

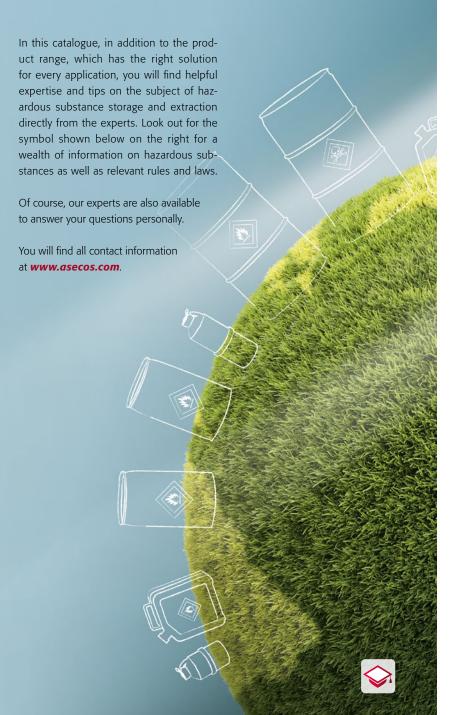


THE WORLD THAT MOVES US

... revolves around storing hazardous materials.

asecos ensures that hazardous substances are appropriately stored and safely handled in our day-to-day working life. The best possible protection of humankind and the environment is our number 1 priority. Driven by this desire, we developed the first safety storage cabinet with 90-minute fire resistance for the storage of flammable liquids in 1994. What was a technical revolution in the industry at that time has now become the generally accepted technical standard. asecos products combine quality, innovation and safety for one purpose: to benefit the customer.

asecos is the world's leading manufacturer of safety cabinets in accordance with the European standard EN 14470 Part 1 and Part 2. As experts in the storage, handling and extraction of hazardous materials, we offer our customers **everything from one provider**: Starting with our innovative developments, which are certified according to the highest standards, through in-depth consulting competence of our employees to production and subsequent maintenance. We combine quality and knowhow with the claim to offer our customers optimal solutions for their requirements.



EXPERTISE DIRECT FROM THE **MANUFACTURER**

Our expertise is sound, international and multimedia-based.

Benefit from our expert knowledge - wherever you are in the world. All our employees have excellent expertise in their respective fields. In Germany, for example, our consultants are independent BDSF experts and overseas they have expertise

in the local legal situation. Tailor-made and legally compliant solutions for every customer need are the result.



We are raising awareness of the dangers in handling hazardous materials

This trains and creates awareness for the routine handling of hazardous materials — for more sustainable safety in everyday work. In the asecos academy, we offer further training and seminars on the subject areas of hazardous material storage and handling. Whether basic knowledge or a special topic, whether user, planner, architect or authorised asecos specialist dealer — the asecos academy passes on well-founded expert knowledge in a practice-oriented and target group-oriented manner.

Our academy concept has a modular structure, thus the individual components can be combined to form a tailor-made further education offer: www.asecos.com/academy

asecos World – The heart of the academy!

Visitors to the asecos world can test, refresh and expand their knowledge of hazardous materials in guided tours. Instead of dry theory, the asecos learning concept focuses on the amiable, independent acquisition of content. The asecos world's theoretical and practical offerings are vast and interactively designed.

A tour of the asecos world can be individually adapted to the respective level of knowledge of the visitor group.

Interested parties can find sound specialist knowledge for further reading in the asecos hazardous substances brochure, the Redpaper series and in our multilingual HazMat Guides at www.asecos.com or in our product videos on youtube.com/asecosVideos.



OUR **MEDIA OFFERING**



Customised and individual

The asecos product configurator is a valuable tool. You can use the online tool to customise your own safety storage cabinet, including interior equipment, dimensions, and design — your product is then displayed and you can request an offer. Get an overview of our extensive asecos product range, and easily find the right cabinet to meet your needs. Test the configurator now at: www.asecos-configurator.com

Our online service for you

Our new product conifgurator provides you with technical specifications, drawings, BIM data, product images, tender texts, operating manuals, certificates, test reports and much more. Simply structured and easily accessible: At the end of each configuration, all common data formats to assist in designing your laboratory, are held ready for your use.

Discover asecos safety storage cabinets in our virtual showroom!

In addition to our on-site showroom at our company headquarters in Gründau, you can now also experience asecos products virtually:

At **www.asecos-showroom.com** you can easily click through the 3D navigation of our online showroom and take a look at detailed product information such as explanatory videos or technical drawings.



PROVEN SAFETY

... you can rely on.

We develop and produce our products exclusively in the German town of Gründau — our headquarters.

From here, we deliver safety storage cabinets to over 100 countries all over the world. As a reliable partner and supplier, we satisfy the highest standards in terms of technology, customer orientation and value added potential.

The quality and functionality of our products is regularly monitored and certified by the relevant testing institutes.

Our safety storage cabinets burn in the cause of safety

Every single model type of our fire-resistant safety storage cabinets from asecos must be successfully tested in a fire chamber by an independent material testing laboratory. It is thus tested according to the stringent requirements of the European standard EN 14470 Part 1 or 2 to demonstrate its fire protection rating.





Safety in daily use

Safety storage cabinets from asecos are tested according to the requirements of those safety regulations in force. By successfully passing GS testing, an independent organisation documents and certifies that asecos products are tough enough and of the highest quality with the extended GS test program.

The GS mark is only granted if, for example, the products under test have undergone a continuous mechanical test of 50,000 cycles without damage. The safety storage cabinets from asecos have easily proved themselves so successfully.



On-going quality control

Production of asecos safety storage cabinets are subject to voluntary and permanent external monitoring by an accredited and independent materials testing institute. Without any advance notice, safety storage cabinets from the current production process are taken and subjected to retesting in the fire chamber.





Outstanding quality management

Our certified quality management system complies with the international standard ISO 9001 and thus proves that the quality control of every sub-process of asecos confirms the company philosophy and all its activities.



A reliable partner throughout

Once again asecos GmbH was awarded the coveted "CrefoZert" seal for an "outstanding" creditworthiness. The price is awarded by the leading rating company Creditre-form Hanau Leibrock KG.



Ventilation - protection and safety at work

For over 20 years asecos has been manufacturing ventilation equipment for working with hazardous materials. All asecos hazardous material work stations have been thoroughly tested over time on the basis of German (e.g. DIN 12924-1) and European standards (e.g. EN 14175-3 Para. 5.4.4). Also in the field of ventilation of safety storage cabinets, asecos offers a wide, ever-expanding range of different solutions. With all its products, asecos is supported by renowned test institutes such as infraserv Höchst, IFI Institute for Industrial Aerodynamics, Tintschl Engineering and others from the development of the perfect solution right up to the serial production of certified products.











PROFOUND EXPERTISE

FOR REFERENCE



Your guide on all aspects of storage, extraction and handling of hazardous materials

In this catalogue, in addition to the asecos product range, you will also find profound expertise and useful advice on the subject of storing, handling and extracting hazardous substances, direct from the expert.

Please pay attention to the symbol at the bottom right for a variety of information on hazardous substances and applicable rules and laws.

The expertise is organised according to the types of hazardous substances and can always be found in the direct vicinity of the appropriate product solutions.



Expert knowledge at a glance:

Hazardous substances basics – from page 10
Flammables – from page 26
Lithium-ion batteries – from page 230
Compressed gases – from page 240
Acids & bases – from page 276
Acute toxic substances – from page 298
Extraction of hazardous materials – from page 326
Technical air purification – from page 378
Water pollutants – from page 404



STORAGE AND HANDLING OF HAZARDOUS SUBSTANCES – ARE YOU SAFE?

In many workplaces and laboratories, the use of hazardous substances is part of everyday work and is unavoidable. What can be easily overlooked in daily handling? Improper storage, especially of flammable substances, poses various dangers to people, the environment and property.

- >>> Fires and explosions caused by, for example, the improper storage of flammable liquids and gases
- >>> Pollution of soils, groundwater and surface waters through e.g. contaminated extinguishing water or leakages
- Downtimes up to bankruptcy, e.g. due to destroyed buildings, laboratories after fires (after a fire, approx. 80% of companies go bankrupt)
- >>> Endangering health

Business owners and managers must be aware of their responsibility for the handling and storage of hazardous substances and regularly ask themselves the following questions:

- >>> Do I know the legal regulations for hazardous substances?
- >>> Do I apply these regulations?
- >>> Do I fulfil my duty of care towards people and the environment?
- >>> Do I store hazardous substances in my company in accordance with the regulations?

WHICH **LEGAL BASIS** HAS TO BE TAKEN INTO ACCOUNT?

DSEAR 2002

"The particular objective in the event of an incident, is to ensure that people can safely escape from the workroom/working area." (DSEAR ACOP L136 par. 68 refers)

What is DSEAR?

DSEAR (applicable in the UK) stands for the Dangerous Substances and Explosive Atmospheres Regulations 2002. Dangerous substances can put peoples' safety at risk from fire and explosion or energetic event. DSEAR puts duties on employers and the self-employed to protect people from risks from fires, explosions and similar events in the workplace. This includes members of the public who may be put at risk by both the work hazards and any secondary hazards likely to occur at the time of Incident, Accident or Emergency, arising from the work activity, such as toxicity, or escalating fire load.

WHAT ARE **HAZARDOUS SUBSTANCES**?

What are dangerous substances?

Dangerous substances are any substances used or present at work that could, if not properly controlled, cause harm to people as a result of a fire or explosion.

They are clearly defined into five separate categories:

- 1. A substance or preparation which meets the criteria in the approved classification and labelling guide for classification as a substance or preparation which is explosive, oxidising, extremely flammable, highly flammable or flammable, whether or not that substance or preparation is classified under the CHIP Regulations or CLP.
- 2. A substance or preparation which because of its physico-chemical or chemical properties and the way it is used or is present at the workplace creates a risk, not being a substance or preparation falling within subparagraph (a) above; or
- 3. Any dust, whether in the form of solid particles or fibrous materials or otherwise, which can form an explosive mixture with air or an explosive atmosphere, not being a substance or preparation falling within subparagraphs (a) or (b) above;

Please observe local legislation and regulations.



From the 1st June 2015, DSEAR also includes:

- 1. Substances that are corrosive to metals Substances that can corrode metals could cause structural damage reducing integrity of structures if not suitably contained.
- All gases under pressure. Gases that are under pressure (eg gas in a cylinder) may present a risk of explosion if not correctly handled in the workplace.

Such substances are common in industry and include solvents, paints, varnishes, hydrogen, acetylene or liquid petroleum gas (LPG), organic peroxides, to name just a few. DSEAR places a formal requirement on employers to assess the risks for substances if classified for these properties and put in place suitable control and mitigation measures.

Materials and chemicals of the nature specified in the regulation can be found in nearly every workshop, factory, laboratory or workplace and few companies are exempt from the DSEAR legislation.

Hazardous materials are materials with the following properties:

highly toxic oxidising reprotoxic toxic explosive mutagenic hazardous to health > extremely flammable ★ dangerous for the environment corrosive highly flammable > releasing hazardous materials when handled ▶ flammable > chronically harmful in any other way irritant sensitising carcinogenic

These terms can be explained as follows:

HIGHLY TOXIC	materials which can cause temporary or permanent damage to health or even death, even in very small quantities e.g. hydrogen cyanide, phosgene.
TOXIC	materials which can cause temporary or permanent damage to health or even death in small quantities e.g. methanol, chlorine.
HAZARDOUS TO HEALTH	materials which can cause temporary or permanent damage to health or even death, e.g. glycol, iodine.
CORROSIVE	are materials, which can cause destruction of body tissue upon contact with the skin or mucous membranes, e. g. hydrochloric acid above 25 %, sodium hydroxide above 2 %.
IRRITANT	materials which can cause inflammation upon contact with the skin or mucous membranes, e.g. hydrochloric acid between 10 and 25%, sodium hydroxide between 0.5 and 2%.
SENSITISING	materials which may cause hypersensitive reactions when inhaled or absorbed through the skin, e.g. cobalt, nickel, various diisocyanates.
OXIDISING	materials which can maintain a fire without air supply, e.g. sodium chlorate, sodium peroxide, nitric acid above 70%.
EXPLOSIVE	materials which can be brought to explode e.g. due to heat, friction, impact or initial ignition, e.g. nitroglycerine, dynamite, TNT.
EXTREMELY FLAMMABLE	gases or materials whose vapours form potentially explosive mixtures with the surrounding air and which are extremely flammable in the presence of an ignition source; with a flash point - below 0 °C and boiling point below 35 °C, e.g. acetylene, hydrogen, diethyl ether.
HIGHLY FLAMMABLE	materials whose vapours form potentially explosive mixtures with the surrounding air and which are highly flammable in the presence of an ignition source; with a flash point below 23 °C, e.g. acetone, petrol.
FLAMMABLE	materials whose vapours form potentially explosive mixtures with the surrounding air and which are flammable in the presence of an ignition source; with a flash point between 23 °C and 60 °C, e.g. styrene, turpentine oil.
CARCINOGENIC	a material which can prompt the body's own cells to form carcinomas e.g. asbestos, benzene.
REPROTOXIC	materials which cause non-heritable damage to the progeny or increase their frequency and/or which may cause an impairment of the male or female reproduction functions or capability e.g. benzo[a] pyrene, 2-ethoxyethanol.
MUTAGENIC	materials which may cause heritable genetic damage, e.g. acrylamide, diethyl sulphate, ethylene oxide.
DANGEROUS FOR THE ENVIRONMENT	materials which may damage animals, plants, microorganisms, climate, air, water or soil, e.g. diesel fuel, mercury, dichlorofluoroethane.

During the manufacture or use of substances, hazardous materials may arise or be released, e.g. welding electrodes. Other chronically harmful materials can cause damage to health when repeated or longer exposure occurs.



→ Hazardous substances basics

WHAT ARE THE **CLASSIFICATION CRITERIA** OR HAZARDOUS SUBSTANCES?

The number of hazardous substances with diverse properties and characteristics is manifold and poses corresponding risks. For this reason, the labelling of hazardous materials has been standardised worldwide and implemented in Europe through the CLP Regulation.

GHS (Globally Harmonized System of Classification, Labelling and Packaging of Chemicals): Globally uniform system for classifying chemicals and labelling them on packaging and in safety data sheets. The labelling methods for hazardous substances that applied in the EU until 2015 have been replaced. In the GHS, hazard pictograms replaced the hazard symbols with their hazard designations; where appropriate with a common signal word ("Caution" or "Danger"). In combination with the Hazard and Precautionary Statements, the pictograms provide information about

- >>> the type and severity of the hazard (H-phrases (Hazard Statements) as well as additional EUH-phrases (special hazards)) and
- >>> the differentiated safety instructions for prevention, reaction, storage and disposal of the hazardous substances (**P-phrases** (Precautionary Statements)).
 - The EU CLP Regulation is still applicable to the UK and has been retained in GB law as GB CPL. This means that Great Britain continues to adopt GHS, independently of the European Union.

O (EG) 1272/2008 CLP (Regulation on Classification, Labelling and Packaging of Substances and Mixtures): The regulation is the European implementation of the worldwide GHS system and is equally and directly valid in all

Adaptation to technical and scientific progress are made periodically. These adaptations are mainly concerned with corrections to terminology and additions to the list of harmonised classification and labelling of dangerous substances in Annex VI:

Hazard pictograms according to GHS/CLP



Acute toxicity – Category 1, 2, 3



Corrosive - Category 1



Flammable – Category 1, 2, 3



Flammable (oxidising) – Category 1, 2, 3



Explosive



Compressed gases



Hazardous to the environment **Hazardous to waters** Harmful to ozone layer



Acute toxicity – Category 4 Corrosive - Category 2 **Skin sensitising Targeted organ toxicity** – Category 3



CMR - Category 1A, 1B, 2 Respiratory sensitising Targeted organ toxicity – Category 1, 2 **Aspiration hazard**



WHAT ARE THE MOST IMPORTANT TERMS IN HAZMAT STORAGE AND HANDLING?

Storage

Storage is keeping materials for future use and dispensing to others. It includes the provision for transport, if the transport does not take place within 24 hours after provision or on the following working day. If the working day is a Saturday, the period ends upon expiry of the next working day.

The quantities of hazardous materials provided must be limited to the quantity required for that day/shift; all quantities beyond these must be stored. If small quantities are required regularly, the smallest standard container size can be provided.

If activities such as decanting, removal, or maintenance work are carried out in the storeroom, a separate risk assessment should be carried out.



If you want to store a larger quantity than required for that day directly at your workplace, you need a fire resistant safety storage cabinet.

Storage section

A storage section is the part of the storeroom that is separated from other storage sections or adjacent rooms

-))) in buildings by means of walls and ceilings that fulfil the safety-related requirements,
- >>> outdoors by means of sufficient clearance or walls.

Outdoor storerooms are also roofed-over storage areas, which

- » are open on at least two sides or
- » are open on one side, if the depth measured from the open side is not greater than the height of the open side

One side of the room is considered open if it consists of a wire or similar grating, which does not impair the natural ventilation.



Safety storage cabinets with at least 90 minute fire resistance are also classified as storage sections.

Storage class

Storage classes represent a classification of the stored materials based on specific hazardous properties and are only required in conjunction with joint storage.

Fire compartment

A fire compartment is a part of a building separated with regard to fire precautions in compliance with building law, where, as a result of the requirements on the surrounding components, spreading of the fire to other parts of the building is generally avoided.

Keeping, providing and reserving

Providing is the short-term storage for a specific intended use, usually for not longer than 24 hours or until the next working day. If the working day is a Saturday, the period ends upon expiry of the next working day.

Provision includes amongst other things:

- >>> Reserving the quantities of operating materials or resources required to continue the work in or at production facilities. The required quantity must not exceed the amount needed per day.
- >>> **Deposit** of finished or intermediate products.
- >>> Reserving for company-internal transport, conveying, handling or storage.

Safety data sheet

A safety data sheet (SDS),material safety data sheet (MSDS), or product safety data sheet (PSDS) is an important component of product stewardship and occupational safety and health and spill-handling procedures. SDS formats can vary from source to source within a country depending on national requirements.

The SDS follows a 16 section format i.e. **SECTION 1: Hazards identification, SECTION 4: Firefighting**

measures, SECTION 7: Handling and storage which is internationally agreed and for substances especially, the SDS should be followed with an annex which contains the exposure scenarios of this particular substance.

⊘- Hazardous substances basics

Joint storage is when various materials are stored in a

- >>> storage section,
- >>> container,
- >>> safety storage cabinet or
- >>> collection room.

Separate storage is when various stored goods are separated from one another within a storage section by means of

- >>> sufficient distances,
- >>> barriers, e.g. walls, cabinets made of non-combustible material, products made of non-combustible materials of storage class 12 or 13 or
- >>> separated collection rooms.

Separate storage may be required to reduce hazards when storing goods of the same storage class or materials of different storage classes. Information regarding the requirement for separate storage is given in

- >>> the hazard information labelling (H or R codes), complementary hazard properties (EU H codes) and safety information (P or S codes);
- ** the product-specific safety information, for example, the safety data sheets (Section 5 Fire-fighting measures and Section 7 Handling and storage; the information in Section 10 Stability and reactivity is usually provided in less detail);
- >>> the leaflets from the accident insurance companies.

Partitioned storage is separate storage in different storage sections. These must be separated from other storage sections or adjacent rooms

-))) in buildings by means of walls or ceilings with at least 90 minute fire resistance, or
-))) outdoors by means of sufficient clearance or walls.

The distances serve to

-))) protect a storeroom from external harmful incidents such as mechanical damage or heating as a result of fire,
-))) protect against interactions between the stored hazardous materials,
- >>> keep the risk for the employees or other persons, of leaks from portable containers and/or malfunctions in the proper operational procedure, as low as possible.







CAN DIFFERENT CHEMICALS BE STORED TOGETHER?

Hazardous materials may only be stored together if there is no increase in the risks involved. This may possible, for example, because of the risk assessment or the limitation of quantities.

The Health and Safety Executive (HSE) provides guidance for segregation through HSG71 and offers very detailed guidance for the storage of chemical groups, see Table 1. The chemical groups are used to determine the possibilities for joint storage and this formal classification serves to control the joint storage of different hazardous materials.

The table assists in defining where chemical groups:

- >>> May not require segregation (white)
- >>> Should be segregated (red)
- >>> Should be kept apart (black)
- >>> Should be isolated (red on white)

The segregation of chemicals provides very distinct advantages to the user or provider of hazardous materials as it:

- >>> Allows clear definition of the materials present
-))) Ensures more adequate management of chemicals at the site
- >>> Contributes towards positive management of storage and procurement
- >>> Prevents potential chemical reactions which could lead to accidents
- >>> Prevents exposure of staff to harmful substances
- >>> Puts you in control of all harmful substance

Using HSG71 Table 2 as the guide, with the GHS symbols superimposed, it becomes clear that GHS symbols are not the best way to segregate substances.

For example, the following chemicals: Flammable liquids, Flammable solids, Flammables dangerous when wet, Flammables spontaneously combustible; all share the same GHS symbol. However, they cannot be stored in the same cabinet at the same time.

HSG71 should be used in conjunction with the safety data sheet (SDS), which clearly defines how compatible one substance is to another. For example, Section 10 of the SDS may advise that flammable liquids should not be stored with strong corrosives. The SDS also defines how to assess co-located storage.

PLEASE NOTE

Flammable liquids may not be stored in safety storage cabinets together with hazardous materials that may lead to the occurrence of fires (e.g. pyrophoric materials).

Due to the risk of corrosion, it is basically recommended not to store mineral acids and alkalis together in one safety storage cabinet, but in a separate acid or alkali cabinet respectively. Non-flammable toxic and highly toxic materials must be kept in a separate, locked chemical storage cabinet.

Table 2: HSG71 - Segregation Table incorporating GHS Symbols

	CLASS	1		2		3		4		Į.	5	6	8
Chemica	al Segregation			\Diamond		(3)		(3)		<u>(</u>	E		
By Cher	mical Group.	COLOSIA	FLAMINGUE		TOBOC CAS			4	•		<u></u>	TOXIC	
Explosive	1.0 Explosive		Segregate Form	Segregate Form	Segregate Form	Segregate Form	Segregate Form	Segregate Form	Segregate Form	Segregate Form	Segregate Form	Segregate Form	Segregate Form
Compresse gases	2.1 Flammable	Segregate Form		Keep Apart	Segregate form Keep or Apart	Segregate Form	Segregate Form	Segregate Form	Segregate Form	Segregate Form	ISOLATE	Keep Apart	Keep Apart
	Non Toxic Non flammable	Segregate Form	Keep Apart		Keep Apart	Keep Apart	Segregation may not be necessary	Segregate Form	Segregation may not be necessary	Segregation may not be necessary	Segregate Form	Segregation may not be necessary	Keep Apart
	2.3 Toxic	Segregate Form	Segregate form Keep or Apart	Keep Apart		Segregate Form	Keep Apart	Segregate Form	Keep Apart	Segregation may not be necessary	Segregate Form	Segregation may not be necessary	Keep Apart
Flammable liquids	· 🕸 🔷	Segregate Form	Segregate Form	Keep Apart	Segregate Form		Keep Apart	Segregate Form	Segregate Form	Segregate Form	ISOLATE	Keep Apart	Keep Apart
Flammable solids	4.1 Readily combustible	Segregate Form	Segregate Form	Segregation may not be necessary	Keep Apart	Keep Apart		Keep Apart	Segregate Form	Segregate Form	Segregate Form	Keep Apart	Segregation may not be necessary
	Spontaneously combustible	Segregate Form	Segregate Form	Segregate Form	Segregate Form	Segregate Form	Keep Apart		Keep Apart	Segregate Form	ISOLATE	Keep Apart	Keep Apart
	4.3 Dangerous when wet	Segregate Form	Segregate Form	Segregation may not be necessary	Keep Apart	Segregate Form	Segregate Form	Keep Apart		Keep Apart	Segregate Form	Segregation may not be necessary	Segregation may not be necessary
Oxidising substances	substance 🔻	Segregate Form	Segregate Form	Segregation may not be necessary	Segregation may not be necessary	Segregate Form	Segregate Form	Segregate Form	Keep Apart		Segregate Form	Keep Apart	Keep Apart
	5.2 Organic peroxide	Segregate Form	ISOLATE	Segregate Form	Segregate Form	ISOLATE	Segregate Form	ISOLATE	Segregate Form	Segregate Form		Keep Apart	Keep Apart
Toxic	(1) (2) (3) (TOXIC)	Segregate Form	Keep Apart	Segregation may not be necessary	Segregation may not be necessary	Keep Apart	Keep Apart	Keep Apart	Segregation may not be necessary	Keep Apart	Keep Apart		Segregation may not be necessary
Corrosive		Segregate Form	Keep Apart	Keep Apart	Keep Apart	Keep Apart	Segregation may not be necessary	Keep Apart	Segregation may not be necessary	Keep Apart	Keep Apart	Segregation may not be necessary	

Segregation may not be necessary

Segregation may not be necessary

Segregation may not be necessary, but consult suppliers about requirements for individual substances. In particular, note that some types of chemicals within the same class, particularly Class 8 corrosives, may react violently, generate a lot of heat if mixed or evolve toxic fumes.



Segregate from

These combinations should not be kept in the same building compartment or outdoor storage compound. Compartment walls should be imperforate, of at least 30 minutes fire resistance and sufficiently durable to withstand normal wear and tear. Brick or concrete construction is recommended. An alternative is to provide separate outdoor storage compartments with an adequate space between them.



Keep apart

Separate packages by at least 3 m in the storeroom or storage area outdoors. Materials in non-combustible packaging that are not dangerous substances and that present a low fire standard of separation should be regarded as a minimum between substances known to react together readily, if that reaction would increase the danger of an escalating incident.



Segregate from or keep apart

The lower standard refers to the outside storage of gas cylinders. Where non-liquefied flammable gases are concerned, the 3 m separation distance may be reduced to 1 m.



Isolate

This is used for organic peroxides, for which dedicated buildings are recommended. Alternatively, some peroxides may be stored outside in fire-resisting secure cabinets. In either case, adequate separation from other buildings and boundaries is required.



WHAT ARE, IRRESPECTIVE OF QUANTITY, THE BASIC OBLIGATIONS FOR HAZMAT STORAGE?

What are the general requirements for hazardous material packaging and containers?

The primary safeguard to prevent the release of flammable liquids is provided by the container. It is therefore critical to ensure that it is of appropriate design for the duty. The materials of construction should be compatible with the chemical and physical properties of the flammable liquid to ensure that no interaction occurs which might cause leakage. All the container openings should be equipped with a secure and well-fitting cap or lid to resist the escape of flammable liquid or vapours, including if the container falls or rolls over. All stored hazardous materials must be identifiable. Labelling must contain sufficient information about the classification of the hazard involved in handling and the appropriate protective measures that need to be observed are evident or can be derived.

What needs to be observed when dealing with hazardous liquids?

Locations where flammable liquids are stored should have adequate means to prevent the uncontrolled spread of any spillages or leaks beyond the confines of the storage area. Typically, this is achieved by ensuring the base or floor of the storage area is impervious and enclosing this with an impervious sill, low bund wall or drainage channel to contain a volume that is at least 110% of the capacity of the largest container, where these are of metal construction.

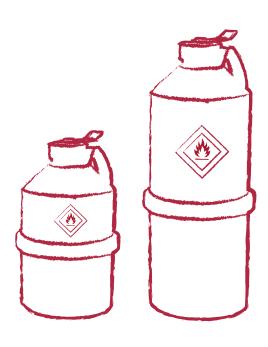
What needs to be observed when dealing with flammable materials?

Preventing leaks and possible accumulation of dangerous quantities of flammable liquid or vapours is the first priority. However, you should anticipate that flammable liquids or vapours could still escape and have adequate and sufficient control measures in place to prevent their ignition. Pressurised gas cylinders containing flammable materials with connected withdrawal devices may only be stored with additional protective measures (e.g. effective ventilation openings in a storeroom or cabinet with an area of more than 100 cm²) in order to avoid the formation of a potentially explosive atmosphere.

Is the storage of hazardous materials in stairways or corridors allowed?

Hazardous materials may not be stored in areas where they may pose a risk to employees or other persons. These include in particular:

- >>> Access routes, such as stairways, escape and rescue routes, corridors, passageways and narrow courtyards
- >>> Break rooms, on-call rooms, sanitary areas, first aid areas or daytime accommodation rooms



>- Hazardous substances basics

WHAT **STORAGE OPTIONS** EXIST FOR HAZARDOUS SUBSTANCES?

Improper storage of, for example, flammable hazardous substances poses various risks to people, the environment and property and material assets. In the worst case, this leads to fires and explosions, which not only endanger human lives, but can also lead to downtimes and even bankruptcy for companies (after a fire, approx. 80% of companies go bankrupt). The pollution of soils, groundwater and surface waters, through e.g. contaminated extinguishing water or leakages, are among the possible consequences. The storage of hazardous substances in compliance with the law should therefore be given high priority in every company.

Basically, these three storage concepts are to be distinguished:

- 1. Outdoor storage / storage buildings / hazardous material containers central outdoor storage
- Storage rooms in buildings central indoor storage
 Safety cabinets type 90 / type G90 decentralised storage in workrooms

Impropor etorago	Safe storage		
Improper storage	Central storage	Decentralised storage	
Unauthorised, random storage * High risk * Legal consequences	Hazardous substance storage/hazardous substance container ✓ Large storage quantities X Long distances	Safety storage cabinets Storage directly at the workplace Flexibility Mobile storage space	

Storage of Flammable Materials – External

Many facilities require large volumes of flammable materials to be typically held on the premises. At these sites, flammable materials may be stored in large containers – 200 litre drums or 1,000 litre IBC's (Intermediate Bulk Containers) are most common. One of the most effective control measures when working with bulk flammables is to remove them from the workplace and into a safer, external storage location.

Particular note should be taken to adequately separate flammable liquids from:

- >>> Site boundaries
- >>> Occupied buildings
- >>> Process areas

The recommended minimum separation distances (HSG51) shown below are widely accepted industry practice. Although these distances may not provide complete fire protection to prevent other parts of the premises from being affected by a fire in the storage area, or prevent fire causing damage beyond the boundary, they should provide time to implement emergency procedures and enable people to evacuate to a place of safety.

Requirement for storage containers	
Distance to buildings min. 10 m	No fire protection requirements
Distance to buildings > 5 m	No fire protection requirements for exclusively passive storage of 200–1,000 l
Distance to buildings > 3 m	No fire protection requirements for exclusively passive storage of up to 200 l

Where these separation distances cannot be realised, additional protective measures, may be used to justify a reduction in the minimum separation distances.

Please observe local legislation and regulations.



Store rooms - Central indoor storage

Essential structural requirements and fire protection

Fire resisting storerooms and fire resisting workrooms should provide a minimum of 30 minutes fire resistance in respect of integrity, insulation and where applicable; load bearing capacity. The exception to this is when the storeroom or workroom are within a building that also contains residential accommodation, in which case the partition between the two should provide a minimum of 60 minutes fire resistance to comply with UK legislation.

Safety storage cabinets - Decentralised storage in workrooms

Type 90 safety storage cabinets according to EN 14470-1 (storage of flammable liquids) and type G90 according to EN 14470-2 (storage of compressed gas cylinders) as an adequate storage solution compared to storerooms or storage buildings.

Your cabinets should:

- >>> Minimise the fire risks associated with storing flammable substances and protect the contents in the event of fire.
-))) Ideally you will use a cabinet with a known (tested) minimum length of time (fire rating)
-))) Minimise the amount of vapour released into the working environment
- Ensure the retention of accidental spillages within the cabinet
- >>> Provide sufficient evacuation time for all personnel
- >>> Reduce the risk of explosion through greater temperature protection to provide fire fighters with adequate time to deal with an incident and minimise site damage



INFO

Despite the recognisable effort for more clarity and precision, the topic of hazardous substance storage remains challenging. This is because companies must implement every change in the storage of hazardous substances. This means that those responsible must not only check whether the substances and products used, their classifications or quantities have changed, but also, whether the protective measures and technical equipment chosen so far meet the current requirements.

It Can Happen To Anyone – many different dangers threaten when handling hazardous materials! The use of hazardous and combustible materials is part of the daily routine in most laboratories and industries and

the daily routine in most laboratories and industries and is unavoidable. What is often quickly forgotten in daily handling: the improper storage of such materials puts people, the environment and property in danger.

Learn more about the safe storage of hazardous materials in our "HazMat Guide". You can order it on our website: www.asecos.global/catalogues



LARGE VARIETY OF CABINETS

Chemicals are diverse and usually have many different properties. But regardless of whether they are environmentally hazardous, gaseous, toxic or flammable: as the world's leading manufacturer of safety storage cabinets in accordance with

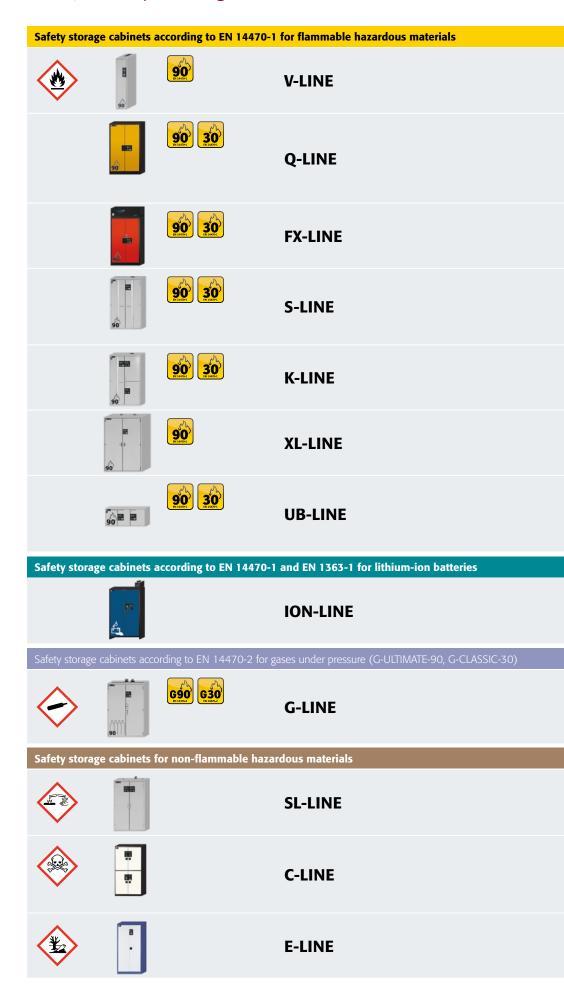
European standard EN 14470-1/-2, asecos has the right cabinet for safe and legally compliant storage. Our individual solutions are used in agriculture, research, industry and laboratories, among others.





Content part 1 | Safety storage cabinets





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Recirculating air filter cabinets for safe filtering and storage of a wide variety of hazardous materials with a flexible installation option.	FX-CLASSIC-90 FX-PEGASUS-90 FX-DISPLAY-30	page 96–97 page 98–103 page 104–105
Safety storage cabinets as proven classics with a large variety of models	S-CLASSIC-90 S-PEGASUS-90 S-CLASSIC-30 S-PHOENIX-90 S-PHOENIX Vol.2-90	page 112–127 page 124–127 page 128–129 page 132–145 page 146–153
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Storage and ha	ndling of hazardo	us materials in	doors and outdoo	ors	
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RISKS AND HAZARDS

Today, flammable hazardous substances are used in most laboratories and companies. The safe and legally compliant storage of these hazardous substances often presents users with major challenges.

Because of their nature, flammable liquids and solids easily contribute to the spread of fire and, if stored incorrectly, pose a high risk to both people and the environment.

Under certain conditions, vapours from flammable hazardous substances can form an explosive atmosphere and, in combination with an ignition source, cause explosions.

Vapours therefore pose a particular risk. In hazmat containers that appear to be empty, for example, an explosive mixture can be created by the remaining contents.

Legal basis / information

- Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)
- >>> Health and Safety Executive (HSE)
- >>> Control of Substances Hazardous to Health (COSHH)
- >>> Control of Major Accident Hazards (COMAH)
- Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP)

Definition

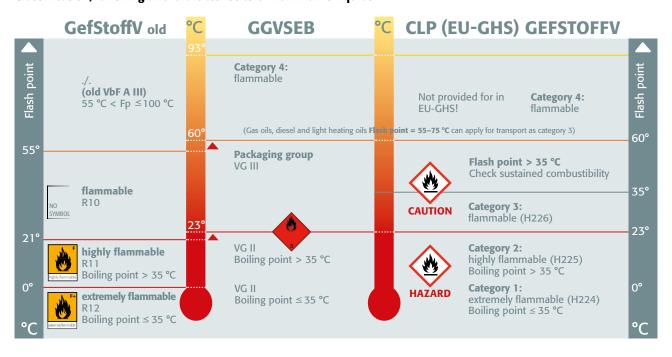
Substances whose vapours can form an explosive atmosphere and which are easily ignitable in the presence of an ignition source.

The following diagrams show the classification of flammable liquids according to the CLP Regulation / GefStoffV.

Hazard class

Hazard class / pictogram	Hazard Category	Signal Word	H Code
Flammable liquids	Category 1	Hazard	H 224
(b)	Category 2	Hazard	H 225
<u> </u>	Category 3	Caution	H 226

Classification, labelling and characteristics of flammable liquids



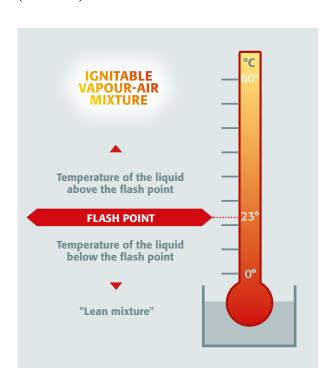


Flash point

Classification and labelling of flammable liquids depends on the flash point of the liquid.

Definition Flash point

The temperature at which enough vapour escapes from a liquid that an ignitable mixture is created with the ambient air (EN 1127-1).



Examples of flash points of flammable liquids

Material	Flash point °C
Ether (diethyl ether)	-40 °C
Petroleum ether / light petrol	< -20 °C
Petrol	< -20 °C
Diesel / Heating oil / Gas oil	> 55 °C
Petroleum / Turpentine / Kerosene	30-40 °C
Ethanol	12 °C
Propanol	12 ℃
Acetone	< -20 °C
MEK (butanone)	-1 °C

Explosion limits

Explosion limits are the minimum or maximum concentration levels of vapour of a flammable or combustible material (expressed as percent by volume in air) at which an explosion will occur in a confined area if an ignition source is present. No explosion can occur in the presence of very low or very high concentrations.



Definition ignition temperature

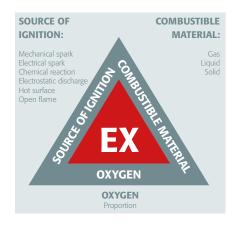
Ignition temperature (of a flammable gas or liquid) is the lowest temperature of a hot surface, determined under prescribed test conditions, at which ignition of a flammable substance occurs as a gas-air or vapour-air mixture.

The fire triangle

The basis for the handling of hazardous materials is knowledge of the fire triangle. This clearly illustrates that a fire or an explosion is only possible if three conditions are fulfilled:

Combustible substance Ignition source

Oxygen





RESPONSIBLE STORAGE IN SAFETY STORAGE CABINETS

What is the purpose of storing flammable hazardous substances in safety storage cabinets?

By storing flammables in safety cabinets with a defined fire resistance, the basic safety requirements for fire load minimisation are fulfilled.

Safety cabinets must be designed, installed, operated and maintained in a way that guarantees the safety of employees and third parties.

What are the advantages of storing in safety storage cabinets?

Safety storage cabinets with a fire resistance of 90 minutes are considered a separate fire compartment. Thus, storage in these cabinets offers the following advantages:

- >>> Fire and explosion protection requirements are met. The use of safety cabinets is also recommended for small quantities of flammable liquids!
- >>> Easy and flexible installation in workrooms.
- >>> Reduction of in-house transport of hazardous substances and the associated risks.
- >>> Installation in corridors is possible after consultation with the local fire brigade, provided the width of the escape route is observed.

What types of safety storage cabinets are there?

There are three types:

1. Fire-resistant storage cabinets for flammable liquids:

Safety storage cabinets according to EN 14470-1 for the storage of flammable and combustible liquids, solid hazardous substances, compressed gas cartridges and aerosol dispensers.

2. Fire-resistant storage cabinets for compressed gas cylinders:

Safety storage cabinets in accordance with EN 14470-2 for the storage of pressurised gas cylinders, pressurised gas cartridges and aerosol dispensers. For more information, see the corresponding chapter from p. 240.

3. Fire-resistant safety cabinets for lithium-ion batteries:

Safety storage cabinets, at the moment without normative reference, for the storage and charging of lithium-ion batteries.

For more information, see the corresponding chapter from p. 230.

How are safety storage cabinets classified?

Safety storage cabinets are classified according to their fire resistance in a fire chamber test as follows:

	Type of safety storage cabinet					
Measured time for temperature rise in the fire chamber test	Safety storage cabinet for flammables* EN 11470-1	Safety storage cabinets for compressed gas cylinders** EN 14470-2	Safety storage cabinets for lithium-ion batteries***			
30 minutes	Type 30	G 30	-			
60 minutes	Type 60	G 60	-			
90 minutes	Type 90	G 90	90			

st Flammable liquids: Measured time for temperature rise by 180 K, measured inside the cabinet

Safety storage cabinets with a certified fire resistance of 90 minutes are designated as state of the art. As a result, they are considered a separate fire compartment or storage section.

^{**} Compressed gas cylinders: Measured time for the temperature rise by 50 K, measured on the surface of the gas cylinder valve holder

^{***} Lithium-ion batteries: Measured in accordance with EN 1363 and EN 14470-1



How can the fire resistance of safety cabinets be recognised and what other markings are there?

The fire resistance in minutes must be stated on the front of the safety storage cabinet. The number on the sticker indicates the resistance in minutes. (e.g. 90 or 30).

In addition, the following warning and prohibition symbols, among others, are also required:

- Prohibition sign P003 "No open flame; fire, open source of ignition and smoking prohibited"
- >>> Warning sign W021 "Warning of flammable substances"

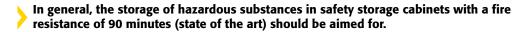


What safety requirements must be met when installing safety storage cabinets for flammable liquids with various fire resistance classes?

The safety demands on the quality of safety storage cabinets for flammable liquids are considered to be fulfilled if they have a fire resistance of at least 90 minutes and meet further requirements according to EN 14470-1. They can be installed in unlimited numbers.

The fire resistance may be less but at least 30 minutes (type 30) if

- only one cabinet is installed in a fire (fighting) section/utility unit (for larger sections, a maximum of one cabinet per 100 m²) or
- an automatic fire alarm system and a recognised site fire brigade with a maximum response time of five minutes after being alerted are available for the fire (fighting) section/utility unit, or
- >>> an automatic fire extinguishing system is available.



What prohibitions on combined storage must be observed in safety cabinets for flammable liquids?

Hazardous materials may only be stored together if there is no increase in the risks involved. This is possible, for example, as a result of the risk assessment or the limitation of quantities. In order to determine the possibilities for joint storage, the hazardous materials are divided into storage classes. This formal classification serves to control the joint storage of different hazardous materials.

Flammable liquids may not be stored together in safety cabinets with:

- Hazardous substances that may lead to the occurrence of fires (e.g. pyrophoric substances)
- Compressed gas cylinders
- >>> Lithium-ion batteries

It is also advisable to store mineral acids and alkalis in a separate acid or alkali safety storage cabinet in view of the risk of corrosion. Non-flammable toxic and very toxic substances must be stored separately in a lockable, chemical cabinet.

Suitable products can be found in the corresponding chapter from p. 276.



SHOULD **SAFETY STORAGE CABINETS** IN

ACCORDANCE WITH EN 14470-1 BE

CONNECTED TO TECHNICAL VENTILATION?

Safety storage cabinets according to EN 14470-1 should, but do not necessarily have to be, connected to a technical ventilation system. In the case of safety storage cabinets that are not technically ventilated, substitute measures must be taken to ensure comparable explosion and health protection for employees.

Technical ventilation as a precautionary measure to prevent the occurrence of a dangerous explosive atmosphere is recommended. It should be used in the interests of health protection even and already in the case of a "mere" odour nuisance.

CAUTION! The lower explosion limit of a solvents is many times higher than the occupational exposure limit of most substance.

Solvent	Flash point Fp °C	Steam pressure p 20°C mbar/hPa	Lower Explosion Limit LEL (1 VOL-% = 10.000 ppm)	Occupational Exposure Limit OEL
Ether (diethyl ether)	-40°C	587 mbar	1,7 Vol-% = 17.000 ppm	400 ppm
Heptan C ₇ H ₁₆	-4°C	48 mbar	1,1 Vol-% = 11.000 ppm	500 ppm
Acetone C ₃ H ₆ O	< -20°C	233 mbar	2,5 Vol-% = 25.000 ppm	500 ppm
Ethanol C ₂ H ₅ OH	12°C	59 mbar	3,1 Vol-% = 31.000 ppm	200 ppm

With their special construction, asecos safety storage cabinets are ready for connection (NW 75) to and operation of a technical ventilation system.

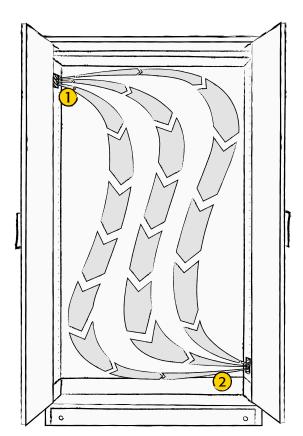
The **supply air** in the upper (1) and **exhaust air** in the lower part of the cabinet (2) successfully eliminate harmful vapours. The hazardous substance vapours are then led to the technical exhaust air duct via the cabinet ceiling. There, the exhaust air can either be connected to an on-site exhaust air system (exhaust air ducted to a safe location outdoors) or to a recirculating air filter system.

YOUR ADVANTAGES:

- » No health hazards for the employees
- » No EX zones in and around the safety storage cabinet required
- » Occupational exposure limits (OEL) are safely complied with









Technical ventilation of safety storage cabinets can be achieved by:

- Connection to an exhaust air that will be ducted to a safe location outdoors
- >>> Integration into an existing exhaust air system

Apart from these, the following products can be used:

- >>> Recirculating air filter units (UFA)
- Safety storage cabinets with an integrated recirculating air filter module



For all solutions, there must be a minimum air exchange of 10 times per hour.

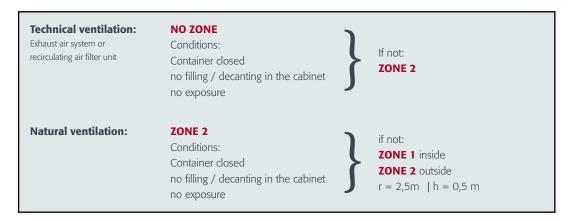
When using recirculating air filter units or recirculating air filter modules, practical tests have shown that fires in the adsorption filters — as known from large industrial plants — do not occur if the recirculating air filter is equipped with a continuously acting protective device.

Certain hazardous substances may only be stored in technically ventilated safety storage cabinets with a fire resistance of at least 90 minutes. These are flammable hazardous substances labelled with H224 and those with ignition temperatures below 200 °C (e.g. diethyl ether or carbon disulphide). Opened compressed gas cylinders may also only be stored in technically ventilated safety storage cabinets.

There must be no ignition sources inside the safety cabinet. If this cannot be guaranteed, measures must be taken to avoid ignition sources, depending on the risk assessment.

The cabinets must be grounded via a potential equalisation.

Thus, the following zone classification has to be applied in the safety cabinet for flammable liquids:



In practice, the above-mentioned conditions should be negligible, i.e. no zoning and therefore no explosion protection document is required for ventilated safety storage cabinets.

Health protection through compliance with workplace limits must always be ensured when handling hazardous substances. Solvents can be safely transferred and processed in hazardous material workplaces.

Further information can be found in the chapter "Hazardous material workplaces" from page 336.





Is it permissible to carry out filling or decanting activities in a safety storage cabinet?

Generally no. Fume cupboards or workplaces for hazardous substances should preferably be used for this purpose. Deviations from the general prohibition can only be made if it has been demonstrated in the risk assessment that no hazards arise, e.g. when handling normal laboratory quantities.



It Can Happen To Anyone – many different dangers threaten when handling hazardous materials!

The use of hazardous and combustible materials is part of the daily routine in most laboratories and industries and is unavoidable. What is often quickly forgotten in daily handling: the improper storage of such materials puts people, the environment and property in danger. Learn more about the safe storage of hazardous materials in our "HazMat Guide".

You can order it on our website: www.asecos.global/catalogues

Which approval documents and certificates should be available from the manufacturer of a safety storage cabinet?

To ensure high quality and funcionality in a worst case scenario a safety storage cabinet that conforms to the standards should have the following approval documents:

- Fire test report from an independent materials testing institute as proof of fire resistance
- GS certificate as proof of compliance with ProdSG §21 Para. 1 on the basis of ZLS EK5/AK4 and proof of conformity in accordance with EN 16121 and EN 16122 (requirements and test procedures for safety, strength, durability and stability)
-))) EC declaration of conformity as proof of compliance with product-relevant EU directives and national standards





asecos safety storage cabinets in accordance with EN 14470-1 for the safe storage of flammable liquids in buildings and workrooms –

- are considered to be a storage section (storage section = part of a warehouse that is separated from other storage sections or neighbouring rooms).
- are special facilities for the storage of hazardous substances in workrooms.
- are also recommended for the storage of flammable liquids in smaller quantities.
- >>> are suitable for the storage of different hazardous substances < 200 kg without essentially complying with the prohibitions on combined storage.

asecos safety storage cabinets in accordance with EN 14470-1 offer you:



Legal certainty in procurement and use

Standardised, tested product with complete approval documentation: Fire test certificate, GS certification with conformity according to the requirements of EN 16121/16122, EC Declaration of Conformity



Long-term safety and risk minimisation

- Fulfilment of the elementary requirements of fire and explosion protection
- >>> Minimisation of unprotected storage
- >>> Reduction of fire loads in the building
- Protection of employees from fire and explosion hazards as well as harmful vapours (technical ventilation)
- >>> Reduction of in-house transport of hazardous substances from a central warehouse to the workplace and the associated risks



Saving time and money

>	One employee – in-house transport	
	Per day	6 minutes
	Per week	30 minutes
	Per month	2 hours
	Per year	3 work days – costs approx 612,00£ (working days á 8 hours / wage costs 26 £ per hour)

- >>> In principle, the safety cabinet is immediately ready for operation after delivery and installation. No further approval procedures or individual permits are necessary.
- >>> There is no need for complex modifications, as the cabinet can be easily integrated into the local conditions.



Flexibility

- >>> Flexible choice of storage locations within buildings the cabinet simply moves to the new location.
- Offers the option as it is fire-resistant to be installed in corridors if, for example, this does not restrict the width of the escape route (in consultation with the fire brigade or fire protection authorities).
- >>> Thanks to a large product portfolio with a multitude of models and interior equipments, the safety storage cabinet can be optimally adapted to your applications and container sizes.





V-LINE

Overview

Safety storage cabinets type 90

V-MOVE-90 | model class with unicolour design and electronic vertical drawer with automatic closing system



V-MOVE-90 | model class with bi-colour design and electronic vertical drawer with automatic closing system

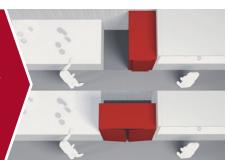


V-LINE | V-MOVE-90

Safety storage cabinets for unrestricted storage of flammable hazardous materials in work areas in accordance with EN 14470-1 and TRGS 510

Optimum integration and use of space

With a depth of 86 cm, V-LINE cabinets now use the space next to laboratory fume cupboards and work benches that conventional hazardous material cabinets have left unused.



2

Maximum comfort

The vertical drawer technology allows access and visibility to all stored containers from both sides.



33

Innovative technology

At the push of a button the vertical drawers open and close automatically. The drawers glide softly and quietly out of and into the cabinet body, without additional physical efforts. The stop function of the vertical drawers detects resistances and eliminates the risk of being trapped.





Modern colour design

Bi-colour design – choice of 5 door colours for the scratch proof surface. Unicolour design – choice of 2 colours for the powder-coated surface.





No unauthorised use

Doors lockable with cylinder lock; the cabinets can be integrated by the customer in an existing master key system. Locking status indicator (red/ green) signals the locking status of the cabinet





Technical ventilation

Integrated air ducts ready for connection (DN 75) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.



7/

Guard rail system

For shelves as additional tilt protection for stored containers (optional).

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 10 years in combination with an asecos service tariff
- Further information from page 494



V-LINE | V-MOVE-90



Model V90.196.081.VDAC:0012

Order No. 35035-001-35103



Model V90.196.081.VDAC:0013

Order No. 35086-051-35104



Model V90.196.081.VDAC:0012

Order No. 35035-005-35102

Technical data

External dimensions W x D x H mm $819 \times 860 \times 1966$ Internal dimensions W x D x H mm $701 \times 775 \times 1750$ Weight without interior equip. kg 500 Air change **10 times** m³/h 9 Diff. pressure (air change **10 times EK5/AK4**) Pa 5 Max. load of drawers kg 140

 Max. load of drawers
 kg
 140

 Power consump. in operation
 W
 50

 Power consump. in standby mode
 W
 0,5

 Nominal voltage
 V
 85-265

Main features



Space-saving design with high storage volume



Electronic vertical drawers for maximum ease of use



Clear storage

Model	Body colour	Door colour	Order No.
V90.196.081.VDAC:0013	anthracite grey RAL 7016	warning yellow RAL 1004	35086-040
		light grey RAL 7035	35086-041
		traffic red RAL 3020	35086-046
		gentian blue RAL 5010	35086-047
		stainless steel	35086-051
V90.196.081.VDAC:0012	light grey RAL 7035	light grey RAL 7035	35035-001
	laboratory white (sim. RAL 9016)	laboratory white (sim. RAL 9016)	35035-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
Left: 4x shelf, 1x perforated insert, 1x bottom collecting sump (V=12.5L) Right: 4x shelf, 1x perforated insert, 1x bottom collecting sump (V=12.5L)	sheet steel powder-coated RAL 7035	35102
Left: 5x shelf, 1x perforated insert, 1x bottom collecting sump (V=12.5L) Right: 5x shelf, 1x perforated insert, 1x bottom collecting sump (V=12.5L)	sheet steel powder-coated RAL 7035	35103
Left: 4x shelf, 1x perforated insert, 1x bottom collecting sump (V=12.5L) Right: 5x shelf, 1x perforated insert, 1x bottom collecting sump (V=12.5L)	sheet steel powder-coated RAL 7035	35104
Left: 4x tray shelf (V=6.0L), 1x bottom collecting sump (V=12.5L) Right: 4x tray shelf (V=6.0L), 1x bottom collecting sump (V=12.5L)	sheet steel powder-coated RAL 7035	36113
Left: 4x tray shelf (V=6.0L), 1x bottom collecting sump (V=12.5L) Right: 5x tray shelf (V=6.0L), 1x bottom collecting sump (V=12.5L)	sheet steel powder-coated RAL 7035	36114
Left: 5x tray shelf (V=6.0L), 1x bottom collecting sump (V=12.5L) Right: 5x tray shelf (V=6.0L), 1x bottom collecting sump (V=12.5L)	sheet steel powder-coated RAL 7035	36115

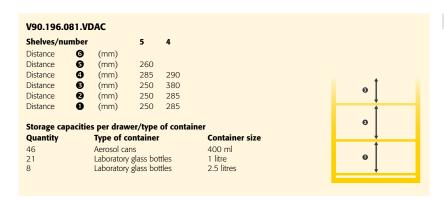


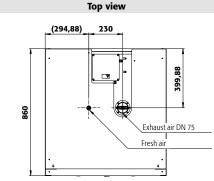
Accessories		Material	W x D x H (mm)	Order No.
	Shelf guard rail system set for 1 shelf	sheet steel powder-coated RAL 7035	40 x 719 x 80	35099
	Sump inliner for tray shelf	PP	310 x 700 x 30	36355
	Anti-slip rubber mat	grey	305 x 705 x 2	33575

Ventilation	Order No.
Extraction unit with exhaust air monitoring	14220
Extraction unit without exhaust air monitoring	14218
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

Can't find a suitable interior equipment package for your application?

Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.













SAFETY STORAGE CABINETS ONLY PROVIDE RELIABLE PROTECTION ...

... for humankind, environment and property when they are maintained professionally! With the **asecos services** you are always on the safe side.

You can find our service tariffs from page 494

V-LINE | V-MOVE-90



Model V90.196.045.VDAC:0012

Order No. 35034-001-35101



Model V90.196.045.VDAC:0013

Order No. 35085-040-35100



Model V90.196.045.VDAC:0012

Order No. 35034-005-35101

Technical data

External dimensions W x D x H mm $449 \times 860 \times 1966$ Internal dimensions W x D x H mm $331 \times 775 \times 1750$ Weight without interior equip. kg 344Air change **10 times** m³/h 5

Weight Without Intend equip.

Right Special Sp

Main features



Space-saving design with high storage volume



Electronic vertical drawers for maximum ease of use



Clear storage

Model	Body colour	Door colour	Order No.
V90.196.045.VDAC:0013	anthracite grey RAL 7016	warning yellow RAL 1004	35085-040
		light grey RAL 7035	35085-041
		traffic red RAL 3020	35085-046
		gentian blue RAL 5010	35085-047
		stainless steel	35085-051
V90.196.045.VDAC:0012	light grey RAL 7035	light grey RAL 7035	35034-001
	laboratory white (sim. RAL 9016)	laboratory white (sim. RAL 9016)	35034-005

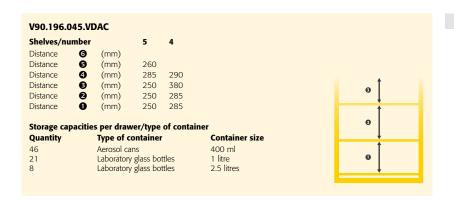
Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=12.5L)	sheet steel powder-coated RAL 7035	35100
5x shelf, 1x perforated insert, 1x bottom collecting sump (V=12.5L)	sheet steel powder-coated RAL 7035	35101
4x tray shelf (V=6.0L), 1x bottom collecting sump (V=12.5L)	sheet steel powder-coated RAL 7035	36111
5x tray shelf (V=6.0L), 1x bottom collecting sump (V=12.5L)	sheet steel powder-coated RAL 7035	36112

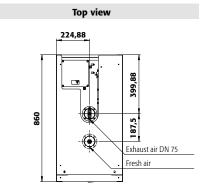


Accessories		Material	W x D x H (mm)	Order No.
	Shelf guard rail system set for 1 shelf	sheet steel powder-coated RAL 7035	40 x 719 x 80	35099
	Sump inliner for tray shelf	PP	310 x 700 x 30	36355
	Anti-slip rubber mat	grey	305 x 705 x 2	33575

Ventilation	Order No.
Extraction unit with exhaust air monitoring	14220
Extraction unit without exhaust air monitoring	14218
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

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THE ASECOS HAZMAT GUIDE

... we have collected the most important information on storing and handling hazardous materials safely.

Order your free copy now: www.asecos.global



Q-LINE

O-

Overview

Safety storage cabinets type 90

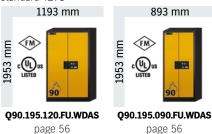
Q-CLASSIC-90 | model class with wing doors



Q-CLASSIC-90 | model class with wing doors and dividing walls

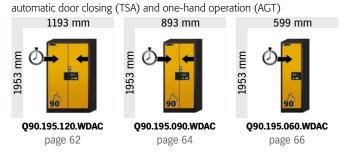


Q-CLASSIC-90 | model class with wing doors and door open arrest system, additionally tested in accordance with FM standard 6050 and UL/ULC standard 1275





Q-PEGASUS-90 | model class with wing doors, door open arrest system,



Q-PHOENIX-90 | model class with folding doors



Safety storage cabinets type 30

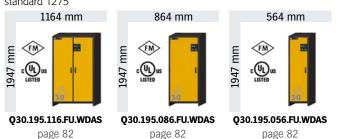
Q-CLASSIC-30 | model class with wing doors



Q-DISPLAY-30 | model class with wing door and fixed window



Q-CLASSIC-30 | model class with wing doors and door open arrest system, additionally tested in accordance with FM standard 6050 and UL/ULC standard 1275



The handling of metal powders represents a potential hazard. You can find the right solution for hazardous metal powders in our product configurator at www.asecos-configurator.com

Q-LINE | Q-CLASSIC-90

Safety storage cabinets for unrestricted storage of flammable hazardous materials in work areas in accordance with EN 14470-1 and TRGS 510

Robust talent

Extremely robust design with scratch-proof surface, triple hinged door for extreme strain. Doors stay in place at any opening angle for a more convenient handling of containers.



2

High flexibility

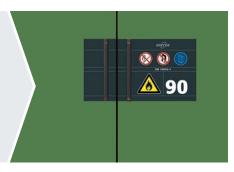
Integrated transport base for simple inhouse transport, cabinet can be transported upright through doors (all Q-LINE models).





Modern bicolour design

Brings colour to your workplace: choice of seven door colours at no extra cost. Language-free labelling for optimum international usability.





Cylinder lock with locking status indicator

Doors lockable with cylinder lock; the cabinets can be integrated by the customer in an existing master key system. Locking status indicator (red/ green) signals the locking status of the cabinet.



5

Technical ventilation

Integrated air ducts ready for connection (DN 75) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.



0

Optionally available with dividing walls that create up to four storage compartments for the safe and cost-efficient storage of different hazardous substances in one cabinet.



7/

TRIPLE CERTIFIED Safety storage cabinets offer maximum protection

Certified according to EN 14470-1 as well as the FM and UL standards. The cabinets are suitable for international use.

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to ten years in connection with the asecos PREMIUM tariff
- Further information from page 494



- Certain cabinets of this model group have been additionally tested in accordance with FM Standard 6050 and are compliant to NFPA Code 30, NFPA 1 Fire Code, OSHA
- Further information on these models from page 56



- Certain cabinets of this model group have been additionally tested in accordance with Underwriters Laboratories-Standard UL/ ULC 1275
- Further information on these models from page 56



Interior equipment

Our numerous cabinet models can be easily adapted to a variety of storage requirements thanks to the wide range of interior equipment options. Depending on requirements, interior equipment packages with the following components are available:

Drawer



Ideally suited for the storage of small containers up to 5 L, spray cans or compressed gas cans

- The extended drawer provides an overview of all stored hazardous materials
- All containers can be conveniently and safely removed or adjusted
- The drawers are self-closing in case of fire or have a permanent self-closing mechanism
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Metal-free storage level



Optimally suited for the storage of flammable and slightly aggressive hazardous materials.

- The tray shelf with chemically resistant surface coating and plastic sump offers a high level of corrosion protection
- The plastic sump is mounted on the tray shelf to prevent it from tipping and pulling out, and can be easily removed if necessary
- Available material: polypropylene (grey)

Bottom collecting sump and perforated insert



High quality bottom collecting sumps

- Possible leakages are safely collected in the floor area
- Can be used in combination with a perforated insert as an additional storage level for containers
- Available material: powder-coated sheet steel (RAL 7035), stainless steel or polypropylene

Shelf and shelf tray



Suitable for larger containers

- The shelves are height-adjustable and can be easily adapted to the height of the containers
- A safety upstand protects the containers from falling down
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Accessories



Practical accessories such as plastic sump inliner, anti-slip mats or separately lockable storage boxes complement the interior design variants and provide additional comfort and safety when storing and handling the containers



HAVE YOU GOT SPACE TO WASTE?

... probably not.

This is exactly the reason why we want to introduce you to the benefits of safety storage cabinets with full drawers.

THE TASK

A situation known to many users:

- Which conditions should be used when clearing the containers in the cabinet?
- Which containers are on the front of the shelves, which are to the rear?
- Which hazardous materials should be placed on one storage level if possible?
- How can it be guaranteed that the containers from the rear rows can be easily and safely removed?





THE SOLUTION

Safety storage cabinets with drawers make these questions redundant!

- Logical storage of small containers
- Easily accessible for storage and removal
- Safe and simple collection of waste materials in waste containers

Convenient – no awkward removal of containers to remove containers from the rear storage area.

The question of whether containers should be at the front or rear does not arise. The full drawer always gives you the **complete overview** of the storage level.

Hazardous materials that should be placed together on a storage level can be easily and **logically arranged in a full drawer. Double your possible storage capacity** in the safety cabinet!

Q-LINE | Q-CLASSIC-90







Model Q90.195.120 Order No. 30001-041-33647



Model Q90.195.120 Order No. 30001-046-33649

Technical data

External dimensions W x D x H	mm	1193 x 615 x 1953
Internal dimensions W x D x H	mm	1050 x 522 x 1647
Weight without interior equip.	kg	424
Air change 10 times	m³/h	9
Diff. pressure (air change 10 times EK5/	Pa	5
AK4)		
Entry height transport base	mm	90
Entry width transport base	mm	1120

Main features



Robust construction in bi-colour design



Accessible transport base



Doors stop at any opening angle

You will find technical drawings and adjustment heights for these cabinet models from page $84\,$

Model	Body colour	Door colour	Order No.
Q90.195.120	anthracite grey RAL 7016	warning yellow RAL 1004	30001-040
		light grey RAL 7035	30001-041
		traffic red RAL 3020	30001-046
		gentian blue RAL 5010	30001-047
		reseda green RAL 6011	30001-048
		asecos silver	30001-049
		pure white RAL 9010	30001-050

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33635
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33636
3x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33637
4x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33638
3x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	33640
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	30816
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33642
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33643
3x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33644
4x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33645
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	stainless steel	30817
3x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30013
4x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30014
4x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33647
5x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33648
6x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33649
4x drawer (V=29.0L)	stainless steel	33651
5x drawer (V=29.0L)	stainless steel	33652
6x drawer (V=29.0L)	stainless steel	33653

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
(Secretary)	Sump inliner for shelf	PE black	1000 x 392 x 50*	7223
	Sump inliner for drawer	PP grey	834 x 450 x 96*	10054
	Anti-slip rubber mat for drawer	black	840 x 490 x 1	8699
o o	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
• •	Base cover	sheet steel powder-coated textured RAL 7016	1118 x 35 x 85	30036
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} usable storage space W x D

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.









Technical ventilation – an important component for risk minimisation! Products for technical ventilation from asecos help to prevent the formation of explosive atmospheres and harmful vapours.

Further information and suitable solutions for technical ventilation can be found from page $326\,$

Q-LINE | Q-CLASSIC-90



Model Q90.195.120.MM

Order No. 34192-040-34211



Model Q90.195.120.MV

Order No. 34214-041-33657



Model Q90.195.120.MV

Order No. 34214-046-33656

Technical data	
External dimensions W x D x H Internal dimensions W x D x H	mm mm
Weight without interior equip. Air change 10 times Diff. pressure (air change 10 times EK5/ AK4)	kg m³/h Pa
Entry height transport base	mm
Entry width transport base	mm

34214 34192 1193 x 615 x 1953 1193 x 615 x 1953 left: 450 x 522 x 1647 all compartments: 450 x right: 450 x 522 x 1647 522 x 810 454 460 9 9 5 5 90 90 1120 1120

Main features



Robust construction in bi-colour



Accessible transport base



Dividing walls providing separate storage compartments

You will find technical drawings and adjustment heights for these cabinet models from page 84

Model	Body colour	Door colour	Order No.
Q90.195.120.MV	anthracite grey RAL 7016	warning yellow RAL 1004	34214-040
		light grey RAL 7035	34214-041
		traffic red RAL 3020	34214-046
		gentian blue RAL 5010	34214-047
		reseda green RAL 6011	34214-048
		asecos silver	34214-049
		pure white RAL 9010	34214-050
Q90.195.120.MM	anthracite grey RAL 7016	warning yellow RAL 1004	34192-040
		light grey RAL 7035	34192-041
		traffic red RAL 3020	34192-046
		gentian blue RAL 5010	34192-047
		reseda green RAL 6011	34192-048
		asecos silver	34192-049
		pure white RAL 9010	34192-050

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
Q90.195.120.MV		
Left: 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	33656
Left: 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey	33544
Left: 3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	37694
Left: 3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey	37695
Left: 6x drawer (V=4.5L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	33657
Left: 6x drawer (V=4.5L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey	33658
Q90.195.120.MM		
4x shelf, 4x perforated insert, 4x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34211
4x shelf, 4x perforated insert, 4x bottom collecting sump (V=22.0L)	stainless steel	34207
4x shelf, 4x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34210
4x shelf, 4x bottom collecting sump (V=22.0L)	stainless steel	34205
Top: 2x shelf, 2x perforated insert, 2x bottom collecting sump (V=22.0L) Bottom: 2x drawer (V=4.5L), 2x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	34212
Left: 4x drawer (V=4.5L) Right: 2x tray shelf (V=11.0L), 2x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	34213

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner	PP grey	353 x 406 x 88*	9706
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
• •	Base cover	sheet steel powder-coated textured RAL 7016	1118 x 35 x 85	30036
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

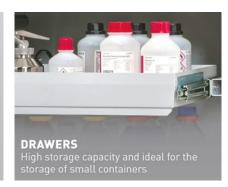
Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} usable storage space W x D (mm)

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Need to store small quanities of various hazardous materials? Interior equipment with many variants and dividing walls enable the perfect adjustment to different types of hazardous stubstances in one cabinet.





THE ASECOS HAZMAT GUIDE

 \dots we have collected the most important information on storing and handling hazardous materials safely.

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Q-LINE | Q-CLASSIC-90



Model Q90.195.090

Order No. 30041-040-33622

Entry width transport base



Model Q90.195.090

820

Order No. 30041-041-33629



Model Q90.195.090

Order No. 30041-047-33627

Technical data

External dimensions W x D x H 893 x 615 x 1953 mm Internal dimensions W x D x H 750 x 522 x 1647 mm Weight without interior equip. kg m³/h 343 Air change 10 times
Diff. pressure (air change 10 times EK5/ 6 Pa 5 AK4) Entry height transport base mm 90

Main features



Robust construction in bi-colour design



Accessible transport base



Doors stop at any opening angle

You will find technical drawings and adjustment heights for these cabinet models from page 84

Model	Body colour	Door colour	Order No.
Q90.195.090	anthracite grey RAL 7016	warning yellow RAL 1004	30041-040
		light grey RAL 7035	30041-041
		traffic red RAL 3020	30041-046
		gentian blue RAL 5010	30041-047
		reseda green RAL 6011	30041-048
		asecos silver	30041-049
		pure white RAL 9010	30041-050

nterior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33622
x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33623
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33624
x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33625
8x tray shelf (V=23.5L), 1x bottom collecting sump (V=39.5L)	sheet steel powder-coated RAL 7035	30818
8x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30047
x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30048
x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30049
x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30050
x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30819
x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30051
x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30052
x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33627
ix drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33628
ix drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33629
x drawer (V=19.0L)	stainless steel	33631
x drawer (V=19.0L)	stainless steel	33632
x drawer (V=19.0L)	stainless steel	33633

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner for shelf	PP grey	653 x 406 x 88*	9707
	Sump inliner for drawer	PP grey	534 x 450 x 96*	27948
	Anti-slip rubber mat for drawer	black	540 x 490 x 1	15653
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
	Base cover	sheet steel powder-coated textured RAL 7016	818 x 35 x 85	30069
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} usable storage space W x D (mm)

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ARE YOU LOOKING FOR AN APPROPRIATE STORAGE SOLUTION FOR HAZARDOUS MATERIALS?

Our optimised online product configurator helps you, step by step, to find the suitable safety storage cabinet. Take the test: **www.asecos-configurator.com**

Q-LINE | Q-CLASSIC-90



Model Q90.195.060

Order No. 30072-040-33600

Entry width transport base



Model Q90.195.060

Order No. 30072-047-33610



Model Q90.195.060

Order No. 30072-046-33608

Technical data

External dimensions W x D x H 599 x 615 x 1953 mm Internal dimensions W x D x H 450 x 522 x 1647 mm Weight without interior equip. kg m³/h 265 Air change 10 times
Diff. pressure (air change 10 times EK5/ 4 5 Pa AK4) Entry height transport base mm 90

Main features



Robust construction in bi-colour design



Accessible transport base



Doors stop at any opening angle

You will find technical drawings and adjustment heights for these cabinet models from page $84\,$

Model	Body colour	Door colour	Order No.
			Door hinge: left right
Q90.195.060	anthracite grey RAL 7016	warning yellow RAL 1004	30072-040 30073-040
		light grey RAL 7035	30072-041 30073-041
		traffic red RAL 3020	30072-046 30073-046
		gentian blue RAL 5010	30072-047 30073-047
		reseda green RAL 6011	30072-048 30073-048
		asecos silver	30072-049 30073-049
		pure white RAL 9010	30072-050 30073-050

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
		Door hinge: left right
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33600 34371
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33602 34372
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33603 34373
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33604 34374
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33606 34375
3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	30820 34369
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30081 33412
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30082 33413
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30083 33414
4x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30084 33415
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	30085 33416
3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30821 34370
3x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30086 33417
4x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30087 33418
4x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33608 34376
5x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33609 34377
6x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33610 34378
4x drawer (V=4.5L)	stainless steel	33616 34381
5x drawer (V=4.5L)	stainless steel	33617 34382
6x drawer (V=4.5L)	stainless steel	33618 34383
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33619 34384
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33620 34385
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33612 34379
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33613 34380

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner	PP grey	353 x 406 x 88*	9706
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472
	Sump inliner for drawer disposal	PE white	313 x 484 x 71*	40171
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
• •	Base cover	sheet steel powder-coated textured RAL 7016	524 x 35 x 85	30112
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} usable storage space W x D (mm)

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THE ASECOS HAZMAT GUIDE

... we have collected the most important information on storing and handling hazardous materials safely.

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Q-LINE | Q-CLASSIC-90 | Triple Certified



Model Q90.195.120.FU.WDAS

Order No. 37584-040-34637



Model Q90.195.090.FU.WDAS

Order No. 37585-040-34628



Model Q90.195.060.FU.WDAS

Order No. 37586-040-34617

Technical data		37584	37585	37586 / 37587
External dimensions W x D x H	mm	1193 x 615 x 1953	893 x 615 x 1953	599 x 615 x 1953
Internal dimensions W x D x H	mm	1050 x 522 x 1647	750 x 522 x 1647	450 x 522 x 1647
Weight without interior equip.	kg	424	343	265
Air change 10 times	m³/h	9	6	4
Diff. pressure (air change 10 times EK5/AK4)	Pa	5	5	5
Entry height transport base	mm	90	90	90
Entry width transport base	mm	1120	820	526

Main features



Robust construction in bi-colour design

You will find technical drawings and adjustment heights for these cabinet models from page 84



Accessible transport base



TRIPLE CERTIFIED

Model	Body colour	Door colour	Order No.
Q90.195.120.FU.WDAS	anthracite grey RAL 7016	warning yellow RAL 1004	37584-040
		light grey RAL 7035	37584-041
Q90.195.090.FU.WDAS	anthracite grey RAL 7016	warning yellow RAL 1004	37585-040
		light grey RAL 7035	37585-041
		Door hinge: left	right
Q90.195.060.FU.WDAS	anthracite grey RAL 7016	warning yellow RAL 1004 37586-040	37587-040
		light grey RAL 7035 37586-041	37587-041

nterior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
290.195.120.FU.WDAS		
x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	34637
x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	34638
x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	34639
x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	34640
x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	37588
Ix tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	37591
x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	37600
Ix tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	37603
Q90.195.090.FU.WDAS Ex shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34628
ix shelf, 1x perforated insert, 1x bottom collecting sump (v=22.0L) Ix shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035 sheet steel powder-coated RAL 7035	34628
xx shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34629
Ix shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34631
ox shelf, 1x bottom collecting sump (v=22.0L) ox tray shelf (V=23.5L), 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37589
Ix tray shelf (V=23.5L), 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37592
ox tray shelf (V=23.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37601
Ix tray shelf (V=23.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37604
290.195.060.FU.WDAS(R)	·	
x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34617
x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34618
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34615
x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34616
x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37590
x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37593
x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37602
x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37605

Accessories	Material	W x D x H (mm)	Order No.
* • • • • • • • • • • • • • • • • • • •	sheet steel powder-coated textured RAL 7016	524 x 35 x 85	30112
	sheet steel powder-coated textured RAL 7016	818 x 35 x 85	30069
•	sheet steel powder-coated textured RAL 7016	1118 x 35 x 85	30036
Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037

Ventilation	Order No.
Extraction unit without exhaust air monitoring	14218

^{*} usable storage space W x D (mm)

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3D

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www.asecos-showroom.com



Q-LINE | Q-PEGASUS-90

Safety storage cabinets for unrestricted storage of flammable hazardous materials in work areas in accordance with EN 14470-1 and TRGS 510

Robust talent

Extremely robust design with scratch-proof surface.



2

One hand operation

One-hand operation for double-door cabinets. Container remains in one hand whilst opening.



33

Door open arrest system with serial automatic door closing

Doors remain open with the serial door open arrest system, convenient and safe removal or storage of containers. Doors close automatically after approx. 60 seconds. Acoustic and visual signal before closing.





High flexibility

Integrated transport base for simple inhouse transport, cabinet can be transported upright through doors (all Q-LINE models).





Modern bicolour design

Brings colour to your workplace: choice of seven door colours at no extra cost. Language-free labelling for optimum international usability.





Cylinder lock with locking status indicator

Doors lockable with cylinder lock; the cabinets can be integrated by the customer in an existing master key system. Locking status indicator (red/ green) signals the locking status of the cabinet.





Technical ventilation

Integrated air ducts ready for connection (DN 75) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to ten years in connection with the asecos PREMIUM tariff
- Further information from page 494



Interior equipment

Our numerous cabinet models can be easily adapted to a variety of storage requirements thanks to the wide range of interior equipment options. Depending on requirements, interior equipment packages with the following components are available:

Drawer



Ideally suited for the storage of small containers up to 5 L, spray cans or compressed gas cans

- The extended drawer provides an overview of all stored hazardous materials
- All containers can be conveniently and safely removed or adjusted
- The drawers are self-closing in case of fire or have a permanent self-closing mechanism
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Metal-free storage level



Optimally suited for the storage of flammable and slightly aggressive hazardous materials.

- The tray shelf with chemically resistant surface coating and plastic sump offers a high level of corrosion protection
- The plastic sump is mounted on the tray shelf to prevent it from tipping and pulling out, and can be easily removed if necessary
- Available material: polypropylene (grey)

Bottom collecting sump and perforated insert



High quality bottom collecting sumps

- Possible leakages are safely collected in the floor area
- Can be used in combination with a perforated insert as an additional storage level for containers
- Available material: powder-coated sheet steel (RAL 7035), stainless steel or polypropylene

Shelf and shelf tray



Suitable for larger containers

- The shelves are height-adjustable and can be easily adapted to the height of the containers
- A safety upstand protects the containers from falling down
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Accessories



Practical accessories such as plastic sump inliner, anti-slip mats or separately lockable storage boxes complement the interior design variants and provide additional comfort and safety when storing and handling the containers



HAVE YOU GOT SPACE TO WASTE?

... probably not.

This is exactly the reason why we want to introduce you to the benefits of safety storage cabinets with full drawers.

THE TASK

A situation known to many users:

- Which conditions should be used when clearing the containers in the cabinet?
- Which containers are on the front of the shelves, which are to the rear?
- Which hazardous materials should be placed on one storage level if possible?
- How can it be guaranteed that the containers from the rear rows can be easily and safely removed?





THE SOLUTION

Safety storage cabinets with drawers make these questions redundant!

- Logical storage of small containers
- Easily accessible for storage and removal
- Safe and simple collection of waste materials in waste containers

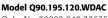
Convenient – no awkward removal of containers to remove containers from the rear storage area.

The question of whether containers should be at the front or rear does not arise. The full drawer always gives you the **complete overview** of the storage level.

Hazardous materials that should be placed together on a storage level can be easily and **logically arranged in a full drawer. Double your possible storage capacity** in the safety cabinet!

Q-LINE | Q-PEGASUS-90





Order No. 30002-040-33635



Model Q90.195.120.WDAC

Order No. 30002-048-33649



Model Q90.195.120.WDAC

Order No. 30002-050-33647

Technical data

External dimensions W x D x H mm $1193 \times 615 \times 1953$ Internal dimensions W x D x H mm $1050 \times 522 \times 1647$ Weight without interior equip. kg 424Air change **10 times** m³/h 9 Diff. pressure (air change **10 times EK5/** Pa 5

AK4)

Entry height transport base mm 90
Entry width transport base mm 1120

Main features



Robust construction in bi-colour design



Accessible transport base



Doors with one-hand operation (AGT), door open-arrest system and automatic door closing (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page 84

Model	Body colour	Door colour	Order No.
Q90.195.120.WDAC	anthracite grey RAL 7016	warning yellow RAL 1004	30002-040
		light grey RAL 7035	30002-041
		traffic red RAL 3020	30002-046
		gentian blue RAL 5010	30002-047
		reseda green RAL 6011	30002-048
		asecos silver	30002-049
		pure white RAL 9010	30002-050

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33635
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33636
3x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33637
4x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33638
3x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	33640
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	30816
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33642
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33643
3x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33644
4x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33645
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	stainless steel	30817
3x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30013
4x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30014
4x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33647
5x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33648
6x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33649
4x drawer (V=29.0L)	stainless steel	33651
5x drawer (V=29.0L)	stainless steel	33652
6x drawer (V=29.0L)	stainless steel	33653

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
Queen and a	Sump inliner for shelf	PE black	1000 x 392 x 50*	7223
	Sump inliner for drawer	PP grey	834 x 450 x 96*	10054
	Anti-slip rubber mat for drawer	black	840 x 490 x 1	8699
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
• •	Base cover	sheet steel powder-coated textured RAL 7016	1118 x 35 x 85	30036
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} usable storage space W x D (mm)

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.



one hand!









Technical ventilation – an important component for risk minimisation! Products for technical ventilation from asecos help to prevent the formation of explosive atmospheres and harmful vapours.

Further information and suitable solutions for technical ventilation can be found from page $326\,$



Q-LINE | Q-PEGASUS-90



Model Q90.195.090.WDAC

Entry width transport base

Order No. 30042-040-33622



Model Q90.195.090.WDAC

820

mm

Order No. 30042-046-33627



Model Q90.195.090.WDAC

Order No. 30042-047-33629

Technical data

External dimensions W x D x H	mm	893 x 615 x 1953
Internal dimensions W x D x H	mm	750 x 522 x 1647
Weight without interior equip.	kg	343
Air change 10 times	m³/h	6
Diff. pressure (air change 10 times EK5/	Pa	5
AK4)		
Entry height transport base	mm	90

Main features



Robust construction in bi-colour design



Accessible transport base



Doors with one-hand operation (AGT), door open-arrest system and automatic door closing (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page 84

Model	Body colour	Door colour	Order No.
Q90.195.090.WDAC	anthracite grey RAL 7016	warning yellow RAL 1004	30042-040
		light grey RAL 7035	30042-041
		traffic red RAL 3020	30042-046
		gentian blue RAL 5010	30042-047
		reseda green RAL 6011	30042-048
		asecos silver	30042-049
		pure white RAL 9010	30042-050

nterior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33622
x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33623
x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33624
x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33625
x tray shelf (V=23.5L), 1x bottom collecting sump (V=39.5L)	sheet steel powder-coated RAL 7035	30818
shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30047
shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30048
shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30049
shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30050
tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30819
tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30051
tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30052
drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33627
drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33628
drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33629
drawer (V=19.0L)	stainless steel	33631
drawer (V=19.0L)	stainless steel	33632
drawer (V=19.0L)	stainless steel	33633

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner for shelf	PP grey	653 x 406 x 88*	9707
0 0 0	Sump inliner for drawer	PP grey	534 x 450 x 96*	27948
	Anti-slip rubber mat for drawer	black	540 x 490 x 1	15653
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
•	Base cover	sheet steel powder-coated textured RAL 7016	818 x 35 x 85	30069
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} usable storage space W x D (mm)

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.

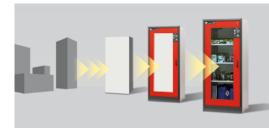


one hand!









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Q-LINE | Q-PEGASUS-90







Model Q90.195.060.WDAC Order No. 30074-046-33608



Model Q90.195.060.WDAC Order No. 30074-047-33610

Technical data

External dimensions W x D x H	mm	599 x 615 x 1953
Internal dimensions W x D x H	mm	450 x 522 x 1647
Weight without interior equip.	kg	265
Air change 10 times	m³/h	4
Diff. pressure (air change 10 times EK5/	Pa	5
AK4)		
Entry height transport base	mm	90
Entry width transport base	mm	526

Main features



Robust construction in bi-colour design



Accessible transport base



Door with open-arrest system and automatic door closing (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page $84\,$

Model	Body colour	Door colour	Order No.	
			Door hinge: left right	
Q90.195.060.WDAC	anthracite grey RAL 7016	warning yellow RAL 1004	30074-040 30075-040	
	light grey RAL 7035	30074-041 30075-041		
		traffic red RAL 3020	30074-046 30075-046	
		gentian blue RAL 5010	30074-047 30075-047	
		reseda green RAL 6011	30074-048 30075-048	
		asecos silver	30074-049 30075-049	
		pure white RAL 9010	30074-050 30075-050	

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order	· No.
		Door hinge: left	right
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33600	34371
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33602	34372
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33603	34373
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33604	34374
8x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33606	34375
3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	30820	34369
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30081	33412
x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30082	33413
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30083	33414
x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30084	33415
x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	30085	33416
x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30821	34370
x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30086	33417
x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30087	33418
4x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33608	34376
x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33609	34377
x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33610	34378
x drawer (V=4.5L)	stainless steel	33616	34381
ix drawer (V=4.5L)	stainless steel	33617	34382
x drawer (V=4.5L)	stainless steel	33618	34383
x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33619	34384
x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33620	34385
x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33612	34379
x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33613	34380

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner	PP grey	353 x 406 x 88*	9706
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472
	Sump inliner for drawer disposal	PE white	313 x 484 x 71*	40171
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
••••	Base cover	sheet steel powder-coated textured RAL 7016	524 x 35 x 85	30112
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} usable storage space W x D (mm)

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THE ASECOS HAZMAT GUIDE

... we have collected the most important information on storing and handling hazardous materials safely.

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Q-LINE | Q-PHOENIX-90

Safety storage cabinets for unrestricted storage of flammable hazardous materials in work areas in accordance with EN 14470-1 and TRGS 510

Robust talent

Extremely robust design with scratch-proof surface.



23

The space-saving talent

Space-saving folding doors, ideal for use in case of narrow passage widths in front of the cabinet. Continuous anti-trapping door strips on the folding doors offer maximum protection during operation.





High flexibility

Integrated transport base for simple inhouse transport, cabinet can be transported upright through doors (all Q-LINE models).





Modern bicolour design

Choice of two door colours at no extra cost. Language-free labelling for optimum international usability.





Cylinder lock with locking status indicator

Doors lockable with cylinder lock; the cabinets can be integrated by the customer in an existing master key system. Locking status indicator (red/ green) signals the locking status of the cabinet.





Technical ventilation

Integrated air ducts ready for connection (DN 75) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to ten years in connection with the asecos PREMIUM tariff
- Further information from page 494



Q-LINE | Q-PHOENIX-90



Model Q90.195.120.FD Order No. 32149-040-33635



Model Q90.195.120.FD Order No. 32149-040-33647



Model Q90.195.120.FD Order No. 32149-041-33649

Technical data

External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip. Air change 10 times	mm mm kg m³/h	1193 x 615 x 1953 1050 x 522 x 1647 424 9
Diff. pressure (air change 10 times EK5/	Pa	5
AK4)		3
Entry height transport base	mm	90
Entry width transport base	mm	1120

Main features



Robust construction in bi-colour design



Accessible transport base



Space-saving folding doors

You will find technical drawings and adjustment heights for these cabinet models from page $84\,$

Model	Body colour	Door colour	Order No.
Q90.195.120.FD	anthracite grey RAL 7016	warning yellow RAL 1004	32149-040
		light grey RAL 7035	32149-041

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33635
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33636
3x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33637
4x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33638
3x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	33640
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	30816
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33642
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33643
3x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33644
4x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33645
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	stainless steel	30817
3x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30013
4x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30014
4x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33647
5x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33648
6x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33649
4x drawer (V=29.0L)	stainless steel	33651
5x drawer (V=29.0L)	stainless steel	33652
6x drawer (V=29.0L)	stainless steel	33653

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
January	Sump inliner for shelf	PE black	1000 x 392 x 50*	7223
	Sump inliner for drawer	PP grey	834 x 450 x 96*	10054
	Anti-slip rubber mat for drawer	black	840 x 490 x 1	8699
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
• •	Base cover	sheet steel powder-coated textured RAL 7016	1118 x 35 x 85	30036
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} usable storage space W x D (mm)

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3D

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Q-LINE | Q-CLASSIC-30

Safety storage cabinets for the storage of flammable hazardous materials in working areas according to EN 14470-1 and TRGS 510

Optimised design

To meet the minimum requirements for the storage of flammable hazardous materials in workrooms. Very good price-performance ratio.



2

Lock

Lockable doors with a central locking system.



3

High flexibility

Integrated transport base for simple inhouse transport, cabinet can be transported upright through doors (all Q-LINE models).





Modern bicolour design

Brings colour to your workplace: choice of seven door colours at no extra cost. Language-free labelling for optimum international usability.





Cylinder lock

Door lockable with cylinder lock, the cabinets can be integrated by the customer into an existing locking system.



(0)

Technical ventilation

Integrated air ducts ready for connection (DN 75) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.



7/

TRIPLE CERTIFIED Safety storage cabinets offer maximum protection

Certified according to EN 14470-1 as well as the FM and UL standards. The cabinets are suitable for international use.

















• Fire resistance of 30 minutes (type 30), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- Further information from page 494



- Certain cabinets of this model group have been additionally tested in accordance with FM Standard 6050 and are compliant to NFPA Code 30, NFPA 1 Fire Code, OSHA
- Further information on these models from page 82



Interior equipment

Our numerous cabinet models can be easily adapted to a variety of storage requirements thanks to the wide range of interior equipment options. Depending on requirements, interior equipment packages with the following components are available:

Drawer



Ideally suited for the storage of small containers up to 5 L, spray cans or compressed gas cans

- The extended drawer provides an overview of all stored hazardous materials
- All containers can be conveniently and safely removed or adjusted
- The drawers are self-closing in case of fire or have a permanent self-closing mechanism
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Metal-free storage level



Optimally suited for the storage of flammable and slightly aggressive hazardous materials.

- The tray shelf with chemically resistant surface coating and plastic sump offers a high level of corrosion protection
- The plastic sump is mounted on the tray shelf to prevent it from tipping and pulling out, and can be easily removed if necessary
- Available material: polypropylene (grey)

Bottom collecting sump and perforated insert



High quality bottom collecting sumps

- Possible leakages are safely collected in the floor area
- Can be used in combination with a perforated insert as an additional storage level for containers
- Available material: powder-coated sheet steel (RAL 7035), stainless steel or polypropylene

Shelf and shelf tray



Suitable for larger containers

- The shelves are height-adjustable and can be easily adapted to the height of the containers
- A safety upstand protects the containers from falling down
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Accessories



Practical accessories such as plastic sump inliner, anti-slip mats or separately lockable storage boxes complement the interior design variants and provide additional comfort and safety when storing and handling the containers



HAVE YOU GOT SPACE TO WASTE?

... probably not.

This is exactly the reason why we want to introduce you to the benefits of safety storage cabinets with full drawers.

THE TASK

A situation known to many users:

- Which conditions should be used when clearing the containers in the cabinet?
- Which containers are on the front of the shelves, which are to the rear?
- Which hazardous materials should be placed on one storage level if possible?
- How can it be guaranteed that the containers from the rear rows can be easily and safely removed?





THE SOLUTION

Safety storage cabinets with drawers make these questions redundant!

- Logical storage of small containers
- Easily accessible for storage and removal
- Safe and simple collection of waste materials in waste containers

Convenient – no awkward removal of containers to remove containers from the rear storage area.

The question of whether containers should be at the front or rear does not arise. The full drawer always gives you the **complete overview** of the storage level.

Hazardous materials that should be placed together on a storage level can be easily and **logically arranged in a full drawer. Double your possible storage capacity** in the safety cabinet!

Q-LINE | Q-CLASSIC-30



Model Q30.195.116 Order No. 31003-060-33635



Model Q30.195.116 Order No. 31003-061-33647



Model Q30.195.116 Order No. 31003-067-33649

Technical data

External dimensions W x D x H	mm	1164 x 620 x 1947
Internal dimensions W x D x H	mm	1050 x 519 x 1626
Weight without interior equip.	kg	240
Air change 10 times	m³/h	9
Diff. pressure (air change 10 times EK5/	Pa	10
AK4)		
Entry height transport base	mm	90
Entry width transport base	mm	1012

Main features



Robust construction in bi-colour design



Accessible transport base

You will find technical drawings and adjustment heights for these cabinet models from page $84\,$

Model	Body colour	Door colour	Order No.
Q30.195.116	anthracite grey	warning yellow RAL 1004	31003-060
		light grey RAL 7035	31003-061
		traffic red RAL 3020	31003-066
		gentian blue RAL 5010	31003-067
		reseda green RAL 6011	31003-068
		asecos silver	31003-069
		pure white RAL 9010	31003-070

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33635
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33636
3x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33637
4x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33638
3x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	33640
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	30816
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33642
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33643
3x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33644
4x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33645
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	stainless steel	30817
3x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30013
4x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30014
4x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33647
5x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33648
6x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33649
4x drawer (V=29.0L)	stainless steel	33651
5x drawer (V=29.0L)	stainless steel	33652
6x drawer (V=29.0L)	stainless steel	33653

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
January	Sump inliner for shelf	PE black	1000 x 392 x 50*	7223
	Sump inliner for drawer	PP grey	834 x 450 x 96*	10054
	Anti-slip rubber mat for drawer	black	840 x 490 x 1	8699
	Base cover	panel melamine resin-coated RAL 7016	1086 x 536 x 88	31925
1	Base cover with adjusting device (available for order only in combination with cabinet)	panel melamine resin-coated RAL 7016	1086 x 536 x 88	31005
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038

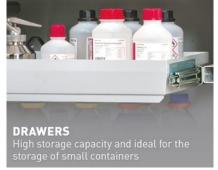
Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} usable storage space W x D (mm)

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SAFETY STORAGE CABINETS ONLY PROVIDE RELIABLE PROTECTION ...

... for humankind, environment and property when they are maintained professionally! With the **asecos services** you are always on the safe side.

You can find our service tariffs from page 494

Q-LINE | Q-CLASSIC-30



Model Q30.195.086.WD Order No. 31008-060-33622



Model Q30.195.086.WD Order No. 31008-060-33622



Model Q30.195.086.WDFW Order No. 32781-061-33629

Technical data

External dimensions W x D x H	mm	864 x 620 x 1947
Internal dimensions W x D x H	mm	750 x 519 x 1626
Weight without interior equip.	kg	195
Air change 10 times	m³/h	6
Diff. pressure (air change 10 times EK5/	Pa	10
AK4)		
Entry height transport base	mm	90
Entry width transport base	mm	788
Littly Water dansport base		,00

Main features



Robust construction in bi-colour design



Accessible transport base



Model WDFW with glass-fronted wing door

You will find technical drawings and adjustment heights for these cabinet models from page 84

Model	Body colour	Door colour	0	rder No.
			Door hinge: left	right
Q30.195.086.WD	anthracite grey	warning yellow RAL 1004	31008-060	31009-060
		light grey RAL 7035	31008-061	31009-061
		traffic red RAL 3020	31008-066	31009-066
		gentian blue RAL 5010	31008-067	31009-067
		reseda green RAL 6011	31008-068	31009-068
		asecos silver	31008-069	31009-069
		pure white RAL 9010	31008-070	31009-070
			Door hinge: left	
Q30.195.086.WDFW	anthracite grey	warning yellow RAL 1004	32781-060	
		light grey RAL 7035	32781-061	
		traffic red RAL 3020	32781-066	

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33622
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33623
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33624
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33625
3x tray shelf (V=23.5L), 1x bottom collecting sump (V=39.5L)	sheet steel powder-coated RAL 7035	30818
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30047
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30048
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30049
4x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30050
3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30819
3x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30051
4x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30052
4x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33627
5x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33628
6x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33629
4x drawer (V=19.0L)	stainless steel	33631
5x drawer (V=19.0L)	stainless steel	33632
6x drawer (V=19.0L)	stainless steel	33633

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
January 1	Sump inliner for shelf	PE black	1000 x 392 x 50*	7223
	Sump inliner for drawer	PP grey	834 x 450 x 96*	10054
	Anti-slip rubber mat for drawer	black	840 x 490 x 1	8699
• •	Base cover	sheet steel powder-coated textured RAL 7016	1118 x 35 x 85	30036
F	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} usable storage space W x D (mm)

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Model Q30.195.056 Order No. 31002-060-33600



Model Q30.195.056 Order No. 31002-066-33608



Model Q30.195.056 Order No. 31002-061-33610

Technical data

External dimensions W x D x H	mm	564 x 620 x 1947
Internal dimensions W x D x H	mm	450 x 519 x 1626
Weight without interior equip.	kg	146
Air change 10 times	m³/h	4
Diff. pressure (air change 10 times EK5/	Pa	10
AK4)		
Entry height transport base	mm	90
Entry width transport base	mm	412

Main features



Robust construction in bi-colour design



Accessible transport base

You will find technical drawings and adjustment heights for these cabinet models from page $84\,$

Model	Body colour	Door colour	Order No.	
			Door hinge: left	right
Q30.195.056 anthracite grey	warning yellow RAL 1004	31002-060	31007-060	
		light grey RAL 7035	31002-061	31007-061
	traffic red RAL 3020	31002-066	31007-066	
		gentian blue RAL 5010	31002-067	31007-067
		reseda green RAL 6011	31002-068	31007-068
		asecos silver	31002-069	31007-069
		pure white RAL 9010	31002-070	31007-070

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
		Door hinge: left right
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33600 34371
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33602 34372
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33603 34373
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33604 34374
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33606 34375
3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	30820 34369
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30081 33412
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30082 33413
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30083 33414
4x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30084 33415
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	30085 33416
3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30821 34370
3x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30086 33417
4x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30087 33418
4x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33608 34376
5x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33609 34377
6x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33610 34378
4x drawer (V=4.5L)	stainless steel	33616 34381
5x drawer (V=4.5L)	stainless steel	33617 34382
6x drawer (V=4.5L)	stainless steel	33618 34383
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33619 34384
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33620 34385
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33612 34379
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33613 34380

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner	PP grey	353 x 406 x 88*	9706
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719
	Sump inliner for drawer disposal	PE white	313 x 484 x 71*	40171
1	Base cover with adjusting device (available for order only in combination with cabinet)	panel melamine resin-coated RAL 7016	486 x 536 x 88	31004
	Base cover	panel melamine resin-coated RAL 7016	486 x 536 x 88	31923
F	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

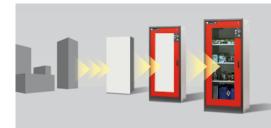
^{*} usable storage space W x D (mm)

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Our optimised online product configurator helps you, step by step, to find the suitable safety storage cabinet. Take the test: **www.asecos-configurator.com**

Q-LINE | Q-CLASSIC-30 | Triple Certified



Model Q30.195.116.FU.WDAS

Order No. 37579-060-34637



Model Q30.195.086.FU.WDAS

Order No. 37580-060-34628



Model Q30.195.056.FU.WDAS

Order No. 37582-060-34617

Technical data		37579	37580 / 37581	37582 / 37583
External dimensions W x D x H	mm	1164 x 620 x 1947	864 x 620 x 1947	564 x 620 x 1947
Internal dimensions W x D x H	mm	1050 x 519 x 1626	750 x 519 x 1626	450 x 519 x 1626
Weight without interior equip.	kg	240	195	146
Air change 10 times	m³/h	9	6	4
Diff. pressure (air change 10 times EK5/AK4)	Pa	10	10	10
Entry height transport base	mm	90	90	90
Entry width transport base	mm	1012	788	412

Main features



Bi-colour design



Accessible transport base



TRIPLE CERTIFIED

You will find technical drawings and adjustment heights for these cabinet models from page 84

Model	Body colour	Door colour		Order No.	
Q30.195.116.FU.WDAS	anthracite grey	warning yellow RAL 1004		37579-060	
		light grey RAL 7035		37579-061	
			Door hinge: left	right	
Q30.195.086.FU.WDAS	anthracite grey	warning yellow RAL 1004	37580-060	37581-060	
		light grey RAL 7035	37580-061	37581-061	
			Door hinge: left	right	
Q30.195.056.FU.WDAS	anthracite grey	warning yellow RAL 1004	37582-060	37583-060	
		light grey RAL 7035	37582-061	37583-061	

	light grey RAL 7035	37582-061 37583-061
Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
Q30.195.116.FU.WDAS		
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	34637
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	34638
3x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	34639
4x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	34640
3x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	37588
4x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	37591
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	37600
4x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	37603
Q30.195.086.FU.WDAS(R)		
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34628
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34629
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34630
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34631
3x tray shelf (V=23.5L), 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37589
4x tray shelf (V=23.5L), 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37592
3x tray shelf (V=23.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37601
4x tray shelf (V=23.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37604
Q30.195.056.FU.WDAS(R)		
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34617
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34618
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34615
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	34616
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37590
4x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37593
3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37602
4x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	37605

Accessories		Material	W x D x H (mm)	Order No.
		panel melamine resin-coated RAL 7016	486 x 536 x 88	31923
	Base cover	panel melamine resin-coated RAL 7016	786 x 536 x 88	31924
		panel melamine resin-coated RAL 7016	1086 x 536 x 88	31925
_		panel melamine resin-coated RAL 7016	486 x 536 x 88	31004
1	Base cover with adjusting device (available for order only in combination with cabinet)	panel melamine resin-coated RAL 7016	786 x 536 x 88	31010
1		panel melamine resin-coated RAL 7016	1086 x 536 x 88	31005
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037

Ventilation	Order No.
Extraction unit without exhaust air monitoring	14218

^{*} usable storage space W x D (mm)

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.







3D

Discover our products in the virtual **3D showroom:**

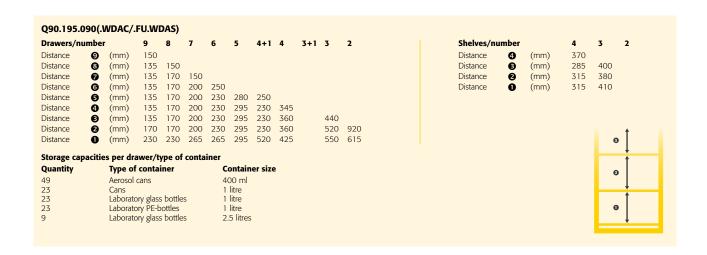
www.asecos-showroom.com

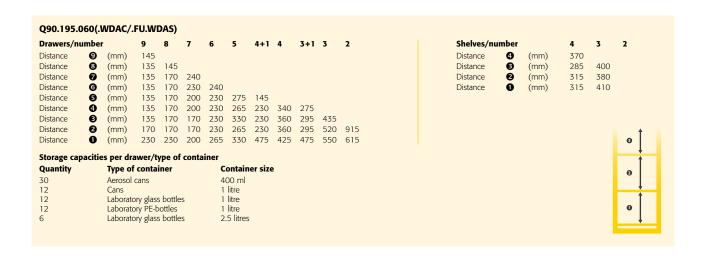


Storage heights

Safety storage cabinets type 90

)rawers/nui	mber	9	8	7	6	5	4+1	4	3+1	3	2	Shelves/nu	umber		4	3	2
Distance	9 (mm)	150										Distance	4	(mm)	370		
istance	8 (mm)	135	150									Distance	€	(mm)	285	400	
istance	(mm)	135	170	150								Distance	0	(mm)	315	380	
istance	6 (mm)	135	170	200	250							Distance	0	(mm)	315	410	
istance	6 (mm)	135	170	200	230	280	250						_	` /			
Distance	4 (mm)	135	170	200	230	295	230	345									
Distance	6 (mm)	135	170	200	230	295	230	360		440							
istance	(mm)	170	170	200	230	295	230	360		520	920						
Distance	(mm)	230	230	265	265	295	520	425		550	615					6	
Storage capa	acities per dr	awer/ty	pe of	contai	iner										-	,	
Quantity	Type of	f contai	ner		C	ontain	er size									0	
90	Aerosol	cans			40	00 ml										•	
10	Cans				1	litre									_	,	•
10		ory glass		S		litre										,	Ī
10		ory PE-b				litre										0	
5	Laborat	ory glass	bottle	S	2.	5 litres											ļ







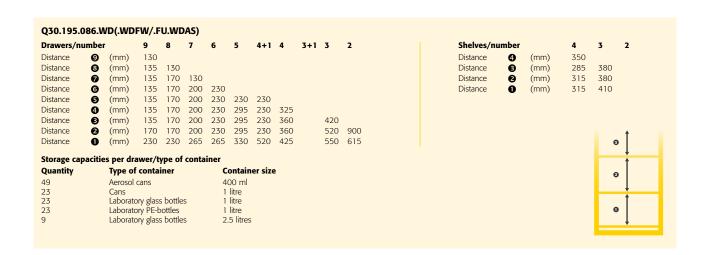
Safety storage cabinets type 90

Drawers/num	ber	9	8	7	6	5	4+1	4	3+1	3	2		Shelves/n	umber		4	3
Distance	9 (mm)	145											Distance	4	(mm)	370	
Distance	(mm)	135	145										Distance	€	(mm)	285	400
Distance	7 (mm)	135	170	240									Distance	0	(mm)	315	380
	(mm)	135	170	230	240								Distance	Ŏ	(mm)	315	410
	(mm)	135	170	200	230	275	145								()		
	(mm)	135	170	200	230	265	230	340	275								
	(mm)	135	170	170	230	330	230	360	295	435							
	(mm)	170	170	170	230	265	230	360	295	520	915						
	(mm)	230	230	200	265	330	475	425	475	550	615					6	. 1
Distance ((11111)	230	230	200	203	330	4/3	423	4/3	330	015					٠	'
Storage capac	ities per dr	awer/ty	pe of	conta	iner												*
Quantity	Type of	f contai	ner		C	ontain	er size	2								•	
30	Aerosol	cans			40	00 ml											'
12	Cans				1	litre											+
12	Laborat	ory glass	bottle	s	1	litre											1
12	Laborate				1	litre										0)
6	Laborat	ory glass	bottle	S	2.	5 litres											1

. , .		Upper compartments	Lower compartments			Upper compartments		ver compa	rtments
rawers/numbe		2	2	Shelves/number		2	2		
stance 2		340	339		, ,			_	
tance ①	(mm)	330	330	Distance ①	(mm)	315	315		
)	Laborato	ry glass bottles 1 ry PE-bottles 1	20 ml litre litre litre 5 litres				ı	9	9
							_	0	0

Safety storage cabinets type 30

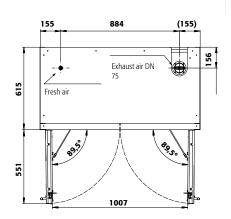
Orawers/nui	mber	9	8	7	6	5	4+1	4	3+1	3	2	S	helves/nu	mber		4	3
Distance	9 (mm)	130										D	istance	4	(mm)	350	
Distance	8 (mm)	135	130									D	istance	€	(mm)	285	380
Distance	(mm)	135	170	130								D	istance	0	(mm)	315	380
Distance	6 (mm)	135	170	200	230							D	istance	Ŏ	(mm)	315	410
Distance	(mm)	135	170	200	230	230	230								()	2.15	
Distance	(mm)	135	170	200	230	295	230	325									
Distance	(mm)	135	170	200	230	295	230	360		420							
istance	- \ /	170	170	200	230	295	230	360		520	900						
	(mm)																
istance	0 (mm)	230	230	230	265	295	520	425		550	615						6
torage capa	acities per d	awer/ty	ype of	conta	iner												
Quantity	Туре о	f contai	iner		C	ontain	er size	2									0
90	Aeroso	cans			40	00 ml											•
10	Cans				1	litre										_	
10	Labora	ory glass	bottle	S	1	litre											
10	Labora	ory PE-b	ottles		1	litre											0
5	Labora	ory glass	bottle	S	2.	5 litres											



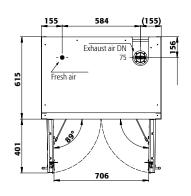
Drawers/nu	mber	9	8	7	6	5	4+1	4	3+1	3	2	S	helves/n	umber		4	3
Distance	9 (mm)	125										D	Distance	4	(mm)	350	
Distance	3 (mm)	135	125									D	Distance	€	(mm)	285	380
Distance	(mm)	135	170	220								D	Distance	0	(mm)	315	380
Distance	6 (mm)	135	170	230	220							D	Distance	0	(mm)	315	410
Distance	6 (mm)	135	170	200	230	255	125										
Distance	4 (mm)	135	170	200	230	265		320									
Distance	3 (mm)	135	170	170	230	330		360		415							
Distance	2 (mm)	170	170	170	230	265		360		520	895						
Distance	1 (mm)	230	230	200	265	330		425		550	615						
Storage capa	acities per dr	awer/t	ype of	conta	iner												
Quantity	Туре о	f contai	iner		C	ontain	er size	e									
30	Aerosol	cans			4	00 ml											
12	Cans					litre											
12		ory glass		!S		litre											
12		ory PE-b				litre											
6	Laborat	ory glass	s bottle	!S	2.	.5 litres											



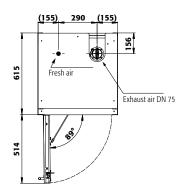
Safety storage cabinets type 90



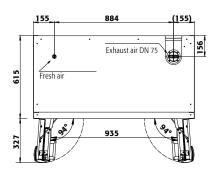
Q90.195.120 Q90.195.120.MV Q90.195.120.MM Q90.195.120.FU.WDAS Q90.195.120.WDAC



Q90.195.090 Q90.195.090.FU.WDAS Q90.195.090.WDAC

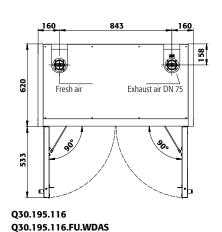


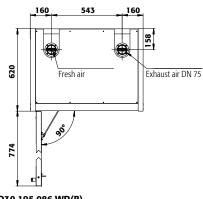
Q90.195.060(.R) Q90.195.060.FU.WDAS(R) Q90.195.060.WDAC(R)



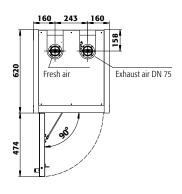
Q90.195.120.FD

Safety storage cabinets type 30





Q30.195.086.WD(R) Q30.195.086.WDFW Q30.195.086.FU.WDAS(R)



Q30.195.056(.R) Q30.195.056.FU.WDAS(R)



asecos is uncompromising when it comes to safety.

Our expertise as developers and manufacturers of technical safety products is also reflected in the range of services we offer. Seamless, professional maintenance can prevent serious damage in critical cases, and is also required by law in many countries.

A selected number of sales partners around the world have undergone a special certification process and are able to provide professional services where asecos cannot be present personally.

Ask us for more information.

With the asecos services you are always on the safe side.

asecos fulfils these requirements: Inspection and maintenance carried out by our specialised service technicians ensures your safety storage cabinet functions properly. Concluding an asecos service agreement extends your warranty to up to 10 years.

During safety technology inspections, our service experts check all safety-relevant elements such as fire protection and ventilation seals, insulation, door closures, fusible links, ventilation openings for proper function and effectiveness.

For more information on the asecos service programme visit **www.asecos.global** or contact our experts via **service@asecos.com**.

Detailed information about our services, service rates and legal frameworks is available from page 494.







Overview

Recirculating air filter storage cabinets type 90

FX-PEGASUS-90 | model class with wing doors, door open arrest system, automatic door closing (TSA), one-hand operation (AGT) and recirculating air filter system



FX-CLASSIC-90 | model class with wing doors, vertical dividing wall and recirculating air filter system



page 96

Recirculating air filter storage cabinets type 30

FX-DISPLAY-30 | model class with wing door with glass openings and recirculating air filter system



FX30.229.086.WDFW page 104

91

FX-LINE | FX-CLASSIC-90

Safe and approved storage of flammable liquids and further hazardous substances

Safety for employees

Avoidance of explosive atmospheres, extraction and filtering of vapours that are harmful to health.



Low noise level

At approx. 39 dB (A), the unit is extremely quiet and does not produce any perturbing noises. Visual and acoustic signals provide a clear warning in an emergency and, in combination with the potential-free alarm contact, ensure maximum safety.



Eco-friendly filter with electronic monitoring

Long filter lifetimes; environmentally and customer-friendly reusable filter system; monitoring of filter saturation by solvent vapours (hydrocarbons), air recirculation rate (exhaust air quantity), service intervals; scheduling for the manual filter saturation check.



High flexibility

Integrated transport base for simple inhouse transport.



Modern bicolour system

The new recirculating air filter storage cabinets bring colour to your workplace, body in modern Anthracite grey, cabinet doors available in Traffic red, Warning yellow or Light grey.



(5)

Cylinder lock

Door lockable with cylinder lock, the cabinets can be integrated by the customer into an existing locking system.



\Box

The FX-LINE

Is based on the Q-CLASSIC-90, Q-PEGASUS-90 and Q-DISPLAY-30 cabinets.

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



• Fire resistance of 30 minutes (type 30), type-tested in accordance with EN 14470-1



• **GS-test** of the Q-LINE safety storage cabinets according to the requirements of EN 14470-1



Conformity of the Q-LINE safety storage cabinets according to EN 16121 and 16122 (EN 16121:2013+A1:2017)



- ATEX-conformity: C€© II 3/-G Ex ic nA IIB t4 Gc
- super quiet approx. 39 dB (A)
- optical and acoustic alarm including potential-free alarm contact



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to five years in connection with an asecos service tariff



Interior equipment

Our numerous cabinet models can be easily adapted to a variety of storage requirements thanks to the wide range of interior equipment options. Depending on requirements, interior equipment packages with the following components are available:

Drawer



Ideally suited for the storage of small containers up to 5 L, spray cans or compressed gas cans

- The extended drawer provides an overview of all stored hazardous materials
- All containers can be conveniently and safely removed or adjusted
- The drawers are self-closing in case of fire or have a permanent self-closing mechanism
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Metal-free storage level



Optimally suited for the storage of flammable and slightly aggressive hazardous materials.

- The tray shelf with chemically resistant surface coating and plastic sump offers a high level of corrosion protection
- The plastic sump is mounted on the tray shelf to prevent it from tipping and pulling out, and can be easily removed if necessary
- Available material: polypropylene (grey)

Bottom collecting sump and perforated insert



High quality bottom collecting sumps

- Possible leakages are safely collected in the floor area
- Can be used in combination with a perforated insert as an additional storage level for containers
- Available material: powder-coated sheet steel (RAL 7035), stainless steel or polypropylene

Shelf and shelf tray



Suitable for larger containers

- The shelves are height-adjustable and can be easily adapted to the height of the containers
- A safety upstand protects the containers from falling down
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Accessories



Practical accessories such as plastic sump inliner, anti-slip mats or separately lockable storage boxes complement the interior design variants and provide additional comfort and safety when storing and handling the containers

HAVE YOU GOT SPACE TO WASTE?

... probably not.

This is exactly the reason why we want to introduce you to the benefits of safety storage cabinets with full drawers.

THE TASK

A situation known to many users:

- Which conditions should be used when clearing the containers in the cabinet?
- Which containers are on the front of the shelves, which are to the rear?
- Which hazardous materials should be placed on one storage level if possible?
- How can it be guaranteed that the containers from the rear rows can be easily and safely removed?





THE SOLUTION

Safety storage cabinets with drawers make these questions redundant!

- Logical storage of small containers
- Easily accessible for storage and removal
- Safe and simple collection of waste materials in waste containers

Convenient – no awkward removal of containers to remove containers from the rear storage area.

The question of whether containers should be at the front or rear does not arise. The full drawer always gives you the **complete overview** of the storage level.

Hazardous materials that should be placed together on a storage level can be easily and **logically arranged in a full drawer. Double your possible storage capacity** in the safety cabinet!



FX-LINE | FX-CLASSIC-90



Model FX90.229.120.MV Order No. 33286-040-33544



Model FX90.229.120.MV Order No. 33286-041-33657



Model FX90.229.120.MV Order No. 33286-046-33656

Technical data

External dimensions W x D x H Internal dimensions W x D x H	mm mm	1193 x 615 x 2294 left: 450 x 522 x 1647 right: 450 x 522 x 1647
Weight without interior equip.	kg	554
Entry height transport base	mm	90
Entry width transport base	mm	1120
Frequency	Hz	50
Power consump. in operation	W	120
Power consump. in standby mode	W	50
Max. current consumption	Α	0.5

Main features



Self-sufficient and flexible storage solution



Type 90 cabinet incl. recirculating air filter



Dividing wall separates two storage compartments

You will find technical drawings and adjustment heights for these cabinet models from page $106\,$

Model	Body colour	Door colour	Order No.
FX90.229.120.MV	anthracite grey RAL 7016	warning yellow RAL 1004	33286-040
		light grey RAL 7035	33286-041
		traffic red RAL 3020	33286-046

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
Left: 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	33656
Left: 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey	33544
Left: 3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	37694
Left: 3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey	37695
Left: 6x drawer (V=4.5L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	33657
Left: 6x drawer (V=4.5L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey	33658

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner	PP grey	353 x 406 x 88*	9706
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
• •	Base cover	sheet steel powder-coated textured RAL 7016	1118 x 35 x 85	30036
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793
	Activated carbon replacement filter	activated carbon	270 x 270 x 246	32950

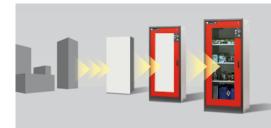
^{*} usable storage space W x D

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FX-LINE | FX-PEGASUS-90



Model FX90.229.120.WDAC Order No. 32905-040-33647



Model FX90.229.120.WDAC Order No. 32905-041-33649

x 615 x 2294 x 522 x 1647



Model FX90.229.120.WDAC Order No. 32905-046-33635

Technical data

mm	1193
mm	1050
kg	459
mm	90
mm	1120
Hz	50
W	120
W	50
Α	0.5
	mm kg mm mm Hz W

Main features



Self-sufficient and flexible storage solution



Type 90 cabinet incl. recirculating air filter unit



Doors with one-hand operation (AGT), door open-arrest system and automatic door closing (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page 106

Model	Body colour	Door colour	Order No.
FX90.229.120.WDAC	anthracite grey RAL 7016	warning yellow RAL 1004	32905-040
		light grey RAL 7035	32905-041
		traffic red RAL 3020	32905-046

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33635
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33636
3x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33637
4x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33638
3x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	33640
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	30816
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33642
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33643
3x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33644
4x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33645
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	stainless steel	30817
3x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30013
4x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30014
4x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33647
5x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33648
6x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33649
4x drawer (V=29.0L)	stainless steel	33651
5x drawer (V=29.0L)	stainless steel	33652
6x drawer (V=29.0L)	stainless steel	33653

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
Succession	Sump inliner for shelf	PE black	1000 x 392 x 50*	7223
	Sump inliner for drawer	PP grey	834 x 450 x 96*	10054
	Anti-slip rubber mat for drawer	black	840 x 490 x 1	8699
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
•	Base cover	sheet steel powder-coated textured RAL 7016	1118 x 35 x 85	30036
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793
	Activated carbon replacement filter	activated carbon	270 x 270 x 246	32950

^{*} usable storage space W x D

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You can find our service tariffs from page 494



FX-LINE | FX-PEGASUS-90



Model FX90.229.090.WDAC

Order No. 32910-046-33622



Model FX90.229.090.WDAC

Order No. 32910-041-33627



Model FX90.229.090.WDAC

Order No. 32910-040-33629

Technical data

External dimensions W x D x H	mm	893 x 615 x 2294
Internal dimensions W x D x H	mm	750 x 522 x 1647
Weight without interior equip.	kg	370
Entry height transport base	mm	90
Entry width transport base	mm	820
Frequency	Hz	50
Power consump. in operation	W	120
Power consump. in standby mode	W	50
Max. current consumption	А	0.5

Main features



Self-sufficient and flexible storage solution



Type 90 cabinet incl. recirculating air filter unit



Doors with one-hand operation (AGT), door open-arrest system and automatic door closing (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page 106

Model	Body colour	Door colour	Order No.
FX90.229.090.WDAC	anthracite grey RAL 7016	warning yellow RAL 1004	32910-040
		light grey RAL 7035	32910-041
		traffic red RAL 3020	32910-046

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33622
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33623
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33624
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33625
3x tray shelf (V=23.5L), 1x bottom collecting sump (V=39.5L)	sheet steel powder-coated RAL 7035	30818
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30047
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30048
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30049
4x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30050
3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30819
3x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30051
4x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30052
4x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33627
5x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33628
6x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33629
4x drawer (V=19.0L)	stainless steel	33631
5x drawer (V=19.0L)	stainless steel	33632
6x drawer (V=19.0L)	stainless steel	33633

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner for drawer	PP grey	534 x 450 x 96*	27948
Summer	Sump inliner for shelf	PP grey	653 x 406 x 88*	9707
	Anti-slip rubber mat for drawer	black	540 x 490 x 1	15653
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
• •	Base cover	sheet steel powder-coated textured RAL 7016	818 x 35 x 85	30069
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793
	Activated carbon replacement filter	activated carbon	270 x 270 x 246	32950

^{*} usable storage space W x D

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FX-LINE | FX-PEGASUS-90



Model FX90.229.060.WDAC Order No. 32915-046-33600



Model FX90.229.060.WDAC Order No. 32915-040-33608



Model FX90.229.060.WDAC Order No. 32915-041-33610

Technical data

mm mm kg mm mm Hz W	599 x 615 x 2294 450 x 522 x 1647 287 90 526 50 120 50
W A	50 0.5
	mm kg mm mm Hz W

Main features



Self-sufficient and flexible storage solution



Type 90 cabinet incl. recirculating air filter



Door with open-arrest system and automatic door closing (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page $106\,$

Model	Body colour	Door colour	Order No.
			Door hinge: left right
FX90.229.060.WDAC	anthracite grey RAL 7016	warning yellow RAL 1004	32915-040 32920-040
		light grey RAL 7035	32915-041 32920-041
		traffic red RAL 3020	32915-046 32920-046

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No	
		Door hinge: left	right
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33600	34371
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33602	34372
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33603 3	34373
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33604	34374
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33606	34375
3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	30820 3	4369
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30081	3412
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30082	33413
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30083	33414
4x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30084	33415
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	30085	33416
3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30821 3	34370
3x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30086	33417
4x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30087	33418
4x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33608	34376
5x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33609 3	34377
6x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33610 3	34378
4x drawer (V=4.5L)	stainless steel	33616	34381
5x drawer (V=4.5L)	stainless steel	33617 3	4382
6x drawer (V=4.5L)	stainless steel	33618 3	4383
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33619 3	4384
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33620 3	4385
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33612 3	34379
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33613 3	4380

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner	PP grey	353 x 406 x 88*	9706
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472
	Sump inliner for drawer disposal	PE white	313 x 484 x 71*	40171
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
• •	Base cover	sheet steel powder-coated textured RAL 7016	524 x 35 x 85	30112
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
Ē	Document holder DIN A5	polystyrene		30793
	Activated carbon replacement filter	activated carbon	270 x 270 x 181	32951

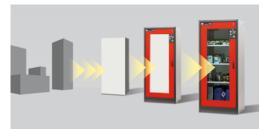
^{*} usable storage space W x D

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FX-LINE | FX-DISPLAY-30



Model FX30.229.086.WDFW

Order No. 32946-060-33622



Model FX30.229.086.WDFW

Order No. 32946-061-33627



Model FX30.229.086.WDFW

Order No. 32946-066-33629

Technical data

External dimensions W x D x H	mm	864 x 620 x 2294
Internal dimensions W x D x H	mm	750 x 519 x 1626
Weight without interior equip.	kg	245
Entry height transport base	mm	90
Entry width transport base	mm	788
Frequency	Hz	50
Power consump. in operation	W	120
Power consump. in standby mode	W	50
Max. current consumption	А	0.5

Main features



Self-sufficient and flexible storage solution



Type 30 cabinet incl. recirculating air filter unit



Model WDFW with glass-fronted wing door

You will find technical drawings and adjustment heights for these cabinet models from page $106\,$

Model	Body colour	Door colour	Order No.
FX30.229.086.WDFW	anthracite grey	warning yellow RAL 1004	32946-060
		light grey RAL 7035	32946-061
		traffic red RAL 3020	32946-066

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33622
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33623
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33624
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33625
3x tray shelf (V=23.5L), 1x bottom collecting sump (V=39.5L)	sheet steel powder-coated RAL 7035	30818
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30047
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30048
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30049
4x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30050
3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30819
3x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30051
4x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30052
4x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33627
5x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33628
6x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33629
4x drawer (V=19.0L)	stainless steel	33631
5x drawer (V=19.0L)	stainless steel	33632
6x drawer (V=19.0L)	stainless steel	33633

Accessories Material W x D x H (mm)	Order No.
Storage box left hinged sheet steel powder-coated RAL 7035 380 x 420 x 360	30029
Storage box right hinged sheet steel powder-coated RAL 7035 380 x 420 x 360	30030
Sump inliner for shelf PP grey 653 x 406 x 88*	9707
Sump inliner for drawer PP grey 534 x 450 x 96*	27948
Anti-slip rubber mat for drawer black 540 x 490 x 1	15653
Pipe lead-through sheet steel powder-coated RAL 7035 182 x 104 x 48	30035
Base cover with adjusting device (available for order only in combination with cabinet) Panel melamine resin-coated RAL 7016 786 x 536 x 88	31010
Base cover panel melamine resin-coated RAL 7016 786 x 536 x 88	31924
Q-mover 2 pieces steel powder-coated textured RAL 7016 600 x 140 x 130	30037
Box for chemicals PP blue 410 x 300 x 260	30038
Activated carbon replacement filter activated carbon 270 x 270 x 181	32951

^{*} usable storage space W x D

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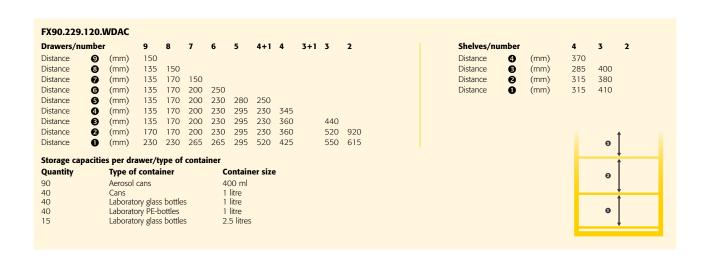




Storage heights

Recirculating air filter storage cabinets type 90

Drawers/nun	nber	9	8	7	6	5	4+1	4	3+1	3	2	S	helves/nu	ımber		4	3	
Distance	9 (mm)	145											istance	4	(mm)	370		
	8 (mm)	135	145										istance	€	(mm)	285	400	
	(mm)	135	170	240									istance	0	(mm)	315	380	
	6 (mm)	135	170	230	240							Г	istance	Ŏ	(mm)	315	410	
	6 (mm)	135	170	200	230	275	145					_			,			
	(mm)	135	170	200	230	265	230	340	275									
	(mm)	135	170	170	230	330	230	360	295	435								
	(mm)	170	170	170	230	265	230	360	295	520	915							
	(mm)	230	230	200	265	330	475	425	475	550	615					•	、 1	
)IStallice	(11111)	230	230	200	203	330	4/3	423	4/3	550	013					•	' [
Storage capa	cities per dr	awer/ty	pe of	conta	iner											_	*	
Quantity	Type of	f contai	ner		C	ontain	er size	2								•		
30	Aerosol	cans			40	00 ml										•	'	
12	Cans				1	litre											+	
12	Laborate	ory glass	bottles	S	1	litre											1	
12	Laborato	ory PE-b	ottles		1	litre										•)	
6	Laborate	ory glass	bottles	s	2.	5 litres											Į.	

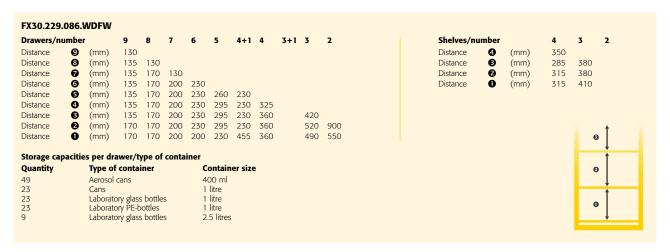


Drawers/nu	ımber	9	8	7	6	5	4+1	4	3+1	3	2	Shelves/n	umber		4	3
Distance	9 (mm)	150										Distance	4	(mm)	370	
Distance	8 (mm)	135	150									Distance	ē	(mm)	285	400
Distance	(mm)	135	170	150								Distance	0	(mm)	315	380
Distance	6 (mm)	135	170	200	250							Distance	Ō	(mm)	315	410
Distance	6 (mm)	135	170	200	230	280	250							` /		
Distance	4 (mm)	135	170	200	230	295	230	345								
Distance	6 (mm)	135	170	200	230	295	230	360		440						
Distance	2 (mm)	170	170	200	230	295	230	360		520	920					
Distance	(mm)	230	230	265	265	295	520	425		550	615					6
Storage cap	acities per dr	awer/t	vpe of	conta	iner											⊢
Quantity	Туре о		• •			ontain	er size	2								0
49	Aerosol	cans			4	00 ml										
23	Cans				1	litre										_
23	Laborat	ory glass	s bottle	:S	1	litre										
23		ory PE-b				litre										0
9	Laborat	ory glass	s bottle	:S	2	.5 litres										



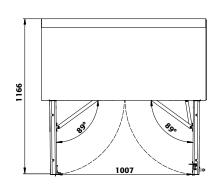
Drawers/nui	mber	9	8	7	6	5	4+1	4	3+1	3	2		Shelves/n	umber		4	3	
Distance	9 (mm)	145											Distance	4	(mm)	370		
Distance	(mm)	135	145										Distance	€	(mm)	285	400	
Distance	(mm)	135	170	240									Distance	0	(mm)	315	380	
Distance	6 (mm)	135	170	230	240								Distance	0	(mm)	315	410	
Distance	6 (mm)	135	170	200	230	275	145											
Distance	4 (mm)	135	170	200	230	265	230	340	275									
Distance	6 (mm)	135	170	170	230	330	230	360	295	435								
Distance	2 (mm)	170	170	170	230	265	230	360	295	520	915							
Distance	0 (mm)	200	200	170	230	295	475	390	475	520	585							
itorage capa	acities per o	lrawer/t	ype of	conta	iner													r
Quantity	Туре	of conta	iner		C	ontain	er size	•										
50	Aeros	ol cans			40	00 ml												
2	Cans				1	litre												H
2	Labor	atory glass	s bottle	S	1	litre												
2		atory PE-b				litre												
5	Labora	atory glas	s bottle	S	2.	5 litres												

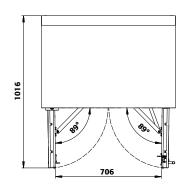
Recirculating air filter storage cabinets type 30

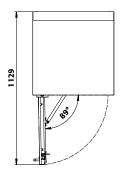


Top views

Recirculating air filter storage cabinets type 90





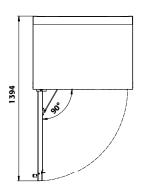


FX90.229.120.WDAC FX90.229.120.MV

FX90.229.090.WDAC

FX90.229.060.WDAC

Recirculating air filter storage cabinets type 30



FX30.229.086.WDFW

INDIVIDUAL AND **MADE TO MEASURE**



With the online tool, you can individually plan your safety storage cabinet including interior equipment, dimensions and design – the desired product is then visualised and a quotation can be requested directly.

Get an overview of the extensive asecos product range and easily find the right cabinet for your needs. Test the configurator now at:

www.asecos-configurator.com



S-LINE-

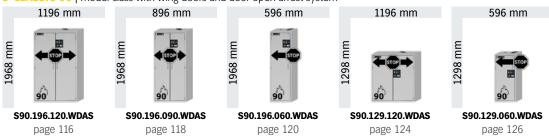
Overview

Safety storage cabinets type 90

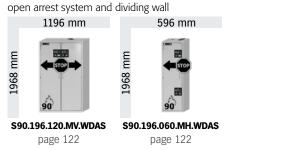
S-CLASSIC-90 | model class with wing doors



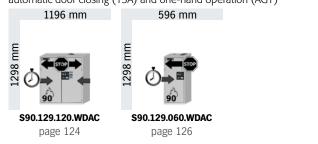
S-CLASSIC-90 | model class with wing doors and door open arrest system



S-CLASSIC-90 | model class with wing doors, door

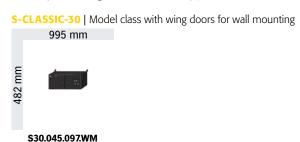


S-PEGASUS-90 | model class with wing doors, door open arrest system, automatic door closing (TSA) and one-hand operation (AGT)



Safety storage cabinets type 30

page 129





S-

Safety storage cabinets for unrestricted storage of flammable hazardous materials in work areas in accordance with EN 14470-1 and TRGS 510

Proven all-rounder

The right storage solution for every application thanks to a wide variety of models and interior equipment. Choose flexibly from wide and narrow as well as medium height and tall cabinets.



Convenient handling

Door operation with minimal effort; door open arrest system (optional) allows convenient and safe removal or storage of containers with both hands.



Dividing walls

Optionally available with a dividing wall, creating two storage compartments for the safe; segregated and cost-efficient storage of different hazardous substances in one cabinet.



Cylinder lock

Door lockable with cylinder lock, the cabinets can be integrated by the customer into an existing locking system.



Technical ventilation

Integrated air ducts ready for connection (DN 75) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.



(5)

PEGASUS Models

Improved comfort and safety when storing and retrieving hazardous materials thanks to one-hand operation (AGT) of the wing doors, door locking system and automatic door closing system (TSA).

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- GS-tested (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of EN 16121 and 16122
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- Further information from page 494



Interior equipment

Our numerous cabinet models can be easily adapted to a variety of storage requirements thanks to the wide range of interior equipment options. Depending on requirements, interior equipment packages with the following components are available:

Drawer



Ideally suited for the storage of small containers up to 5 L, spray cans or compressed gas cans

- The extended drawer provides an overview of all stored hazardous materials
- All containers can be conveniently and safely removed or adjusted
- The drawers are self-closing in case of fire or have a permanent self-closing mechanism
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Metal-free storage level



Optimally suited for the storage of flammable and slightly aggressive hazardous materials.

- The tray shelf with chemically resistant surface coating and plastic sump offers a high level of corrosion protection
- The plastic sump is mounted on the tray shelf to prevent it from tipping and pulling out, and can be easily removed if necessary
- Available material: polypropylene (grey)

Bottom collecting sump and perforated insert



High quality bottom collecting sumps

- Possible leakages are safely collected in the floor area
- Can be used in combination with a perforated insert as an additional storage level for containers
- Available material: powder-coated sheet steel (RAL 7035), stainless steel or polypropylene

Shelf and shelf tray



Suitable for larger containers

- The shelves are height-adjustable and can be easily adapted to the height of the containers
- A safety upstand protects the containers from falling down
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Accessories



Practical accessories such as plastic sump inliner, anti-slip mats or separately lockable storage boxes complement the interior design variants and provide additional comfort and safety when storing and handling the containers

HAVE YOU GOT SPACE TO WASTE?

... probably not.

This is exactly the reason why we want to introduce you to the benefits of safety storage cabinets with full drawers.

THE TASK

A situation known to many users:

- Which conditions should be used when clearing the containers in the cabinet?
- Which containers are on the front of the shelves, which are to the rear?
- Which hazardous materials should be placed on one storage level if possible?
- How can it be guaranteed that the containers from the rear rows can be easily and safely removed?





THE SOLUTION

Safety storage cabinets with drawers make these questions redundant!

- Logical storage of small containers
- Easily accessible for storage and removal
- Safe and simple collection of waste materials in waste containers

Convenient – no awkward removal of containers to remove containers from the rear storage area.

The question of whether containers should be at the front or rear does not arise. The full drawer always gives you the **complete overview** of the storage level.

Hazardous materials that should be placed together on a storage level can be easily and **logically arranged in a full drawer. Double your possible storage capacity** in the safety cabinet!





Model S90.196.120 Order No. 30115-002-33715



Model S90.196.120.WDAS Order No. 30116-002-33724



Model S90.196.120.WDAS Order No. 30116-001-33726

Technical data

Main features



The classic for laboratory and industry



Smooth-running doors, effortless operation

You will find technical drawings and adjustment heights for these cabinet models from page $154\,$

PLEASE NOTE: interior equipment with drawers can only be ordered in combination with WDAS cabinets

Model	Information / equipment	Colour	Order No.
S90.196.120	without interior equipment	light grey RAL 7035	30115-001
		warning yellow RAL 1004	30115-002
		laboratory white (sim. RAL 9016)	30115-005
S90.196.120.WDAS	without interior equipment, with door open arrest	light grey RAL 7035	30116-001
	system	warning yellow RAL 1004	30116-002
		laboratory white (sim. RAL 9016)	30116-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33715
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33716
3x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33717
4x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33718
3x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	33719
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	30830
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33720
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33721
3x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33722
4x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33723
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	stainless steel	30831
3x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30143
4x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30144
4x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33724
5x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33725
6x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33726
4x drawer (V=29.0L)	stainless steel	33727
5x drawer (V=29.0L)	stainless steel	33728
6x drawer (V=29.0L)	stainless steel	33729

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
Succession	Sump inliner for shelf	PE black	1000 x 392 x 50*	7223
	Sump inliner for drawer	PP grey	834 x 450 x 96*	10054
	Anti-slip rubber mat for drawer	black	840 x 490 x 1	8699
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
•	Base cover	sheet steel powder-coated textured RAL 7016	1118 x 35 x 85	30036
	Q-mover 2 pieces	steel powder-coated textured RAL 7016	600 x 140 x 130	30037
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Extraction unit with exhaust air monitoring	14220
Extraction unit without exhaust air monitoring	14218
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

^{*} W x D = usable floor space

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.









Technical ventilation – an important component for risk minimisation! Products for technical ventilation from asecos help to prevent the formation of explosive atmospheres and harmful vapours.

Further information and suitable solutions for technical ventilation can be found from page 326





Model S90.196.090

Order No. 30204-002-33705



Model S90.196.090.WDAS

Order No. 30205-001-33709



Model S90.196.090.WDAS

Order No. 30205-002-33711

Technical data

AK4)

Main features



The classic for laboratory and industry



Smooth-running doors, effortless operation

You will find technical drawings and adjustment heights for these cabinet models from page $154\,$

PLEASE NOTE: interior equipment with drawers can only be ordered in combination with WDAS cabinets

Model	Information / equipment	Colour	Order No.
S90.196.090	without interior equipment	light grey RAL 7035	30204-001
		warning yellow RAL 1004	30204-002
		laboratory white (sim. RAL 9016)	30204-005
S90.196.090.WDAS	without interior equipment, with door open arrest	light grey RAL 7035	30205-001
	system	warning yellow RAL 1004	30205-002
		laboratory white (sim. RAL 9016)	30205-005

3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) 4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) 5x sheet steel powder-coated RAL 7035 4x shelf, 1x bottom collecting sump (V=22.0L) 5x sheet steel powder-coated RAL 7035 5x shelf, 1x bottom collecting sump (V=22.0L) 5x tray shelf (V=23.5L), 1x bottom collecting sump (V=22.0L) 5x tray shelf (V=23.5L), 1x bottom collecting sump (V=22.0L) 5x tray shelf (x perforated insert, 1x bottom collecting sump (V=22.0L) 5x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) 5x shelf, 1x bottom collecting sump (V=22.0L) 5x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=2.0L) 5x tray shelf shell pow	
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x tray shelf metal free (V-22.0L), 1x bottom collecting sump (V-22.0L) x tray shelf metal free (V-22.0L), 1x bottom collecting sump (V-22.0L) PP grey x drawer (V-19.0L) sheet steel powder-coated RAL 7035 x drawer (V-19.0L)	30215
x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L) x drawer (V=19.0L)	30833
x drawer (V=19.0L) sheet steel powder-coated RAL 7035 x drawer (V=19.0L) stainless steel	30216
x drawer (V=19.0L) sheet steel powder-coated RAL 7035 x drawer (V=19.0L) sheet steel powder-coated RAL 7035 x drawer (V=19.0L) stainless steel	30217
x drawer (V=19.0L) sheet steel powder-coated RAL 7035 x drawer (V=19.0L) stainless steel	33709
x drawer (V=19.0L) stainless steel	33710
	33711
x drawer [V=19.0L] stainless steel	33712
	33713
x drawer (V=19.0L) stainless steel	33714

	Material	W x D x H (mm)	Order No.	
Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029	
Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030	
Sump inliner for shelf	PP grey	653 x 406 x 88*	9707	
Sump inliner for drawer	PP grey	534 x 450 x 96*	27948	
Anti-slip rubber mat for drawer	black	540 x 490 x 1	15653	
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
Box for chemicals	PP blue	410 x 300 x 260	30038	
Document holder DIN A5	polystyrene		30793	
	Storage box right hinged Sump inliner for shelf Sump inliner for drawer Anti-slip rubber mat for drawer Pipe lead-through Box for chemicals	Storage box left hinged sheet steel powder-coated RAL 7035 Storage box right hinged sheet steel powder-coated RAL 7035 Sump inliner for shelf PP grey Sump inliner for drawer PP grey Anti-slip rubber mat for drawer black Pipe lead-through sheet steel powder-coated RAL 7035 Box for chemicals PP blue	Storage box left hinged sheet steel powder-coated RAL 7035 380 x 420 x 360 Storage box right hinged sheet steel powder-coated RAL 7035 380 x 420 x 360 Sump inliner for shelf PP grey 653 x 406 x 88* Sump inliner for drawer PP grey 534 x 450 x 96* Anti-slip rubber mat for drawer black 540 x 490 x 1 Pipe lead-through sheet steel powder-coated RAL 7035 182 x 104 x 48 Box for chemicals PP blue 410 x 300 x 260	Storage box left hinged sheet steel powder-coated RAL 7035 380 x 420 x 360 30029 Storage box right hinged sheet steel powder-coated RAL 7035 380 x 420 x 360 30030 Sump inliner for shelf PP grey 653 x 406 x 88* 9707 Sump inliner for drawer PP grey 534 x 450 x 96* 27948 Anti-slip rubber mat for drawer black 540 x 490 x 1 15653 Pipe lead-through sheet steel powder-coated RAL 7035 182 x 104 x 48 30035 Box for chemicals PP blue 410 x 300 x 260 30038

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} W x D = usable floor space

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You can find our service tariffs from page 494







Model S90.196.060.WDAS Order No. 30228-002-33683



Model S90.196.060.WDAS Order No. 30228-001-33681

Technical data

External dimensions W x D x H mm 596 x 616 x 1968 Internal dimensions W x D x H mm 450 x 524 x 1742 Weight without interior equip. kg 260 Air change **10 times** m 3 /h 4 Diff. pressure (air change **10 times EK5/** Pa 5

Main features



The classic for laboratory and industry



Smooth-running doors, effortless operation

You will find technical drawings and adjustment heights for these cabinet models from page $154\,$

PLEASE NOTE: interior equipment with drawers can only be ordered in combination with WDAS cabinets

Model	Information / equipment	Colour	Order No.
			Door hinge: left right
S90.196.060	without interior equipment, left hinged	light grey RAL 7035	30227-001 30229-001
		warning yellow RAL 1004	30227-002 30227-002
		laboratory white (sim. RAL 9016)	30227-005 30227-005
S90.196.060.WDAS	without interior equipment, left hinged, with door open	light grey RAL 7035	30228-001 30230-001
	arrest system	warning yellow RAL 1004	30228-002 30230-002
		laboratory white (sim. RAL 9016)	30228-005 30230-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order	No.
		Door hinge: left	right
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33659	34387
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33660	34388
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33661	34389
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33662	34390
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33663	34391
3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	30834	34386
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30257	33451
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30258	33452
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30260	33454
4x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30261	33455
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	30263	33457
3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30835	30835
4x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30266	33460
3x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30265	33459
4x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33681	34392
5x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33682	34393
6x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33683	34394
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33684	34395
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33685	34396
4x drawer (V=4.5L)	stainless steel	33686	34397
5x drawer (V=4.5L)	stainless steel	33687	34398
6x drawer (V=4.5L)	stainless steel	33688	34399
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33689	34400
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33690	34401

Accessories		Material	W x D x H (mm)	Order No.	
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029	
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030	
	Sump inliner	PP grey	353 x 406 x 88*	9706	
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472	
	Sump inliner for drawer disposal	PE white	313 x 484 x 71*	40171	
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719	
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
	Box for chemicals	PP blue	410 x 300 x 260	30038	
	Document holder DIN A5	polystyrene		30793	

Ventilation	Order No.
Extraction unit with exhaust air monitoring	14220
Extraction unit without exhaust air monitoring	14218
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

^{*} W x D = usable floor space

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Model S90.196.120.MV.WDAS

Order No. 30348-001-33848



Model S90.196.120.MV.WDAS

Order No. 30348-001-33849



Model S90.196.060.MH.WDAS

Order No. 30353-001-33837

Technical data

External dimensions W x D x H mm Internal dimensions W x D x H mm

Weight without interior equip. kg

Air change **10 times** m³/h
Diff. pressure (air change **10 times EK5/** Pa **AK4**)

S90.196.120.MV.WDAS S90.196.060.MH.WDAS

1196 x 616 x 1968 | 596 x 616 x 1968 | left: 450 x 524 x 1742 | top: 450 x 524 x 877 | bottom: 450 x 524 x 845 | 5 | 5

Main features



Doors with open-arrest system



Dividing wall separates two storage compartments

You will find technical drawings and adjustment heights for these cabinet models from page 154

Model	Information / equipment	Colour		Order No.	
S90.196.120.MV.WDAS	without interior equipment, with door open arrest	light grey RAL 7035		30348-001	
	system, with vertical dividing wall	warning yellow RAL 1004		30348-002	
		laboratory white (sim. RAL 9016)		30348-005	
				30340 003	
		,	Door hinge: left	right	
S90.196.060.MH.WDAS	without interior equipment, left hinged, with door open		Door hinge: left 30353-001		
S90.196.060.MH.WDAS	without interior equipment, left hinged, with door open arrest system, with horizontal dividing wall			right	

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	0	rder No.
S90.196.120.MV.WDAS			
Left: 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey		33848
eft: 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey		30350
eft: 3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L) light: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey		37683
eft: 3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L) 2ight: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey		37684
eft: 6x drawer (V=4.5L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey		33849
.eft: 6x drawer (V=4.5L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey		33850
	_		
S90.196.060.MH.WDAS		hinge: left	right
Top: 2x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Bottom: 2x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	33835	34423
Fop: 2x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Bottom: 2x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey	30355	33489
Fop: 2x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L) Bottom: 2x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	37685	37702
Fop: 2x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L) Bottom: 2x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey	37686	37703
Top: 2x drawer (V=4.5L) Bottom: 2x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	33836	34424
op: 3x drawer (V=4.5L) Bottom: 2x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	33837	34425

nm) Order No.
30029
30030
38* 9706
66* 18472
1 8719
8 30035
260 30038
30793
4

Ventilation	Order No.
Extraction unit with exhaust air monitoring	14220
Extraction unit without exhaust air monitoring	14218
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

^{*} W x D = usable floor space

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Model S90.129.120 Order No. 30121-002-33744



Model S90.129.120.WDAC Order No. 30123-002-33753



Model S90.129.120.WDAS Order No. 30122-001-33754

Technical data

External dimensions W x D x H 1196 x 616 x 1298 mm Internal dimensions W x D x H 1050 x 524 x 1072 mm Weight without interior equip. 270 kg Air change 10 times m³/h 6 Diff. pressure (air change 10 times EK5/ Pa 5 AK4)

Main features



Cabinet height of 129 cm



Model WDAS incl. doors with open-arrest system



Model WDAC incl. doors with one-hand operation (AGT), open-arrest system and automatic closing system (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page 154

PLEASE NOTE: interior equipment with drawers can only be ordered in combination with WDAC and WDAS cabinets

Model	Information / equipment	Colour	Order No.
S90.129.120	without interior equipment	light grey RAL 7035	30121-001
		warning yellow RAL 1004	30121-002
S90.129.120.WDAS	without interior equipment, with door open arrest	light grey RAL 7035	30122-001
	system	warning yellow RAL 1004	30122-002
S90.129.120.WDAC	without interior equipment, with TSA, AGT, door open	light grey RAL 7035	30123-001
	arrest system	warning yellow RAL 1004	30123-002

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
2x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33744
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33745
2x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33746
3x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33747
2x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	33748
2x tray shelf (V=33.0L), 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	30822
2x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33749
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33750
2x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33751
3x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33752
2x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	stainless steel	30823
2x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30165
3x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30166
2x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33753
3x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33754
2x drawer (V=29.0L)	stainless steel	33755
3x drawer (V=29.0L)	stainless steel	33756

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
Successive	Sump inliner for shelf	PE black	1000 x 392 x 50*	7223
	Sump inliner for drawer	PP grey	834 x 450 x 96*	10054
	Anti-slip rubber mat for drawer	black	840 x 490 x 1	8699
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Extraction unit with exhaust air monitoring	14220
Extraction unit without exhaust air monitoring	14218
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

^{*} W x D = usable floor space

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Model S90.129.060 Order No. 30238-002-33735



Model S90.129.060.WDAS Order No. 30239-001-33740



Model S90.129.060.WDAC Order No. 30242-002-33741

Technical data

External dimensions W x D x H	mm	596 x 616 x 1298
Internal dimensions W x D x H	mm	450 x 524 x 1072
Weight without interior equip.	kg	170
Air change 10 times	m³/h	3
Diff. pressure (air change 10 times EK5/	Pa	5
AK4)		

Main features



Cabinet height of 129 cm



Model WDAS incl. door with open-arrest system



Model WDAC incl. door with open-arrest system and automatic closing system (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page 154

PLEASE NOTE: interior equipment with drawers can only be ordered in combination with WDAC and WDAS cabinets

Model (Information / equipment	Colour	Order No.
			Door hinge: left right
S90.129.060	without interior equipment, left hinged	light grey RAL 7035	30238-001 30240-001
		warning yellow RAL 1004	30238-002 30240-002
S90.129.060.WDAS	without interior equipment, left hinged, with door open	light grey RAL 7035	30239-001 30241-001
	arrest system	warning yellow RAL 1004	30239-002 30241-002
S90.129.060.WDAC	without interior equipment, left hinged, with TSA, door open arrest system	light grey RAL 7035	30242-001 30243-001
		warning vellow RAI 1004	30242-002 30243-002

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.	
		Door hinge: left	right
2x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33735	34413
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33736	34414
2x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33737	34415
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33738	34416
2x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33739	34417
2x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	30825	34412
2x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30283	33499
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30284	33500
2x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30285	33501
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30286	33502
2x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	30287	33503
2x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30289	33505
3x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30290	33506
2x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33740	34418
3x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33741	34419
2x drawer (V=4.5L)	stainless steel	33742	34420
3x drawer (V=4.5L)	stainless steel	33743	34421

Accessories		Material	W x D x H (mm)	Order No.	
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029	
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030	
	Sump inliner	PP grey	353 x 406 x 88*	9706	
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472	
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719	
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
	Box for chemicals	PP blue	410 x 300 x 260	30038	
	Document holder DIN A5	polystyrene		30793	
	Pipe lead-through Box for chemicals	sheet steel powder-coated RAL 7035 PP blue	182 x 104 x 48	30035 30038	

Order No.
39306
14218
14220

^{*} W x D = usable floor space

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Technical ventilation – an important component for risk minimisation! Products for technical ventilation from asecos help to prevent the formation of explosive atmospheres and harmful vapours.

Further information and suitable solutions for technical ventilation can be found from page $326\,$



Safety storage cabinets for the storage of flammable hazardous materials in working areas according to EN 14470-1 and TRGS 510

Wall-mounted

With wall-mounting capability, small quantities of hazardous materials can be stored directly above the workplace – keeping contents within easy reach and eliminating travel time.



23

No unauthorised use

Optional lockable version with profile cylinder.



3

Ventilation

Even ventilation and extraction of the entire cabinet interior. Integrated air ducts ready for connection (DN 75) to a technical exhaust system. The potential formation of explosive atmospheres or harmful vapours is safely prevented.





Model \$30.045.097.WM

Order No. 32467-912



Model S30.045.097.WM with cylinder locking

Order No. 32467-911

Technical data		\$30.045.097.WM
External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip. Extraction air Air change 10 times Diff. pressure (air change 10 times) Maximum load	mm mm kg DN m³/h Pa kg	995 x 470 x 482 942 x 419 x 414 75 75 2 1

Usable storage heights

S30.045.097.WM

1 mm 202 **2** mm 207



Main features



30 Type 30 safety box for wall mounting

You will find technical drawings for these cabinet models from page 154

Model	Information / equipment	Colour	Order No.
S30.045.097.WM	interior equipment with bottom collecting sump (sheet steel powder-coated), for wall mounting, with profile cylinder lock	anthracite grey RAL 7016	32467-911
	interior equipment with bottom collecting sump (sheet steel powder-coated), for wall mounting	anthracite grey RAL 7016	32467-912

Interior equipment	Material	W x D x H (mm)	1)	2)	3)	Order No.	
Tray shelf	sheet steel powder-coated RAL 7035	935 x 390 x 50	25.00	10.00	9.09	29573	

* usable storage space W x D (mm) 1) load capacity (kgl, 2) retention capacity (kgl, 2) retention capacity (kgl, 3) maximum container volume in the cabinet (ltr.)

Accessories	Order No.
Extraction unit without exhaust air monitoring	17178
Recirculating air filter system with exhaust air monitoring for under bench cabinets, for under bench cabinets	27144
Adapter for wall mounting	23458



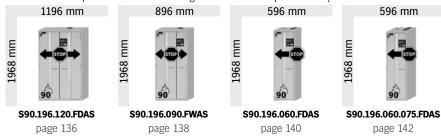




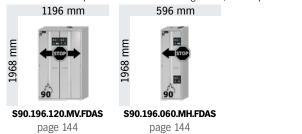
Overview

Safety storage cabinets type 90

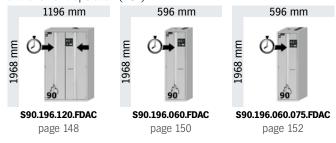
S-PHOENIX-90 | model class with folding doors and door open arrest system



S-PHOENIX-90 | model class with folding doors, door open arrest system and dividing wall



S-PHOENIX Vol.2-90 | model class with wing and folding doors, door open arrest system, automatic door closing (TSA) and one-hand operation (AGT)





S-LINE | S-PHOENIX-90

Safety storage cabinets for unrestricted storage of flammable hazardous materials in work areas in accordance with EN 14470-1 and TRGS 510

The space-saving talent

Space-saving folding doors, ideal for use in case of narrow passage widths in front of the cabinet. Continuous anti-trapping door strips on the folding doors offer maximum protection during operation.



2

Convenient handling

Door operation with minimal effort, door open arrest system allows convenient and safe removal or storage of containers with both hands.



33

Dividing walls

Optionally available with a dividing wall, creating two storage compartments for the safe, segregated and cost-efficient storage of different hazardous substances in one cabinet.





Cylinder lock

Door lockable with cylinder lock, the cabinets can be integrated by the customer into an existing locking system.





Technical ventilation

Integrated air ducts ready for connection (DN 75) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.





Special depth

Optimal use of space due to the optional cabinet depth of 75 cm.

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- Further information from page 494



Interior equipment

Our numerous cabinet models can be easily adapted to a variety of storage requirements thanks to the wide range of interior equipment options. Depending on requirements, interior equipment packages with the following components are available:

Drawer



Ideally suited for the storage of small containers up to 5 L, spray cans or compressed gas cans

- The extended drawer provides an overview of all stored hazardous materials
- All containers can be conveniently and safely removed or adjusted
- The drawers are self-closing in case of fire or have a permanent self-closing mechanism
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Metal-free storage level



Optimally suited for the storage of flammable and slightly aggressive hazardous materials.

- The tray shelf with chemically resistant surface coating and plastic sump offers a high level of corrosion protection
- The plastic sump is mounted on the tray shelf to prevent it from tipping and pulling out, and can be easily removed if necessary
- Available material: polypropylene (grey)

Bottom collecting sump and perforated insert



High quality bottom collecting sumps

- Possible leakages are safely collected in the floor area
- Can be used in combination with a perforated insert as an additional storage level for containers
- Available material: powder-coated sheet steel (RAL 7035), stainless steel or polypropylene

Shelf and shelf tray



Suitable for larger containers

- The shelves are height-adjustable and can be easily adapted to the height of the containers
- A safety upstand protects the containers from falling down
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Accessories



Practical accessories such as plastic sump inliner, anti-slip mats or separately lockable storage boxes complement the interior design variants and provide additional comfort and safety when storing and handling the containers

HAVE YOU GOT SPACE TO WASTE?

... probably not.

This is exactly the reason why we want to introduce you to the benefits of safety storage cabinets with full drawers.

THE TASK

A situation known to many users:

- Which conditions should be used when clearing the containers in the cabinet?
- Which containers are on the front of the shelves, which are to the rear?
- Which hazardous materials should be placed on one storage level if possible?
- How can it be guaranteed that the containers from the rear rows can be easily and safely removed?





THE SOLUTION

Safety storage cabinets with drawers make these questions redundant!

- Logical storage of small containers
- Easily accessible for storage and removal
- Safe and simple collection of waste materials in waste containers

Convenient – no awkward removal of containers to remove containers from the rear storage area.

The question of whether containers should be at the front or rear does not arise. The full drawer always gives you the **complete overview** of the storage level.

Hazardous materials that should be placed together on a storage level can be easily and **logically arranged in a full drawer. Double your possible storage capacity** in the safety cabinet!



S-LINE | S-PHOENIX-90



Model S90.196.120.FDAS

Order No. 30118-005-33715



Model S90.196.120.FDAS

Order No. 30118-001-33724



Model S90.196.120.FDAS

Order No. 30118-002-33726

Technical data

External dimensions W x D x H mr Internal dimensions W x D x H mr Weight without interior equip. kg Air change 10 times m³ Diff. pressure (air change 10 times EK5/ Pa

mm 1196 x 616 x 1968 mm 1050 x 524 x 1742 kg 420 m³/h 10

5

Main features



Space-saving folding doors



Doors with open-arrest system

You will find technical drawings and adjustment heights for these cabinet models from page $154\,$

Model	Information / equipment	Colour	Order No.
S90.196.120.FDAS	without interior equipment, with door open arrest	light grey RAL 7035	30118-001
	system	warning yellow RAL 1004	30118-002
		laboratory white (sim. RAL 9016)	30118-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33715
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33716
3x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33717
4x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33718
3x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	33719
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	30830
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33720
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33721
3x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33722
4x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33723
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	stainless steel	30831
3x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30143
4x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30144
4x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33724
5x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33725
6x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33726
4x drawer (V=29.0L)	stainless steel	33727
5x drawer (V=29.0L)	stainless steel	33728
6x drawer (V=29.0L)	stainless steel	33729

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
Sugar	Sump inliner for shelf	PE black	1000 x 392 x 50*	7223
	Sump inliner for drawer	PP grey	834 x 450 x 96*	10054
	Anti-slip rubber mat for drawer	black	840 x 490 x 1	8699
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
	Box for chemicals	PP blue	410 x 300 x 260	30038
Ī	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

^{*} W x D = usable floor space

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.









Technical ventilation – an important component for risk minimisation! Products for technical ventilation from asecos help to prevent the formation of explosive atmospheres and harmful vapours.

Further information and suitable solutions for technical ventilation can be found from page 326



S-LINE | S-PHOENIX-90



Model S90.196.090.FWAS Order No. 30207-005-33705



Model S90.196.090.FWAS Order No. 30207-001-33709



Model S90.196.090.FWAS Order No. 30207-002-33711

Technical data

AK4)

Main features



Space-saving folding doors



Doors with open-arrest system

You will find technical drawings and adjustment heights for these cabinet models from page $154\,$

Model	Information / equipment	Colour	Order No.
S90.196.090.FWAS	without interior equipment, with door open arrest	light grey RAL 7035	30207-001
	system	warning yellow RAL 1004	30207-002
		laboratory white (sim. RAL 9016)	30207-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33705
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33706
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33707
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33708
3x tray shelf (V=23.5L), 1x bottom collecting sump (V=39.5L)	sheet steel powder-coated RAL 7035	30832
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30212
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30213
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30214
4x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30215
3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30833
3x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30216
4x tray shelf metal free (V=22.0L), 1x bottom collecting sump (V=22.0L)	PP grey	30217
4x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33709
5x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33710
6x drawer (V=19.0L)	sheet steel powder-coated RAL 7035	33711
4x drawer (V=19.0L)	stainless steel	33712
5x drawer (V=19.0L)	stainless steel	33713
6x drawer (V=19.0L)	stainless steel	33714

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner for shelf	PP grey	653 x 406 x 88*	9707
	Sump inliner for drawer	PP grey	534 x 450 x 96*	27948
	Anti-slip rubber mat for drawer	black	540 x 490 x 1	15653
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Extraction unit with exhaust air monitoring	14220
Extraction unit without exhaust air monitoring	14218
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

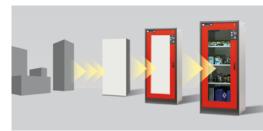
^{*} W x D = usable floor space

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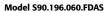
ARE YOU LOOKING FOR AN APPROPRIATE STORAGE SOLUTION FOR HAZARDOUS MATERIALS?

Our optimised online product configurator helps you, step by step, to find the suitable safety storage cabinet. Take the test: **www.asecos-configurator.com**



S-LINE | S-PHOENIX-90





Order No. 30233-001-33659



Model S90.196.060.FDAS

Order No. 30233-001-33681



Model S90.196.060.FDAS

Order No. 30233-002-33683

Technical data

External dimensions W x D x H 596 x 616 x 1968 mm Internal dimensions W x D x H 450 x 524 x 1742 mm Weight without interior equip. kg m³/h 260 Air change 10 times

Diff. pressure (air change 10 times EK5/ 4

Pa

AK4)

Main features



Space-saving folding door



Door with open-arrest system

You will find technical drawings and adjustment heights for these cabinet models from page $154\,$

Model	Information / equipment	Colour	Order No.
			Door hinge: left right
S90.196.060.FDAS	without interior equipment, left hinged, with door open	light grey RAL 7035	30233-001 30234-001
	arrest system	warning yellow RAL 1004	30233-002 30234-002
		laboratory white (sim. RAL 9016)	30233-005 30234-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
		Door hinge: left right
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33659 34387
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33660 34388
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33661 34389
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33662 34390
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33663 34391
3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	30834 34386
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30257 33451
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30258 33452
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30260 33454
4x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30261 33455
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	30263 33457
3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30835 30835
4x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30266 33460
3x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30265 33459
4x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33681 34392
5x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33682 34393
6x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33683 34394
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33684 34395
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33685 34396
4x drawer (V=4.5L)	stainless steel	33686 34397
5x drawer (V=4.5L)	stainless steel	33687 34398
6x drawer (V=4.5L)	stainless steel	33688 34399
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33689 34400
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33690 34401

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
	Sump inliner	PP grey	353 x 406 x 88*	9706
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472
	Sump inliner for drawer disposal	PE white	313 x 484 x 71*	40171
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Extraction unit with exhaust air monitoring	14220
Extraction unit without exhaust air monitoring	14218
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

^{*} W x D = usable floor space

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Discover our products in the virtual 3D showroom:

www.asecos-showroom.com



S-LINE | S-PHOENIX-90



Model S90.196.060.075.FDAS

Order No. 30313-001-33697



Model S90.196.060.075.FDAS

Order No. 30313-001-33698



Model S90.196.060.075.FDAS

Order No. 30313-002-33699

Technical data

AK4)

Main features



Cabinet depth of 750 mm



Space-saving folding door



Door with open-arrest system

You will find technical drawings and adjustment heights for these cabinet models from page 154

Model	Information / equipment	Colour	Order No.		
			Door hinge: left	right	
S90.196.060.075.FDAS	without interior equipment, left hinged, with door open	light grey RAL 7035	30313-001	30314-001	
	arrest system	warning yellow RAL 1004	30313-002	30314-002	
		laboratory white (sim. RAL 9016)	30313-005	30314-005	

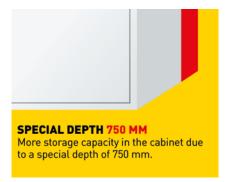
nterior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.	
		Door hinge: left	right
4x drawer (V=5.5L)	sheet steel powder-coated RAL 7035	33695	34402
5x drawer (V=5.5L)	sheet steel powder-coated RAL 7035	33696	34403
5x drawer (V=5.5L)	sheet steel powder-coated RAL 7035	33697	34404
4x drawer (V=5.5L)	stainless steel	33700	34407
5x drawer (V=5.5L)	stainless steel	33701	34408
5x drawer (V=5.5L)	stainless steel	33702	34409

Accessories		Material	W x D x H (mm)	Order No.	
U Uja	Sump inliner for drawer supply	PP undyed	314 x 560 x 66*	18473	
	Anti-slip rubber mat for drawer supply	black	630 x 340 x 1	8720	
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
	Document holder DIN A5	polystyrene		30793	

Ventilation	Order No.
Extraction unit with exhaust air monitoring	14220
Extraction unit without exhaust air monitoring	14218
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

^{*} W x D = usable floor space

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SAFETY STORAGE CABINETS ONLY PROVIDE RELIABLE PROTECTION ...

... for humankind, environment and property when they are maintained professionally! With the **asecos services** you are always on the safe side.

You can find our service tariffs from page 494



S-LINE | S-PHOENIX-90



Model S90.196.120.MV.FDAS

Order No. 30708-001-33848



Model S90.196.120.MV.FDAS

Order No. 30708-001-33849



Model S90.196.060.MH.FDAS

Order No. 30709-001-33835

Technical data

External dimensions W x D x H mm Internal dimensions W x D x H mm

Weight without interior equip. kg
Air change 10 times m³/h
Diff. pressure (air change 10 times EK5/ Pa
AK4)

S90.196.120.MV.FDAS S90.196.060.MH.FDAS

1196 x 616 x 1968 left: 450 x 524 x 1742 right: 450 x 524 x 1742 515 8

390.190.000.WITI.FDA3

596 x 616 x 1968 top: 450 x 524 x 877 bottom: 450 x 524 x 845 260

Main features



Dividing wall separates two storage compartments



Space-saving folding doors



Doors with open-arrest system

You will find technical drawings and adjustment heights for these cabinet models from page 154

Model	Information / equipment	Colour		Order No.	
S90.196.120.MV.FDAS	without interior equipment, with door open arrest	light grey RAL 7035		30708-001	
	system, with vertical dividing wall	warning yellow RAL 1004		30708-002	
		laboratory white (sim. RAL 9016)		30708-005	
			Door hinge: left	right	
S90.196.060.MH.FDAS	without interior equipment, left hinged, with door open	light grey RAL 7035	30709-001	31867-001	
	arrest system, with horizontal dividing wall	laboratory white (sim. RAL 9016)	30709-005	31867-005	

5

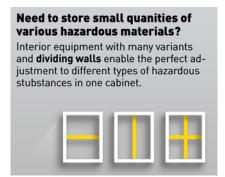
Interior equipment packages (can only be ordered in combination with the cabinet)	Material	0	order No.
S90.196.120.MV.FDAS			
Left: 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Right: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey		33848
eft: 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) light: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey		30350
eft: 3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L) light: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey		37683
eft: 3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L) ight: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey		37684
eft: 6x drawer (V=4.5L) light: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey		33849
eft: 6x drawer (V=4.5L) light: 3x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey		33850
S90.196.060.MH.FDAS(R)	Door	hinge: left	right
Fop: 2x shelf, 1x perforated insert, 1x bottom collecting sump [V=22.0L] Bottom: 2x tray shelf [V=11.0L], 1x bottom collecting sump [V=11.0L]	sheet steel powder-coated RAL 7035, PP grey	33835	34423
op: 2x shelf, 1x perforated insert, 1x bottom collecting sump [V=22.0L] Bottom: 2x tray shelf [V=11.0L], 1x bottom collecting sump [V=11.0L]	stainless steel, PP grey	30355	33489
op: 2x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L) lottom: 2x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	37685	37702
op: 2x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L) bottom: 2x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	stainless steel, PP grey	37686	37703
op: 2x drawer (V=4.5L) lottom: 2x tray shelf (V=11.0L), 1x bottom collecting sump (V=11.0L)	sheet steel powder-coated RAL 7035, PP grey	33836	34424
op: 3x drawer [V=4.5L] Bottom: 2x tray shelf [V=11.0L], 1x bottom collecting sump [V=11.0L]	sheet steel powder-coated RAL 7035, PP grey	33837	34425

Accessories		Material	W x D x H (mm)	Order No.	
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029	
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030	
	Sump inliner	PP grey	353 x 406 x 88*	9706	
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472	
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719	
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
	Box for chemicals	PP blue	410 x 300 x 260	30038	
	Document holder DIN A5	polystyrene		30793	

Ventilation	Order No.
Extraction unit with exhaust air monitoring	14220
Extraction unit without exhaust air monitoring	14218
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

^{*} W x D = usable floor space

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THE ASECOS HAZMAT GUIDE

 \dots we have collected the most important information on storing and handling hazardous materials safely.

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S-LINE | S-PHOENIX Vol.2-90

Safety storage cabinets for unrestricted storage of flammable hazardous materials in work areas in accordance with EN 14470-1 and TRGS 510

The space-saving talent

Space-saving folding doors, ideal for use in case of narrow passage widths in front of the cabinet. Continuous anti-trapping door strips on the folding doors offer maximum protection during operation.



One hand operation

One-hand operation for double-door cabinets; container remains in one hand whilst opening; doors remain open with the serial door open arrest system; convenient and safe removal or storage of containers.



3

Serial automatic door closing

Doors close automatically after approx. 60 seconds. Acoustic and visual signal before closing.



Cylinder lock

Door lockable with cylinder lock, the cabinets can be integrated by the customer into an existing locking system.



5

Technical ventilation

Integrated air ducts ready for connection (DN 75) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.





Special depth

Optimal use of space due to the optional cabinet depth of 75 cm.

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- Further information from page 494



S-LINE | S-PHOENIX Vol.2-90



Model S90.196.120.FDAC

Order No. 30119-002-33715



Model S90.196.120.FDAC

Order No. 30119-001-33724



Model S90.196.120.FDAC

Order No. 30119-001-33726

Technical data

External dimensions W x D x H
Internal dimensions W x D x H
Weight without interior equip.
Air change 10 times
Diff. pressure (air change 10 times EK5/
AK4)

mm 1196 x 616 x 1968 mm 1050 x 524 x 1742 kg 420 m³/h 10

5

Pa

Main features



Space-saving folding doors



Doors with one-hand operation (AGT), door open-arrest system and automatic door closing (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page $154\,$

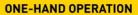
Model	Information / equipment	Colour	Order No.
S90.196.120.FDAC	without interior equipment, with TSA, AGT, door open	light grey RAL 7035	30119-001
	arrest system	warning yellow RAL 1004	30119-002
		laboratory white (sim. RAL 9016)	30119-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33715
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33716
3x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33717
4x shelf, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33718
3x tray shelf (V=33.0L), 1x perforated insert, 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	33719
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=55.0L)	sheet steel powder-coated RAL 7035	30830
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33720
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	33721
3x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33722
4x shelf, 1x bottom collecting sump (V=33.0L)	stainless steel	33723
3x tray shelf (V=33.0L), 1x bottom collecting sump (V=33.0L)	stainless steel	30831
3x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30143
4x tray shelf metal free (V=33.0L), 1x bottom collecting sump (V=33.0L)	PP grey	30144
4x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33724
5x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33725
6x drawer (V=29.0L)	sheet steel powder-coated RAL 7035	33726
4x drawer (V=29.0L)	stainless steel	33727
5x drawer (V=29.0L)	stainless steel	33728
6x drawer (V=29.0L)	stainless steel	33729

Accessories		Material	W x D x H (mm)	Order No.
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029
	Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030
Successive	Sump inliner for shelf	PE black	1000 x 392 x 50*	7223
	Sump inliner for drawer	PP grey	834 x 450 x 96*	10054
	Anti-slip rubber mat for drawer	black	840 x 490 x 1	8699
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
	Box for chemicals	PP blue	410 x 300 x 260	30038
	Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.



Are you looking for a comfortable storage solution for your hazardous material containers?

Operate two doors with one hand!









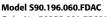
Technical ventilation – an important component for risk minimisation! Products for technical ventilation from asecos help to prevent the formation of explosive atmospheres and harmful vapours.

Further information and suitable solutions for technical ventilation can be found from page $326\,$



S-LINE | S-PHOENIX Vol.2-90





Order No. 30235-001-33681



Model S90.196.060.FDAC

Order No. 30235-002-33683



Model S90.196.060.FDAC

Order No. 30235-005-33659

Technical data

External dimensions W x D x H mm 596 x 616 x 1968 Internal dimensions W x D x H mm 450 x 524 x 1742 Weight without interior equip. kg 260 Air change 10 times m 3 /h 4 Diff, pressure (air change 10 times EK5/ Pa 5

AK4)

Main features



Space-saving folding door



Door with open-arrest system and automatic door closing (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page $154\,$

Model	Information / equipment Colour		Order No.
			Door hinge: left right
S90.196.060.FDAC	without interior equipment, left hinged, with TSA, door	light grey RAL 7035	30235-001 30236-001
	open arrest system	warning yellow RAL 1004	30235-002 30236-002
		laboratory white (sim. RAL 9016)	30235-005 30236-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
		Door hinge: left r
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33659 34
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33660 34
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33661 34
4x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	33662 34
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035	33663 34
3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035	30834 34
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30257 33
4x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30258 33-
3x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30260 33
4x shelf, 1x bottom collecting sump (V=22.0L)	stainless steel	30261 33
3x tray shelf (V=11.5L), 1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	30263 33
3x tray shelf (V=22.0L), 1x bottom collecting sump (V=22.0L)	stainless steel	30835 30
4x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30266 33
3x tray shelf metal free (V=11.0L), 1x bottom collecting sump (V=11.0L)	PP grey	30265 33
4x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33681 34
5x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33682 34
6x drawer (V=4.5L)	sheet steel powder-coated RAL 7035	33683 34
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33684 34
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	sheet steel powder-coated RAL 7035	33685 34
4x drawer (V=4.5L)	stainless steel	33686 34
5x drawer (V=4.5L)	stainless steel	33687 34
6x drawer (V=4.5L)	stainless steel	33688 34
3x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33689 34
4x drawer (V=4.5L), 1x drawer (disposal) (V=7.5L)	stainless steel	33690 34

	Material	W x D x H (mm)	Order No.	
Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029	
Storage box right hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30030	
Sump inliner	PP grey	353 x 406 x 88*	9706	
Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472	
Sump inliner for drawer disposal	PE white	313 x 484 x 71*	40171	
Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719	
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
Box for chemicals	PP blue	410 x 300 x 260	30038	
Document holder DIN A5	polystyrene		30793	
	Storage box right hinged Sump inliner Sump inliner for drawer supply Sump inliner for drawer disposal Anti-slip rubber mat for drawer supply Pipe lead-through Box for chemicals	Storage box left hinged sheet steel powder-coated RAL 7035 Storage box right hinged sheet steel powder-coated RAL 7035 Sump inliner PP grey Sump inliner for drawer supply PP undyed Sump inliner for drawer disposal PE white Anti-slip rubber mat for drawer supply black Pipe lead-through sheet steel powder-coated RAL 7035 Box for chemicals PP blue	Storage box left hinged sheet steel powder-coated RAL 7035 380 x 420 x 360 Storage box right hinged sheet steel powder-coated RAL 7035 380 x 420 x 360 Sump inliner PP grey 353 x 406 x 88* Sump inliner for drawer supply PP undyed 318 x 449 x 66* Sump inliner for drawer disposal PE white 313 x 484 x 71* Anti-slip rubber mat for drawer supply black 495 x 340 x 1 Pipe lead-through sheet steel powder-coated RAL 7035 182 x 104 x 48 Box for chemicals PP blue 410 x 300 x 260	Storage box left hinged sheet steel powder-coated RAL 7035 380 x 420 x 360 30029 Storage box right hinged sheet steel powder-coated RAL 7035 380 x 420 x 360 30030 Sump inliner PP grey 353 x 406 x 88* 9706 Sump inliner for drawer supply PP undyed 318 x 449 x 66* 18472 Sump inliner for drawer disposal PE white 313 x 484 x 71* 40171 Anti-slip rubber mat for drawer supply black 495 x 340 x 1 8719 Pipe lead-through sheet steel powder-coated RAL 7035 182 x 104 x 48 30035 Box for chemicals PP blue 410 x 300 x 260 30038

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.







Discover our products in the virtual 3D showroom:

www.asecos-showroom.com





S-LINE | S-PHOENIX Vol.2-90



Model S90.196.060.075.FDAC Order No. 30315-001-33697



Model S90.196.060.075.FDAC Order No. 30315-001-33698



Model S90.196.060.075.FDAC Order No. 30315-002-33699

Technical data

External dimensions W x D x H	mm	596 x 749 x 1968
Internal dimensions W x D x H	mm	450 x 657 x 1742
Weight without interior equip.	kg	310
Air change 10 times	m³/h	5
Diff_pressure (air change 10 times EK5/AK4)	Pa	5

Main features



Space-saving folding door



Door with open-arrest system and automatic door closing (TSA)



Special depth 750 mm

You will find technical drawings and adjustment heights for these cabinet models from page 154

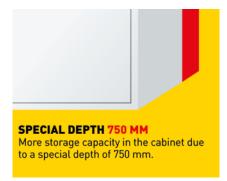
Model	Information / equipment	Colour	Order No.		
			Door hinge: left	right	
S90.196.060.075.FDAC	without interior equipment, left hinged, with TSA, door	light grey RAL 7035	30315-001	30316-001	
open arrest system wa	warning yellow RAL 1004	30315-002	30316-002		
		laboratory white (sim. RAL 9016)	30315-005	30316-005	

nterior equipment packages (can only be ordered in combination with the cabinet)	Material	Order	No.
		Door hinge: left	right
4x drawer (V=5.5L)	sheet steel powder-coated RAL 7035	33695	34402
5x drawer (V=5.5L)	sheet steel powder-coated RAL 7035	33696	34403
5x drawer (V=5.5L)	sheet steel powder-coated RAL 7035	33697	34404
4x drawer (V=5.5L)	stainless steel	33700	34407
5x drawer (V=5.5L)	stainless steel	33701	34408
5x drawer (V=5.5L)	stainless steel	33702	34409

Accessories		Material	W x D x H (mm)	Order No.	
U U a	Sump inliner for drawer supply	PP undyed	314 x 560 x 66*	18473	
	Anti-slip rubber mat for drawer supply	black	630 x 340 x 1	8720	
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
	Document holder DIN A5	polystyrene		30793	

Ventilation	Order No.
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Extraction unit without exhaust air monitoring	14218
Extraction unit with exhaust air monitoring	14220

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.









SAFETY STORAGE CABINETS ONLY PROVIDE RELIABLE PROTECTION ...

... for humankind, environment and property when they are maintained professionally! With the **asecos services** you are always on the safe side.

You can find our service tariffs from page 494



Storage heights

Safety storage cabinets type 90

rawers/nui	mber	9	8	7	6	5	4+1	4	3+1	3	2	Shelves/n	umber		4	3	2
Distance	9 (mm)	145										Distance	4	(mm)	460		
Distance	8 (mm)	135	210									Distance	€	(mm)	285	490	
istance	(mm)	135	200	210								Distance	0	(mm)	315	380	
istance	6 (mm)	170	200	200	275							Distance	0	(mm)	315	410	
istance	6 (mm)	170	170	200	230	340	295						_	. ,			
Distance	4 (mm)	170	170	200	230	330	295	400									
Distance	6 (mm)	170	170	200	230	295	230	360		530							
Distance	2 (mm)	170	170	230	230	295	230	390		520	1010						
Distance	0 (mm)	200	200	265	330	295	490	425		550	615					0	
Storage capa	acities per di	awer/t	ype of	conta	iner										-	•	}
Quantity	Туре о	f contai	iner		C	ontain	er size	2								0	
90	Aeroso	cans			40	00 ml											
10	Cans				1	litre										,	
10		ory glass		S		litre											Ī
10		ory PE-b				litre										0	
15	Laborat	ory glass	bottle	S	2.	5 litres										,	ļ

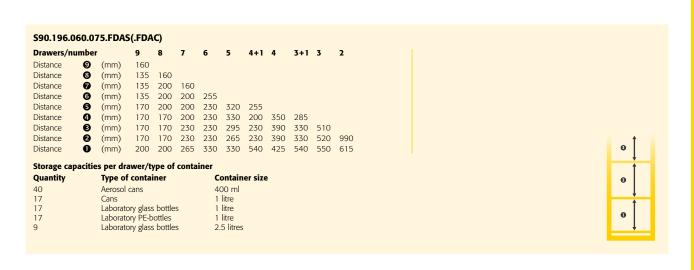
Drawers/nur	mber	9	8	7	6	5	4+1	4	3+1	3	2	Shelves/n	umber		4	3
Distance	(mm)	145										Distance	4	(mm)	460	
Distance	3 (mm)	135	210									Distance	€	(mm)	285	490
Distance	(mm)	135	200	210								Distance	0	(mm)	315	380
Distance	6 (mm)	170	200	200	275							Distance	0	(mm)	315	410
Distance	6 (mm)	170	170	200	230	340	295									
Distance	4 (mm)	170	170	200	230	330	295	400								
Distance	6 (mm)	170	170	200	230	295	230	360		530						
Distance	2 (mm)	170	170	230	230	295	230	390		520	1010					
Distance	(mm)	200	200	265	330	265	490	425		550	615					6
Storage capa	cities per d	rawer/t	ype of	conta	iner											-
Quantity	Туре	of conta	iner		C	ontain	er size	•								0
19	Aeroso	ol cans			40	00 ml										ľ
23	Cans					litre										_
23		itory glass		S		litre										
23	Labora	itory PE-b	ottles s bottle			litre 5 litres										0

wers/nu	mber	9	8	7	6	5	4+1	4	3+1	3	2		Shelves/	number		4	3	2
stance	9 (mm)	175											Distance	4	(mm)	460		
istance	3 (mm)	135	175										Distance	€	(mm)	285	490	
istance	7 (mm)	135	200	175									Distance	0	(mm)	315	380	
Distance	6 (mm)	135	200	200	270								Distance	0	(mm)	315	410	
Distance	6 (mm)	170	200	200	230	335	270											
Distance	4 (mm)	170	170	200	230	330	200	365	300									
Distance	6 (mm)	170	170	230	230	295	230	390	330									
Distance	2 (mm)	170	170	230	230	265	230	390	330									
Distance	1 (mm)	200	200	265	330	330	540	425	540									9
torage capa	acities per dr	awer/ty	ype of	conta	iner													,
Quantity	Type of	f contai	iner		C	ontain	er size	:										
30	Aerosol	cans			40	00 ml												0
12	Cans					litre												,
12	Laborat			S		litre												
12	Laborat					litre												0
5	Laborat	ory glass	bottle	S	2.	5 litres												u



S90.196.120.MV.WDAS(.FDAS) Drawers/number 3+1 3 Shelves/number 3 Distance Distance 460 (mm) (mm) Distance (mm) 135 295 Distance € (mm) 285 490 Distance Ø (mm) 135 135 295 Distance Ø (mm) 315 380 Distance 0 (mm) 170 170 230 295 Distance 0 (mm) 315 410 Ø 170 200 295 Distance 170 325 295 (mm) Distance 170 230 4 (mm) 170 200 295 295 Distance (mm) 170 170 170 230 330 230 390 520 Distance 0 (mm) 170 170 200 230 295 230 390 520 1125 200 490 Distance 0 (mm) 200 200 330 295 390 550 490 Storage capacities per drawer/type of container Type of container **Ouantity** Container size 0 0 400 ml Aerosol cans 30 12 12 12 1 litre Laboratory glass bottles Laboratory PE-bottles 1 litre 0 0 Laboratory glass bottles 6 2.5 litres





Storage heights

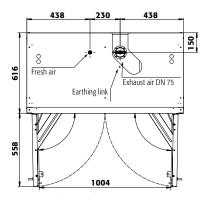
Medium high safety storage cabinets type 90

	6 5 4+1 4	3+1 3	2	Shelves/number	4 3 2
9 (mm)				Distance 4 (mm)	
8 (mm)				Distance 3 (mm)	335
(mm)				Distance 2 (mm)	220 385
6 (mm)				Distance 1 (mm)	250 315
6 (mm)					
4 (mm)					
3 (mm)		305			
2 (mm)		295	435		• •
1 (mm)		330	520		6
cities per drawer/type of conta	iner				*
Type of container	Container size				9
Aerosol cans	400 ml				•
Cans	1 litre				+
Laboratory glass bottles	1 litre				Ī
Laboratory PE-bottles Laboratory glass bottles	1 litre 2.5 litres				0
	 (mm) cities per drawer/type of conta Type of container Aerosol cans Cans Laboratory glass bottles Laboratory PE-bottles 	(mm) (mm) (mm) (mm) (mm) (mm) (mm) (mm)	③ (mm) ② (mm) ③ (mm) ⑤ (mm) ③ (mm) ③ (mm) ③ (mm) ③ (mm) ② (mm) ② (mm) ② (mm) ② (oran) ② (oran) ② (oran) ② (oran) □ (oran	 (mm) 295 435 (mm) 330 520 cities per drawer/type of container Type of container Aerosol cans Aerosol cans 400 ml Cans Laboratory glass bottles Laboratory PE-bottles 1 litre Laboratory PE-bottles 1 litre 	③ (mm) Distance ⑤ (mm) ② (mm) Distance ② (mm) ⑤ (mm) Distance ② (mm) ⑥ (mm) 305 (mm) ② (mm) 295 435 ① (mm) 330 520 cities per drawer/type of container Type of container Container size Aerosol cans 400 ml Cans 1 litre Laboratory glass bottles 1 litre Laboratory PE-bottles 1 litre

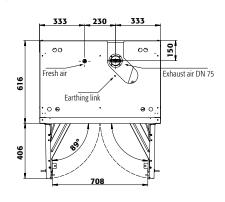
Drawers/num	ber 987	6 5 4+1 4 3	3+1 3	2	Shelves/number	4 3	2
Distance	9 (mm)				Distance 4 (mm)		
Distance	3 (mm)				Distance 3 (mm)	33	5
Distance	7 (mm)				Distance 2 (mm)	220	0 395
Distance	3 (mm)				Distance (mm)	250	0 315
Distance	9 (mm)						
Distance	4 (mm)						
Distance	B (mm)		290				
Distance	2 (mm)		295	450			
Distance	1 (mm)		330	490			9
Storage capac	ities per drawer/type of conta	iner					+
Quantity	Type of container	Container size					9
30	Aerosol cans	400 ml					1 1
12	Cans	1 litre					*
12	Laboratory glass bottles	1 litre					Ī
12	Laboratory PE-bottles	1 litre					0
5	Laboratory glass bottles	2.5 litres					1

Top views

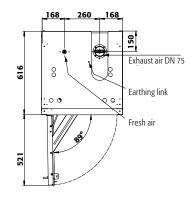
Safety storage cabinets type 90



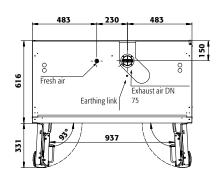
S90.196.120(.WDAS) S90.196.120.MV.WDAS S90.129.120(.WDAS) S90.129.120.WDAC



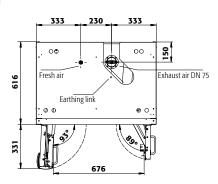
S90.196.090(.WDAS)



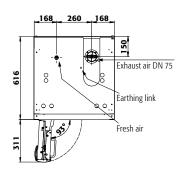
S90.196.060(.WDAS) S90.196.060.MH.WDAS S90.129.060(.WDAS) S90.129.060.WDAC



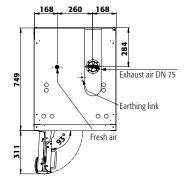
S90.196.120.FDAS S90.196.120.MV.FDAS S90.196.120.FDAC



S90.196.090.FWAS



\$90.196.060.FDAS \$90.196.060.MH.FDAS \$90.196.060.FDAC



S90.196.060.075.FDAS S90.196.060.075.FDAC



asecos is uncompromising when it comes to safety.

Our expertise as developers and manufacturers of technical safety products is also reflected in the range of services we offer. Seamless, professional maintenance can prevent serious damage in critical cases, and is also required by law in many countries.

A selected number of sales partners around the world have undergone a special certification process and are able to provide professional services where asecos cannot be present personally.

Ask us for more information.

With the asecos services you are always on the safe side.

asecos fulfils these requirements: Inspection and maintenance carried out by our specialised service technicians ensures your safety storage cabinet functions properly. Concluding an asecos service agreement extends your warranty to up to 10 years.

During safety technology inspections, our service experts check all safety-relevant elements such as fire protection and ventilation seals, insulation, door closures, fusible links, ventilation openings for proper function and effectiveness.

For more information on the asecos service programme visit **www.asecos.global** or contact our experts via **service@asecos.com**.

Detailed information about our services, service rates and legal frameworks is available from page 494.







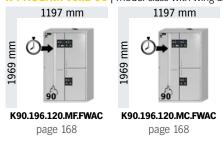
Overview

Combi safety storage cabinets type 90

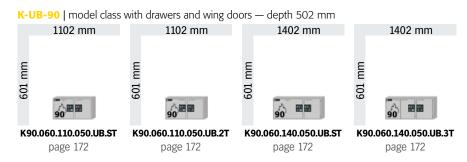
K-PHOENIX-90 | model class with wing and folding doors and door open arrest system



K-PHOENIX Vol.2-90 | model class with wing and folding doors, door open arrest system and automatic door closing (TSA)



Combi under bench cabinets type 90







K-LINE | K-PHOENIX-90 | K-PHOENIX Vol.2-90

Combi safety storage cabinets for the unrestricted storage of flammable and aggressive hazardous materials in working areas

Three in one combi safety storage cabinet

Safe and separated storage of acids, alkalis and flammable hazardous materials in one cabinet.



23

Safe, separate storage

Two hermetically separated storage compartments with fire resistant dividing wall; integrated aeration and venting system; corrosion resistance of the metal-free air ducts.





Storage compartment type 90 for model PHOENIX Vol. 2 (FWAC)

Doors remain open in the serial door open arrest system; convenient and safe removal or storage of containers; doors close automatically after approx. 60 seconds; acoustic and visual signal before closing.





Storage compartment type 90 for model PHOENIX

Doors remain open with the serial door open arrest system; convenient and safe removal or storage of containers.





No unauthorised use

Doors lockable with profile cylinder and cylinder lock.





Ventilation

Even ventilation and extraction of the entire cabinet interior. Integrated air ducts ready for connection (DN 75) to a technical exhaust system. The potential formation of explosive atmospheres or harmful vapours is safely prevented.





Hazardous substances center

Storage box for toxic materials; storage box separately lockable.



Left compartment





















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- Further information from page 494





Interior equipment

Our numerous cabinet models can be easily adapted to a variety of storage requirements thanks to the wide range of interior equipment options. Depending on requirements, interior equipment packages with the following components are available:

Drawer



Ideally suited for the storage of small containers up to 5 L, spray cans or compressed gas cans

- The extended drawer provides an overview of all stored hazardous materials
- All containers can be conveniently and safely removed or adjusted
- The drawers are self-closing in case of fire or have a permanent self-closing mechanism
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Metal-free storage level



Optimally suited for the storage of flammable and slightly aggressive hazardous materials.

- The tray shelf with chemically resistant surface coating and plastic sump offers a high level of corrosion protection
- The plastic sump is mounted on the tray shelf to prevent it from tipping and pulling out, and can be easily removed if necessary
- Available material: polypropylene (grey)

Bottom collecting sump and perforated insert



High quality bottom collecting sumps

- Possible leakages are safely collected in the floor area
- Can be used in combination with a perforated insert as an additional storage level for containers
- Available material: powder-coated sheet steel (RAL 7035), stainless steel or polypropylene

Shelf and shelf tray



Suitable for larger containers

- The shelves are height-adjustable and can be easily adapted to the height of the containers
- A safety upstand protects the containers from falling down
- Available material: powder-coated sheet steel (RAL 7035) or stainless steel

Accessories



Practical accessories such as plastic sump inliner, anti-slip mats or separately lockable storage boxes complement the interior design variants and provide additional comfort and safety when storing and handling the containers

HAVE YOU GOT SPACE TO WASTE?

... probably not.

This is exactly the reason why we want to introduce you to the benefits of safety storage cabinets with full drawers.

THE TASK

A situation known to many users:

- Which conditions should be used when clearing the containers in the cabinet?
- Which containers are on the front of the shelves, which are to the rear?
- Which hazardous materials should be placed on one storage level if possible?
- How can it be guaranteed that the containers from the rear rows can be easily and safely removed?





THE SOLUTION

Safety storage cabinets with drawers make these questions redundant!

- Logical storage of small containers
- Easily accessible for storage and removal
- Safe and simple collection of waste materials in waste containers

Convenient – no awkward removal of containers to remove containers from the rear storage area.

The question of whether containers should be at the front or rear does not arise. The full drawer always gives you the **complete overview** of the storage level.

Hazardous materials that should be placed together on a storage level can be easily and **logically arranged in a full drawer. Double your possible storage capacity** in the safety cabinet!



K-LINE | K-PHOENIX-90



Model K90.196.120.MC.FWAS

Order No. 30335-001-33841



Model K90.196.120.MF.FWAS

Order No. 30333-001-33839



Model K90.196.120.MF.FWAS

Order No. 30333-001-33838

Technical data

External dimensions W x D x H 1197 x 617 x 1969 mm left: 450 x 522 x 1742 Internal dimensions W x D x H mm top right: 491 x 542 x 862 bottom right: 491 x 542 x 862 Weight without interior equip. 515 kg Air change 10 times

Diff. pressure (air change 10 times EK5/ m³/h 9 Pa AK4) Air change 30 times 29 m³/h Diff. pressure (air change 30 times) 28

Main features



Safe segregated storage due to hermetically separated compartments



Available with optional hazardous materials centre



Type 90 compartment with door open-arrest system

You will find technical drawings and adjustment heights for these cabinet models from page $174\,$

Model	Information / equipment	Colour	Order No.
K90.196.120.MF.FWAS	without interior equipment, with door open arrest	light grey RAL 7035	30333-001
	system, with vertical centre partition (fire resistant)	laboratory white (sim. RAL 9016)	30333-005
K90.196.120.MC.FWAS	without interior equipment, with door open arrest system, hazardous substances center (including lockable storage box on shold	light grey RAL 7035	30335-001

lockable storage box on shelf)	5 5 7	
	Material	Order No.
Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
K90.196.120.MF.FWAS Left: 3x shelf, 1x perforated insert, 1x bottom collecting sump [V=22.0L] Top right: 2x pull-out shelf [V=11.0L] Bottom right: 2x pull-out shelf [V=11.0L]	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	33838
Left: 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Top right: 2x pull-out shelf (V=11.0L) Bottom right: 2x pull-out shelf (V=11.0L)	stainless steel, panel melamine resin-coated/PP grey	30338
Left: 3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L) Top right: 2x pull-out shelf (V=11.0L) Bottom right: 2x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	34257
Left: 3x tray shelf (V=11.5L), 1x bottom collecting sump (V=22.0L) Top: 3x pull-out shelf (V=11.0L) Bottom: 3x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	37687
Left: 6x drawer (V=4.5L) Top right: 3x pull-out shelf (V=11.0L) Bottom right: 3x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	33839
Left: 6x drawer (V=4.5L) To right: 3x pull-out shelf (V=11.0L) Bottom right: 3x pull-out shelf (V=11.0L)	stainless steel, panel melamine resin-coated/PP grey	33840
K90.196.120.MC.FWAS		
Left: 1x storage box, 2x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Top right: 2x pull-out shelf (V=11.0L) Bottom right: 2x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	33841
Left: 1x storage box, 2x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L) Top right: 2x pull-out shelf (V=11.0L) Bottom right: 2x pull-out shelf (V=11.0L)	stainless steel, panel melamine resin-coated/PP grey	30755
Left: 1x storage box, 4x drawer (V=4.5L) Top right: 3x pull-out shelf (V=11.0L) Bottom right: 3x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	33842
Left: 1x storage box, 4x drawer (V=4.5L) Top right: 3x pull-out shelf (V=11.0L) Bottom right: 3x pull-out shelf (V=11.0L)	stainless steel, panel melamine resin-coated/PP grey	33843

Accessories		Material	W x D x H (mm)	Order No.	
	Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029	
	Sump inliner	PP grey	353 x 406 x 88*	9706	
	Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472	
	Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719	
	Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
	Box for chemicals	PP blue	410 x 300 x 260	30038	
	Document holder DIN A5	polystyrene		30793	

Ventilation	Order No.	
Extraction unit without exhaust air monitoring	14218	

^{*} W x D = usable floor space

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.









Technical ventilation – an important component for risk minimisation! Products for technical ventilation from asecos help to prevent the formation of explosive atmospheres and harmful vapours.

Further information and suitable solutions for technical ventilation can be found from page 326



K-LINE | K-PHOENIX Vol.2-90



Model K90.196.120.MC.FWAC

Order No. 30336-001-33841



Model K90.196.120.MF.FWAC

Order No. 30334-001-33839



Model K90.196.120.MF.FWAC

Order No. 30334-001-33838

Technical data

External dimensions W x D x H 1197 x 617 x 1969 mm Internal dimensions W x D x H left: 450 x 522 x 1742 mm top right: 491 x 542 x 862 bottom right: 491 x 542 x 862 Weight without interior equip. 515 kg Air change 10 times

Diff. pressure (air change 10 times EK5/ m³/h 9 5 Pa AK4) Air change 30 times 29 m³/h Diff. pressure (air change 30 times) 28

Main features



Safe segregated storage due to hermetically separated compartments



Available with optional hazardous materials centre



Type 90 compartment with hold-open system and automatic locking (TSA)

You will find technical drawings and adjustment heights for these cabinet models from page 174

Model	Information / equipment	Colour	Order No.
K90.196.120.MF.FWAC	without interior equipment, with TSA, door open arrest	light grey RAL 7035	30334-001
	system, with vertical centre partition (fire resistant)	laboratory white (sim. RAL 9016)	30334-005
K90.196.120.MC.FWAC	without interior equipment, with TSA, door open arrest system, hazardous substances center (including lockable storage box on shelf)	light grey RAL 7035	30336-001

Order No.
rder-coated RAL 7035, panel melamine 33838 P grey
panel melamine resin-coated/PP grey 30338
rder-coated RAL 7035, panel melamine 34257 P grey
rder-coated RAL 7035, panel melamine 37687 P grey
rder-coated RAL 7035, panel melamine 33839 P grey
panel melamine resin-coated/PP grey 33840
rder-coated RAL 7035, panel melamine 33841
panel melamine resin-coated/PP grey 30755
rder-coated RAL 7035, panel melamine 33842 P grey
panel melamine resin-coated/PP grey 33843

	Material	W x D x H (mm)	Order No.	
Storage box left hinged	sheet steel powder-coated RAL 7035	380 x 420 x 360	30029	
Sump inliner	PP grey	353 x 406 x 88*	9706	
Sump inliner for drawer supply	PP undyed	318 x 449 x 66*	18472	
Anti-slip rubber mat for drawer supply	black	495 x 340 x 1	8719	
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
Box for chemicals	PP blue	410 x 300 x 260	30038	
Document holder DIN A5	polystyrene		30793	
	Sump inliner Sump inliner for drawer supply Anti-slip rubber mat for drawer supply Pipe lead-through Box for chemicals	Storage box left hinged sheet steel powder-coated RAL 7035 Sump inliner PP grey Sump inliner for drawer supply PP undyed Anti-slip rubber mat for drawer supply black Pipe lead-through sheet steel powder-coated RAL 7035 Box for chemicals PP blue	Storage box left hinged sheet steel powder-coated RAL 7035 380 x 420 x 360 Sump inliner PP grey 353 x 406 x 88* Sump inliner for drawer supply PP undyed 318 x 449 x 66* Anti-slip rubber mat for drawer supply black 495 x 340 x 1 Pipe lead-through sheet steel powder-coated RAL 7035 182 x 104 x 48 Box for chemicals PP blue 410 x 300 x 260	Storage box left hinged sheet steel powder-coated RAL 7035 380 x 420 x 360 30029 Sump inliner PP grey 353 x 406 x 88* 9706 Sump inliner for drawer supply PP undyed 318 x 449 x 66* 18472 Anti-slip rubber mat for drawer supply black 495 x 340 x 1 8719 Pipe lead-through sheet steel powder-coated RAL 7035 182 x 104 x 48 30035 Box for chemicals PP blue 410 x 300 x 260 30038

Ventilation	Order No.	
Extraction unit without exhaust air monitoring	14218	

^{*} W x D = usable floor space

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.









THE ASECOS HAZMAT GUIDE

... we have collected the most important information on storing and handling hazardous materials safely.

Order your free copy now: www.asecos.global



K-LINE | K-UB-90

Combi under bench cabinets for the unrestricted storage of flammable and aggressive hazardous materials in working areas

Fits perfectly under fume cupboards

Cabinet makes perfect use of the space available under the fume cupboard.



Two in one combi under bench cabinet

Safe storage of slightly aggressive and flammable hazardous materials in one cabinet. Separated storage compartments with vertical dividing wall.



Cylinder lock with locking status indicator

Doors lockable with cylinder lock, locking status indicator (red/green) signals the locking status of the cabinet.



Ventilation

Integrated air ducts ready for connection (DN 50) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.



Mobile

Optionally available castors with plinth; simple movement of the cabinet. Height adjustable to various laboratory furniture systems due to attachment covers.



Left compartment





















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- You can find our service tariffs from page 494





K-LINE | K-UB-90



Model K90.060.140.050.UB.3T

Order No. 30377-001-33846



Model K90.060.110.050.UB.2T

Order No. 30365-001-33844



Model K90.060.110.050.UB.ST

Order No. 30358-001-35363

Technical data

External dimensions W x D x H Internal dimensions W x D x H

Weight without interior equip. Air change 10 times

Diff. pressure (air change 10 times EK5/AK4)

K90.060.140.050.UB.ST K90.060.140.050.UB.3T

1402 x 502 x 601 left: 770 x 380 x 502 right: 440 x 468 x 562

197 3

K90.060.110.050.UB.ST K90.060.110.050.UB.2T

1102 x 502 x 601 left: 470 x 381 x 502 right: 440 x 468 x 562 155

2 1

Usable storage heights

Left compartment

mm mm 460 400*

Right compartment

1 mm 495**
1 mm 495**
2 mm 280 / 195***
3 bottom collecting sump with perforated insert
1 pull-out shelf
1 pull-out shelf
1 pull-out shelves



mm

mm

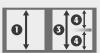
kg

Pa

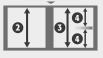
m³/h

K90.060.110.050.UB.ST





K90.060.140.050.UB.ST



Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Safe segregated storage due to hermetically separated compartments

You will find technical drawings for these cabinet models from page 174

Model	Information / equipment	Colour	Order No.
K90.060.140.050.UB.ST	without interior equipment, with 1 drawer, 1 wing door	light grey RAL 7035	30370-001
K90.060.140.050.UB.3T	without interior equipment, with 3 wing doors	light grey RAL 7035	30377-001
K90.060.110.050.UB.ST	without interior equipment, with 1 drawer, 1 wing door	light grey RAL 7035	30358-001
K90.060.110.050.UB.2T	without interior equipment, with 2 wing doors	light grey RAL 7035	30365-001

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
(90.060.140.050.UB.ST		
Left: 1x drawer (V=17.5L) Right: 1x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	35364
eft: 1x drawer (V=17.5L) Right: 2x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	35365
K90.060.140.050.UB.3T		
Left: 1x perforated insert, 1x bottom collecting sump (V=16.5L) Right: 1x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	33846
Left: 1x perforated insert, 1x bottom collecting sump (V=16.5L) Right: 2x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	33847
K90.060.110.050.UB.ST		
Left: 1x drawer (V=10.0L) Right: 1x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	35362
Left: 1x drawer (V=10.0L) Right: 2x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	35363
K90.060.110.050.UB.2T		
Left: 1x perforated insert, 1x bottom collecting sump (V=10.0L) Right: 1x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	33844
eft: 1x perforated insert, 1x bottom collecting sump (V=10.0L) Right: 2x pull-out shelf (V=11.0L)	sheet steel powder-coated RAL 7035, panel melamine resin-coated/PP grey	33845

Accessories	Material	W x D x H (mm)	Order No.
All models with width 1400 mm			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31359
All models with width 1100 mm			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358

Ventilation	Order No.
Extraction unit without exhaust air monitoring	14218

Can't find a suitable interior equipment package for your application? Contact us by phone at +49 6051 9220-0 or by e-mail at info@asecos.com – together with our experts you will find the right solution.









ARE YOU LOOKING FOR AN APPROPRIATE STORAGE SOLUTION FOR HAZARDOUS MATERIALS?

Our optimised online product configurator helps you, step by step, to find the suitable safety storage cabinet. Take the test: **www.asecos-configurator.com**

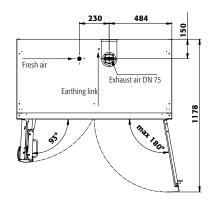


Storage heights

Combi safety storage cabinets type 90

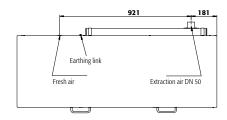
tandard s	torage	heights	for dra	wers	(left co	ompar	tment)					мс	Standard storage heights for pull-out shelves (right compartment)
rawers/n	umber		9	8	7	6	5	4+1	4	3+1	3	2	4	Pull-out shelves/number 6 4
istance	0	(mm)	200											Distance 6 (mm) 230
istance	8	(mm)	135	290										Distance ⑤ (mm) 265
istance	Ø	(mm)	135	135	290									Distance 4 (mm) 265 395
istance	0	(mm)	135	170	230	290								Distance 3 (mm) 230 395
istance	6	(mm)	170	170	200	295	320	305						Distance 2 (mm) 265 395
Distance	4	(mm)	170	170	200	230	295	295	385	400				Distance 1 (mm) 265 395
Distance	€	(mm)	170	170	170	230	330	230	390	390				
istance	0	(mm)	170	170	200	230	295	230	390	295				
istance	0	(mm)	170	200	200	230	295	475	390	275				
tandard s	torage	heights	for she	elves (left co	mparl	ment)							0 0
	•	•	MF	•		- M	IC É							<u> </u>
helves/nu	ımber		4	3	2	3								9 0
Distance	4	(mm)	460											
Distance	€	(mm)	285	435										
Distance	0	(mm)	315	380	44	5								
Distance	0	(mm)	315	410	410	0								0 0

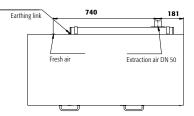
Combi safety storage cabinets type 90



K90.196.120.MF(MC).FWAS K90.196.120.MF(MC).FWAC

Combi under bench cabinets type 90





K90.060.140.050.UB.ST K90.060.140.050.UB.3T K90.060.110.050.UB.ST K90.060.110.050.UB.2T

XL-LINE | XL-CLASSIC-90

Safety storage cabinets for unrestricted storage of flammable hazardous materials in work areas in accordance with EN 14470-1 and TRGS 510



Safe and approved storage of large containers and drums (V = 200 litres).



23

Grounding

Safety whilst decanting; continous internal and external earthing link; interior space with up to 3 m earthing wire incl. clamp.



3

Individual

Rack system with height adjustable storage levels (optional) allows the efficient use of existing storage capacities.



4

High flexibility

Transport base for simple in house transport.



5

No unauthorised use

Doors lockable with profile cylinder and cylinder lock.



0

Ventilation

Even ventilation and extraction of the entire cabinet interior. Integrated air ducts ready for connection (DN 75) to a technical exhaust system. The potential formation of explosive atmospheres or harmful vapours is safely prevented.















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- Further information from page 494



Overview

XL-CLASSIC-90 | model class with wing doors and door open arrest system



XL-LINE | XL-CLASSIC-90



Model XL90.222.155.WDAS

Order No. 30382-001-30386



Model XL90.222.155.WDAS

Order No. 30382-001-30388

Technical data

AK4)

Main features



You will find technical drawings for these cabinet models from page 180

Model	Information / equipment	Colour	Order No.
XL90.222.155.WDAS	without interior equipment, with door open arrest system	light grey RAL 7035	30382-001
	an only be ordered in combination with the cabinet)	Material	Order No.
With bottom collecting sump			
1x transport base height = 100 mi	n, 1x bottom collecting sump with grid (V=235.0L)	powder-coated steel RAL 7035, sheet steel galvanised	30384

1x shelf, 1x transport base, 1x bottom collecting sump with grid (V=235.0L)	steel RAL 7035, sheet steel galvanised	30386	
With storage shelf (depth 600mm) and bottom collecting sump			
with storage shell (depth obothin) and bottom collecting sump			
1x bottom collecting sump and rack (4 shelves, depth = 600 mm) (V=66.0L), 1x transport base	steel galvanized, powder-coated steel RAL 7035	30388	

With storage shelf (depth 800mm) and bottom collecting sump

1x bottom collecting sump with rack system 4 shelves, depth = 800 mm (V=66.0L), 1x transport base steel galvanized, powder-coated steel RAL 7035 38671

Interior equipment	Material	W x D x H (mm)	Order No.
Shelf for rack system depth 800 mm	sheet steel galvanised		38956
Shelf for rack system depth 600 mm	sheet steel galvanised	1300 x 600 x 40	30390
Shelf	sheet steel powder-coated RAL 7035	1373 x 491 x 25*	30389
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Box for chemicals	PP blue	410 x 300 x 260	30038
Document holder DIN A5	polystyrene		30793

Accessories	Order No.
Recirculating air filter system with exhaust air monitoring for drum cabinets	40259
Extraction unit with exhaust air monitoring for drum cabinets	27412

^{*} W x D = usable floor space



Model XL90.222.110.WDAS

Order No. 30393-001-30395



Model XL90.222.110.WDAS

Order No. 30393-001-30397

Technical data

External dimensions W x D x H mm External dimensions W x D x H
Internal dimensions W x D x H
Weight without interior equip.
Air change 10 times
Diff. pressure (air change 10 times EK5/
AK4) mm 936 x 864 x 1890 855 17 kg m³/h

Pa 15

Main features



Storage of large containers and 200 L $\,$ drums

You will find technical drawings for these cabinet models from page 180

Model	Information / equipment	Colour	Order No.
XL90.222.110.WDAS	without interior equipment, with door open arrest system	light grey RAL 7035	30393-001

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
1x transport base height = 100 mm, 1x bottom collecting sump with grid (V=230.0L)	powder-coated steel RAL 7035, sheet steel galvanised	30395
1x shelf, 1x transport base, 1x bottom collecting sump with grid (V=230.0L)	sheet steel powder-coated RAL 7035, powder-coated steel RAL 7035, sheet steel galvanised	30397

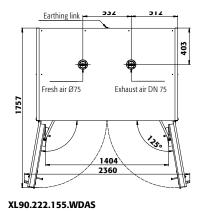
Interior equipment	Material	W x D x H (mm)	Order No.
Shelf	sheet steel powder-coated RAL 7035	923 x 491 x 25*	30398
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Box for chemicals	PP blue	410 x 300 x 260	30038
Document holder DIN A5	polystyrene		30793

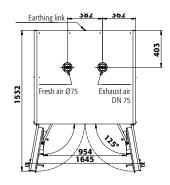
Accessories	Order No.	
Recirculating air filter system with exhaust air monitoring for drum cabinets	40259	
Extraction unit with exhaust air monitoring for drum cabinets	27412	

^{*} W x D = usable floor space



Top views





XL90.222.110.WDAS

INDIVIDUAL AND **MADE TO MEASURE**



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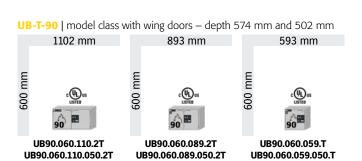


Under bench cabinets type 90

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800 mm

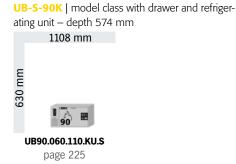


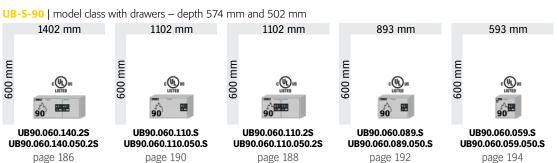
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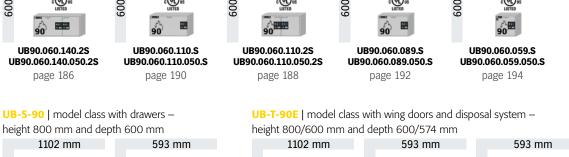
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Safety storage under bench cabinets for the unrestricted storage of flammable hazardous materials in working areas

Fits perfectly under fume cupboards

Cabinet makes perfect use of the space available under the fume cupboard.



2

Flexible applications

Model variations in 2 heights, 4 widths and 3 depths enable maximum flexibility in adapting to user requirements and structural conditions.





Drawers

Remain open in any position and allow access to all stored goods. The interior is completely visible. Optimal usage of the interior height with the optional second level drawer for storing small containers.





Cylinder lock with locking status indicator

Doors lockable with cylinder lock, locking status indicator (red/green) signals the locking status of the cabinet.





Ventilation

Integrated air ducts ready for connection (DN 50) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.





Mobile

Optionally available castors with plinth; simple movement of the cabinet. Height adjustable to various laboratory furniture systems due to attachment covers.





DOUBLE CERTIFIED

Certified according to EN 14470-1 as well as the UL standard, the cabinets are suitable for international use.

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- You can find our service tariffs from page 494



 Various cabinets in this model group are also tested to Underwriters Laboratories standard UL/ULC 1275.





Model UB90.060.140.2S

Order No. 30401-001-35345



Model UB90.060.140.UL.2S

Order No. 37066-001-35348

Tecl	hnical data		UB90.060.140.2S UB90.060.140.UL.2S	UB90.060.140.050.2S UB90.060.140.050.UL.2S
Exte	ernal dimensions W x D x H	mm	1402 x 574 x 600	1402 x 502 x 600
Inter	rnal dimensions W x D x H	mm	1279 x 452 x 502	1279 x 382 x 502
Weig	ght without interior equip.	kg	230	205
Extra	action air	DN	50	50
Air c	change 10 times	m³/h	3	3
Diff.	pressure (air change 10 times EK5/AK4)	Pa	1	1
Max	c. load of drawers	kg	50	50

Usable storage heights

0 mm 2 mm

mm 465** mm 230***







Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Available in cabinet depths of 574 mm or 502 mm



Optionally available with UL certification

You will find technical drawings for these cabinet models from page $226\,$

Model	Information / equipment	Colour	Order No.
UB90.060.140.2S	without interior equipment, with 2 drawers	light grey RAL 7035	30401-001
		laboratory white (sim. RAL 9016)	30401-005
UB90.060.140.UL.2S	without interior equipment, UL/ULC 1275 listed, with 2 drawers	light grey RAL 7035	37066-001
		laboratory white (sim. RAL 9016)	37066-005
UB90.060.140.050.2S	without interior equipment, with 2 drawers	light grey RAL 7035	30402-001
		laboratory white (sim. RAL 9016)	30402-005
UB90.060.140.050.UL.2S	without interior equipment, UL/ULC 1275 listed, with 2 drawers	light grey RAL 7035	37058-001
		laboratory white (sim. RAL 9016)	37058-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
UB90.060.140.(UL.)2S		
Left: 1x drawer (V=20.0L) Right: 1x drawer (V=11.5L)	stainless steel	35349
Left: 1x drawer (V=20.0L), 1x perforated insert Right: 1x drawer (V=11.5L), 1x perforated insert	stainless steel	35350
Left: 1x drawer (V=20.0L), 1x second level drawer Right: 1x drawer (V=11.5L), 1x second level drawer	stainless steel	35353
UB90.060.140.050.(UL.)2S		
Left: 1x drawer (V=17.5L) Right: 1x drawer (V=10.0L)	sheet steel powder-coated RAL 7035	35359

Interior equipment	Material	W x D x H (mm)	Order No.
UB90.060.140.(UL)2S - left compartment			
Sump inliner for second level drawer (recom. 2 pcs)	PE black	734 x 199 x 20*	10907
Sump inliner for shelf	PP grey	653 x 406 x 88*	9707
Anti-slip rubber mat	black	720 x 438 x 1	8700
UB90.060.140.(UL)2S - compartment on the right			
Sump inliner for second level drawer (recom. 2 pcs)	PE black	434 x 199 x 20*	10904
Sump inliner	PP grey	353 x 406 x 88*	9706
Anti-slip rubber mat	black	420 x 438 x 1	8698
UB90.060.140.(UL.)2S - Accessories			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31359
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604
SOFT-CLOSE			33982
Document holder DIN A5	polystyrene		30793
UB90.060.140.050.(UL.)2S - compartment left			
Second level drawer for internal width 890 mm	sheet steel powder-coated RAL 7035	743 x 346 x 45*	16589
Perforated insert for internal width 890 mm	stainless steel	717 x 364 x 9	19619
UB90.060.140.050.(UL)2S - compartment on the right			
Second level drawer for internal width 590 mm	sheet steel powder-coated RAL 7035	443 x 346 x 45*	16590
Perforated insert for internal width 590 mm	stainless steel	417 x 364 x 9	18922
UB90.060.140.050.(UL)2S - Accessories			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31359
SOFT-CLOSE			33982
Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Adapter as separate housing unit for lateral mounting	26885

* W x D = usable floor space Accessories Pipe bushing and SOFT-CLOSE not available for models in UL version

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You can find our service tariffs from page 494





Model UB90.060.110.2S

Order No. 30427-001-35311



Model UB90.060.110.UL.2S

Order No. 37047-001-35319

	UB90.060.110.2S UB90.060.110.UL.2S	UB90.060.110.050.2S UB90.060.110.050.UL.2S	
mm	1102 x 574 x 600	1102 x 502 x 600	
mm	979 x 452 x 502	979 x 382 x 502	
kg	180	160	
m³/h	2	2	
Pa	1	1	
kg	50	50	
	mm kg m³/h Pa	WB90.060.110.UL.2S mm	UB90.060.110.UL.2S UB90.060.110.050.UL.2S mm 1102 x 574 x 600 1102 x 502 x 600 mm 979 x 452 x 502 979 x 382 x 502 kg 180 160 m³/h 2 2 Pa 1 1

Usable storage heights

465** 230*** 0 mm 2 mm

** without perforated insert *** with second level drawer





Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Available in cabinet depths of 574 mm or 502 mm



Optionally available with UL certification

You will find technical drawings for these cabinet models from page 226

Model	Information / equipment	Colour	Order No.
UB90.060.110.2S	without interior equipment, with 2 drawers	light grey RAL 7035	30427-001
		laboratory white (sim. RAL 9016)	30427-005
UB90.060.110.UL.2S	without interior equipment, UL/ULC 1275 listed, with 2 drawers	light grey RAL 7035	37047-001
		laboratory white (sim. RAL 9016)	37047-005
UB90.060.110.050.2S	without interior equipment, with 2 drawers	light grey RAL 7035	30428-001
		laboratory white (sim. RAL 9016)	30428-005
UB90.060.110.050.UL2S	without interior equipment, UL/ULC 1275 listed, with 2 drawers	light grey RAL 7035	37032-001
		laboratory white (sim. RAL 9016)	37032-005

UB90.060.110.[UL]2S 2x drawer [V=11.5L] stainless steel 2x drawer [V=11.5L] stainless steel	35315
	35315
2x drawer [V=11.5L], 2x perforated insert stainless steel	
ZA drawer (V 11.51), ZA periorated insert	35316
2x drawer (V=11.5L), 1x second level drawer stainless steel	35318

Interior equipment	Material	W x D x H (mm)	Order No.
UB90.060.110.(UL.)2S			
Sump inliner for second level drawer (recom. 2 pcs)	PE black	434 x 199 x 20*	10904
Sump inliner	PP grey	353 x 406 x 88*	9706
Anti-slip rubber mat	black	420 x 438 x 1	8698
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604
SOFT-CLOSE			33980
Document holder DIN A5	polystyrene		30793
UB90.060.110.050.(UL.)2S			
Second level drawer for internal width 590 mm	sheet steel powder-coated RAL 7035	443 x 346 x 45*	16590
Perforated insert for internal width 590 mm	stainless steel	417 x 364 x 9	18922
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358
Document holder DIN A5	polystyrene		30793
SOFT-CLOSE			33981

Ventilation	Order No.
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Adapter as separate housing unit for lateral mounting	26885

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^{*} W x D = usable floor space Accessories Pipe bushing and SOFT-CLOSE not available for models in UL version



Model UB90.060.110.S

Order No. 30420-001-35327



Model UB90.060.110.050.UL.S

Order No. 37039-001-35340

Technical data		UB90.060.110.S UB90.060.110.UL.S	UB90.060.110.050.S UB90.060.110.050.UL.S
External dimensions W x D x H	mm	1102 x 574 x 600	1102 x 502 x 600
Internal dimensions W x D x H	mm	979 x 452 x 502	979 x 382 x 502
Weight without interior equip.	kg	180	160
Extraction air	DN	50	50
Air change 10 times	m³/h	2	2
Diff. pressure (air change 10 times EK5/AK4)	Pa	1	1
Max. load of drawers	kg	50	50

Usable storage heights

465** 230*** 0 mm 2 mm

** without perforated insert *** with second level drawer





Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Available in cabinet depths of 574 mm or 502 mm



Optionally available with UL certification

You will find technical drawings for these cabinet models from page 226

Model	Information / equipment	Colour	Order No.
UB90.060.110.S	without interior equipment, with drawer	light grey RAL 7035	30420-001
		warning yellow RAL 1004	30420-002
		laboratory white (sim. RAL 9016)	30420-005
UB90.060.110.UL.S	without interior equipment, UL/ULC 1275 listed, with drawer	light grey RAL 7035	37054-001
		laboratory white (sim. RAL 9016)	37054-005
UB90.060.110.050.S	without interior equipment, with drawer	light grey RAL 7035	30421-001
		laboratory white (sim. RAL 9016)	30421-005
UB90.060.110.050.ULS	without interior equipment, UL/ULC 1275 listed, with drawer	light grey RAL 7035	37039-001
		laboratory white (sim. RAL 9016)	37039-005

Interior equipment packages (can only be ordered in combination with the cabinet) UB90.060.110.(UL.)S		
1x drawer (V=27.0L)	sheet steel powder-coated RAL 7035	35326
1x drawer (V=26.0L)	stainless steel	35329
1x drawer (V=27.0L), 1x perforated insert	sheet steel powder-coated RAL 7035, stainless steel	35327
1x drawer (V=26.0L), 1x perforated insert	stainless steel	35330
1x drawer (V=27.0L), 1x perforated insert, 1x second level drawer	sheet steel powder-coated RAL 7035, stainless steel	35328
1x drawer (V=26.0L), 1x perforated insert, 1x second level drawer	stainless steel	35331
UB90.060.110.050.(UL.)S		
1x drawer (V=22.5L)	sheet steel powder-coated RAL 7035	35340

Interior equipment	Material	W x D x H (mm)	Order No.
UB90.060.110.(UL.)S			
Sump inliner for second level drawer (recom. 2 pcs)	PE black	930 x 199 x 20*	10906
Sump inliner	PP	869 x 378 x 88*	8564
Anti-slip rubber mat	black	925 x 434 x 1	8697
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604
Document holder DIN A5	polystyrene		30793
UB90.060.110.050.(UL.)S			
Second level drawer	sheet steel powder-coated RAL 7035	939 x 346 x 45*	16592
Perforated insert height = 9 mm	stainless steel	925 x 364 x 9	18921
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358
Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Adapter as separate housing unit for lateral mounting	26885

^{*} W x D = usable floor space Accessories Pipe bushing not available for models in UL version

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Model UB90.060.089.UL.S

Order No. 37024-001-35299



Model UB90.060.089.S

Order No. 30457-001-35299

Technical data		UB90.060.089.S UB90.060.089.UL.S	UB90.060.089.050.S UB90.060.089.050.UL.S
External dimensions W x D x H	mm	893 x 574 x 600	893 x 502 x 600
Internal dimensions W x D x H	mm	771 x 452 x 502	771 x 382 x 502
Weight without interior equip.	kg	140	125
Extraction air	DN	50	50
Air change 10 times	m³/h	2	1
Diff. pressure (air change 10 times EK5/AK4)	Pa	1	1
Max. load of drawers	kg	50	50

Usable storage heights

0 mm 2 mm

1 460** 1 230***

** without perforated insert *** with second level drawer





Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Available in cabinet depths of 574 mm or 502 mm



Optionally available with UL certification

You will find technical drawings for these cabinet models from page $226\,$

Model	Information / equipment	Colour	Order No.
UB90.060.089.S	without interior equipment, with drawer	light grey RAL 7035	30457-001
		laboratory white (sim. RAL 9016)	30457-005
UB90.060.089.ULS without	without interior equipment, UL/ULC 1275 listed, with drawer	light grey RAL 7035	37024-001
		laboratory white (sim. RAL 9016)	37024-005
JB90.060.089.050.S	without interior equipment, with drawer	light grey RAL 7035	30458-001
		laboratory white (sim. RAL 9016)	30458-005
UB90.060.089.050.ULS without interior equipment, UL/ULC 1275 listed, with drawer		light grey RAL 7035	37017-001
		laboratory white (sim. RAL 9016)	37017-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
UB90.060.089.(UL.)S		
1x drawer (V=20.0L)	stainless steel	35302
1x drawer (V=20.0L), 1x perforated insert	stainless steel	35303
1x drawer (V=20.0L), 1x second level drawer	sheet steel powder-coated RAL 7035	30937
1x drawer (V=20.0L), 1x second level drawer	stainless steel	35305
UB90.060.089.050.[UL.]S		
1x drawer (V=17.5L)	sheet steel powder-coated RAL 7035	35308

Interior equipment	Material	W x D x H (mm)	Order No.	
UB90.060.089.(UL.)S				
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31361	
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602	
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603	
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604	
SOFT-CLOSE			33983	
Document holder DIN A5	polystyrene		30793	
UB90.060.089.050.(UL.)S				
Second level drawer for internal width 890 mm	sheet steel powder-coated RAL 7035	743 x 346 x 45*	16589	
Perforated insert for internal width 890 mm	stainless steel	717 x 364 x 9	19619	
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31361	
Document holder DIN A5	polystyrene		30793	
SOFT-CLOSE			33983	

Ventilation	Order No.
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Adapter as separate housing unit for lateral mounting	26885

^{*} W x D = usable floor space

Accessories Pipe bushing and SOFT-CLOSE not available for models in UL version

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Model UB90.060.059.050.UL.S

Order No. 36993-001-35295



Model UB90.060.059.S

Order No. 30472-001-35286

Technical data		UB90.060.059.S UB90.060.059.UL.S	UB90.060.059.050.S UB90.060.059.050.UL.S
External dimensions W x D x H	mm	593 x 574 x 600	593 x 502 x 600
Internal dimensions W x D x H	mm	470 x 452 x 502	470 x 382 x 502
Weight without interior equip.	kg	120	110
Extraction air	DN	50	50
Air change 10 times	m³/h	1	1
Diff. pressure (air change 10 times EK5/AK4)	Pa	1	1
Max. load of drawers	kg	50	50

Usable storage heights



460** 230*** 0 mm 2 mm







Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Available in cabinet depths of 574 mm or 502 mm



Optionally available with UL certification

You will find technical drawings for these cabinet models from page 226

Model	Information / equipment	Colour	Order No.
UB90.060.059.S	without interior equipment, with drawer	light grey RAL 7035	30472-001
		laboratory white (sim. RAL 9016)	30472-005
UB90.060.059.UL.S	without interior equipment, UL/ULC 1275 listed, with drawer	light grey RAL 7035	37004-001
		laboratory white (sim. RAL 9016)	37004-005
UB90.060.059.050.S	without interior equipment, with drawer	light grey RAL 7035	30473-001
		laboratory white (sim. RAL 9016)	30473-005
UB90.060.059.050.ULS	without interior equipment, UL/ULC 1275 listed, with drawer	light grey RAL 7035	36993-001
		laboratory white (sim. RAL 9016)	36993-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
UB90.060.059.(UL.)S		
1x drawer (V=11.5L)	stainless steel	35289
1x drawer (V=11.5L), 1x perforated insert	stainless steel	35290
1x drawer (V=11.5L), 1x second level drawer	stainless steel	35292
UB90.060.059.050.(UL.)S		
1x drawer (V=10.0L)	sheet steel powder-coated RAL 7035	35295

Interior equipment	Material	W x D x H (mm)	Order No.	
UB90.060.059.(UL.)S				
Sump inliner	PP grey	353 x 406 x 88*	9706	
Sump inliner for second level drawer (recom. 2 pcs)	PE black	420 x 199 x 20*	10905	
Anti-slip rubber mat	black	420 x 438 x 1	8698	
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31360	
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602	
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603	
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604	
SOFT-CLOSE			33983	
Document holder DIN A5	polystyrene		30793	
UB90.060.059.050.(UL.)S				
Second level drawer	sheet steel powder-coated RAL 7035	430 x 346 x 45*	16595	
Perforated insert for internal width 590 mm	stainless steel	417 x 364 x 9	18922	
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31360	
Document holder DIN A5	polystyrene		30793	
SOFT-CLOSE			33983	

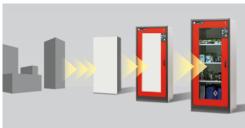
Ventilation	Order No.
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Adapter as separate housing unit for lateral mounting	26885

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^{*} W x D = usable floor space Accessories Pipe bushing and SOFT-CLOSE not available for models in UL version



Model UB90.080.110.060.2S

Order No. 32657-001-35372



Model UB90.080.059.060.S

Order No. 32658-001-35377

Technical data		UB90.080.110.060.2S	UB90.080.059.060.S
External dimensions W x D x H	mm	1102 x 600 x 800	593 x 600 x 800
Internal dimensions W x D x H	mm	979 x 482 x 702	470 x 482 x 702
Weight without interior equip.	kg	233	143
Extraction air	DN	50	50
Air change 10 times	m³/h	2	2
Diff. pressure (air change 10 times EK5/AK4)	Pa	1	1
Max. load of drawers	kg	50	50

Usable storage heights

665** 330*** 0 mm 2 mm







Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Cabinet height of 80 cm ideal for taller containers

You will find technical drawings for these cabinet models from page 226 $\,$

Model	Information / equipment	Colour	Order No.
UB90.080.110.060.2S	without interior equipment, with 2 drawers	light grey RAL 7035	32657-001
		warning yellow RAL 1004	32657-002
		laboratory white (sim. RAL 9016)	32657-005
UB90.080.059.060.S	without interior equipment, with drawer	light grey RAL 7035	32658-001
		warning yellow RAL 1004	32658-002
		laboratory white (sim. RAL 9016)	32658-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
UB90.080.110.060.2S		
2x drawer (V=25.0L)	sheet steel powder-coated	35372
2x drawer (V=25.0L), 2x perforated insert	sheet steel powder-coated, stainless steel	35373
2x drawer (V=25.0L), 2x perforated insert, 2x second level drawer	sheet steel powder-coated, stainless steel, sheet steel powder-coated RAL 7035	35374
UB90.080.059.060.S		
1x drawer (V=25.0L)	sheet steel powder-coated	35376
1x drawer (V=25.0L), 1x perforated insert	sheet steel powder-coated, stainless steel	35377
1x drawer (V=25.0L), 1x perforated insert, 1x second level drawer	sheet steel powder-coated, stainless steel, sheet steel powder-coated RAL 7035	35378

Interior equipment	Material	W x D x H (mm)	Order No.	
UB90.080.110.060.2S				
Sump inliner for second level drawer (recom. 2 pcs)	PE black	434 x 199 x 20*	10904	
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358	
UB90.080.059.060.S				
Sump inliner for second level drawer (recom. 2 pcs)	PE black	420 x 199 x 20*	10905	
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31360	
Accessories for both sides				
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
Anti-slip rubber mat	black	420 x 438 x 1	8698	
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602	
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603	
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604	
Document holder DIN A5	polystyrene		30793	

Ventilation	Order No.	
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315	
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306	

^{*} W x D = usable floor space

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Safety storage under bench cabinets for the unrestricted storage of flammable hazardous materials in working areas

Fits perfectly under fume cupboards

Cabinet makes perfect use of the space available under the fume cupboard.



Drawers

Remain open in any position and allow access to all stored goods. The interior is completely visible. Optimal usage of the interior height with the optional second level drawer for storing small containers.



33

Higher comfort

Thanks to the large opening angle, the wing doors allow a view of the entire storage area and facilitate the storage and removal of containers. With the optionally available maximised interior height, the cabinets can be retro-fitted with disposal systems by the customer.





Cylinder lock with locking status indicator

Doors lockable with cylinder lock, locking status indicator (red/green) signals the locking status of the cabinet.





Ventilation

Integrated air ducts ready for connection (DN 50) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.





Mobile

Optionally available castors with plinth; simple movement of the cabinet. Height adjustable to various laboratory furniture systems due to attachment covers.



7/

DOUBLE CERTIFIED

Certified according to EN 14470-1 as well as the UL standard, the cabinets are suitable for international use.

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- You can find our service tariffs from page 494



 Various cabinets in this model group are also tested to Underwriters Laboratories standard UL/ULC 1275.





Model UB90.060.140.S2T

Order No. 30410-001-33777



Model UB90.060.140.050.UL.S2T

Order No. 37062-001-33779

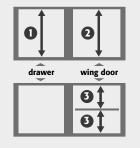
Technical data		UB90.060.140.S2T UB90.060.140.UL.S2T	UB90.060.140.050.S2T UB90.060.140.050.UL.S2T
External dimensions W x D x H	mm	1402 x 574 x 600	1402 x 502 x 600
Internal dimensions W x D x H	mm	1279 x 452 x 502	1279 x 382 x 502
Weight without interior equip.	kg	230	205
Extraction air	DN	50	50
Air change 10 times	m³/h	3	3
Diff. pressure (air change 10 times EK5/AK4)	Pa	1	1
Max. load of drawers	kg	50	50

Usable storage heights

1 mm 400* **2** mm 465**

3 mm 230***

* with perforated insert ** without perforated insert *** with second level drawer



Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Available in cabinet depths of 574 mm or 502 mm



Optionally available with UL certification

You will find technical drawings for these cabinet models from page $226\,$

Model	Information / equipment	Colour	Order No.
UB90.060.140.S2T	without interior equipment, with 1 drawer, 2 wing doors	light grey RAL 7035	30410-001
		laboratory white (sim. RAL 9016)	30410-005
UB90.060.140.UL.S2T	without interior equipment, UL/ULC 1275 listed, with 1 drawer, 2 wing doors	light grey RAL 7035	37070-001
		laboratory white (sim. RAL 9016)	37070-005
UB90.060.140.050.S2T	without interior equipment, with 1 drawer, 2 wing doors	light grey RAL 7035	30411-001
		laboratory white (sim. RAL 9016)	30411-005
UB90.060.140.050.UL.S2T	without interior equipment, UL/ULC 1275 listed, with 1 drawer, 2 wing doors	light grey RAL 7035	37062-001
		Jahoratory white (sim RAI 9016)	37062-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
UB90.060.140.(UL.)S2T		
Left: 1x perforated insert, 1x bottom collecting sump (V=20.0L) Right: 1x drawer (V=11.5L)	sheet steel powder-coated RAL 7035	35356
Left: 1x perforated insert, 1x bottom collecting sump (V=22.0L) Right: 1x drawer (V=11.5L)	stainless steel	35355
Left: 1x perforated insert, 1x bottom collecting sump (V=20.0L) Right: 1x drawer (V=11.5L), 1x perforated insert	sheet steel powder-coated RAL 7035, stainless steel	33777
Left: 1x perforated insert, 1x bottom collecting sump (V=22.0L) Right: 1x drawer (V=11.5L), 1x perforated insert	stainless steel	30414
Left: 1x shelf, 1x perforated insert, 1x bottom collecting sump (V=20.0L) Right: 1x drawer (V=11.5L), 1x perforated insert, 1x second level drawer	sheet steel powder-coated RAL 7035, stainless steel	33778
Left: 1x shelf, 1x perforated insert, 1x bottom collecting sump [V=22.0L] Right: 1x drawer [V=11.5L], 1x perforated insert, 1x second level drawer	stainless steel	30415

UB90.060.140.050.(UL.)S2T		
Left: 1x perforated insert, 1x bottom collecting sump (V=16.5L) Right: 1x drawer (V=10.0L)	sheet steel powder-coated RAL 7035	35361
Left: 1x perforated insert, 1x bottom collecting sump (V=16.5L) Right: 1x drawer (V=10.0L)	sheet steel powder-coated RAL 7035, stainless steel	33779
Left: 1x shelf, 1x perforated insert, 1x bottom collecting sump (V=16.5L) Right: 1x drawer (V=10.0L)	sheet steel powder-coated RAL 7035, stainless steel	33780

Interior equipment	Material	W x D x H (mm)	Order No.
	Matchai	W X D X H (IIIIII)	Order 140.
UB90.060.140.(UL.)S2T - compartment on the right			
Sump inliner for second level drawer (recom. 2 pcs)	PE black	434 x 199 x 20*	10904
Sump inliner	PP grey	353 x 406 x 88*	9706
Anti-slip rubber mat	black	420 x 438 x 1	8698
SOFT-CLOSE			33979
UB90.060.140.(UL.)2ST - accessories			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31359
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604
Document holder DIN A5	polystyrene		30793
UB90.060.140.050.(UL.)S2T - compartment on the right			
Second level drawer for internal width 590 mm	sheet steel powder-coated RAL 7035	443 x 346 x 45*	16590
SOFT-CLOSE			33979
UB90.060.140.050.(UL)2ST - accessories			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31359
Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Adapter as separate housing unit for lateral mounting	26885

* W x D = usable floor space Accessories Pipe bushing and SOFT-CLOSE not available for models in UL version

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Model UB90.060.110.ST

Order No. 30432-001-33774



Model UB90.060.110.050.UL.ST

Order No. 37028-001-35342

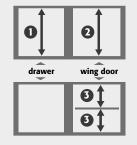
Technical data		UB90.060.110.ST UB90.060.110.UL.ST	UB90.060.110.050.ST UB90.060.110.050.UL.ST
External dimensions W x D x H	mm	1102 x 574 x 600	1102 x 502 x 600
Internal dimensions W x D x H	mm	979 x 452 x 502	979 x 382 x 502
Weight without interior equip.	kg	180	160
Extraction air	DN	50	50
Air change 10 times	m³/h	2	2
Diff. pressure (air change 10 times EK5/AK4)	Pa	1	1
Max. load of drawers	kg	50	50

Usable storage heights

1 mm 400* 2 mm 465**

3 mm 230***

* with perforated insert ** without perforated insert *** with second level drawer



Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Available in cabinet depths of 574 mm or 502 mm



Optionally available with UL certification

You will find technical drawings for these cabinet models from page $226\,$

Model	Information / equipment	Colour	Order No.
UB90.060.110.ST	without interior equipment, with 1 drawer, 1 wing door	light grey RAL 7035	30432-001
		laboratory white (sim. RAL 9016)	30432-005
UB90.060.110.UL.ST	without interior equipment, UL/ULC 1275 listed, with 1 drawer, 1 wing door	light grey RAL 7035	37043-001
		laboratory white (sim. RAL 9016)	37043-005
UB90.060.110.050.ST	without interior equipment, with 1 drawer, 1 wing door	light grey RAL 7035	30433-001
		laboratory white (sim. RAL 9016)	30433-005
UB90.060.110.050.ULST	without interior equipment, UL/ULC 1275 listed, with 1 drawer, 1 wing door	light grey RAL 7035	37028-001
		Jahoratory white (sim RAI 9016)	37028-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
JB90.060.110.(UL.)ST		
Left: 1x perforated insert, 1x bottom collecting sump (V=12.0L) Right: 1x drawer (V=11.5L)	sheet steel powder-coated RAL 7035, stainless steel	33773
_eft: 1x perforated insert, 1x bottom collecting sump (V=11.0L) Right: 1x drawer (V=11.5L)	stainless steel	35333
_eft: 1x perforated insert, 1x bottom collecting sump (V=12.0L) Right: 1x drawer (V=11.5L)	sheet steel powder-coated RAL 7035	35334
Left: 1x perforated insert, 1x bottom collecting sump (V=11.0L) Right: 1x drawer (V=11.5L), 1x perforated insert	stainless steel	30437
Left: 1x shelf, 1x perforated insert, 1x bottom collecting sump (V=12.0L) Right: 1x drawer (V=11.5L), 1x perforated insert	sheet steel powder-coated RAL 7035, stainless steel	33774
Left: 1x shelf, 1x perforated insert, 1x bottom collecting sump (V=11.0L) Right: 1x drawer (V=11.5L), 1x perforated insert, 1x second level drawer	stainless steel	30438
Left: 1x drawer max. interior height (V=33.0L) Right: 1x drawer (V=11.5L)	sheet steel powder-coated RAL 7035, sheet steel powder-coated	30436
11D00 0C0 110 0E0 (H) ST		
JB90.060.110.050_(UL_)ST _eft: 1x perforated insert, 1x bottom collecting sump (V=10.0L) Right: 1x drawer (V=10.0L)	sheet steel powder-coated RAL 7035	35342
Night: 1x drawer (v=1001) Left: 1x perforated insert, 1x bottom collecting sump (V=10.0L) Right: 1x drawer (V=10.0L), 1x perforated insert	sheet steel powder-coated RAL 7035, stainless steel	34266
Left: 1x shelf, 1x perforated insert, 1x bottom collecting sump (V=10.0L) Right: 1x drawer (V=10.0L), 1x perforated insert	sheet steel powder-coated RAL 7035, stainless steel	34267

Interior equipment	Material	W x D x H (mm)	Order No.
UB90.060.110.(UL.)ST - compartment on the right			
Sump inliner for second level drawer (recom. 2 pcs)	PE black	434 x 199 x 20*	10904
Sump inliner	PP grey	353 x 406 x 88*	9706
Anti-slip rubber mat	black	420 x 438 x 1	8698
SOFT-CLOSE			33979
UB90.060.110.(UL.)ST - accessories			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604
Document holder DIN A5	polystyrene		30793
UB90.060.110.050.(UL)ST - compartment on the right			
Second level drawer for internal width 590 mm	sheet steel powder-coated RAL 7035	443 x 346 x 45*	16590
SOFT-CLOSE			33979
UB90.060.110.050.(UL.)ST - accessories			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358
Document holder DIN A5	polystyrene		30793

Order No.
24315
39306
26885

* W x D = usable floor space Accessories Pipe bushing and SOFT-CLOSE not available for models in UL version

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Safety storage under bench cabinets for the unrestricted storage of flammable hazardous materials in working areas

Fits perfectly under fume cupboards

Cabinet makes perfect use of the space available under the fume cupboard.



23

Flexible applications

Model variations in 2 heights, 3 widths and 4 depths enable maximum flexibility in adapting to user requirements and structural conditions.



33

Higher comfort

Thanks to the large opening angle, the wing doors allow a view of the entire storage area and facilitate the storage and removal of containers. With the optionally available maximised interior height, the cabinets can be retro-fitted with disposal systems by the customer.





Cylinder lock with locking status indicator

Doors lockable with cylinder lock, locking status indicator (red/green) signals the locking status of the cabinet.





Ventilation

Integrated air ducts ready for connection (DN 50) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of explosive atmospheres or harmful vapours is safely prevented.





Mobile

Optionally available castors with plinth; simple movement of the cabinet. Height adjustable to various laboratory furniture systems due to attachment covers.





DOUBLE CERTIFIED

Certified according to EN 14470-1 as well as the UL standard, the cabinets are suitable for international use.

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



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- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
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 Various cabinets in this model group are also tested to Underwriters Laboratories standard UL/ULC 1275.





Model UB90.060.110.050.UL.2T

Order No. 37035-001-33776



Model UB90.060.110.2T

Order No. 30443-001-33771

Technical data		UB90.060.110.2T UB90.060.110.UL.2T	UB90.060.110.050.2T UB90.060.110.050.UL.2T
External dimensions W x D x H	mm	1102 x 574 x 600	1102 x 502 x 600
Internal dimensions W x D x H	mm	979 x 452 x 502	979 x 382 x 502
Weight without interior equip.	kg	180	160
Extraction air	DN	50	50
Air change 10 times	m³/h	2	2
Diff. pressure (air change 10 times EK5/AK4)	Pa	1	1

Usable storage heights



1 mm 400*



* with perforated insert

Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Available in cabinet depths of 574 mm or 502 mm



Optionally available with UL certification

You will find technical drawings for these cabinet models from page 226

Model	Information / equipment	Colour	Order No.
UB90.060.110.2T	without interior equipment, with 2 wing doors	light grey RAL 7035	30443-001
		laboratory white (sim. RAL 9016)	30443-005
JB90.060.110.UL.2T	without interior equipment, UL/ULC 1275 listed, with 2 wing doors	light grey RAL 7035	37050-001
		laboratory white (sim. RAL 9016)	37050-005
JB90.060.110.050.2T	without interior equipment, with 2 wing doors	light grey RAL 7035	30444-001
		laboratory white (sim. RAL 9016)	30444-005
JB90.060.110.050.UL2T	without interior equipment, UL/ULC 1275 listed, with 2 wing doors	light grey RAL 7035	37035-001
		laboratory white (sim. RAL 9016)	37035-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
UB90.060.110.(UL.)2T		
1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30450
1x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30451
1x drawer max. interior height 2-times (right and left side) (V=33.0L)	sheet steel powder-coated (electrically conductive)	30449
UB90.060.110.050.(UL.)2T		
1x perforated insert, 1x bottom collecting sump (V=21.0L)	sheet steel powder-coated RAL 7035	33775
1x shelf, 1x perforated insert, 1x bottom collecting sump (V=21.0L)	sheet steel powder-coated RAL 7035	33776

Material	W v D v H (mm)	Order No.
IVIACCI IAI	W A D A II (IIIIII)	Oluci No.
sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
sheet steel powder-coated RAL 7015		31358
sheet steel powder-coated RAL 7035	210 x 440 x 30	7602
sheet steel powder-coated RAL 7035	210 x 440 x 30	7603
sheet steel powder-coated RAL 7035	210 x 440 x 30	7604
polystyrene		30793
sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
sheet steel powder-coated RAL 7015		31358
polystyrene		30793
	sheet steel powder-coated RAL 7015 sheet steel powder-coated RAL 7035 sheet steel powder-coated RAL 7035 sheet steel powder-coated RAL 7035 polystyrene sheet steel powder-coated RAL 7035 sheet steel powder-coated RAL 7035	sheet steel powder-coated RAL 7035 182 x 104 x 48 sheet steel powder-coated RAL 7015 sheet steel powder-coated RAL 7035 210 x 440 x 30 sheet steel powder-coated RAL 7035 210 x 440 x 30 sheet steel powder-coated RAL 7035 210 x 440 x 30 polystyrene sheet steel powder-coated RAL 7035 182 x 104 x 48 sheet steel powder-coated RAL 7015

Ventilation	Order No.
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Adapter as separate housing unit for lateral mounting	26885

 $^{^{\}ast}$ W x D = usable floor space Accessories Pipe bushing not available for models in UL version

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Model UB90.060.089.2T

Order No. 30464-001-33767



Model UB90.060.089.050.UL.2T

Order No. 37013-001-33770

Technical data		UB90.060.089.2T UB90.060.089.UL.2T	UB90.060.089.050.2T UB90.060.089.050.UL.2T
External dimensions W x D x H	mm	893 x 574 x 600	893 x 502 x 600
Internal dimensions W x D x H	mm	771 x 452 x 502	771 x 382 x 502
Weight without interior equip.	kg	140	125
Extraction air	DN	50	50
Air change 10 times	m³/h	2	1
Diff. pressure (air change 10 times EK5/AK4)	Pa	1	1

Usable storage heights



1 mm 460**



* with perforated insert

Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Available in cabinet depths of 574 mm or 502 mm



Optionally available with UL certification

You will find technical drawings for these cabinet models from page 226

Model	Information / equipment	Colour	Order No.
UB90.060.089.2T	without interior equipment, with 2 wing doors	light grey RAL 7035	30464-001
		laboratory white (sim. RAL 9016)	30464-005
UB90.060.089.UL.2T	without interior equipment, UL/ULC 1275 listed, with 2 wing doors	light grey RAL 7035	37020-001
		laboratory white (sim. RAL 9016)	37020-005
UB90.060.089.050.2T	without interior equipment, with 2 wing doors	light grey RAL 7035	30465-001
		laboratory white (sim. RAL 9016)	30465-005
UB90.060.089.050.UL.2T	without interior equipment, UL/ULC 1275 listed, with 2 wing doors	light grey RAL 7035	37013-001
		laboratory white (sim. RAL 9016)	37013-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
UB90.060.089.(UL.)2T		
1x perforated insert, 1x bottom collecting sump (V=20.0L)	sheet steel powder-coated RAL 7035	33767
1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30468
1x shelf, 1x perforated insert, 1x bottom collecting sump (V=20.0L)	sheet steel powder-coated RAL 7035	33768
1x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30469
UB90.060.089.050.[UL]2T		
1x perforated insert, 1x bottom collecting sump (V=16.5L)	sheet steel powder-coated RAL 7035	33769
1x shelf, 1x perforated insert, 1x bottom collecting sump (V=16.5L)	sheet steel powder-coated RAL 7035	33770

Interior equipment	Material	W x D x H (mm)	Order No.
UB90.060.089.(UL.)2T			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31361
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604
Document holder DIN A5	polystyrene		30793
UB90.060.089.050.(UL.)2T			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31361
Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Extraction unit with exhaust air monitoring for wall mounting for under bench cabinets	24315
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Adapter as separate housing unit for lateral mounting	26885

 $^{^{*}}$ W x D = usable floor space Accessories Pipe bushing not available for models in UL version

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You can find our service tariffs from page 494





Model UB90.060.059.T

Order No. 30481-001-33763



Model UB90.060.059.050.UL.T

Order No. 36997-001-33766

Technical data		UB90.060.059.T UB90.060.059.UL.T	UB90.060.059.050.T UB90.060.059.050.UL.T
External dimensions W x D x H	mm	593 x 574 x 600	593 x 502 x 600
Internal dimensions W x D x H	mm	470 x 452 x 502	470 x 382 x 502
Weight without interior equip.	kg	120	110
Extraction air	DN	50	50
Air change 10 times	m³/h	1	1
Diff. pressure (air change 10 times EK5/AK4)	Pa	1	1

Usable storage heights



1 mm 400*



* with perforated insert

Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Available in cabinet depths of 574 mm or 502 mm



Optionally available with UL certification

You will find technical drawings for these cabinet models from page 224

Model	Information / equipment	Colour	Order No.
UB90.060.059.T	without interior equipment, left hinged, with wing door	light grey RAL 7035	30481-001
		laboratory white (sim. RAL 9016)	30481-005
JB90.060.059.TR	without interior equipment, right hinged, with wing door	light grey RAL 7035	30482-001
		laboratory white (sim. RAL 9016)	30482-005
JB90.060.059.UL.T	without interior equipment, left hinged, UL/ULC 1275 listed, with wing door	light grey RAL 7035	37007-001
		laboratory white (sim. RAL 9016)	37007-005
JB90.060.059.UL.TR	without interior equipment, right hinged, UL/ULC 1275 listed, with wing door	light grey RAL 7035	37010-001
		laboratory white (sim. RAL 9016)	37010-005
JB90.060.059.050.T	without interior equipment, left hinged, with wing door	light grey RAL 7035	30483-001
		laboratory white (sim. RAL 9016)	30483-005
JB90.060.059.050.TR	without interior equipment, right hinged, with wing door	light grey RAL 7035	30484-001
		laboratory white (sim. RAL 9016)	30484-005
JB90.060.059.050.ULT	without interior equipment, left hinged, UL/ULC 1275 listed, with wing door	light grey RAL 7035	36997-001
		laboratory white (sim. RAL 9016)	36997-005
JB90.060.059.050.ULTR	without interior equipment, right hinged, UL/ULC 1275 listed, with wing door	light grey RAL 7035	37000-001
		laboratory white (sim. RAL 9016)	37000-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
UB90.060.059.(UL.)T(R)		
1x perforated insert, 1x bottom collecting sump (V=11.0L)	stainless steel	30488
1x shelf, 1x perforated insert, 1x bottom collecting sump (V=11.0L)	stainless steel	30489
1x drawer max. interior height left hinged (V=33.0L)	sheet steel powder-coated (electrically conductive) RAL 7035	30487
1x drawer max. Interior height right hinged (V=33.0L)	sheet steel powder-coated (electrically conductive)	30871
UB90.060.059.050.(UL.)T(R)		
1x perforated insert, 1x bottom collecting sump (V=10.0L)	sheet steel powder-coated RAL 7035	33765
1x shelf, 1x perforated insert, 1x bottom collecting sump (V=10.0L)	sheet steel powder-coated RAL 7035	33766

Interior equipment	Material	W x D x H (mm)	Order No.
UB90.060.059.(UL)T(R)			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31360
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604
Document holder DIN A5	polystyrene		30793
UB90.060.059.050.(UL.)T(R)			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31360
Document holder DIN A5	polystyrene		30793

Ventilation	Order No.
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306
Adapter as separate housing unit for lateral mounting	26885

 $^{^{*}}$ W x D = usable floor space Accessories Pipe bushing not available for models in UL version

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THE ASECOS HAZMAT GUIDE

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Model UB90.080.110.060.2T

Order No. 36418-001-33771



Model UB90.080.059.060.T

Order No. 35900-001-33763

Technical data		UB90.080.110.060.2T	UB90.080.059.060.T
External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip. Extraction air Air change 10 times Diff. pressure (air change 10 times EK5/AK4)	mm mm kg DN m³/h Pa	1102 x 600 x 800 979 x 482 x 702 233 50 2	593 x 600 x 800 470 x 482 x 702 143 50 2

Usable storage heights



1 mm 600*

* with perforated insert





Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Cabinet height of 80 cm ideal for taller containers

You will find technical drawings for these cabinet models from page 226 $\,$

Model	Information / equipment	Colour	Order No.
UB90.080.110.060.2T	without interior equipment, with 2 wing doors	light grey RAL 7035	36418-001
		laboratory white (sim. RAL 9016)	36418-005
UB90.080.059.060.T	without interior equipment, left hinged, with wing door	light grey RAL 7035	35900-001
		laboratory white (sim. RAL 9016)	35900-005
UB90.080.059.060.TR	without interior equipment, right hinged, with wing door	light grey RAL 7035	35915-001
		laboratory white (sim. RAL 9016)	35915-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
UB90.080.110.060.2T		
1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30450
1x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	stainless steel	30451
1x drawer max. interior height 2-times (right and left side) (V=33.0L)	sheet steel powder-coated (electrically conductive)	30449
UB90.080.059.060.T[R]		
1x perforated insert, 1x bottom collecting sump (V=11.0L)	stainless steel	30488
1x shelf, 1x perforated insert, 1x bottom collecting sump (V=11.0L)	stainless steel	30489
1x drawer max. interior height left hinged (V=33.0L)	sheet steel powder-coated (electrically conductive)	30487
1X drawer max. Interior neight left hinged (v=33.0L)	RAL 7035	30487

Interior equipment	Material	W x D x H (mm)	Order No.
UB90.080.110.060.2T			
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358
UB90.080.059.060.T			
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31360
Accessories for both sides			
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604
Document holder DIN A5	polystyrene		30793

Ventilation	Order No.	
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315	
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306	

^{*} W x D = usable floor space

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Model UB90.080.110.075.2T

Order No. 30107-001-30762



Model UB90.080.110.075.2T

Order No. 30107-001-30712

Technical data UB90.080.110.075.2T

External dimensions W x D x H 1102 x 752 x 800 mm 979 x 626 x 701 Internal dimensions W x D x H mm Weight without interior equip. 200 Extraction air ĎΝ 50 Air change 10 times m³/h 4 Diff. pressure (air change 10 times EK5/AK4) Pa 5

Standard storage heights of the drawers

1 mm 580 2 mm 280



Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Cabinet height of 80 cm ideal for taller containers

You will find technical drawings for these cabinet models from page 226 $\,$

Model	Information / equipment	Colour	Order No.
UB90.080.110.075.2T	without interior equipment, with 2 wing doors	light grey RAL 7035	30107-001

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
1x perforated insert, 1x bottom collecting sump (V=33.0L)	stainless steel	30762
1x drawer (V=33.0L)	sheet steel powder-coated RAL 7035	30711
2x drawer (V=33.0L)	sheet steel powder-coated RAL 7035	30712

Interior equipment	Material	W x D x H (mm)	Order No.	
Pipe lead-through	sheet steel powder-coated RAL 7035	182 x 104 x 48	30035	
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358	
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602	
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603	
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604	
Document holder DIN A5	polystyrene		30793	

Ventilation	Order No.
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	24315
Recirculating air filter system with exhaust air monitoring for tall and underbench cabinets	39306

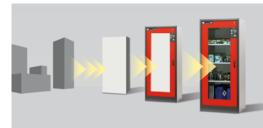
^{*} W x D = usable floor space

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UB-LINE | UB-T-90E/UB-S-90E

Safety storage under bench cabinets for the unrestricted storage and collection of flammable hazardous materials in working areas

PROFESSIONAL

Minimised risk through fully certified complete systems, consisting of conductive type 90 safety storage cabinets and integrated disposal components for the safe collection of solvent waste. Integrated level indicator and exhaust air monitoring with visual display (red/green) and acoustic alarm.



23

Detailed, seamless, and personalised approval documentation is included in the scope of delivery.



5

Choose from two different interior equipments packages (BASIC, PRE-MIUM), as well as optional accessories to provide optimal solutions for a wide range of applications.



MODULAR

The type 90 under bench cabinets are optionally available in completely conductive or non-conductive versions.



SLIM

Various models

Choose from four Type 90 safety cabinets, depending on the canister size and quantity.



72

Optimally prepared for the installation of disposal components by the customer.



5

Under bench cabinets with drawers

Allow convenient access to the disposal canisters, equipped with a funnel.

















• Fire resistance of 90 minutes (type 90), type-tested in accordance with EN 14470-1



- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- Further information from page 494



UB-LINE | UB-T-90E PROFESSIONAL



Model UB90.060.110.2T:0014

Order No. 36521-882-38347



Model UB90.060.059.T:0014

Order No. 36511-882-38346



Model UB90.080.059.060.T:0014

Order No. 36539-882-38348

Technical data		UB90.060.110.2T:0014	UB90.060.059.T:0014	UB90.080.059.060.T:0014
External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip. Extraction air Air change 10 times Diff. pressure (air change 10 times EK5/AK4)	mm	1102 x 574 x 600	593 x 574 x 600	593 x 600 x 800
	mm	979 x 452 x 502	470 x 452 x 502	470 x 482 x 702
	kg	180	120	143
	DN	50	50	50
	m³/h	2	1	2

Main features



Incl. approved fire protection bushes



Built-in signal box for monitoring fill levels and exhaust air



Pull-out tray with positioning frame for the disposal canisters

You will find technical drawings for these cabinet models from page 226

Model	Body colour	Door colour	Order No.
UB90.060.110.2T:0014	light grey RAL 7035	stainless steel	36521-882
		light grey RAL 7035	36521-889
JB90.060.059.T:0014	light grey RAL 7035	stainless steel	36511-882
		light grey RAL 7035	36511-889
JB90.080.059.060.T:0014	light grey RAL 7035	stainless steel	36539-882
		light grey RAL 7035	36539-889
nterior equipment packages (can only	be ordered in combination with the cabinet)	Material	Order No.
JB90.060.110.2T:0014			
PREMIUM 2 x drawer 1 x disposal system (3 x disposal channel 4 x canister 10 L 1 x exhaust air monitoring		stainless steel, PE conductive	38347
BASIC 2 x drawer 2 x disposal system (3 x disposal channel 3 x canister 10 L)	sheet steel powder-coated electrically conductive, PE conductive	38343
JB90.060.059.T:0014			
PREMIUM 1 x drawer 1 x disposal system (1 x disposal channel 2 x canister 10 L 1 x exhaust air monitoring]	stainless steel, PE conductive	38346
BASIC Lx drawer Lx disposal system (1 x disposal channel 2 x canister 10 L)	sheet steel powder-coated electrically conductive, PE conductive	38341
UB90.080.059.060.T:0014			
PREMIUM			
l x drawer l x disposal system (1 x disposal channel 2 x canister 20 L		stainless steel, PE conductive	38348
x exhaust air monitoring			
BASIC L x drawer L x disposal system (1 x disposal channel P x canister 20 l		sheet steel powder-coated electrically conductive, PE conductive	38345

Accessories for these cabinet models:

Interior equipment	Material	Order No.
UB90.060.110.2T:0014		
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015	31358
UB90.060.059.T:0014 / UB90.080.059.060.T:0014		
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015	31360
Accessories for both sides		
Fill-in set 1: Funnel small with cap (PE-HD electrical conductive) and table lead-through (GL45/GL25)	PE	37282
Fill-in set 2: ball funnel with cap (PE-HD electrical conductive) and table lead-through (GL45/GL25)		37283
Fill-in set 3: draining adapter for basin, PE-HD electrical conductive, G 1 1/2"	PE	36567

UB-LINE PROFESSIONAL

Comprehensively certified complete system consisting of type 90 safety storage cabinet and integrated disposal components including high-quality approval documentation with a personalised serial number.

Choose from two equipment packages: BASIC or PREMIUM.



Are you looking for an appropriate storage solution for hazardous materials?

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UB-LINE | UB-T-90E MODULAR



Model UB90.060.110.2T:0014

Order No. 36521-882-36825



Model UB90.060.059.T:0014

Order No. 36511-882-36824



Model UB90.080.059.060.T:0014

Order No. 36539-882-38530

Technical data		UB90.060.059.T UB90.060.059.T:0014	UB90.060.110.2T UB90.060.110.2T:0014	UB90.080.059.060.T UB90.080.059.060.T:0014
External dimensions W x D x H	mm	593 x 574 x 600	1102 x 574 x 600	593 x 600 x 800
Internal dimensions W x D x H	mm	470 x 452 x 502	979 x 452 x 502	470 x 482 x 702
Weight without interior equip.	kg	120	180	143
Extraction air	DN	50	50	50
Air change 10 times	m³/h	1	2	2
Diff. pressure (air change 10 times EK5/AK	4) Pa	1	1	1

Main features



Optionally expandable in case of changing workplace conditions



Pull-out tray with positioning frame for the disposal canisters

You will find technical drawings for these cabinet models from page 226

Model	Body colour	Door colour	Order No.
Outer corpus without discharge			
UB90.060.110.2T	light grey RAL 7035	light grey RAL 7035	30443-001
	laboratory white (sim. RAL 9016)	laboratory white (sim. RAL 9016)	30443-005
UB90.060.059.T	light grey RAL 7035	light grey RAL 7035	30481-001
	laboratory white (sim. RAL 9016)	laboratory white (sim. RAL 9016)	30481-005
UB90.080.059.060.T	light grey RAL 7035	light grey RAL 7035	35900-001
	laboratory white (sim. RAL 9016)	laboratory white (sim. RAL 9016)	35900-005
Outer corpus with discharge cap	acity		
UB90.060.110.2T:0014	light grey RAL 7035	light grey RAL 7035	36521-889
		stainless steel	36521-882
UB90.060.059.T:0014	light grey RAL 7035	light grey RAL 7035	36511-889
		stainless steel	36511-882
UB90.080.059.060.T:0014	light grey RAL 7035	light grey RAL 7035	36539-889
		stainless steel	36539-882
Interior equipment packages (ca	n only be ordered in combination with the cabinet)	Material	Order No.
UB90.060.110.2T			
2x drawer max. interior height (V=2	2.0L), 2x positioning sheet	stainless steel brush-finished, stainless steel	36814
UB90.060.059.T			
1x drawer (disposal) left hinged (V=	15.5L), 1x positioning sheet	stainless steel brush-finished, stainless steel	36813
UB90.080.059.060.T			
	30.0L), 1x positioning sheet	stainless steel brush-finished, stainless steel	37114
1x drawer (disposal) left hinged (V=			
1x drawer (disposal) left hinged (V= UB90.060.110.2T:0014			
. ,		stainless steel brush-finished, stainless steel	36825
. ,		stainless steel brush-finished, stainless steel	36825
UB90.060.110.2T:0014 UB90.060.059.T:0014	15.5L), 1x positioning sheet	stainless steel brush-finished, stainless steel	36825 36824
UB90.060.110.2T:0014	15.5L), 1x positioning sheet		

Accessories for these cabinet models:

Interior equipment	Material	Order No.
UB90.060.110.2T(:0014)		
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015	31358
Pipe lead-through enclosed, for customer assembly	sheet steel powder-coated red	28088
UB90.060.059.T(:0014) / UB90.080.059.060.T(:0014)		
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015	31360
Pipe lead-through enclosed, for customer assembly	sheet steel powder-coated red	28088

Please note:

The use of the pipe lead-through listed in the accessories is mandatory when installing hoses and cables of the on-site waste disposal systems. Only then is the tested fire resistance of the cabinets (type 90 according to EN 14470-1) guaranteed. The pipe lead-through is enclosed with the cabinet and can be mounted on the cabinet by the customer according to the manufacturer's specifications.

TIME

UB-LINE MODULAR Approved safety cabinets according to GS and EN 14470-1 for customer-owned equipment or retrofitting with disposal

components.



ELECTRICALLY CONDUCTIVE

Depending on the requirements, the UB-LINE MODULAR models are available in both **conductive** and **non-conductive** versions.



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Our optimised online product configurator helps you, step by step, to find the suitable safety storage cabinet.





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UB-LINE | UB-S-90E SLIM



Model UB90.060.110.2S Order No. 30427-001-38354

Model UB90.060.059.S

Order No. 30472-001-38352



Model UB90.080.059.060.S

Order No. 32658-001-38357

Technical data		UB90.060.110.2S	UB90.060.059.S	UB90.080.110.060.2S	UB90.080.059.060.S
External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip. Air change 10 times Diff. pressure (air change 10 times EK5/ AK4)	mm mm kg m³/h Pa	1102 x 574 x 600 979 x 452 x 502 180 2	593 x 574 x 600 470 x 452 x 502 120 1	1102 x 600 x 800 979 x 482 x 702 233 2	593 x 600 x 800 470 x 482 x 702 143 2
Max. load of drawers	kg	50	50	50	50

Main features



Canister incl. funnel made of high-quality, electrically conductive PE-HD

You will find technical drawings for these cabinet models from page 226

Model	Body colour	Colour	Order No.
UB90.060.110.2S	light grey RAL 7035	light grey RAL 7035	30427-001
	laboratory white (sim. RAL 9016)	laboratory white (sim. RAL 9016)	30427-005
UB90.060.059.S	light grey RAL 7035	light grey RAL 7035	30472-001
	laboratory white (sim. RAL 9016)	laboratory white (sim. RAL 9016)	30472-005
UB90.080.110.060.2S	light grey RAL 7035	light grey RAL 7035	32657-001
	laboratory white (sim. RAL 9016)	laboratory white (sim. RAL 9016)	32657-005
UB90.080.059.060.S	light grey RAL 7035	light grey RAL 7035	32658-001
	laboratory white (sim. RAL 9016)	laboratory white (sim. RAL 9016)	32658-005
Interior equipment packages (can only be	ordered in combination with the cabinet)	Material	Order No.
Interior equipment packages (can only be UB90.060.110.2S	e ordered in combination with the cabinet)	Material	Order No.
	· ·	Material sheet steel powder-coated RAL 7035, PE conductive	Order No. 38354
UB90.060.110.2S	· ·		
UB90.060.110.2S 2x drawer (V=15.5L), 2x funnel, 2x canister 1)L		
UB90.060.110.2S 2x drawer (V=15.5L), 2x funnel, 2x canister 1 UB90.060.059.S)L	sheet steel powder-coated RAL 7035, PE conductive	38354
UB90.060.110.2S 2x drawer (V=15.5L), 2x funnel, 2x canister 1 UB90.060.059.S 1x drawer (V=15.5L), 1x funnel, 1x canister 1	DL.	sheet steel powder-coated RAL 7035, PE conductive	38354
UB90.060.110.2S 2x drawer (V=15.5L), 2x funnel, 2x canister 1 UB90.060.059.S 1x drawer (V=15.5L), 1x funnel, 1x canister 1 UB90.080.110.060.2S	DL.	sheet steel powder-coated RAL 7035, PE conductive sheet steel powder-coated RAL 7035, PE conductive	38354 38352

Accessories for these cabinet models:

Interior equipment	Material	Order No.
UB90.060.110.2S / UB90.080.110.060.2S		
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015	31358
UB90.060.059.S / UB90.080.059.060.S		
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015	31360



UB-LINE SLIM

Disposal system for intermediate storage of waste liquids. SLIM safety storage cabinets consist of a safety storage cabinet with drawer(s) and disposal canister(s). The liquids are dispensed into the disposal canister via a screwed-on funnel.

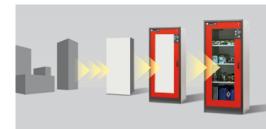




Safety storage cabinets only provide reliable protection ...

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UB-LINE | UB-S-90K

Refrigerating under bench cabinets for the unrestricted storage of highly flammable hazardous materials in working areas

Controlled cooling

Homogeneous cooling effect in the interior through laminar entry of the cold air. Maximum cooling power +4 °C. High energy efficiency through return of cooled air in the system.



2

Fits perfectly under fume cupboards

Cabinet makes perfect use of the space available under the fume cupboard.





Secure function

7-segment LED display for direct monitoring of functions; display of cooling temperature (NOMINAL/ACTUAL); air recirculation rate and filter saturation; simple setting of the nominal temperatures; safe, continuous, min. 10-fold air exchange; no explosive zones inside and outside the cabinet.





Recirculating air operation

Integrated aeration and ventilation system in recirculating air operation. Monitoring and activated charcoal filter unit for the safe retention of solvent vapours (hydrocarbons). No external exhaust air system required, maximum flexibility in the choice of the place of installation.





Drawers

Remain open in any position and allow access to all stored goods. The interior is completely visible. Optimal usage of the interior height with the optional second level drawer for storing small containers.





Cylinder lock with locking status indicator

Doors lockable with cylinder lock, locking status indicator (red/green) signals the locking status of the cabinet.





Mobile

Optionally available castors with plinth; simple movement of the cabinet. Height adjustable to various laboratory furniture systems due to attachment covers.



UB-LINE | UB-S-90K



Model UB90.060.110.KU.S

Order No. 31827-005-35322

Technical data

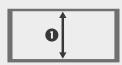
External dimensions W x D x H 1108 x 574 x 630 mm Power consump. in operation 247 W 7.2 W Internal dimensions W x D x H 753 x 443 x 484 mm Power consump. in standby mode Weight without interior equip. 220 kg Waste heat 1 kW Power connection 230 V Cooling capacity 4−15 °C Frequency 50/60 Hz Temperature difference (cooling capacity to room temper-25 K Rated current 2 A Maximum permissible room temperature 35 ℃

Usable storage heights

0 mm 422** 2 mm 205***

Starting current

** without perforated insert *** with second level drawer



6,8-8,1 A



Main features



Cabinet incl. energy-efficient cooling function



Ventilation and deaeration system in recirculation mode



Perfect for installation under fume cupboards or hazardous materials workplaces

You will find technical drawings for these cabinet models from page 226

Model	Information / equipment	Colour	Order No.
UB90.060.110.KU.S	without interior equipment, cooling function in the recirculating air operation, with drawer	laboratory white (sim. RAL 9016)	31827-005

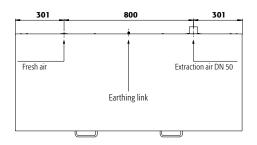
Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
1x drawer (V=17.5L)	stainless steel	35322
1x drawer (V=17.5L), 1x perforated insert	stainless steel	35323
1v drawer (V=1751) 1v perforated insert 1v second level drawer	etainlace etaal	35324

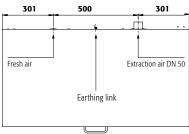
Interior equipment	Material	W x D x H (mm)	Order No.	
Bottle rack for 32 bottles with Ø 40 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7602	
Bottle rack for 15 bottles with Ø 70 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7603	
Bottle rack for 8 bottles with Ø 90 mm	sheet steel powder-coated RAL 7035	210 x 440 x 30	7604	
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015		31358	

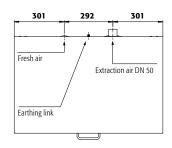
^{*} W x D = usable floor space



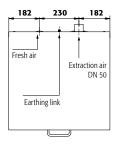
Top views

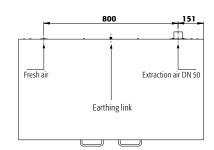






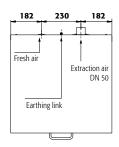
UB90.060.140.(UL.)xxx UB90.060.140.050.(UL.)xxx UB90.060.110.(UL.)xxx UB90.060.110.050.(UL.)xxx UB90.080.110.075.2T UB90.060.089.(UL.)xxx UB90.060.089.050.(UL.)xxx

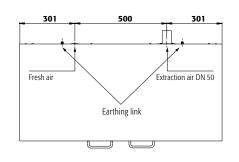


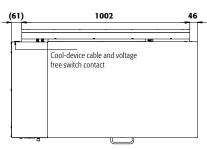


UB90.060.059.(UL.)xxx UB90.060.059.050.(UL.)xxx UB90.060.059.T:0014

UB90.080.110.xxx







UB90.080.059.xxx UB90.080.059.T:0014 UB90.060.110.2T:0014

UB90.060.110.KU.S

INDIVIDUAL AND **MADE TO MEASURE**



With the online tool, you can individually plan your safety storage cabinet including interior equipment, dimensions and design – the desired product is then visualised and a quotation can be requested directly.

Get an overview of the extensive asecos product range and easily find the right cabinet for your needs. Test the configurator now at:

www.asecos-configurator.com



asecos is uncompromising when it comes to safety.

Our expertise as developers and manufacturers of technical safety products is also reflected in the range of services we offer. Seamless, professional maintenance can prevent serious damage in critical cases, and is also required by law in many countries.

A selected number of sales partners around the world have undergone a special certification process and are able to provide professional services where asecos cannot be present personally. Ask us for more information.

With the asecos services you are always on the safe side.

asecos fulfils these requirements: Inspection and maintenance carried out by our specialised service technicians ensures your safety storage cabinet functions properly. Concluding an asecos service agreement extends your warranty to up to 10 years.

During safety technology inspections, our service experts check all safety-relevant elements such as fire protection and ventilation seals, insulation, door closures, fusible links, ventilation openings for proper function and effectiveness.

For more information on the asecos service programme visit **www.asecos.global** or contact our experts via **service@asecos.com**.

Detailed information about our services, service rates and legal frameworks is available from page 494.



- Lithium-ion batteries

Increasing popularity, underestimated risks

There are very few technology trends that have become so firmly established in recent years than the development of ever more powerful energy storage systems based on lithium (Li).

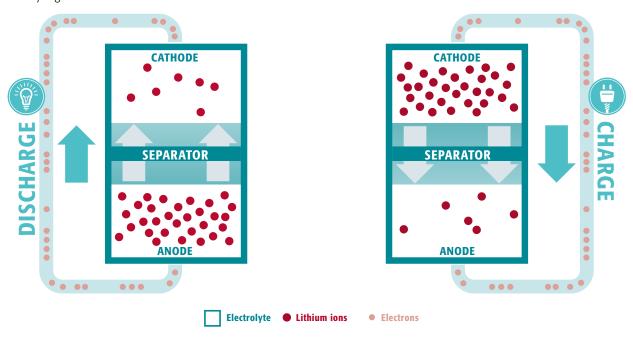
For about 30 years, lithium-ion batteries and accumulators have been conquering the market for energy storage and are used in more and more products and devices. It is no coincidence that the development of the Li-memory technology was awarded with the Nobel Prize for Chemistry in 2019.

Whether power tools, garden tools or e-bikes, our private and professional everyday life without lithium batteries is now unimaginable.

But this boom has a flip side. Because these energy storage systems that are so practical and efficient are anything but harmless. They can burst into flames and cause serious fires. Even specially shielded batteries can develop temperatures of over 1,000 °C, as experiments by the BDE have shown.

How lithium-ion batteries work

Like batteries, accumulators are electrochemical energy storage devices. They consist of two metal electrodes, a separator and a liquid electrolyte. When ions migrate from one electrode to the other, an electrical voltage is generated which can be used as an energy source. When charging, the ions are forced by an externally applied voltage to migrate back to the anode, so that the battery regenerates.



With higher energy density comes a greater risk of fire

With higher storage capacities and the increasing spread of lithium-ion batteries, the risk of fire has risen rapidly. The fact that this risk is not only of a theoretical nature has been made clear by a large number of damaging events in recent years. The recall actions were particularly spectacular with Samsung mobile devices or the worldwide flight bans on the Boeing 787 due to burning and exploding batteries.

The list of battery fires is also growing. Some examples prove the explosiveness:

- >>> On 28th July 2020, a huge cloud of smoke rose above the site of a waste disposal site in Ellwangen. Two warehouses were on fire. The cause of the fire is suspected to be batteries located in yellow bags.
- >>> On 1st June 2020 a lithium-ion battery triggers a fire in the building of a technology service provider in Ehningen. Although the fire can be extinguished quickly, the fire brigade is still on duty for many hours, due to highly dangerous hydrofluoric acid that escaped when the battery decomposed. The danger zone had to be cordoned off over a large area until the battery could be cooled and transported away in a special container.

These and many other cases of fire have one thing in common: the Li-batteries were stored or charged unattended without any special protective measures.



CAUSES OF BATTERY FIRES

The combination of high energy density with flammable electrolytes can hardly be avoided in the construction, so there is always a latent fire risk. If a Li-battery is not handled, stored and charged carefully and under supervision as intended by the manufacturer, uncontrolled discharges, spontaneous ignition with bursting of the battery and fire must be expected.

According to experts, undesired events and damage with batteries can generally be assigned to one of the following initial situations. These are considered particularly risky if the lithium-ion battery in combination with the high energy density of the battery

-))) is mechanically damaged, e.g. if an electric car or e-bike is involved in a traffic accident.
- >>> is pre-damaged by deep discharge; in this case the cell becomes unstable, internal short circuits occur leading to over-heating.
- >>> by external heat or energy sources resulting in thermal overload, e.g. when a cooling system is switched off in strong sunlight, which leads to an internal short circuit.
- is *electrically overloaded* during charging and discharging, e.g. due to a defect in the protective electronics.

The actual cause of burning, bursting and exploding lithium-ion batteries is the so-called thermal runaway. This technical term refers to a self-reinforcing chemical process which, once started, is very difficult to stop. The risk of such a thermal runaway is due to the construction of the batteries and the substances that are necessarily used.

The electrolyte liquids consist of organic solvents, i.e. they are flammable and their flammability is almost equal to that of petrol. In combination with the high energy densities this results in an extremely dangerous situation. Because as soon as the temperature in a single cell of a battery rises, all neighbouring cells also heat up in cascades. If the temperature reaches a limit range which, depending on the solvents used, starts at around 60°C and becomes extremely critical from 100 °C a chain reaction occurs which can no longer be controlled. Within fractions of a second the temperature rises up to 800 °C, the gases produced break the cover of the battery cell and the battery burns explosively.

Such a situation is unpredictable. Not only are there flames to contend with, but burning battery material is hurled through the air like fireworks. This not only endangers people, but can also start secondary fires, particularly if a fire spreads domino-like to neighbouring batteries, it spreads very quickly. Such a fire with lithium-ion batteries is feared among firefighters, as it is difficult to control. Even immediate cooling cannot stop the process, as the water only reaches the outer shell of the battery.



WHAT DO EXPERTS SAY?

Assessments and recommendations by experts from fire brigades, statutory accident insurance companies or property insurers illustrate the importance of the correct handling of lithium-ion batteries.

"A lithium-ion battery fire can have many causes and may occur in the complete life cycle of an energy storage system." (DGUV)

"Burning lithium-ion batteries represent a large and incalculable danger" (bvfa)

In particular, the need for safe storage of lithium-ion batteries is repeatedly stressed by all experts:

"The batteries can be dangerous in a warehouse – once they catch fire, the fire is very difficult to control."
(GDV after evaluation of fire tests)

"Even if relatively small quantities of the lithiumion batteries stored catch fire, a fast fire spread is very likely. Partially explosive burning may cause the burning parts to be thrown around the area."
(AGBF)

Not without reason does the IFS recommend that lithium batteries should always be charged in a room with a smoke detector. However, a smoke detector neither prevents a fire nor spontaneous ignition and is not an effective alternative to preventive fire protection measures.

"Lithium batteries are the biggest challenge "Defective or damaged batteries pose a particular fire hazard - for examof the industry over the last 40 years. We ple, an ebike may be handed over by a know about waste management companies, customer to a service depot following a in which they are responsible for 95% of bicycle crash. It is critical that these are the occuring incidents. There are injured placed in protective containers or stored employees and the damage to property is in outside buildings." enormous. This cannot continue." (Provinzial Rheinland, Loss Prevention, Risk (VOEB) Advice Department

With the growing number of damage claims and the assessments of many experts, it is becoming increasingly clear that companies and businesses that handle batteries without a comprehensive safety concept and without consistent implementation are faced with occupational safety, insurance and health risks liability in a highly risky situation.



LEGAL BASIS FOR HANDLING LITHIUM-ION

BATTERIES IN USE

According to the Health and Safety at Work Act 1974 (HSWA), it is the duty of every employer to ensure, as far as is reasonably practicable, the health, safety and welfare at work of all its employees. This includes arrangements for ensuring, so far as is reasonably practicable, safety and absence of health risks in connection with the use, handling, storage and transport of articles and substances. The Control of Substances Hazardous to Health (COSHH), which recognises that using hazardous substances at work can put people's heath at risk, supports this. However, in accordance with regulation 5(1), COSHH only applies to substances that are hazardous to health. It is the Dangerous Substances and Explosive Atmosphere Regulations 2002 (DSEAR) which covers substances that are capable of producing effects on health because of their explosive or flammable properties.

Under both COSHH and DSEAR, the employer is obliged to reduce the accident and health risks for its employees and to evaluate them. Regulation 5 of DSEAR requires employers and the self-employed to assess risk associated with the use or presence of dangerous substances at work. DSEAR is specifically written to assist companies in protecting persons from the risk of fire, the risk of explosion and the risk of energetic energy release — all potential hazards of lithium-ion batteries.

To adhere to this, it is important that:

- >>> risk assessments are carried out, which thoroughly evaluate all fire and explosion risks.
- >>> on the basis of the risk assessments, suitable protective measures and rules of conduct for the employees are defined.
- ">" operating instructions for handling lithium-ion batteries are prepared and displayed."
-))) the employees are instructed on the risks, the safety measures and the established rules of conduct.
- >>> the effectiveness of the protective measures taken is regularly reviewed and corrected or extended as necessary.

According to DSEAR, a competent person must carry out the risk assessment. Only an expert can decide within the scope of an on-site inspection where and which measures become necessary. The DSEAR guidelines clearly state that technological measures are generally preferable over organisational or personal protection measures.

Further recommendations for the storage, handling and use of batteries in commercial and industrial premises are contained in the RC61 document, produced by the RISCAuthority in 2014. RC61 6.7 clearly advocates that storage areas should provide at least 60 minutes fire resistance between the stored batteries and any other part of the premises. Furthermore, RC61 8.12 states, "Where batteries are stored in a relatively small environment consideration may be given to installing a proprietary in-cabinet system to automatically detect and suppress a fire in the incipient stages. Where such a system is installed it should be monitored to allow the fire and rescue service to be alerted without delay".

RC61 3.3 also states that any battery that has been damaged, dented or pierced should be taken out of service immediately, segregated from other batteries and stored safely (Section 7) while awaiting safe disposal.

The relevant legislation for the mode of transport should be adhered to when transporting lithium batteries.

The relevant legislation for the mode of transport should be adhered to when transporting lithium batteries. For example, by Road – ADR; by Rail – RID; by Air – ICAO and IATA; by Sea – IMDG etc.

In addition to the legislation and guidance, the many cases of fire and the assessments of experts (cf. the above quotations) provide sufficient reason for effective preventive measures in order to guarantee insurance cover. From the perspective of the insurance industry, RC61 clearly states Lithium batteries are particularly hazardous if not stored, charged and used correctly.



GENERAL SAFETY RULES

Every employer must ensure that all employees who handle lithium-ion batteries at their workplaces:

- >>> Never short-circuit batteries or protect battery terminals from short-circuiting (use pole caps or tape them off).
-))) Inspect batteries regularly and check for physical damage such as cracks.
- >>> Do not use deformed, inflated, corroded, defective, damaged or hot batteries. These must be quarantined immediately and kept at a safe distance or stored separately until disposal.
- >>> Never make your own battery packs or use batteries in any other way than specified by the manufacturer.
- >>> Avoid hot work or open flames near batteries.

STORING LITHIUM-ION BATTERIES SAFELY

If Li-accumulators are provided at production sites, the quantities should be based on the daily or weekly quantities or shift requirements. All other supplies require suitable storage. If rechargeable batteries are not used for a longer period of time, e.g. removed over the winter, they can and should be stored professionally. In unsuitable storage conditions, the electrolyte may decompose and flammable gases may develop. The next time you try to recharge, an internal short circuit occurs and the cell can catch fire.

Fire and explosion risks can be significantly reduced with the following principles:

- >>> Store dust-free and dry, protect from moisture
- >>> Store in a temperature protected area, i.e. between 10 °C and 25 °C
- >>> Protect from frost, but also from temperatures > 60 °C, never store in the sun or near hot surfaces, motors, etc.
- >>> Store in fireproof separated areas
- >>> Monitor storage areas by means of a suitable fire alarm system
- >>> Do not store together with other fire accelerating products
- >>> Maintain safety distances (up to 5 m from flammable materials, depending on battery type)

In workplaces with fire extinguishing systems, the extinguishing agent instructions in the safety data sheets must be observed.

SAFE CHARGING OF LITHIUM-ION BATTERIES

The following rules apply to safety when charging lithium-ion batteries:

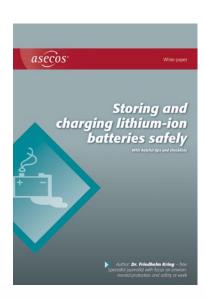
- >>> Only use with the chargers approved and intended by the manufacturer
- >>> Only on non-combustible surfaces
- >>> Not in the vicinity of flammable materials and fire loads
- >>> Never cover the batteries during the charging process
- >>> Do not charge when cold (< 0 °C)
- >>> Never deep discharge

Although protective electronics built into the battery should prevent overcharging, such a battery management system (BMS) can fail – for example if the charger is not suitable. Thus unattended charging is always a source of danger.



INCREASING POPULARITY,

UNDERESTIMATED RISKS



EXPERT KNOWLEDGE

Our new red paper is your ideal tool for obtaining quick information about lithium-ion batteries.

On 20 pages, Dr. Friedhelm Kring – freelance trade journalist with a focus on environmental protection and occupational safety – explains the essential information on lithium batteries and their hazards in an approachable manner. Tips, practical examples and checklists for the handling of lithium-ion batteries complete the red paper.

Order now!

Visit www.asecos.global to order your free copy of the red paper!



FROM RISK ASSESSMENT TO SAFETY CONCEPT

Even if all the above safety rules are implemented in a company, the business owners and employers are not yet automatically legally on the safe side. The decisive factor is that not only individual measures are derived from the risk assessment, but that the business develops and implements a comprehensive safety and fire protection concept for handling lithium-ion batteries. Such an approach should answer the following 10 questions.

10 critical points of a fire protection concept for lithium-ion batteries:

- >>> Are suitable locations and state-of-the-art technical facilities available in the workplace for the safe storage and charging of lithium batteries?
- >>> Do these storage locations or facilities comply with the current state of the art, e.g. with regard to fire resistance, as well as the requirements for separate storage in safe distance to fire loads etc.?
- >>> Is it ensured that the heating or burning of a battery is immediately registered (temperature sensors, smoke detectors) and indicated visually and acoustically by suitable alarm systems?
- >>> Is the power supply to batteries in charging mode immediately and automatically interrupted in the event of increased temperatures or other safety critical situations?
- >>> Is it guaranteed that every safety-critical condition is reliably reported to a control room, building management system or qualified personnel so that the necessary measures can be initiated immediately?
- Are both the alarm and its transmission to the intended recipients secured even outside working and operating hours, e.g. at night, at weekends or in the company holidays?
- Is it possible to remove the existing batteries quickly and safely from the building in a safety-critical situation, e.g. by using storage equipment that can be picked up by industrial trucks?
- >>> Are the technical facilities for charging and storing batteries regularly checked for safety?
- >>> Is the maintenance performed by qualified and competent personnel, e.g. by the manufacturer or persons certified by the manufacturer?
- >>> Are the results of these tests documented and are the test reports kept for an appropriate period?



INSURANCE COVER AND LIMITATION OF LIABILITY ARE AT RISK

Temporary solutions that are not based on the current state of the art can even increase the risks if employees rely on a supposed but de facto inadequate protection against fire and explosion. Only a safety concept that ensures permanent and reliable monitoring and alarming and includes a qualified technical inspection at regular intervals, offers a sufficient degree of legal certainty.

If safety equipment such as hazardous material cabinets or fire alarm systems are not properly checked, the responsible employer and business owner not only loses insurance cover in the event of damage, but also risks the loss of the business owner liability limitation.

SAFETY CABINETS AS THE BASIS OF AN OPERATIONAL FIRE PROTECTION CONCEPT

Thoroughly instructed employees are undoubtedly a gain in safety. But what applies to accidents at work also applies to fire prevention: people make mistakes and individual behavioural mistakes become the cause of accidents far more often than technical failure. If you want to rule out major damage from battery fires from the start, there is no getting around technical solutions.



THE ION-LINE PRO SAFETY CONCEPT

With an integrated 3-stage warning/fire suppression system and smoke detector, the cabinets offer a high level of safety for storing and charging lithium-ion batteries.

INCIDENTS

MESSAG

ARNING

LEVEL

RM

ALARM LEVEL

If the interior temperature increases **above 50 °C**, the warning/fire suppression system triggers a warning message to the central control office.

Possible causes:

- Temperature build-up due to battery charging processes
- Ventilation system failure

Alarm level 1 is triggered when smoke begins to form in the cabinet, as soon as the smoke detector is activated.

Possible causes:

 Smoke detected without simultaneous temperature increase

Alarm level 2 is triggered when the smoke detector is already activated (alarm level 1) and the temperature sensor registers an interior temperature greater than 70 °C

Possible causes:

Outbreak of fire

SYSTEM REACTIONS

Visual and acoustic signal output

- The warning light (red LED) is activated and permanently illuminated, the function indicator (green LED) goes out
- Alarm triggers with slow tone interval

The potential-free alarm switch

• is activated, the alarm is transmitted to the building services management system

SUBSEQUENT MEASURES

Internal qualified personnel can immediately inspect the system to take any further necessary measures. If the interior temperature decreases below 50 °C once again, the system returns to normal operations, and the visual and acoustic signals are turned off.

Visual and acoustic signal output

- The warning light (red LED) is activated and permanently illuminated, the function indicator (green LED) goes out
- Alarm triggers with medium tone interval

The potential-free alarm switch

• is activated, the alarm is transmitted to the building services management system

Technicians (such as from the fire department) can immediately inspect the system to take any further necessary measures. If the smoke detector does not detect any further smoke production inside the cabinet, the system can be returned to normal operations by briefly unplugging it from mains voltage.

The visual and acoustic signals change to

- warning light (red LED) switches from continuous illumination to flashing light
- the alarm switches to a fast tone interval

In the BATTERY CHARGE model, at the same time

- the technical ventilation is also switched off
- power to the outlet strip is turned off

The aerosol fire suppression unit

triggers

The overall system can then only be assessed by an authorised asecos service technician and reset to normal operation if possible. At least the fire suppression unit and smoke detector must be exchanged before doing so.

EXPERT TIP: React quickly in case of a fire

Any fires which occur inside the cabinet are detected promptly, and employees can be evacuated immediately.

The warning/fire suppression system is also connected to a permanently staffed building services management, ensuring that trained rescue personnel...

-))) can be alerted quickly and be on site in a short amount of time.
- >>> can initiate further measures immediately after completing an initial assessment of the situation.
- >>> can transport the cabinet out of the building, for instance. This prevents further major damage to the building, and protects against personal injury.

The cabinets are equipped with a transport base to ensure fast transportation. Cabinets are automatically unplugged from mains supply during transportation. Once the cabinet is outside of the building at a safe location, rescue personnel can identify any further measures necessary.

We recommend an installation at the ground level for the simplified and quick evacuation of the safety storage cabinets!



ION-LINE | Safe charging and storing of lithium-ion

THE CABINETS AND THEIR FEATURES

When storing lithiumion batteries, we can differentiate between passive and active storage:

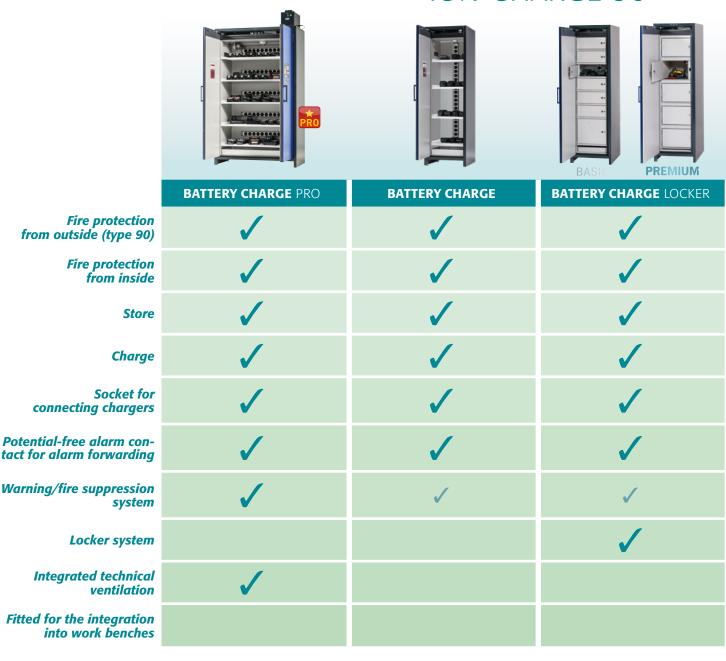
ACTIVE STORAGE

In active storage, lithium-ion batteries or battery packs are charged in a cabinet with a charger or partially discharged (60–70%). Heat is generated when a lithium-ion battery charges. If this heat output is too high, a fire may occur, for instance if the lithium battery, the charger or the connection cable is defective.

Another major danger is the risk of thermal runaway of lithium-ion batteries, for instance caused by internal short circuits.

CONCLUSION: The risk increases when lithium-ion batteries are left unanattended to charge outside of work hours. We recommend active storage in the asecos BATTERY CHARGE safety storage cabinets.

ION-CHARGE-90



batteries in type 90 safety storage cabinets

PASSIVE STORAGE

In passive storage, new or used lithium-ion batteries are stored over a certain time period.

TIP: We recommend that new and used lithium-ion batteries are stored separately (different storage levels) in the BATTERY STORE or BATTERY STORE PRO safety storage cabinets.

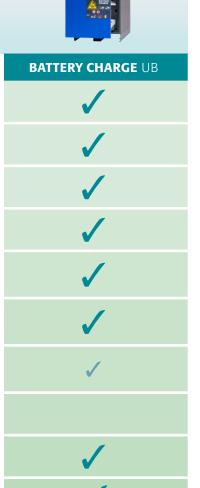
> All ION-LINE models can be found in the current brochure. Request directly at www.asecos.global – or simply configure your own cabinet at www.asecos-configurator. com.

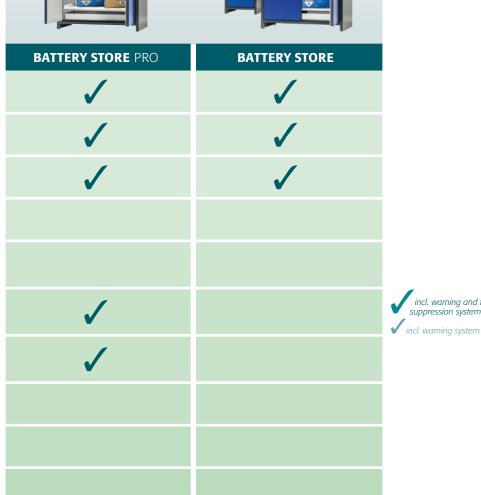
ION-STORE-90















RISKS AND HAZARDS

Gases are indispensable in all industrial sectors, in testing and welding technology, but also in medicine and research. Therefore, it is important to know the specific hazards for all activities involving gases, and thus also for the storage of gases to take them into account and to consider them in the risk assessment.

When flammable gases, but also other gases, are stored in pressurised gas containers — e.g. in pressurised gas cylinders, pressurised gas cartridges and aerosol dispensers — in workrooms, the risk of fire and explosion must be assessed as part of the risk assessment.

The primary protection goal is to protect all containers for gases under pressure from excessive heating and the associated danger of bursting due to pressure build-up in the event of a fire. Furthermore, it must be assessed whether and to what extent explosion protection measures may be required in addition to fire protection.

To realise these protection goals, safety storage cabinets with a defined fire resistance type according to the state of the art have proven themselves for years.

What are the particular hazards of gases under pressure?

- 1. Gases that are heavier than air behave similarly to liquids and can flow and spread into shafts and/or cellars when they escape
- 2. Cryogenic or liquefied gases can cause cold burns or injuries.

 Note: Wear specified personal protective equipment when handling these gases.
- 3. Gas containers under pressure can burst when heated above the permissible temperature (> 70 °C).

What are the consequences and effects?

- >>> Pressure increase of the gas
- >>> The cylinder valve or the steel jacket of the gas cylinder can no longer withstand the increased internal pressure
- >>> Leakage of contents (flammable, oxidising, toxic, etc.)
- >>> Gas escapes uncontrollably, with high pressure and recoil, the gas cylinder can whirl around unmanageably
-))) Uncontrolled detonation due to bursting of the cylinder at a temperature of approx. 310 °C
- >>> When bursting due to fire or damage, gas cylinders can become destructive projectiles that can travel several hundred metres



Why must attention be paid to securing pressurised gas cylinders against falling over when storing them?

Compressed gas cylinders can, especially the screwed-in cylinder valve, be mechanically damaged. Possible consequences:

- **Unnoticed gas leakage** even a quite "harmless" gas such as nitrogen can displace oxygen from the room and lead to **asphyxiation**.
- >>> Flammable gases can cause **explosive gas mixtures** in cellar rooms, for example, which can be very easily ignited, e.g. by activating a light switch.
- >>> If the **cylinder valve is torn off**, the pressurised gas cylinder, driven by the highly pressurised gas, flies **off/around**.



Mechanical hazards



Health hazards



Fire and explosion hazards



Legal basis / information

The following apply to the storage of compressed gases, among others:

- >>> Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)
- >>> Health and Safety Executive (HSE)
- >>> HSE Drum and Cylinder Handling Guidelines
-))) UKLPG Storage of Full and Empty LPG Cylinders and Cartridges Code of Practice No. 7
- >>> NERC Guidance to Safe Storage and Installation of Gas Cylinders

Definition

A "gas" or "gaseous substance" is one of the three states of matter, the other two being "solid" and "liquid".

Gases, general definition

Gases are materials or material mixtures/preparations that

- >>> have a vapour pressure of over 300 kPa (3 bar) at 50°C or
- » are completely gaseous at 20°C and a standard pressure of 101.3 kPa (1 bar).

Pressurised gases

Pressurised gases are gases that

- are contained in a vessel under at least 200 kPa pressure (overpressure) or more,
- >>> are liquefied or are liquefied and frozen.

This includes compressed, liquefied, dissolved and frozen liquefied gases.



The term critical temperature is important in this context. The critical temperature is the temperature above which a pure gas can no longer be liquefied depending on its pressure, or can no longer change its state of matter.

Gases under pressure are divided into four groups according to the GHS/CLP Regulation Annex 1, taking into account the state of aggregation and the critical temperature T_{ν} (critical temperature T_{ν} above which a pure gas can no longer be liquefied).

Compressed gas	A gas that is gaseous when filled under pressure at 50°C, including all gases with a critical temperature \leq -50 °C.
Liquefied gas	A gas that is partially liquefied when filled under pressure at temperatures above -50 °C. We can differentiate between: Gas liquefied under high pressure — a gas whose critical temperature is between -50 °C and +65 °C Gas liquefied under low pressure — a gas whose critical temperature is over +65 °C
Frozen, liquefied gas	A gas that is partially liquefied when filled upon gas extraction due to its low temperature
Dissolved gas	A gas that is dissolved under pressure in a liquid solvent when packaged

Gases are divided into four major groups according to their properties:

Properties	Examples
Flammable gases	Hydrogen, Methane, Ethane, Acetylene, Propane, Butane, Special forming and Test gases
Oxidising gases	Oxygen /Air nitrogen oxide mixtures (laughing gas)
Toxic and corrosive gases	Arsenic, Phosphine, Carbon monoxide, Ammonia, Hydrogen sulphide, Sulphur dioxide, Chlorine
Inert gases	Nitrogen , Inert gases, Shielding gases (welding)



How can gases be identified?

Gases and gas mixtures can endanger users due to their chemical properties, and gases and gas mixtures that are under pressure can cause compressed gas cylinders to burst. Most gases are invisible, and some are even odourless. Hazardous materials labelling requirements are uniform worldwide under the GHS system, which is implemented in Europe by the CLP Regulation.

Compressed gases are labelled with the pictogram GHS 04 (gas cylinder) and with the H statements H220, H221, H270, H280 or H281 depending on their chemical properties.

















The following are also labelled:

- Aerosols in aerosol packaging with H222 or H223
- Gases in compressed gas cartridges with H220 or H221

Labelling gas cylinders

The hazardous materials sticker on the shoulder of the container is conclusive.

The most important information is stated first: The colour of the label on the gas cylinder is not always correct; instead, it is an initial aid and is meant to be visible from far away. Only the hazardous material sticker on the shoulder of the cylinder is conclusive.

Where can I find the label on the gas cylinder?

The colour designation is placed on the shoulder of the cylinder. The cylinder jacket also bears the colour designation. Medical gases are the only exception, for which the cylinder is white. If the cylinder contains a gas mixture, then both colours are coded alternatively as rings.

Basic colours for gas cylinders or cylinder bodies

The basic gas cylinder colours indicated here are not mandatory; however, in practice the industry has by and large agreed to use the following classifications:

- High-purity medical gases (see also, for example, our entry on oxygen): White cylinder body
- Industrial gases: Grey cylinder body or same colour as the cylinder shoulder (but not white)
- No specialised gases stipulated



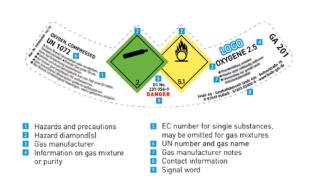
Liquefied gas cylinders (such as propane or butane gas) are red, grey, and other colours. However, these colours do not designate the content and its properties, but rather who owns the cylinders: In this case, red (or green) indicate a returnable cylinder, grey indicates an owned cylinder (these can vary in other European countries). However, there are also some differences between these cylinders.

General rule for labelling gas cylinders

There is a general colour label for all gases that are not specifically stipulated. This indicates that the content poses a primary hazard. The previous possible division into two for gas mixtures does not apply

The following colours are used for general labelling of gas cylinders:

- Yellow: poisonous and/or corrosive (to human tissues) such as Ammonia, Chloride, Carbon monoxide
- >>> Red: flammable Ethylene, Methane, Hydrogen
- >>> Light blue: oxidising Laughing gas mixtures
- Bright green: asphyxiating (inert) Techn. compressed air, Krypton, Neon, Xenon





STORAGE OF COMPRESSED GASES

Storage is keeping materials for future use. It includes the provision for transport, if the transport does not take place within 24 hours after provision or on the following working day. If the working day is a Saturday, the period ends upon expiry of the next working day.

The quantities of hazardous materials provided must be limited to the quantity required for that day/shift; all quantities beyond these must be stored. If small quantities are required regularly, the smallest standard container size can be provided. If activities such as decanting, removal, or maintenance work are carried out in the storeroom, a separate risk assessment should be carried out.



If you want to store a larger quantity than required for that day directly at your workplace, you need a fire resistant safety storage cabinet.

Storing cylinders together

Materials are **stored together** if different materials are located in

- >>> one storage section,
- >>> one container,
- >>> one safety storage cabinet or
- >>> one collecting chamber.

Can gases be stored together with other hazardous materials?

If there are no other properties that take priority and must be taken into consideration according to the process, then gases formally fall under storage class 2 A. If gases are stored together with other hazardous materials, then certain regulations and values apply, and must be observed above a total quantity of 400 kg (maximum 200 kg for each storage class).

Gases may only be stored together with

- >>> non-flammable, corrosive materials (storage class 8B) and
- >>> non-flammable liquids (storage class 12),
- other flammable and non-flammable materials (storage class 13).

What is important to note when storing different gases together?

Generally, no restrictions apply when gases are stored together outdoors.

The following may be stored together in the same storage area:

	Flammable	Oxidising	Highly poisonous	Inert
Flammable	Any	Up to 150 cylinders, plus any number of cylinders containing inert gases	Max. 15 cylinders containing highly poisonous gases	Any
Oxidising	Up to 150 cylinders, plus any number of cylinders containing inert gases	Any	Max. 15 cylinders containing highly poisonous gases	Any
Highly poisonous	Max. 15 cylinders containing highly poisonous gases	Max. 15 cylinders containing highly poisonous gases	Any	Any
Inert	Any	Any	Any	Any

A distance of at least two metres must be maintained between compressed gas cylinders containing flammable and oxidising gases.



RESPONSIBLE **STORAGE** IN

SAFETY STORAGE CABINETS

What is the purpose of storing compressed gas cylinders in safety storage cabinets?

By storing gas bottles in safety cabinets with a defined fire resistance, the basic safety requirements for fire load minimisation are fulfilled. Safety cabinets must be designed, installed, operated and maintained in a way that guarantees the safety of employees and third parties.

What are the advantages of storing in safety storage cabinets?

Safety storage cabinets with a fire resistance of 90 minutes are considered a separate fire compartment. Thus, storage in these cabinets offers the following advantages:

- >>> Fire and explosion protection requirements are met
- >>> Easy and flexible installation in workrooms
- >>> Reduction of in-house transport of hazardous substances and the associated risks
- >>> Installation in corridors is possible after consultation with the local fire brigade, provided the width of the escape route is observed

What types of gas cylinder storage cabinets are there?

There are two types:

1. Fire-resistant safety storage cabinets for compressed gas cylinders:

Safety storage cabinets in accordance with EN 14470-2 for the storage of pressurised gas cylinders, pressurised gas cartridges and aerosol packages. For more information, see p. 254

2. Single-walled safety storage cabinets for compressed gas cylinders:

For the storage of compressed gas cylinders located outdoors. For more information, see p. 268

How are safety storage cabinets classified?

Safety storage cabinets are classified according to their fire resistance in a fire chamber test as follows:

	Type of safety storage cabinet		
Measured time for temperature rise in the fire chamber test	Safety storage cabinet for flammables* EN 11470-1	Safety storage cabinets for compressed gas cylinders** EN 14470-2	
30 minutes	Type 30	G 30	
60 minutes	Type 60	G 60	
90 minutes	Type 90	G 90	

^{*} Flammable liquids: Measured time for temperature rise by 180 K, measured inside the cabinet

Safety storage cabinets with a certified fire resistance of 90 minutes are designated as state of the art. As a result, they are considered a separate fire compartment or storage section.

^{**} Compressed gas cylinders: Measured time for the temperature rise by 50 K, measured on the surface of the gas cylinder valve holder



How can the fire resistance of safety cabinets be recognised and what other markings are there?

The fire resistance in minutes must be stated on the front of the safety storage cabinet. The number on the sticker indicates the resistance in minutes. (e.g. G90 or G30). In addition, the following warning and prohibition symbols, among others, are also required:

- >>> Prohibition sign P003 "No open flame; fire, open source of ignition and smoking prohibited"
- >>> Warning sign W029 "Warning of gas cylinders"



What safety requirements must be met when installing safety storage cabinets for compressed gas cylinders with various fire resistance classes?

The safety demands on the quality of safety storage cabinets for gas cylinders are considered to be fulfilled if they have a fire resistance of at least 90 minutes and meet further requirements according to EN 14470-2. They can be installed in unlimited numbers.

In principle, the storage of compressed gas cylinders in safety storage cabinets with a fire resistance of 90 minutes (state of the art) should be aimed for.

What prohibitions on combined storage must be observed in safety storage cabinets for gases?

In safety storage cabinets, compressed gas containers of different gases may be stored and connected for draining at the same time. There is no restriction on the number of containers. In this regard, when flammable and oxidising gases (e.g. acetylene and oxygen) are stored in a safety cabinet, the otherwise mandatory safety distance does not have to be observed.

What is the total volume of compressed gas cylinders allowed in the cabinets?

The maximum total volume is 220 litres – compressed gas cylinders for purging gases are included in this specification.

Is it possible to extract gases from pressurised gas cylinders that are stored in a safety storage cabinet?

Yes, piping and electrical wiring may be led outside of safety cabinets. This is usually done through the cabinet ceiling and does not require any further fire protection measures. This means that gases can be withdrawn from the pressurised gas cylinders via appropriate pressure reducers and pipelines. When installing the pipes, it is essential to follow the manufacturer's instructions and to ensure that they are installed professionally and in accordance with the standards.

What and how many pipelines and cables may be installed out of the asecos gas cylinder cabinet without losing the type G90 classification?

In general, the following applies according to the requirements of EN 14470-2:

The number of lead-throughs must be kept to a minimum, and unused lead-throughs and drill holes must be sealed off according to manufacturer specifications.

The following applies to installing pipelines (for operational compressed gas cylinders):

- >>> Maximum of three pipe lead-through per gas cylinder (gas lines).
- >>> The three lead-throughs may each have a diameter not exceeding 10 mm

The following applies to installing electrical lines / cables (if applicable):

- >>> Max. two lead-throughs per gas cylinder (electrical lines)
- >>> The two lead-throughs may each have a diameter not exceeding 20 mm

What material may be used for the piping?

Basically, pipes made of copper or stainless steel can be used.

Note: According to EN 14470-2, it is recommended that the pipes are made of stainless steel or a material with similar thermal conductivity (maintaining the fire resistance determined and specified during testing).



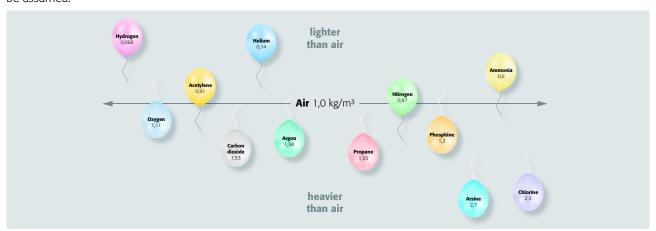
SHOULD **SAFETY STORAGE CABINETS** IN

ACCORDANCE WITH EN 14470-2 BE CONNECTED

TO TECHNICAL VENTILATION?

Yes – Gases may form hazardous explosive atmospheres or mixtures harmful to health. Potential hazards can be prevented by continuous technical ventilation of the safety storage cabinet.

Reaching the lower explosion limit can be prevented for oxidising and flammable gases by a 10-fold air exchange/hour. Acutely toxic gases must be extracted at an air exchange rate of 120 air exchanges/hour to prevent the operational exposure limit from being reached. Gases are heavier or lighter than air, depending on their type. Therefore, a uniform distribution in the interior can be assumed.

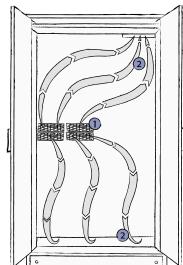


The effective extraction in the lower and upper area of the cabinet or storage room is therefore extremely important.

With their special construction, asecos safety storage cabinets are ready for the connection (NW 75) and operation of a technical ventilation system. The **supply air** in the rear wall of the centre of the cabinet (1) and **exhaust air** in the upper and lower cabinet areas (2) successfully eliminate escaping gases. These are led to the technical exhaust air duct via the cabinet ceiling. There, the exhaust air can be connected to an on-site exhaust air system (exhaust air ducted to a safe location outdoors).

YOUR ADVANTAGES:

- » No health hazards for the employees
- » No or less EX zones in and around the safety storage cabinet required
- » Occupational exposure limits (OEL) are safely complied with



asecos G90 compressed gas cylinder cabinets meet the following requirements:

- >>> The pressure drop must not exceed 150 Pa, even in conjunction with a 120-fold air exchange in the cabinet.
- >>> The ventilation system must create a negative pressure in the cabinet.
- >>> Ventilation shall be provided in the top and bottom of the cabinet.
- >>> The exhaust air flow must ensure that gases escaping in small quantities are extracted.
- >>> The pressure drop and air exchange rate have been chosen to ensure efficient purging.

asecos G90 compressed gas cylinder cabinets achieve a high efficiency of over 85 %. The entire interior of the safety storage cabinets is ventilated — escaping gas leaks in the cabinet that are hazardous to health are quickly and effectively extracted.



The consequences of incorrect, untested information on pressure loss values: Only when the system is put into operation on site, the user will notice that the required 120 air changes per hour are not achieved. The use of toxic gases in such cabinets is therefore fundamentally not permissible.



Safety cabinets for the storage of compressed gas cylinders must always be operated with technical ventilation. The following applies:

- >>> Oxidising gases (labelled H270, H 271 or H 272) or flammable gases (labelled H220 or H221) may only be stored in safety cabinets that have at least a 10-fold air exchange/hour.
- >>> Acutely toxic gases of categories 1 to 3 (labelled H330 or H331) may only be stored in safety cabinets which have at least a 120-fold air exchange/hour.

As part of the risk assessment, danger zones must be defined around compressed gas cylinders for flammable and acutely toxic gases. The danger zones are spatial areas in which the release of gases cannot be ruled out as a result of leaks at connections and fittings or as a result of operating errors. In the case of storage in the cabinet, the entire safety storage cabinet and the ventilation ducts must be provided as hazardous areas. Hazardous areas in which hazardous explosive atmospheres may occur are potentially explosive atmospheres. If a hazardous area is identified around compressed gas cylinders for flammable gases, it must be classified as zone 2.

The following zoning must be carried out in the safety cabinet for compressed gas bottles with flammable gases:

Conditions	Zone classification	
a) Storage and keeping ready of compressed gas cylinders in an unopened state or checked for technical leakage after use	No zone	
 Safety storage cabinet with 120-fold air exchange in a technically ventilated room No dangerous explosive atmosphere during the exchange of pressurised gas cylinders 	No zone, but ignition source avoidance during bottle change	
c) as b), but hazardous explosive atmosphere not excluded when changing cylindersno special seals		
d) as b), but • no special seals (see EX-RL 1.2.1.1.2) • safety storage cabinet with 10-fold air exchange only	Zone 2 inside the cabinet (avoid ignition sources when changing bottles)	
e) as b), but • installation of the safety storage cabinet in a room with natural ventilation		

Health protection through compliance with workplace limits must always be ensured when handling hazardous substances. Dangerous substances can be safely transferred and processed in hazardous material workplaces.

Further information can be found in the chapter "Hazardous material workplaces" from page 336.



asecos HazMat Guide FLAMMABLES FLAMMABLES SLOPE CHIA

It Can Happen To Anyone – many different dangers threaten when handling hazardous materials!

The use of hazardous and combustible materials is part of the daily routine in most laboratories and industries and is unavoidable. What is often quickly forgotten in daily handling: the improper storage of such materials puts people, the environment and property in danger. Learn more about the safe storage of hazardous materials in our "HazMat Guide".

You can order it on our website: www.asecos.global/catalogues

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GAS SUPPLIES

- CENTRALISED VS. DECENTRALISED

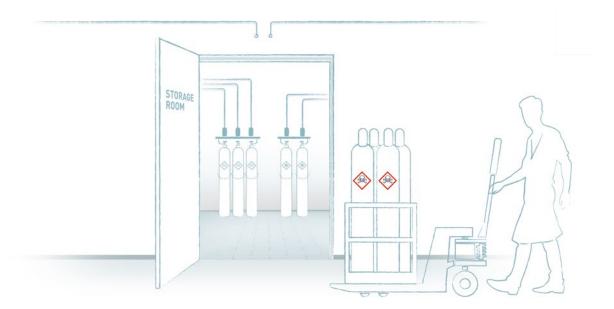
Gas supply systems, particularly for specialised gases, pose unique requirements for components used in storage, distribution, regulation and monitoring.

Central gas supply

- >>> Can generally be differentiated into outdoor installation and installation in a warehouse
- >>> Required gas cylinders are placed centrally in one location
- >>> Permanently installed pipeline systems are used to deliver gases to the point of extraction

Before constructing new, or expanding existing gas supply systems, the advantages and disadvantages of different potential supply concepts must be considered:

- >>> System user / operator analysis of application
- >>> Planner / architect Assessment of the construction project in consideration of safety technology and monetary aspects



ADVANTAGES

- No unprotected placement of gas cylinders in the direct vicinity of work stations
- >>> Exclusion of different sources of danger due to improper handling and storage of gas cylinders caused by tipping over, leaking poisonous, flammable or toxic gases
- >>> No high-pressure fittings in work areas
- Cylinder exchanges are coordinated centrally by authorised personnel
- >>> Time required for cylinder exchanges reduced to a fraction
- >>> Efficient dispensing of compressed gas cylinders
-))) Lower costs due to savings for cylinder rent
-))) Improved, controlled monitoring of gas supplies through a central monitoring / controlling system (decentralised also available)
- Extraction points only at the individual work stations more active work space available

DISADVANTAGES

High costs due to

- >>> Long pipelines / pipeline network to extraction points in the building / work area
- Stainless steel lines, primarily when using corrosive gases
- >>> Significant increase in flushing gas consumption
- >>> Maintenance and testing required for pipelines
- Nooms in the building can only be used for storing / placing gas cylinders
- Nooms must be separated with at least flame-retardant partitions (walls and doors)
- >>> No flammable liquids can be stored in the room



Decentralised gas supply

Consists of small, individual supply units which are set up directly at or in the immediate vicinity of the consumption point (generally inside buildings).

A central gas supply set up in a warehouse differs only in where the gas cylinders are stored. An internal storage room is required, with at least flame-retardant partitions.

G90 safety storage cabinets allow for the decentralised use of compressed gas cylinders with a comparable level of protection (type class G90) as for safety storage cabinets (type 90) for flammable liquids.



Decentralised delivery and extraction of compressed gases in safety storage cabinets in accordance with EN 14470-2

ADVANTAGES

- >>> Is often the less expensive option
- >>> Reduces the required pipeline length to a minimum
- >>> Greatly reduces the consumption of flushing gases
- >>> Offers good flexibility for on site use with a small pipeline network
- >>> Easy to retrofit in existing buildings (without available central storage rooms)
- >>> Guarantees legal security for all areas of responsibility
- >>> Flexible, easy to adjust to increasing requirements
- >>> Ideal for buildings, for instance, where structural modifications cannot be made because they are historically preserved
- >>> Ideal for temporary rentals of research facilities and temporary requirements
- >>> Simple control / process / gas shortage display monitoring









Please observe local legislation and regulations.

Which approval documents and certificates should be available from the manufacturer of a safety storage cabinet?

To ensure high quality and funcionality in a worst case scenario, a safety storage cabinet that conforms to the standards should have the following approval documents:

- >>> Fire test report from an independent materials testing institute as proof of fire resistance
- 33 GS certificate as proof of compliance with ProdSG §21 Para. 1 on the basis of ZLS EK5/AK4 and proof of conformity in accordance with EN 16121 and EN 16122 (requirements and test procedures for safety, strength, durability) and stability)
- >>> EC declaration of conformity as proof of compliance with product-relevant EU directives and national standards



The GS mark - An important addition to fire protection:

The GS test certificate of an independent test body proves that the safety storage cabinet is in compliance with the requirements of the Equipment and Product Safety Act (§7 Para. 1) with respect to the guarantee of safety and health.

- >>> EN 14470-2 primarily specifies the criteria for fire protection, testing and documentation.
- >>> The tests for the GS mark adopt, specify and increase these requirements.
- EN 16121 & EN 16122 Furthermore, asecos G90 gas cylinder cabinets are tested in accordance with the testing requirements of EN 16121:2013+A1:2017 (Non-domestic storage furniture Requirements for safety, strength, durability and stability) and EN 16122:2012 (Domestic and non-domestic storage furniture Test methods for the determination of strength, durability and stability) based on the highest test level 2.

What is tested, and how are tests conducted?

- >>> Long-term function one key aspect is tests for long-term functioning of the safety storage cabinets and thus for the safety of the user.
- >>> Endurance test mechanical components (such as doors) are subject to an endurance test under max. load.
- >>> Opened and closed 80,000 x the requirements of EN 16121/16122 are only fulfilled in accordance with testing level 2 if the cabinet can be opened/closed 80,000 times without damage.
- >>> Fire test Temperature measuring stations must be additionally installed during the fire test in the furnaces and on the cabinet base (important e.g. for cabinet designs with a roll-under base).
- In case of tests in accordance with EN 14470-2, the connection between the compressed gas cylinder and the stainless steel tube used in the fire area will be designed as a direct connection, i.e. without a pressure regulator and without a spiral coil.
- >>> PAK-free Verification that all operating components of the cabinet are free from toxic/carcinogenic/polycyclic aromatic hydrocarbons (PAH).



asecos safety storage cabinets in accordance with EN 14470-2 for the safe storage of compressed gas cylinders in buildings and workrooms – ...

- 33 are considered to be a storage section (storage section = part of a warehouse that is separated from other storage sections or neighbouring rooms).
- » are special facilities for storing and holding and emptying compressed gas cylinders in working spaces.
- enable compressed gas cylinders of different gases to be stored in the cabinet or to be connected or made available for emptying. Compliance with protective distances can be omitted.
- »» ensure the highest possible protection of the compressed gas cylinders against critical heating (max. temperature increase on the surface of the cylinder valve holder of 50 K up to 90 minutes).





Legal certainty in procurement and use

Standardised, tested product with complete approval documentation: Fire test certificate, GS certification with conformity according to the requirements of EN 16121/16122, EC Declaration of Conformity



Long-term safety and risk minimisation

- >>> Fulfilment of the elementary requirements of fire and explosion protection
- >>> Minimisation of unprotected storage
- >>> Reduction of fire loads in the building
- >>> Protection of employees from fire and explosion hazards as well as harmful vapours (technical ventilation)



Saving time and money

- In principle, the safety cabinet is immediately ready for operation after delivery and installation. No further approval procedures or individual permits are necessary.
- >>> There is no need for complex modifications, as the cabinet can be easily integrated into the local conditions.
- >>> Reduces the required pipeline length to a minimum.
- >>> Greatly reduces the consumption of flushing gases.
- >>> Simple control / process / gas shortage display monitoring.



Flexibility

- >>> Flexible choice of storage locations within buildings the cabinet simply moves to the new location.
- Offers the option as it is fire-resistant to be installed in corridors if, for example, this does not restrict the width of the escape route (in consultation with the fire brigade or fire protection authorities).
- >>> High flexibility for local use with small pipe network.
- >>> Simple retrofitting in existing buildings (without existing central storage rooms).
- >>> Thanks to a large product portfolio with a multitude of models and interior equipments, the safety storage cabinet can be optimally adapted to your applications and bottle sizes.







1450 mm

598 mm

G90.145.060

page 261

Overview

Gas cylinder cabinets for indoor storage

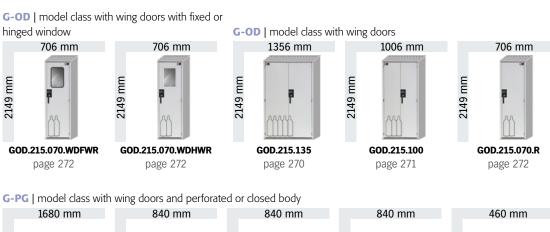
G-ULTIMATE-90 | model class with wing doors



Gas cylinder cabinets for outdoor storage

G-OD | model class with wing doors with fixed or hinged window







G-LINE | G-ULTIMATE-90

Compressed gas cylinder cabinets for the storage of pressurised gas cylinders in working areas

Ventilation

Even ventilation and extraction of the entire cabinet interior. Integrated air ducts ready for connection (DN 75) to a technical exhaust system. The potential formation of explosive atmospheres or harmful vapours is safely prevented.



2

Cylinder lock

Door lockable with cylinder lock, the cabinets can be integrated by the customer into an existing locking system.



33

Pipe lead-throughs

Large area for flexible lead-through possibilities on the top of the cabinet, no additional insulation of piping necessary.





Space-saving talent

Unique on the market: gas cylinder cabinet with a 60 cm width for the storage of two 50 litre steel gas cylinders or two 40 litre aluminium gas cylinders with a diameter of 230 mm.





Easy monitoring

Optionally, the wing door of model G90.205.060.2F can be equipped with a glass cutout. The level and pressure of the stored cylinders can be conveniently monitored without opening the door.





The standard interior equipment

Includes mounting rails, cylinder retainers with matching tension belts and a rolling ramp. The integrated, manually operated rolling ramp facilitates the storage and removal of compressed gas cylinders. With the comfort interior, the rolling ramp is conveniently operated by a lever.



77

Shelves

In different versions, can also be installed at an angle for the storage of small gas cylinders.













• Fire resistance 90 minutes (type G90), type-tested in accordance with EN 14470-2



- GS-tested (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of EN 16121 and 16122
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- Further information from page 494





G-LINE | G-ULTIMATE-90



Model G90.205.140

Order No. 30641-001-30642



Model G90.205.140

Order No. 30641-005-30642

Technical data

External dimensions W x D x H	mm	1398 x 615 x 2050
Internal dimensions W x D x H	mm	1245 x 400 x 1858
Weight without interior equip.	kg	690
Air change 10 times	m³/h	9
Diff. pressure (air change 10 times EK5/AK4)	Pa	5
Air change 120 times	m³/h	111
Diff. pressure (air change 120 times EK5/AK4)	Pa	143

Main features



Up to 4 x 50-litre gas cylinders



Maximum fire resistance of 90 minutes



Optionally available with comfort interior equipment

You will find technical drawings for these cabinet models from page 274



LATERAL CYLINDER RETAINER

Practical accessory for storing additional 10-litre gas cylinders. Optionally available in a tool-free height-adjustable version.

Model	Information / equipment	Colour	Order No.
G90.205.140	without interior equipment	light grey RAL 7035	30641-001
		laboratory white (sim. RAL 9016)	30641-005

Interior equipment packages (can only be ordered in combination v	vith the cabinet) Material	Order No.
1x standard interior equipment gas cylinders	sheet steel galvanised and powder coated	30642
1x comfort interior equipment gas cylinders	sheet steel galvanised and powder coated	30643
4x shelf inclined for storage of small bottles	sheet steel powder-coated RAL 7035	40181
5x shelf inclined for storage of small bottles, 1x	sheet steel powder-coated RAL 7035	40182

Interior equipment	Material	W x D x H (mm)	1)	Order No.
Shelf	sheet steel powder-coated RAL 7035	1235 x 241 x 25*	75.00	30644
Shelf inclined for storage of small bottles	sheet steel powder-coated RAL 7035	1235 x 372 x 28*	75.00	30399
Grid as storage level	steel galvanized	1233 x 280 x 30	180.00	30645
Cylinder retainer on the sidewall	sheet steel powder-coated RAL 7035	350 x 175 x 175	75.00	30647
Cylinder retainer on the sidewall height adjustable without tools	sheet steel powder-coated RAL 7035	350 x 175 x 175	75.00	30648
Cylinder retainer for storage of small bottles (2 and 3 litres) on inclined shelves	sheet steel powder-coated RAL 7035			30847

Accessories	Order No.
Ermeto-fitting	5981
Preparation for lead-through with female thread	30649
Tension belt additionally	13181
Gas cylinder trolley, 1x 50-litre gas cylinders (ø 230 mm) or 2x 10-litre gas cylinders (ø 140 mm)	26294
Document holder DIN A5	30793
Equipment version only available in addition with a cabinet for factory assembly, door latching for one wing door for G-ULTIMATE-90	29818

^{*} usable storage space W x D (mm) / 1) load capacity [kg]





Model G90.205.120 Order No. 30657-001-30658

Model G90.205.120 Order No. 30657-005-30658

Technical data

External dimensions W x D x H	mm	1198 x 615 x 2050
Internal dimensions W x D x H	mm	1045 x 400 x 1858
Weight without interior equip.	kg	610
Air change 10 times	m³/h	8
Diff. pressure (air change 10 times EK5/AK4)	Pa	5
Air change 120 times	m³/h	93
Diff. pressure (air change 120 times EK5/AK4)	Pa	103

Information / equipment

Cylinder retainer for storage of small bottles (2 and 3 litres) on inclined shelves sheet steel powder-coated RAL 7035

Main features



Up to 4 x 50-litre gas cylinders



Maximum fire resistance of 90 minutes



Optionally available with comfort interior equipment

You will find technical drawings for these cabinet models from page $\ensuremath{\mathsf{274}}$



COMFORT INTERIOR EQUIPMENT

Optionally available for even more comfort. Complete with mounting rails, cylinder retainer and matching tension belts and rolling ramp with pneumatic damper.



30659

40179

40180

G90.205.120	without interior equipment	light grey RAL 7035	30657-001
		laboratory white (sim. RAL 901)	6) 30657-005
Interior equipment packas	ges (can only be ordered in combination with the cabinet)	Material	Order No.

sheet steel galvanised and powder coated sheet steel powder-coated RAL 7035

sheet steel powder-coated RAL 7035

Interior equipment	Material	W x D x H (mm)	1)	Order No.
Shelf	sheet steel powder-coated RAL 7035	1035 x 241 x 25*	75.00	30660
Shelf inclined for storage of small bottles	sheet steel powder-coated RAL 7035	1040 x 432 x 30*	75.00	30771
Grid as storage level	steel galvanized	1033 x 280 x 30	180.00	30661
Cylinder retainer on the sidewall	sheet steel powder-coated RAL 7035	350 x 175 x 175	75.00	30647
Cylinder retainer on the sidewall height adjustable without tools	sheet steel powder-coated RAL 7035	350 x 175 x 175	75.00	30648
Cylinder retainer for storage of small bottles (2 and 3 litres) on inclined shelves	sheet steel powder-coated RAL 7035			30847

Accessories	Order No.
Ermeto-fitting	5981
Preparation for lead-through with female thread	30649
Tension belt additionally	13181
Gas cylinder trolley, 1x 50-litre gas cylinders (ø 230 mm) or 2x 10-litre gas cylinders (ø 140 mm)	26294
Document holder DIN A5	30793
Equipment version only available in addition with a cabinet for factory assembly, door latching for one wing door for G-ULTIMATE-90	29818

^{*} usable storage space W x D (mm) / 1) load capacity (kg)

1x comfort interior equipment gas cylinders

4x shelf inclined for storage of small bottles

5x shelf inclined for storage of small bottles, 1x

G-LINE | G-ULTIMATE-90



Model G90.205.090

Order No. 30667-001-30668



Model G90.205.090

Order No. 30667-005-30669

Technical data

External dimensions W x D x H	mm	898 x 615 x 2050
Internal dimensions W x D x H	mm	745 x 425 x 1858
Weight without interior equip.	kg	490
Air change 10 times	m³/h	6
Diff. pressure (air change 10 times EK5/AK4)	Pa	5
Air change 120 times	m³/h	66
Diff. pressure (air change 120 times EK5/AK4)	Pa	147

Main features



Up to 3 x 50-litre gas cylinders



Maximum fire resistance of 90 minutes



Optionally available with comfort interior equipment

You will find technical drawings for these cabinet models from page $\ensuremath{\mathsf{274}}$

PIPE LEAD-THROUGHS Inside and outside marked an

Inside and outside marked area for flexible lead-through possibilities on the top of the cabinet.

Model	Information / equipment	Colour	Order No.
G90.205.090	without interior equipment	light grey RAL 7035	30667-001
		laboratory white (sim. RAL 9016)	30667-005

Interior equipment packages (can only be ordered in combination	with the cabinet) Material	Order No.
1x standard interior equipment gas cylinders	sheet steel galvanised and powder coated	30668
1x comfort interior equipment gas cylinders	sheet steel galvanised and powder coated	30669
4x shelf inclined for storage of small bottles	sheet steel powder-coated RAL 7035	40177
5x shelf inclined for storage of small bottles	sheet steel powder-coated RAL 7035	40178

Interior equipment	Material	W x D x H (mm)	1)	Order No.
Shelf	sheet steel powder-coated RAL 7035	735 x 241 x 25*	75.00	30670
Shelf inclined for storage of small bottles	sheet steel powder-coated RAL 7035	740 x 432 x 30*	75.00	30787
Grid as storage level	steel galvanized	733 x 280 x 30	180.00	30671
Cylinder retainer on the sidewall	sheet steel powder-coated RAL 7035	350 x 175 x 175	75.00	30647
Cylinder retainer on the sidewall height adjustable without tools	sheet steel powder-coated RAL 7035	350 x 175 x 175	75.00	30648
Cylinder retainer for storage of small bottles (2 and 3 litres) on inclined shelves	sheet steel powder-coated RAL 7035			30847

Accessories	Order No.
Ermeto-fitting	5981
Preparation for lead-through with female thread	30649
Tension belt additionally	13181
Gas cylinder trolley, 1x 50-litre gas cylinders (ø 230 mm) or 2x 10-litre gas cylinders (ø 140 mm)	26294
Document holder DIN A5	30793
Equipment version only available in addition with a cabinet for factory assembly, door latching for one wing door for G-ULTIMATE-90	29818

^{*} usable storage space W x D (mm) / 1) load capacity [kg]





Model G90.205.060.2F

Order No. 30678-001-30682



Model G90.205.060.2F

Order No. 30678-884-30682

Technical data

External dimensions W x D x H	mm	598 x 615 x 2050
Internal dimensions W x D x H	mm	477 x 425 x 1858
Weight without interior equip.	kg	365
Air change 10 times	m³/h	4
Diff. pressure (air change 10 times EK5/AK4)	Pa	5
Air change 120 times	m³/h	45
Diff. pressure (air change 120 times EK5/AK4)	Pa	76

Main features



Up to 2 x 50-litre gas cylinders



Maximum fire resistance of 90 minutes



Optionally available with glass cut-out

You will find technical drawings for these cabinet models from page 274

F90 GLASS-FRONTED WING DOOR

Comfortable control over fill level and pressure.





Model	Information / equipment	Colour	Order No.
G90.205.060.2F	without interior equipment, left hinged, for 2x 50 liter cylinders	light grey RAL 7035	30678-001
		laboratory white (sim. RAL 9016)	30678-005
		with F90 glass window, light grey RAL 7035	30678-884
		with F90 glass window, laboratory white (sim. RAL 9016)	30678-885
G90.205.060.2F.R	without interior equipment, right hinged, for 2x 50 liter cylinders	light grey RAL 7035	30679-001
		laboratory white (sim. RAL 9016)	30679-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
1x standard interior equipment gas cylinders	sheet steel galvanised and powder coated	30682

Accessories	Order No.
Ermeto-fitting	5981
Preparation for lead-through with female thread	30649
Gas cylinder trolley, 1x 50-litre gas cylinders (ø 230 mm) or 2x 10-litre gas cylinders (ø 140 mm)	26294
Document holder DIN A5	30793
Equipment version only available in addition with a cabinet for factory assembly, door latching for one wing door for G-ULTIMATE-90	29818

G-LINE | G-ULTIMATE-90



Model G90.205.060

Order No. 30676-001-30680



Model G90.205.060

Order No. 30676-001-30681

Technical data

External dimensions W x D x H	mm	598 x 615 x 2050
Internal dimensions W x D x H	mm	477 x 425 x 1858
Weight without interior equip.	kg	365
Air change 10 times	m³/h	4
Diff. pressure (air change 10 times EK5/AK4)	Pa	5
Air change 120 times	m³/h	42
Diff. pressure (air change 120 times EK5/AK4)	Pa	85

Main features



For 1 x 50-litre gas cylinder



Maximum fire resistance of 90 minutes



Optionally available with comfort interior equipment

You will find technical drawings for these cabinet models from page 274



LATERAL CYLINDER RETAINER

Practical accessory for storing additional 10-litre gas cylinders. Optionally available in a tool-free height-adjustable version.

Model	Information / equipment	Colour	Order No.
G90.205.060	without interior equipment, left hinged	light grey RAL 7035	30676-001
		laboratory white (sim. RAL 9016)	30676-005
G90.205.060.R	without interior equipment, right hinged	light grey RAL 7035	30677-001
		Jahoraton, white (cim. DAI. 0016)	20677 005

Interior equipment packages (can only be ordered in combination with the cabine	t) Material	Order No.
1x standard interior equipment gas cylinders	sheet steel galvanised and powder coated	30680
1x comfort interior equipment gas cylinders	sheet steel galvanised and powder coated	30681
4x shelf inclined for storage of small bottles	sheet steel powder-coated RAL 7035	40175
5x shelf inclined for storage of small bottles	sheet steel powder-coated RAL 7035	40176

Interior equipment	Material	W x D x H (mm)	1)	Order No.	
Shelf	sheet steel powder-coated RAL 7035	435 x 241 x 25*	75.00	30683	
Shelf inclined for storage of small bottles	sheet steel powder-coated RAL 7035	440 x 432 x 30*	75.00	30788	
Cylinder retainer on the sidewall	sheet steel powder-coated RAL 7035	350 x 175 x 175	75.00	30647	
Cylinder retainer on the sidewall height adjustable without tools	sheet steel powder-coated RAL 7035	350 x 175 x 175	75.00	30648	
Cylinder retainer for storage of small bottles (2 and 2 litres) on inclined shelves	choot stool powder coated PAL 7025			20947	

Accessories	Order No.
Ermeto-fitting	5981
Preparation for lead-through with female thread	30649
Tension belt additionally	13181
Gas cylinder trolley, 1x 50-litre gas cylinders (ø 230 mm) or 2x 10-litre gas cylinders (ø 140 mm)	26294
Document holder DIN A5	30793
Equipment version only available in addition with a cabinet for factory assembly, door latching for one wing door for G-ULTIMATE-90	29818

^{*} usable storage space W x D (mm) / 1) load capacity (kg)





Model G90.145.060 Order No. 30689-001-30691



Model G90.145.060 Order No. 30689-005-30691

Technical data

External dimensions W x D x H	mm	598 x 615 x 1450
Internal dimensions W x D x H	mm	445 x 425 x 1246
Weight without interior equip.	kg	278
Air change 10 times	m³/h	2
Diff. pressure (air change 10 times EK5/AK4)	Pa	5
Air change 120 times	m³/h	28
Diff. pressure (air change 120 times EK5/AK4)	Pa	42

Main features

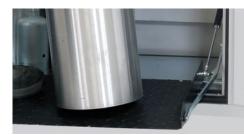


Up to 2 x 10-litre gas cylinders



Maximum fire resistance of 90 minutes

You will find technical drawings for these cabinet models from page $274\,$



ROLLING RAMP

For easy, ergonomic storage and removal of compressed gas cylinders.

Model	Information / equipment	Colour	Order No.
G90.145.060	without interior equipment, left hinged	light grey RAL 7035	30689-001
		laboratory white (sim. RAL 9016)	30689-005
G90.145.060.R	without interior equipment, right hinged	light grey RAL 7035	30690-001
		laboratory white (sim. RAL 9016)	30690-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.	
1x standard interior equipment gas cylinders	sheet steel galvanised and powder coated	30691	

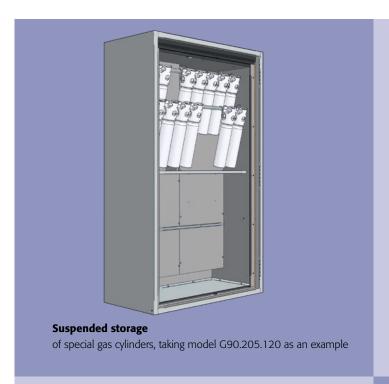
Interior equipment	Material	W x D x H (mm)	1)	Order No.	
Shelf inclined for storage of small bottles	sheet steel powder-coated RAL 7035	440 x 432 x 30*	75.00	30788	
Shelf	sheet steel powder-coated RAL 7035	435 x 241 x 25*	75.00	30683	

Accessories	Order No.
Ermeto-fitting	5981
Preparation for lead-through with female thread	30649
Tension belt additionally	13181
Document holder DIN A5	30793
Equipment version only available in addition with a cabinet for factory assembly, door latching for one wing door for G-ULTIMATE-90	29818

^{*} usable storage space W x D (mm) / 1) load capacity [kg]

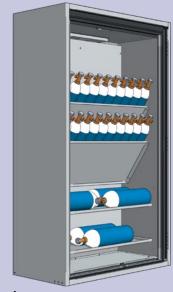
MODEL CLASS G-ULTIMATE-90

SPECIAL SOLUTIONS





Storage of 2-litre cylinders (max. number) taking model G90.205.120 as an example, with 5 inclined shelves (Order No. 30771)



Combined storage

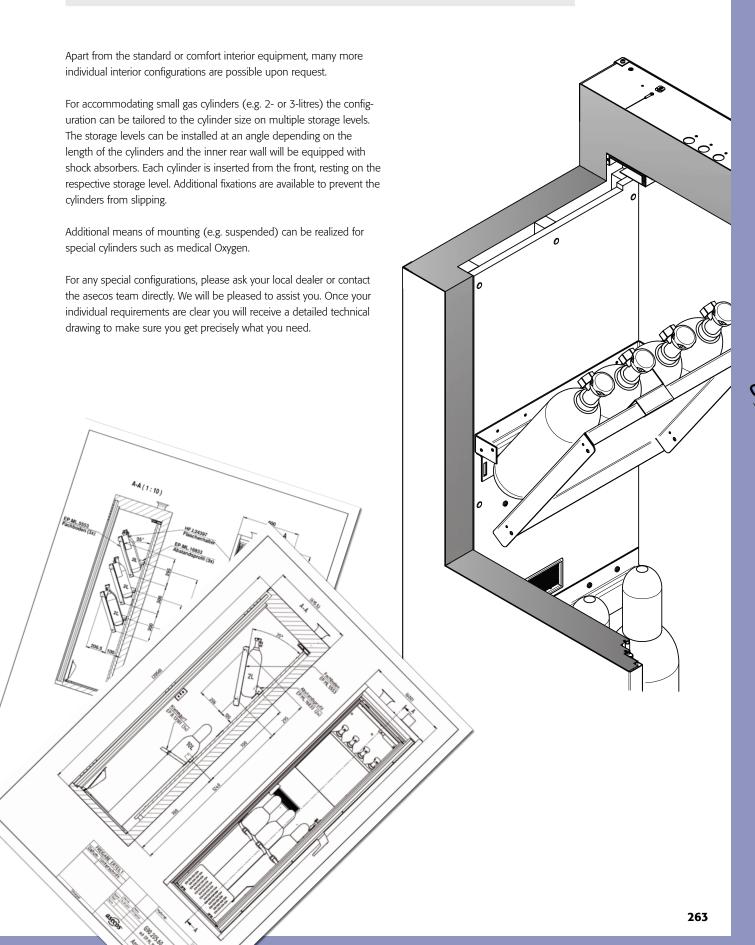
of 3 and 5-litre cylinders, taking model G90.205.120 as an example, with 2 inclined shelves (Order No. 30771) and 2 shelves (Order No. 30660)



Combined storage

of 2 and 10-litre cylinders, taking model G90.205.060.R as an example, and 1 inclined shelf with standard interior equipment (Order No. 30782) and 1 inclined shelf (Order No. 30788)

SPECIAL INTERIOR CONFIGURATIONS



G-LINE | G-CLASSIC-30

Compressed gas cylinder cabinets for the storage of pressurised gas cylinders in working areas

Proven technology

G-CLASSIC-30 gas cylinder cabinets convince due to proven technology.



2

Cylinder lock

Door lockable with cylinder lock, the cabinets can be integrated by the customer into an existing locking system.





Pipe lead-throughs

Large area for flexible lead-through possibilities on the top of the cabinet, no additional insulation of piping necessary.





Standard interior equipment

Complete with mounting rails, rolling ramp and cylinder retainer.





Shelves

In different versions for the storage of small gas cylinders.













• Fire resistance 30 minutes (type G30), type-tested in accordance with EN 14470-2



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- Further information from page 494





G-LINE | G-CLASSIC-30



Model G30.205.140 Order No. 30651-001-30652



Model G30.205.120 Order No. 30663-001-30664

Technical data		G30.205.120	G30.205.140
External dimensions W x D x H	mm	1198 x 616 x 2050	1398 x 616 x 2050
Internal dimensions W x D x H Weight without interior equip.	mm ka	1094 x 479 x 1874 485	1294 x 479 x 1874 545
Air change 10 times	kg m³/h	10	12
Diff. pressure (air change 10 times)	Pa	5	5
Air change 120 times	m³/h	118	139
Diff. pressure (air change 120 times)	Pa	103	143

Main features



Up to 4 x 50-litre gas cylinders



Fire resistance of 30 minutes

You will find technical drawings for these cabinet models from page 274

Model	Information / equipment	Colour	Order No.
G30.205.140	without interior equipment	light grey RAL 7035	30651-001
G30.205.120	without interior equipment	light grey RAL 7035	30663-001

Interior equipment packages (can only be ordered in combination	n with the cabinet) Material	Order No.
G30.205.140		
1x standard interior equipment gas cylinders	sheet steel galvanised and powder coated	30652
G30.205.120		
1x standard interior equipment gas cylinders	sheet steel galyanised and powder coated	30664

Interior equipment	Material	W x D x H (mm)	1)	Order No.
G30.205.140				
Shelf	sheet steel powder-coated RAL 7035	1281 x 331 x 25*	75.00	30653
Grid as storage level	steel galvanized	1233 x 280 x 30	180.00	30654
G30.205.120				
Shelf	sheet steel powder-coated RAL 7035	1081 x 331 x 25*	75.00	30665
Grid as storage level	steel galvanized	1033 x 280 x 30	180.00	30666

Accessories	Order No.
Ermeto-fitting	5981
Preparation for lead-through with female thread	30649
Tension belt additionally	13181
Gas cylinder trolley, 1x 50-litre gas cylinders (ø 230 mm) or 2x 10-litre gas cylinders (ø 140 mm)	26294
Cylinder retainer on the sidewall	30647
Cylinder retainer on the sidewall height adjustable without tools	30648

^{*} usable storage space W x D (mm) / 1) load capacity (kg)





Model G30.205.090 Order No. 30673-001-30674



Model G30.205.060 Order No. 30685-001-30687

Technical data		G30.205.060	G30.205.090
External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip. Air change 10 times	mm mm kg m³/h	598 x 616 x 2050 494 x 479 x 1874 290	898 x 616 x 2050 794 x 479 x 1874 340
Diff. pressure (air change 10 times) Air change 120 times Diff. pressure (air change 120 times)	Pa m³/h Pa	5 53 85	5 86 147

Main features



Up to 3 x 50-litre gas cylinders



G30 Fire resistance of 30 minutes

You will find technical drawings for these cabinet models from page 274

Model	Information / equipment	Colour	Order No.
G30.205.090	without interior equipment	light grey RAL 7035	30673-001
G30.205.060	without interior equipment, left hinged	light grey RAL 7035	30685-001
G30.205.060.R	without interior equipment, right hinged	light grey RAL 7035	30686-001

Interior equipment packages (can only be ordered in combinatio	n with the cabinet) Material	Order No.
G30.205.090		
1x standard interior equipment gas cylinders	sheet steel galvanised and powder coated	30674
G30.205.060(.R)		
1x standard interior equipment gas cylinders	sheet steel galvanised and powder coated	30687

Interior equipment	Material	W x D x H (mm)	1)	Order No.
G30.205.090				
Shelf	sheet steel powder-coated RAL 7035	782 x 337 x 25*	75.00	30675
Grid as storage level	steel galvanized	733 x 280 x 30	180.00	30789
G30.205.060(.R)				
Shelf	sheet steel powder-coated RAL 7035	482 x 337 x 25*	75.00	30688

Accessories	Order No.
Ermeto-fitting	5981
Preparation for lead-through with female thread	30649
Tension belt additionally	13181
Gas cylinder trolley, 1x 50-litre gas cylinders (ø 230 mm) or 2x 10-litre gas cylinders (ø 140 mm)	26294
Cylinder retainer on the sidewall	30647
Cylinder retainer on the sidewall height adjustable without tools	30648

^{*} usable storage space W x D (mm) / 1) load capacity (kg)

G-LINE | G-OD

Safety storage cabinets for the storage of pressurised gas cylinders in outdoor areas according to TRGS 510

Robust, high-quality construction

Perfect for the installation in outside areas; completely galvanised sheet steel construction with plastic laminated structured surface; stainless steel base; sloping roof with supernatant allows water to drain.



23

Standard interior equipment

Complete with mounting rails, cylinder retainer and matching tension belts.





Door variations

Wing doors with large opening angle. Doors also available with fixed or hinged window – all fittings at a glance, even with doors closed.





Optionally available rolling ramp

Simple rolling in and removal of the gas cylinders.





Cylinder lock

Door lockable with cylinder lock, the cabinets can be integrated by the customer into an existing locking system.





Lateral cylinder retainer

For two 10-litre cylinders; height-adjustable version (no tools required).















- Conformity in accordance with the requirements of EN 16121 and 16122
 Requirements and test methods for safety,
- strength, durability and stability.



G-LINE | G-OD



Model GOD.215.135.WDHW

Order No. 30731-015 (rolling ramp optional)



Model GOD.215.135

Order No. 30692-015 (rolling ramp optional)

Technical data

External dimensions W x D x H
Internal dimensions W x D x H
Weight without interior equip.
Air change **10 times**

mm 1356 x 400 x 2149 mm 1345 x 370 x 2070 kg 138 m³/h 10

Main features



Up to 5 x 50-litre gas cylinders



Safe outdoor storage



Optionally with fixed or hinged window

You will find technical drawings for these cabinet models from page 274

LOCKING

Solid 3-point locking with lockable turning lever handle (optionally available with profile cylinder lock, the cabinets can be integrated into an existing locking system on site).



Model	Information / equipment	Colour	Order No.
GOD.215.135	with standard interior equipment for 5 x 50 litre gas cylinders	light grey RAL 7035	30692-015
GOD.215.135.WDFW	with fixed window and standard interior equipment for 5 x 50 litre gas cylinders $% \left(1\right) =\left(1\right) ^{2}$	light grey RAL 7035	30730-015
GOD.215.135.WDHW	with hinged window and standard interior equipment for 5 \times 50 litre gas cylinders	light grey RAL 7035	30731-015

Interior equipment	Material	W x D x H (mm)	1)	Order No.
Mounting kit for installation of various cabinets in a row				30792
Extraction air outlet with flange	PP			30791
Shelf	sheet steel powder-coated RAL 7035	1340 x 340 x 35	75.00	30694
Document holder DIN A5	polystyrene			30793
Handle version turning lever with profile cylinder locking	polyamide			30790
Rolling ramp	sheet steel painted black	1200 x 220 x 50		30693
Cylinder retainer on the sidewall height adjustable without tools	sheet steel powder-coated RAL 7035	312 x 183 x 450*	50.00	30695

^{*} usable storage space W x D (mm) / 1) load capacity (kg)



Order No. 30697-015



Model GOD.215.100.WDFW Order No. 30732-015

Technical data

External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip. Air change 10 times

mm 1006 x 400 x 2149 mm 995 x 370 x 2070 kg m³/h 113 8

Main features



Up to 3 x 50-litre gas cylinders



Safe outdoor storage



Optionally with fixed or hinged window

You will find technical drawings for these cabinet models from page 274

Discover our products in the virtual **3D showroom:**

www.asecos-showroom.com



Model	Information / equipment	Colour	Order No.
GOD.215.100	with standard interior equipment for 5 x 50 litre gas cylinders	light grey RAL 7035	30697-015
GOD.215.100.WDFW	with fixed window and standard interior equipment for 5 x 50 litre gas cylinders $$	light grey RAL 7035	30732-015
GOD.215.100.WDHW	with hinged window and standard interior equipment for 5 x 50 litre gas	light grey RAL 7035	30735-015

Interior equipment	Material	W x D x H (mm)	1)	Order No.
Mounting kit for installation of various cabinets in a row				30792
Extraction air outlet with flange	PP			30791
Shelf	sheet steel powder-coated RAL 7035	990 x 340 x 35	75.00	30699
Document holder DIN A5	polystyrene			30793
Handle version turning lever with profile cylinder locking	polyamide			30790
Rolling ramp	sheet steel painted black	704 x 225 x 60		30698
Cylinder retainer on the sidewall height adjustable without tools	sheet steel powder-coated RAL 7035	312 x 183 x 450*	50.00	30695

^{*} usable storage space W x D (mm) / 1) load capacity [kg]



G-LINE | G-OD



Model GOD.215.070.R Order No. 30701-015



Model GOD.215.070.WDFWR Order No. 30752-015

Technical data

External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip. Air change **10 times** mm 706 x 400 x 2149 mm 695 x 370 x 2070 kg 85 m³/h 5

Main features



Up to 2 x 50-litre gas cylinders



Safe outdoor storage



Optionally with fixed or hinged window

You will find technical drawings for these cabinet models from page 274



ARE YOU LOOKING FOR AN APPROPRIATE STORAGE SOLUTION FOR HAZARDOUS MATERIALS?

Our optimised online product configurator helps you, step by step, to find the suitable safety storage cabinet. Take the test: **www.asecos-configurator.com**

Model	Information / equipment	Colour	Order No.
GOD.215.070.R	with standard interior equipment for 5 x 50 litre gas cylinders	light grey RAL 7035	30701-015
GOD.215.070.WDFWR	with fixed window and standard interior equipment for 5 x 50 litre gas cylinders $% \left(1\right) =\left(1\right) ^{2}$	light grey RAL 7035	30752-015
GOD.215.070.WDHWR	with hinged window and standard interior equipment for 5 x 50 litre gas cylinders	light grey RAL 7035	30753-015

Interior equipment	Material	W x D x H (mm)	1)	Order No.
Mounting kit for installation of various cabinets in a row				30792
Extraction air outlet with flange	PP			30791
Shelf	sheet steel powder-coated	690 x 340 x 35	75.00	30703
Document holder DIN A5	polystyrene			30793
Handle version turning lever with profile cylinder locking	polyamide			30795
Rolling ramp	sheet steel painted black	440 x 225 x 60		30702
Cylinder retainer on the sidewall height adjustable without tools	sheet steel powder-coated RAL 7035	312 x 183 x 450*	50.00	30695

^{*} usable storage space W x D (mm) / 1) load capacity (kg)



Propane gas cabinet G-PG model GPG.150.168.P

Order No. 2846

Safe and approved outdoor storage of liquid gases

Function / construction:

- **Robust:** high protection against corrosion due to hot-dip galvanised sheet steel (including rear wall and bottom grid), dissaembled delivery
- **No unauthorised use:** doors lockable with cylinder locking (integrated in the turning handle) or square lock
- Ventilation: natural ventilation through openings in the doors



Propane gas cabinet G-PG model GPG.075.046

Order No. 10185



Propane gas cabinet G-PG model GPG.150.084.P

Order No. 2845



Propane gas cabinet G-PG model GPG.150.084

Order No. 10188

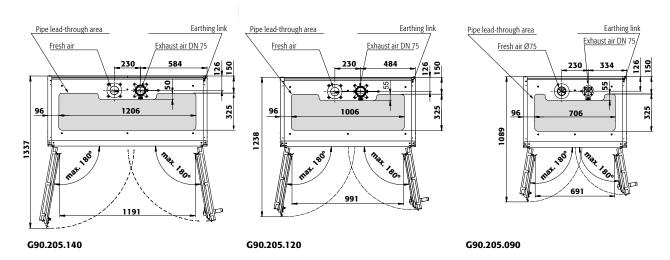
	GPG.150.084.P	GPG.150.168.P	GPG.075.046	GPG.150.084	GPG.075.084
Dimensions W x D x H external (mm)	840 x 690 x 1500	1680 x 690 x 1500	460 x 400 x 750	840 x 400 x 1485	840 x 400 x 750
Number of doors	1	2	1	1	1
Version	perforated	perforated	closed	closed	closed

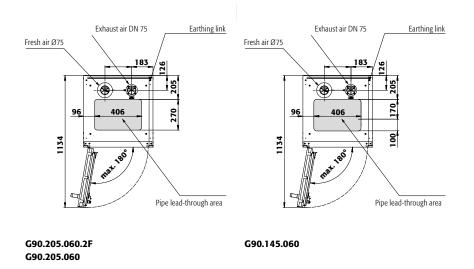
Model	Storage capacity	Order No.
GPG.150.084.P	4 x 33 kg or 10 x 11 kg or 18 x 5 kg	2845
GPG.150.168.P	9 x 33 kg or 20 x 11 kg or 36 x 5 kg	2846
GPG.075.046	1 x 11 kg	10185
GPG.150.084	2 x 33 kg	10188
GPG.075.084	2 x 11 kg	10186



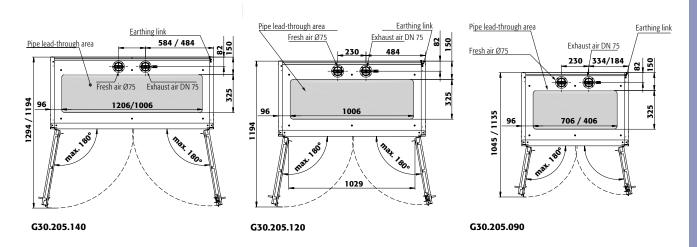
Top views

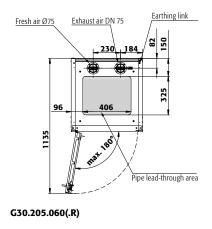
Type 90 gas cylinder cabinets for indoor storage



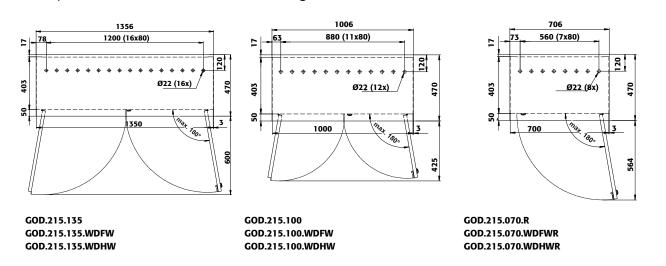


Type 30 gas cylinder cabinets for indoor storage





Gas cylinder cabinets for outdoor storage



RISKS AND HAZARDS

The use of acids and alkalis is very versatile. For example, acids are regularly used in household cleaners and food and beverages (citric acid or acetic acid, for example, are good for combating limescale or rust deposits).

Acids play an important role in many branches of industry. They are not only used in cleaning agents, but also in food products, for example, where they ensure shelf life. Among the more commonly used acids are hydrochloric acid, sulphuric acid, nitric acid and hydrofluoric acid.

Acids and alkalis pose major health hazards as soon as they are processed and stored in a certain concentration and quantity. Due to their corrosive nature, the substances and their vapours are extremely dangerous, as they cause burns and irritation of the skin and mucous membranes.

In the event of leakage, the corrosive or irritating hazardous substances escape from the containers. This can lead to chemical reactions with the surrounding air or other materials.

Information

For all hazardous substances, i.e. also for acids and alkalis, general protective measures are required as follows:

- >>> Limitation of the hazardous substances present in the workplace to the quantity required for the continuation of the
- >>> Precautions shall be taken to ensure the safe storage of hazardous substances.
- >>> Hazardous substances shall be kept or stored in such a way that they do not endanger human health and the environment.
-))) Misuse or abuse must be prevented.
- >>> Prohibition of the storage of chemicals in food containers.

The safe storage of acids and alkalis is an important part of the risk assessment.

To prevent the neutralising effect between acids and alkalis, they should be stored separately.

Characteristics, classification and labelling

Acids are chemical compounds that are able to release protons and react acidically with water (pH value < 7).

Alkalis (bases) are chemical compounds that are able to form hydroxide ions. They react with water in an alkaline way (pH value > 7).

Substances and mixtures that cause inflammation when exposed to living tissue (skin, mucous membranes) are classified as **irritants**.

Substances and mixtures that destroy living tissue are described as **corrosive**.

Acids and alkalis can be solid, liquid, vapour or gaseous or present as aerosols and suspended matter. These substances include inorganic and organic acids and alkalis (bases) as well as substances that react with water in an acidic or basic (alkaline) manner. Oxidising and dehydrating inorganic and organic substances also have an irritating or corrosive effect on living tissue. In addition to irritant or corrosive properties, substances or mixtures may also have other hazardous properties: e.g. toxic or lethal such as phenol or hydrogen fluoride, flammable such as acetic acid or oxidising such as organic peroxides.



The classification and labelling of these substances and the properties of selected acids and alkalis are shown in the following diagram:

Pictog	ram	Hazard class	Hazard category	Signal word	H-phrase
^	Skin corrosion/irritation	Category 1A, 1B, 1C	Danger	H 314	
<		Serious eye damage/eye irritation	Category 1	Danger	H 318
	Y	Corrosive to metals	Category 1	Warning	H 290
		Skin corrosion/irritation	Category 2	Warning	H 315
	V	Serious eye damage/eye irritation	Category 2	Warning	H 319

All concentrated acids, e.g. hydrofluoric acid, sulphuric acid, nitric acid, hydrochloric acid and phosphoric acid as well as formic acid and acetic acid are corrosive.

According to the CLP Regulation, even 5% acids and alkalis must be labelled with the pictogram GHS05 "Corrosivity". Acids and alkalis can be additionally labelled with other hazardous properties such as acute toxicity or specific organ toxicity, e.g. hydrofluoric acid with these pictograms:



and





Attention is drawn to the particular danger of hydrofluoric acid (corrosive, toxic, systemic effect).

STORAGE REQUIREMENTS

Hazardous materials may only be stored together if there is no increase in the risks involved. This may be possible, for example, because of the risk assessment or the limitation of quantities.

The Health and Safety Executive (HSE) provides guidance for segregation through HSG71 and offers very detailed guidance for the storage of chemical groups (please see Table 2 on page 16). The chemical groups are used to determine the possibilities for joint storage and this formal classification serves to control the joint storage of different hazardous materials.

The segregation of chemicals provides very distinct advantages to the user or provider of hazardous materials as it:

- >>> Allows clear definition of the materials present
- >>> Ensures more adequate management of chemicals at the site
- >>> Contributes towards positive management of storage and procurement
- >>> Prevents potential chemical reactions which could lead to accidents
- >>> Prevents exposure of staff to harmful substances
- >>> Puts you in control of all harmful substance

HSG71 should be used in conjunction with the safety data sheet (SDS), which clearly defines how compatible one substance is to another. For example, Section 10 of the SDS may advise that flammable liquids should not be stored with strong corrosives. The SDS also defines how to assess co-located storage.



RESPONSIBLE STORAGE IN SAFETY STORAGE CABINETS

In workrooms, acids and alkalis should be stored separately — in special, so-called "acid-alkali cabinets" made of largely corrosion-resistant material.

Because of the aggressiveness, especially of acid vapours or smoke or mists, which can escape from vessels and lead to reactions in the air (e.g. ammonia vapours + hydrochloric acid vapours = ammonium chloride mist), storage must be organised in such a way that both humans and the environment (water protection) are not endangered.

With regard to the required storage cabinets, there are currently no EN standards in which the technical design is described, but the requirements are based on various legal regulations.

In summary, the requirements are as follows:

- >>> Equipment with bottom collecting sumps capable of holding 10% of the quantity stored or at least the contents of the largest container.
- >>> The corrosion resistance and the compatibility of the materials used with the stored acids and alkalis must be given.
- >>> The cabinet must be connected to an exhaust air ventilation system that continuously discharges the escaping vapours into the open air in a safe place.
- >>> Strong acids and alkalis must be stored and extracted in separate cabinet areas (separate from each other) because their vapours/mists can react and generate heat.

Recommendation: Hydrofluoric acid should generally be stored separately and under lock and key due to the high hazard. Existing restrictions on materials for storage containers should be observed

Hydrofluoric acid is toxic and rapidly penetrates the skin, destroys deeper tissue layers and can lead to acutely threatening metabolic disorders or disturbances of liver or kidney function by inhibiting vital enzymes. It is therefore marked with the acute toxicity pictogram in addition to the corrosive pictogram.

In principle, the storage of acids or alkalis is also possible in safety cabinets according to EN 14470-1. However, the storage of the substances should be checked and minimised in each individual case because of the corrosiveness of the vapours. Concentrated formic acid and acetic acid should be stored in ventilated safety cabinets because of their relatively low flash points (~40°C).

Bottom collecting sumps made of synthetic material in safety cabinets in accordance with EN 14470-1 and other storage cabinets.

The use of containment systems is possible in safety cabinets according to EN 14470-1 and in other storage cabinets without a mark of conformity or general building authority approval, unless other country-specific regulations apply.

CONCLUSION

The use of tested containment systems in safety and other storage cabinets offers the following advantages and safety aspects:

- >>> Exemption from the possible obligation to test the tank system under water law or to upgrade the installation room.
- >>> Complete proof in case of leakage can lead to the fulfilment of the concern principle according to the Water Resources Act.
- >>> Universal installation and use of the cabinets without additional testing.



asecos safey storage cabinets for the storage of acids and alkalis in buildings and workrooms

The main objective of acid and alkali cabinets is to store aggressive acids and alkalis safely and protected from unauthorised access. asecos cabinets provide protection for people and the environment thanks to their particularly robust and high-quality construction and their safety features.

In all consequence this means that

- >>> valid rules and laws are observed
- >>> You as an entrepreneur are not personally liable
- >>> no persons are harmed

High quality and long lasting

- >>> The tall cabinets have an outer body made of epoxy-coated sheet steel and an inner body made of highly resistant melamine-coated special boards.
- >>> The underbench cabinets are made entirely of highly resistant melamine-coated special boards and are optionally available with metal housing.
- >>> All cabinets are GS-tested (conformity according to EN 16121/16222)

Interior equipment

- >>> All cabinets contain pull-out drawers incl. approved bottom collecting sumps made of polyethylene.
- >>> Optionally available with a compartment for storing hydrofluoric acid inside the cabinet. This is separately lockable and is also extracted via the technical ventilation of the cabinet.

Safe separate storage

>>> The vertical or horizontal dividing wall creates two hermetically separated storage compartments.

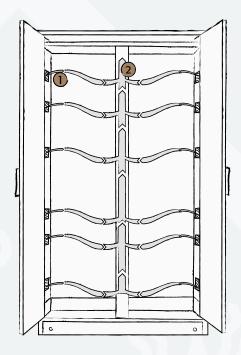
Ventilation

With their special construction, the cabinets are prepared for connection to a technical ventilation system. Through the **supply air** in the outer walls (1) and **exhaust air** in the centre partition (2), the vapours are directly extracted at each storage level in both storage compartments. The technical ventilation can be carried out e.g. via a suitable exhaust air system on site (exhaust air ducting to a non-hazardous location outdoors) or recirculating air filter modules.

ADVANTAGES: » No health hazards for the employees » Occupational exposure limit values (OEL) are safely complied with

The following products can be used independently of this:

>>> Acid and alkali cabinets with integrated recirculating air filter module





Health protection through compliance with workplace limits must always be ensured when handling hazardous substances. Dangerous substances can be safely transferred and processed in hazardous material workplaces.

Further information can be found in the chapter "Hazardous material workplaces" from page 336.



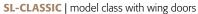


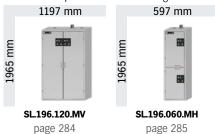




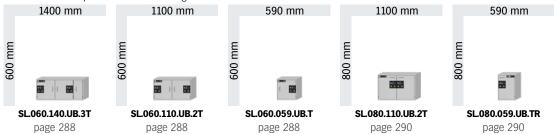
Overview

Cabinets for acids and alkalis

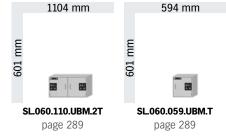




SL-CLASSIC-UB | model class with wing doors



SL-CLASSIC-UB | model class with wing doors and metal cladding



SLX-LINE – recirculating air filter storage cabinets focused on the storage of acids and alkalis

SLX-CLASSIC | model class with wing doors and recirculating air filter system





SL-LINE | SL-CLASSIC

Safety storage cabinets for the storage of aggressive and non-flammable hazardous materials in working areas according to TRGS 510, DGUV-I 213-850, Ordinance on Hazardous Substances

Robust construction and longevity

Tall cabinet with body made of powder-coated sheet steel and interior space made of melamine resin and flame retardant special plates.



Safe, separate storage

Acids and alkalis can be stored safe and separately. Two hermetically divided storage compartments; vertical or horizontal dividing wall; integrated aeration and venting system; corrosion resistance of the metal-free air ducts.



Cylinder lock

Door lockable with cylinder lock, the cabinets can be integrated by the customer into an existing locking system.



Ventilation

Integrated air ducts ready for connection (DN 75) to a technical exhaust system can be used for the extraction of hazardous materials vapours. The potential formation of harmful vapours is safely prevented.



Pull-out shelves

Equipped with pull-out shelves incl. highly resistant sumps made of plastic. The pulled-out shelf provides a quick overview of all stored hazardous substances. In case of leakage the tray can be easily removed and quickly emptied and cleaned.



(0)

Separately lockable storage box (Optionally available) for hydrofluoric

(Optionally available) for hydrofluoric acid including corrosion-resistant polypropylene sump.



7/

Interior equipment

Optionally available with PE tray shelves (V = 33 L) or bottom collecting sumps (V = 68 L) as storage levels for bulk packs.











- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended **manufacturer warranty of up to 5 years** in combination with the asecos BASICPlus tariff
- Further information from page 494





SL-LINE | SL-CLASSIC





Model SL.196.120.MV

Order No. 30606-001-30608

Model SL.196.120.MV

Order No. 30606-001-37224

Technical data

External dimensions W x D x H mm 1197 x 603 x 1965 Internal dimensions W x D x H all compartments: 485 x 570 x mm 1869 Weight without interior equip. Extraction air kg DN 215 75 Air change **30 times**Diff. pressure (air change **30 times**) m³/h 31 Pa 10

Main features



Highly resistant surfaces



Optionally with separate storage box for hydrofluoric acid

You will find technical drawings and adjustment heights for these cabinet models from page $296\,$

Model	Information / equipment	Colour	Order No.
SL196.120.MV	without interior equipment, with vertical dividing wall	light grey RAL 7035	30606-001
		laboratory white (sim. RAL 9016)	30606-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
Left: 4x pull-out shelf with plastic sump (V=11.0L) Right: 4x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey	30607
Left: 6x pull-out shelf with plastic sump (V=11.0L) Right: 6x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey	30608
Left: 4x pull-out shelf with plastic sump (V=11.0L), 1x storage box for hydrofluoric acid (V=7.0L) Right: 4x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37223
Left: 4x pull-out shelf (V=11.0L), 1x storage box for hydrofluoric acid (V=7.0L) Right: 5x pull-out shelf (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37224
Left: 5x pull-out shelf (V=11.0L), 1x storage box for hydrofluoric acid (V=7.0L) Right: 6x pull-out shelf (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37225

			<u>ā</u> 1)	() 2)	3)		
Interior equipment	Material	W x D x H (mm)			TOS.	Order No.	
Sump pallet with grid	PE	454 x 538 x 314*	70.00	68.00	61.82	30611	
Sump pallet on shelf with grid	PE	459 x 555 x 167*	70.00	33.50	30.45	30610	
Pull-out shelf with plastic sump	panel melamine resin-coated/PP grey	407 x 468 x 80*	25.00	11.00	10.00	30609	
Document holder DIN A5	polystyrene					30793	

Accessories	Order No.	
Extraction unit without exhaust air monitoring	14218	

 $^{^{*}}$ usable storage space W x D (mm) 1) load capacity [kg], 2] retention capacity [ltr.], 3] maximum container volume in the cabinet [ltr.]







Model SL.196.060.MH

Order No. 30612-001-30615

Model SL.196.060.MH

Order No. 30612-005-37218

Technical data

External dimensions W x D x H mm 597 x 603 x 1965 top: 485 x 570 x 914 bottom: 485 x 570 x 833 Internal dimensions W x D x H mm Weight without interior equip. Extraction air Air change **30 times** Diff. pressure (air change **30 times**) kg DN 136 75 m³/h 14 Pa 4

Main features



Highly resistant surfaces



Optionally with separate storage box for hydrofluoric acid

You will find technical drawings and adjustment heights for these cabinet models from page $296\,$

Model	Information / equipment	Colour	Order No.
SL196.060.MH	without interior equipment, left hinged, with horizontal	light grey RAL 7035	30612-001
dividing wall	laboratory white (sim. RAL 9016)	30612-005	
SL196.060.MH.R	without interior equipment, right hinged, with horizontal	light grey RAL 7035	30613-001
dividing	dividing wall	laboratory white (sim. RAL 9016)	30613-005

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
	Door	hinge: left right
Top: 2x pull-out shelf with plastic sump (V=11.0L) Bottom: 2x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey	30614 30614
Top: 3x pull-out shelf with plastic sump (V=11.0L) Bottom: 3x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey	30615 30615
Top: 1x pull-out shelf (V=11.0L), 1x storage box for hydrofluoric acid (V=70L) Bottom: 2x pull-out shelf (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37217 37220
Top: 1x pull-out shelf (V=11.0L), 1x storage box for hydrofluoric acid (V=7.0L) Bottom: 3x pull-out shelf (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37218 37221
Top: 2x pull-out shelf (V=11.0L), 1x storage box for hydrofluoric acid (V=7.0L) Bottom: 3x pull-out shelf (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37219 37222

Interior equipment	Material	W x D x H (mm)	1) [2)	3)	Order No.	
Sump pallet with grid	PE	454 x 538 x 314*	70.00	68.00	61.82	30611	
Sump pallet on shelf with grid	PE	459 x 555 x 167*	70.00	33.50	30.45	30610	
Pull-out shelf with plastic sump	panel melamine resin-coated/PP grey	407 x 468 x 80*	25.00	11.00	10.00	30609	

Accessories	Order No.	
Extraction unit without exhaust air monitoring	14218	

^{*} usable storage space W x D (mm) 1) load capacity (kg), 2) retention capacity (ltr.), 3) maximum container volume in the cabinet (ltr.)

SL-LINE | SL-CLASSIC-UB

Safety storage cabinets for the storage of aggressive and non-flammable hazardous materials in working areas according to TRGS 510, DGUV-I 213-850, Ordinance on Hazardous Substances

Fits perfectly under fume cupboards

Cabinet makes perfect use of the space available under the fume cupboard.



2

Robust construction and longevity

Under bench cabinets completely made of melamine resin and flame retardant special plates.





Safe, separate storage

Acids and alkalis can be stored safe and separately. Two hermetically divided storage compartments; vertical or horizontal dividing wall; integrated aeration and venting system; corrosion resistance of the metal-free air ducts.





Ventilation

Integrated air ducts ready for connection (DN 50) to a technical exhaust system can be used for the extraction of hazardous substances vapours. The potential formation of harmful vapours is safely prevented.



2

Pull-out shelves

Equipped with pull-out shelves incl. highly resistant sumps made of plastic. The pulled-out shelf provides a quick overview of all stored hazardous substances. In case of leakage the tray can be easily removed and quickly emptied and cleaned.





Construction

Optionally available with metal cladding for uniform integration into existing facilities.



7/

Mobile

Optionally available castors with plinth; simple movement of the cabinet. Height adjustable to various laboratory furniture systems due to attachment covers.









- **GS-tested** (document EK5/AK4 09-10, ProdSG)
- **50,000** wear-free opening and closing actions
- Test basis: all cabinets of this model group correspond to the requirements of the Product Safety Act (§21 Para. 1) with respect to the guarantee of safety and health



- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to 5 years in combination with the asecos BASICPlus tariff
- Further information from page 494





SL-LINE | SL-CLASSIC-UB -



Model SL.060.140.UB.3T

Order No. 30616-892-30618



Model SL.060.110.UB.2T

Order No. 30619-892-30621



Model SL.060.059.UB.T

Order No. 30622-892-30625

Technical data		SL.060.140.UB.3T	SL.060.110.UB.2T mm	SL.060.059.UB.T
External dimensions W x D x H Internal dimensions W x D x H	mm mm	1400 x 570 x 600 left: 489 x 531 x 562 centered: 489 x 531 x 562 right: 281 x 531 x 562	1100 x 570 x 600 all compartments: 489 x 531 x 562	590 x 570 x 600 490 x 530 x 560
Weight without interior equip.	kg	66	53	35
Extraction air	DN	50	50	50
Air change 30 times	m³/h	11	9	4
Diff. pressure (air change 30 times)	Pa	3	2	1
Distributed load	kg/m²	82	93	151
Maximum load	kg	100	100	100

Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Highly resistant surfaces

You will find technical drawings for these cabinet models from page 296

Model	Information / equipn	nent	Colour					Order No.		
SL060.140.UB.3T	without interior equipr	nent, with 3 wing doors	ent, with 3 wing doors light grey				30616-892			
SL.060.110.UB.2T	without interior equipr	nent, with 2 wing doors	light grey					30619-892		
SL.060.059.UB.T		nent, left hinged, with wing door	light grey					30622-892		
SL.060.059.UB.TR	without interior equipr	nent, right hinged, with wing door	light grey					30623-892		
Interior equipment packages (car	n only be ordered in com	bination with the cabinet)	Material					Order No.		
SL.060.140.UB.3T										
Left: 1x pull-out shelf with plastic si Right: 1x pull-out shelf with plastic	sump (V=11.0L)		panel melam	ine resin-coated/PP g	grey			30617		
Left: 2x pull-out shelf with plastic si Right: 2x pull-out shelf with plastic			panel melam	ine resin-coated/PP g	grey			30618		
SL.060.110.UB.2T										
Left: 1x pull-out shelf with plastic so Right: 1x pull-out shelf with plastic			panel melamine resin-coated/PP grey					30620		
Left: 2x pull-out shelf with plastic so Right: 2x pull-out shelf with plastic			panel melamine resin-coated/PP grey					30621		
SL.060.059.UB.T										
1x pull-out shelf with plastic sump	(V=11.0L)		panel melam	ine resin-coated/PP g	grey			30624		
2x pull-out shelf with plastic sump	(V=11.0L)		panel melam	ine resin-coated/PP g	grey			30625		
Interior equipment		Material		W x D x H (mm)	1)	2)	3)	Order No.		
Pull-out shelf with plastic sump		panel melamine resin-coated/PP	grey	407 x 468 x 80*	25.00	11.00	10.00	30770		
Document holder DIN A5		polystyrene						30793		
Castors with plinth height = 30 mm		sheet steel powder-coated RAL 7	015					31359		
Castors with plinth height = 30 mm		sheet steel powder-coated RAL 7	015					31358		
Castors with plinth height = 30 mm		sheet steel powder-coated RAL 7	015					31360		
Accessories								Order No.		
Extraction unit without exhaust air i	monitoring							17178		

 $^{^{*}}$ usable storage space W x D (mm) 1) load capacity [kg], 2] retention capacity [ltr.], 3] maximum container volume in the cabinet [ltr.]

SL-LINE | SL-CLASSIC-UB •



Model SL.060.110.UBM.2T

Order No. 38006-001-30621



Model SL.060.059.UBM.T

Order No. 38011-001-30624

Technical data		SL.060.059.UBM.T(R)	SL.060.110.UBM.2T
External dimensions W x D x H	mm	594 x 576 x 601	1104 x 576 x 601
Internal dimensions W x D x H	mm	488 x 531 x 531	all compartments: 489 x 531 x 562
Weight without interior equip.	kg	49	64
Extraction air	DN	50	50
Air change 30 times	m³/h	4	9
Diff. pressure (air change 30 times)	Pa	1	2
Distributed load	kg/m²	151	93
Maximum load	kg	100	100

Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Highly resistant surfaces



With metal cladding on exterior of doors and body

You will find technical drawings for these cabinet models from page 296

Model	Information / equipment	Colour	Order No.
SL.060.110.UBM.2T	without interior equipment, version with metal housing	light grey RAL 7035	38006-001
		laboratory white (sim. RAL 9016)	38006-005
SL060.059.UBM.T without interior equipment, left hinged, version with metal	light grey RAL 7035	38011-001	
	housing	laboratory white (sim. RAL 9016)	38011-005
SL.060.059.UBM.TR	without interior equipment, right hinged, version with	light grey RAL 7035	39161-001
	metal housing	laboratory white (sim. RAL 9016)	39161-005
Interior equipment packages	(can only be ordered in combination with the cabinet)	Material	Order No.

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
SL.060.110.UBM.2T		
Left: 1x pull-out shelf with plastic sump (V=11.0L) Right: 1x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey	30620
Left: 2x pull-out shelf with plastic sump (V=11.0L) Right: 2x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey	30621
SL080.059.UBM.T(R)		
1x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey	30624
2x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey	30625

Interior equipment	Material	W x D x H (mm)	1)	2)	3)	Order No.	
Pull-out shelf with plastic sump	panel melamine resin-coated/PP grey	407 x 468 x 80*	25.00	11.00	10.00	30770	
Document holder DIN A5	polystyrene					30793	
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015					31358	
Castors with plinth height = 30 mm	sheet steel powder-coated RAL 7015					31360	

Extraction unit without exhaust air monitoring

 * usable storage space W x D (mm) 1) load capacity [kg], 2] retention capacity [ltr], 3] maximum container volume in the cabinet [ltr]



Order No.

SL-LINE | SL-CLASSIC-UB -



Model SL.080.110.UB.2T

Order No. 33200-892-30621



Model SL.080.059.UB.TR

Order No. 33202-892-30625

Technical data		SL.080.110.UB.2T	SL.080.059.UB.TR mm
External dimensions W x D x H Internal dimensions W x D x H	mm mm	1100 x 570 x 800 all compartments: 1000 x 530 x 760	590 x 570 x 800 488 x 530 x 762
Weight without interior equip.	kg	68	47
Extraction air	DN	50	50
Air change 30 times	m³/h	12	6
Diff. pressure (air change 30 times)	Pa	3	1
Distributed load	kg/m²	98	157
Maximum load	kg	100	100

Main features



Perfect for installation under fume cupboards or hazardous materials workplaces



Highly resistant surfaces

You will find technical drawings for these cabinet models from page 296

Model	Information / equipment	Co	olour				Order No.	
SL080.110.UB.2T	without interior equipment, with 2 wing do	ors lig	ght grey				33200-892	
SL080.059.UB.T	without interior equipment, left hinged, wit	h wing door lig	ght grey				39808-892	
SL080.059.UB.TR	without interior equipment, right hinged, w	ith wing door lig	ght grey				33202-892	
Interior equipment packages (can o	nly be ordered in combination with the o	cabinet) M	laterial				Order No.	
SL.080.110.UB.2T								
Left: 1x pull-out shelf with plastic sump Right: 1x pull-out shelf with plastic sur		pa	anel melamine resin-coated/PP g	grey			30620	
Left: 2x pull-out shelf with plastic sumplicity 2x pull-out shelf with plastic sur		pa	anel melamine resin-coated/PP g	grey			30621	
SL.080.059.UB.T(R)								
1x pull-out shelf with plastic sump (V=	11.0L)	pa	anel melamine resin-coated/PP g	grey			30624	
2x pull-out shelf with plastic sump (V=	11.0L)	pa	anel melamine resin-coated/PP g	grey			30625	
Interior equipment	Material		W x D x H (mm)	1)	2)	3)	Order No.	
Pull-out shelf with plastic sump	panel melamine	resin-coated/PP grey	y 407 x 468 x 80*	25.00	11.00	10.00	30770	
Document holder DIN A5	polystyrene						30793	
Castors with plinth height = 30 mm	sheet steel powd	er-coated RAL 7015					31358	
Castors with plinth height = 30 mm	sheet steel powd	er-coated RAL 7015					31360	
Accessories							Order No.	
Extraction unit without exhaust air moi	nitoring						17178	

 $^{^{\}ast}$ usable storage space W x D (mm) 1) load capacity [kg], 2] retention capacity [ltr], 3] maximum container volume in the cabinet [ltr]

SERVICE AND MAINTENANCE –

OUT AND ABOUT FOR YOUR SAFETY

asecos is uncompromising when it comes to safety.

Our expertise as developers and manufacturers of technical safety products is also reflected in the range of services we offer. Seamless, professional maintenance can prevent serious damage in critical cases, and is also required by law in many countries.

A selected number of sales partners around the world have undergone a special certification process and are able to provide professional services where asecos cannot be present personally.

Ask us for more information.

With the asecos services you are always on the safe side.

asecos fulfils these requirements: Inspection and maintenance carried out by our specialised service technicians ensures your safety storage cabinet functions properly. Concluding an asecos service agreement extends your warranty to up to 10 years.

During safety technology inspections, our service experts check all safety-relevant elements such as fire protection and ventilation seals, insulation, door closures, fusible links, ventilation openings for proper function and effectiveness.

The asecos service: Your advantages at a glance

The protective function of your You enjoy up to a 10 year Our safety technology safety storage cabinet (serving manufacturer warranty, inspection fulfils the requireas a fire bulkhead for stored depending on the service rate ments of EG directive hazardous materials in case of you select. 89/391/EC. a fire) is permanently ensured, extending the service life of your system. The asecos team monitors your Comprehensive service date schedule and tells service network you about upcoming inspections. We can carry out 98% of all the You have our guarantee as repairs in case of manufactured experts familiar with all products within the scope of regulations, guidelines, and the deadline for the safety-recabinet design requirements. Complete, consistent documenlated inspection – this means tation and availability of all just one visit to you and saves spare parts (min. 10 years). money too.

For more information on the asecos service programme visit **www.asecos.global** or contact our experts via **service@asecos.com**.

Detailed information about our services, service rates and legal frameworks is available from page 494.

SLX-LINE | SLX-CLASSIC

Recirculating air filter storage cabinets for the storage of acids and bases and the extraction and filtration of their vapours

Elimination of harmful vapours due to the recirculating air filter unit. Permanent extraction and filtration of hazardous vapours.



23

Multifunctional

The SLX-CLASSIC recirculating air filter storage cabinets enable the common storage, extraction and filtration of the most diverse aggressive acids, alkalis and further chemicals in one cabinet.



33

Eco-friendly

Long filter lifetimes; environmentally and customer-friendly reusable filter system.



Robust construction and longevity

Tall cabinet with body made of powder-coated sheet steel and interior space made of melamine resin and flame retardant special plates.



2

Cylinder lock

Door lockable with cylinder lock, the cabinets can be integrated by the customer into an existing locking system.





Pull-out shelves

Equipped with pull-out shelves incl. highly resistant sumps made of plastic. The pulled-out shelf provides a quick overview of all stored hazardous substances. In case of leakage the tray can be easily removed and quickly emptied and cleaned.



7/

Low noise level

At approx. 39 dB (A), the unit is extremely quiet and does not produce any perturbing noises. Visual and acoustic signals provide a clear warning in an emergency and, in combination with the potential-free alarm contact, ensure maximum safety.













• **GS-test** of the Q-LINE safety storage cabinets according to the requirements of EN 14470-1



• Conformity of the Q-LINE safety storage cabinets according to **EN 16121** and **16122** (EN 16121:2013+A1:2017)



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to five years in connection with an asecos service tariff





SLX-LINE | SLX-CLASSIC



Model SLX.230.120.MV

Order No. 32936-001-30608



Model SLX.230.120.MV

Order No. 32936-001-30607

Technical data

External dimensions W x D x H Internal dimensions W x D x H	mm mm	1197 x 615 x 2300 all compartments: 485 x 565 x 1865
Weight without interior equip. Frequency	kg Hz	195 50
Nominal voltage Max. current consumption	V A	230 0.5
Power consump. in operation Power consump. in standby mode	W W	120 50

Main features



Self-sufficient and flexible storage solution



Cabinet incl. recirculating air filter unit

You will find technical drawings and adjustment heights for these cabinet models from page $296\,$

Model	Information / equipment	Colour	Order No.
SLX.230.120.MV	without interior equipment, with vertical dividing wall	light grey RAL 7035	32936-001
Interior equipment package	es (can only be ordered in combination with the cabinet)	Material	Order No.
Left: 4x pull-out shelf with pla Right: 4x pull-out shelf with p		panel melamine resin-coated/PP grey	30607
Left: 6x pull-out shelf with pla Right: 6x pull-out shelf with p		panel melamine resin-coated/PP grey	30608
Left: 4x pull-out shelf with pla Right: 4x pull-out shelf with p	astic sump (V=11.0L), 1x storage box for hydrofluoric acid (V=7.0L) lastic sump (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37223
Left: 4x pull-out shelf (V=11.0) Right: 5x pull-out shelf (V=11.	L), 1x storage box for hydrofluoric acid (V=7.0L) 0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37224
Left: 5x pull-out shelf (V=11.0) Right: 6x pull-out shelf (V=11.	L), 1x storage box for hydrofluoric acid (V=7.0L) 0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37225

Interior equipment	Material	W x D x H (mm)	Order No.
Sump pallet with grid	PE	454 x 538 x 314*	30611
Sump pallet on shelf with grid	PE	459 x 555 x 167*	30610
Pull-out shelf with plastic sump	panel melamine resin-coated/PP grey	407 x 468 x 80*	30609
* W x D = usable floor space			

Accessories	Material	W x D x H (mm)	Order No.
Activated carbon replacement filter	activated carbon	270 x 270 x 246	32952

Service	Order No.	
Comissioning after delivery to point of usage	463	





Model SLX.230.060.MH Order No. 32939-001-30615



Model SLX.230.060.MH Order No. 32939-001-30614

Technical data

External dimensions W x D x H	mm	600 x 615 x 2300
Internal dimensions W x D x H	mm	485 x 565 x 1865
Weight without interior equip.	kg	152
Frequency	Hz	50
Nominal voltage	V	230
Max. current consumption	Α	0.5
Power consump. in operation	W	120
Power consump. in standby mode	W	50

Main features



Self-sufficient and flexible storage solution



Cabinet incl. recirculating air filter unit

You will find technical drawings and adjustment heights for these cabinet models from page $296\,$

Model	Information / equipment	Colour	Order No.
SLX.230.060.MH	without interior equipment, left hinged, with horizontal dividing wall	light grey RAL 7035	32939-001
SLX.230.060.MH.R	without interior equipment, right hinged, with horizontal dividing wall	light grey RAL 7035	32942-001

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
Top: 2x pull-out shelf with plastic sump (V=11.0L) Bottom: 2x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey	30614
Top: 3x pull-out shelf with plastic sump (V=11.0L) Bottom: 3x pull-out shelf with plastic sump (V=11.0L)	panel melamine resin-coated/PP grey	30615
Top: 1x pull-out shelf [V=11.0L], 1x storage box for hydrofluoric acid [V=7.0L] Bottom: 2x pull-out shelf [V=11.0L]	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37217
Top: 1x pull-out shelf (V=11.0L), 1x storage box for hydrofluoric acid (V=70L) Bottom: 2x pull-out shelf (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37220
Top: 1x pull-out shelf (V=11.0L), 1x storage box for hydrofluoric acid (V=7.0L) Bottom: 3x pull-out shelf (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37218
Top: 1x pull-out shelf (V=11.0L), 1x storage box for hydrofluoric acid (V=7.0L) Bottom: 3x pull-out shelf (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37221
Top: 2x pull-out shelf (V=11.0L), 1x storage box for hydrofluoric acid (V=7.0L) Bottom: 3x pull-out shelf (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37219
Top: 2x pull-out shelf (V=11.0L), 1x storage box for hydrofluoric acid (V=7.0L) Bottom: 3x pull-out shelf (V=11.0L)	panel melamine resin-coated/PP grey, panel melamine resin-coated/PE grey	37222

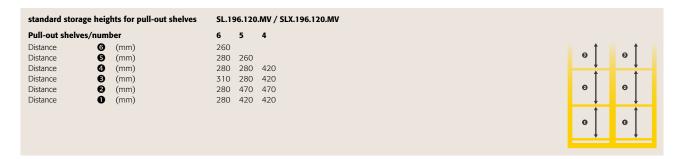
Interior equipment	Material	W x D x H (mm)	Order No.
Sump pallet with grid	PE	454 x 538 x 314*	30611
Sump pallet on shelf with grid	PE	459 x 555 x 167*	30610
Pull-out shelf with plastic sump	panel melamine resin-coated/PP grey	407 x 468 x 80*	30609
* W x D = usable floor space			

Accessories	Material	W x D x H (mm)	Order No.
Activated carbon replacement filter	activated carbon	270 x 270 x 181	32953

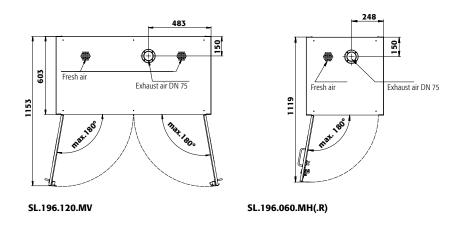
Service	Order No.	
Comissioning after delivery to point of usage	463	

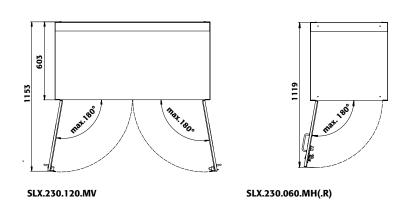
Storage heights | top views

Cabinets for acids and alkalis, recirculating air filter cabinets for acids and alkalis



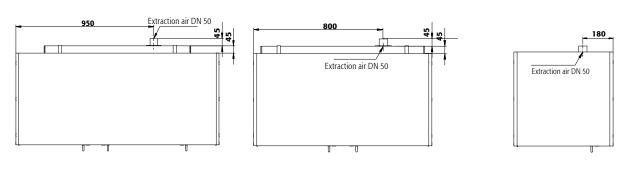
standard sto	rage heigi	nts for pull-out shelves	SL.1	96.060	.MH(R) / SLX.196.060.MH	
Pull-out she	ves/numb	er	6	5	4	
Distance	0	(mm)	260			
Distance	6	(mm)	280	260		
Distance	4	(mm)	280	280	420	
Distance	€	(mm)	165	280	420	
Distance	0	(mm)	280	325	325	
Distance	0	(mm)	280	420	420	



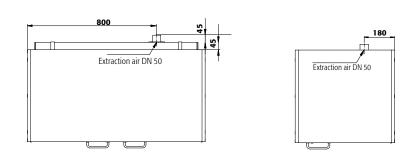


Under bench cabinets for acids and alkalis

S	standard storage h	eigh	nts for pull-out shelves	SL.0	60.140.UB.3T 60.110.UB(M).2T 60.059.UB(M).T(R)		80.110.UB.2T 80.059.UB.T(R)	0	
F	Pull-out shelves/ni	umb	er	2	1	2	1		
[Distance	0	(mm)	200		330			
[Distance	0	(mm)	280	500	345	700		



SL.060.140.UB.3T SL.060.110.UB(M).2T SL.060.059.UB(M).T(R)



SL.080.110.UB.2T SL.080.059.UB.T(R)

- Acute toxic substances

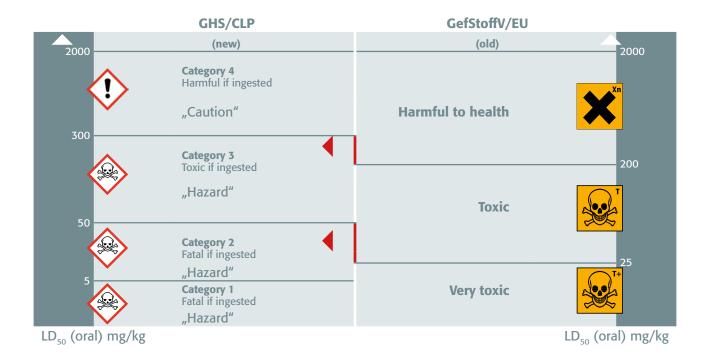
Legal basis

For all hazardous substances, i.e. also for acute toxic substances, the general protective measures require the following:

- Regardless of quantity, acutely toxic hazardous substances must be kept under lock and key or stored in such a way that only competent and reliable persons have access.
-))) Hazardous substances present at the workplace must be limited to the quantity required for the continuation of the activities.
- >>> Precautions shall be taken to ensure the safe storage of hazardous substances.
- >>> Hazardous substances shall be kept or stored in such a way that they do not endanger human health and the environment.
- >>> Misuse or abuse shall be prevented.
- >>> Prohibit the storage of chemicals in food containers.

Classification and labelling

Acute toxic or toxic and very toxic hazardous substances are classified according to the lethal (fatal) dose LD₅₀. The LD₅₀ concentration values are set for oral, inhalation and dermal intake. The classification and labelling can be seen in the following diagrams.



Pictogram	Hazard Class		Hazard Category	Signal word	H phrase
	Acute toxicity	- oral - dermal - inhalative	Category 1	Hazard	H 300 H 310 H 330
	Acute toxicity	- oral - dermal - inhalative	Category 2	Hazard	H 300 H 310 H 330
	Acute toxicity	- oral - dermal - inhalative	Category3	Hazard	H 301 H 311 H 331
•	Acute toxicity	- oral - dermal - inhalative	Category 4	Caution	H 302 H 312 H 332



STORAGE REQUIREMENTS

Hazardous materials may only be stored together if there is no increase in the risks involved. This may be possible, for example, because of the risk assessment or the limitation of quantities.

The Health and Safety Executive (HSE) provides guidance for segregation through HSG71 and offers very detailed guidance for the storage of chemical groups (please see Table 2 on page 16). The chemical groups are used to determine the possibilities for joint storage and this formal classification serves to control the joint storage of different hazardous materials.

The segregation of chemicals provides very distinct advantages to the user or provider of hazardous materials as it:

- >>> Allows clear definition of the materials present
- >>> Ensures more adequate management of chemicals at the site
- >>> Contributes towards positive management of storage and procurement
- >>> Prevents potential chemical reactions which could lead to accidents
- >>> Prevents exposure of staff to harmful substances
- >>> Puts you in control of all harmful substance

HSG71 should be used in conjunction with the safety data sheet (SDS), which clearly defines how compatible one substance is to another. For example, Section 10 of the SDS may advise that flammable liquids should not be stored with strong corrosives. The SDS also defines how to assess co-located storage.



Acute toxic or very toxic or toxic flammable liquids (e.g. methanol) must be stored in a safety storage cabinet according to EN 14470-1.

Acutely toxic and flammable substances may be stored together in a safety cabinet if they are stored in containers approved for hazardous goods, the risk assessment does not indicate any dangerous reactions and the hazardous substances can be extinguished with the same extinguishing agent.

Suitable storage cabinets for chemicals can be found in a wide range of dimensions in the following chapter.

Particularly in the case of (acute) toxic substances, special attention must be paid to compliance with the workplace limit values. Technical ventilation of safety cabinets can be achieved by:

- >>> Connection to a separate exhaust air duct, which should be discharged into the open air at a hazard-free location
- >>> Integration into an existing exhaust air system

Independently of this, safety storage cabinets with an integrated recirculating air filter module can be used for the storage of hazardous substances.



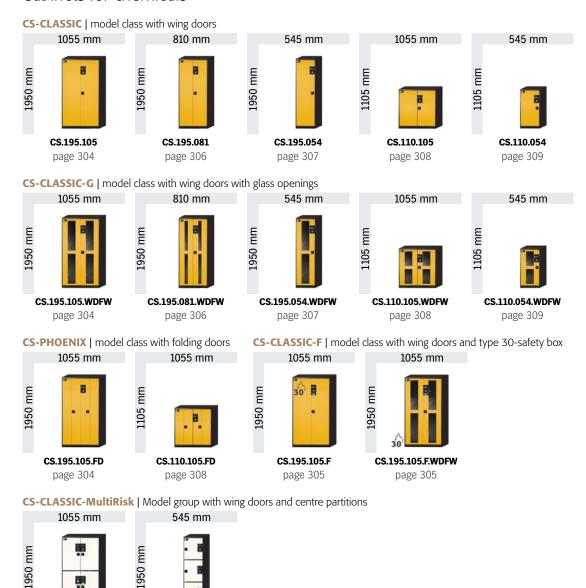
Recirculating air filter storage cabinets from p. 314 CX





Overview

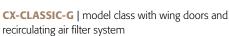
Cabinets for chemicals



CX-LINE - recirculating air filter cabinets

CS.195.054.MH.3WDR

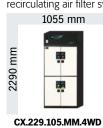
page 313



CS.195.105.MM.4WD page 312



CX-CLASSIC-MultiRisk | model class with wing doors, dividing walls and recirculating air filter system



page 318

301

C-LINE | CS-CLASSIC

Safety storage cabinets for the storage of toxic and non-flammable hazardous materials in working areas according to TRGS 510

Large variation of models

A selection of cabinets in three widths and two heights allow the adaption to users requirements and structural conditions. 3 different door variations are available: Wing door, wing door with fixed window, space-saving folding door.



2

Type 30 safety box

Optionally available with a type 30 safety box for the safe storage of small quantities of flammable hazardous materials.





Modern bicolour design

The cabinets bring colour to your workplace: choice of seven door colours at no extra cost, body in modern Anthracite grey.





No unauthorised use

Doors lockable with profile cylinder and cylinder lock.





Ventilation

Ready for connection to (DN 75) a technical exhaust system. Natural ventilation at the cabinet bottom.





Available with pull-out shelves

Incl. sumps made of plastic. The pulled-out shelf provides a quick overview of all stored hazardous substances. In case of leakage the tray can be easily removed and quickly emptied and cleaned.





Interior equipment

Fitted for large containers and canisters with shelves and a bottom collecting sump. The height-adjustable storage levels offer a high load capacity. In combination with a perforated insert, the bottom collecting sump can be used as an additional storage level.









- Conformity in accordance with the requirements of **EN 16121** and **16122**
- Requirements and test methods for safety, strength, durability and stability.
- Figure shows **model CS.195.105.WDFW**For more detailed information on all available models and further model classes see the following pages





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Model CS.195.105 Order No. 30495-047-30508



Model CS.195.105.FD Order No. 30497-041-30508



Model CS.195.105.WDFW Order No. 30496-050-30516

Technical data

External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip. Extraction air Air change 10 times Diff. pressure (air change 10 times)

CS.195.105(.WDFW/.FD)

1055 x 520 x 1950 mm 996 x 493 x 1835 mm 75 kg 75 DN kg DN m³/h 9 m³/h Pa 2 Pa

Main features



Model WDFW glass-paneled wing doors



Model FD with folding doors

Model	Body colour	Door colour	Order No.
CS.195.105	anthracite grey RAL 7016	warning yellow RAL 1004	30495-040
		light grey RAL 7035	30495-041
CS.195.105.WDFW	anthracite grey RAL 7016	warning yellow RAL 1004	30496-040
		light grey RAL 7035	30496-041
CS.195.105.FD	anthracite grey RAL 7016	warning yellow RAL 1004	30497-040
		light grey RAL 7035	30497-041

You can find further colour combinations and equipment packages in our configurator: www.asecos-configurator.com

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel galvanised	30508
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated, sheet steel galvanised	30510
4x pull-out shelf with plastic sump (V=33.0L)	sheet steel powder-coated/PP RAL 7035	30516
6x pull-out shelf with plastic sump (V=33.0L)	sheet steel powder-coated/PP RAL 7035	30518

Interior equipment	Material	W x D x H (mm)	[a] 1) (b)	2) [[3]	Order No.
Chalf	sheet steel galvanised	993 x 492 x 30	100.00		30519
Shelf	sheet steel powder-coated	993 x 492 x 30	100.00		30520
Perforated insert	sheet steel galvanised	976 x 427 x 41	60.00		30521
Bottom collecting sump	sheet steel galvanised	978 x 430 x 85*	33.00	30.00	30522
Pull-out shelf with plastic sump	sheet steel powder-coated/PP RAL 7035	888 x 415 x 107*	30.00 33.00	30.00	30525
Box for chemicals	PP blue	410 x 300 x 260			30038

Accessories	Order No.	
Extraction unit without exhaust air monitoring	14218	

 $^{^{\}ast}$ usable storage space W x D (mm) 1) load capacity [kg], 2] retention capacity [ltr.], 3] maximum container volume in the cabinet [ltr.]





Model CS.195.105.F Order No. 30848-040-30850



Model CS.195.105.F.WDFW Order No. 30849-050-30858

Technical data External dimensions W x D x H mm Internal dimensions W x D x H mm Weight without interior equip. Extraction air Air change 10 times Diff. pressure (air change 10 times) kg DN m³/h

CS.195.105.F(.WDFW) 1055 x 520 x 1950 996 x 493 x 1835 138 kg 75 DN 9 m³/h 2 Pa

	Model WDFW glass-paneled wing doors
30	Type 30 safety box included

Main features

Model	Body colour	Door colour	Order No.
CS.195.105.F	anthracite grey RAL 7016	warning yellow RAL 1004	30848-040
		light grey RAL 7035	30848-041
CS.195.105.F.WDFW	anthracite grey RAL 7016	warning yellow RAL 1004	30849-040
		light grey RAL 7035	30849-041

You can find further colour combinations and equipment packages in our configurator: www.asecos-configurator.com

Pa

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
2x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel galvanised	30850
2x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated, sheet steel galvanised	30852
3x pull-out shelf with plastic sump (V=33.0L)	sheet steel powder-coated/PP RAL 7035	30858

Interior equipment	Material	W x D x H (mm)	[a] 1)	2)	3)	Order No.	
Chalf	sheet steel galvanised	993 x 492 x 30	100.00			30519	
Shelf	sheet steel powder-coated	993 x 492 x 30	100.00			30520	
Perforated insert	sheet steel galvanised	976 x 427 x 41	60.00			30521	
Bottom collecting sump	sheet steel galvanised	978 x 430 x 85*	:	33.00	30.00	30522	
Pull-out shelf with plastic sump	sheet steel powder-coated/PP RAL 7035	888 x 415 x 107*	30.00	33.00	30.00	30525	
Box for chemicals	PP blue	410 x 300 x 260				30038	

Accessories	Order No.	
Extraction unit without exhaust air monitoring	14218	

^{*} usable storage space W x D (mm) 1) load capacity (kg), 2) retention capacity (ltr.), 3) maximum container volume in the cabinet (ltr.)

C-LINE | CS-CLASSIC



Model CS.195.081

Order No. 30532-048-30542



Model CS.195.081.WDFW

810 x 520 x 1950

751 x 493 x 1835

68 kg 75 DN

7 m³/h

1 Pa

Order No. 30533-041-30550

Technical data

External dimensions W x D x H mm Internal dimensions W x D x H mm Weight without interior equip.

Extraction air kg DN Air change 10 times m³/h Diff. pressure (air change 10 times) Pa

CS.195.081(.WDFW) **Main features**



Model WDFW glass-paneled wing doors

Model	Body colour	Door colour	Order No.
CS.195.081	anthracite grey RAL 7016	warning yellow RAL 1004	30532-040
		light grey RAL 7035	30532-041
CS.110.081.WDFW	anthracite grey RAL 7016	warning yellow RAL 1004	30531-040
		light grey RAL 7035	30531-041

You can find further colour combinations and equipment packages in our configurator: www.asecos-configurator.com

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel galvanised	30542
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035, sheet steel galvanised	30544
3x shelf, 1x bottom collecting sump with grid (V=33.0L)	sheet steel galvanised, sheet steel galvanised and coated blue	30546
3x shelf, 1x bottom collecting sump with grid (V=33.0L)	sheet steel powder-coated RAL 7035, sheet steel galvanised and coated blue	30547
4x pull-out shelf with plastic sump (V=22.0L)	sheet steel powder-coated/PP RAL 7035	30548
6x pull-out shelf with plastic sump (V=22.0L)	sheet steel powder-coated/PP RAL 7035	30550

Interior equipment	Material	W x D x H (mm)	1)	2)	3)	Order No.	
Shelf	sheet steel galvanised	748 x 492 x 30	60.00			30551	
Sileii	sheet steel powder-coated RAL 7035	748 x 492 x 30	60.00			30552	
Perforated insert	sheet steel galvanised	731 x 412 x 41	60.00			30553	
Bottom collecting sump	sheet steel galvanised	736 x 415 x 112*		33.00	30.00	30554	
Pull-out shelf with plastic sump	sheet steel powder-coated/PP RAL 7035	644 x 416 x 102*	30.00	22.00	20.00	30556	
Box for chemicals	PP blue	410 x 300 x 260				30038	

Accessories	Order No.	
Extraction unit without exhaust air monitoring	14218	

 $^{^{\}ast}$ usable storage space W x D (mm) 1) load capacity [kg], 2] retention capacity [ltr.], 3] maximum container volume in the cabinet [ltr.]





Model CS.195.054 Order No. 30561-041-30573



Model CS.195.054.WDFW Order No. 30563-040-30579

Technical data		CS.195.054(.R/.WDFW/.WDFWR)
External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip. Extraction air Air change 10 times Diff. pressure (air change 10 times)	mm mm kg DN m³/h Pa	545 x 520 x 1950 486 x 493 x 1835 51 kg 75 DN 4 m ³ /h 1 Pa

Main features Model WDFW with glass-paneled wing door

Model	Body colour	Door colour	Order No.	
CS.195.054	anthracite grey RAL 7016	warning yellow RAL 1004	30561-040	
		light grey RAL 7035	30561-041	
CS.195.054.R	anthracite grey RAL 7016	warning yellow RAL 1004	30562-040	
		light grey RAL 7035	30562-041	
CS.195.054.WDFW	anthracite grey RAL 7016	warning yellow RAL 1004	30563-040	
		light grey RAL 7035	30563-041	
CS.195.054.WDFWR	anthracite grey RAL 7016	warning yellow RAL 1004	30564-040	
		light grey RAL 7035	30564-041	
bu can find further colour combinations and equipment packages in our configurator: www.asecos-configurator.com				

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel galvanised	30573
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035, sheet steel galvanised	30575
3x shelf, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035, sheet steel galvanised	30576
3x shelf, 1x bottom collecting sump with grid (V=22.0L)	sheet steel powder-coated RAL 7035, sheet steel galvanised and coated blue	30578
4x pull-out shelf with plastic sump (V=11.0L)	sheet steel powder-coated/PP RAL 7035	30579
6x pull-out shelf with plastic sump (V=11.0L)	sheet steel powder-coated/PP RAL 7035	30581

Interior equipment	Material	W x D x H (mm)	1)	2)	Order No.
Shelf	sheet steel galvanised	484 x 491 x 30	50.00		30582
Sileii	sheet steel powder-coated RAL 7035	484 x 491 x 30	50.00		30583
Perforated insert	sheet steel galvanised	464 x 408 x 41	50.00		30584
Bottom collecting sump	sheet steel galvanised	469 x 412 x 118*	22.	00 20.00	30585
Pull-out shelf with plastic sump	sheet steel powder-coated/PP RAL 7035	370 x 417 x 89*	30.00 11.	00 10.00	30587
Box for chemicals	PP blue	410 x 300 x 260			30038

Accessories	Order No.	
Extraction unit without exhaust air monitoring	14218	

^{*} usable storage space W x D [mm] 1] load capacity (kg), 2] retention capacity (ktr), 3] maximum container volume in the cabinet (ltr)

C-LINE | CS-CLASSIC



Model CS.110.105.FD Order No. 30494-041-30498



Model CS.110.105.WDFW Order No. 30493-050-30507

Technical data

External dimensions W x D x H Internal dimensions W x D x H Weight without interior equip.

Extraction air Air change 10 times

Diff. pressure (air change 10 times)

CS.110.105(.WDFW/.FD)

1055 x 520 x 1105 mm 996 x 493 x 990 mm 48 kg 75 DN kg DN m³/h 5 m³/h Pa 1 Pa

Main features



Model WDFW glass-paneled wing doors



Model FD with folding doors

Model	Body colour	Door colour	Order No.
CS.110.105	anthracite grey RAL 7016	warning yellow RAL 1004	30492-040
		light grey RAL 7035	30492-041
CS.110.105.WDFW	anthracite grey RAL 7016	warning yellow RAL 1004	30493-040
		light grey RAL 7035	30493-041
CS.110.105.FD	anthracite grey RAL 7016	warning yellow RAL 1004	30494-040
		light grey RAL 7035	30494-041

You can find further colour combinations and equipment packages in our configurator: www.asecos-configurator.com

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
2x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel galvanised	30498
2x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated, sheet steel galvanised	30500
2x pull-out shelf with plastic sump (V=33.0L)	sheet steel powder-coated/PP RAL 7035	30506
3x pull-out shelf with plastic sump (V=33.0L)	sheet steel powder-coated/PP RAL 7035	30507

Interior equipment	Material	W x D x H (mm)	[a] 1)	2)	3)	Order No.	
Chalf	sheet steel galvanised	993 x 492 x 30	100.00			30519	
Shelf	sheet steel powder-coated	993 x 492 x 30	100.00			30520	
Perforated insert	sheet steel galvanised	976 x 427 x 41	60.00			30521	
Bottom collecting sump	sheet steel galvanised	978 x 430 x 85*	:	33.00	30.00	30522	
Pull-out shelf with plastic sump	sheet steel powder-coated/PP RAL 7035	888 x 415 x 107*	30.00	33.00	30.00	30525	
Box for chemicals	PP blue	410 x 300 x 260				30038	

Accessories	Order No.	
Extraction unit without exhaust air monitoring	14218	

 $^{^{\}ast}$ usable storage space W x D (mm) 1) load capacity [kg], 2] retention capacity [ltr.], 3] maximum container volume in the cabinet [ltr.]







Model CS.110.054.WDFW Order No. 30559-040-30572

Technical data	
External dimensions W x D x H Internal dimensions W x D x H	
Weight without interior equip.	

Air change 10 times
Diff. pressure (air change 10 times)

CS.110.054(.R/.WDFW/.WDFWR)

mm 545 x 520 x 1105 486 x 493 x 990 mm 31 kg 75 DN kg DN m³/h 2 m³/h Pa 1 Pa

Main features



Model WDFW with glass-paneled wing door

Model	Body colour	Door colour	Order No.
CS.110.054	anthracite grey RAL 7016	warning yellow RAL 1004 light grey RAL 7035	30557-040 30557-041
CS.110.054.R	anthracite grey RAL 7016	warning yellow RAL 1004 light grey RAL 7035	30558-040 30558-041
CS.110.054.WDFW	anthracite grey RAL 7016	warning yellow RAL 1004 light grey RAL 7035	30559-040 30559-041
CS.110.054.WDFWR	anthracite grey RAL 7016	warning yellow RAL 1004 light grey RAL 7035	30560-040 30560-041

 $You \ can \ find \ further \ colour \ combinations \ and \ equipment \ packages \ in \ our \ configurator; \ www.asecos-configurator.com$

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
2x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel galvanised	30565
2x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)	sheet steel powder-coated RAL 7035, sheet steel galvanised	30567
2x shelf, 1x bottom collecting sump with grid (V=22.0L)	sheet steel galvanised, sheet steel galvanised and coated blue	30569
2x shelf, 1x bottom collecting sump with grid (V=22.0L)	sheet steel powder-coated RAL 7035, sheet steel galvanised and coated blue	30570
2x pull-out shelf with plastic sump (V=11.0L)	sheet steel powder-coated/PP RAL 7035	30571
3x pull-out shelf with plastic sump (V=11.0L)	sheet steel powder-coated/PP RAL 7035	30572

Interior equipment	Material	W x D x H (mm)	1)) L	3)	Order No.
Shelf	sheet steel galvanised	484 x 491 x 30	50.00			30582
Sileii	sheet steel powder-coated RAL 7035	484 x 491 x 30	50.00			30583
Perforated insert	sheet steel galvanised	464 x 408 x 41	50.00			30584
Bottom collecting sump	sheet steel galvanised	469 x 412 x 118*		22.00	20.00	30585
Pull-out shelf with plastic sump	sheet steel powder-coated/PP RAL 7035	370 x 417 x 89*	30.00	11.00	10.00	30587
Box for chemicals	PP blue	410 x 300 x 260				30038

Accessories	Order No.	
Extraction unit without exhaust air monitoring	14218	

 $^{^{\}ast}$ usable storage space W x D (mm) 1) load capacity (kg), 2) retention capacity (ltr.), 3) maximum container volume in the cabinet (ltr.)

C-LINE | CS-CLASSIC-MultiRisk -

Safety storage cabinets for the storage of toxic and non-flammable hazardous materials in working areas according to TRGS 510

Multifunctional

Separated storage of various hazardous materials in up to 4 storage compartments. Labelling system suitable for each stored hazardous material. Every storage compartment can be equipped individually, optimal adaption to the stored containers and user requirements.



2

Cylinder lock

Doors lockable with cylinder lock. Each storage compartment can be operated separately.





Ventilation

Ready for connection to (DN 75) a technical exhaust system. Natural ventilation at the cabinet bottom.





Available with pull-out shelves

Incl. sumps made of plastic. The pulled-out shelf provides a quick overview of all stored hazardous substances. In case of leakage the tray can be easily removed and quickly emptied and cleaned.





Interior equipment

Fitted for large containers and canisters with shelves and a bottom collecting sump. The height-adjustable storage levels offer a high load capacity. In combination with a perforated insert, the bottom collecting sump can be used as an additional storage level.













- Conformity in accordance with the requirements of EN 16121 and 16122
 Requirements and test methods for safety, strength, durability and stability.





C-LINE | CS-CLASSIC-MultiRisk -



Model CS.195.105.MM.4WD

Order No. 30803-050-30806



Model CS.195.105.MM.4WD

Order No. 30803-050-30808



Model CS.195.105.MM.4WD

Order No. 30803-050-31947

Technical data

External dimensions W x D x H 1055 x 520 x 1950 mm Internal dimensions W x D x H 996 x 493 x 1835 mm 80 kg 75 DN Weight without interior equip. kg DN Extraction air Air change 10 times m³/h 9 m³/h Diff. pressure (air change 10 times) Pa 2 Pa

Main features



Dividing walls providing separate storage compartments

Model	Body colour	Door colour	Order No.
CS.195.105.MM.4WD	anthracite grey RAL 7016	pure white RAL 9010	30803-050
Interior equipment package	es (can only be ordered in combination with the cabinet)	Material	Order No.
4x shelf, 2x bottom collecting	sump (V=22.0L), 4x perforated insert, 2x bottom collecting	sheet steel powder-coated, sheet steel galvanised	30805

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
4x shelf, 2x bottom collecting sump (V=22.0L), 4x perforated insert, 2x bottom collecting sump (V=22.0L)	sheet steel powder-coated, sheet steel galvanised	30805
4x shelf, 2x bottom collecting sump (V=22.0L), 4x perforated insert, 2x bottom collecting sump (V=22.0L)	sheet steel galvanised	30806
Top: 2x shelf, 2x perforated insert, 1x bottom collecting sump (V=22.0L), 1x bottom collecting sump (V=22.0L) Bottom: 4x pull-out shelf (V=11.0L)	sheet steel powder-coated, sheet steel galvanised, sheet steel powder-coated/PP RAL 7035	30807
Top: 2x shelf, 1x bottom collecting sump (V=22.0L), 2x perforated insert, 1x bottom collecting sump (V=22.0L) Bottom: 4x pull-out shelf (V=11.0L)	sheet steel galvanised, sheet steel powder-coated/PP RAL 7035	30808
8x pull-out shelf for cabinets with vertical dividing wall (V=11.0L)	sheet steel powder-coated/PP RAL 7035	31947

			<u></u>	()	3)		
Interior equipment	Material	W x D x H (mm)		L	Tat.	Order No.	
Shelf	sheet steel galvanised		50.00			30838	
Sileli	sheet steel powder-coated		50.00			30837	
Perforated insert	sheet steel galvanised	464 x 408 x 41	50.00			30584	
Bottom collecting sump for cabinets with vertical dividing wall	sheet steel galvanised	469 x 412 x 118*		22.00	20.00	30840	
Bottom collecting sump with grid for cabinets with vertical dividing wall	sheet steel powder-coated blue	466 x 406 x 136*		22.00	20.00	30841	
Pull-out shelf for cabinets with vertical dividing wall	sheet steel powder-coated/PP RAL 7035	370 x 417 x 89*	30.00	11.00	10.00	30839	
Box for chemicals	PP blue	410 x 300 x 260				30038	

Accessories	Order No.
Extraction unit without exhaust air monitoring	14218

 $^{^{\}ast}$ usable storage space W x D (mm) 1) load capacity [kg], 2] retention capacity [ltr.], 3] maximum container volume in the cabinet [ltr.]







Model CS.195.054.MH.3WDR Order No. 30804-050-31945

Model CS.195.054.MH.3WDR Order No. 30804-050-31946

Technical data

External dimensions W x D x H mm 545 x 520 x 1950 Internal dimensions W x D x H 486 x 493 x 1835 mm Weight without interior equip.

Extraction air 51 kg 75 DN kg DN Air change 10 times m³/h 4 m³/h Diff. pressure (air change 10 times) Pa 1 Pa

Main features



Dividing walls providing separate storage compartments

Model	Body colour	Door colour	Order No.
CS.195.054.MH.3WDR	anthracite grey RAL 7016	pure white RAL 9010	30804-050
Interior equipment package	es (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 3x bottom collecting	sump (V=22.0L), 3x perforated insert	sheet steel powder-coated RAL 7035, sheet steel galvanised	30809
3x shelf, 3x bottom collecting	sump (V=22.0L), 3x perforated insert	sheet steel galvanised	30810
Top: 1x shelf, 1x bottom colle Central: 2x pull-out shelf (V= Bottom: 2x pull-out shelf (V=		sheet steel powder-coated RAL 7035, sheet steel galvanised, sheet steel powder-coated/PP RAL 7035	31944
Top: 1x shelf, 1x bottom colle Central: 2x pull-out shelf (V= Bottom: 2x pull-out shelf (V=		sheet steel galvanised, sheet steel powder-coated/PP RAL 7035	31945
6x pull-out shelf with plastic s	sump (V=11.0L)	sheet steel powder-coated/PP RAL 7035	31946

Interior equipment	Material	W x D x H (mm)	1)	2) [[]3]	Order No.	
Shelf	sheet steel galvanised	484 x 491 x 30	50.00		30582	
SHEII	sheet steel powder-coated RAL 7035	484 x 491 x 30	50.00		30583	
Perforated insert	sheet steel galvanised	464 x 408 x 41	50.00		30584	
Bottom collecting sump	sheet steel galvanised	469 x 412 x 118*	22.	00 20.00	30585	
Bottom collecting sump with grid	sheet steel galvanised and coated blue	466 x 406 x 136*	22.	00 20.00	30586	
Pull-out shelf with plastic sump	sheet steel powder-coated/PP RAL 7035	370 x 417 x 89*	30.00 11.	00 10.00	30587	
Box for chemicals	PP blue	410 x 300 x 260			30038	

Accessories	Order No.	
Extraction unit without exhaust air monitoring	14218	



^{*} usable storage space W x D (mm) 1) load capacity (kg), 2) retention capacity (ltr.), 3) maximum container volume in the cabinet (ltr.)

CX-LINE | CX-CLASSIC

Recirculating air filter storage cabinets for the storage of non-flammable and toxic hazardous materials and the extraction and filtration of their vapours

Elimination of harmful vapours due to the recirculating air filter unit. Permanent extraction and filtration of hazardous vapours.



2

Multifunctional

The CX-LINE recirculating air filter storage cabinets enable the common storage, extraction and filtration of the most diverse hazardous materials in one cabinet.





Eco-friendly

Long filter lifetimes; environmentally and customer-friendly reusable filter system.





No unauthorised use

Doors lockable with profile cylinder and cylinder lock.





The CX-LINE is based on the CS-CLASSIC and CS-CLASSIC-MultiRisk cabinets.





Low noise level

At approx. 39 dB (A), the unit is extremely quiet and does not produce any perturbing noises. Visual and acoustic signals provide a clear warning in an emergency and, in combination with the potential-free alarm contact, ensure maximum safety.









Conformity of the Q-LINE safety storage cabinets according to EN 16121 and 16122 (EN 16121:2013+A1:2017)



- Excellent products with special manufacturer warranty
- Extended manufacturer warranty of up to five years in connection with an asecos service tariff





CX-LINE | CX-CLASSIC



Model CX.229.105.WDFW

Order No. 32925-041-30508



Model CX.229.105.WDFW

Order No. 32925-050-30516



Model CX.229.105.WDFW

Order No. 32925-041-30518

Technical data

External dimensions W x D x H Internal dimensions W x D x H	mm mm	1055 x 520 x 2290 all compartments: 475 x 495 x 905
Weight without interior equip. Frequency Nominal voltage Max. current consumption Power consump. in operation Power consump. in standby mode	kg Hz V A W	105 50 230 0.5 120 50

Main features



Self-sufficient and flexible storage solution



Cabinet incl. recirculating air filter unit

Model	Body colour	Door colour	Order No.
CX.229.105.WDFW	anthracite grey RAL 7016	light grey RAL 7035	32925-041
		nure white RAI 9010	32925-050

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel galvanised	30508
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated, sheet steel galvanised	30510
4x pull-out shelf with plastic sump (V=33.0L)	sheet steel powder-coated/PP RAL 7035	30516
6x pull-out shelf with plastic sump (V=33.0L)	sheet steel powder-coated/PP RAL 7035	30518

Interior equipment	Material	W x D x H (mm)	1)	2)	3)	Order No.	
Shelf	sheet steel galvanised	993 x 492 x 30	100.00			30519	
Shelf	sheet steel powder-coated	993 x 492 x 30	100.00			30520	
Perforated insert	sheet steel galvanised	976 x 427 x 41	60.00			30521	
Bottom collecting sump	sheet steel galvanised	978 x 430 x 85*		33.00	30.00	30522	
Bottom collecting sump big with grid	sheet steel galvanised and coated blue	984 x 382 x 175*		66.00	60.00	30524	
Pull-out shelf with plastic sump	sheet steel powder-coated/PP RAL 7035	888 x 415 x 107*	30.00	33.00	30.00	30525	
Box for chemicals	PP blue	410 x 300 x 260				30038	

^{*} usable storage space W x D [mm] 1] load capacity [kg], 2] retention capacity [ltr.], 3] maximum container volume in the cabinet [ltr.]

Accessories	Material	W x D x H (mm)	Order No.
Activated carbon replacement filter	activated carbon	270 x 270 x 246	32952





Model CX.229.081.WDFW Order No. 32929-050-30542



Model CX.229.081.WDFW Order No. 32929-041-30548



Model CX.229.081.WDFW Order No. 32929-041-30550

Technical data

External dimensions W x D x H	mm	810 x 520 x 2290
Internal dimensions W x D x H	mm	751 x 493 x 1835
Weight without interior equip.	kg	93
Frequency	Hz	50
Nominal voltage	V	230
Max. current consumption	Α	0.5
Power consump. in operation	W	120
Power consump. in standby mode	W	50

Main features



Self-sufficient and flexible storage solution



Cabinet incl. recirculating air filter unit

Model	Body colour	Door colour	Order No.
CX.229.081.WDFW	anthracite grey RAL 7016	light grey RAL 7035	32929-041
		pure white RAL 9010	32929-050

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel galvanised	30542
3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)	sheet steel powder-coated RAL 7035, sheet steel galvanised	30544
3x shelf, 1x bottom collecting sump with grid (V=33.0L)	sheet steel galvanised, sheet steel galvanised and coated blue	30546
3x shelf, 1x bottom collecting sump with grid (V=33.0L)	sheet steel powder-coated RAL 7035, sheet steel galvanised and coated blue	30547
4x pull-out shelf with plastic sump (V=22.0L)	sheet steel powder-coated/PP RAL 7035	30548
6x pull-out shelf with plastic sump (V=22.0L)	sheet steel powder-coated/PP RAL 7035	30550

Interior equipment	Material	W x D x H (mm)	1)	1 2)	3)	Order No.
Shelf	sheet steel galvanised	748 x 492 x 30	60.00			30551
Shelf	sheet steel powder-coated RAL 7035	748 x 492 x 30	60.00			30552
Perforated insert	sheet steel galvanised	731 x 412 x 41	60.00			30553
Bottom collecting sump	sheet steel galvanised	736 x 415 x 112*		33.00	30.00	30554
Bottom collecting sump with grid	sheet steel galvanised and coated blue	739 x 411 x 129*		33.00	30.00	30555
Pull-out shelf with plastic sump	sheet steel powder-coated/PP RAL 7035	644 x 416 x 102*	30.00	22.00	20.00	30556
Box for chemicals	PP blue	410 x 300 x 260				30038

^{*} usable storage space W x D [mm] 1] load capacity [kg], 2] retention capacity [ltr.], 3] maximum container volume in the cabinet [ltr.]

Accessories	Material	W x D x H (mm)	Order No.
Activated carbon replacement filter	activated carbon	270 x 270 x 181	32953

CX-LINE | CX-CLASSIC-MultiRisk



Model CX.229.105.MM.4WD

Order No. 32933-050-30806



Model CX.229.105.MM.4WD

Order No. 32933-050-30808



Model CX.229.105.MM.4WD

Order No. 32933-050-31947

Technical data

External dimensions W x D x H Internal dimensions W x D x H	mm mm	1055 x 520 x 2290 all compartments: 475 x 495 x 905
Weight without interior equip.	kg	98
Frequency	Hz	50
Nominal voltage	V	230
Max. current consumption	Α	0.5
Power consump. in operation	W	120
Power consump. in standby mode	W	50

Main features



Self-sufficient and flexible storage solution



Cabinet incl. recirculating air filter unit

Model	Body colour	Door colour	Order No.
CX.229.105.MM.4WD	anthracite grey RAL 7016	pure white RAL 9010	32933-050

Interior equipment packages (can only be ordered in combination with the cabinet)	Material	Order No.
4x shelf, 2x bottom collecting sump (V=22.0L), 4x perforated insert, 2x bottom collecting sump (V=22.0L)	sheet steel powder-coated, sheet steel galvanised	30805
4x shelf, 2x bottom collecting sump (V=22.0L), 4x perforated insert, 2x bottom collecting sump (V=22.0L)	sheet steel galvanised	30806
Top: 2x shelf, 2x perforated insert, 1x bottom collecting sump (V=22.0L), 1x bottom collecting sump (V=22.0L), 1x bottom collecting sump (V=21.0L) and (V=21.0L) bottom: 4x pull-out shelf (V=11.0L)	sheet steel powder-coated, sheet steel galvanised, sheet steel powder-coated/PP RAL 7035	30807
Top: 2x shelf, 1x bottom collecting sump (V=22.0L), 2x perforated insert, 1x bottom collecting sump (V=22.0L) Bottom: 4x pull-out shelf (V=11.0L)	sheet steel galvanised, sheet steel powder-coated/PP RAL 7035	30808
8x pull-out shelf for cabinets with vertical dividing wall (V=11.0L)	sheet steel powder-coated/PP RAL 7035	31947

Interior equipment	Material	W x D x H (mm)	1)	2)	3)	Order No.
Shelf	sheet steel galvanised		50.00			30838
Sileii	sheet steel powder-coated		50.00			30837
Perforated insert	sheet steel galvanised	464 x 408 x 41	50.00			30584
Bottom collecting sump for cabinets with vertical dividing wall	sheet steel galvanised	469 x 412 x 118*		22.00	20.00	30840
Bottom collecting sump with grid for cabinets with vertical dividing wall	sheet steel powder-coated blue	466 x 406 x 136*		22.00	20.00	30841
Pull-out shelf for cabinets with vertical dividing wall	sheet steel powder-coated/PP RAL 7035	370 x 417 x 89*	30.00	11.00	10.00	30839
Box for chemicals	PP blue	410 x 300 x 260				30038

^{*} usable storage space W x D [mm] 1] load capacity [kg], 2] retention capacity [ltr.], 3] maximum container volume in the cabinet [ltr.]

Accessories	Material	W x D x H (mm)	Order No.
Activated carbon replacement filter	activated carbon	270 x 270 x 246	32952





E-LINE | E-CLASSIC

Safe and approved storage of water pollutants in working areas

Type 30 safety box

Optionally available with a type 30 safety box for the safe storage of small quantities of flammable hazardous materials.



Ventilation

Ready for connection to a technical exhaust system, natural ventilation at the cabinet bottom.



3

No unauthorised use

Doors lockable with profile cylinder and cylinder lock.





Interior equipment

Equipped with galvanised tray shelves and bottom collecting sump for large containers and canisters. Leakages are safely collected.







E-CLASSIC | model class with wing doors



E-CLASSIC-UF | model class with wing doors and type 30-safety box



E-PSM-UF | model class with wing doors



E-LINE | E-CLASSIC -



Model E.195.095.2 Order No. 30629-007



Model E.140.095 Order No. 30626-007



Model E.195.095 Order No. 30628-007

Technical data

External dimensions W x D x H Internal dimensions W x D x H $\,$ Weight f. technical data

E.195.095(.2)

mm

mm

kg

950 x 500 x 1935 945 x 460 x 1845 137

E.145.095(.2)

950 x 500 x 1400 945 x 460 x 1295

Main features



Model 095.2 incl. liquid-tight welded tray shelves

Model	Body colour	Door colour	Order No.
E.195.095	gentian blue RAL 5010	light grey RAL 7035	30628-007
E.195.095.2	gentian blue RAL 5010	light grey RAL 7035	30629-007
E.140.095	gentian blue RAL 5010	light grey RAL 7035	30626-007
E.140.095.2	gentian blue RAL 5010	light grey RAL 7035	30627-007

Interior equipment	Material	W x D x H (mm)	1] (1) (2)	3)	Order No.	
Tray shelf	sheet steel galvanised	931 x 444 x 50*	50.00 20.00	18.18	30632	
Perforated insert	sheet steel galvanised	930 x 440 x 40	75.00		14740	
Bottom collecting sump	sheet steel galvanised	932 x 445 x 50*	20.50	18.64	30633	
Sump inliner	PP	869 x 378 x 88*	26.50	24.09	8564	

^{*} usable storage space W x D (mm) 1) load capacity (kg), 2) retention capacity (ltr.), 3) maximum container volume in the cabinet (ltr.)



Model E.195.095.F Order No. 30634-006



Model EM.195.095.F Order No. 30638-006

Technical data		E.195.095.F	E.195.095.F2	EM.195.095.F
External dimensions W x D x H	mm	950 x 500 x 1935	950 x 500 x 1935	950 x 500 x 1935
Internal dimensions W x D x H	mm	945 x 460 x 1845	945 x 460 x 1845	945 x 460 x 1845
Weight f. technical data	kg	148	156	133

Main features



Model 095.F incl. type 30 safety box



Model 095.2 incl. liquid-tight welded tray shelves



Model 095.EM can be used as a material cabinet

Model	Body colour	Door colour	Order No.
E.195.095.F	gentian blue RAL 5010	purple red RAL 3004	30634-006
E.195.095.F2	gentian blue RAL 5010	purple red RAL 3004	30635-006
EM.195.095.F	gentian blue RAL 5010	purple red RAL 3004	30638-006

Interior equipment	Material	W x D x H (mm)	1)	1 2)	3)	Order No.	
Shelf	sheet steel galvanised	944 x 456 x 25	50.00			30640	
Trough olf	sheet steel galvanised	931 x 444 x 50*	50.00	20.00	18.18	30632	
Tray shelf	sheet steel powder-coated RAL 7035	805 x 383 x 50*	25.00	8.50	7.73	30769	
Perforated insert	sheet steel galvanised	930 x 440 x 40	75.00			14740	
Bottom collecting sump	sheet steel galvanised	932 x 445 x 50*		20.50	18.64	30633	
Sump inliner	PP	869 x 378 x 88*		26.50	24.09	8564	



^{*} usable storage space W x D (mm)
1) load capacity (kg), 2) retention capacity (ltr.), 3) maximum container volume in the cabinet (ltr.)

E-LINE | E-PSM



Model EP.195.095 Order No. 30630-009



Model EP.195.095.F Order No. 30636-009

EP.195.095	
950 x 500 x 1 945 x 460 x 1 99	

mm

mm

kg

EP.195.095.2 950 x 500 x 1935 945 x 460 x 1845 112

EP.195.095.F 950 x 500 x 1935 945 x 460 x 1845 147

EP.195.095.F2 950 x 500 x 1935 945 x 460 x 1845 156

Main features



Model 095.F incl. type 30 safety box



Model 095.2 incl. liquid-tight welded tray shelves

Model	Body colour	Door colour	Order No.
EP.195.095	turquoise green RAL 6016	turquoise green RAL 6016	30630-009
EP.195.095.2	turquoise green RAL 6016	turquoise green RAL 6016	30631-009
EP.195.095.F	turquoise green RAL 6016	turquoise green RAL 6016	30636-009
EP.195.095.F2	turquoise green RAL 6016	turquoise green RAL 6016	30637-009

Interior equipment	Material	W x D x H (mm)	1)	2)	3)	Order No.	
Trave shoulf	sheet steel galvanised	931 x 444 x 50*	50.00	20.00	18.18	30632	
Tray shelf	sheet steel powder-coated RAL 7035	805 x 383 x 50*	25.00	8.50	7.73	30769	
Perforated insert	sheet steel galvanised	930 x 440 x 40	75.00			14740	
Bottom collecting sump	sheet steel galvanised	932 x 445 x 50*		20.50	18.64	30633	
Sump inliner	PP	869 x 378 x 88*		26.50	24.09	8564	

^{*} usable storage space W x D (mm) 1) load capacity (kg), 2) retention capacity (ltr.), 3) maximum container volume in the cabinet (ltr.)

INDIVIDUAL AND MADE TO MEASURE



With the online tool, you can individually plan your safety storage cabinet including interior equipment, dimensions and design – the desired product is then visualised and a quotation can be requested directly.

Get an overview of the extensive asecos product range and easily find the right cabinet for your needs. Test the configurator now at:

www.asecos-configurator.com

S- Extraction of hazardous materials

Which limit values are relevant for activities involving hazardous materials?

When working with hazardous substances, employees must be protected from substance-related hazards and damages. For the assessment of health hazards when handling and storing hazardous substances, the following limit values must be observed:

>>> Limit values according to REACH

DNEL: Derived No-Effect Level (derived exposure level without effect)

(by manufacturers or importers/marketers)

DMEL: Derived Minimum Effect Level

Risk-based limit values for carcinogenic and germ cell mutagenic substances (not provided for in REACH, only in legally nonbinding ECHA guidelines)

-))) Limit values according to the Ordinance on Hazardous Substances/TRGS 900 OEL: Occupational exposure limit vs. MWC: Maximum workplace concentration
- Carcinogenic hazardous substances according to TRGS 910 ERB: Exposure-Risk Relationships vs. TGC: Technical Guideline Concentration
- >>> HSE workplace exposure limits according to EH40/2005

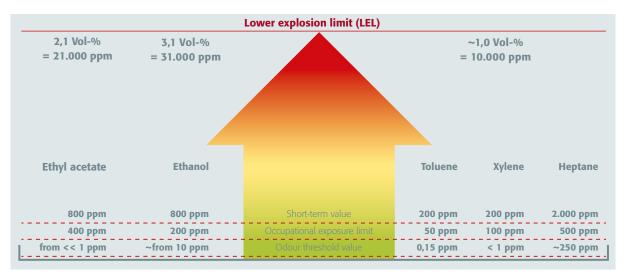
WEL's: Workplace exposure limits

Are British occupational exposure limits which are set in order to help protect the health of workers. WEL's are concentrations of hazardous substances in the air, averaged over a specified period of time, referred to as a time-weighted average (TWA). Two time periods are generally used:

- >>> long-term (8 hours) and
- >>> short-term (15 minutes)
- The short-term exposure limits (STEL's) are set to help prevent effects such as eye irritation, which may occur following an exposure for a few minutes.

A possible health hazard can also be derived from the odour threshold value. Unpleasant or even annoying odours should always be the first sign of a possible health risk when working with hazardous substances. For the evaluation of possible explosion hazards during activities with flammable hazardous substances, the lower explosion limit (LEL) must also be taken into account.

The concentration ratios between odour threshold value, occupational exposure limit value, short-term value and lower explosion limit are illustrated in the following figure:



The occupational exposure limit value (OEL) as a legally binding threshold value

The occupational exposure limit value (OEL) is the limit value for the time-weighted average concentration of a substance in the air at the workplace in relation to a given reference period. It specifies the concentration of a substance at which acute or chronic harmful effects on health are generally not to be expected. Occupational exposure limit values are shift averages for approx. 8 hours daily exposure five days a week during the working life.



How do I safely comply with these limits?

If it is not possible to substitute the hazardous substances used with a less hazardous material — which must be justified in the risk assessment — technical measures must primarily be taken in accordance with the state of the art. The aim is — first and foremost — to protect the health of employees by avoiding or at least minimising exposure to hazardous substances and thus to prevent accidents and illnesses caused by hazardous substances. If these limit values are complied with, it can be assumed that employees will not fall ill and that their working capacity will be permanently maintained.

In order to achieve this goal and at the same time prevent the formation of hazardous explosive atmospheres, ventilation measures or the extraction of hazardous substances at the point of origin are of outstanding importance.

Technical measures have long been established in practice. However, these must be differentiated depending on the activity, in order to extract hazardous substances safely.

1. Passive storage of hazardous substances

Containers for hazardous substances in the safety cabinet or storage room are tightly closed and are not filled, emptied or opened for any other purposes.

In these applications, technical ventilation of the storerooms can be achieved by connecting to an on-site exhaust air system or recirculating air filter devices. If permanent technical ventilation is not possible, alternative measures must be taken to avoid exposing employees to health risks and to ensure explosion protection.

You will find suitable and supplementary products on the following pages in this catalogue.





2. Active storage of and working with hazardous materials (e.g. decanting, collecting, etc.)

Hazardous substances are stored in transportable containers and used at the place of storage as removal or collection containers or opened for other purposes.

In these cases, a higher risk of exposure to hazardous substances can be assumed. In principle, therefore, no filling should be carried out in a storeroom. In practice, however, this may be necessary for the decanting of smaller quantities or for the disposal of solvents. Such applications should be carried out at technically ventilated safety storage cabinets or — even better — in adequate workplaces for hazardous substances. You will find safe product solutions in this catalogue.

The lower explosion limit of a substance is many times higher than the occupational exposure limit of a substance. Therefore, always ensure adequate ventilation and thus safely comply with both limit values.



It Can Happen To Anyone – many different dangers threaten when handling hazardous materials!

The use of hazardous and combustible materials is part of the daily routine in most laboratories and industries and is unavoidable. What is often quickly forgotten in daily handling: the improper storage of such materials puts people, the environment and property in danger. Learn more about the safe storage of hazardous materials in our "HazMat Guide".

You can order it on our website: www.asecos.global/catalogues



Do safety storage cabinets have to be technically ventilated?

1.

The legislative authority has facilitated the operation of safety storage cabinets without technical ventilation on the basis of **TRGS 510**, Annexe 3, 2.2. If technical ventilation is not carried out in the long-run, contingency measures must be implemented, which ensure comparable explosion protection. (Applicable for German market).

2.

Please bear in mind that other regulations in addition to **TRGS 510** (Annexe 3) can also make technical ventilation necessary. For example, if corrosive or poisonous substances are stored or there is unpleasant odour for the employees due to the substances stored, a technical ventilation of the safety storage cabinet must be planned as a rule; for this, please refer to the Ordinance on Hazardous Substances or Workplaces Ordinance.

3.

With the recirculating air filter system UFA.025.030, it is also possible to ensure a technical ventilation of safety storage cabinets without an expensive exhaust fan and by avoiding explosion protection measures in a costeffective manner!

Please adhere to the country-specific terms of use binding for you. In case of any doubt, the possible applications must be agreed with the relevant authority having jurisdiction.

What are the possible ventilation options?

Natural ventilation

- No cost-intensive exhaust air ducts are necessary
- Explosion zones must be permanently ensured around the safety storage cabinet
- Possible health risk to the employees
- Ignition sources must still exist inside the safety storage cabinet

Technical ventilation using Local Exhaust Ventilation (LEV)

- No health risk to the employees
- + All the hazardous materials (also acid and base vapours) will be eliminated
- Cost-intensive exhaust air ducts with possible wall/ceiling breaks will be necessary
- Installation of the safety storage cabinet becomes inflexible
- Energy consumption due to heat losses in the exhaust air

Technical ventilation using a recirculating air filter system

- No health risk to the employees/workers
- No cost-intensive exhaust air ducts are necessary
- + Flexible installation of the safety storage cabinet
- → No energy losses due to exhaust duct outwards
- Permanent electronic monitoring of the exhaust air volume
- Tested and certified system
- Only solvent vapours (hydrocarbons) can be filtered



If you have any further questions on ventilation of safety storage cabinets, please contact us. Our employees will be happy to help you.

Please adhere to the country-specific regulations and provisions that are applicable for you.



Area classification for flammable liquids – storage in a safety storage cabinet (DGUV-standard 113-001, collection of examples 2.2.8)

NO AREA CLASSIFICATION

Case A: the LEL (lower explosion limit) is sufficiently below the flashpoint as the flashpoint of the flammable liquid is sufficiently above the storage temperature (refer to TRGS 721 point 3.2 (3))

OR

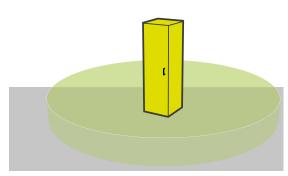
Case B: the flashpoint is **not** sufficiently above the storage temperature (refer to TRGS 721 point 3.2 (3))

Technical ventilation is available and the following conditions are fulfilled:

- container securely closed, regularly checked for leakage
- sealed containers only (no filling or decanting, no sampling)
- dried containers, no external flammable liquid residue



Case A: in accordance with TRGS 722, point 2.3.2 **Case B:** in accordance with TRGS 722, point 2.4.4.3 **Case A and B:** in accordance with TRGS 724, none



Area classification ZONE 2 inside the cabinet No area classification outside the cabinet

the flashpoint is not sufficiently above the storage temperature (refer to TRGS 721, point 3.2 (3))

Case C: technical ventilation iis available, the conditions for area classification **(Case B)** are not fulfilled in all points, containers are however tightly closed

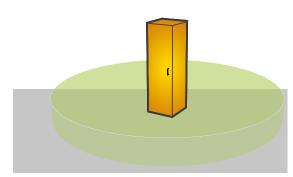
OR

Case D: natural ventilation is available and the following conditions are fulfilled:

- container securely closed, regularly checked for leakage
- sealed containers only (no filling or decanting, no sampling)
- dried containers, no external flammable liquid residue

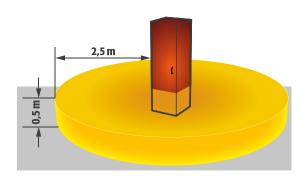
Protective measures:

Case C: in accordance with TRGS 722, point 2.4.4.3 **Case D:** in accordance with TRGS 722, point 2.4.4.2 **Case C and D:** in accordance with TRGS 724, none



Area classification ZONE 1 inside the cabinet

Area classification ZONE 2 outside the cabinet



the flashpoint is **not** sufficiently above the storage temperature (refer to TRGS 721, point 3.2 (3))

Case E: natural ventilation is available, the conditions for area classification **(Case D)** are not fulfilled in all points, containers are however tightly closed

Protective measures:

Case E: in accordance with TRGS 722, point 2.4.4.2 **Case E:** in accordance with TRGS 724, none

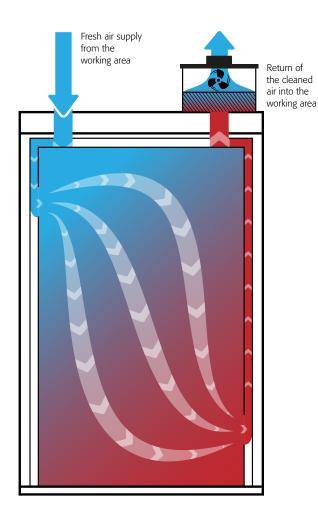
Defining the zones for avoiding ignition sources in accordance with TRGS 723

The inside of the exhaust air duct is to be classified in the same zone as the inside of the safety storage cabinet.



Recirculating air filter systems

The flexible solution for complying with national occupational exposure limits and for avoiding a build-up of explosive atmospheres in solvent safety cabinets



Your advantages

- » Avoid complex wall and ceiling openings and expensive exhaust air ducts
- Whigh flexibility in choosing the installation location
- » Active personal protection through safe capture of harmful vapours with retention in the filter system
- » Very low noise, only approx. 23 dB (A)
- » Principle avoidance of hazardous area zones inside and around the safety storage cabinet



Filter technology

- Activated carbon (main filter) and broadband activated carbon (secondary filter) as absorbent filter media
- Filter housing made of reusable plastic (ABS) used filters are sustainably reprocessed after return
- In the unlikely event of a filter breach, the secondary filter provides additional safety

Exhaust air monitoring

- Permanent, electronic monitoring of the exhaust air volume
- Visual and audible alarm with potential-free alarm contact

Filter monitoring

- Permanent monitoring of the filter saturation
- 2-stage alarm: optical via the display, acoustic via warning tone and with potential-free alarm contact

Assembly, easy and safe in only 2 steps:

- Position the recirculation filter unit on the cabinet ceiling
- Plug in the mains supply
- Use the optional potential-free contact to give an alarm



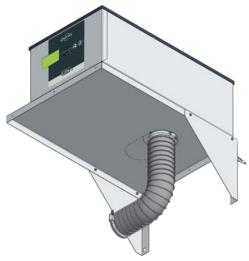




Order No. 39306



Order No. 39306 + 26885



Order No. 39306 + 23458

Please note the country-specific terms of use that are binding for you. In case of doubt, possible uses must be agreed with the competent authority.

Recirculating air filter system – avoid complex wall breakthroughs and expensive exhaust air ducts

- High flexibility in choosing the installation location
- Active personal protection through safe capture of harmful vapours with retention in the filter system
- Very low noise, only approx. 23 dB (A)
- ATEX compliant: C 🕲 II 3/-G Ex ic nA IIB T4 Gc
- Housing made of sheet-steel powder-coated
- With multi-stage filter system, secondary filter, connection cable and mains plug
- Incl. monitoring electronics for exhaust air and filter monitoring and display for status and error indication
- Key control panel for navigation of the functions and status query
- Optical and acoustic alarm including potential-free alarm contact
- Successfully tested by the certified testing institute



The plug-in recirculating air filter system, type UFA.20.30 is capable of retaining solvent vapours (hydrocarbons) permanently up to a filter saturation of more than 99.999%, under normal operating conditions as well as for a simulated accident in the safety storage cabinet.

Technical data		All models
External dimensions W x D x H	mm	308 x 555 x 256
Nominal voltage	V	85-265
Frequency	Hz	50/60
Max. current consumption	A	0.13
Noise level (approx.)	dB	23.0
Weight	kg	17
Volume flow	m³/h	10
Potential-free alarm contact Max. continuous current Max. nominal voltage AC Max. nominal voltage DC	A V V	10 230 30



Accessories	Order No.
Adapter for wall mounting	23458
Adapter as separate housing unit for lateral mounting (suitable for cabinets with depth 574 mm)	26885
New filter (activated carbon)	40202
New secondary filter	40200



Extraction modules



Extraction unit

for wall mounting, with exhaust air monitoring, CE compliant: CE
I I 3/- G Ex ic nA IIC T4, explosion-proof Order No. 8678

Technical data		HF.EA.8678
External dimensions W x D x H	mm	600 x 375 x 600
Nominal voltage	V	230
Frequency	Hz	50
Max. current consumption	Α	0.6
Noise level (approx.)	dB	39.0
Speed	rpm	2780
Weight	kg	25

Extraction module for technical ventilation of up to 4 safety storage cabinets

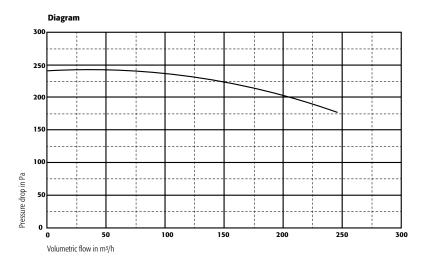
Safe capturing of escaping vapours and gases at the point where they are released or produced

- Suitable for 10 times air change
- Extraction air monitoring with integrated pressure leak detector
- Connecting fitting DN 100/140
- ATEX compliant: C€ II 3/- G Ex ic nA IIC T4
- Housing made of sheet steel powder-coated

For wall-mounting

• Including mounting kit





Model	Order No.	
Extraction unit with exhaust air monitoring for technical ventilation of up to 4 cabinets	8678	

Extraction modules -



Extraction unit

for installation on the cabinet, for tall cabinets, with exhaust air monitoring, CE compliant: C€ © II 3/- G Ex ic nA IIC T4, explosion-proof, extraction from: EX-Zone 2 / installation: outside any EX-ZONE

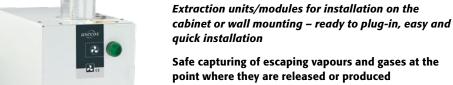
Order No. 14220



Extraction unit

for installation on the cabinet, for tall cabinets, CE compliant: C€ ® II 3/- G Ex ic nA IIC T4, explosion-proof, extraction from: EX-Zone 2 / installation: outside any EX-ZONE

Order No. 14218



- Very low noise, ideal for direct installation at the workplace
- With connection cable and power cord
- Connecting fitting DN 75
- ATEX compliant: C € II 3/-G Ex c IIC T4

With extraction air monitoring

- Integrated pressure leak detector
- The green LED turns off in case of failure and the red LED lights up

Without extraction air monitoring

• The green LED turns of in case of power failure

Potential free alarm contact

Additionally available for units with extraction air monitoring

For wall mounting

• Incl. installation bracket, flexible hose, hose clips and installation material

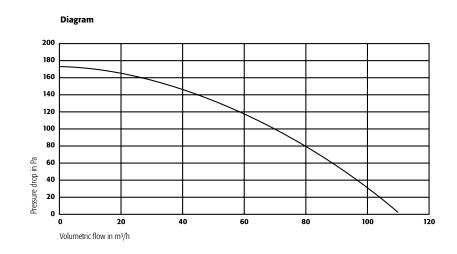
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		⊗ © ○			
	4	90			
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Technical data		All models
External dimensions W x D x H	mm	200 x 400 x 200
Nominal voltage	V	230
Frequency	Hz	50
Max. current consumption	А	0.35
Noise level (approx.)	dB	35.0
Speed	rpm	2400
Weight	kg	11

Extraction unit

For wall mounting, for under bench cabinets, with exhaust air monitoring, CE compliant: $\mathbf{C} \in \mathbb{G}$ | 1.3/- G Ex ic nA IIC T4, explosion-proof, extraction from: EX-Zone 2 / installation: outside any EX-ZONE

Order No. 24315





Extraction unit

for wall mounting, CE compliant: C € ⓑ II 3/- G Ex ic nA IIC T4, explosion-proof, extraction from: EX-Zone 2 / installation: outside any EX-ZONE

Order No. 17178

Model		Order No.
Extraction unit without exhaust air monitoring		14218
Extraction unit with exhaust air monitoring		14220
Extraction unit with exhaust air monitoring	with potential-free alarm contact	16454
Extraction unit without exhaust air monitoring		17178
Extraction unit with exhaust air monitoring for wall mounting		17177
Extraction unit with exhaust air monitoring for wall mounting	with potential-free alarm contact	18568
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets	with potential-free alarm contact	24732
Extraction unit with exhaust air monitoring for wall mounting, for under bench cabinets		24315



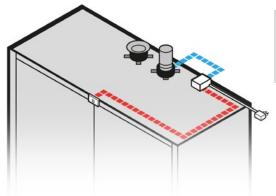
Exhaust air monitoring systems





for permanent monitoring of **safe and energy-efficient storage** of hazardous substances

- Maximum safety through permanent monitoring of the technical ventilation (explosion protection and protection of employee health)
- High energy efficiency thanks to control of extract air demand according to technical necessity
- For safety cabinets according to EN 14470-1 as well as gas cylinder cabinets according to EN 14470-2
- Can be installed ex works or retrofitted in existing safety cabinets
- Permanent detection of the exhaust air volume flow by integrated differential pressure measurement with electronic evaluation
- Visual alarm when the minimum exhaust air volume flow is not reached and when doors or pull-outs are not fully closed
- Potential-free alarm contact for central monitoring
- Battery back-up in case of power failure (optional)
- Measuring connection for targeted setting of an energy-efficient extract air volume flow rate



Technical data		SAS
Electronic housing W x D x H Nominal frequency	mm Hz	90 x 75 x 45 50/60
Nominal flow	mA	100
Exhaust air volume flow	m³/h	10-150



Exhaust air monitoring systems – quick installation for a safe and reliable monitoring of the exhaust air

- Mounting between cabinet and on-site air exhaust-system
- Electronic volume flow monitoring
- Minimum volume flow 20 m³/h
- Potential-free alarm contact
- Localisation of cabinet's or on-site dysfunction
- Digital display of the exact volume flow and acoustic alarm in case of power breakdown
- ATEX compliant: **C €** II 3/- G Ex ic nA IIC T4

Technical data		APG.26.30-EL
External dimensions W x D x H	mm	300 x 400 x 265
Max. current consumption	А	0.15
Noise level (approx.)	dB	28.0
Weight	kg	10
Min. volume flow	m³/h	20

Model	Description	Order No.
SAS for safety cabinets according to EN 14470-1	System for condition monitoring of the min. 10-fold air change with visual display, potential-free switching contact and external differential pressure measuring point	39709
SAS for under bench cabinets according to EN 14470-1	System for condition monitoring of the min. 10-fold air change with visual display, potential-free switching contact and external differential pressure measuring point	39710
SAS for gas cylinder cabinets in accordance with EN 14470-2	System for condition monitoring of the min. 10-fold air change with visual display, potential-free switching contact and external differential pressure measuring point	40174
APG.26.30-EL	Unit for volume flow monitoring with exhaust air monitoring EXCLUSIVE-LINE	14352



Fan

Order No. 5794



Fan

CE compliant: CE & II 3/_G Ex h IIB T3 Gc X, explosion-proof, extraction from: EX-Zone 2 / installation: outside any EX-ZONE, including shock absorber

Order No. 5793

Fans – powerful and safe ventilation of safety storage cabinets

- Housing and impeller made of polypropylene
- Sealed against gas emission
- Connecting fitting DN 75
- Protection class IP 55
- Air flow 60-250 m³/h
- Total pressure 240-175 Pa
- Incl. PA/GFK console

Technical data		EH.VE.5793
External dimensions W x D x H	mm	275 x 225 x 312
Nominal voltage	V	230
Frequency	Hz	50
Max. current consumption	Α	4.5
Noise level (approx.)	dB	45.0
Speed	rpm	2850
Weight	kg	4.2

Technical data		EH.VE.5794
External dimensions W x D x H	mm	335 x 225 x 312
Nominal voltage	V	3x400
Frequency	Hz	50
Max. current consumption	Α	2.9
Noise level (approx.)	dB	45.0
Speed	rpm	2760
Weight	kg	4.8



Hose clamp made from chrome steel, diameter 70—90 mm

Butterfly damper made from polyethylene, inner diameter 75 mm

Hose clamp made from chrome steel, diameter 70—90 mm

Order No. 5797



Butterfly damper made from polyethylene, inner diameter 75 mm

Order No. 5798



Flexible extraction hose made from plastic, inner diameter 75 mm

Order No. 1434



Motor protection switch suitable for fans **Order No. 5799**

5798

5797

Model	Order No.
Fan EH.VE.5793	5793
Fan EH.VE.5794	5794
Accessories	Order No.
Accessories Motor protection switch suitable for fans	Order No. 5799
Motor protection switch suitable for fans	5799



Overview

Hazardous material work stations depth 600 mm and 750 mm



GAP.095.090.060 GAP.125.090.060 GAP.095.090 GAP.125.090

from page 346



GAP.095.120.060 GAP.125.120.060 GAP.095.120 GAP.125.120

from page 348



GAP.095.150.060 GAP.125.150.060 GAP.095.150 GAP.125.150

from page 350



GAP.095.180.060 GAP.125.180.060 GAP.095.180 GAP.125.180

from page 352

Weighing work stations



GAP.125.120.WA from page 358



GAP.125.090.WA from page 358

Pharmaceutical exhaust



from page 370



APA.145.075

from page 370

Suction hoods



ASE.090.120.060 from page 372



from page 372

ASE.090.090.060



from page 372



from page 372

Are you working with hazardous materials at your workplace?

Legal requirements for employers have steadily increased in recent years and although these are tending towards **deregulation**, they do, however, confer with them a **higher degree of responsibility.**

Air is a suitable medium to move hazardous materials from one hazardous area to another such as, for example all types of filters or to areas of higher dilutions. The primary aim is, above all to protect personnel against harmful vapours.

A wide range of applications.

Along with traditional laboratories, such as those mentioned in the guidelines "Working Safely in Laboratories", (German regulations BGI 850-0), there are many other workplaces where hazardous materials are handled in some form or another. These are, for example:

• machines (for cooling, grinding, dust, chips ...)

- storage (solvents, chemicals...)
- workshops (with soldering, welding, bonding, cleaning, painting, grinding areas...)
- working with solvents (cleaning, decanting, adhesive bonding, painting)
- · or medical pathology

The following diagram provides the user and employer (at the workplace) with an overview to quickly find practical solutions to work-related issues.

Are you working with hazardous materials at your workplace?
(German regulations ArbSchG §§ 4,5,6; BetrSichV §3; ArbStättV §3)

Can the work with hazardous materials be avoided? (Risk assessment, BetrSichV, TRGS 400)

Initiate protective measures (GefStoffV §§7–10)

In addition to organizational and personal protective measures, technical procedures are the most important and efficient means for providing maximum personal protection.



- Fume cupboard according to EN 14175-3
- Hazardous material work station with volume flow monitoring, tested in accordance with EN 14175-3
- Pharmaceutical exhaust according to EN 12924 part 4: 2012
- Suction hoods without volume flow monitoring, tested in accordance with EN 14175-3
- · Spot and source extraction
- · Various bench extraction systems

Technical solutions are always preferable to organisational and personal measures!

The solutions

How does the asecos hazardous materials work station work?

The capacity of the hazardous material work station to hold pollutants in check depends to a large extent on the air speeds achieved by the device's inlet air.

Increasing the inlet air flow increases the exhaust air flow at the same time. High air speeds are needed in the area of the front opening in order to capture pollutants optimally and direct them elsewhere.

It is only this interaction that can prevent the possibility of pollutants "rebounding" from the rear wall and being pushed forwards out of the hazardous material work station.

Fresh air curtain

Thanks to the optimised exhaust air ducts, and to the use of fresh air curtains in the upper and lower parts of the front opening, the asecos hazardous material work station can satisfy the requirements described above:

- Air supply to the fresh air curtain through a powerful radial fan
- Air required is sucked in from the work area
- Fresh air transported through the aluminium frame sections jointed at corner nodes
- Excess pressure developed in the tubular frame feeds the fresh air nozzles, which point inwards at 45°
- Hazardous materials (gases, vapours or suspended solids) present or being generated in the working area are securely captured and transported back towards the
- For optimised evacuation, efficient capture of the hazardous materials through the suction slots and transfer to the exhaust air system, the hazardous material work station must always be connected to a suitable exhaust air system

Secure function

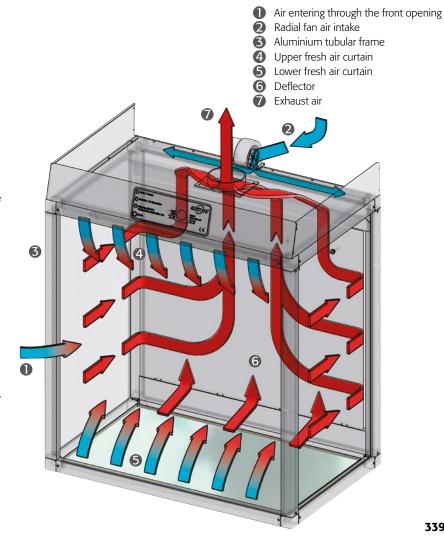
- Permanent display of the air system parameters through monitoring equipment fitted as standard
- Monitoring the air in the exhaust and supply ducts through pressure measurement
- Integrated pressure cells with adjustable nominal value, adjusted for the required (minimum) quantities

- Alarm signal (audible and visible) given if the parameters drift outside a 10% tolerance from the specified figures. The visual alarm only stops when the nominal values are reached again.
- Optional isolated alarm contact for signaling to a central control point
- Integrated back-up battery to maintain function of the monitoring unit in the event of a power failure

Secure pollutant capture

The hazardous material work station offers the user a highly efficient form of pollutant capture through blowing carefully directed fresh air curtains at the front, and through a vacuum at the rear wall.

and so guarantee the user the highest levels of safety and protection against hazardous





Ventilation testing in accordance with EN 14175 - Part 3

What does that mean?

EN 14175 consists of the following parts:

Part 1: Terms

Part 2: Requirements for safety and

capacity

Part 3: Type test methods

Part 4: On-site test procedure

Part 5: Recommendations for instal-

lation and servicing

and/or acidic load

Part 6: Exhausts with regulated volume

flow rates

Part 7: Fume cupboards for special application with high thermal load

Aim:The aim of Part 3 of the European standard EN 14175 is to specify the type testing procedure for evaluating the safety and the

airflow capacity of exhaust equipment.

In accordance with the hazardous materials regulations and the workplace regulations, hazardous vapours, gases or suspended solids that are released must be fully captured at the place where they emerge or where they are created before they can damage health or the environment.

The asecos hazardous material workplace is a highly effective way of ensuring that no vapours, gases or suspended solids involved in handling hazardous working materials (for instance when filling containers, gluing, cleaning, preparing, weighing etc.) pollute the breathable air.

This has been proven in tests that accord with EN 14175 Part 3, Type Testing Procedure for Exhausts, paragraph part 5.4.4 (Robustness of the retention capacity), if properly used they also ensure that no explosive gas-air mixtures accumulate inside the device (proven by an additional test according with DIN 12924 Part 1, Concentration of hazardous gases inside devices).

The lowest known explosion limits are around 6000 ppm (the lower explosive limit (LEL) of hydrogen). Testing in accordance with DIN 12924 Part 1 for the maximum pollutant concentration in the interior of the device defines a maximum permissible concentration of 2000 ppm of pollutant (which represents a safety factor of at least 3). In this test it has been clearly demonstrated that the maximum pollutant concentration in the asecos hazardous material workplace has not exceeded 320 ppm. This offers the user a safety level that is 20 times higher and thereby far exceeds the requirements of DIN 12924 Part 1.

All tests have been carried out by recognised and certified test institutes.

Test setup:

- In order to test the robustness of the retention capacity, nine samplers are positioned on a grid directly in front of the hazardous material workstaion in a measuring plane that is parallel to the front opening (refer also here to figure 2).
- In addition, a flat, rectangular board with a height of 1900 mm and a width of 400 mm (movable along a line parallel to the front opening) is constructed in front of the hazardous material workstation.
- When testing the robustness of the capture capacity, the board is moved back and forth at a speed of 1 m/s transverse to the front side, across the full width of the hazardous material work station.
- A mixture of sulphur hexafluoride (SF6) and nitrogen (N2) is used as a test gas, in which the proportion of SF6 by volume is 10%.

Test procedure:

 The board which is vertical and oriented at a right angle to the workplace, is moved back and forth at a speed of 1 m/s transverse the front face.

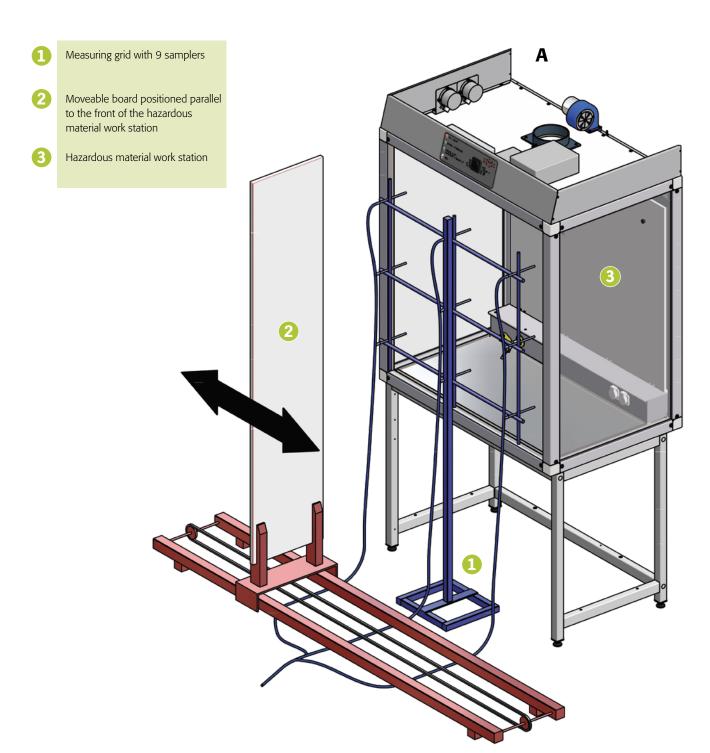
- At each side the board is moved to a point at least 600 mm beyond the total width of the workplace.
- Thirty seconds elapse between each transit.
 The concentration of test gas is measured and recorded.
- The movement of the plate is started after 60 s and six complete transits are carried out
- The gas analyser continues to measure the signal for a further 30 s.
- The test gas outlet is shut off, and the data evaluated.

All the evaluated measurements are collected and listed on the test report.

The results achieved in the tests underline the outstanding performance of the asecos hazardous material work stations.

CONCLUSION:

If the hazardous material work station is used properly, the resulting pollutant concentrations are far below the levels permitted by DIN 12924 Part 1, thus preventing the formation of explosive gas-air mixtures!











Hazardous material work stations – Real life application













1.Hazardous material work station for bonding, casting and cleaning at Endress+Hauser Flowtec, Reinach, Switzerland.

Hazardous material work station for restoring books using solvents at the City Archives, Bochum, Germany.

Hazardous material work station for investigating tissue samples at the Medical University, Innsbruck, Austria.

4.

Hazardous material work station with supply systems for the Chemical and Veterinary Investigation Institute, Rhein-Ruhr-Wupper, Krefeld, Germany. 5.

Hazardous material work station for investigating chemical samples at Bayer CropScience, Monheim, Germany.

6.

Hazardous material work station on mobile trial vehicles at the Fire Brigade, Cologne, Germany.



Hazardous material work stations with fresh air curtain

Exhaust air monitoring

- With visual and audible alarm
- Optionally included potential-free alarm contact
- Integrated on/off switch and light switch



Anti-glare lighting

- Energy-saving lamp with removable cover
- Easily accessible, easy replacement of the fluorescent tube



3 Alum

Aluminium tubular frame design

- Robust, rigid design, low weight, low floor stress
- Anodised surface, chemically resistant



Electrical sockets with earthing contact

- Splash-proof IP 54, integrated into the media duct as standard (min. 2)
- Additional sockets by request (sockets also possible without media duct)





- Optimum brightness in the hazardous material work station, transparent side panes made from 5 mm toughened safety glass
- Closed version also available as an option, special material boards coated in melamine resin



Deflector

- Easily dismantled for optimum cleaning
- Easy cleaning throughout the interior
- A transparent version of the rear wall and deflector is optionally available, ideal for placement in the middle of a room





Media duct

 Optional, for fitting a wide range of media supplies such as water, gas, compressed air etc.



Working surfaces

- Choose, according to need, from: special material board coated in melamine resin, 1.4301 stainless steel or technical ceramic (high resistance to many acids and alkalis)
- Also available without a working surface, ideal for mounting on existing working surfaces





Support frames

- Can be chosen for standing or sitting work
- Strong tubular frame design, material strength 4 mm, light grey powder-coated (similar to RAL 7035)
- Height can be set by means of adjustable feet, covers optionally available



Perfectly complemented with type 90 safety storage under bench cabinets

 Safely store and dispose of required hazardous materials directly at the point of use







GAP-LINE | width 90 cm





Model GAP.095.090

Model GAP.125.090

OUR HAZARDOUS SAFETY STORAGE **UNDER BENCH CABINETS**

... can be found on the pages of the chapter **UB-LINE** in this catalogue.



PLINTH VERSIONS

Complete depth of the work surface is usable as no media duct is necessary, media supplies and shockproof sockets are installed in the plinth, serial made from FP, optionally available in aluminium.









Choose, according to need, from: special material board coated in melamine resin, 1.4301 stainless-steel or technical ceramic

Basic model*	W x D x H (mm)	Nominal volume flow (m3/h)	Exhaust air spigot	Pressure drop in Pa	Order No.	
GAP.095.090.060	900 x 600 x 1100	370	1	52	32786	
GAP.125.090.060	900 x 600 x 1400	500	1	96	32798	
GAP.095.090	900 x 750 x 1100	370	1	52	32785	
GAP.125.090	900 x 750 x 1400	500	1	96	32797	

Package article based on	with the following components	Order No.
GAP.095.090.060		32786-901
	working surface (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	
GAP.125.090.060		32798-901
	working surface (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	
GAP.095.090		32785-902
	working surface incl. sink no. 9 (200 x 400 x 170 - L x W x H in mm) and 1 1/2" outlet (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	
GAP.095.090		32785-901
	working surface (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	
AP.125.090		32797-902
	working surface incl. sink no. 9 (200 x 400 x 170 - L x W x H in mm) and 1 1/2" outlet (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	
AP.125.090		32797-901
	working surface (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	

Hazardous material work station

Basic model*	Order No.
GAP.095.090.060	32786
GAP.125.090.060	32798
GAP.095.090	32785
GAP.125.090	32797

 $[\]begin{tabular}{ll} * basic model = without any further option, only for installation on existing working surfaces. \end{tabular}$

GAP.095.090.060

Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32409
Working surface	stainless steel brush-finished	790 x 490	32826
Working surface	ceramic	790 x 490 x 8	32836
Working surface	panel melamine resin-coated RAL 7035	790 x 490 x 10	32064
Aluminium base	aluminium anodised		32853
Media duct with working surface with 2 sockets	aluminium / stainless steel		16478
Media duct with working surface with 2 sockets	aluminium / ceramic		16479
Support frame for seated activities	powder-coated steel RAL 7035	900 x 555 x 685	32867
Support frame for standing activities	powder-coated steel RAL 7035	900 x 555 x 865	32864
Support frame for standing activities with cover; for cabinet width 59 cm	steel powder-coated / panel melamine resin-coated RAL 7035	900 x 555 x 865	32880

GAP.125.090.060

Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32892
Working surface	stainless steel brush-finished	790 x 490	32826
Working surface	ceramic	790 x 490 x 8	32836
Working surface	panel melamine resin-coated RAL 7035	790 x 490 x 10	32064
Aluminium base	aluminium anodised		32853
Media duct with working surface with 2 sockets	aluminium / stainless steel		16478
Media duct with working surface with 2 sockets	aluminium / ceramic		16479
Support frame for seated activities	powder-coated steel RAL 7035	900 x 555 x 685	32867
Support frame for standing activities	powder-coated steel RAL 7035	900 x 555 x 865	32864
Support frame for standing activities with cover; for cabinet width 59 cm	steel powder-coated / panel melamine resin-coated RAL 7035	900 x 555 x 865	32880

GAP.095.090

uni 10301030			
Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32409
Working surface	stainless steel brush-finished	790 x 640	32830
Working surface	ceramic	790 x 640 x 8	32840
Working surface	panel melamine resin-coated RAL 7035	790 x 640 x 10	32822
Aluminium base	aluminium anodised		32853
Media duct with working surface with 2 sockets	aluminium / stainless steel		16334
Media duct with working surface with 2 sockets	aluminium / ceramic		16335
Support frame for seated activities	powder-coated steel RAL 7035	900 x 625 x 685	32861
Support frame for standing activities	powder-coated steel RAL 7035	900 x 625 x 865	32860
Support frame for standing activities with cover; for cabinet width 59 cm	steel powder-coated / panel melamine resin-coated RAL 703	5 900 x 625 x 865	32871

GAP.125.090

Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32892
Working surface	stainless steel brush-finished	790 x 640	32830
Working surface	ceramic	790 x 640 x 8	32840
Working surface	panel melamine resin-coated RAL 7035	790 x 640 x 10	32822
Aluminium base	aluminium anodised		32853
Media duct with working surface with 2 sockets	aluminium / stainless steel		16334
Media duct with working surface with 2 sockets	aluminium / ceramic		16335
Support frame for seated activities	powder-coated steel RAL 7035	900 x 625 x 685	32861
Support frame for standing activities	powder-coated steel RAL 7035	900 x 625 x 865	32860
Support frame for standing activities with cover; for cabinet width 59 cm	steel powder-coated / panel melamine resin-coated RAL 7035	900 x 625 x 865	32871

All models

Accessories	Equipment	Information	Order No.
media supply	water with stop valve	integrated in base or media slot	32889
media supply	compressed air with stop valve	integrated in base or media slot	32885
media supply	butane with stop valve	integrated in base or media slot	32886
media supply	industrial compressed air outlet	integrated in base or media slot	32884
media supply	water with stop valve	integrated in media duct	25417
media supply	compressed air with stop valve	integrated in media duct	25419
media supply	butane with stop valve	integrated in media duct	25418
media supply	industrial compressed air outlet	integrated in media duct	24268
socket(s)	1 pair 230 V, IP54, up to 16A	integrated in media duct or media slot	32850
socket(s)	surface-mounted sockets 1 pair 230 V, IP44, up to 16A	integrated in base	32256
earthing link	of the work surface (stainless steel)	mounted in the profile	32851
electrical component	potential-free alarm contact with fitting plug		32846
electrical component	potential-free switching contact "operation"		32847

PLEASE NOTE: For technical data and technical drawings of hazardous materials work stations see page 354



GAP-LINE | width 120 cm-



Model GAP.095.120.060

(under bench cabinet and support frame cover optional)



Model GAP.125.120.060

ARE YOU LOOKING FOR A SUITABLE HAZARDOUS MATERIALS WORKSTATION?

Our optimised online product configurator helps you, step by step, to find the suitable product.







Basic model*	W x D x H (mm)	Nominal volume flow (m3/h)	Exhaust air spigot	Pressure drop in Pa	Order No.
GAP.095.120.060	1200 x 600 x 1100	510	1	99	32788
GAP.125.120.060	1200 x 600 x 1400	690	1	185	32802
GAP.095.120	1200 x 750 x 1100	510	1	99	32787
GAP.125.120	1200 x 750 x 1400	690	1	185	32801

GAP.095.120.060 working surface (stainless steel brush-finished) aluminium base (aluminium anodised) support frame for standing activities (steel powder-coated) earthing link mounted in the profile	32788-901 32802-901
aluminium base (aluminium anodised) support frame for standing activities (steel powder-coated)	32802-901
support frame for standing activities (steel powder-coated)	32802-901
	32802-901
earthing link mounted in the profile	32802-901
	32802-901
AP.125.120.060	
working surface (stainless steel brush-finished)	
aluminium base (aluminium anodised)	
support frame for standing activities (steel powder-coated)	
earthing link mounted in the profile	
SAP.095.120	32787-901
working surface (stainless steel brush-finished)	
earthing link mounted in the profile	
aluminium base (aluminium anodised)	
support frame for standing activities (steel powder-coated)	
AP.095.120	32787-902
working surface incl. sink no. 9 (200 x 400 x 170 – L x W x H in mm) and 1 1/2" outlet (stainless s	steel brush-finished)
aluminium base (aluminium anodised)	
support frame for standing activities (steel powder-coated)	
earthing link mounted in the profile	
SAP125.120	32801-901
working surface (stainless steel brush-finished)	
aluminium base (aluminium anodised)	
support frame for standing activities (steel powder-coated)	
earthing link mounted in the profile	
tAP.125.120	32801-902
working surface incl. sink no. 9 (200 x 400 x 170 – L x W x H in mm) and 1 1/2" outlet (stainless s	steel brush-finished)
aluminium base (aluminium anodised)	
support frame for standing activities (steel powder-coated)	
earthing link mounted in the profile	

Hazardous material work station

Basic model*	Order No.
GAP.095.120.060	32788
GAP.125.120.060	32802
GAP.095.120	32787
GAP.125.120	32801

 $[\]begin{tabular}{ll} * basic model = without any further option, only for installation on existing working surfaces. \end{tabular}$

GAP.095.120.060

Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32890
Working surface	stainless steel brush-finished	1090 x 490	32827
Working surface	ceramic	1090 x 490 x 8	32837
Working surface	panel melamine resin-coated RAL 7035	1090 x 490 x 10	32819
Aluminium base	aluminium anodised		32854
Media duct with working surface with 2 sockets	aluminium / stainless steel		16153
Media duct with working surface with 2 sockets	aluminium / ceramic		16482
Support frame for seated activities	powder-coated steel RAL 7035	1200 x 555 x 685	32868
Support frame for standing activities	powder-coated steel RAL 7035	1200 x 555 x 865	32863
Support frame for standing activities with cover; for cabinet width 110 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1200 x 555 x 865	32879

GAP.125.120.060

Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32893
Working surface	stainless steel brush-finished	1090 x 490	32827
Working surface	ceramic	1090 x 490 x 8	32837
Working surface	panel melamine resin-coated RAL 7035	1090 x 490 x 10	32819
Aluminium base	aluminium anodised		32854
Media duct with working surface with 2 sockets	aluminium / stainless steel		16153
Media duct with working surface with 2 sockets	aluminium / ceramic		16482
Support frame for seated activities	powder-coated steel RAL 7035	1200 x 555 x 685	32868
Support frame for standing activities	powder-coated steel RAL 7035	1200 x 555 x 865	32863
Support frame for standing activities with cover; for cabinet width 110 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1200 x 555 x 865	32879

GAP.095.120

Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32890
Working surface	stainless steel brush-finished	1090 x 640	32831
Working surface	ceramic	1090 x 640 x 8	32841
Working surface	panel melamine resin-coated RAL 7035	1090 x 640 x 10	32823
Aluminium base	aluminium anodised		32854
Media duct with working surface with 2 sockets	aluminium / stainless steel		15938
Media duct with working surface with 2 sockets	aluminium / ceramic		15937
Support frame for seated activities	powder-coated steel RAL 7035	1200 x 625 x 685	32255
Support frame for standing activities	powder-coated steel RAL 7035	1200 x 625 x 865	32857
Support frame for standing activities with cover; for cabinet width 59 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1200 x 625 x 865	32875
Support frame for standing activities with cover; for cabinet width 89 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1200 x 625 x 865	32876
Support frame for standing activities with cover; for cabinet width 110 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1200 x 625 x 865	32873

GAP.125.120

GAP.125.120			
Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32893
Working surface	stainless steel brush-finished	1090 x 640	32831
Working surface	ceramic	1090 x 640 x 8	32841
Working surface	panel melamine resin-coated RAL 7035	1090 x 640 x 10	32823
Aluminium base	aluminium anodised		32854
Media duct with working surface with 2 sockets	aluminium / stainless steel		15938
Media duct with working surface with 2 sockets	aluminium / ceramic		15937
Support frame for seated activities	powder-coated steel RAL 7035	1200 x 625 x 685	32255
Support frame for standing activities	powder-coated steel RAL 7035	1200 x 625 x 865	32857
Support frame for standing activities with cover; for cabinet width 59 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1200 x 625 x 865	32875
Support frame for standing activities with cover; for cabinet width 89 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1200 x 625 x 865	32876
Support frame for standing activities with cover; for cabinet width 110 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1200 x 625 x 865	32873

All models

All models			
Accessories	Equipment	Information	Order No.
media supply	water with stop valve	integrated in base or media slot	32889
media supply	compressed air with stop valve	integrated in base or media slot	32885
media supply	butane with stop valve	integrated in base or media slot	32886
media supply	industrial compressed air outlet	integrated in base or media slot	32884
media supply	water with stop valve	integrated in media duct	25417
media supply	compressed air with stop valve	integrated in media duct	25419
media supply	butane with stop valve	integrated in media duct	25418
media supply	industrial compressed air outlet	integrated in media duct	24268
socket(s)	1 piece 400V, IP 44, up to 16A	integrated in media duct or media slot	32848
socket(s)	surface-mounted sockets 1 pair 230 V, IP44, up to 16A	integrated in base	32256
earthing link	of the work surface (stainless steel)	mounted in the profile	32851
electrical component	potential-free alarm contact with fitting plug		32846
electrical component	potential-free switching contact "operation"		32847

PLEASE NOTE: For technical data and technical drawings of hazardous materials work stations see page 354



GAP-LINE | width 150 cm-



Model GAP.095.150



Model GAP.125.150 Frame optional



Our optimised online product configurator helps you, step by step, to find the suitable product.





Height adjustable due to adjustable feet +/- 15 mm, optionally available for either standing or sitting work



Dasio illoaci	W X D X II (IIIIII)	recinition volunte now (m5/m)	Extrause an opigot	r ressure arop in r a	Order No.
GAP.095.150.060	1500 x 600 x 1100	650	1	163	32790
GAP.125.150.060	1500 x 600 x 1400	890	1	305	32806
GAP.095.150	1500 x 750 x 1100	650	1	163	32789
GAP.125.150	1500 x 750 x 1400	890	1	305	32805
Package article based on	with the following components				Order No.
GAP.095.150.060					32790-901
	working surface (stainless steel brush-fin	ished)			
	aluminium base (aluminium anodised)				
	support frame for standing activities (stee	el powder-coated)			
	earthing link mounted in the profile				
GAP.125.150.060					32806-901
	working surface (stainless steel brush-fin	ished)			
	aluminium base (aluminium anodised)				
	support frame for standing activities (stee	el powder-coated)			
	earthing link mounted in the profile				
GAP.095.150					32789-901
	working surface (stainless steel brush-fin	ished)			
	aluminium base (aluminium anodised)				
	support frame for standing activities (stee	el powder-coated)			
	earthing link mounted in the profile				
GAP.125.150					32805-901
	working surface (stainless steel brush-fin	ished)			
	aluminium base (aluminium anodised)				
	support frame for standing activities (stee	el powder-coated)			
	earthing link mounted in the profile				

Nominal volume flow (m3/h) Exhaust air spigot Pressure drop in Pa Order No.

Hazardous material work station

Basic model*	Order No.
GAP.095.150.060	32790
GAP.125.150.060	32806
GAP.095.150	32789
GAP.125.150	32805

 $[\]begin{tabular}{ll} * basic model = without any further option, only for installation on existing working surfaces. \end{tabular}$

GAP.095.150.060

W. II. 1000.1201.000			
Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32895
Working surface	stainless steel brush-finished	1390 x 490	32828
Working surface version - multi-part	ceramic	1390 x 490 x 8	32838
Working surface	panel melamine resin-coated RAL 7035	1390 x 490 x 10	32821
Aluminium base	aluminium anodised		32855
Media duct with working surface with 2 sockets	aluminium / stainless steel		16487
Media duct with working surface with 2 sockets	aluminium / ceramic		16488
Support frame for seated activities	powder-coated steel RAL 7035	1500 x 555 x 685	32870
Support frame for standing activities	powder-coated steel RAL 7035	1500 x 555 x 865	32866
Support frame for standing activities with cover; for cabinet width 140 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1500 x 555 x 865	32881
Support frame for standing activities with cover; 2 pieces for cabinet width 59 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1500 x 555 x 865	32883

GAP.125.150.060

UAI:123:130:000			
Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32896
Working surface	stainless steel brush-finished	1390 x 490	32828
Working surface version - multi-part	ceramic	1390 x 490 x 8	32838
Working surface	panel melamine resin-coated RAL 7035	1390 x 490 x 10	32821
Aluminium base	aluminium anodised		32855
Media duct with working surface with 2 sockets	aluminium / stainless steel		16487
Media duct with working surface with 2 sockets	aluminium / ceramic		16488
Support frame for seated activities	powder-coated steel RAL 7035	1500 x 555 x 685	32870
Support frame for standing activities	powder-coated steel RAL 7035	1500 x 555 x 865	32866
Support frame for standing activities with cover; for cabinet width 140 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1500 x 555 x 865	32881
Support frame for standing activities with cover; 2 pieces for cabinet width 59 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1500 x 555 x 865	32883

GAP.095.150

Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32895
Working surface	stainless steel brush-finished	1390 x 640	32832
Working surface version - multi-part	ceramic	1390 x 640 x 8	32842
Working surface	panel melamine resin-coated RAL 7035	1390 x 640 x 10	32824
Aluminium base	aluminium anodised		32855
Media duct with working surface with 2 sockets	aluminium / stainless steel		15968
Media duct with working surface with 2 sockets	aluminium / ceramic		15967
Support frame for seated activities	powder-coated steel RAL 7035	1500 x 625 x 685	32862
Support frame for standing activities	powder-coated steel RAL 7035	1500 x 625 x 865	32814
Support frame for standing activities with cover; for cabinet width 110 cm	sheet steel powder-coated / panel melamine resin-coated RAL 7035	1500 x 625 x 865	32878
Support frame for standing activities with cover; for cabinet width 140 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1500 x 625 x 865	32815
Support frame for standing activities with cover; 2 pieces for cabinet width 59 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1500 x 625 x 865	32872

GAP.125.150

Material	W x D x H (mm)	Order No.
PMMA (acrylic glass)		32896
stainless steel brush-finished	1390 x 640	32832
ceramic	1390 x 640 x 8	32842
panel melamine resin-coated RAL 7035	1390 x 640 x 10	32824
aluminium anodised		32855
aluminium / stainless steel		15968
aluminium / ceramic		15967
powder-coated steel RAL 7035	1500 x 625 x 685	32862
powder-coated steel RAL 7035	1500 x 625 x 865	32814
sheet steel powder-coated / panel melamine resin-coated RAL 7035	1500 x 625 x 865	32878
steel powder-coated / panel melamine resin-coated RAL 7035	1500 x 625 x 865	32815
steel powder-coated / panel melamine resin-coated RAL 7035	1500 x 625 x 865	32872
	PMMA (acrylic glass) stainless steel brush-finished ceramic panel melamine resin-coated RAL 7035 aluminium anodised aluminium / stainless steel aluminium / ceramic powder-coated steel RAL 7035 powder-coated steel RAL 7035 sheet steel powder-coated / panel melamine resin-coated RAL 7035 steel powder-coated / panel melamine resin-coated RAL 7035	PMMA (acrylic glass) stainless steel brush-finished 1390 x 640 ceramic 1390 x 640 x 8 panel melamine resin-coated RAL 7035 1390 x 640 x 10 aluminium anodised aluminium / stainless steel aluminium / ceramic powder-coated steel RAL 7035 1500 x 625 x 685 powder-coated steel RAL 7035 1500 x 625 x 865 sheet steel powder-coated / panel melamine resin-coated

All models

All models			
Accessories	Equipment	Information	Order No.
media supply	water with stop valve	integrated in base or media slot	32889
media supply	compressed air with stop valve	integrated in base or media slot	32885
media supply	butane with stop valve	integrated in base or media slot	32886
media supply	industrial compressed air outlet	integrated in base or media slot	32884
media supply	water with stop valve	integrated in media duct	25417
media supply	compressed air with stop valve	integrated in media duct	25419
media supply	butane with stop valve	integrated in media duct	25418
media supply	industrial compressed air outlet	integrated in media duct	24268
socket(s)	1 piece 400V, IP 44, up to 16A	integrated in media duct or media slot	32848
socket(s)	surface-mounted sockets 1 pair 230 V, IP44, up to 16A	integrated in base	32256
earthing link	of the work surface (stainless steel)	mounted in the profile	32851
electrical component	potential-free alarm contact with fitting plug		32846
electrical component	potential-free switching contact "operation"		32847

 $\textbf{PLEASE NOTE:} \ \textbf{For technical data} \ \textbf{and technical drawings of hazardous} \ \textbf{materials work stations see} \ \textbf{page} \ \textbf{354}$



GAP-LINE | width 180 cm





Model GAP.125.180

Under bench cabinets and support frame cover optional

PLINTH VERSIONS

Complete depth of the work surface is usable as no media duct is necessary, media supplies and shockproof sockets are installed in the plinth, serial made from FP, optionally available in aluminium.











Basic model*	W x D x H (mm)	Nominal volume flow (m3/h)	Exhaust air spigot	Pressure drop in Pa	Order No.	
GAP.095.180.060	1800 x 600 x 1100	790	2	61	32792	
GAP.125.180.060	1800 x 600 x 1400	1080	2	114	32808	
GAP.095.180	1800 x 750 x 1100	790	2	61	32791	
GAP.125.180	1800 x 750 x 1400	1080	2	114	32807	

Package article based on	with the following components	Order No.
GAP.095.180.060		32792-901
	working surface (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	
GAP.125.180.060		32808-901
	working surface (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	
GAP.095.180		32791-901
	working surface (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	
AP.095.180		32791-902
	working surface incl. sink no. 9 (200 x 400 x 170 – L x W x H in mm) and 1 1/2" outlet (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	
AP.125.180		32807-901
	working surface (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	
AP.125.180		32807-902
	working surface incl. sink no. 9 (200 x 400 x 170 - L x W x H in mm) and 1 1/2" outlet (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	support frame for standing activities (steel powder-coated)	
	earthing link mounted in the profile	

Hazardous material work station

Basic model*	Order No.
GAP.095.180.060	32792
GAP.125.180.060	32808
GAP.095.180	32791
GAP.125.180	32807

 $[\]hbox{*-basic model = without any further option, only for installation on existing working surfaces.} \\$

GAP.095.180.060

Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32891
Working surface	stainless steel brush-finished	1690 x 490	32829
Working surface version - multi-part	ceramic	1690 x 490 x 8	32839
Working surface	panel melamine resin-coated RAL 7035	1690 x 490 x 10	32820
Aluminium base	aluminium anodised		32856
Media duct with working surface incl. 4 sockets	aluminium / stainless steel		16493
Media duct with working surface incl. 4 sockets	aluminium / ceramic		16494
Support frame for seated activities	powder-coated steel RAL 7035	1800 x 555 x 685	32869
Support frame for standing activities	powder-coated steel RAL 7035	1800 x 555 x 865	32865
Support frame for standing activities with cover; for cabinet width 140 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1800 x 555 x 865	32882

GAP.125.180.060

Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32894
Working surface	stainless steel brush-finished	1690 x 490	32829
Working surface version - multi-part	ceramic	1690 x 490 x 8	32839
Working surface	panel melamine resin-coated RAL 7035	1690 x 490 x 10	32820
Aluminium base	aluminium anodised		32856
Media duct with working surface incl. 4 sockets	aluminium / stainless steel		16493
Media duct with working surface incl. 4 sockets	aluminium / ceramic		16494
Support frame for seated activities	powder-coated steel RAL 7035	1800 x 555 x 685	32869
Support frame for standing activities	powder-coated steel RAL 7035	1800 x 555 x 865	32865
Support frame for standing activities with cover; for cabinet width 140 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1800 x 555 x 865	32882

GAP.095.180

Material	W x D x H (mm)	Order No.
PMMA (acrylic glass)		32891
stainless steel brush-finished	1690 x 640	32833
ceramic	1690 x 640 x 8	32843
panel melamine resin-coated RAL 7035	1690 x 640 x 10	32825
aluminium anodised		32856
aluminium / stainless steel		15974
aluminium / ceramic		15973
powder-coated steel RAL 7035	1800 x 625 x 685	32858
powder-coated steel RAL 7035	1800 x 625 x 865	32859
steel powder-coated / panel melamine resin-coated RAL 7035	1800 x 625 x 865	32874
	PMMA (acrylic glass) stainless steel brush-finished ceramic panel melamine resin-coated RAL 7035 aluminium anodised aluminium / stainless steel aluminium / ceramic powder-coated steel RAL 7035 powder-coated steel RAL 7035	PMMA (acrylic glass) 1690 x 640 stainless steel brush-finished 1690 x 640 x 8 ceramic 1690 x 640 x 8 panel melamine resin-coated RAL 7035 1690 x 640 x 10 aluminium anodised aluminium / stainless steel aluminium / ceramic powder-coated steel RAL 7035 1800 x 625 x 685

GAP.125.180

Interior equipment	Material	W x D x H (mm)	Order No.
Rear wall; transparent	PMMA (acrylic glass)		32894
Working surface	stainless steel brush-finished	1690 x 640	32833
Working surface version - multi-part	ceramic	1690 x 640 x 8	32843
Working surface	panel melamine resin-coated RAL 7035	1690 x 640 x 10	32825
Aluminium base	aluminium anodised		32856
Media duct with working surface incl. 4 sockets	aluminium / stainless steel		15974
Media duct with working surface incl. 4 sockets	aluminium / ceramic		15973
Support frame for seated activities	powder-coated steel RAL 7035	1800 x 625 x 685	32858
Support frame for standing activities	powder-coated steel RAL 7035	1800 x 625 x 865	32859
Support frame for standing activities with cover; for cabinet width 140 cm	steel powder-coated / panel melamine resin-coated RAL 7035	1800 x 625 x 865	32874

All models

Accessories	Equipment	Information	Order No.
media supply	water with stop valve	integrated in base or media slot	32889
media supply	compressed air with stop valve	integrated in base or media slot	32885
media supply	butane with stop valve	integrated in base or media slot	32886
media supply	industrial compressed air outlet	integrated in base or media slot	32884
media supply	water with stop valve	integrated in media duct	25417
media supply	compressed air with stop valve	integrated in media duct	25419
media supply	butane with stop valve	integrated in media duct	25418
media supply	industrial compressed air outlet	integrated in media duct	24268
socket(s)	1 piece 400V, IP 44, up to 16A	integrated in media duct or media slot	32848
socket(s)	surface-mounted sockets 1 pair 230 V, IP44, up to 16A	integrated in base	32256
earthing link	of the work surface (stainless steel)	mounted in the profile	32851
electrical component	potential-free alarm contact with fitting plug		32846
electrical component	potential-free switching contact "operation"		32847

 $\textbf{PLEASE NOTE:} \ \textbf{For technical data} \ \textbf{and technical drawings of hazardous} \ \textbf{materials work stations see} \ \textbf{page} \ \textbf{354}$



GAP-LINE | Technical data

Width 90 cm

Technical data	GAP.095.090.060	GAP.095.090	GAP.125.090.060	GAP.125.090
External dimensions (mm)				
Height (external)	1100	1100	1400	1400
Height with support frame for sitting work	1785	1785	2085	2085
Height with support frame for standing work	1965	1965	2265	2265
Width (external)	900	900	900	900
Depth (external)	600	750	600	750
Internal dimensions (mm)				
Clear height	855	855	1105	1105
Width (internal)	865	865	865	865
Depth (internal)	500	650	500	650
Usable work surface (mm)				
Width usable work surface	790	790	790	790
Depth usable work surface with media duct	380	530	380	530
Depth usable work surface	490	640	490	640
Max. charge of the working surface	3000 N/m²	3000 N/m ²	3000 N/m ²	3000 N/m ²
Work height (mm)				
Work height sitting	720	720	720	720
Work height standing	900	900	900	900
Weight (kg)				
Weight	86 kg	93 kg	96 kg	103 kg
Further information				
Point load per support	222 N	257 N	250 N	287 N
Amount of air ducts	1 piece	1 piece	1 piece	1 piece
Nominal volume flow	370 m ³ /h	370 m ³ /h	500 m ³ /h	500 m ³ /h
Differential pressure per air duct	52 Pa	52 Pa	96 Pa	96 Pa
Noise level (approx.)	32.0 dB	32.0 dB	32.0 dB	32.0 dB
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Power consump. in operation	50 W	50 W	50 W	50 W
Max. current consumption	0.5 A	0.5 A	0.5 A	0.5 A
Nominal voltage	230 V	230 V	230 V	230 V

Width 120 cm

Technical data	GAP.095.120.060	GAP.095.120	GAP.125.120.060	GAP.125.120
External dimensions (mm)				
Height (external)	1100	1100	1400	1400
Height with support frame for sitting work	1785	1785	2085	2085
Height with support frame for standing work	1965	1965	2265	2265
Width (external)	1200	1200	1200	1200
Depth (external)	600	750	600	750
Internal dimensions (mm)				
Clear height	855	855	1105	1105
Width (internal)	1165	1165	1165	1165
Depth (internal)	500	650	500	650
Usable work surface (mm)				
Width usable work surface	1090	1090	1090	1090
Depth usable work surface with media duct	380	530	380	530
Depth usable work surface	490	640	490	640
Max. charge of the working surface	3000 N/m²	3000 N/m ²	3000 N/m ²	3000 N/m ²
Work height (mm)				
Work height sitting	720	720	720	720
Work height standing	900	900	900	900
Weight (kg)				
Weight	95 kg	103 kg	106 kg	114 kg
Further information				
Point load per support	260 N	295 N	290 N	325 N
Amount of air ducts	1 piece	1 piece	1 piece	1 piece
Nominal volume flow	510 m³/h	510 m³/h	690 m³/h	690 m³/h
Differential pressure per air duct	99 Pa	99 Pa	185 Pa	185 Pa
Noise level (approx.)	32.0 dB	32.0 dB	32.0 dB	32.0 dB
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Power consump. in operation	60 W	60 W	60 W	60 W
Max. current consumption	0.5 A	0.5 A	0.5 A	0.5 A
Nominal voltage	230 V	230 V	230 V	230 V

Width 150 cm

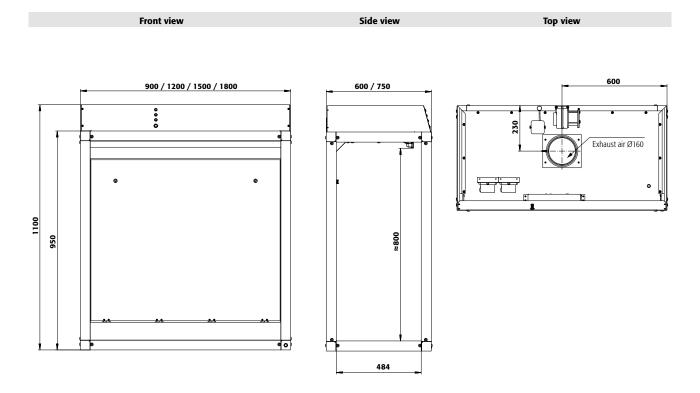
Technical data	GAP.095.150.060	GAP.095.150	GAP.125.150.060	GAP.125.150
External dimensions (mm)				
Height (external)	1100	1100	1400	1400
Height with support frame for sitting work	1785	1785	2085	2085
Height with support frame for standing work	1965	1965	2265	2265
Width (external)	1500	1500	1500	1500
Depth (external)	600	750	600	750
Internal dimensions (mm)				
Clear height	855	855	1105	1105
Width (internal)	1465	1465	1465	1465
Depth (internal)	500	650	500	650
Usable work surface (mm)				
Width usable work surface	1390	1390	1390	1390
Depth usable work surface with media duct	380	530	380	530
Depth usable work surface	490	640	490	640
Max. charge of the working surface	3000 N/m ²	3000 N/m ²	3000 N/m ²	3000 N/m ²
Work height (mm)				
Work height sitting	720	720	720	720
Work height standing	900	900	900	900
Weight (kg)				
Weight	118 kg	126 kg	131 kg	139 kg
Further information				
Point load per support	298 N	336 N	328 N	363 N
Amount of air ducts	1 piece	1 piece	1 piece	1 piece
Nominal volume flow	650 m³/h	650 m³/h	890 m³/h	890 m³/h
Differential pressure per air duct	163 Pa	163 Pa	305 Pa	305 Pa
Noise level (approx.)	32.0 dB	35.0 dB	32.0 dB	32.0 dB
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Power consump. in operation	65 W	70 W	65 W	65 W
Max. current consumption	0.5 A	0.5 A	0.5 A	0.5 A
Nominal voltage	230 V	230 V	230 V	230 V

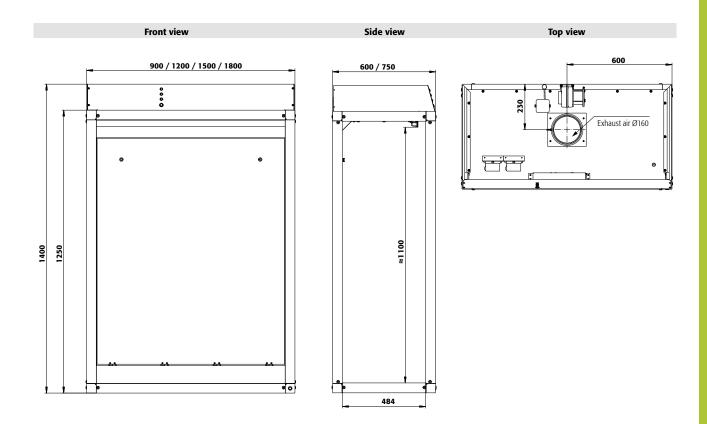
Width 180 cm

Technical data	GAP.095.180.060	GAP.095.180	GAP.125.180.060	GAP.125.180
External dimensions (mm)				
Height (external)	1100	1100	1400	1400
Height with support frame for sitting work	1785	1785	2085	2085
Height with support frame for standing work	1965	1965	2265	2265
Width (external)	1800	1800	1800	1800
Depth (external)	600	750	600	750
Internal dimensions (mm)				
Clear height	855	855	1105	1105
Width (internal)	1765	1765	1765	1765
Depth (internal)	500	650	500	650
Usable work surface (mm)				
Width usable work surface	1690	1690	1690	1690
Depth usable work surface with media duct	380	530	380	530
Depth usable work surface	490	640	490	640
Max. charge of the working surface	3000 N/m²	3000 N/m ²	3000 N/m ²	3000 N/m ²
Work height (mm)				
Work height sitting	720	720	720	720
Work height standing	900	900	900	900
Weight (kg)				
Weight	127 kg	136 kg	141 kg	150 kg
Further information				
Point load per support	336 N	371 N	366 N	401 N
Amount of air ducts	2 piece	2 piece	2 piece	2 piece
Nominal volume flow	790 m³/h	790 m³/h	1080 m³/h	1080 m³/h
Differential pressure per air duct	61 Pa	61 Pa	114 Pa	114 Pa
Noise level (approx.)	36.0 dB	36.0 dB	35.0 dB	35.0 dB
requency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Power consump. in operation	70 W	70 W	70 W	70 W
Max. current consumption	0.5 A	0.5 A	0.5 A	0.5 A
Nominal voltage	230 V	230 V	230 V	230 V



GAP-LINE | Technical data







GAP-LINE | Weighing work stations



Model GAP.125.120.WA



Weighing work stations with testing of the air equipment according to EN 14175-3 (5.4.4)

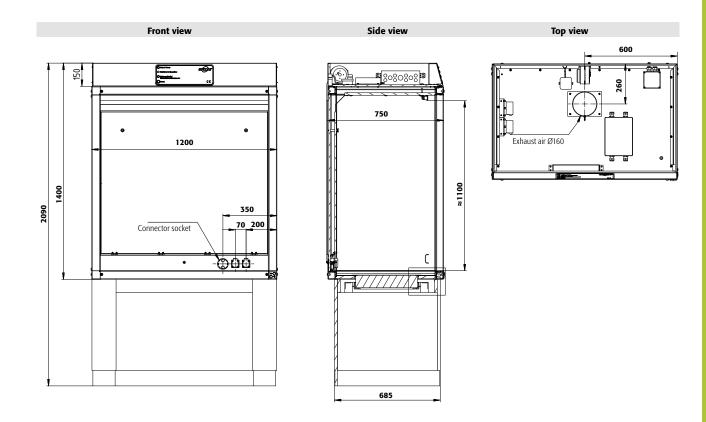
Function / construction:

- Robust construction made of chemically resistant, anodised aluminium profiles
- Weighed materials are not scattered by the fresh air curtain at the front
- Vibration-free facility for mounting the analytical scales on a granite block decoupled from the hazardous material work station
- Usable for analytical scales with a measuring range of up to 0,00001 g
- Highly effective capturing of hazardous materials inside the work station through special fresh air curtain technology
- Prepared for connection to the on-site exhaust air system and for electrical supply (230 V/50 Hz)

Standard equipment

- Working surface with cutout 400x400mm (stainless steel brush-finished)
- Support frame as weighing rack with granite block for seated activities (panel melamine resin-coated)
- Aluminium base (aluminium anodised)
- Socket(s) 1 pair 230 V, IP54, up to 16A integrated in media duct or media slot
- Electrical component preinstalled outlet with cable duct integrated in media duct or media slot
- Earthing link mounted in the profile

Model	with the following components	Order No.
GAP.125.090.WA		32800-901
	working surface with cutout 400x400mm (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	electrical component preinstalled outlet with cable duct integrated in media duct or media slot	
	socket(s) 1 pair 230 V, IP54, up to 16A integrated in media duct or media slot	
	support frame as weighing rack with granite block for seated activities (panel melamine resin-coated)	
	earthing link mounted in the profile	
GAP.125.120.WA		32804-901
	working surface with cutout 400x400mm (stainless steel brush-finished)	
	aluminium base (aluminium anodised)	
	socket(s) 1 pair 230 V, IP54, up to 16A integrated in media duct or media slot	
	electrical component preinstalled outlet with cable duct integrated in media duct or media slot	
	support frame as weighing rack with granite block for seated activities (panel melamine resin-coated)	
	earthing link mounted in the profile	



Technical data	GAP.125.090.WA	GAP.125.120.WA
External dimensions (mm)		
Height (external)	1400.00	1400.00
Height with support frame for sitting work	2090.00	2090.00
Height with support frame for standing work		
Width (external)	900.00	1200.00
Depth (external)	750.00	750.00
Internal dimensions (mm)		
Clear height	1105.00	1105.00
Width (internal)	865.00	1165.00
Depth (internal)	650.00	650.00
Usable work surface (mm)		
Width usable work surface	790	1090
Depth usable work surface with media duct		
Depth usable work surface	640	640
Max. charge of the working surface	2850 N/m ²	2850 N/m²
Work height (mm)		
Work height sitting	725	725
Work height standing		
Weight (kg)		
Weight	103 kg	114 kg
Further information		
Point load per support	287 N	325 N
Amount of air ducts	1 piece	1 piece
Nominal volume flow	500 m³/h	690 m³/h
Differential pressure per air duct	96 Pa	185 Pa
Noise level (approx.)	32.0 dB	32.0 dB
Frequency	50/60 Hz	50/60 Hz
Power consump. in operation	50 W	60 W
Max. current consumption	0.5 A	0.5 A
Nominal voltage	230 V	230 V





GAP-LINE | Fans-

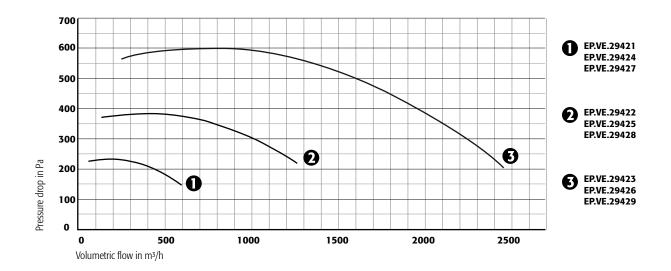




Fan CE compliant: C€ © II 3/3G Ex h IIB T4 Gc X, explosion-proof Order No. 33564

Radial fans – safe technical ventilation of hazardous material work stations in accordance with regulations

- Impeller and housing made of PPS
- CE compliant
- Protection class IP 55
- Incl. mounting bracket with shock absorber
- Also available as explosion protected version



Technical data	EP.VE.29421	EP.VE.29422	EP.VE.29423	EP.VE.29424 /29427	EP.VE.29425 /29428	EP.VE.29426 /29429
External dimensions W x D x H	360 x 350 x 430	420 x 440 x 540	530 x 540 x 670	360 x 350 x 430	420 x 440 x 540	530 x 540 x 670
Nominal voltage	400	400	400	400	400	400
Frequency	50/60	50/60	50/60	50/60	50/60	50/60
Max. current consumption	0.65	1.1	2.2	0.47	1.1	2.25
Noise level (approx.)	41.0	49.0	56.0	41.0	49.0	56.0
Weight	6.708	18.012	21.011	10	11	21.811
Max. volume flow	600	1200	2500	600	1200	2500
Min. volume flow	250	350	750	250	350	750

Model		Order No.
EP.VE.29421		33561
EP.VE.29422		33562
EP.VE.29423		33563
EP.VE.29424	for explosive area II	33564
EP.VE.29425	for explosive area II	33565
EP.VE.29426	for explosive area II	33566
EP.VE.29427	for expolsive area I	33567
EP.VE.29428	for expolsive area I	33568
EP.VE.29429	for expolsive area I	33569

Accessories	Order No.
Current limit circuit-breaker; for radial fan EP.VE.29421 / 29424 / 29427	32845
Current limit circuit-breaker; for radial fan EH.VE.8680, EPVE.29425 / 29428	32849
Current limit circuit-breaker; for fans EP.VE.29426 / 29429 / 29423	33826





Customised solutions when working with hazardous materials

The preceding pages have shown that a wide variety of work procedures require unique solutions when handling hazardous materials. The modular hazardous material work stations by asecos guarantee the ideal product is found quickly.

A safe decision

Do you have a quite specific application but are not sure if this can be done with an asecos hazardous material work stations? No problem — in our test and application centre in Gründau (Germany) you can test the application while totally protected by the asecos hazardous material work stations. See for yourself, and without risk, how effective our products are.

For more information simply visit us online at: **www.asecos.global**

Special requests welcome

Bushings, sinks, special connections, and various work surfaces with cutouts or balance table accessory — our experts will advise you on the many options available to personalise your specific hazardous material work station. Complete supply and waste disposal systems are also available along with asecos under bench cabinets so that hazardous material storage is thus possible directly on site.







GAP-LINE | References



Application

Hazardous material work station with special size for the production of plastic models

Company

Düker GmbH & Co. KGaA

Location

Karlstadt (Germany)

Sector

Manufacturer of fittings and pressure pipe fittings

Implemented by asecos partner

Günther Fachhandel, Bad Neustadt/Saale



Application

Hazardous material work station with safety storage under bench cabinet and front panel for the preparation of tissue samples, using for example xylene and formalin

Company

Klinikum Fulda gAG, pathology

Location

Fulda (Germany)

Sector

Hospitals

Implemented by asecos partner

Vogel GmbH & Co. KG, Gießen



Application

Hazardous material work station for bonding, sheding and cleaning

Company

Endress+Hauser Flowtec AG

Location

Reinach (Switzerland)

Sector

Electronics assembly

Implemented by asecos partner

Waldner AG

Application

Hazardous material work station with safety storage under bench cabinet for the investigation of water samples

Company

Justizvollzugsanstalt Landsberg am Lech

Location

Landsberg (Germany)

Sector

Authorities

Implemented by asecos partner

CVent



Application

Hazardous material work station for book restoration with solvents

Company

Stadt Bochum - Stadtarchiv

Location

Bochum (Germany)

Sector

Public institution

Implemented by asecos partner

B+G Balandis + Grewe GmbH, Bochum



Application

Hazardous material work station for cleaning work with flammable liquids

Company

Canberra Semiconductor

Location

Olen (Belgium)

Sector

Manufacturer electronics assembly

Implemented by asecos partner

DENIOS BV





Worktable series AT-





The ejector technology used ensures air flows from the entry to the extraction vents. The clean air curtain from the ejectors, together with the air extraction technology, ensures any harmful substances are safely captured. This effectively prevents aerosols of hazardous substances from entering the employee's breathing zone and the laboratory. The front screen can be omitted if the workplace limits are complied with, resulting in barrier-free access to the work area.

Basic equipment

- Sturdy steel frame construction (powder coated or optionally in stainless steel)
- Closed rear and side walls in steel, powder coated
- Worksurface in stainless steel, corrosion free, even under intensive use
- ✓ Strong worksurface, load capacity 150 kg
- Exhaust air connection: exhaust air fitting for connecting customer's ventilation equipment or an air extraction fan
- ✓ Air supply fan for supplying the ejector system
- ✓ Flush-fitting built-in lighting
- ✓ Accessible working area without barriers or front screen
- ✓ Switch cabinet/control system
- ✓ Design in accordance with EN 14175-3

Additional equipment

- Washing/draining basin in the worksurface, with/without additional draining board
- ✓ Media connections e.g. sockets
- ✓ Glazed side panels
- Extraction fans and air extraction monitoring
- Integrated filter technology
- ✓ Fire-rated F90 underbench cabinets
- ✓ Control flap or volume flow controller
- ✓ Stainless steel designs
- Ex proof design
- ✓ Standing area, e.g. for 205 litre drum with integral floor extraction
- ✓ Weighing plates for scales integrated into worksurface

MODEL	AT-12	AT-15	AT-18	AT-21
External dimensions* W x D x H [m]	1,20 x 0,80 x 2,45	1,50 x 0,80 x 2,45	1,80 x 0,80 x 2,45	2,10 x 0,80 x 2,45
Internal height [m]	1,00	1,00	1,00	1,00
Working area W x D [m]	1,10 x 0,75	1,40 x 0,75	1,70 x 0,75	2,00 x 0,75
Worksurface height [m]	0,90	0,90	0,90	0,90
Air extraction volume flow [m³/h]	720	900	1.080	1.260
Pressure loss [Pa]	from 150	from 150	from 150	from 150

^{*} without filter system

The dimensions in the table provide a rough guide. Your worktable is designed according to your individual specifications.

Multi-task workstations series FAP-





The ejector technology used ensures air flows from the entry to the extraction vents. The clean air curtain from the ejectors in the roof area, together with the air extraction technology, ensures any harmful substances are safely captured. The ejector technology is ideal for ventilating large multi-task workstations. The targeted blowing of air jets (ejectors) towards the extraction vents in the rear wall ensures that employees are effectively protected from vapours and dusts in the work area. Thanks to the draught-free work environment, even sensitive powders can easily be dispensed.

Basic equipment

- Sturdy steel frame construction (powder coated or in stainless
- Closed rear and side walls in steel, powder coated
- Integrated workplace lighting
- Exhaust air connection for connecting customer's ventilation equipment
- Air supply fan
- Ejector supply system
- Flush-fitting, built-in lighting
- Control system/switch cabinet

- Strip curtains at the side
- Media connections e.g. sockets
- Glazed side panels
- Extraction fans and air extraction monitoring
- Ex proof design
- Breakthrough points for media connections
- Multi-stage extraction and recirculation filter technology, integrated
- available

Additional equipment

into the rear wall to save space If required, ATEX conformity in accordance with RL 2014/34/EU is

MODEL	FAP-15	FAP-20	FAP-25	FAP-30
External dimensions* W x D x H [m]	1,60 x 2,15 to 3,60 x 2,70	2,10 x 2,15 to 3,60 x 2,70	2,60 x 2,15 to 3,60 x 2,70	3,10 x 2,15 to 3,60 x 2,70
Internal height [m]	2,20	2,20	2,20	2,20
Working area W x D [m]	1,50 x 2,00 to 3,00	2,00 x 2,00 to 3,00	2,50 x 2,00 to 3,00	3,00 x 2,00 to 3,00
Working area suface [m ²]	2,20 to 4,50	3,00 to 6,00	3,70 to 7,50	4,50 to 9,00
Air extraction volume flow [m³/h]	2.250	3.000	3.750	4.500
Pressure loss [Pa]	from 150	from 150	from 150	from 150

The dimensions in the table provide a rough guide. Your worktable is designed according to your individual specifications.



information

Please contact us by phone (+49 6051 9220-0) or by mail (info@asecos.com) - together

with our experts you will find

the appropriate solution.

Laminar Downflow booths



A laminar downflow multi-task workstation is a closed system which is designed for the control of potent and non-potent compounds, such as powders or dusts, during sampling, weighing and other manual processes. Laminar downflow workstations are mainly used in the pharmaceutical and chemical industries to protect users from the harmful substances which are created when manually handling powders or liquids.

Operation of air recirculation equipment

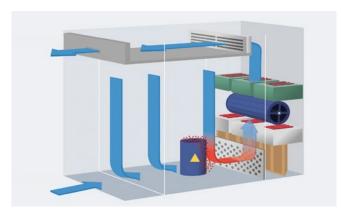
In air recirculation equipment 100% of the air is extracted through a high performance ventilation system. At the same time, an automatic volume flow controller prevents any pressure loss if filter saturation rises.

90% of the clean air is blown out evenly from the roof over the whole safety working area and all fine dust is removed at the bottom, out of the breathing area of the user.

While the dust sinks down to a certain level above the floor, extraction grids direct the dust to the rear area of the workstation.

The filter system in the rear, consisting of coarse pre-filters, fine dust and HEPA filters, filters the dust out, before the clean air is returned to the roof area.

10% of the air is directed from the filters to the outside, creating a slight underpressure. An air supply of normally 10% with a slight underpressure ensures containment. The system contains air flow regulation, motor, fans and lighting and offers easy access to the filters from the inner room.



Basic principle for user protection



Basic principle for user protection and product protection

High level of safety and ergonomics -





Typical areas of use

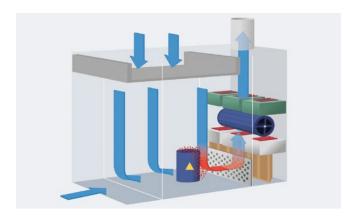
- Product dosing
- Sampling
- Split workstations
- ✓ Bulk good filling / weighing
- Reactor filling
- Product emptying
- Test equipment
- Containment workstations
- Mixing areas
- Drum filling / emptying

Operation of the air extraction system

In the air extraction system, 100 % of the air is supplied via a special, extremely powerful fan/filter system with a coarse dust pre-filter, a fine dust filter and a HEPA filter. This system creates a downward flow of clean, filtered air while directing all fine dust downward and out of the operator's breathing zone. While the dust sinks down to a certain level above the floor, high speed extraction grids direct the dust, gases or vapours to the rear area of the workstation.

The filter extraction system in the rear filters the dust out, before the air is returned to the atmosphere. The air supply of 10% to the workstation with underpressure to the external area ensures a constant underpressure at the workplace. The equipment contains instruments, air flow regulation, motor, fans and lighting and offers easy access to the maintenance filters from the inner room.

Magnehelic differential pressure gauges allow a real time display of the status of the air supply and extraction filters as well as the air supply and extraction flows. The switch cabinet contains the control system, lighting and motor, power connections and the start/stop function. The workstation is provided with safety switches for the air supply and extraction equipment as well as an alarm indicator.



Basic principle for user protection

Special equipment

- ✓ Fully automatic air flow regulation
- Extraction, fine dust and HEPA filters in safe-change filter housings for safe filter replacement
- ✓ Air supply with heating/cooling elements
- Electrical components meet ATEX Directives for potentially explosive areas
- ✓ If required, ATEX conformity in accordance with RL 2014/34/EU is available



Customised sizes and equipment upon request.



Pharmaceutical exhausts



Model APA.145.090 Order No. 31834



Pharmaceutical exhausts according to DIN 12924 Part 4: 2012

Function / construction:

- Safe handling of chemicals, protection from hazardous vapours and potentially explosive atmospheres
- Easily mounted on a table top
- Robust construction made of chemically resistant, antibacterial powder-coated sheet steel
- Testing of the air equipment by recognized test institute

Standard equipment

- Exhaust air fan
- Monitoring electronics with visual and audible alarm
- Workplace light
- Steplessly height adjustable front sash made from acrylic glass
- 2 sockets

Accessories

Ventilation set 1:

- 1 m flexible hose DN 100
- 2 hose clamps
- 1 wall bushing

Ventilation set 2:

7,5 m flexible hose DN 125

2 hose clamps

1 wall bushing

1 reducing adapter DN 100/125

Ventilation set 3:

1 fan DN 150

2 reducing adapters DN 150/125

7,5 m flexible hose DN 125

2 hose clamps

6 drilling screws 4,2 x 16

Model	W x D x H (mm)	Order No.
APA.145.075	750 x 600 x 1460	31833
APA.145.090	900 x 600 x 1460	31834

APA.145.075

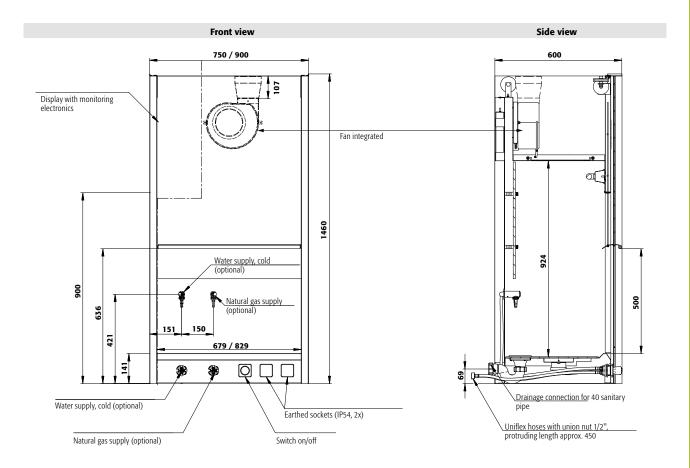
Accessories	Order No.
Support frame (laboratory table), height adjustable from 740 to 770 mm	33188
Media supply	33197
Media supply	33195
Media supply	33193

APA.145.090

Accessories	Order No.
Support frame (laboratory table), height adjustable from 740 to 770 mm	33187
Media supply	33198
Media supply	33196
Media supply	33194

All models

Accessories	Order No.
Ventilation set 1: ventilation accessories, ø100 mm, 1 m hose	33189
Ventilation set 2: ventilation accessories, ø125 mm, 7,5 m hose	33190
Ventilation set 3: support fan, ø125 mm, 7,5 m hose	33191



Technical data	APA.145.075	APA.145.090
External dimensions (mm)		
Height (external)	1460	1460
Width (external)	750	900
Depth (external)	600	600
Internal dimensions (mm)		
Clear height	924	924
Width (internal)	740	890
Depth (internal)	440	440
Usable work surface (mm)		
Width usable work surface	745	895
Depth usable work surface	440	440
Weight (kg)		
Weight	91	100
Further information		
Amount of air ducts	1 piece	1 piece
Nominal volume flow	330 m³/h	330 m³/h
Differential pressure per air duct	315 Pa	315 Pa
Frequency	50/60 Hz	50/60 Hz
Power consump. in operation	160 W	160 W
Power consump. in standby mode	0,5 W	0,5 W
Nominal voltage	230 V	230 V



Suction hoods

Suction hoods — safe working with open containers or other sources of harmful substances/vapours



Robust, user-friendly and safe

- Robust construction made of chemically resistant, anodised aluminium profiles
- Fracture-resistant acrylic glass, 5 mm

Ventilation

- Quickly put into operation
- Connecting hood (DN 160) in the ceiling for connection to the on-site exhaust air system

Certified safety

- Ventilation testing of the air equipment in accordance with EN 14175-3 (5.4.4)
- The prescribed specified workplace limit values are maintained







Model ASE.090.120.060 Order No. 16556



Model ASE.050.060.040 Order No. 16553

Suction hoods — safe working with open containers or other sources of harmful substances/vapours

Function / construction:

- Ventilation testing of the air equipment in accordance with EN 14175-3 (5.4.4)
- The prescribed specified workplace limit values are maintained
- Ideal for assembly on an existing workplace
- Robust construction made of chemically resistant, anodised aluminium profiles
- Fracture-resistant acrylic glass, 5 mm
- Mounting on an on-site air exhaust system
- Connecting pieces (DN 160) in the ceiling for connection to the on-site exhaust air system
- The air speed should be 0,3 m/s

Technical data		ASE.050.060.040	ASE.050.090.040
External dimensions W x D x H	mm	600 x 400 x 500	900 x 400 x 500
Differential pressure per air duct	Pa	45	64
Nominal volume flow	m³/h	250	300

Technical data		ASE.090.090.060	ASE.090.120.060
External dimensions W x D x H mm		900 x 600 x 900	1200 x 600 x 900
Differential pressure per air duct Pa		93	208
Nominal volume flow m ³ /	5/h	360	540

Model	W x H (mm) front opening	Order No.
ASE.050.060.040	484 x 437	16553
ASE.050.090.040	600 x 437	16554
ASE.090.090.060	600 x 542	16555
ASE.090.120.060	900 x 542	16556



Source extractions | Industry



Source extractions for use in industry – Reliable pollutant detection at the source

Extraction arm for industrial environment

Extremely easy to manoeuvre and very stable in position even when the arm is fully extended. The dead weight of the extraction arm is balanced by a gas pressure spring mounted on the outside. The extraction hood can be angled 90° in all directions and the wall bracket also offers a 360° swivel function. The extractor is supplied as standard with a manual air damper and a hose made of fire-retardant PVC.

- Steel fasteners with dark grey powder-coating
- Joints made of PA and PP in anthracite
- Aluminum tubes with dark blue powder-coating
- Hose in dark blue PVC-coated polyamide fabric

Optional accessories:

 Conical hood made of sheet steel, anthracite grey powdercoating

Source extraction for industry

for welding work, with high demands on easy mobility and effective extraction, hose made of PVC, pipe made of steel sheet, powder-coated, 3290 x 100 mm

Order no. 10169



Source extraction for welding work	Length (mm)	Diameter (mm)	Order No.
PVC Hose Dark Blue, Pipe made of sheet steel powder-coated	3000	200	10166
PVC Hose Dark Blue, Pipe made of sheet steel powder-coated	3000	160	10167
PVC Hose Dark Blue, Pipe made of sheet steel powder-coated	3000	125	12868
Telescopic suction arms	Length (mm)	Diameter (mm)	Order No.
PVC Hose Dark Blue, Pipe made of sheet steel powder-coated	1300-2100	125	10169
Accessories	Material	Diameter (mm)	Order No.
Suction hood conical shape	sheet steel powder-coated	199	10182
Suction hood conical shape	sheet steel powder-coated	122	10183

aluminium powder-coated

Suction hood conical shape



Source extractions for use in industry – Reliable pollutant detection at the source

For wall mounting

- Externally mounted supporting arms natural, straight course of the exhaust air
- Low pressure drop, effective extraction
- Integrated throttle valve
- Suction nozzle with swivel joint function (360° rotatable, 90° bendable)
- Gas spring for balancing the dead weight
- Extremely light and position-stable
- Easy assembly on-site

Options:

 Source extraction is also available with LED lighting and/or switch to control fan/throttle

Source extraction for industry for universal use, hose made of PVC, dimensions 2000 x 100 mm $\,$ Order no. 10170 $\,$



Source extraction universal	Length (mm)	Diameter (mm)	Order No.	
For wall mounting as hose with special bonnet	2000	100	10170	
For wall mounting as hose with special bonnet	2000	125	10171	
For wall mounting as hose with special bonnet	2000	160	10172	
For wall mounting as hose with special bonnet	3000	100	10173	
For wall mounting as hose with special bonnet	3000	125	10174	
For wall mounting as hose with special bonnet	3000	160	10175	

Accessories	Order No.
Lighting LED	38638
Push button	38639
Lighting LED and push-button for on-site exhaust air system	38640



Source extractions | Laboratory



Source extractions for the laboratory for direct table installation, dome-shaped hood optional Order no. 10147



Universal use

- For wall, ceiling or table installation
- Friction joints made of PP with ball-bearing and guide rings
- Extremely light
- stable position due to supporting springs
- High flexibility
- Easy internal cleaning
- Standard with sealed throttle
- Easy assembly on-site



Source extractions for the laboratory for wall or ceiling mounting, bracket and flat hood optional Order no. 10149

Source extraction for table installation	Diameter (mm)	Length (mm)	Order No.
Pipe made of aluminium anodised	75	1000	10147
Pipe made of aluminium anodised	75	1300	10148
Accessories			Order No.
Table clamp			10156
Source extraction for wall/ceiling mounting	Diameter (mm)	Length (mm)	Order No.
Pipe made of aluminium anodised	75	1000	10149
Pipe made of aluminium anodised	75	1500	10150
Accessories	Material	Length (mm)	Order No.
Celling bracket	aluminium anodised	250	10151
Ceiling bracket	aluminium anodised	500	10152
Ceiling bracket	aluminium anodised	750	10153
Ceiling bracket	aluminium anodised	1000	10154
Wall bracket	aluminium anodised	270	10155
Accessories for all models	Material	Diameter (mm)	Order No.
Suction hood - version dome-shaped hood	PMMA (acrylic glass)	Ø 350 mm	10176
Suction hood - version metal hood	aluminium powder-coated	Ø 250 mm	10177
Suction hood - version flat hood	PMMA (acrylic glass)	Length 300 mm	10178
Pine made of aluminium		Ø 75 mm	23985



Source extractions for the laboratory with wall bracket and flat hood optional Order no. 10157



Source extractions for the laboratory with ceiling bracket optional Order no. 10158

With telescopic function

- For wall and ceiling mounting
- Especially for laboratory work benches
- Natural course of the exhaust air
- Suitable for workplaces with demands for less pressure drops
- Joints can be adjusted from outside
- Extremely light
- High position stability and movability
- Suction nozzle with swivel joint function (360° rotatable)
- Pipe diameter: 75 mm, exhaust air connection: Ø 125 mm



Source extraction for wall/ceiling mounting	Diameter (mm)	Length (mm)	Order No.	
Pipe made of aluminium anodised	75	800-1000 mm	10157	
Pipe made of aluminium anodised	75	1000-1500 mm	10158	

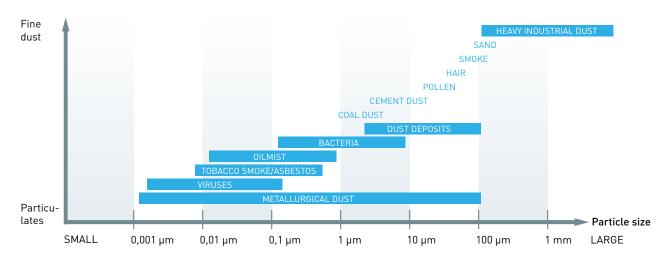
Accessories	Material	Length (mm)	Order No.
Ceiling bracket	aluminium anodised	Length 500 mm	10162
Ceiling bracket	aluminium anodised	Length 750 mm	10163
Ceiling bracket	aluminium anodised	Length 1000 mm	10164
Suction hood - version dome-shaped hood	PP	Ø 350 mm	10195
Suction hood - version metal hood	aluminium painted	Ø 250 mm	10196
Suction hood - version flat hood	PMMA (acrylic glass)	Length 300 mm	10197
Wall bracket	aluminium powder-coated		11253



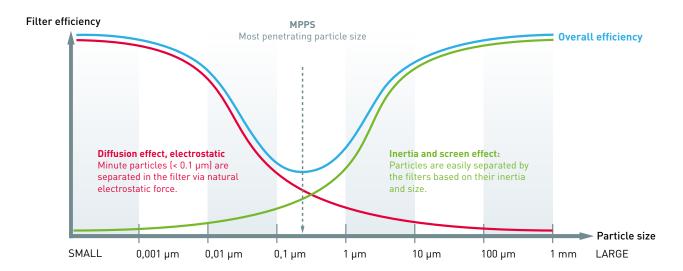
◇- Technical air purification

When using air purifiers to remove fine dusts and particulates from the atmosphere, the correct filter must be used for the type and size of particles in question. How do fine dusts and particulates differ, and what kinds of filters can be used to clean dirty indoor air? This information will help you find answers to these questions.

Airborne particles come in different sizes:



Basic filter technology principles





The most critical particles have a diameter of approx. $0.3 \mu m$ and are the most difficult to remove (technical term MPPS = Most Penetrating Particle Size). The MPPS serves as the basis for defining the efficiency of particle filters.

If you have further technical questions on basic filter technology, our experts will be happy to help. Contact us at info@asecos.com or +49 6051 9220-0.



The filter classes are defined based on the efficiency of separating MPPS. In Europe, particulate air filters are differentiated into **three groups**:

EPA

High-efficiency particulate air filter (= group E)

HEPA

High-efficiency submicron particulate air filter (= group H) **ULPA**

Ultra low particulate air filters (= group U)

85% **E10** Efficiency

U17 99.999995%

Overview of filter classes, incl. relevant degree of efficiency:

Filterklassen	Integral value Average value over the entire filter surface		Local value Point value at the weakest part of the filter	
	Efficiency (%)	Penetration (%)	Efficiency (%)	Penetration (%)
E10	≥ 85	≤ 15		
E11	≥ 95	≤ 5		
E12	≥ 99.5	≤ 0.5		
H13	≥ 99.95	≤ 0.05	≥ 99.75	≤ 0.25
H14	≥ 99.995	≤ 0.005	≥ 99.975	≤ 0.025
U15	≥ 99.9995	≤ 0.0005	≥ 99.9975	≤ 0.0025
U16	≥ 99.99995	≤ 0.00005	≥ 99.99975	≤ 0.00025
U17	≥ 99.999995	≤ 0.000005	≥ 99.9999	≤ 0.0001

Efficiency: Percentage of particles separated / penetration: Percentage of particles that pass through the filter

What makes a tested HEPA H14 filter according to EN 1822 so safe?

Construction

- >>> The filter medium is sealed leak-free in a stable frame, e.g. made of medium-density fibreboard. The filter offers dimensional stability and a circumferential, closed seal, so that all particles must flow through the filter medium in order to be reliably captured.
- High-performance filter materials are used, which offer the following advantages (using an ePTFE membrane as an example):
 - >>> High retention capacity due to large filter surface area
 - >>> Long service life
 - >>> High intake capacity
 - >>> Withstands mechanical stress in all operating phases of the air purifier
 - >>> Stability
 - » ePTFE material, thanks to its composition and deep folding, allows for lower pressure losses and thus higher air flow rate
 - >>> High energy efficiency
 - >>> High efficiency

Testing & Classification

- >>> There is a labelling requirement for each filter which includes the following:
 -)>) Manufacturer's name, type and serial number of the filter
 - >>> Reference to the test standard EN 1822
 - >>> Filter class
 - >>> Nominal volume flow
- >>>> For each filter, an individual test certificate/test protocol shall be provided to prove the separation efficiency and the standard-compliant test including filter medium and test parameters.
- Each individual filter shall be subjected to the test procedure according to EN 1822. In the individual test
 - >>> the particle size in the separation efficiency minimum of the filter is determined.
 - >>> the absence of leakage at nominal volume flow is verified (reference scan method or oil filament test),
 - mand with the help of the test aerosol (≜ suspended particles in MPPS Most Penetrating Particle Size) the filtration efficiency of ≥ 99.95 % or 99.995 % is determined.

asecos is one of the world's leading manufacturers of safety cabinets for storing flammable hazardous materials and compressed gases in accordance with EN 14470 part 1 and part 2. Since it was founded in 1994, asecos has been successfully focused on researching and developing products to safely extract and store hazardous materials. "Technical air purification concepts" have now been added to the company product range, with smoking cabins and air purifiers. In its development of high-performance systems for extracting and filtering cigarette smoke and air contaminated with pollutants and pathogens, asecos has employed its many years of expertise in hazardous materials extraction technology.



Technical air purification ——



AIR PURIFIERS

Improving the air quality in the entire installation room

Viruses and other microorganisms are transmitted via extremely fine airborne liquid droplets, called aerosols.

These can float and survive in the air even for long periods of time. There is an increased risk of infection in poorly ventilated indoor areas. Therefore, effective room ventilation is a high priority in hygiene concepts, in order to counteract elevated concentrations of hazardous materials.

However, room characteristics and winter weather can make natural ventilation more difficult.

Using an air purifier can significantly reduce viral loads and pollution in indoor areas.

Air purifiers should not be considered a substitute for a fresh air supply. Over time, they only deliver efficient results if the filter is replaced at regular intervals according to the electronic display.



Are you interested in asecos air purifiers, and need further information? From air purifiers for use in private homes to industrial applications, we offer products to meet your needs. Contact our experts at **info@asecos.com** or **+49 6051 9220-0**. We will be happy to help!









Technical air purification ———



SMOKING CABINS FOR INDOOR

AND **OUTDOOR AREAS**

Our smoking cabins for indoor and outdoor use offer solutions for the harmonious coexistence of non-smokers and smokers. This is a long-term and good investment for satisfied and motivated employees.

Tested technology for maximum protection

Behind the smoke & talk smoking cabins is a proven system for capturing smoke: tobacco smoke is completely captured and extracted instantly through the finely perforated ceiling by the quiet but powerful exhaust air unit. The fresh air curtain in the entrance area holds the cigarette smoke back, allowing an open and friendly cabin design. Not only that — even the ashtray modules are connected to the extraction system so that accumulated cigarette smoke cannot escape again from the ashtrays. Tobacco smoke is thus captured directly where it's generated.

A 5-step filter system reliably retains the pollutants. The filtered, clean air is returned to the environment. A positive side effect is that the air quality in the entire room is improved.

The smoking cabins of the OUTDOOR LINE for outdoor areas create a comfortable alternative to smoking rooms — without completely banning smoking. The outdoor cabins offer employees protection from all weather conditions and thus reduce the risk of illness.



OUTDOOR LINE



Are you interested in our smoking cabins and would like further information? Contact our air purity experts for a comprehensive consultation at **info@asecos.com**. We'll be glad to help you!







HAZARDOUS MATERIALS STORES WITH FIRE PROTECTION

Safe fire protection from the inside and outside



A fire protection store must be reliable as a whole and withstand and the effects of fire in various ways. When it comes to fire protection, any compromise can have risky consequences. Therefore, we do not only rely on theory. That is why all the individual components of the container systems we offer are tested and certified.

In most EU countries, a uniform classification system for fire protection has already been introduced and anchored in legislation. Fire protection certifications in accordance with REI include the relevant factors of load-bearing capacity (R), tightness (E) and insulation (I). If a fire protection product can withstand all factors over a period of 90 minutes, it is certified according to REI 90. This is regularly verified by accredited and independent testing institutes.

Building permits are also noticeably shortened if the "structures" already meet all the necessary standards and do not have to be checked with individual verifications.

Need further information? Please contact us by phone (+49 6051 9220-0) or by mail (info@asecos.com) - together with our experts you will find the appropriate solution.

WFP: WALK IN FIRE PROTECT

- ✓ WALK-IN FIRE RATED STORAGE CONTAINER
- ✓ FOR SMALL CONTAINERS AND INDIVIDUAL DRUMS
- ✓ STORAGE AREA: APPROX. 6 22 M²



RFP 115: RACK FIRE PROTECT

- ✓ COMPACT FIRE RATED STORAGE CONTAINER
- ✓ STORAGE CAPACITY FOR UP TO 4 X 205 LITRE DRUMS OR 1 IBC



RFP: RACK FIRE PROTECT

- ✓ FIRE-RATED STORAGE CONTAINER WITH SHELVING
- ✓ FOR IBCS AND 205 LITRE DRUMS
- ✓ STORAGE CAPACITY FOR UP TO 8 IBCS OR 32 DRUMS



RFP SD: RACK FIRE PROTECT

- ✓ FIRE-RATED STORAGE CONTAINER WITH SHELVING AND SLIDING DOORS
- ✓ OPTIMUM USE OF SPACE FOR UP TO 12 IBCS OR 48 X 205 LITRE DRUMS





Hazmat stores | with fire protection

Walk-in fire-rated storage container WFP



In the walk-in fire-rated store WFP, which is also available as an international version, flammable liquids can be stored in a variety of ways. Thanks to its fire protection approval, the hazardous materials store can be integrated directly into your infrastructure without the need for safety distances, either indoors or outdoors. Six product models allow optimal adaptation to the individual installation requirements.











Product description

- Walk-in hazardous materials store for small containers and 205 litre drums
- For the safe storage, dispensing or removal of flammable and water-polluting substances
- Install directly next to the external wall of neighbouring buildings or as a fire-rated separate area, e.g. in a production hall. Exception: peroxide stores
- ✓ Water law tested, one piece, hot dip galvanised 5 mm spill pallet with removable grids (max. load capacity: 1000 kg/m²)
- Long-lasting corrosion protection with fully-galvanised base material and high-quality 2K paint (RAL 9002, grey-white)
- Fire protection panels with high insulation properties (thickness 100 mm, A class material, non-combustible)
- ✓ Lockable, self closing EI2 90-C fire-rated doors to EN 13501-2, tested in accordance with EN 1634-1, or country-specific design (El₂ 120 or El₁ 60) with a door opening angle of 90 ° / 115 °

- ✓ 1-wing door (W x H: 1250 x 2000 mm) or 2-wing door (W x H: 2000 x 2000 mm), either on the short or long side of the store in the steps provided
- ✓ For 2-wing doors, a door sequence controller ensures the doors close reliably
- Removable crane eyes for safe use with a crane and transport safety device
- Available in two heights: Clear internal height: WFP-X = 2500 mm, WFP-M = 2280 mm
- ✓ ETA approval / CE marking according to European Regulation (EU) No. 305/2011
- ✓ Tested and approved as a complete system with 90 minute fire protection (F 90 / REI 90) from inside and outside
- International designs meeting country-specific legislation REI 120, REI 60)

Storage area approx. 6-22 m²



Fire-rated store WFP can be used for storing paints and solvents (H226-H224) in small containers and drums, for example. A monitored air-conditioning system ensures consistent quality of the temperature-sensitive substances.

Structural analysis

The structural calculations for the technical room system are based on Eurocode 3 (EN 1993). The loads on the structure are measured according to Eurocode 1 (EN 1991-1-3) for a characteristic wind load $q_{\rm kw}=0.585~\rm kN/m^2$ and a ground snow load $s_{\rm k}=2.5~\rm kN/m^2$. The structure is also designed for earthquake zone 3 according to DIN 4149, EN 1998-1:2004. Available with additional equipment for up to wind load zone 4, terrain category I $(q_{\rm kw}=1.064~\rm kN/m^2)$ and for up to ground snow load $s_{\rm k}=5.86~\rm kN/m^2$.

Storage recommendations

In addition, the following specifications must be observed when storing flammable media:

- Create equipotential bonding (earthing) (connection point provided in the hazardous materials store)
- ✓ If required, provide lightning protection
- ✓ Country-specific requirements for air exchange rate
- Specifications in accordance with ATEX Directive 2014/34/EU and 1999/92/EC
- ✓ For hazardous materials stores without fire-resistant partitions, a distance to fire loads must be observed (usually at least 10 m)

Equipment options

For maximum comfort and improved safety, we have developed the Communication Bar. You'll have all the important information here at a glance. We will be happy to discuss with you in person which other equipment might be suitable. Our experts will design a customised solution with you on site.



Central monitoring and control of all electrical components with the Communication Bar



Video surveillance and recording of the hazard area indoors or



Hazmat stores | with fire protection

Compact fire-rated storage container RFP 115



Not every company needs a large store for safely housing hazardous substances. Fire-rated storage container RFP 115 offers a sturdy, fire-rated design with minimal footprint. On request, up to three additional shelves can be supplied so that you can make optimum use of the interior space.



Need further information? Please contact us by phone (+49 6051 9220-0) or by mail (info@asecos.com) – together with our experts you will find the appropriate solution.

Product description

- The space saving solution for storage of hazardous substances near to production, or decentralised, if required for safety or logistical reasons
- For the safe storage, dispensing or removal of flammable and water-polluting substances
- Install directly next to the external wall of neighbouring buildings or as a fire-rated separate area, e.g. in a production hall.
 Exception: peroxide stores
- ✓ Steel spill pallet with removable hot dip galvanised grids (max. load capacity: RFP 115-2 = 1000 kg/m², RFP 115-10 = 1250 kg/m²)
- Long-lasting corrosion protection with fully-galvanised base material and high-quality 2K paint (RAL 9002, grey-white)
- ✓ Fire protection panels (A class material, non-combustible) with high insulation properties

- Lockable, self closing 1-wing fire-rated El₂ 90-C door to EN 13501-2, tested in accordance with EN 1634-1, or country-specific design (El₁ 60 or El₂ 120) with a door opening angle of 90 ° / 115 °
- ✓ If required with up to three additional shelves
- ✓ ETA approval / CE marking according to European Regulation (EU) No. 305/2011
- Tested and approved as a complete system with 90 minute fire protection (F 90 / REI 90) from inside and outside
- International designs meeting country-specific legislation (REI 120, REI 60)

Storage capacity for up to 4 drums or 1 IBC



The RFP 115 fire-rated storage container, in combination with a pressure relief system and cooling system, is ideally suited for storing organic peroxides outdoors.

Structural analysis

The structural calculations for the technical room system are based on Eurocode 3 (EN 1993). The loads on the structure are measured according to Eurocode 1 (EN 1991-1-3) for a characteristic wind load $q_{\rm kw}=0.585~kN/m^2$ and a ground snow load $s_{\rm k}=2.5~kN/m^2$. The structure is also designed for earthquake zone 3 according to DIN 4149, EN 1998-1:2004. Available with additional equipment for up to wind load zone 4, terrain category I ($q_{\rm kw}=1.064~kN/m^2$) and for up to ground snow load $s_{\rm k}=5.86~kN/m^2$.

Storage recommendations

In addition, the following specifications must be observed when storing flammable media:

- Create equipotential bonding (earthing) (connection point provided in the hazardous materials store)
- ✓ If required, provide lightning protection
- ✓ Country-specific requirements for air exchange rate
- Specifications in accordance with ATEX Directive 2014/34/EU and 1999/92/EC
- ✓ For hazardous materials stores without fire-resistant partitions, a distance to fire loads must be observed (usually at least 10 m)

Equipment options

The fire-rated stores WFP and RFP can also be equipped with pressure relief via roof panel. It ensures controlled pressure equalisation in the event of an explosion. Get in touch: we will be happy to discuss your individual requirements in a personal consultation. Our experts will design a customised solution with you on site, offering high levels of safety and maximum convenience.



In the event of an explosion, the pressure is relieved via the roof panel. The weather protection prevents snow loads affecting operation



Enclosed controls: controls are protected from unauthorised access in the front of the switch cabinet



Hazmat stores | with fire protection

Fire-rated storage container with shelving RFP



RFP fire-rated storage containers are ideally suited for storing large quantities of hazardous substances. Thanks to an integrated heavy-duty rack with adjustable storage levels, optimum use can be made of the interior space, storing hazardous materials individually, in boxes, on pallets or on special carrier frames. In the accessible version, they can also be loaded with a high-lift truck. Outdoor lighting with motion sensor ensures good visibility.







Product description

- Best option when larger quantities of hazardous materials need to be stored in a separate fire compartment and no safety clearances to avoid exposure to fire on both sides can be maintained
- For the storage, dispensing or removal of flammable and waterpolluting substances
- Install directly next to the external wall of neighbouring buildings or as a fire-rated separate area, e.g. in a production hall Exception: peroxide stores
- ✓ On request available with variable shelf heights
- ✓ Water law tested, one-piece, hot-dip galvanised 5 mm spill pallet in the lower storage level
- ✓ Storage levels fitted with removable, hot-dip galvanised grids (max. load capacity 1250 kg/m²)
- Long-lasting corrosion protection with fully-galvanised base material and high-quality 2K paint (RAL 9002, grey-white)
- ✓ Fire protection panels with high insulation properties (thickness 100 mm, A class material, non-combustible)

- ✓ Lockable, self-closing EI2 90-C wing doors on the long side meeting EN 13501-2, tested to EN 1634-1 or country-specific design with a door opening angle of 90 ° / 102 °/ 115 °/ 128 °
- Versions which are accessible underneath are installed on a separately-supplied concrete pad. This means they can easily be loaded with a high-lift truck, for example. For the wide version (RFP 615.20 and .30), the store has two concrete pads of the same size.
- ✓ ETA approval / CE marking according to European Regulation (EU) No. 305/2011
- ✓ Tested and approved as a complete system with 90 minute fire protection (F 90 / REI 90) from inside and outside
- International designs meeting country-specific legislation (REI 120, REI 60)

Storage capacity for up to 32 drums or 8 IBCs



The 2-wing doors allow generous, convenient access and facilitate loading and unloading. The integrated roof drainage system drains rainwater via the short sides of the room system.

Structural analysis

The structural calculations for the technical room system are based on Eurocode 3 (EN 1993). The loads on the structure are measured according to Eurocode 1 (EN 1991-1-3) for a characteristic wind load $q_{k,w}=0.585\ kN/m^2$ and a ground snow load $s_k=2.5\ kN/m^2$. The structure is also designed for earthquake zone 3 according to DIN 4149, EN 1998-1:2004. Available with additional equipment for up to wind load zone 4, terrain category I $(q_{k,w}=1.064\ kN/m^2)$ and for up to ground snow load $s_k=5.86\ kN/m^2$.

Storage recommendations

In addition, the following specifications must be observed when storing flammable media:

- Create equipotential bonding (earthing) (connection point provided in the hazardous materials store)
- ✓ If required, provide lightning protection
- ✓ Country-specific requirements for air exchange rate
- Specifications in accordance with ATEX Directive 2014/34/EU and 1999/92/EC
- For hazardous materials stores without fire-resistant partitions, a distance to fire loads must be observed (usually at least 10 m)

Equipment options

Whether you need access underneath or fire bulkheads for cable systems and pipes - equipment plays a decisive role in the individual product configuration. Our experts will discuss your requirements with you on site and develop a custom-fit solution.



Versions which are accessible underneath are installed on a separately-supplied concrete pad



Cable box (fire bulkhead) for the passage of cables through the wall of the firerated store, while maintaining the fire resistance of the component



Hazmat stores | with fire protection

Fire-rated storage container RFP SD



Fire-rated storage container RFP SD with sliding doors offers fire protection for large quantities of hazardous substances, stored in drums or IBCs. The larger size of the sliding doors gives you up to 50 % more storage capacity than the wing door variant. In addition, the door opening radius is eliminated, which extends the working area in front of the room system. When installed outdoors, there is therefore no risk of the doors slamming shut unintentionally due to wind loads. In the version with electric sliding doors RFP SD-ED, the doors can be easily opened and closed by remote control from the forklift.

Product description

- Best option when larger quantities of hazardous materials need to be stored in a separate fire compartment and no clearance is available
- ✓ The larger sliding doors offer up to 50 % more storage capacity
- ✓ An open sliding door gives easier access to the fire-rated storage container with shelving than a wing door and improves logistical efficiency; when installed outdoors, there is no risk of the doors slamming shut unintentionally due to wind loads
- ✓ The manually or electrically operated fire-rated doors, tested according to EN 16034, close automatically when the fire detectors are triggered
- ✓ Install directly next to the external wall of neighbouring buildings or as a fire-rated separate area, e.g. in a production hall Exception: peroxide stores

- ✓ On request available with variable shelf heights
- ✓ Water law tested, two piece, hot dip galvanised 5 mm spill pallet in the lower storage level, with removable grids (max. load capacity: 1250 kg/m²)
- Long-lasting corrosion protection with fully-galvanised base material and high-quality 2K paint (RAL 9002, grey-white)
- Fire protection panels with high insulation properties (thickness 100 mm, A class material, non-combustible)
- ETA approval / CE marking according to European Regulation (EU) No. 305/2011
- ✓ Tested and approved as a complete system with 120 minute fire protection (F 120 / REI 120) from inside and outside

Structural analysis

The structural calculations for the technical room system are based on Eurocode 3 (EN 1993). The loads on the structure are measured according to Eurocode 1 (EN 1991-1-3) for a characteristic wind load $q_{k,w} = 0.585$ kN/m² and a ground snow load $s_k = 2.5$ kN/m². The structure is also designed for earthquake zone 3 according to DIN 4149, EN 1998-1:2004. Available with additional equipment for up to wind load zone 4, terrain category I ($q_{k,w} = 1.064$ kN/m²) and for up to ground snow load $s_k = 5.86$ kN/m².

Storage capacity for up to 48 drums or 12 IBCs



The RFP SD fire-rated storage container can be equipped with ribbed tubular radiators for freeze-proof storage. Due to its large volume, a recirculation system is also used. This is connected to the heating system, draws in the heated interior air and distributes it evenly in the storage area.

Roof drainage

The roof drainage counteracts loads from standing water on the roof. The rainwater is directed via the roof profile to the two short sides of the room and is channeled to an outlet either through the right or left corner profile or through both. From there, it can be directed to a drainage system on site, e.g. via a drainage pipe.

Storage recommendations

In addition, the following specifications must be observed when storing flammable media:

- Create equipotential bonding (earthing) (connection point provided in the hazardous materials store)
- ✓ If required, provide lightning protection
- ✓ Country-specific requirements for air exchange rate
- ✓ Specifications in accordance with ATEX Directive 2014/34/EU and 1999/92/EC
- ✓ For hazardous materials stores without fire-resistant partitions, a distance to fire loads must be observed (usually at least 10 m)

Equipment options

With fire-rated stores, safety is of prime importance. Add electric sliding doors with remote control, optional video surveillance or an aerosol extinguishing system to increase safety. Our experts will discuss your requirements with you on site and develop a custom-fit solution.



The electric sliding doors of the RFP SD-ED can be easily opened and closed from the forklift, saving time, with a practical remote control unit



The aerosol extinguishing system is triggered by temperature and effectively interrupts the chemical combustion process within 4.5 - 15 seconds (depending on model)



HAZARDOUS MATERIALS STORES WITHOUT FIRE PROTECTION

Plenty of space for waterpollutants



Hazardous material storage is as diverse as the hazardous substance itself. Storage capacity, type of container, storage medium, storage location: These are only the most important parameters that influence the correct equipment of a hazardous materials storage facility. Other factors such as fire and frost protection can also be of importance.

On the following pages we will show you the different possibilities for storing hazardous substances. For an quick initial overview of the variety of models and their application and storage possibilities.

Need further information?

Please contact us by phone (+49 6051 9220-0) or by mail (info@asecos.com) – together with our experts you will find the appropriate solution.

SC

- ✓ STORAGE CONTAINERS WITH SHELVING FOR IBCS AND 205 LITRE DRUMS
- ✓ PERFECT FIT WITH A WIDE RANGE OF VARIANTS



SOLIDMAXX

- ✓ COMPACT STORE FOR INSTALLATION NEAR PRODUCTION
- ✓ STORAGE CAPACITY: FOR UP TO 8 DRUMS OR 2 IBCS



MCV

- ✓ WALK-IN HAZARDOUS MATERIALS STORE WITH MULTIPLE EQUIPMENT OPTIONS
- ✓ STORAGE CAPACITY: APPROX. 5-17 M²



WHG

- ✓ WALK-IN HAZARDOUS MATERIALS STORE FOR SMALL CONTAINERS AND INDIVIDUAL DRUMS
- ✓ STORAGE CAPACITY: APROX. 2-15 M²





Hazmat stores | without fire protection

Hazardous materials store SC



Hazmat storage container with shelving SC is the most flexible room system. Four different versions (K, P, H, M) are optimised to suit typical types of large containers: drums or IBCs with/without pallets or mixed storage. The containers can be stored on top of each other on up to three levels. Each version has insulated variants and an extra deep version available. Your hazardous materials store can be adapted to your individual needs.







Product description (SC-K)

- ✓ For the storage of large quantities of hazardous substances in IBCs
- Version for temperature-sensitive materials with thermal insulation in 60 mm class A material (class B material also available for SC 2K 415 + SC 2K 715)
- Water-law tested, fully galvanised 3 mm spill pallet(s) in the lower storage level
- ✓ Storage levels fitted with removable, hot-dip galvanised grids (max. load capacity 1250 kg/m²)
- 110 mm clearance for access underneath using a hand operated electric stacker
- Long-lasting corrosion protection with fully-galvanised base material and high-quality 2K paint (RAL 9002, grey-white or RAL 5010, gentian blue)

- / Sliding doors in modern sectional design
- ✓ Security lock for protection against unauthorised access
- ✓ Precise roof drainage
- ✓ European product concept: higher availability and a uniform product and service offering for internationally operating customers; country-specific legislation is taken into account
- With General Technical Approval valid throughout Germany from the Deutsches Institut für Bautechnik (DIBt) for the storage of liquids in all water hazard classes
- Compliance with EN 1090 for manufacturers of load-bearing structures in steel

Storage capacity for up to 18 IBCs or 60 drums



If substances are stored in the hazmat storage container with shelving SC which may pose a risk due to the accumulation of explosive atmospheres, adequate ventilation must be provided. A high-performance technical ventilation system ensures permanent cross-ventilation.

Structural analysis

The structural calculations for the technical room system are based on Eurocode 3 (EN 1993). The loads on the structure are measured according to Eurocode 1 (EN 1991-1-3) for a characteristic wind load $q_{k,w}=0.585\ kN/m^2$ and a ground snow load $s_k=2.5\ kN/m^2$. The structure is also designed for earthquake zone 3 according to DIN 4149, EN 1998-1:2004.

Storage recommendations

In addition, the following specifications must be observed when storing flammable media:

- Create equipotential bonding (earthing) (connection point provided in the hazardous materials store)
- ✓ If required, provide lightning protection
- ✓ Country-specific requirements for air exchange rate
- Specifications in accordance with ATEX Directive 2014/34/EU and 1999/92/EC
- ✓ For hazardous materials stores without fire-resistant partitions, a distance to fire loads must be observed (usually at least 10 m)

Equipment options

Equipment plays a decisive role in the individual product configuration. We will be happy to discuss with you whether you need a motion sensor or a signal lamp. Our experts will design a customised solution with you on site.



External lighting with motion sensor



Signal lamp for visual indication of an alarm.



Hazmat stores | without fire protection

Compact hazardous materials store SolidMaxx



The compact SolidMaxx hazardous materials store is the ideal solution where space is limited. It is suitable for storing hazardous substances close to production, for example cleaning agents for dispensing. If there is no heating at the site, choose a version with thermal insulation and heating. In the high version (CH) the room system can be used as a dispensing station.







Product description

- ✓ Water law tested, one piece 5 mm spill pallet (to density 1.9 g/cm³) with easily removable hot dip galvanised grids (max. load capacity: 2000 or 4000 kg)
- When a PE inliner is fitted: galvanised fluid guides all around ensure any leaked substances are safely diverted to the spill pallet
- Steel frames and spill pallet are powder coated (RAL 7043, black-grey). The wall elements are made of galvanised profile sheet metal or, in the thermally insulated version, of painted smooth sheet metal panels (RAL 9002, grey-white)
- ✓ On request with thermal insulation for walls (40 mm) and roof (50 mm) in mineral wool (ISO A - non-combustible) and heating for frost-free storage

- 100 mm clearance for access underneath using a hand operated electric stacker
- Natural ventilation provided by weather-protected, all round openings
- ✓ Security lock for protection against unauthorised access
- ✓ Precise roof drainage via the rear
- Crane eyes as standard for safe transport to the installation site
- ✓ With General Technical Approval valid throughout Germany from the Deutsches Institut für Bautechnik (DIBt) for the storage of liquids in allvwater hazard classes
- Compliance with EN 1090 for manufacturers of load-bearing structures made of steel

Structural analysis

The structural calculations for the technical room system are based on Eurocode 3 (EN 1993). The loads on the structure are measured according to Eurocode 1 (EN 1991-1-3) for a characteristic wind load $q_{k,w} = 0.585 \text{ kN/m}^2$ and a ground snow load $s_k = 2.5 \text{ kN/m}^2$. The structure is also designed for earthquake zone 3 according to DIN 4149, EN 1998-1:2004.

Storage capacity for up to 8 drums or 2 IBCs



In the stable, corrosion-protected steel design with integral spill pallet, you can store up to eight 205 litre drums on Euro/chemical pallets or directly on grids. Alternatively, the hazardous materials store offers space for up to two IBCs. In addition, it is accessible underneath and can therefore be easily loaded with a highlift truck or forklift.

Door designs

- ✓ 1-wing for SolidMaxx C / CH 1.1
- ✓ 2-wing for SolidMaxx C / CH 2.1
- ✓ Internal door hook
- ✓ Security lock for protection against unauthorised access

Storage recommendations

In addition, the following specifications must be observed when storing flammable media:

- Create equipotential bonding (earthing) (connection point provided in the hazardous materials store)
- ✓ If required, provide lightning protection
- ✓ Country-specific requirements for air exchange rate
- Specifications in accordance with ATEX Directive 2014/34/EU and 1999/92/EC
- For hazardous materials stores without fire-resistant partitions, a distance to fire loads must be observed (usually at least 10 m)

Equipment options

If you choose the SolidMaxx hazardous materials store, a drum pump or a convenient step provide even more safety and additional comfort. We will be happy to discuss your individual requirements in a personal consultation. Our experts will design a customised solution with you on site.



Drum pump for pumping flammable liquids



The 1-tread step allows you to easily reach the upper part of a container, for example to use a drum pump



Hazmat stores | without fire protection

Walk-in hazardous materials store MCV



The walk-in hazardous materials store MCV has improved comfort and flexibility. It is available in various dimensions as well as an insulated version. But it offers even more: thanks to galvanised components, long-lasting corrosion protection is ensured. The doors can be positioned either in the long or short side of the room system.







Product description

- Approved for storage of water-polluting and flammable substances
- Enclosed construction with walls and roof in corrosion resistant galvanised and painted sheets (RAL 5010, gentian blue)
- On request with thermal insulation for walls (40 mm) and roof (50 mm) in mineral wool (ISO A - non-combustible) and heating for frost-free storage
- Water law tested, one piece 5 mm spill pallet with easily removable hot dip galvanised grids (max. load capacity: 1000 kg/m²)
- ✓ Low entry height of 150 mm

- ✓ With 2-wing door (W x H: 2,000 x 2,000 mm), either on the short or long side of the room system in the steps provided MCV 2520 only available with 2-wing door on the long side
- ✓ Delivered ready assembled
- ✓ Crane eyes as standard for safe transport to the installation site
- ✓ Natural ventilation available on request
- ✓ With General Technical Approval valid throughout Germany from the Deutsches Institut f
 ür Bautechnik (DIBt) for the storage of liquids in all water hazard classes
- Compliance with EN 1090 for manufacturers of load-bearing structures made of steel

Structural analysis

The structural calculations for the technical room system are based on Eurocode 3 (EN 1993). The loads on the structure are measured according to Eurocode 1 (EN 1991-1-3) for a characteristic wind load $q_{k,w} = 0.585$ kN/m² and a ground snow load $s_k = 2.5$ kN/m². The structure is also designed for earthquake zone 3 according to DIN 4149, EN 1998-1:2004.

Storage area approx. ca. 5-17 m²



Use walk-in hazardous materials store MCV to store water-based paints in small containers and drums for example, as well as fill them or dispense from them. As these substances are temperature-sensitive, the store is also equipped with thermal insulation and heating. Various sizes of container can be stored, from small containers up to 205 litre drums. The inner room can be optimised with flexible shelving systems.

Shelving

Optionally available shelves can be used to create order for small containers in your hazardous materials store. The shelves can be stacked. They have three levels (grids) and are available in two sizes:

- 1.000 x 500 mm (W x D, shelf load: 75 kg*, bay load: 225 kg)
- 2,000 x 500 mm (W x D, shelf load: 120 kg*, bay load: 360 kg)
 *Shelf loads are with an evenly distributed load.

Storage recommendations

In addition, the following specifications must be observed when storing flammable media:

- Create equipotential bonding (earthing) (connection point provided in the hazardous materials store)
- ✓ If required, provide lightning protection
- ✓ Country-specific requirements for air exchange rate
- Specifications in accordance with ATEX Directive 2014/34/EU and 1999/92/EC
- ✓ For hazardous materials stores without fire-resistant partitions, a distance to fire loads must be observed (usually at least 10 m)

Equipment options

Whether you need a heating system or you store so many different substances that a clearly laid out information board makes sense, we will clarify this together with you in a personal consultation. Our experts will design a customised solution with you on site.



The 5 kW heating system in nEx design, in combination with the thermal insulation, ensures an internal temperature of + 5 °C for an external temperature of -15 °C



Infoboard for the clear presentation of information and work safety instructions



Hazmat stores | without fire protection

Walk-in hazardous materials store WHG



The WHG walk-in hazardous materials store can be conveniently loaded due to its low entry height in combination with an access ramp: the entry height is only 150 mm. The standard version of WHG is perfect for passive storage of water-polluting / flammable substances, if safety distances are observed. Flexible equipment options can be added at any time.







Product description

- Approved for storage of water-polluting and flammable substances
- Enclosed construction with walls and roof in corrosion resistant galvanised and painted profile sheets (RAL 5010, gentian blue)
- Water law tested, one piece 5 mm spill pallet with easily removable hot dip galvanised grids (max. load capacity: 1000 kg/m²)
- ✓ Low entry height of 150 mm
- ✓ 2-wing door (with safety lock) on the long side of the room
- ✓ Delivered ready assembled
- ✓ Crane eyes as standard for safe transport to the installation site
- ✓ Natural ventilation available on request
- With general technical approval valid throughout Germany from the Deutsches Institut für Bautechnik (DIBt) [German institute of construction engineering], Berlin
- Compliance with EN 1090 for manufacturers of load-bearing structures made of steel

Structural analysis

The structural calculations for the technical room system are based on Eurocode 3 (EN 1993). The loads on the structure are measured according to Eurocode 1 (EN 1991-1-3) for a characteristic wind load $q_{k,w} = 0.585$ kN/m² and a ground snow load $s_k = 2.5$ kN/m². The structure is also designed for earthquake zone 3 according to DIN 4149, EN 1998-1:2004.

Storage area approx. 2-15 m²



For example, the walk-in hazardous materials store could be used as a workshop oil store for small containers and drums.

Shelving

Optionally available shelves can be used to create order for small containers in your hazardous materials store. The shelves can be stacked. They have three levels (grids) and are available in two sizes:

- 1,000 x 500 mm (W x D, shelf load: 75 kg*, bay load: 225 kg)
- 2,000 x 500 mm (W x D, shelf load: 120 kg*, bay load: 360 kg)
 *Shelf loads are with an eventy distributed load.

Storage recommendations

In addition, the following specifications must be observed when storing flammable media:

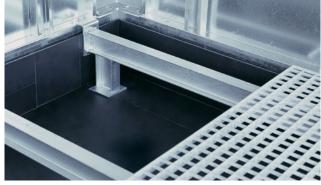
- Create equipotential bonding (earthing) (connection point provided in the hazardous materials store)
- ✓ If required, provide lightning protection
- ✓ Country-specific requirements for air exchange rate
- Specifications in accordance with ATEX Directive 2014/34/EU and 1999/92/EC
- For hazardous materials stores without fire-resistant partitions, a distance to fire loads must be observed (usually at least 10 m)

Equipment options

Our tip: SpillGuard® connect detects dangerous leaks and sends an alarm to your smartphone in real time if there is an emergency. This allows you to react immediately, gain valuable time and avoid any subsequent costs. We will be happy to discuss your individual requirements in a personal consultation. Our experts will design a customised solution with you on site.



Spillguard® connect leak recognition system



PE inliner for acids and alkalis (LGK 8), dissipative version available



RISKS AND HAZARDS

When companies handle substances that are harmful to water or other hazardous materials, operators and users bear a great responsibility for people and the environment. Just one drop of oil, for example, can pollute up to 1,000 litres of water. A supposedly small leakage can thus already lead to ecological damage. The consequences of large leaks into the environment are correspondingly much more far-reaching.

However, its not only when storing hazardous materials indoors and outdoors that special measures have to be taken, but also and especially when handling – the protection of people and the environment should be a top priority. Because wherever material is moved, manoeuvred or stored and retrieved, there is an increased risk of damage. If the material transported is also a hazardous substance, then more stringent conditions apply. Improper handling or damage to the container can cause uncontrolled leakage of critical substances – often with devastating consequences.

Therefore, operators and users should always carry out a risk assessment when handling hazardous substances, derive suitable protective measures according to the STOP principle and instruct the workforce accordingly.



UK Legislation for storing hazardous materials in sump pallets

Our sump pallets offer the necessary protection for storing water hazardous substances whilst maintaining a safe and clean working environment in accordance with UK legislation.

In the United Kingdom, according to the Oil Storage Regulations of 2001, a container of oil or fuel cannot be stored outside unless it is bunded in a secondary containment item, like a spill pallet. All the prospective leakage should be stored within the bund according to these regulations. It is also considered good practice to ensure that the secondary containment item is able to hold 110% of the largest container above, while it is not legally enforceable.

The Environmental Regulation PPG 26 guidelines for the storage and handling of drums and intermediate bulk containers (IBCs) were produced by the Environment Agency and Wales, the Scottish Environment Protection Agency and the Environment and Heritage Service in Northern Ireland. PPG's guidelines give information and advice about storing oil and chemicals in small containers, drums of up to 205 litres or IBCs up to 1000 litres. Following the Pollution Prevention Guidelines PPG 26 will ensure you reduce the risk of pollution from the site to land, surface waters and groundwater by taking care with the storage, maintenance and handling of drums and IBCs.







The right sump pallet for your application

Which hazardous materials should be stored? The properties of the hazardous material determine the material of the sump pallet:

Storage of flammable substances and/or water pollutants such as oils, varnishes, etc.

Storage of non-flammable, water pollutants, aggressive substances such as acids and bases



Steel sump pallets either in coated or galvanised design



Polyethylene sump pallets

Which containers should be stored?

When storing hazardous materials, the sump pallet must ensure an adequate collection volume. Depending on whether small containers, 60 or 200 litre drums, 1,000 litre containers or different container sizes are supposed to be clustered, the asecos delivery programme offers the right sump pallet







Which application is required?

The sump pallet systems offer you maximum flexibility



Overview: sump pallet (steel)

For small containers







page 408

For 60 litre drums





page 410

For drums à 200 litres









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For IBC à 1000 litres







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Bunded spill floorings





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Sump for small containers | Steel | Stainless steel



Order No. 39976

Steel or stainless steel sumps for small containers

Compact and robust design

- Approved for the safe storage of water pollutants and flammable liquids
- Ideal for use in the workplace, e.g. on the workbench
- Sturdy plastic feet protect against corrosion and protect work surfaces and floors

Flexible

• Direct storage in the sump pallet or on the storage level

Optimal corrosion protection

 Made of high-quality powder-coated steel optionally with galvanised perforated insert, or made of stainless steel optionally available with perforated insert made of stainless steel



Order No. 39971



Order No. 39978



Order No. 39982



Order No. 39985



Order No. 39990



Order No. 39994

				Storage level		
		1) L	[kg 2]	without	perforated insert	
Туре	W x D x H (mm)	L		Order No.	Order No.	
Sump for small containers powder-coated steel	250 x 400 x 95	5	50	39971	39972	
Sump for small containers powder-coated steel	250 x 600 x 95	7	50	39973	39974	
Sump for small containers powder-coated steel	500 x 400 x 95	10	50	39975	39976	
Sump for small containers powder-coated steel	500 x 600 x 95	15	50	39977	39978	
Sump for small containers powder-coated steel	987 x 400 x 95	20	100	39979	39980	
Sump for small containers powder-coated steel	987 x 600 x 95	30	100	39981	39982	
Sump for small containers stainless steel	250 x 400 x 95	5	50	39983	39984	
Sump for small containers stainless steel	250 x 600 x 95	7	50	39985	39986	
Sump for small containers stainless steel	500 x 400 x 95	10	50	39987	39988	
Sump for small containers stainless steel	500 x 600 x 95	15	50	39989	39990	
Sump for small containers stainless steel	987 x 400 x 95	20	100	39991	39992	
Sump for small containers stainless steel	987 x 600 x 95	30	100	39993	39994	

¹⁾ capacity (litre), 2) load capacity (kg)

Sump for small containers | Steel -



Order No. 40006

Steel sumps for small containers

Compact and robust design

- Approved for the safe storage of water pollutants and flammable liquids
- Ideal for use in the workplace, e.g. on the workbench
- Sturdy plastic feet protect against corrosion and protect work surfaces and floors

Flexible

• Direct storage in the sump pallet or on the storage level

Optimal corrosion protection

 Made of high-quality powder-coated steel for optimum protection against corrosion, optionally with a grid made of PE or galvanised perforated insert as a shelf



Order No. 39998



Order No. 40002



Order No. 40007



Order No. 40008



Order No. 40004



Order No. 40000

				Storage level			
		(1)	[2]	without	grid	perforated insert	
Туре	W x D x H (mm)	L		Order No.	Order No.	Order No.	
Sump for small containers powder-coated steel	392 x 392 x 200	20	50	39995	39996	39997	
Sump for small containers powder-coated steel	584 x 392 x 200	30	75	39998	39999	40000	
Sump for small containers powder-coated steel	774 x 392 x 200	40	100	40001	40002	40003	
Sump for small containers powder-coated steel	774 x 584 x 200	65	150	40004	40005	40006	
Sump for small containers powder-coated steel	774 x 774 x 200	90	200	40007	40008	40009	



Sump pallet | Steel



Order No. 11947

Steel sump pallets

Compact and robust design

• Approved for the safe storage of water pollutants and flammable liquids

Flexible

- Direct storage in the sump pallet or on the grid
- Optimal corrosion protection through high-quality galvanizing or powder coating

Sump with feet

• Easy and safe in-house transport of the empty sump by pallet truck and forklift truck



Order No. 11946



Order No. 11942



Order No. 2516



Order No. 2517

				Storage level	
		([<u>7</u>]	without	grid
Туре	W x D x H (mm)	L		Order No.	Order No.
Sump pallet powder-coated steel	635 x 785 x 178	60	400	11945	11943
Sump pallet steel galvanized	635 x 785 x 178	60	400	11944	11942
Sump pallet powder-coated steel with foot construction	635 x 785 x 278	60	400	11949	11947
Sump pallet steel galvanized with foot construction	635 x 785 x 278	60	400	11948	11946
Sump pallet powder-coated steel with foot construction	815 x 885 x 478	217	400	9844	2516
Sump pallet steel galvanized with foot construction	815 x 885 x 478	217	400	9843	2517

¹⁾ capacity (litre), 2) load capacity (kg)



Order No. 2513

Steel sump pallets

Compact and robust design

• Approved for the safe storage of water pollutants and flammable liquids

Flexible

- Direct storage in the sump pallet or on the grid
- Optimal corrosion protection through high-quality galvanizing or powder coating

Sump with feet

• Easy and safe in-house transport of the empty sump by pallet truck and forklift truck



Order No. 2512



Order No. 2508



Order No. 2504



Order No. 2505

Type W x D x H (mm) 1				Storage level	
Type W x D x H (mm) Image: Control of the control of t			b 1) a	2) without	grid
Sump pallet steel galvanized 815 x 1236 x 255 205 800 2501 2505 Sump pallet powder-coated steel with foot construction 815 x 1236 x 355 205 800 2508 2512	Type W >	c D x H (mm)		Order No.	Order No.
Sump pallet powder-coated steel with foot construction 815 x 1236 x 355 205 800 2508 2512	Sump pallet powder-coated steel 815	x 1236 x 255	205 800	2500	2504
	Sump pallet steel galvanized 815	x 1236 x 255	205 800	2501	2505
Sump pallet steel galvanized with foot construction 815 x 1236 x 355 205 800 2509 2513	Sump pallet powder-coated steel with foot construction 815	x 1236 x 355	205 800	2508	2512
Camp panet close garranteed was root concerned.	Sump pallet steel galvanized with foot construction 815	x 1236 x 355	205 800	2509	2513

¹⁾ capacity (litre), 2) load capacity (kg)



Sump pallet | Steel



Order No. 2514

Steel sump pallets

Compact and robust design

• Approved for the safe storage of water pollutants and flammable liquids

Flexible

- Direct storage in the sump pallet or on the grid
- Optimal corrosion protection through high-quality galvanizing or powder coating

Sump with feet

• Easy and safe in-house transport of the empty sump by pallet truck and forklift truck



Order No. 2515



Order No. 2510



Storage level

		(2)	without	grid
Type W 2	D x H (mm)	L		Order No.	Order No.
Sump pallet powder-coated steel 121	0 x 1236 x 290	220	1600	2510	2514
Sump pallet steel galvanized 121	0 x 1236 x 290	220	1600	2511	2515
Sump pallet powder-coated steel 815	x 2470 x 250	225	1600		2520
Sump pallet steel galvanized 815	x 2470 x 250	225	1600	-	2521
Sump pallet powder-coated steel 816	x 2470 x 355	420	1600	-	23039
Sump pallet steel galvanized 816	x 2470 x 355	420	1600	-	23040
Sump pallet powder-coated steel 121	0 x 2455 x 250	340	3200	-	2522
Sump pallet steel galvanized 121	0 x 2455 x 250	340	3200	-	2523

¹⁾ capacity (litre), 2) load capacity (kg)

Accessories



Drum mount galvanised for $1 \times 50/60$ litre drum or 200 litres, W x D x H (mm): $600 \times 600 \times 380$ **Order No. 2560**



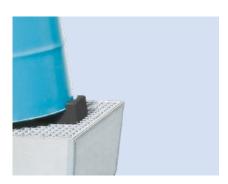
Drum mount galvanised for 2 x 50/60 litre drums or 200 litres, W x D x H (mm): 1160 x 600 x 380 **Order No. 2561**



Drum mount galvanised for 3 x 50/60 litre drums or 2 x 200 litre drums, W x D x H (mm): 1160 x 600 x 380 **Order No. 2562**



Drum mount PE, variable for 1 x 60 L drum or 1 x 200 L drum simply turn 180 degrees W x D H (mm): 475 x 620 x 390 **Order No. 9875**



Barrel wedge PE enables 200 litre steel and plastic barrels to be placed at an angle optimal emptying of the barrel possible by means of a pump W x D x H (mm): 217 x 214 x 97 **Order No. 12124**



Loading safety set for mobile 2-drum trough with grid Set consisting of safety tensioning strap and holder for 2 drums **Order No. 34829**



SpillGuard

- Leak recognition system for ATEX zone 0
- Highly resistant and electrically conductive housing
- Reliably detects dangerous leaks
- Acoustic and optical alarm for min. 24 hours in case of contact with hazardous liquid substances
- Regular optical signal (red LED) indicates safe function
- Acoustic signal indicates the need for replacement in good time at the end of the service life (up to 5 years)
- \bullet ATEX marking: EX II 1G Ex ia IIC T4 Ga
- External dimensions ØxH (mm): 110 x 40

Order No. 39036



Sump pallet | Steel | movable —



Order No. 2558

Movable steel sump pallets

Compact and robust design

• Approved for the safe storage of water pollutants and flammable liquids

Flexible

- Direct storage in the sump pallet or on the grid
- Optimal corrosion protection through high-quality galvanizing or powder coating

Mobile version

- Movable with castors made of polyamide
- Handle for convenient internal transport



Order No. 14302

Order No. 2557



Order No. 2556



Order No. 22746

				Storage level		
		6 1)	[2]	without	grid	
Туре	W x D x H (mm)	L		Order No.	Order No.	
Sump pallet powder-coated steel with castors	1275 x 635 x 890	65	300	23041	14302	
Sump pallet steel galvanized with castors	1275 x 635 x 890	65	300	23042	22476	
Sump pallet powder-coated steel with castors	1350 x 815 x 995	217	400	-	2556	
Sump pallet steel galvanized with castors	1350 x 815 x 995	217	400	-	2555	
Sump pallet powder-coated steel with castors	1700 x 815 x 995	217	800	-	2558	
Sump pallet steel galvanized with castors	1700 x 815 x 995	217	800	-	2557	

¹⁾ capacity (litre), 2) load capacity (kg)





Order No. 40016

Steel sump pallet

Compact and robust design

• Approved for the safe storage of water pollutants and flammable liquids

Flexible

- Direct storage in the sump pallet or on the grid
 Optimal corrosion protection through high-quality galvanizing or powder coating

Mobile version

- Movable with electrically conductive castors
- Handle for convenient internal transport









Order No. 40014



Order No. 40013

				Storage level	
		6 1)	[2]	without	grid
Туре	W x D x H (mm)	L		Order No.	Order No.
Sump pallet powder-coated steel with castors, electrically conductive castors from PP	1275 x 635 x 890	65	300	40010	40012
Sump pallet steel galvanized with castors, electrically conductive castors from PP	1275 x 635 x 890	65	300	40011	40013
ump pallet powder-coated steel with castors, electrically conductive castors from PP	1350 x 815 x 995	217	400	-	40014
imp pallet steel galvanized with castors, electrically conductive castors from PP	1350 x 815 x 995	217	400	-	40015
ump pallet powder-coated steel with castors, electrically conductive castors from PP	1700 x 815 x 995	205	800	-	40016
ump pallet steel galvanized with castors, electrically conductive castors from PP	1700 x 815 x 995	205	800	-	40017

¹⁾ capacity (litre), 2) load capacity (kg)

Sump pallet | Steel | for KTC/IBC



Order No. 8808



Order No. 19232



Order no. 8853



Order no. 2577

Steel sump pallet

Compact and robust design

• Approved for the safe storage of water pollutants

Flexible

- Ideal for the storage of IBC
- Polyethylene sump inliner optionally available, optimum corrosion protection when storing agressive materials
- Useable as filling and dispensing station in combination with drum mount (sumps without grid)
- Available either painted or galvanised

Sump with feet

• Easy and safe in-house transport of the empty sump by pallet truck and forklift truck



Order No. 8856

					Filling rack	
		W x D x H (mm) incl.	6 1)	[kg] 2J	without	1x
Туре	W x D x H (mm)	filling rack	L		Order No.	Order No.
KTC/IBC station powder-coated steel	1350 x 1650 x 710	1350 x 1650 x 1180	1000	2000	19232	8809
KTC/IBC station steel galvanized	1350 x 1650 x 710	1350 x 1650 x 1180	1000	2000	13626	8857
Sump inliner	1230 x 1630 x 565				2577	2577
Can tray steel galvanized	360 x 365 x 300				-	8853
KTC/IBC station powder-coated steel	1300 x 1120 x 1040	1120 x 1300 x 1493	1000	2000	8854	8856
KTC/IBC station steel galvanized	1300 x 1120 x 1040	1120 x 1300 x 1493	1000	2000	8807	8808
Sump inliner	1107 x 1162 x 883				8855	8855
Can tray	364 x 452 x 374				-	40018

¹⁾ capacity (litre), 2) load capacity (kg)





Order No. 23048

Steel sump pallet

Compact and robust design

Approved for the safe storage of water pollutants

Flexible

- Ideal for the storage of IBC
- Polyethylene sump inliner optionally available, optimum corrosion protection when storing agressive materials
- Useable as filling and dispensing station in combination with drum mount (sumps without grid)
- Available either painted or galvanised

Sump with feet

• Easy and safe in-house transport of the empty sump by pallet truck and forklift truck



Order No. 8851



Order No. 40019



Order no. 9212



Order No. 22578

					Filling rack			
		W x D x H (mm) incl.	([6]	without	1x		3x
Туре	W x D x H (mm)	filling rack	L	18	Order No.	Order No.	Order No.	Order No.
KTC/IBC station powder-coated steel	2200 x 1300 x 590	2200 x 1300 x 1050	1000	4000	8851	25577	22579	-
KTC/IBC station steel galvanized	2200 x 1300 x 590	2200 x 1300 x 1050	1000	4000	8806	22578	12169	_
Sump inliner	2186 x 1161 x 435				9212	9212	9212	9212
KTC/IBC station powder-coated steel	3280 x 1300 x 430	3280 x 1300 x 883	1000	6000	23043	23044	23046	23048
KTC/IBC station steel galvanized	3280 x 1300 x 430	3280 x 1300 x 883	1000	6000	22623	23045	23047	23049
Sump inliner steel galvanized	3265 x 1160 x 275				40019	40019	40019	40019
Can tray	364 x 452 x 374				_	40018	40018	40018

¹⁾ capacity (litre), 2) load capacity (kg)

Bunded spill floorings | galvanised steel | height 78 mm

Bunded spill flooring made from galvanised steel (height 78 mm) with removable, hot-dip galvanised grids

Compact and robust design - safe and approved

• Approved for the safe storage of water pollutants and flammable liquids

Flexible

- Ideal for covering a large storage area, optimal adaption on space demands
- Height 78 mm easy access
- Wheel load either 450 kg or 2,000 kg



				Wheel load	
		6 1)	<u>~</u> 2J	450 kg	2000 kg
Туре	W x D x H (mm)	L		Order No.	Order No.
Bunded spill flooring steel galvanized with galvanised grid	1362 x 1362 x 78	80	5000	2583	17758
Bunded spill flooring steel galvanized with galvanised grid	1862 x 1362 x 78	110	5000	2584	14949
Bunded spill flooring steel galvanized with galvanised grid	1862 x 1862 x 78	140	5000	27965	27966
Bunded spill flooring steel galvanized with galvanised grid	2862 x 1362 x 78	170	5000	2585	10536
Bunded spill flooring steel galvanized with galvanised grid	2862 x 1862 x 78	225	5000	2586	14491

1) capacity (litre), 2) load capacity (kg)

Accessories	W x D x H (mm)	Order No.
Joining element steel galvanized	1320 x 45 x 40	2587
Joining element steel galvanized	1820 x 45 x 40	2588
Joining element steel galvanized	2820 x 45 x 40	2589
Ramp steel galvanized	1320 x 720 x 78	2590
Ramp steel galvanized	1820 x 720 x 78	2591
Ramp steel galvanized	2820 x 720 x 78	2592
Corner ramp steel galvanized	730 x 730 x 78	2596
Distance joiner steel galvanized	25 x 120 x 77	2593
Edge fastening steel galvanized	20 x 80 x 73	2594
Cross joiner steel galvanized	130 x 130	2595

Bunded spill floorings | galvanised steel | height 123 mm

Bunded spill flooring made from galvanised steel (height 123 mm) with removable, hot-dip galvanised grids

Compact and robust design - safe and approved

• Approved for the safe storage of water pollutants and flammable liquids

Flexible

- Ideal for covering a large storage area, optimal adaption on space demands
- Height 123 mm large collecting volume
- Wheel load either 450 kg or 2,000 kg



	Wheel load					
		6 1)	[2]	450 kg	2000 kg	
Туре	W x D x H (mm)			Order No.	Order No.	
Bunded spill flooring steel galvanized with galvanised grid	500 x 500 x 123	20	5000	8810	23064	
Bunded spill flooring steel galvanized with galvanised grid	1000 x 500 x 123	40	5000	8811	23065	
Bunded spill flooring steel galvanized with galvanised grid	1000 x 1000 x 123	80	5000	8812	17303	
Bunded spill flooring steel galvanized with galvanised grid	2000 x 1000 x 123	165	5000	8813	10479	
Bunded spill flooring steel galvanized with galvanised grid	2500 x 500 x 123	95	5000	8814	23066	
Bunded spill flooring steel galvanized with galvanised grid	2500 x 1000 x 123	210	5000	8815	23067	

1) capacity (litre), 2) load capacity (kg)

Accessories	W x D x H (mm)	Order No.
Joining element steel galvanized	470 x 45 x 40	8816
Joining element steel galvanized	970 x 45 x 40	8817
Joining element steel galvanized	1970 x 45 x 40	8818
Joining element steel galvanized	2470 x 45 x 40	8819
Ramp steel galvanized	450 x 1120 x 125	8820
Ramp steel galvanized	950 x 1120 x 125	8821
Ramp steel galvanized	1950 x 1120 x 125	8822
Ramp steel galvanized	2450 x 1120 x 125	8823
Distance joiner steel galvanized	25 x 120 x 123	8824
Edge fastening steel galvanized	20 x 80 x 123	8825
Corner ramp steel galvanized	1140 x 1140 x 125	8826
Cross joiner steel galvanized	130 x 130	2595



Overview: sump pallet (PE)

For small containers







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For 60 litre drums



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For drums à 200 litres



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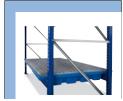
Pallet-racking-sumps



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For IBC à 1,000 litres



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Bunded spill floorings



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Sump for small containers | Polyethylene -



Order No. 40037

Polyethylene sump for small containers

Compact and robust design

- Approved for the safe storage of water pollutants
- Ideal for use in the workplace, e.g. on the workbench

Highly resistant against oil, acid, alkali, etc.

- Made of chemically highly resistant polyethylene
- Optionally available with PE grid including leakage indicator



Order No. 40033



Order No. 40039



Order No. 40034



Order No. 40040

Туре	W x D x H (mm)	1)	[Kg] 2]	Order No.
Sump for small containers PE	995 x 395 x 90	20	200	40033
Grid with leakage indicator				40034
Sump for small containers PE	1265 x 395 x 90	26	200	40035
Grid with leakage indicator				40036
Sump for small containers PE	995 x 595 x 90	30	200	40037
Grid with leakage indicator				40038
Sump for small containers PE	1265 x 595 x 90	40	200	40039
Grid with leakage indicator				40040

¹⁾ capacity (litre), 2) load capacity (kg)



Sump for small containers | Polyethylene -



Order No. 40028

Polyethylene sump for small containers

Compact and robust design

- Approved for the safe storage of water pollutants
- Ideal for use in the workplace, e.g. on the workbench

Highly resistant against oil, acid, alkali, etc.

- Made of chemically highly resistant polyethylene
- Optionally available with PE grid including leakage indicator



Order No. 40030



Order No. 40031



Order No. 40024



Order No. 40023

		Storage level							
		(<u>~</u> 2)	without	grid				
Туре	W x D x H (mm)	L		Order No.	Order No.				
Sump for small containers PE	400 x 400 x 180	20	50	40021	40022				
Sump for small containers PE	592 x 400 x 180	30	75	40023	40024				
Sump for small containers PE	784 x 400 x 180	40	100	40025	40026				
Sump for small containers PE	784 x 784 x 180	80	200	40027	40028				
Sump for small containers PE	1170 x 785 x 180	120	300	40029	40030				
Sump for small containers PE	1168 x 1168 x 180	180	450	40031	40032				

¹⁾ capacity (litre), 2) load capacity (kg)

Sump pallet | Polyethylene



Order No. 18074



Order No. 18447



Order No. 18076

Polyethylene sump pallets

Compact and robust design

Approved for the safe storage of water pollutants

Highly resistant against oil, acid, alkali, etc.

- Optionally available with galvanized grid or PE grid
- Sump pallet for direct placing on the floor or Euro-Pallet

Sump with feet

• Ideal for in-house transport of the empty sump pallet

Mobile version

- Movable with 2 swivel castors and 2 fixed castors, castors made of polyamide
- Handle for convenient internal transport



Order No. 18073



Order No. 18077

Storage level

		Juliage level								
		<u></u>				Grid PE				
Туре	W x D x H (mm)			Order No.	Order No.	Order No.				
Sump pallet PE	725 x 525 x 235	60	150	18447	18448	18449				
Sump pallet PE with foot construction	725 x 525 x 320	60	150	18073	18074	18075				
Sump pallet PE with castors	725 x 525 x 330	60	120	18076	18077	18078				





Sump pallet | Polyethylene -



Polyethylene sump pallets

Compact and robust design

• Approved for the safe storage of water pollutants

Highly resistant against oil, acid, alkali, etc.

• Optionally available with galvanized grid or PE grid

Flat surface design

- For an easy and comfortable storage of drums
- Robust construction, shock resistant

Forklift pockets

• Easy and safe in-house transport of the empty sump by forklift truck

Mobile version

- Movable with 2 swivel castors and 2 fixed castors, castors made of polyamide
- Handle for convenient internal transport



Order No. 33055



Order No. 31861





Order No. 33057

		Storage level								
		without Grid galvanised Grid Pt								
Туре	W x D x H (mm)	L	INS I	Order No.	Order No.	Order No.				
Sump pallet PE	865 x 1245 x 350	220	760	33052	33054	33055				
Sump pallet PE with castors	865 x 1245 x 1060	220	620	33056	33057	33059				
Sumn nallet PF	1235 v 1235 v 275	255	950	31860	31861	31862				

¹⁾ capacity (litre), 2) load capacity (kg)





Order No. 40045

Polyethylene sump pallets

Compact and robust design

- Approved for the safe storage of water pollutants
- Extremely stable supports for grids or pallets molded into the

Highly resistant against oil, acid, alkali, etc. - Optionally available with galvanized grid or PE grid

Forklift pockets

• Easy and safe in-house transport of the empty sump by forklift truck



Order No. 40044



Order No. 40046



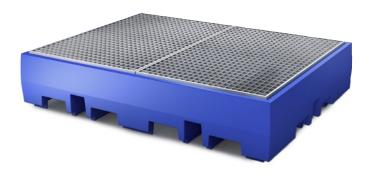
Order No. 40050



Order No. 40049

				Storage level			
		(<u></u> 2)	without (Grid galvanised	Grid PE	Pallet PE
Туре	W x D x H (mm)	L	188	Order No.	Order No.	Order No.	Order No.
Sump pallet PE	1330 x 930 x 385	220	800	40044	40045	40046	40047
Sump pallet PE	1330 x 1330 x 295	220	1600	40048	40049	40050	40051

Sump pallet | Polyethylene -



Order No. 40042

Polyethylene sump pallets

Compact and robust design

• Approved for the safe storage of water pollutants

Highly resistant against oil, acid, alkali, etc.

• Optionally available with galvanized grid or PE grid

Forklift pockets

• Easy and safe in-house transport of the empty sump by forklift truck

Models 40052 and 40053

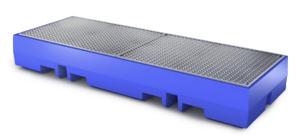
• incl. PE grid with integrated leakage indicator



Order No. 40043



Order No. 40053



Order No. 39195



Order No. 40052

	Storage level								
	(a) 1 (b) without Grid galvanised								
Туре	W x D x H (mm)			Order No.	Order No.	Order No.			
Sump pallet PE	2520 x 900 x 350	520	1200	39194	39195	39196			
Sump pallet PE	1720 x 1300 x 350	440	1200	40041	40042	40043			
Sump pallet PE	918 x 1314 x 400	220	800	-	-	40052			
Sump pallet PE	1314 x 1349 x 400	340	1600	-	-	40053			

¹⁾ capacity (litre), 2) load capacity (kg)

Pallet racking sump | Polyethylene -



Polyethylene pallet racking sumps

Compact and robust design

Approved for the safe storage of water pollutants

Flexible

 Useable for all common rack widths, used for the storage of hazardous materials and therefore shall be modified according to the legal regulations

Highly resistant against oil, acid, alkali, etc.

Forklift pockets

• Easy and safe in-house transport of the empty sump by forklift

Sump for mounting

- For placing on crossbars
- Either available with galvanised or polyethylene grid



Order No. 31407



Order No. 31411



Order No. 31409



Order No. 22460

Storage	level

	Storage level														
		1J 7 2J		1) [2]		1] [2]		1) (3, 2)		1) [2]		without Grid galva		Grid PE	
Туре	W x D x H (mm)			Order No.	Order No.	Order No.									
Rack sump PE	1390 x 1315 x 315	315		31404	-	-									
Rack sump PE	1780 x 1315 x 315	400		31406	-	-									
Rack sump PE	2180 x 1315 x 315	480		31407	-	-									
Rack sump PE	2680 x 1315 x 315	600		31408	-	-									
Rack sump PE	2680 x 1315 x 490	1000		31409	-	-									
Rack sump PE for mounting	1780 x 1300 x 250	220	800	-	31410	22459									
Rack sump PE for mounting	2680 x 1300 x 190	220	800	-	22460	31411									

¹⁾ capacity (litre), 2) load capacity (kg)

Note to 22459 and 31411: Load capacity applies when containers are stored on pallets



Sump pallet | Polyethylene | for IBC -



Order No. 15477

Polyethylene sump pallets

Compact and robust design

• Approved for the safe storage of water pollutants

Highly resistant against oil, acid, alkali, etc.

Forklift pockets

• Easy and safe in-house transport of the empty sump by forklift truck

Models 13054 and 13055

- Optionally with integrated dispensing area
- Integrated polyethylene storage mount with upturned edges to prevent IBC from slipping

Models 15477, 15479 and 15480

- Ideal for storing 1,000 litre IBC or small containers
- Optionally with an integrated pallet shape storage platform made of polyethylene
- 2,000 kg load capacity per storage area depending on the self-weight of the container
- Ideal suited for storing liquids with a maximum specific weight of up to 1,800 kg/m³



Order No. 13054



Order No. 15480

				Storage level			
		6 1)	[2]	without	Pallet PE	Bearing block	
Туре	W x D x H (mm)			Order No.	Order No.	Order No.	
IBC station PE	1380 x 1575 x 760	1000	2000	-	-	13054	
IBC station PE with filling area	1380 x 1800 x 760	1000	2000	-	-	13055	
IBC station PE	1430 x 1430 x 965	1000	2000	-	15477	-	
IBC station PE	2260 x 1430 x 720	1000	4000	15479	15480	-	

¹⁾ capacity (litre), 2) load capacity (kg)





Order No. 24151

Polyethylene sump pallets

Compact and robust design

- Approved for the safe storage of water pollutantsOptionally with integrated dispensing area

Highly resistant against oil, acid, alkali, etc.

Forklift pockets

• Easy and safe in-house transport of the empty sump by forklift truck









Order No. 24155



Order No. 24157

	Storage level								
	without Grid galvanised								
Туре	W x D x H (mm)		L Kg	Order No.	Order No.	Order No.			
IBC station PE	1280 x 1660 x 870	1000	2000	24150	24151	24154			
IBC station PE with filling area	1280 x 1910 x 860	1000	2000	24155	24156	24157			
IBC station PE with filling area	2460 x 1800 x 460	1000	4000	24158	24159	24160			
IBC station PE with filling area	3640 x 1800 x 450	1000	6000	38509	40054	33570			

Sump pallet | Polyethylene | for IBC -



Order No. 38650

Polyethylene sump pallets

Compact and robust design

- Approved for the safe storage of water pollutants
- Complete corrosion protection

Highly resistant against oil, acid, alkali, etc.

Forklift pockets

• Easy and safe in-house transport of the empty sump by forklift truck



Order No. 38648



Order No. 38647



Order No. 38649

				Storage level		
		6 1)	[2]	Grid galvanised	Grid PE	
Туре	W x D x H (mm)	L		Order No.	Order No.	
IBC station PE	1370 x 1980 x 690	1000	2000	38647	38648	
IBC station PE	2530 x 1320 x 580	1000	4000	38649	38650	

Bunded spill floorings | Polyethylene | Height 150 mm

Compact and robust design - safe and approved

• Approved for the safe storage of water pollutants

Flexible

- Ideal for covering a large storage area
- High resistance against chemicals
- Height 150 mm large collecting volume
- Optionally available with galvanised or polyethylene grid
- Ramps for wheel loads up to 150 kg



		Storage level			
		() 1)	[kg] 2]	Grid galvanised	Grid PE
Туре	W x D x H (mm)	L		Order No.	Order No.
Bunded spill flooring PE	790 x 790 x 150	60	800	31394	31395
Bunded spill flooring PE	1500 x 790 x 150	125	800	17301	19234
Bunded spill flooring PE	1500 x 1500 x 150	220	800	8827	8684
Bunded spill flooring PE	2200 x 790 x 150	170	800	31396	31397
Bunded spill flooring PE	2200 x 1500 x 150	355	800	19235	19236
Bunded spill flooring PE	3000 x 790 x 150	235	800	31398	31399
Bunded spill flooring PE	3000 x 1500 x 150	400	800	8828	8829

1) capacity (litre), 2) load capacity (kg)

Accessories	W x D x H (mm)	Order No.
Ramp PE	790 x 1000 x 150	31400
•	790 X 1000 X 130	
Ramp PE		8832
Ramp PE	1090 x 1000 x 150	31401
Ramp PE	1490 x 1000 x 150	31402
Corner ramp PE	1000 x 1000 x 150	31403
Joining element length 720 mm steel galvanized		23068
Joining element length 1420 mm steel galvanized		8685
Joining element length 2120 mm steel galvanized		23069
Joining element length 2920 mm steel galvanized		8830
Distance joiner		11262
Cross joiner		8831
Edge fastener		8701



Bunded spill floorings | Accessories

Accessories



Attachment container made of PE for IBC sump pallets

- Height adjustable with 2 legs
- Safe and clean dispensing Container dimensions: W x D x H (mm):350 x 400 x 500 W x D (mm) outside: 605 x 785 **Order No. 40055**



Attachment container made of PE for IBC sump pallets

- With 2 feet
- Safe and clean dispensing
- With trays for lids, funnels, rags etc. Container dimensions:

W x D (mm) outside: 605 x 785 **Order No. 40056**



Outlet extension for IBC

- Suitable for IBC's with an outlet opening of DN 50
- Internal thread DIN 61Order No. 9891



Drum mount galvanised for $1 \times 50/60$ litre drum or 200 litres, W x D x H (mm): $600 \times 600 \times 380$ **Order No. 2560**



Drum mount galvanised for $2 \times 50/60$ litre drums or 200 litres, W x D x H (mm): $1160 \times 600 \times 380$ **Order No. 2561**



Drum mount galvanised for 3 x 50/60 litre drums or 2 x 200 litre drums, W x D x H (mm): 1160 x 600 x 380 **Order No. 2562**

Accessories



Drum mount PE, variable for 1 x 60 L drum or 1 x 200 L drum simply turn 180 degrees W x D H (mm): 475 x 620 x 390 **Order No. 9875**



Barrel wedge PE enables 200 litre steel and plastic barrels to be placed at an angle optimal emptying of the barrel possible by means of a pump W x D x H (mm): 217 x 214 x 97 **Order No. 12124**



Loading safety set for mobile 2-drum trough with grid
Set consisting of safety tensioning strap and holder for 2 drums **Order No. 34829**



Drum pallet PE for horizontal storage of 2 drums à 200 litres Easy forklift transport due to integrated fork pockets Stackable

W x D x H (mm): 1300 x 790 x 300 **Order No. 2678**



SpillGuard

- Leak recognition system for ATEX zone 0
- Highly resistant and electrically conductive housing
- Reliably detects dangerous leaks
- Acoustic and optical alarm for min. 24 hours in case of contact with hazardous liquid substances
- Regular optical signal (red LED) indicates safe function
- Acoustic signal indicates the need for replacement in good time at the end of the service life (up to 5 years)
- ATEX marking: EX II 1G Ex ia IIC T4 Ga
- External dimensions ØxH (mm): 110 x 40

Order No. 39036







with PE collecting tray storage of substances hazardous to water of all hazard classes







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Filling/storage station

with sump made of steel for the storage of flammable liquids and water pollutant







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Drum racks – safe storage and filling

with PE collecting tray storage of substances hazardous to water of all hazard classes







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Drum racks – safe storage and filling

with sump made of steel for the storage of flammable liquids and water pollutant







page 438



Fill and storage stations | steel | stackable .



Filling and storage station made from steel, 3 times stackable

Safe and approved

- For the storage of flammable liquids and water pollutants (steel
- For the storage of water pollutants (PE sump)

Flexible

- Stacking rack can be transported using a forklift truck
- Safe dispensing due to overhanging collecting sump

Order No. 2692







Order No. 2695

Order No. 2699

Order No. 9857

Sump pallet accessible from underneath	W x D x H (mm)	[5] 1J	2)	Order No.
Fill and storage station for 2 x 200 litre drum	870 x 1340 x 1860	350	2695	
Fill and storage station for 3 x 60 litre drum + 2 x 200 litre drum	1340 x 1260 x 1810		2692	
			1	
Sump pallet steel	W x D x H (mm)	[5] 1J	2)	Order No.
Fill and storage station for 2 x 200 litre drum	870 x 1240 x 1535		9845	
Fill and storage station for 3 x 60 litre drum + 2 x 200 litre drum	1370 x 1240 x 1670		2699	
Fill and storage station for 3 x 60 litre drum + small containers	1370 x 1240 x 1535		2700	
Sump pallet PE accessible from underneath	W x D x H (mm)	[5]	²	Order No.
Fill and storage station for 3 x 60 litre drum + 2 x 200 litre drum	1370 x 1240 x 1535		9857	
Fill and storage station for 4 x 200 litre drum	1370 x 1240 x 1535	350	9859	

Fill and storage station for 4 x 200 litre drum

1) load capacity per drum platform (kg), 2) bay load (kg)

Stacking rack | steel | stackable 3 times



Order No. 2693

Add-on racks for filling/storage station made of steel, stackable 3 times.

- Ideal for supplementing/expanding existing storage stations
- Robust steel construction, galvanised
- Stackable 3 times
- Delivered disassembled, with assembly instructions







Order No. 15959





Order No. 2694



Order No. 22753



Order no. 2698



Order no. 8959

		1)	2)	
Type W	x D x H (mm)			Order No.
Stacking rack for small containers 87	0 x 1120 x 790		435	22753
Stacking rack for small containers 13	70 x 1120 x 790		410	10888
Stacking rack for 3 x 30 or 2 x 60 litre canister 87	0 x 640 x 790	225	240	27828
Stacking rack 13	70 x 640 x 790	225	360	15959
Stacking rack for 1 x 200 litre drum 87	0 x 640 x 790	225	350	2696
Stacking rack for 2 x 200 litre drum 13	70 x 640 x 790	225	700	2693
Stacking rack for 3 x 60 litre drum 13	70 x 640 x 790	225	360	2694
Can tray steel galvanized 28	0 x 270 x 300			2698
Can tray PE 27	0 x 270 x 300			8959

¹⁾ load capacity per drum platform (kg), 2) bay load (kg)





Drum racks

Approved and safe

- Steel sumps for the storage of oil, paint and lacquer
- Polyethylene sumps for the storage of acids, alkalis and further aggressiv chemicals
- Safe dispensing due to overhanging collecting sump

Order No. 13246



Order No. 13148



Order No. 13244



Order No. 13137

				Sump pallet	
		(1)	<u>~</u> 2]	Steel	Polyethylene
Туре	W x D x H (mm)			Order No.	Order No.
Drum rack for 2 x 60 litre drum	755 x 635 x 1570	65	120	13148	13244
Drum rack for 3 x 60 litre drum	755 x 635 x 1570	65	120	13146	13147
Drum rack for 6 x 60 litre drum	1330 x 815 x 1570	205	120	13089	13137
Drum rack for 9 x 60 litre drum	1330 x 815 x 1570	205	120	13246	13126

¹⁾ Collecting volume (litres), 2) Load capacity per drum support (kg)

Hazardous material racks

Hazardous substances rack type REG

- storage of flammable liquids and water pollutants
- grid shelves as storage levels / steel sump on lower level







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Hazardous substances rack type REG-B

- storage of flammable liquids and water pollutants
- grid shelves as storage levels / rack placed in the steel sump







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Hazardous substances rack type RWW

- storage of water pollutants
- steel sump on each storage level





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Hazardous substances rack type RWG/RWF

- storage of flammable liquids and water pollutants
- shelves or grids as storage levels / rack placed in the steel sump







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Hazardous substances rack type RSG-V und RSG-K

- storage of aggressive chemicals
- galvanised or polyethylene grid shelves as storage levels / polyethylene sump on lower level







page 444

Hazardous substances rack type RSW

- storage of aggressive chem-
- polyethylene sump on each storage level







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Type index for hazardous substances racks

RWW Shelf with 4 steel trays
REG Shelf with 3 mesh shelves and 1 steel tray
REG-B Shelf with 4 mesh shelves and 1 steel base tray
RSG-V Shelving with 3 galvanised mesh shelves and 1 PE base tray
RSG-K Shelf with 3 PE grating shelves and 1 PE base tray
RSW Shelf with 4 PE trays
RWG Shelving with 4 or 8 galvanised gratings, shelving in steel drip tray
RWF Shelving with 4 or 8 galvanised shelves, shelf in steel drip tray

1044 Shelf width 1000 mm, shelf depth 400 mm **1064** Shelf width 1000 mm, shelf depth 600 mm **1344** Shelf width 1300 mm, shelf depth 400 mm **1364** Shelf width 1300 mm, shelf depth 650 mm



Hazardous material racks | with grids



Hazardous substances rack with grids

Storage of water pollutant and flammable liquids

Construction

- Galvanised rack frames
- Sturdy construction due to reinforcement cross bars
- Storage levels in 25 mm increments, height-adjustable
- Load capacity per storage shelf: 200 kg (evenly distributed)
- Rack system can be extended individually
- Flat-pack delivery with assembly instructions

Interior equipment

• 3 galvanised grids as storage levels and 1 bottom collecting sump made of galvanised steel

Order No. 27841







Туре	Capacity (I)	Basic rack W x D x H (mm)	Order No.	Add-on rack W x D x H (mm)	Order No.
REG 1044	20	1060 x 437 x 2000	27837	1012 x 437 x 2000	27838
REG 1064	30	1060 x 637 x 2000	27839	1012 x 637 x 2000	27840
REG 1344	25	1360 x 437 x 2000	27841	1312 x 437 x 2000	27842
REG 1364	40	1360 x 637 x 2000	27843	1312 x 637 x 2000	27844

Additional storage level for type	Order No.	Order No.
Version 1044 / 1054	27877	27877
Version 1064 / 1072 / 2064 steel galvanized	27878	27878
Version 1344 / 1352	27879	27879
Version 1364 / 1372 steel galvanized	27880	27880

Hazardous material racks | with grids



Order No. 27849

Hazardous substances rack with grids and bottom collecting sump

Storage of water pollutant and flammable liquids

Construction

- Galvanised rack frames
- Sturdy construction due to reinforcement cross bars
- Storage levels in 25 mm increments, height-adjustable
- Load capacity per storage shelf: 200 kg (evenly distributed)
- Rack system can be extended individually
- Flat-pack delivery with assembly instructions

Interior equipment

 4 galvanised grids as storage levels and 1 bottom collecting sump made of galvanised steel



Order No. 27845



Туре	Capacity (I)	Basic rack W x D x H (mm)	Order No.	Add-on rack W x D x H (mm)	Order No.
REG-B 1054	32	1156 x 526 x 2000	27845	1006 x 526 x 2000	27846
REG-B 1072	45	1156 x 726 x 2000	27847	1006 x 726 x 2000	27848
REG-B 1354	41	1456 x 526 x 2000	27849	1306 x 526 x 2000	27850
REG-B 1372	57	1456 x 726 x 2000	27851	1306 x 726 x 2000	27852

Additional storage level for type	Order No.	Order No.
Version 1044 / 1054	27877	27877
Version 1064 / 1072 / 2064 steel galvanized	27878	27878
Version 1344 / 1352	27879	27879
Version 1364 / 1372 steel galvanized	27880	27880



Hazardous material racks | with sump pallet



Order No. 27833

Hazardous substances rack with sumps

Storage of water pollutant liquids

Construction

- Galvanised rack frames
- Sturdy construction due to reinforcement cross bars
- Storage levels in 25 mm increments, height-adjustable
- Load capacity per storage shelf: 200 kg (evenly distributed)
- Rack system can be extended individually
- Flat-pack delivery with assembly instructions

Interior equipment

• 4 painted sumps made of steel as storage levels



Order No. 27829



Туре	Capacity (I)	Basic rack W x D x H (mm)	Order No.	Add-on rack W x D x H (mm)	Order No.
RWW 1044	20	1060 x 437 x 2000	27829	1012 x 437 x 2000	27830
RWW 1064	30	1060 x 637 x 2000	27831	1012 x 637 x 2000	27832
RWW 1344	25	1360 x 437 x 2000	27833	1312 x 437 x 2000	27834
RWW 1364	40	1360 x 637 x 2000	27835	1312 x 637 x 2000	27836

Additional storage level for type	Order No.	Order No.
Version 1044 steel galvanized	27873	27873
Version 1064 steel galvanized	27874	27874
Version 1344 steel galvanized	27875	27875
Version 1364 steel galvanized	27876	27876

Hazardous material racks | with sump pallet -



Order No. 27869



Order No. 27867

Hazardous substances rack with sumps

Storage of water pollutant and flammable liquids

Construction

- Galvanised rack frames
- Sturdy construction due to reinforcement cross bars
- Storage levels in 25 mm increments, height-adjustable
- Load capacity per storage shelf: 200 kg (evenly distributed)
- Rack system can be extended individually
- Flat-pack delivery with assembly instructions

Interior equipment

- Rack with galvanised grid or shelves as storage levels
- Collecting sumps either galvanised or painted
- 100 mm ground clearance for transport with pallet truck
- Version with shelves: storage of water pollutant liquids
- Version with grids: storage of water pollutant and flammable liquids



Order no. 27878

			Sump pallet		
		(painted	galvanised	
Туре	W x D x H (mm)		Order No.	Order No.	
RWG 1064 with 4 x grid	1236 x 816 x 2100	205	27865	27866	
RWG 1064 with 4 x shelf	2470 x 816 x 2100	225	27867	27868	
RWG 2064 with 8 x grid	1236 x 816 x 2100	205	27869	27870	
RWG 2064 with 8 x shelf	2470 x 816 x 2100	225	27871	27872	

1) Collection volume (I)

Additional storage level for type			
Version 1064 / 1072 / 2064 steel galvanized	27878	27878	
Version 1064 / 2064 steel galvanized	27885	27885	



Hazardous material racks | with grid



Order No. 27859

Hazardous substances rack with grid and PE sump

Storage of water pollutant and aggressive liquids

Construction

- Galvanised rack frames
- Sturdy construction due to reinforcement cross bars
- Storage levels in 25 mm increments, height-adjustable
- Load capacity per storage shelf: 200 kg (evenly distributed)
- Rack system can be extended individually
- Flat-pack delivery with assembly instructions

Ausstattung

- 3 galvanised grids or PE grids as storage levels and 1 sump made of PE
- Polyethylene sumps with high resistance against aggressive chemicals (such as acids and alkalis)



Order No. 27853



Туре	Capacity (I)	Basic rack W x D x H (mm)	Order No.	Add-on rack W x D x H (mm)	Order No.
RSG-V 1064 with galvanised grid	30	1060 x 637 x 2000	27853	1012 x 637 x 2000	27854
RSG-V 1364 with galvanised grid	40	1360 x 637 x 2000	27855	1312 x 637 x 2000	27856
RSG-K 1064 with PE grid	30	1060 x 637 x 2000	27857	1012 x 637 x 2000	27858
RSG-K 1364 with PE grid	40	1360 x 637 x 2000	27859	1312 x 637 x 2000	27860

Additional storage level for type	Order No.	Order No.
Version 1064 / 1072 / 2064 steel galvanized	27878	27878
Version 1364 / 1372 steel galvanized	27880	27880
Version 1064	27881	27881
Version 1364	27882	27882

Hazardous material racks | with sump pallet



Order No. 27861



Order No. 27863

Hazardous substances rack with PE sump

Storage of water pollutant and aggressive liquids

Construction

- Galvanised rack frames
- Sturdy construction due to reinforcement cross bars
- Storage levels in 25 mm increments, height-adjustable
- Load capacity per storage shelf: 200 kg (evenly distributed)
- Rack system can be extended individually
- Flat-pack delivery with assembly instructions

Interior equipment

- 4 polyethylene collecting sumps as storage levels
- Polyethylene sumps with high resistance against aggressive chemicals (such as acids and alkalis)



Order no. 27883

Туре	Capacity (I)	Basic rack W x D x H (mm)	Order No.	Add-on rack W x D x H (mm)	Order No.
RSW 1064 with PE sump pallet	30	1060 x 637 x 2000	27861	1012 x 637 x 2000	27862
RSW 1364 with PE sump pallet	40	1360 x 637 x 2000	27863	1312 x 637 x 2000	27864

Additional storage level for type	Order No.	Order No.
Version 1064	27883	27883
Version 1364 steel galvanized	27884	27884





Hazardous material depots made of steel

With wing doors



Hazardous material depots made of polyethylene



With pull-down blind



With sliding doors



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Harzardous material depots | Steel



Order No. 32004

Hazmat depot made of steel

Approved and safe

- Approved for the safe storage of flammable liquids (passive storage) and water pollutants
- With natural ventilation (0.4 times air change)

Safe, easy and efficient operation

- Light, easy opening and closing of the lid with gas pressure
- Protection against unauthorized use through a central locking mechanism for doors and lids
- Lid and doors can be opened independently
- Optimal access through 120° opening angle of the doors
- Drum storage directly on the galvanised grid or on Euro/ chemical pallets

Flexible

- Also suitable for storing 60 liter drums and small containers with the optionally available shelf combinations
- A ground clearance of 100 mm for optimal accessibility





Order No. 32006

Order No. 32008

Туре	W x D x H (mm)		[kg] 2J	Order No.
Depot sheet steel powder-coated 2 x 200 litre drum, accessible by forklift	1425 x 960 x 1540	205	815	32004
Depot sheet steel powder-coated 4 x 200 litre drum, accessible by forklift	1425 x 1350 x 1480	205	1215	32006
Depot sheet steel powder-coated 4 x 200 litre drum, accessible by forklift	1425 x 1350 x 1610	400	1215	32008
Accessories	W x D x H (mm)			Order No.
	<u> </u>			
Rack supports	75 x 63 x 1161			32010
Rack supports Shelf arms steel galvanized	75 x 63 x 1161 40 x 600 x 60			32010 10040
Shelf arms steel galvanized	40 x 600 x 60			10040

Hazardous material depots | Steel



Order No. 32012

Hazmat depot made of steel

Approved and safe

- Approved for the safe storage of flammable liquids (passive storage) and water pollutants
- With natural ventilation (0.4 times air change)

Safe, easy and efficient operation

- Light, easy opening and closing of the lid with gas pressure springs
- Protection against unauthorized use through a central locking mechanism for doors and lids
- Lid and doors can be opened independently
- Optimal access through 120° opening angle of the doors
- Drum storage directly on the galvanised grid or on Euro/ chemical pallets

Flexible

A ground clearance of 100 mm for optimal accessibility

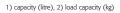


Order No. 32014



Order No. 40020

Туре	W x D x H (mm)	1) L	[s] 2)	Order No.
Depot sheet steel powder-coated 2 x 200 litre drum, accessible by forklift	1425 x 960 x 1870	205	815	32012
Depot sheet steel powder-coated 4 x 200 litre drum, accessible by forklift	1425 x 1350 x 1810	205	1215	32014
Depot sheet steel powder-coated 4 x 200 litre drum, accessible by forklift	1425 x 1350 x 1930	440	1215	40020





Harzardous material depots | Steel



Order No. 38711

Hazmat depot made of steel

Approved and safe

- Approved for the safe storage of flammable liquids (passive storage) and water pollutants
- With natural ventilation (0.4 times air change)

Safe, easy and efficient operation

- Interior height optimized for drums with mounted filling pumps or filling funnels
- Ventilation openings for passive storage of flammable liquids
- Delivery of fully assembled depot

Flexible

• A ground clearance of 100 mm for optimal accessibility



Order No. 38712



Order No. 38713

Туре	W x D x H (mm)	1)	[Kg] 2)	Order No.
Depot sheet steel powder-coated 1 x 200 litre drum, accessible by forklift	850 x 700 x 2000	220	400	38711
Depot sheet steel powder-coated 2 x 200 litre drum, accessible by forklift	1700 x 700 x 1800	220	800	38712
Shelf	805 x 660 x 30			38713

Hazardous material depot | Polyethylene



Order No. 31858

Hazmat depots made of PE

Approved and safe

- Approved for the safe storage of water pollutants
- High resistance to oils, acids and alkalis

Safe, easy and efficient operation

- Smooth-running, lockable sliding gates or wing doors
- Convenient interior height for safe and efficient loading with a forklift or forklift truck
- Integrated pocket for access underneath by forklifts and forklift trucks
- Ready for anchoring to the ground (anchor kit optional)
- Delivery of fully assembled depot



Order No. 36471



Туре	W x D x H (mm)		[Kg] 2]	Order No.
Depot PE	1560 x 1550 x 2330	1000	2000	31858
Depot PE	3200 x 1750 x 2170	1000	3600	36471
Mounting kit for floor anchoring				31859



Hazardous material depots | Polyethylene



Order No. 40057

Hazmat depots made of PE

Approved and safe

- Approved for the safe storage of water pollutants
- High resistance to oils, acids and alkalis

Safe, easy and efficient operation

- Wing door or space-saving roller blind
- With integrated sump pallet
- For direct placement of a barrel on a Euro pallet or barrel storage on the optional PE half pallet
- Integrated pocket for access underneath by forklifts and forklift trucks
- Ready for anchoring to the ground (anchor kit optional)

Depot with rack system

- Safe storage of small and medium-sized containers
- Rack with galvanised or PE rack frames and 3 shelves
- Dimensions shelves B x D (mm): 900 x 800 (steel) or 900x 590 (PE)
- Load capacity per storage level: 250 kg (steel) or 180 kg (PE)



Order No. 40058



Order No. 40060



Order No. 40062

				version			
		([kg 2]	Drum	Steel rack	Plastic rack	
Туре	W x D x H (mm)			Order No.	Order No.	Order No.	
Depot PE, wing door	1140 x 1050 x 2060	245	400	40057	40058	40059	
Depot PE, pull-down blind	1140 x 1050 x 2060	245	400	40060	40061	40062	
PE half pallet for placing 1 drum à 200 L	600 x 800 x 160			40063	-	-	
Mounting kit for floor anchoring				31859	31859	31859	

¹⁾ capacity (litre), 2) load capacity (kg)

Hazardous material depot | Polyethylene



Order No. 31856

Hazmat depots made of PE

Approved and safe

- Approved for the safe storage of water pollutants
- High resistance to oils, acids and alkalis

Safe, easy and efficient operation

- Wing door or space-saving roller blind
- With integrated sump pallet
- For direct placement of a barrel on a Euro pallet or barrel storage on the optional PE half pallet
- Integrated pocket for access underneath by forklifts and forklift trucks
- Ready for anchoring to the ground (anchor kit optional)

Depot with rack system

- Safe storage of small and medium-sized containers
- Rack with galvanised rack frames and 3 shelves (in 25 mm increments height-adjustable)
- Dimensions shelves B x D (mm): 1300 x 800 (steel) or 1300 x 590 (PE)
- Load capacity per storage level: 250 kg (steel) or 180 kg (PE)



Order No. 36470



Order No. 40065



Order No. 40067

	Version								
		A 1J	[Eg 2]	Drum	Steel rack	Plastic rack			
Туре	W x D x H (mm)	1)	INS.	Order No.	Order No.	Order No.			
Depot PE, wing door	1560 x 1080 x 1980	250	800	31856	32003	40064			
Depot PE, wing door	1140 x 1410 x 1980	240	800	36470	-	-			
Depot PE, pull-down blind	1554 x 1083 x 1980	250	400	40065	40066	40067			
PE grid to adjust for drums	1400 x 910 x 32			31857	-	-			
Mounting kit for floor anchoring				31859	31859	31859			





Hazardous materials handling

Overview: Safety containers

Dispensing cans



Sheet steel page 456



PE page 456



Stainless steel page 456



Stainless steel page 463

Storage and transport cans



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Stainless steel page 456





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Dispensing canister



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Storage and transport canister



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Stainless steel page 458

Cleaning containers



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Stainless steel page 460

Safety collection and disposal containers



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Stainless steel page 462



Stainless steel page 462

Stand ashtray



PE page 462



Safety containers | Steel, stainless steel, PE -



Order No. 23126 Order No. 23127



Order No. 23128

Safety containers made of steel, stainless steel or PE

- Made of galvanised steel with additional signal yellow coating, stainless steel or PE
- Plastic protective ring eliminates the risk of damaging the robust can body (steel and stainless steel versions only)
- Integrated removable flame guard (steel and stainless steel versions only)
- Incl. classification labels with danger symbols and warning

Storage and transport cans

- Tight-fitting screw cap
- Lock secured against loss (steel and stainless steel versions

Dispensing cans

- Easy-motion fine dosing tap made of stainless steel (1.4301) incl. ventilation and PTFE seal
- Fine dosing tap can be redated through 360°



Order No. 23129

Order No. 23130

Order No. 23131



Order No. 40084



Order No. 40083



Order No. 40095



Order No. 40094

				Capacity			
	1 L	2 L	5 L	1 L	2 L	5 L	
Туре	Ø x H (mm)	Ø x H (mm)	Ø x H (mm)	Order No.	Order No.	Order No.	
Safety can sheet steel	132 x 181	158 x 226	178 x 336	23129	23130	23131	
Safety can stainless steel	132 x 181	158 x 226	178 x 336	40081	40082	40083	
Safety can PE	100 x 150 x 200	100 x 150 x 280		40093	40094	-	
Safety can sheet steel	132 x 215	158 x 260	178 x 370	23126	23127	23128	
Safety can stainless steel	132 x 215	158 x 260	178 x 370	40084	40085	40086	
Safety can PE	100 x 150 x 230	100 x 150 x 310		40095	40096	-	
Funnel galvanised steel				23132	23132	23132	
Funnel stainless steel				36486	36486	36486	

Safety containers | Steel, stainless steel



Order No. 36475

Order No. 36476

Order No. 36477



Safety containers made of steel or stainless steel

- Made of galvanised steel with additional signal yellow coating or stainless steel
- Integrated removable flame guard
- Plastic protective ring eliminates the risk of damaging the robust can body
- Seals made of NBR
- Incl. classification labels with danger symbols and warning notes
- Ventilation valve for uniform, precision filling

Storage and transport cans

- UN certification for the transport of liquids of the packaging groups I, II and III (UN 3A1/X/250/...)
- Opening Ø approx. 35 mm with screw cap made of aluminium

Dispensing cans

- Easy-motion fine dosing tap made of stainless steel (1.4301) incl. ventilation and PTFE seal
- Fine dosing tap can be redated through 360°



Order No. 40087



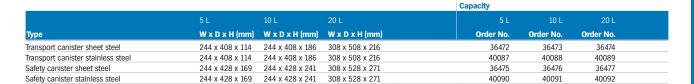
Order No. 40088



Order No. 40090



Order No. 40091





Safety containers | Steel, stainless steel





Safety containers made of steel or stainless steel

- Made of galvanised steel with additional signal yellow coating or stainless steel
- Seals made of NBR
- Incl. classification labels with danger symbols and warning
- Ventilation valve for uniform, precision filling

Storage and transport cans

- UN certification for the transport of liquids of the packaging groups I, II and III (UN 3A1/X/250/...)
- Opening \varnothing approx. 43,5 mm with screw cap made of aluminium
- Standard with flexible outlet pipe made of plastic (\varnothing approx. 20 mm)
- Storage of the dirt-proof outlet pipe inside the container

Safety containers with dispensing tap

• The dispensing tap with easy to use operating lever allows dispensing into smaller containers





Order No. 36481



Order No. 36482



Order No. 36484



Order No. 36485

			Сарасіцу	
	10 L	20 L	10 L	20 L
Туре	W x D x H (mm)	W x D x H (mm)	Order No.	Order No.
Transport canister sheet steel	170 x 340 x 280	170 x 340 x 470	36478	36479
Transport canister stainless steel	170 x 340 x 280	170 x 340 x 470	36480	36481
Dispensing canister sheet steel with dispensing tap	170 x 445 x 280	170 x 445 x 470	36482	36483
Dispensing canister stainless steel with dispensing				
tap	170 x 445 x 280	170 x 445 x 470	36484	36485
Funnel stainless steel			36486	36486

Dispensing cans | PE



Filling cans

- safe, clean and comfortable dispensing of liquids in the workplace
- Resistant, chemically stable and UV-stable containers
- Incl. 2 screw-on type outlets in different sizes
- 18 labels in 9 signal colours and a multilingual safety label for content labelling according to GHS
- With stable handles for ergnomic handling
- Available with 2, 5 or 10 litres capacity

Order No. 36489





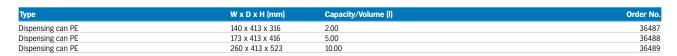
Order No. 36488

Order No. 36489











Cleaning containers | Steel, stainless steel



Order No. 2898

Small parts cleaning basket made of stainless steel

- When closing the lid the immersion sieve is pressed down, pushing the parts to be cleaned into the cleaning fluids
- Clamps keep the lid closed

Cleaning and immersion container made of stainless

- High resistance even to aggressive cleaning fluids
- Small parts basket available optionally

Dip tank

- Stainless steel lid and basin
- Sheet steel base frame as liquid-tight drip sump
- Dispensing tap made from brass at the basin bottom
- The lid is opened by pressing the foot pedal







Order No. 8632

				Capacity			
	2,5 L	10 L	20 L	2,5 L	10 L	20 L	
Туре	Ø x H (mm)	Ø x H (mm)	Ø x H (mm)	Order No.	Order No.	Order No.	
Cleaning and immersion container stainless steel		270 x 370	270 x 430	-	8570	8633	
Parts basket				-	8571	8635	
Small parts cleaner	265 x 160			8632	_	_	

Туре	W x D x H (mm)	Order No.	
Immersion container with stainless steel basin	670 x 660 x 935	2898	
Parts basket for immersion container	400 x 280 x 120	2900	
Sieve bottom for immersion container	600 x 311 x 17	2901	

Cleaning containers | Steel, stainless steel, PE -



Cleaning containers made of sheet steel, stainless steel or PE

Plunger can

- For safely moistening cleaning rags and sponges
- Easy-to-use pump tube with spring-loaded stainless steel dasher plate
- Economical removal, residual liquid flows back into the container
- Protection by reducing the vapors produced
- Protection against flame propagation through integrated flame arrester

Spray cans

- Economical and controlled spraying of surfaces and parts to be cleaned
- Ergonomic spray cap and integrated pump mechanism manufactured from plastic
- Incl. screw-on extension
- · Cans with protector ring

Material

- Galvanized steel, additionally coated in warning yellow with protective plastic ring
- High quality stainless steel (1.4404) with plastic protective ring
- Robust high-resistance polyethylene







Order No. 40098



Order No. 23139



Order No. 23137

			Capacity		
	1 L	2 L	1L	2 L	
Туре	Ø x H (mm)	Ø x H (mm)	Order No.	Order No.	
Plunger can sheet steel	178 x 200	178 x 290	23133	23134	
Plunger can stainless steel	178 x 200	178 x 290	23135	23136	
Plunger can PE	120 x 115 x 265	145 x 155 x 265	40097	40098	
Spray can sheet steel	165 x 300	190 x 345	23137	23138	
Spray can stainless steel	165 x 300	190 x 345	8628	23139	



Disposal containers | Steel, stainless steel, PE







Order No. 23158



Order No. 23159



Order No. 23161



Order No. 8640

Order No. 8641

Disposal bins made of sheet steel, stainless steel or PE

Disposal bins

- Safe collection of solvent-soaked cleaning rags and other waste
- Reduce vapor leakage to a minimum
- Safe opening thanks to large pedal with non-slip surface
- Protection against fires caused by self-closing lid
- Bottom edge with ventilation openings, self-ignition of the contents is prevented
- Container welded liquid-tight, protection against leaking liquids
- FM Certified
- Container either galvanized sheet steel with red powder coating or made of stainless steel

Disposal container

- Made of stainless steel
- Reduce escaping vapours to a minimum
- Lid opened with foot pedal, serial selfclosing lid

Safety floor-standing ashtray

- Made of robust, weatherproof polyethylene
- Cigarettes that have been thrown in expire briefly because the narrow slot minimizes the supply of oxygen
- Low center of gravity guarantees high stability
- Incl. Squeezing plate, easily removable aluminum inner container for collecting ashes and cigarette butts
- Integrated eyelet for wind and anti-theft protection
- Possibilities for floor attachment and weighting, e.g. B. with sand



Order No. 40235

Order No. 40237

			Material		
			Sheet steel	Stainless steel	PE
Туре	W x D x H (mm)	Capacity/Volume (I)	Order No.	Order No.	Order No.
Disposal bin sheet steel	385 x 382 x 429	20	39379	40009	-
Disposal bin sheet steel	441 x 440 x 490	35	23156	23159	-
Disposal bin sheet steel	493 x 495 x 536	50	23157	23160	_
Disposal bin sheet steel	535 x 535 x 577	65	23158	23161	
Disposal bin stainless steel	Ø 270 x 500	20	-	8640	_
Disposal bin stainless steel	Ø 390 x 600	50	-	8641	-
Ashtray grey	430 x 430 x 1140	15	-	-	40235
Ashtray black	430 x 430 x 1140	15	-	-	40237

Safety container | Stainless steel



Safety container made from stainless steel

- Made of stainless steel 1.4401
- PTFE seals
- Removable flame arrester made of perforated stainless steel
- Ergonomic form, safe working
- Fine dosing tap can be rotated through 360°
- With ventilation and pressure relief valve



				Capaci	ty			
	1 L	2 L	5 L		1 L	2 L	5 L	
Туре	Ø x H (mm)	Ø x H (mm)	Ø x H (mm)	Oı	der No.	Order No.	Order No.	
Safety can stainless steel	115 x 210	145 x 280	145 x 445		14745	14746	14747	
				Capaci	ty			
	5 L	10 L	20 L		5 L	10 L	20 L	
Туре	W x D x H (mm)	W x D x H (mm)	W x D x H (mm)	Oı	der No.	Order No.	Order No.	
Safety canister stainless steel	234 x 402 x 126	240 x 430 x 240	175 x 380 x 495		14757	14758	14759	

Safety container | Stainless steel



Safety containers made from stainless steel

- Explosion-proof with pressure relief valves and flame arrester
- High chemical resistance, made of high-grade stainless steel 1.4571
- PTFE seals for high resistance
- Removable flame retarder made of perforated stainless steel

Dispensing cans

- Fine dosing tap can be redated through 360°
- With ventilation and pressure relief valve

Transport cans

- With screw cap (secured against loss with a flexible shaft)
- With UN transport approval (GGVSEB / ADR / RID / IMDG-Code / ICAO-TI)
- Approved for all hazardous substances (packing group X): UN 1A1/X2.0/400...







Transport canister



Order no. 16790

				Capa	icity			
	1 L	2 L	5 L		1 L	2 L	5 L	
Туре	Ø x H (mm)	Ø x H (mm)	Ø x H (mm)		Order No.	Order No.	Order No.	
Safety can stainless steel	111 x 235	131 x 295	165 x 405		16768	16769	16770	
Transport can stainless steel	110 x 235	130 x 295	165 x 400		16771	16772	16773	
Fine measuring tap					16787	16787	16787	
Funnel					16790	16790	16790	

				Capacity			
	5 L	10 L	20 L	5 L	10 L	20 L	
Туре	W x D x H (mm)	W x D x H (mm)	W x D x H (mm)	Order No.	Order No.	Order No.	
Safety canister stainless steel	130 x 200 x 310	130 x 280 x 380		16774	16775	-	
Transport canister stainless steel	130 x 200 x 310	130 x 280 x 380	175 x 345 x 470	16776	16777	27974	
Fine measuring tap				16788	16788	16788	
Funnel				16791	16791	16791	





Dispensing canister

25 L **(**

Standing vessels



Dispensing canisters

- With ventilation and manual pressure relief valve
- Selfclosing tap
- Applicable horizontally

Safety container made from stainless steel – for inhouse

- High stabilitySelf-closing tap
- Pressure relief valve in the screw lid
- Level indicator made from PTFE, optical control of the substances during filling and extracting
- 25 litre container stackable

					Capacity			
	5 L	10 L	20 L	25 L	5 L	10 L	20 L	25 L
Туре	W x D x H (mm)	Order No.	Order No.	Order No.	Order No.			
Dispensing can with fine dosing tap and ventilation	130 x 200 x 310	130 x 280 x 380	175 x 345 x 470		16779	16780	16780	-
Stand vessel with fine dosing tap and ventilation		260 x 260 x 350			-	16782	-	_
Stand vessel tap		260 x 260 x 350		315 x 315 x 530	-	16783	-	16785
Stand vessel tap and level indicator		260 x 260 x 350		315 x 315 x 530	-	16784	-	16786
Self-closing tap for dosing canisters					16796	16796	16796	-
Funnel made from stainless steel (for 10 and 25 litre	s)				-	16789	-	16789

Hazardous materials handling

Overview: Hazardous materials handling

Gas cylinder storage and handling



Gas cylinder depots page 469



Gas cylinder trolley page 468



Gas cylinder retainer page 468

Drum protection accessories



Drum funnel page 470



IBC-Funnel page 471



Grounding cable page 472



Drum wrench page 472



Drum tap page 473



Drum tool page 473



Level indicator page 473



Drum valve page 473

Collection systems



Stackable containers page 476



Multipurpose container page 477

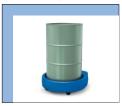


Dump trolley page 478



Tipping skip page 479

Drum transport



Drum dolly page 480



Drum lifter page 482



Drum tongs page 481



Drum lifter page 484



Drum turner page 483

Pumps



Container pumps page 474



Drum pumps page 475

Collision protection systems



Wall protection profile page 486



Pillar protection profiles page 486

Grit bin



Without dispensing hatch

With dispensing hatch page 487

page 487 **Leakage management**



Sorbents oil page 488



Sorbents UNIVERSAL page 489



Sorbents SPECIAL page 490



Sorbents transport trolley page 491



Sorbents transport boxes page 491



Sealing mats page 493



Barrier boundaries page 493



Granules page 492



Gas cylinder handling.



Order No. 13265

Gas cylinder wall brackets

- Steel, galvanised incl. chains to secure the cylinders
- For gas cylinders Ø 140, 230 and 320 mm
- Made of polyethylene incl. belt
- For gas cylinders \varnothing between 140 and 320 mm

Gas cylinder trolley

- For the safe transportation of 1 gas cylinder (up to Ø 320 mm)
- Includes a belt to secure the cylinder in place
- Solid rubber wheels, wheel $\varnothing 200 \text{ mm}$
- Load capacity: 80 kg

Polyethylene gas cylinder pallet

- For up to 4 gas cylinders (diameter 230 mm)
- Safe transport with fork lift truck
- Incl. safety chain for additional attachment to fork lift truck
- Load capacity 300 kg











Order No. 12793

Num	ber	of	bottl	e

				2x	3x	4x
Туре	W x D x H (mm)	Diameter bottles	Order No.	Order No.	Order No.	Order No.
Gas cylinder holder galvanised steel	192 x 131 x 60	140	13255	13254	13253	_
Gas cylinder holder galvanised steel	280 x 175 x 60	230	18162	12793	14699	
Gas cylinder holder galvanised steel	372 x 221 x 60	320	13252	13251	-	_
Gas cylinder trolley polyethylene	495 x 627 x 1110	230	13266	-	-	-
Gas cylinder trolley with support wheel polyethylene	495 x 800 x 1110	to 320	13265	-	-	-
Transport frame polyethylene	1120 x 600 x 1100	230	-	-	_	13267

Order No. 13266

Gas cylinder depots



Gas depots

Approved and safe

• Safe and approved storage of gas cylinders in outside areas

Construction

- Sturdy steel frame construction with mesh grid
- Roof made of profiled sheet steel
- Galvanized with additional powder coating in gray (RAL 7016) for optimal corrosion protection
- Lockable wing door
- Disassembled delivery, with assembly instructions

Storage Capacity Model 38715:

• 25 gas bottles of 50 liters each

Storage Capacity Model 38716:

• 50 gas bottles of 50 liters each

Stacking shelf

- Sturdy galvanized construction
- Up to 2 shelves can be stacked on top of each other
- Load capacity 500 kg





Order No. 38716

Туре	W x D x H (mm)	Order No.
Gas cylinder depot, single door	1430 x 1410 x 2210	38715
Gas cylinder depot, two doors	2760 x 1410 x 2210	38716
Stacking rack	1437 x 1038 x 750	8615



Drum funnel | Polyethylene, sheet steel



Order No. 2729

Drum funnel made of polyethylene or sheet steel

- Cans and filters can be put on the fluted area for draining
- Optional available lid protects againts contamination and can be locked
- Suitable for 200 litre drums

With high sidewalls

- Covers the whole drum surface
- Grooved surface allows a clean and splash-free infilling
- Optional available lid protects against contamination and can be locked.
- Suitable for 200-litre-drums (steel and plastic drum, bung hole drum or drum with lid)

Made of steel

- Extensive, safe filling in the 2" bung hole of 200 litre steel drums
- The funnel has a 30 litre capacity, suitable to fill in large amounts of liquid into the drum quickly







Order No. 2732



Order No. 12125

			Without sieve	With sieve	
Туре	Ø x H (mm)	Capacity/Volume (I)	Order No.	Order No.	
Drum funnel PE	Ø 580 x 115	5	2729	2730	
Drum funnel PE with lid	Ø 605 x 145	5	2731	2732	
Drum funnel PE conductive with lid	Ø 605 x 145	5	40076	40077	
Drum funnel PE	Ø 690 x 200	22	11308	11309	
Drum funnel PE with lid	Ø 690 x 230	22	11310	11311	
Drum funnel PE conductive with lid	Ø 690 x 190	22	23117	23119	
Drum funnel sheet steel	Ø 650 x 135	30	12125	-	



Order No. 40078

IBC funnel made of polyethylene

- Funnel for use with a conventional IBC
- For safely collecting and channelling liquids
- Domed base liquids run off
- Spout Ø approx. 100 mm (round version)

Version angular

- Large drain opening (Ø 145 mm) with integral 2" connection
- Discharge basin with side storage areas
- Storage pocket for IBC locking lid

Safety dispensing lid

- Effectively prevents contamination
- Safely restrains dripping residue
- For 200 litre steel bung hole drums
- Openings for 3/4" and 2" bung hole for using pumps and/or fill-level indicators

Safety dispensing platform

- Protection from dripping residues
- For 200 litre steel bung hole drums
- With openings for 3/4" and 2" bung holes



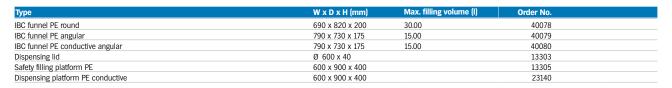
Order No. 13303



Order No. 13305



Order No. 40079





Earthing wire and drum wrench -





Order No. 19307

Order No. 19349





Order No. 40072

Order No. 40075





Order No. 19303

Order No. 19306

Earthing cable

Prevents danger of explosion through sparking or static charge

- Approved in accordance with ATEX II 1GD T6
- Low electrical resistance with high mechanical strength
- Chemically resistant and wear-resistant cable sheath
- ATEX version with stainless steel clamps
- Spiral grounding cable with length 3 or 5 m

Tested ATEX stainless steel pliers in 2 optional sizes

- Type MD (medium duty, opening angle approx. 15 mm) for drums, containers up to 200 liters
- Type HD (heavy duty, large opening angle approx. 40 mm) for larger system components, drum and containers from 200 liters etc.

Drum wrench

Cast iron

• Suitable for all bung types

Bronze

- Suitable for all common drum types
- Compact design, sparking is completely eliminated

Steel

- Fits all standard bung covers
- Easy opening with long handle

Plastic

 Suitable for 3/4" and 2" bung hole and synthetic lids DIN 51 and DIN 61

Cross-shaped drum wench

- In painted steel
- To easily opening all conventional drum lids using the wheel spider principle









Order No. 2781

Order No. 2780

Order No. 10055

Order No. 19302

	VELZIOII IVID		version no			
Spiral grounding cable	Order No.	Order No.	Order No.	Order No.	Order No.	Order No.
ATEX	Yes	Yes	Yes	Yes	No	No
Length (mm)	3000.00	3000.00	3000.00	3000.00	3000.00	3000.00
with 1x stainless steel tongs, 1x eyelet	19307	19308	40072	40073	19303	19304
with 2x stainless steel tongs	19348	19349	40074	40075	19305	19306

Drum key	Order No.					
	Cast iron	Bronce	Bronce	Steel	Plastic	Cross steel
	2781	2780	12033	10055	9701	19302



- Suited for filling aggressive chemicals
- Made of polypropylene high resistance to many acids and alkalis

Order No. 2774



- Suitable for filling e.g. mineral oil products, alcohols, flammable solvents etc.
- Made of stainless steel / aluminium

Order No. 40070



- Suitable for filling even highly viscous liquids, e.g. mineral oil products, as well as alcohols, flammable solvents
- Made of stainless steel / aluminium

Order No. 40071

Drum tools

- Simultaneous opening and emptying of drums, suitable for drums with 2" thread
- Electric or pneumatic connection not necessary
- Complete emptying of a drum in horizontal position



Level indicator

 With protecting cap, integrated ventilation indicates when drum is nearly full

Order No. 18094



Level indicator

- Made from chromed steel
- Fits 3/4" drum taps
- Enables filling to be carried out in installed state

Order No. 2776



Level indicator with volume scala

- Suitable for all common 200 litre drums
- For non corrosive liquids
 Order No. 13299



Drum safety vent made of brass with 2" thread

- Provides the necessary pressure balance when dispensing or pumping down
- Valve opens at 0.35 bars
 Order No. 2777

Stainless steel tap with 3/4" thread

- Self closing with flame arrester and PTFE seal
- Adjustable in position
- For aggressive liquids
- With suspension device for filling vessels



Order No. 2797

Brass tap with 3/4" thread

- Self closing with flame arrester and PTFE seal
- For non-corrosive liquids < 30 SAE
- With suspension device for filling vessels



Order No. 2799

Fine dosing tap made of stainless steel with 3/4" thread

- Self closing with flame arrester and PTFE seal
- Adjustable in position
- · For aggressive liquids



Order No. 2795

Brass tap with 3/4" thread

- Self closing with flame arrester and PTFE seal
- For aggressive liquids



Order No. 2798

Brass tap with 2" thread

- Self closing with flame arrester and PTFE seal
- For viscous liquids > 30 SAE



Order No. 2800

Fine dosing tap made of injection moulding zinc with 3/4" thread

 Self closing incl. flame arrester and plastic seal for alkaline liquids and mineral oil products





Drum pumps

Pumps

- For für weak acids, alkalis and petrochemical liquids
- Emptying of canisters up to 60 litres
- Thread connection: Ø 64 mm (BSI)
- Parts in contact with liquids are made of PP, PE and FKM

Solvent pump

- Parts in contact with liquids are made of stainless steel (1.4301) and PTFE
- Screw connection for 2" fine thread, for containers up to 60 litres
- Connection adapters for all common containers as accessories

With foot pedal

- submersion pipe steplessly adjustable to drum depth
- For drums up to 200 litres

For hand operation

• Fixed drip nozzle with stop valve of stainless steel/PTFE

Universal pumps

- Submersion pipe steplessly adjustable to drum depth
- Universal plugs for container openings \varnothing 30 70 mm
- Conveyor pipe made from PP
- Pump for hand operation with hose (PVC), length 1,5 m and stop volve
- Foot pedal for containers up to 120 litres
- Mini pump for containers up to 10 litres, container opening Ø 20–36 mm



Drum pump made of stainless steel, pedal-operated, conveying: 20.00 l/min, thread 2" Order No. 16841



Container pump made of PP, hand operation, for weak acids and bases, conveying: 8.00 l/min **Order No. 16840**



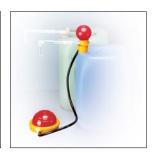
Drum pumpmade of stainless steel, hand operation, for
ultrapure liquids, solvents and flavourings,
conveying: 10.00 l/min **Order No. 16842**



Drum pump with hand operation



Mini pump with hand operation



Drum pump with foot operation

Model	Version	Pipe Ø (mm)	Immersion tube length (mm)	Conveying capacity (I/min)	Order No.
Container pump PP	hand operation		1000.00	8.00	16840
Drum pump stainless steel	pedal-operated		950.00	20.00	16841
Drum pump stainless steel	hand operation		600.00	10.00	16842
Container pump PP	hand operation	12.00	700.00	14.00	16849
Container pump PP	hand operation	18.00	700.00	26.00	16870
Container pump PP	hand operation	12.00	700.00	12.00	16872
Mini pump PP	hand operation	10.00	450.00	4.00	16873
Container pump PP	pedal-operated	15.00	700.00	20.00	16874
Container pump PP	pedal-operated	22.00	900.00	30.00	16884
Container pump PP	pedal-operated	12.00	700.00	12.00	16895
Accessories					Order No.
Adapter					16896



Drum pump made of stainless steel

- For flammable liquids
- Stainless steel 1.4301, PTFE-seal
- Optionally with outlet hose or bend
- Electrically conductive and suitable fpr zone 0 and 1
- Explosion group II A
- Submersion pipe Ø 32 mm



Drum pumps

- With outlet bend (PP) or PVC outlet hose incl. stopcock
- Submersion pipe Ø 32 mm
- PTFE seals
- Pumping capacity up to 12 l/min
- ullet For drums and tanks up to 60–1,000 litres



Anti-static set

 Consisting of: 3 colour-coded connecting copper cables with clamping pliers (1 copper cable 1.30 m long, 2 copper cables, insulated 3 m long) Order No. 2790



Drum pump PTFE

- For the extraction of ultrapure liquids
- With stop valve
- Immersion depth 950 mm
- Submersion pipe: Ø 32 mm
- Pumping capacity: 0,4 l/stroke

Order No. 16927

ļ Ģ	
D. a	

Model	Version	immersion depth (mm)	Conveying capacity (I/min)	Order No.
Drum pump PP	drain hose	500	0.20	16902
Drum pump PP	drip nozzle	500	0.20	16897
Drum pump stainless steel	drip nozzle	360	0.22	18908
Drum pump stainless steel	drain hose	360	0.22	18909
Drum pump PP	drain hose	650	0.23	16915
Drum pump PP	drip nozzle	650	0.23	16898
Drum pump PP	drain hose	800	0.26	16916
Drum pump PP	drip nozzle	800	0.26	16899
Drum pump PP	drip nozzle	1000	0.30	18954
Drum pump PP	drain hose	1000	0.30	18956
Drum pump PP	drain hose	1250	0.30	16918
Drum pump PP	drip nozzle	1250	0.30	16900
Drum pump PP	drip nozzle	1500	0.30	18955
Drum pump PP	drain hose	1500	0.30	18957
Drum pump stainless steel	drip nozzle	570	0.35	16923
Drum pump stainless steel	drain hose	570	0.35	16925
Drum pump stainless steel	drip nozzle	910	0.56	16924
Drum pump stainless steel	drain hose	910	0.56	16926

Model	Accessories of	Material	Order No.
Drum screw joint	PP drum pump	PP	16934
Drum screw joint	stainless steel drum pump	steel	16935
Drum screw joint	all models	PP	18963
Drum screw joint	all models	PP	18964
Drum plug	all models	PVC	16936



Stacking container | Polyethylene



Stackable containers out of polyethylene Safe and space-saving collection and provision of warehouse goods and recyclable materials

- Manufactured from corrosion-free polyethylene
- Safe-keeping of containers e. g. with acids, alkalis oil, non-flammable cleaning dilution, etc.
- Highly resistant to many acids and alkalis and aggressive substances
- Load capacity 500 kg
- Weather proof and easy to clean
- Low self-weight
- Easily accessible from front or sides









Order No. 22548



Order No. 22557

			Colour			
		1]	Grey	Red	Blue	Black
Туре	W x D x H (mm)	1)	Order No.	Order No.	Order No.	Order No.
Stacking containers PE	800 x 500 x 500	90	22536	22537	22539	-
Stacking containers PE	1000 x 800 x 600	260	22540	22541	22543	-
Stacking containers PE	1200 x 800 x 600	300	22548	22549	22551	_
Stacking containers PE	1200 x 1000 x 600	400	22556	22557	22559	-
Lid PE Stacking container PE V 90 L	786 x 523 x 43		-	-	-	24279
Lid PE Stacking container PE V 260 L	986 x 823 x 43		-	-	-	24280
Lid PE Stacking container PE V 300 L	1186 x 823 x 43		-	-	-	24281
Lid PE Stacking container PE V 400 L	1186 x 1023 x 43		-	-	-	24282

¹⁾ Collection volume (I)

Multipurpose container | Polyethylene -



Multipurpose container made of polyethylene

Collection, storage and provision of warehouse goods

- High-quality, dimensionally stable and robust construction
- Easy handling, low dead weight
- Food-safe and easy to clean
- Liquid-tight and extremely resistant to acids and alkalis

Version with feet

• Accessible from below for transporting by forklift trucks and pallet trucks

Version with castors

- Easy, manual transport
- 2 swivel castors and 2 lockable fixed castors, castor diameter 125 mm







Order No. 32041



Order No. 32035



Order No. 32045

			Colour			
		(A) 1)	Grey	Red	Blue	
Туре	W x D x H (mm)		Order No.	Order No.	Order No.	
Tipping container PE with feet	825 x 1240 x 845	600.00	32030	32031	32033	
Tipping container PE with feet	1030 x 1340 x 845	800.00	32038	32039	32041	
Tipping container PE with castors	825 x 1240 x 900	600.00	32034	32035	32037	
Tipping container PE with feet	1030 x 1340 x 900	800.00	32042	32043	32045	





Tipping trolley | Polyethylene -



Tipping trolley out of polyethylene

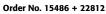
Collection and provision of warehouse goods

- Easy to move due to large castors (Ø 200 mm) and swivel castors (Ø 125 mm) of polyamide, lockable
- Easy emptying by tipping the container over the axle of the wheels
- Load capacity:
 Capacity 300 L and 500 L = 150 kg
 Capacity 750 L and 1000 L = 250 kg

Order No. 13067









Order No. 23074

			Colour			
		(A) 1)	Grey	Red	Blue	
Туре	W x D x H (mm)) IJ	Order No.	Order No.	Order No.	
Tipping trolley PE	920 x 1320 x 625	300.00	23073	23072	23070	
Tipping trolley PE	960 x 1440 x 825	500.00	15484	15483	13066	
Tipping trolley PE	1145 x 1560 x 925	750.00	15487	15486	13067	
Tipping trolley PE	1173 x 1586 x 1095	1000.00	23077	23076	23074	
Lid PE Tipping trolley/container V 300 L	1380 x 960 x 395		23078	-	-	
Lid PE Tipping trolley/container V 500 L	1510 x 990 x 550		22810	-	-	
Lid PE Tipping trolley/container V 750 L	1630 x 1170 x 550		22812	-	-	
Lid PE Tipping trolley/container V 1000 L	1655 x 1200 x 610		23079	-	-	

¹⁾ Collection volume (I)

Tipping containers | Polyethylene •



Order No. 13064

Tipping skip out of polyethylene

Collection and provision of warehouse goods

- Integrated inserts for transportation by forklift truck
- Optionally available with polyamide castors
- Made of resistant polyethylene
- Releasing the locking device immediately activates the tipping process
- Integrated spring mechanism limits the tipping process to approx. 90°, prevents the container for being damaged
- Load capacity:
 Capacity 300 L and 500 L = 150 kg
 Capacity 750 L and 1000 L = 250 kg







Order No. 13062



Order No. 23086



Order No. 23095

			Colour			
		(a) 1)	Grey	Red	Blue	
Туре	W x D x H (mm)		Order No.	Order No.	Order No.	
Tipping container PE without castors	920 x 1420 x 625	300.00	23083	23082	23080	
Tipping container PE without castors	960 x 1530 x 790	500.00	15490	15489	13061	
Tipping container PE without castors	1145 x 1650 x 890	750.00	15496	15495	13062	
Tipping container PE without castors	1173 x 1660 x 1060	1000.00	23091	23090	23088	
Tipping container PE with castors	920 x 1420 x 660	300.00	23087	23086	23084	
Tipping container PE with castors	960 x 1530 x 830	500.00	15493	15492	13063	
Tipping container PE with castors	1145 x 1650 x 925	750.00	15499	15498	13064	
Tipping container PE with castors	1173 x 1660 x 1095	1000.00	23095	23094	23092	
Lid PE Tipping trolley/container V 300 L	1380 x 960 x 395		23078	-	-	
Lid PE Tipping trolley/container V 500 L	1510 x 990 x 550		22810	-	-	
Lid PE Tipping trolley/container V 750 L	1630 x 1170 x 550		22812	-	-	
Lid PE Tipping trolley/container V 1000 L	1655 x 1200 x 610		23079	-	-	





Drum transport systems



Order No. 23262

Safe and easy transport of drums

Polyethylene drum dollies

- Ideal for 200 litre steel drums and 220 litre polyethylene drums
- Liquid-tight and corrosion-resistant
- Easy transport with 2 polyamide swivel castors and 2 fixed castors (Ø 80 mm)
- With profiled floor for good stability during transport

Steel drum dollies

- Easy transport with 4 polyamide swivel castors (\varnothing 75 x 25 mm)
- For 200 litre drums

Steel drum trolley

- Effortless picking up and transporting of drums
- No need to tilt or drive under the full drum
- For 60- to 220-litre steel and plastic drums
- Sturdy steel and stainless steel construction in high-quality powder coating
- Optionally in electrically conductive version for use in potentially explosive atmospheres (zones 1, 2 IIA, IIB)



Туре	W x D x H (mm)	[kg] 1]	Order No.
Drum dolly PE	720 x 800 x 225	300	23262
Drum dolly PE with drawbar	720 x 800 x 1135	300	23263
Drum dolly PE with apron with push-handle	720 x 800 x 1025	300	23264
Drum dolly PE conductive with apron with push-handle	720 x 800 x 1025	300	23265
Drum dolly steel	610 x 610 x 125	350	13333
Drum trolley steel	855 x 510 x 1405	350	40068
Drum trolley steel	855 x 510 x 1405	350	40069

¹⁾ Load capacity (kg)

Drum turner

- Robust hot dip galvanisedor painted version
- Steel drums can be transported, turned and tipped safely
- Turning range drum: > 360°



Version with clamp

• Steel drum lockable in both vertical and horizontal position Order No. 19257



Version with drum gripper

- For vertical or horizontal transport of 200 litre steel drums
- Can be locked in horizontal position
- The drums can be turned in the gripper

Order No. 2881



Drum turning tongs horizontal

- For lifting and transporting 200 litre beaded or clamping ring
- With locking device Order No. 13309



Drum lifting clamp

- Vertical or horizontal transport
- Also suitable for lifting a lying drum

Order No. 19262



Drum lifting tongs vertical

- For lifting and transporting 200 litre beaded or clamping ring
- Suitable for use with tightly packed drums or for loading safety and T-code recovery drums

Order No. 2689



Drum lifting tongs vertical

- For lifting and transporting 200 litre beaded or clamping ring
- Optimally suited for use with tightly packed drums **Order No. 2691**



Drum hanger for horizontal drums

• For lifting and transporting horizontal 60- and 200-litre steel beaded drums

• Sturdy chain construction with 2 special gripping hooks for drum

lifting Order No. 9877



Drum gripper

• For vertical lifting and transporting of drums for 200 litre steel drums and 220 litre plastic L-ring drums, body height: 350

Order No. 13274

Туре	Material	W x D x H (mm)	Load capacity (kg)	Order No.
Drum turning tongs with clamp	steel powder-coated	700 x 560 x 850	300	19257
Drum turning tongs with scissors gripper	steel galvanized	1080 x 550 x 850	300	2881
Drum turning tongs horizontal	steel powder-coated	120 x 665 x 60	350	13309
Drum lifting clamp	steel galvanised and coated	130 x 170 x 700	500	19262
Drum lifting tongs vertical	steel powder-coated	550 x 250 x 210	350	2689
Drum lifting tongs vertical	steel powder-coated	440 x 100 x 800	350	2691
Drum hanger	steel galvanized	NaN x NaN x NaN	300	9877
Drum gripper vertical	steel painted	300 x 350 x 445	350	13274



Drum turner | Forklift attachment



Order No. 2542



Order No. 2543



Order No. 19260

Drum lifter for one or two drums

- Safe loading of various drums
- Height adjustable
- By driving up to the top rim of the drum and lifting the drum, the gripper will automatically grip the rim of the drum
- When placing the drum on the ground again, the locking device on the gripper releases automatically

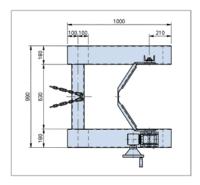
Drum gripper

- For all grooved 200 litres steel drums
- As forklift extension
- The clamp closes automatically when the forklift truck lifts the drum
- Secured by wing screws

Model	Material	W x D x H (mm)	Load capacity (kg)	Order No.
Drum lifter for 1 drum	steel powder-coated	710 x 890 x 975	350	2542
Drum lifter for 2 drums	steel powder-coated	1050 x 1080 x 975	700	2543
Drum gripper for 1 drum	steel powder-coated	710 x 1100 x 160	350	19260

Drum turner

- suitable for drums with diameters from 380 mm up to 600 mm
- rotatable prism jaws are installed in the front area, all common drums can be transported due to manual lash device
- securing chain for mounting to the forklift truck
- rotation range drum: 180°, load capacity: 300 kg
- forklift pockets: 170 x 70 mm, fork spacing: 630 mm









Drum turner as attachment for forklift trucks made of steel, with hand wheel **Order No. 2880**





Drum turner with chain for 200 litre steel drums

- Easy to control and use from driver's seat of fork lift
- The continuous chain enables measured drum emptying from any height
- Secured to fork lift with retaining screws
- Forklift pockets: 180 x 65 mm, fork spacing: 620 mm
- Turning range drum: > 360°, load capacity: 300 kg

Model	Material	W x D x H (mm)	Load capacity (kg)	Order No.
Drum turner	steel powder-coated	1055 x 1000 x 455	300	2880
Drum turner with chain	steel powder-coated	990 x 720 x 510	300	19258



Drum lifter



Order No. 13330

Drum lifter Type GH

- For 200 litre steel ripped sumps
- Adjustable wheel base (720 mm up to 1390 mm entry width)
- Easy to manoeuvre in confined spaces
- Self closing gripping mechanism

Drum lifter type LE

- Suitable for use with 200 litre ripped drums
- The wheel base of the drum lifter is wide enough to push the lifter either side of Euro pallets to ensure that drums at the back of the pallet can be reached easily
- The special locking mechanism fixes onto the top of the drum to hold the drum in place

Drum lifter with gripper

- For 60 litres and 200 litres grooved and clamping ring steel drums
- Special locking mechanism: steel drum is gripped at the upper drum edge and safely held
- Adjustable gripper mechanism, ideal adaption to various drum sizes and loading positions
- Easy to move due to 2 swivel and 2 fixed castors





Order No. 23271

Туре	Chassis	Material	W x D x H (mm)	Load capacity (kg)	Order No.
Drum lifter GH		steel powder-coated	900 x 1100 x 1885	350	19255
Drum lifter LE	wide	steel powder-coated	980 x 810 x 1180	250	13330
Drum lifter with gripper	narrow	steel painted	830 x 1140 x 1605	300	23266
Drum lifter with gripper	wide	steel painted	1200 x 1140 x 1605	300	2538
Drum lifter with gripper	wide	steel painted	1200 x 1100 x 2135	300	23271



Drum lifter with clamp

- 2 versions: clamp either suitable for 200 litre steel drums or univerally suited to all 200–220 litre steel and plastic drums
- The clamp closes automatically
- With foot pump
- Easy to move due to 2 swivel and 2 fixed castors
- Articles 14683, 2539 and 23276 for 200-L steel drums
- Articles 32016 and 32018 für 200-/220-L steel and PE drums

Drum lifter with prism jaws

- Drum lifter to lift, turn, mix, controlled emptying and transport drums
- Gripping system with rotatable prism jaws enable the handling of various drum and container sizes
- Rotation range: > 360°
- The drum is raised to the correct height by hydraulic pump
- Lifting height up to 1400 mm (depending on the version)
- Mobile due to 2 swivel and 2 fixed castors (with locking device)



Order No. 23276

Order No. 2879

Туре	Chassis	Material	W x D x H (mm)	Load capacity (kg)	Order No.
Drum lifter with clamp	narrow	powder-coated steel	830 x 1140 x 1605	300	14683
Drum lifter with clamp	wide	powder-coated steel	1200 x 1140 x 1605	300	2539
Drum lifter with clamp	wide	powder-coated steel	1200 x 1100 x 2135	300	23276
Drum lifter with clamp	narrow	powder-coated steel	830 x 1140 x 1605	300	32016
Drum lifter with clamp	wide	powder-coated steel	1200 x 1140 x 1605	300	32018
Drum lifter with prism jaws	narrow	powder-coated steel	830 x 1140 x 1605	300	23290
Drum lifter with prism jaws	wide	powder-coated steel	1200 x 1140 x 1605	300	23292
Drum lifter with prism jaws	wide	powder-coated steel	1200 x 1100 x 2135	300	2879

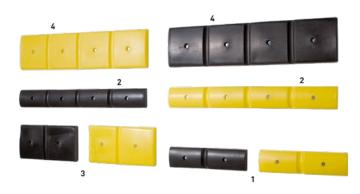




Wall/corner protection profiles



Pillar protection profiles



Transport route protection

Protectors for walls and corners

- To prevent damage on walls and corners
- Made from robust polyethylene
- Optimal impact resistance even in cold weather
- A collision involving forklifts is cushioned so that possible damage to forklifts is also minimized
- Resistant to numerous aggressive chemicals
- Warning colours yellow/black
- 2 per set, incl. assembly materials

Pillar protectors

- Made from robust polyethylene
- Optimal impact resistance even in cold weather
- Can also be assembled one on top of another to protect the upper part of a pillar
- Reduces the impact caused by a forklift truck, for example, and also minimises any possible damage to the forklift truck
- Warning colours yellow/black
- Set of 2 profiles with socket connector



Pillar protection profiles

			Colour		
			Yellow	Black	
Protection profile type	Туре	W x D x H (mm)	Order No.	Order No.	
Wall	slim 1	500 x 50 x 125	23096	23097	
Wall	slim 2	1000 x 50 x 125	23098	23099	
Wall	wide 3	500 x 50 x 250	23100	23101	
Wall	wide 4	1000 x 50 x 250	23102	23103	
Corner	slim 5	250 x 125 x 250	23104	23105	
Corner	wide 6	250 x 125 x 500	23106	23107	
Pillar	160	360 x 360 x 500	23108	23109	
Pillar	200	400 x 400 x 500	23110	23111	
Pillar	240	440 x 440 x 500	23112	23113	
Pillar	300	500 x 500 x 500	23114	23115	

Packaging Unit = 2



Grit container made of polyethylene

- Very sturdy construction, high impact resistance
- Optionally with dispensing hatch
- Weatherproof
- Entirely made of polyethylene, durable and corrosion-free
- Lid can be removed without tools
- Containers are lockable (lock not included in the scope of
- Available in light grey with three different lid colours



Order No. Orange

Order No.





Order No. 13068 Order No. 13366 Order No. 13071

12499

Capacity (ltr.) Model without dispensing hatch W x D x H (mm) 975 x 705 x 460 975 x 705 x 665 1210 x 785 x 780 1400 x 1070 x 748 1400 x 1070 x 930 Order No. Yellow 13296 12495 12496 13068 13069 Order No. Green 13298 13301 13328 13368 13358 13297 13300 13315 13369 13359

Capacity (ltr.) 400 100 200 550 with dispensing hatch 1400 x 1070 x 930 Model with dispensing hatch with dispensing hatch with dispensing hatch with dispensing hatch 975 x 705 x 460 975 x 705 x 665 1210 x 785 x 780 1400 x 1070 x 748 W x D x H (mm) 13393 12497 13071 Order No. Yellow 11515 13070 Order No. Green 13395 13307 13388 13365 13342 Order No. Orange 13306 13366 400 litre 550 litre Order No. 12498 12500 13072

12501

13073



Order No. 11315



Order No. 9934



Order No. 9930



Order No. 9933

Туре	Material thickness	Absorption (litres/PU)			Order No.
Sorbents	light	250.00	90 m x 40 cm	2	11315
Sorbents	heavy	250.00	45 m x 80 cm	1	9936
Sorbents	heavy	250.00	45 m x 40 cm	2	9937
Sorbents	light	136.00	46 cm x 40 cm	200	11327
Sorbents	heavy	129.00	46 cm x 40 cm	100	9934
Sorbents		57.00	1.2 m x 75 mm	15	9930
Sorbents		64.00	3 m x 75 mm	6	9931
Sorbents		46.00	46 cm x 46 cm	10	9932
Sorbents		35.00	25 cm x 25 cm	20	9933
Sorbents	heavy	42.00	Ø 560 mm	25	14367

Accessories		Order No.
For rolls with a width of 40 cm, with cutting edge	for rolls with a width of 40 cm, with cutting edge	9905
For rolls with a width of 40 cm, with cutting edge	for rolls with a width of 40 cm, with cutting edge	9908
For rolls with a width of 80 cm, with cutting edge (also suitable	for rolls with a width of 80 cm, with cutting edge (also suitable for wall	
for wall mounting	mounting)	9909

Oil Sorbents – water repellant, safe absorption of oils, petrol, diesel, etc.

- Very strong durability
- Suitable for heavy and long-lasting use
- Tightly woven fibres, high abrasion resistance and low-lint surface
- Outstanding absorption performance
- Large absorption capacity (up to 16 time of own weight)

Material thickness:

- Light for smaller leakages and prevention
- Heavy for larger leakages or absorption of puddles
- No unnecessary material usage perforated rolls and mats, take only as much material as necessary
- Minimised risk of dripping outstanding ability of absorbent surface to retain liquid



Order No. 11314



Order No. 9951



Order No. 9943

Universal Sorbents – safe absorption of oils, water, coolants and non-aggressive chemicals

- Very strong durability
- Suitable for heavy and long-lasting use
- Tightly woven fibres, high abrasion resistance and low-lint surface
- Outstanding absorption performance
- Large absorption capacity (up to 16 time of own weight)

Material thickness:

- Light for smaller leakages and prevention
- Heavy for larger leakages or absorption of puddles
- No unnecessary material usage perforated rolls and mats, take only as much material as necessary
- Minimised risk of dripping outstanding ability of absorbent surface to retain liquid



Order No. 9954

Туре	Material thickness	Absorption (litre	s/PU)		Order No.
Sorbents	light	242.00	90 m x 40 cm	2	11314
Sorbents	light	242.00	90 m x 80 cm	1	11317
Sorbents	heavy	242.00	45 m x 80 cm	1	9950
Sorbents	heavy	242.00	45 m x 40 cm	2	9949
Sorbents		64.00	3 m x 75 mm	6	11347
Sorbents		57.00	1.2 m x 75 mm	15	9954
Sorbents	light	144.00	46 cm x 40 cm	200	11326
Sorbents	heavy	136.00	46 cm x 40 cm	100	9951
Sorbents		46.00	46 cm x 46 cm	10	9943
Sorbents		35.00	25 cm x 25 cm	20	9944
Sorbents	heavy	42.00	Ø 560 mm	25	9953

Accessories		Order No.
For rolls with a width of 40 cm, with cutting edge	for rolls with a width of 40 cm, with cutting edge	9905
For rolls with a width of 40 cm, with cutting edge	for rolls with a width of 40 cm, with cutting edge	9908
For rolls with a width of 80 cm, with cutting edge (also suitable	for rolls with a width of 80 cm, with cutting edge (also suitable for wall	
for wall mounting)	mounting)	9909





Order No. 9913



Order No. 9917



Order No. 9910

Special Sorbents – safe absorption of acids, alkalis, aggressive chemicals and oil

- Very strong durability
- Suitable for heavy and long-lasting use
- Tightly woven fibres, high abrasion resistance and low-lint surface
- Outstanding absorption performance
- Large absorption capacity (up to 16 time of own weight)

Material thickness:

- Light for smaller leakages and prevention
- Heavy for larger leakages or absorption of puddles
- No unnecessary material usage perforated rolls and mats, take only as much material as necessary
- Minimised risk of dripping outstanding ability of absorbent surface to retain liquid



Order No. 9915

Туре	Material thickness	Absorption (litres/PU)	LxW	Packaging unit (PU)	Order No.
Sorbents	light	268.00	90 m x 80 cm	2	11319
Sorbents	heavy	228.00	45 m x 70 cm	1	9919
Sorbents	heavy	228.00	45 m x 40 cm	1	9913
Sorbents		85.00	1.2 m x 75 mm	15	9914
Sorbents		84.00	3 m x 75 mm	6	9915
Sorbents		57.00	25 cm x 25 cm	20	9910
Sorbents		78.00	46 cm x 46 cm	10	9916
Sorbents	heavy	114.00	46 cm x 40 cm	100	9917
Sorbents	light	163.00	46 cm x 40 cm	200	9918

Accessories		Order No.
For rolls with a width of 40 cm, with cutting edge	for rolls with a width of 40 cm, with cutting edge	9905
For rolls with a width of 40 cm, with cutting edge	for rolls with a width of 40 cm, with cutting edge	9908
For rolls with a width of 80 cm, with cutting edge (also suitable	for rolls with a width of 80 cm, with cutting edge (also suitable for wall	
for wall mounting	mounting	gana

Sorbents | Mobile Box, Transport Trolley, Refill Set



PREMIUM transport trolley special, W x D x H (mm): $410 \times 590 \times 950$ **Order No. 14413**



PREMIUM mobile box universal, W x D x H (mm): 610 x 400 x 340 Order No. 14406

PREMIUM Sorbents emergency set in trolley

 Content: 6 cushions, 3 socks, 20 mats, 3 pair protective gloves, 5 plastic bags, 1 pair full vision safety glasses with elastic strap

PREMIUM mobile box

• Content: 6 cushions, 3 socks, 20 mats, 1 pair protective gloves

Handy sized mobile spill kit for fast access in case of leakage. The chosen content of the box provides the neccessary help in serious accidents to absorb water-pollutant substances.

Oil Sorbents

Safe absorption of oils, petrol, diesel, hydrocarbon-based liquids etc., water repellant

Universal Sorbents

Safe absorption of oils, water, coolants and non-aggressive chemicals

Special Sorbents

Safe absorption of acids, alkalis, aggressive chemicals and oil



Refill kits for the mobile box (without protective gloves)

Туре		W x D x H (mm)	Material	Order No.
Mobile box	Oil sorbents	610 x 400 x 340	polyethylene	14405
Mobile box	Universal sorbents	610 x 400 x 340	polyethylene	14406
Mobile box	Special sorbents	610 x 400 x 340	polyethylene	14407
Transport trolley	Oil sorbents	410 x 590 x 950	polyethylene	14411
Transport trolley	Universal sorbents	410 x 590 x 950	polyethylene	14412
Transport trolley	Special sorbents	410 x 590 x 950	polyethylene	14413

Accessories		Order No.
Refill kit for mobile box	Oil sorbents	14408
Refill kit for mobile box	Universal sorbents	14409
Refill kit for mobile box	Special sorbents	14410
Refill kit for trolleys	Oll sorbents	14414
Refill kit for trolleys	Universal sorbents	14415
Refill kit for trolleys	Special sorbents	14416





Universal coarse grain

- 1-3 mm grain size
- 20 kg bag binds up to 16 l heating oil
- Suitable for solid surfaces
- Optimum slip resistance even when completely saturated
- For indoors and outdoors



Universal fine grain

- 0.5-1 mm grain size
- 20 kg bag binds up to 18 l heating oil
- Penetrates small depressions and cracks
- Best suited for large contact with the surface and fast absorption (e.g. traffic surfaces)
- $\mbox{-}$ Optimum slip resistance even when completely saturated



Ultra fine grain

- 0.3-0.7 mm grain size
- 10 kg bag binds up to 11 l heating oil
- Penetrates the finest recesses and cracks
- Ideally suited for applications where little waste and very high suction power is required

Granulate - to set oils, alkalis, lipids, fuels, lacquers etc.

- Test certificates (MPA-NRW type III R)
- Succesfully tested and licensed for the usage on traffic areas



Granulate universal	Absorption (litres/PU)	Weight (kg)	Order No.
Granulate universal ultra fine grain (packaging unit: 1x 10 kg bag)	11.00	10	14394
Granulate universal ultra fine grain (packaging unit: 3 x 10 kg bags)	33.00	30	18165
Granulate universal fine grain (packaging unit: 1x 20 kg bag)	18.00	20	9906
Granulate universal fine grain (packaging unit: 3 x 20 kg bags)	54.00	60	18453
Granulate universal coarse grain (packaging unit: 1x 20 kg bag)	16.00	20	9956
Granulate universal coarse grain (packaging unit: 3 x 20 kg bags)	48.00	60	18468
Accessories		Material	Order No.
Hand-shovel		polypropylene	14369
Hand-shovel		polypropylene	14370

Sealing mats, barrier boundaries



Sealant mat, W x D x H (mm): $800 \times 800 \times 8$ Order No. 13098



Separation barrier, W x L x H (mm): 70 x 3000 x 100 **Order No. 11365**



Separation barrier, W x H (mm): 400 x 50 Order No. 13096

Flexible sealant mat – rapid protection in case of leaking liquids

- Prevents in case of fire or emergency a contamination of the surroundings with waterpollutant liquids
- Incl. protection film with integral handles
- Resistant to water, hydrocarbons and most chemicals
- The extremely dense, flexible material adhering to the underside adapts perfectly to the nature of the ground
- Can be used several times

Flexible separation barrier – rapid protection in case of leaking liquids

- Stick to ground and protects the environment from escaping liquids (e.g. for drains)
- Consists of a special plastic mixture
- Resistant to water, hydrocarbon and most chemicals
- Reusable (can be washed with soapy water or detoxicated)
- For all smooth substrates



Туре	W x D x H (mm)	Material	Order No.	
Separation barrier	70 x 3000 x 100	polyurethane	11365	
Separation barrier	45 x 2000 x 50	polyurethane	13093	
Separation barrier	400 x 50	polyurethane	13096	
Sealant mat	800 x 800 x 8	polyurethane	13098	
Sealant mat	1000 x 1000 x 8	polyurethane	9901	
Sealant mat	400 x 400 x 8	polyurethane	9902	
Sealant mat	1200 x 1200 x 8	polyurethane	9903	
Sealant mat	600 x 600 x 8	nolyurethane	9904	

Storage boxes	W x L x H (mm)	Material	Order No.
for length 400 mm	190 x 475 x 210	polyethylene	13097
for length 600 mm	190 x 675 x 210	polyethylene	13094
for length 800 mm	190 x 875 x 210	polyethylene	13101
for length 1000 mm	190 x 1080 x 210	polyethylene	13102
for length 1200 mm	190 x 1280 x 210	polyethylene	13095



WHEN IT COMES TO SAFETY, WE DO NOT COMPROMISE

We take the maintenance of your safety equipment very seriously. In your interest.



Safety equipment is there to prevent the worst damage in the event of an emergency.

Therefore, it must be maintained regularly to ensure that it is fully functional at all times.

Professional maintenance can be vital

Improper maintenance can have serious consequences, such as loss of insurance cover. But other more severe costs can be incurred through production downtime, logistical

changes or even the relocation of production. In these circumstances, day-to-day running costs for personnel, vehicle fleet etc., continue to be a burden on the affected company.

This can all be avoided with asecos original service, keeping you legally on the safe side.

CORRECTLY MAINTAINED, PERFECTLY SECURED

Original service from asecos means: comprehensive and thorough maintenance – for your safety.

Our success began in 1994:

An inventive newcomer to the industry, asecos introduced the world's first safety storage cabinet with 90-minutes fire resistance onto the market in 1994. At that time, the product was revolutionary as only fire-resistant storage rooms offered this same level of protection.

Outstanding functionality and first-class quality soon earned asecos an excellent reputation in the industry. The innovative technologies that were developed in the following years continued to set new standards and trends.

At asecos, we still pursue this mission today. In accordance with our corporate philosophy, we want our products to contribute towards the safe management of hazardous materials throughout the world.

Our enthusiasm and inventiveness have made us the global leader in the manufacture of EN 14470-1/-2-compliant safety storage cabinets.

To provide all-round protection, our product portfolio today includes the following business divisions: indoor hazardous materials storage, extraction and filter systems, hazardous materials handling in outdoor areas, protection of non-smokers and maintenance and service solutions for all sectors.









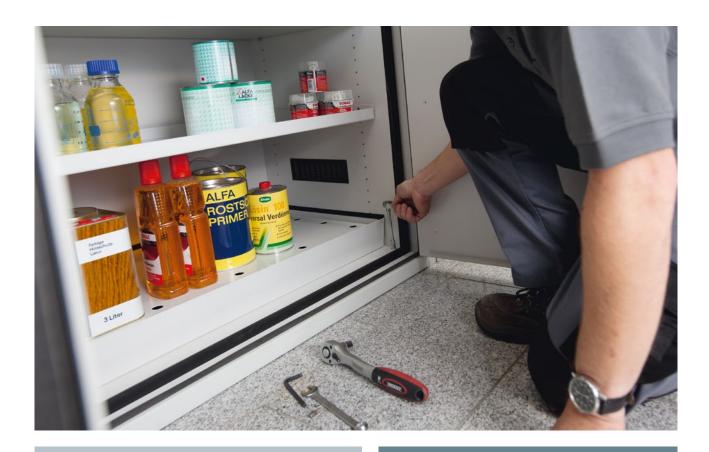
Our service sets standards

Our expertise as a developer and manufacturer of safety-related equipment is also reflected in our range of services: we offer a complete, professional service programme including a 24-hour spare parts service.

WHY **MAINTENANCE MATTERS**

- THE **LEGAL BASIS**

The UK has many regulations governing the maintenance of equipment and employers have a legal duty to ensure that work equipment, including storage cabinets, are kept in good order to meet those requirements.



But nothing has ever happened to us...

"It is a fact of life that a fire can occur practically at any time. The fact that in many buildings there has been no fire for decades does not prove that there is no danger, but rather represents a stroke of luck for those affected. The end of which can be expected at any time."

Quotation from a judgement of the Higher Administrative Court of Münster

(file no : 10 A 363/86 from 11 12 87)

Reasons for the purchase of a safety storage cabinet:

- » Sustainable guarantee of legal security
- » Duty of care for people and the environment
- » Limitation of liability for the company and the business owner

However, you will only stay legally on the safe side if you have your safety storage cabinet regularly checked for safety!

Health and Safety at Work Act 1974

General duties of employers to their employees.

- (1) It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all employees.
- (2) Without prejudice to the generality of an employer's duty under the preceding subsection, the matters to which that duty extends include in particular—
- (a) The provision and maintenance of plant and systems of work that are, so far as is reasonably practicable, safe and without risks to health.

Care of Substance Hazardous to Health Regulations 2002 – COSHH

Regulation 9 states that in the case of plant and equipment, including engineering controls and PPE that it is maintained in an efficient state, in efficient working order, good repair and in a clean condition. In the case of the provision of systems of work and supervision and of any other measure, it is reviewed at suitable intervals and revised if necessary. In addition, employers must ensure that whoever carries out maintenance examinations and tests are competent to do so. People carrying out examinations and test on control measures of which safety cabinets are, must have adequate knowledge, training and expertise in methods and techniques.

Dangerous Substances and Explosive Atmospheres Regulations 2002 – DSEAR

DSEAR refers to maintenance throughout the regulations. The employer, having carried out all the required assessment and subsequent implementation work, should continue to

ensure that the control measures they have created are maintained both in terms of hardware (plant etc) and software.

The workplace, including the location of equipment, should be designed, constructed and maintained to prevent releases of dangerous substances accumulating in sufficient quantity that ignition could result in a fire and/or explosion or 'other events' that may lead to injury.

The Provision and Use of Work Equipment Regulations 1998 – PUWER

PUWER requires that equipment provided for use at work is safe for use, maintained in a safe condition and inspected.

In order to ensure work equipment does not deteriorate to the extent that it may put people at risk, employers, the relevant self-employed and others in control of work equipment are required by PUWER to keep it maintained in an efficient state, in efficient order and in good repair'.

The frequency and nature of maintenance should be determined through risk assessment, taking full account of

- when the manufacturer's recommendations
- >>> the intensity of use
- operating environment (such as the effect of temperature, corrosion, and weathering)
- » user knowledge and experience
- the risk to health and safety from any fore seeable failure or malfunction

Maintenance on a less frequent basis than the manufacturer's recommendation should be subject to careful risk assessment and the reasons for doing so should be reviewed at appropriate intervals.

Maintenance work should only be undertaken by those who are competent to do the work. With high-risk or complex equipment, these demands may be significant and, in some cases, may be best undertaken by the manufacturer or specialist contractors.

There is no requirement for you to keep a maintenance log, although it is recommended for high-risk equipment. Maintenance logs can provide useful information for the future planning of maintenance, as well as informing maintenance personnel of previous action taken. However, if you have a maintenance log, you must keep it up to date.

Conclusion

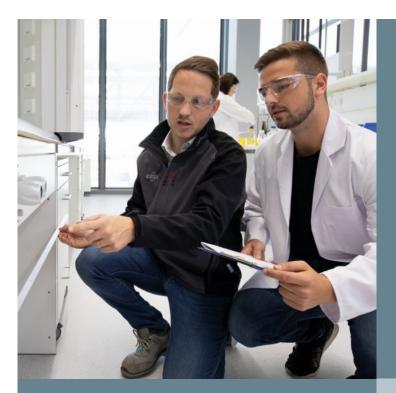
Improper or irregular inspection of safety-related equipment, not only risks the loss of insurance cover but also threatens your personal liability - you can be held personally responsible for damage or injury.

Do you meet all legal requirements?		
	A risk assessment has been prepared for our company	
	Our safety cabinets are inspected for safety at regular intervals	
	Our safety cabinets are inspected by the manufacturer or by a person certified by the manufacturer	
	The results of the inspection are recorded and kept for an appropriate period of time.	
Only	a positive response to these statements keeps you on the safe side!	



ONLY ASECOS CAN CORRECTLY MAINTAIN ASECOS PRODUCTS

Have trust in the asecos original service.



What you can expect from the asecos service.

- » Warranty or manufacturer's warranty and producer liability
- » Thorough checks to ensure the storage facility is being used in accordance with the legislation (site location; correct, segregated storage; EX zones etc.)
- » Complete documentation and availability of all original spare parts (min. 10 years)
- » Comprehensive service network
- » 98% of all repairs on asecos products completed during the initial service / safety check – no second visit required.

We know every detail of our products.

After all, we have developed and built them ourselves. Therefore, when maintaining your technical safety equipment, you should rely exclusively on the asecos original service – and on the competence of our service technicians. Because they know exactly what they have to deal with.

You are safer with asecos.

Professional maintenance extends the life of your products and minimises the risk of failure. In an emergency we, as the manufacturer, have 98% of the original parts of common asecos products available. This means we can normally repair your equipment during the safety inspection.

QUALIFIED TRAINING

- THE **BASIS** FOR **EXCELLENT WORK**

asecos employees are specialists in their field.

Safety inspections should only be carried out by a qualified, competent person. A competent person is defined as:

A person who, through his or her vocational training, professional experience and timely professional activity, has the necessary technical knowledge to test work equipment.

We work in accordance with the legal regulations and only employ service staff who are called upon to be competent persons to carry out these safety checks.

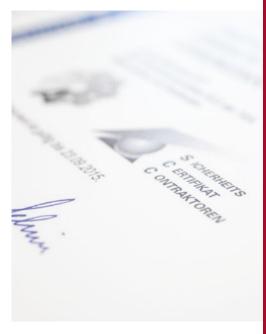
Our service technicians undergo thorough initial and continuous training, both internal and external, in all aspects of hazardous material storage and handling, across our full product range.

Such intensive training ensures our service technicians have the necessary qualifications and ability to

- carry out safety inspections on asecos products,
- » carry out the effectiveness test,
- conduct a technically correct and comprehensive assessment,
- » assess the basis for warranty extension.

In addition, asecos has a specialist back office with a trained occupational safety specialist. So you can be sure that we understand what is important.

Maintenance at the highest level means you have: legal security in the event of damage.



Documentation

- » Issue of test sticker
- Creation of an electronic test protocol (PDF) specifically for each cabinet type (solvent/compressed gas/corrosive) and adapted to the respective construction type (tall unit/under bench unit/container).
- Integration of inventory/equipment number into the maintenance system for quick tracking. Advantage: no unnecessary paper consumption, simple data archiving.
- Warranty or manufacturer's warranty and producer's liability in accordance with the product safety law to protect your employees and facilities.

Please observe local legislation and regulations.

WITH OUR SERVICES YOU ARE ALWAYS ON THE SAFE SIDE

The asecos original service in detail.





Trust in the competence of asecos

Regardless of which safety equipment you operate, we ensure that everything is perfectly maintained. What you can expect:

The annual safety inspection

For asecos safety storage cabinets, the safety inspection is mandatory.

Safety installations must be properly maintained at regular intervals by a competent person and tested for their functionality. The basis for determining the inspection intervals is the risk assessment.

The safety inspection is a classic standard maintenance, which provides you with a guaranteed, optimum inspection of all safety-related systems.

The asecos service technicians thoroughly check all equipment and correct any malfunctions on site, using original spare parts. Finally, the service work is documented so that you are covered in the event of damage. In order to be able to carry out the inspections properly, the service technician must have a very precise knowledge of the safety storage cabinet - e.g. with regard to the fire protection construction (sealing systems etc.), the technical extraction system (air exchange, fire dampers, monitoring electronics etc.) or special equipment such as door open arrest systems, pipe lead-throughs and similar. It goes without saying that the safety inspection can only be carried out by specially trained and certified asecos service staff.

We also carry out other work, such as filter changes for recirculating air filters, inspection of shelf systems and much more.

Our service technicians carry out the following tests:

- » Functional test
- » Security check
- » Fire protection testing
- » Ventilation test
- » Legal security control
- » Visual inspection

MAINTENANCE MEANS RESPONSIBILITY

The asecos original service according to BS EN 13306.

Anyone who operates technical installations or systems of any kind must ensure that they are always in working order, i.e. they are maintained. This is of course particularly important where human life can be endangered by technical failure — and this is the case with safety-related installations.

The objectives of maintenance are:

- >>> To increase the service life
- » Improvement of operational safety
- » Increase of plant availability

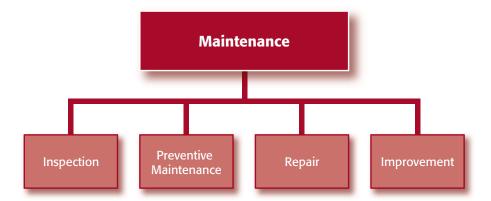
- » Reduction of disturbances
- » Optimisation of operational processes
- » Plannability of costs

More productivity and legal certainty through preventive maintenance

Regular service by our technicians prevents system failures. Thus you increase your productivity, avoid financial follow-up costs and you are legally on the safe side:

- You reduce downtimes
- » You shorten repair times

- You safeguard your limitation of liability for your company or for you as a business owner.
- You receive from us a warranty for the service provided



BS EN 13306 clearly sets out the requirements and basic maintenance measures:

Inspection

During the inspection, the installation to be inspected is assessed. The causes of any wear and tear are determined and the necessary conclusions for future use are drawn.

Preventive Maintenance

BS EN 13306 defines maintenance as measures taken to prevent failure due to wear and tear.

Repair

If the system to be tested is defective, the functional condition is restored during maintenance. However, no improvements have been made.

Improvement

The aim is to increase the functional safety of a plant without changing the function. The measures to achieve this BS EN 13306 is defined as a combination of technical and administrative measures and activities of the management. We have taken these aspects into account when developing our service proposal.



OUR **PROPOSAL**



Tailored to your individual needs.

Do you have other safety engineering systems? No problem.

We can also offer you safety checks, e.g. of hazardous substance work stations, pharmacy fume cupboards, acid-alkaline cabinets, chemical, environmental and pesticide cabinets.

Our service programme includes many more services – just contact us!

Safety inspection of safety storage cabinets for flammable liquids or pressurised gas cylinders

Tariff



The regular inspection according to EC-directives 89/391/EEC

Inspection

- · Visual inspection including ventilation test
- Error analysis

Legal Certainty Inspectorate

• Control of EX areas, stored goods, legal marking, checking the documentation, installation conditions

Immediate maintenance

- Measures to delay wear and tear
- Functional test
- Feedback of maintenance work

Immediate repair

- Replacement of parts to a value of £5 are included in the service.
- Immediate repair in 98% of cases for manufactured products

Signed entry in the asecos service booklet / inspection sticker / inspection record



THE **ASECOS ORIGINAL SERVICE**:

SAFETY THAT REASSURES

asecos gives you the good feeling of having done everything necessary.



Save yourself unnecessary trouble and effort. Trust in the competence of asecos for the maintenance of your safety systems.

You don't have to do anything more. We regularly remind you of due maintenance dates and safety inspections. In this way, the function of all systems is guaranteed at all times.

You gain legal certainty, and you do everything necessary to protect the health of your employees, your company and last but not least, the environment.

A good feeling, don't you think?

Trust in the asecos original service:

- » Enjoy lasting legal security
- » Fulfil your duty of care towards people and the environment
- » Maintain the limitation of liability for your company and yourself

Terms and conditions

Dimensions, weights and illustrations

Technical data such as dimensions and weights shown in the catalogue are approximate values. Illustrations may contain special equipment. Products will be delivered without any decoration material.

Price and delivery information

To obtain binding price information and delivery times, please contact your respective dealer/retail partner.

Customs duty / documents dispatch

In case any country-specific extra costs occur for an order (like for example customs confirmation, express shipping of documents, chamber of commerce (IHK) confirmations, etc.), the charges will be passed on accordingly.

asecos Warranty



* Upon conclusion of an asecos service and maintenance agreement (BasicPlus tariff) with a fixed term of 5 years, you will get a warranty extension for a maximum of 5 years for your safety storage cabinet according to EN 14470. Detailed information upon request. Available only in certain markets. Please check with local partner.



* Upon conclusion of an asecos service and maintenance agreement (PREMIUM tariff), you will get a warranty extension for up to 10 years for your safety storage cabinet.

Detailed information upon request. Available only in certain markets. Please check with local partner.

Other information

Furthermore we refer to the general terms and conditions of the asecos GmbH on **www.asecos.global** and the terms and conditions of your specialised dealer.

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Publisher asecos GmbH



www.asecos.global

asecos GmbH

Sicherheit und Umweltschutz Weiherfeldsiedlung 16–18 DE-63584 Gründau

F +49 6051 922010 @ info@asecos.com

Asecos BV

Veiligheid en milieubescherming Tuinderij 15 NL-2451 GG Leimuiden

+31 172 506476 F +31 172 506541

@ info@asecos.nl

asecos SARL

Sécurité et protection de l'environnement 1, rue Pierre Simon de Laplace FR-57070 Metz

+33 3 87 78 62 80

asecos S.L.

Seguridad y Protección del Medio Ambiente CIM Vallès, C/ Calderi S/N Oficinas 75 a 77 E5-08130 - Santa Perpètua de Mogoda Barcelona

asecos Ltd.

Safety and Environmental Protection Profile House Stores Road Derby, Derbyshire DE21 4BD

+44 1332 415933

@ info@asecos.co.uk

asecos

Safety and Environmental Protection Inc. 19109 West Catawba Avenue, Suite 200 Cornelius, NC 28031 USA

@ info@asecos.com

asecos Schweiz AG

Sicherheit und Umweltschutz Gewerbe Brunnmatt 5 CH-6264 Pfaffnau

#41 62 754 04 57
F +41 62 754 04 58
@ info@asecos.ch