

CLEAN-AIR 3 stage filtering for respirable air processing

Filter stations for respirable air processing according ISO 8573-1.

The 3-stage filter unit is installed stationary in existing compressed air networks.

Fittings such as pressure regulators, pressure gauges, flow controls and couplings are installed in accordance with the requirements.

Breathing air standard DIN EN 12021:2014

Limits:

Oxygen (O ₂):	21% ± 1%
Carbonmonoxide (CO):	≤ 5 ppm
Carbon dioxide (CO ₂):	≤ 500 ppm
Oil content:	≤ 0.5 mg/m ³
Dew point temp.:	min. 5°C below T _{min} .

Technical properties:

Max. operational pressure: 17 bar
 Air flow: 1500 l/min (6 bar)

Quality of the respirable air:

- Class 1.7.1 according ISO 8573-1
- Removes particles down to 0.01 µm
- Max. content of oil: 0.003 mg/m³ (ppm)

Operational temperature: -20...+65°C

For temperatures below +2°C, please consider the air condition.

These filters do not remove CO, CO₂ or other toxic gases and do not change the content of oxygen of the feeded air.

3 stage filter unit for wall mounting

Each 3-stage filter unit consists of a ball valve, compressed air filter, oil separator and activated carbon filter. It is completely pre-assembled on an aluminium plate, tested and ready for installation on site.

The version for two independently usable breathing air connections includes for each outlet:

- gate valve
- Pressure regulator with pressure gauge
- flow control

Connections:

Inlet: female thread G 1"
 Outlet: 2 x female thread G ¾"



The version for a breathing air connection includes

- Ball valve with pressure gauge
- Pressure regulator with pressure gauge

Connections:

Inlet: female thread G 1"
 Outlet: female thread G ¾"



Triple filter station, installed in a steel cabinet

The filter station processes the compressed air (coming from a compressor) into respirable air. The used components guarantee a reliable, efficient and long-live operation.

The filter station comes completely built up and is ready for operation.

Each filter line works independently and contains:

- Discharge cock
- 3 stage filter unit, 1500 l/min. each (at 6 bar)
- visual indication, if filter are blocked
- Delta-p manometer with adjustable electrical switch contact
- Pressure regulator and two manometers
- Automatic condensate discharge with collecting reservoir

Cabinet:

- Sheet metal, primed and powder coated RAL 7035
- Door tightened IP 56 (NEMA 12 conform)
- Flush-mounted door grips, lockable
- all internal tubes stainless steel
- Inlet: vertical, on top (1 x female thread G 1")
- Outlet: horizontal, at side (3 x female thread G 1")
- Dimensions: B x W x H = 1000 x 1800 x 400 mm
- Weight: about 180 kg.



Recommendations:

Adjustment of delta-p manometer: 0.8 bar.

Change the filters as soon as:

- the visual indication changes to red color
- or if the delta-p manometer switches the contact

The charcoal filter element shall be removed once a year, even if not in use.

Double filter station, installed in a steel cabinet

Same as the triple filter station, but the two lines will be merged together: allows the change of filters during the operation.

Connections:

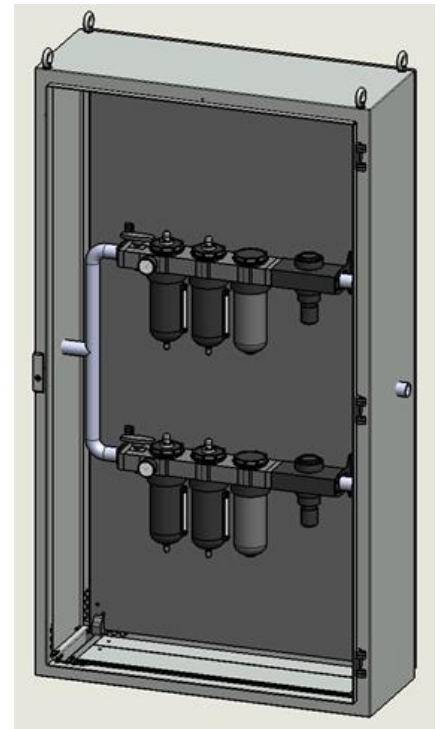
Entry and exit with female thread G 1".

Thanks to the built-in shut-off valves, the filter can be changed during operation.



Option:

- 2 pcs. of delta-p manometer with electrical contact switches.



Item no.:		
111020	3 stage filter unit with 2 outputs	Pre-assembled on aluminium plate ready for connection
112088	3 stage filter unit with 1 output	Pre-assembled on aluminium plate ready for connection
113742	Triple filter station	Built into a steel cabinet ready for connection
114244	Double filter station	Built into a steel cabinet ready for connection
Option:		
113744	Delta-p manometer	with electrical contact switches
Auxiliary:		
116243	Breathing air monitoring device SAFEGUARD-C for recording the breathing air quality as well as for alarming in case of exceeding or falling below the set limit values	
116451	Hose set For connecting SAFEGUARD-C to breathing air supply hose length 2 m, equipped with Rectus 20KA nipple	
Spare parts:		
103309	Pre-filter complete	
111592	Revision set for pre-filter	
111593	Pre-filter element (5 my)	(Replacement when filter display changes to red color)
111594	Main filter complete	
111595	Revision set for main filter	
111596	Main filter element (0.01 my)	(Replacement when filter display changes to red color)
103424	Charcoal filter complete	
111597	Revision set for charcoal filter	
111598	Charcoal filter element	(Replacement once a year, even when not in use)

Breathing Air Monitoring device SAFEGUARD-C

The high-quality breathing air monitoring device SAFEGUARD-C is used for recording of breathing air quality according to DIN EN 12021:2014 as well as for alarming in case of exceeding or falling the set limit values.

- simultaneous monitoring of temperature / pressure / dew point / oxygen O₂ / carbon monoxide CO / carbon dioxide CO₂ / volatile organic compounds
- with potential-free contact for triggering of an external alarm
- recording of measured values in adjustable intervals
- limit values for each sensor individually adjustable
- display of current sensor readings (red/green)
- 360° edge lighting (red/green)
- operation / query also possible via WiFi
- magnetic attachment possible
- compressed air range from 2 to 10 bar
- operation via rechargeable battery (runtime 8 h), 12/24 VDC or 230 VAC
- dimensions: L x W x H = 160 x 100 x 90 mm
- weight: 0.6 kg

see product info 04321 (search term on website)

