

OPERATING INSTRUCTIONS FOR OIL FILTERS

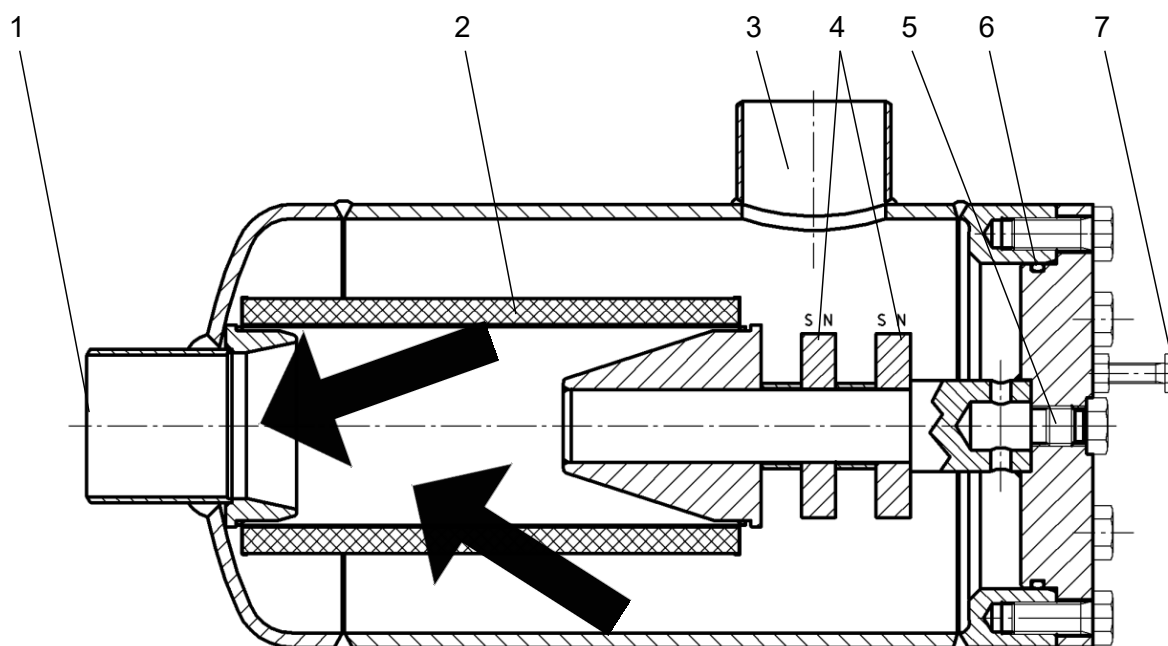
OF (577)

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1 Overview of types

Type 577



- | | |
|------------------------------------|------------------|
| 1 Outlet | 2 Filter element |
| 3 Inlet | 4 Ring magnet |
| 5 Screw plug G 1/2" wrench size 10 | 6 O-ring |
| 7 Jacking screw | |

2 Technical characteristics

Body material	Selection acc. to AD-2000 Series W
Steel	P235GH, S235JR, S355J2
Low-temperature steel	P355NL1
Stainless steel	X5CrNi18-10 or equivalent

2.1 Pressure/temperature operating limits

When using screws of property class 8.8

PN	TB (MWT) [C°]	-35 ²⁾	-25 ²⁾	-10	+50	+120
25	PS (MWP) [bar]	12.5	18.7	25	25	25
40		20	30	40	40	40

When using screws of property class A2-70

PN	TB (MWT) [C°]	-35 ²⁾	-35 ¹⁾	-10	+50	+120
25	PS (MWP) [bar]	18.5	25	25	25	25
40		30	40	40	40	40

¹⁾ Load case I (low-temperature steel, stainless steel)

²⁾ Load case II (acc. to AD2000-W10) (steel)

Permissible ambient temperature range (°C) -50 to +50

2.2 Operating media

Refrigerants EN 378 Part 1, e.g. NH₃, R22, R134a, blends and refrigeration machine oil, non-corrosive gases and liquids e.g. propane, butane, glycol-based brines.

2.3 Flow coefficient

Volume flow [l/min]	depending on filter material, filter fineness, viscosity and temperature
Installation position	vertical, horizontal
Flow direction through the filter element	from outside to inside
Leakage	to atmosphere < 5 g (refrigerant per year)
Filter rating [µm]	25
Filter material	Stainless steel

3 Safety instructions

NOTICE

Danger from improper handling!

Risk of property damage.

- ▶ Do not install filters with transport or storage damage.
- ▶ Filters must be free of axial forces, bending moments, and torsional moments and must not serve as fixed points for pipework.
- ▶ In the event of oxy-fuel welding or brazing, the flame must not touch the filter.
- ▶ Keep the interior of the filters free of contamination.
- ▶ Only change the filter element when the filter housing is depressurised and sufficiently ventilated.

4 Application

AWP oil filters are suitable for use in oil circuits for industrial refrigeration systems.

5 Functional description

AWP oil filters are equipped with a replaceable filter element made of stainless metal mesh. The filter element is self-centring in the base and is held in its position by the bonnet. Only filter elements from renowned companies are installed.

Selection is based on the required filter fineness, filter material, flow rate and viscosity. The flow through the filter element is from outside in.

6 Installation

1. Clean pipework and system components before installation.

NOTICE! The deviation from parallelism or perpendicularity of the welding ends or flange facings must not exceed 1°. Connecting flanges must be axially aligned. Components with transport or storage damage must not be installed. After removing the pipe plugs, the component can be welded in or installed. Observe the direction of flow (see arrow on the nameplate).

2. **NOTICE! When using modern welding processes (e.g. TIG, CO2 arc welding), do not dismantle weld-in filters. Provide sufficient space on the bonnet side for changing the filter elements.**

Filter	A90	A160
DN	15–50	50–100
mm	200	280

7 Transport, storage and disposal

AWP components are transported protected against impact and covered with foil.

- Storage must take place in dry rooms.
- Ensure that the connection ports are sealed intact.
- Contamination of any kind must be kept away from the interior.
- The external surfaces are provided with a corrosion protection coating for dry storage at room temperature, which is effective for at least 1 year.
- The corrosion protection coating CELEROL® Reaktionsgrund 918 is a good adhesion promoter for 1- and 2-component top coats.
- Dismantle for disposal.
- Collect lubricants during dismantling. The materials must be separated from one another and disposed of in accordance with local regulations.

8 Warranty

Unless agreed otherwise, the statutory warranty provisions apply. For further information, please also refer to our General Terms and Conditions, available on our website awpvalves.com.

9 Spare parts

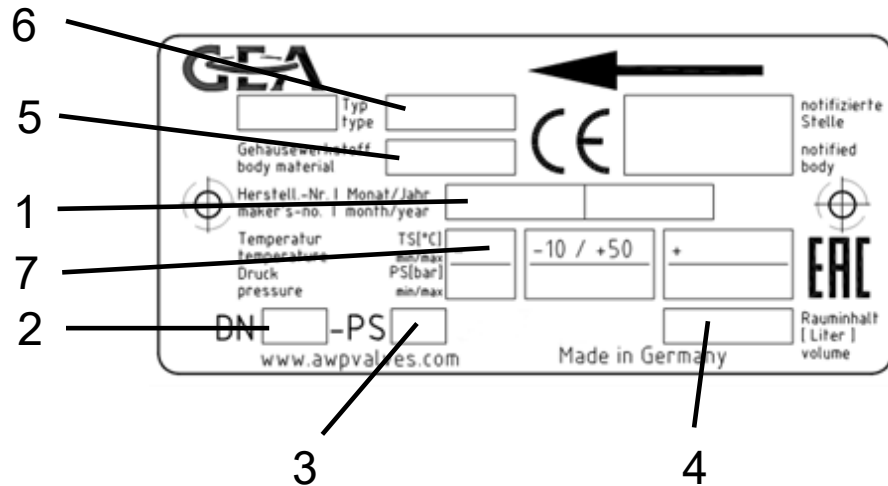
O-ring (CR)			
Filter	Nominal size	Item number	Dimensions
A 90	DN 15-50	737566	∅ 97 x 5
A 160	DN 50-100	737510	∅ 140 x 5

Filter element			
Nominal size	G10	G25	Dimensions
DN 15-50	575044	575008	90 x 42.2 / 128
DN 50-100	575045	575001	160 x 95.5 / 250

In case of doubt, please contact our Sales Support either via our website awpvalves.com/contact or by email to info@awpvalves.com. The most reliable method to correctly identify the required spare part is to send a photo of the nameplate on which the serial number of the valve is clearly visible.

10 Marking

The marking of AWP oil filters is carried out in accordance with Pressure Equipment Directive 2014/68/EU. Nameplate on the filter body.



1 Serial number	2 Nominal size (DN)
3 Pressure rating (PS)	4 Volume (l)
5 Material number	6 Type designation
7 Operating temperature	

TS (MWT) [C°]	Operating temperature associated with the operating pressure
PS [bar]	Max. permissible operating pressure
DN [mm]	Nominal size
DIN EN ISO 21922	Refrigerating valves, safety requirements, testing and marking
Volume [litres]	Content of the pressure vessel

Volume		Volume [litres]
DN	Filter type	Volume
15 – 50	A90	3.5
50 – 100	A160	13.8

11 Note on residual hazards in accordance with Pressure Equipment Directive 2014/68/EU

NOTICE

- ▶ Do not loosen the bonnet (without authorisation) during operation or when under internal pressure.
- ▶ There may be defects in weld seams that could not be detected in previous inspections.
- ▶ Do not incorrectly assemble flange connections (inlet and outlet flanges, bonnets).
- ▶ Contamination in the operating medium or improper handling of internal components can lead to damage to gaskets.
- ▶ Observe operating limits and manufacturer's instructions in accordance with these operating instructions.

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