



Industrial Filters · Accumulators

Application

Filtration of pressurised liquids and lubricants.

Direct installation in pipelines.

Direct wear protection of subsequent components and systems.

Design

The duplex filters consist of two in-line filters connected by stub pipes via a control housing with segment change-over.

Filter Element

Pleated design with optimised pleat density and various filter media.

The filter element is the most important component of the filter in view of prolonged life and wear protection of the system.

Oil cleanliness, the initial pressure drop and the dirt holding capacity are the most important criteria for selection.

For further detailed information please refer our "Filter Elements" brochure.

A proper filter selection is enabled by our "EPE-FILTERSELECT" software.

Accessories

Maintenance Indicators

For monitoring the filter element's contamination status, optical and optical/electrical indicators, with one or two switching points are available.

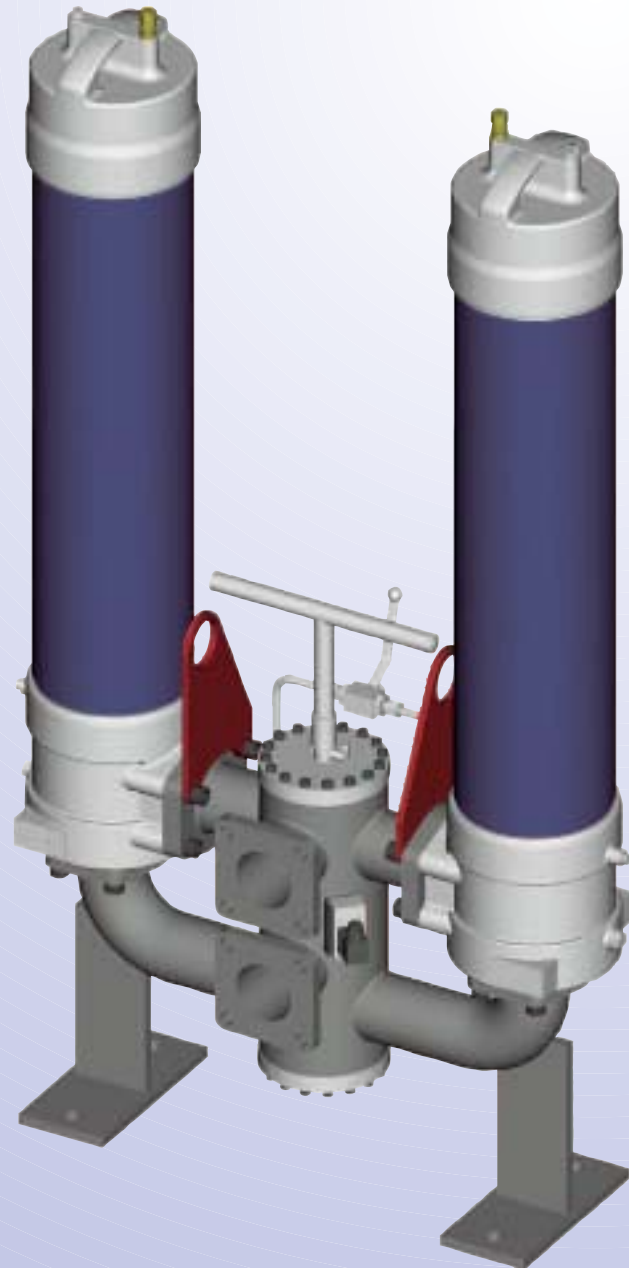
Bypass Valve

To protect the filter element during start up and over pressurisation due to clogging.

Vent Valve

For removing the air from the filter during starting and for safe de-pressurisation.

Duplex Filters with Segment Change-over 40 FLD 0146(C)-0271 (C) 40 FLDN 1001



*Operating pressure 40 bar
Connections up to DN 80*



Quality assured!

Ordering Information

Selection of filter size:
using the computer program
"EPE-FILTERSELECT" or
performance characteristics in
this brochure.
Special designs available on
request.

Type	Magnet	Maintenance Indicator	Connection	Material
FLD = Duplex filter FLDN = Duplex filter with filter element acc. to DIN 24550	0 = without	0 = Without A = Pressure gauge M 010 B = Maintenance indicator visual G.. A0 00 OOP C = Maintenance indicator visual/electr. with equipment connector thread G.. GW 02 OOP F = Maintenance indicator with three luminous diodes T.. GW 09 ZOP Standard switch pressure 2,5 bar	FO = EPE- Square flange	0 = Standard

Filter → 40 FLD 0271C H10SL - A 00 - 0 7 C2,5 - FO P 0 0
Seal Kit → D40 FLD 0271C - - C - FO P 0 0

Pressure	Size	Filtration Grade	Diff. Pressure	Element Model	Bypass Valve	Seal	Addit. Info
40 bar	Filter 0146 1.0145 0146C 1.0145C 0201 1.0200 0201C 1.0200C 0271 1.0270 0271C 1.0270C 1001 1.1000 C = coreless filter element	Nominal filter fineness in μm G = Stainless steel wire mesh cleanable G10 G25 G40 G60 G80 G100 VS = Nonwoven media, non cleanable VS25 VS40 VS60 P = Paper, non cleanable P5 P10 P25 Absolute filtration grade (ISO4572) in μm H...SL = Micro glass-fibre, non cleanable H1SL H3SL H6SL H10SL H20SL AS = Micro glass-fibre, water adsorbent, non cleanable AS1 AS3 AS6 AS10 AS20	Maximum allowable differential pressure drop across the filter elements 0 = 15 bar not possible in coreless design A = 30 bar	O... = Standard- adhesive T = 100°C E... = Special- adhesive T = 160°C ...0 = Standard material ...Z = Zinc free	0 = Without 7 = 3,5 bar for filter element always "0"	P = Buna N V = Viton E = Ethylene- propylene N = Neoprene	0 = Without 8 = Change over with rigid pressing A = Pressure equalisation line E = Vent valve Z = Inspection certificate Z = Inspection certificate 5 = Silicone free

Filter Element → 1. 0270C H10SL - A 00 - 0 - P -

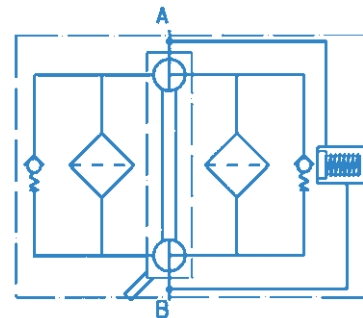
Maintenance Indicator

The maintenance indicator monitors the degree of clogging of the filter elements.
They are available as visual or visual/electrical displays.
See "Maintenance Indicator" brochure for technical data.

A...visual	B...visual
Ordering information A = M 010	Ordering information B2,5 = G2,5 A0 00 OOP*
C...visual/electrical	F...visual/electrical with three 24 V diodes and two switching points
Ordering information C2,5 = G2,5 GW 02 OOP*	Ordering information F2,5 = T2,5 GW 09 ZOP*
Switching Symbol 	Switching Symbol

*P=Buna N; V=Viton; E=Ethylene-propylene; N=Neoprene possible

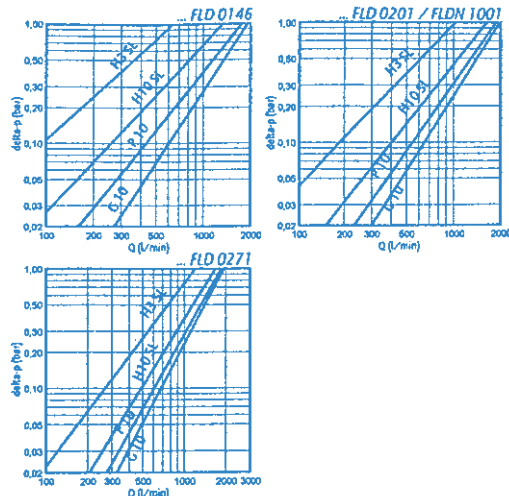
Filter Switching Symbol



Performance Characteristics

Pressure drop curves

Oil Viscosity: 30 mm²/s
Specific gravity: < 0,9 kg/dm³





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Installation, Starting and Maintenance

Installation

Verify operating pressure with name plate information.

Mount the filter assembly using mounting device considering flow direction (direction arrows) and servicing height required for cleaning/replacing elements.

Connection of Electrical Maintenance Indicator

See brochure 64 .

Starting

Move switching lever to central position to fill both filter sides. Switch on system pump. De-aerate filter by opening the vent valve, close when liquid emerges from valve. Move switching lever to filter in use. Switching lever must be moved into final position.

Maintenance

The filter element is clogged and needs to be replaced or cleaned if the visual indicator 's red pin reaches its final position and /or the electrical switch is activated.

Filter Element Service

Open valve in pressure equalisation value, move switching lever to opposite direction until final position on clean filter side is reached. Close pressure equalisation value. Open vent valve and depressurise system in filter out of use. Close vent valve.

Unscrew filter head. Open drain plug and drain filter. Close drain plug. Remove filter element, turning slightly off from its lower spigot in the filter housing. Check filter housing inside and clean if necessary. Replace filter element H...-SL, P..., VS... and AS... . The filter element with G...-media is cleanable. The efficiency of the cleaning process depends on the characteristics of contamination and the final pressure drop prior to servicing / cleaning the element. If the differential pressure after the filter element's cleaning process exceeds more than 50% of the pre service value the G... filter element also needs to be replaced.

Replace filter element in filter housing. Check o-ring and replace in case of damage or wear. Install filter head by turning clock-wise by hand. Don't use any tools. Turn back 1/4 turn counter-clock-wise. De-aerate filter by opening the vent valve, close when liquid emerges.

Warning

Assemble and disassemble filter only when system is switched off!

Vessel is under pressure!

Leave pressure equalisation valve closed while filter housing is out of service!

Do not operate switching device while filter housing is out of service!

Do not change maintenance indicator or pressure equalisation valve when filter is under pressure!

Functions and safety warranty only with EPE- spare part!

Filter service only by trained personal!

Quality and Standardisation

The development, manufacture and assembly of EPE-industrial filters and filter elements is carried out within the framework of a certified quality-management-system in accordance with DIN EN ISO 9001:2000.

Certification of the filters by accredited institutions (for example TÜV, GL, LRS, LRIS, ABS, BV, DNV, DRIRE, UDT, etc.) is available on request.

The stability calculation and testing of the filters proceeds according to actual standards, as well as in accordance with national and international norms.

The CE-identificaton mark according to the Pressure Equipment Directive 97/23/EG depends upon the individual application and operating conditions.

On request we will classify the filters.

Technical modifications reserved!

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