



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 or more 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.

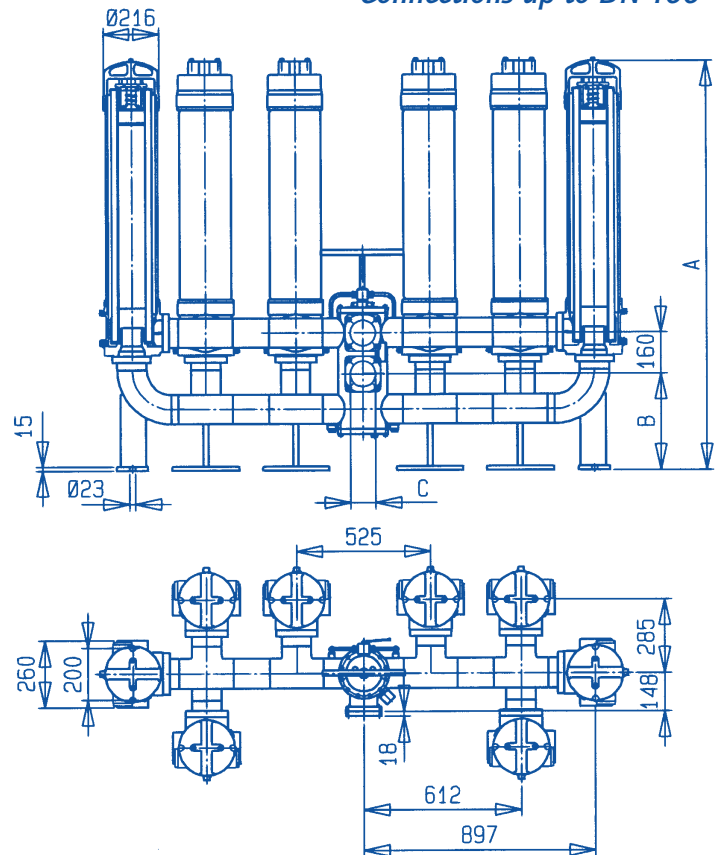
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Duplex Filters

40 FLD 0146(C)-0274(C)

40 FLDN 1001-1004

Operating pressure 40 bar
 Connections up to DN 100



Assembly of the filter housings

40 FLD 0146(C)	40 FLD 0147(C)	40 FLD 0148(C)	40 FLD 0149(C)
40 FLD 0201(C)	40 FLD 0202(C)	40 FLD 0203(C)	40 FLD 0204(C)
40 FLD 0271(C)	40 FLD 0272(C)	40 FLD 0273(C)	40 FLD 0274(C)
40 FLDN 1001	40 FLDN 1002	40 FLDN 1003	40 FLDN 1004



Type	No. of filters	No. of filter elements	A	B	Connection C
40 FLD 0146(C)	2x1	2x1.0145(C)	930	300	DN 80
40 FLD 0147(C)	2x2	4x1.0145(C)	998	375	DN 100
40 FLD 0148(C)	2x3	6x1.0145(C)	998		
40 FLD 0149(C)	2x4	8x1.0145(C)	998	375	DN 100
40 FLD 0201(C)	2x1	2x1.0200(C)	1280		
40 FLD 0202(C)	2x2	4x1.0200(C)	1356		
40 FLD 0203(C)	2x3	6x1.0200(C)	1356		
40 FLD 0204(C)	2x4	8x1.0200(C)	1356	300	DN 80
40 FLD 0271(C)	2x1	2x1.0270(C)	1522		
40 FLD 0272(C)	2x2	4x1.0270(C)	1590		
40 FLD 0273(C)	2x3	6x1.0270(C)	1590		
40 FLD 0274(C)	2x4	8x1.0270(C)	1590	375	DN 100
40 FLDN 1001	2x1	2x1.1000(C)	930		
40 FLDN 1002	2x2	4x1.1000(C)	998		
40 FLDN 1003	2x3	6x1.1000(C)	998		
40 FLDN 1004	2x4	8x1.1000(C)	998	375	DN 100



Quality assured!

Ordering Information

Selection of filter size: using the computer program "EPE-FILTERSELECT".

Special designs available on request.

Filter Type FLD = Duplex Filter FLDN = Duplex Filter with filter element acc. to DIN 24550	Magnet 0 = Without	Maintenance Indicator 0 = Without A = Manometer M 010 B = Maintenance indicator opt. G.. A0 00 00P C = Maintenance indicator opt./electr. with equipment connector thread G.. GW 02 00P F = Maintenance indicator with three luminous diodes T.. GW 09 Z0P Standard switch pressure 2,5 bar	Connection FO = EPE - Square flange	Material 0 = Standard
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Filter Assembly → 40 FLD 0271(C) H10SL - A 00 - 0 7 0 - FO P 0 0

Seal Kit → D40 FLD 0271(C) - - 0 - FO P 0

Nominal Pressure	Nominal Size		Filtration Grade	Differential Pressure	Filter Element Design	Bypass Valve	Seal	Add. Info
	Filter	Filter element						
40 bar	0146(C)	1.0415(C)	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 (ISO 4572) 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	Max. allowed differential pressure of the filter element 0 = 15 bar not possible in coreless design A = 30 bar	O... = Standard-adhesive T = 100°C E... = Special-adhesive T = 160°C ...O = 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
	0147(C)							
	0148(C)							
	0149(C)							
Filter Element Type: 1.	0201(C)	1.0270(C)						
	0202(C)							
	0203(C)							
	0204(C)							
1.	1001	1.1000						
	1002							
	1003							
	1004							
(C) = coreless filter element								

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

Installation, Starting and Maintenance

Installation

Verify operating pressure on the nameplate is equal or greater than the maximum system pressure. Install the filter using mounting device considering flow direction (direction arrows) and servicing height required for cleaning/replacing filter 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 valve, move switching lever to opposite direction until final position on clean filter side is reached. Close pressure equalisation valve. 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 ¼ 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!

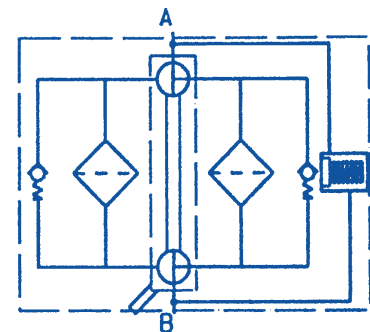
Do not operate switching device while filter housing is out of service!

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

Functions and safety warranty only with EPE- spare part!

Service filter only by trained personal!

Filter Switching Symbol



Numbers of filters according to filter type