

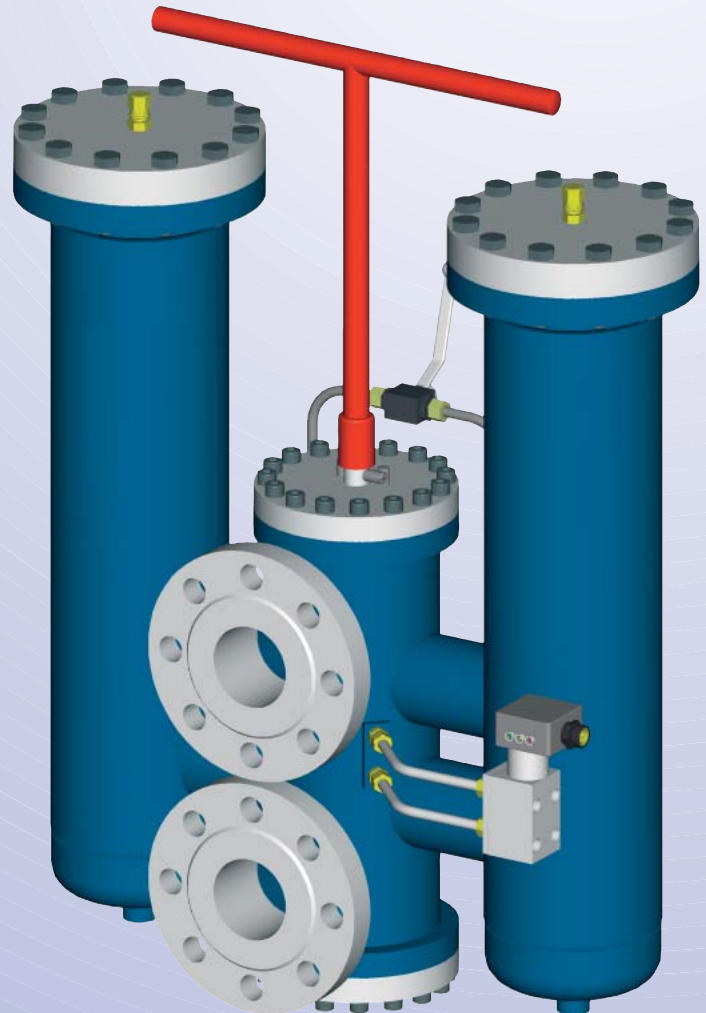


Industrial Filters · Accumulators

## Duplex Filters

100 FLD 0020-0270

100 FLDN 0160-1000



*Filter for inline installation,  
for continuous operation*

*FLDN Type with  
Filterelements according  
to DIN 24550*

*Wide application*

*Compact modular design*

*Optimised flow characteristics  
by 3D - computer aided design*

*Low pressure drop*

*Special high efficient  
filter media*

*Operating pressure 100 bar*

*Connections up to DN 100*



Quality assured!

# Ordering Information

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

Special designs are available on request

<b>Filter Type</b> FLD = Duplex filter with filter element according to EPE Standard  FLDN = Duplex filter with filter element according to DIN 24550	<b>Magnet</b> 0 = Without	<b>Maintenance Indicator</b> 0 = Without A = Maintenance indicator visual C = Maintenance indicator visual/electr. with equipment connector thread F = Maintenance indicator visual/electr. with 3 signal lights  Standard switch pressure 2,5 bar  See illustrations of maintenance indicator for detailed information and technical data.	<b>Connection</b> DO = DIN-Flange	<b>Material</b> 0 = Standard
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**Filter Assembly** → 100 FLD 0020 H10SL - A 00 - 0 7 A2,5 - DO P 0 0

**Seal Kit** → D100 FLD 0020 - A - DO P 0 0

<b>Nominal Pressure</b>  100 bar	<b>Nominal Size</b> 100 FLD... 0020 0030 0045 0060 0095 0120 0145 0200 0270	<b>Filtration Grade</b> 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 glas-fibre, non cleanable H1SL H3SL H6SL H10SL H20SL AS = Micro glas-fibre, wateradsorbent non cleanable AS1 AS3 AS6 AS10 AS20	<b>Differential Pressure</b> Max. allowable differential pressure of the filter element  A = 30 bar	<b>Filter Element Design</b> O... = Standard adhesive T = 100°C  E... = Special adhesive T = 160°C  ...0 = Standard material ...V = stainless steel 1.4571	<b>Bypass Valve</b> Opening pressure: 0 = Without 7 = 3,5 bar  for filter element always 0	<b>Seal</b> P = Buna N V = Viton E = Ethylene-Propylene N = Neoprene	<b>Add. Info</b> 0 = Without 5 = Silicone free A = Pressure-equalisation-line E = Vent valve Z = Inspection certificate  5 = Silicone free Z = Inspection certificate
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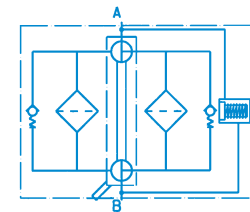
**Filter Element** → 1. 0020 H10SL - A 00 - 0 - P -

## 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.

## Filter Switching Symbol

A...visual	C...visual/electrical with electric plug	F...visual/electrical with three light indicators 24 V and two switching points
Ordering information A 2,5 = A 2,5 A0 00 00P*	Ordering information C 2,5 = A 2,5 GW 02 00P*	Ordering information F 2,5 = A 2,5 GW 09 ZOP*
	Switching symbol 	Switching symbol 



\*P = Buna N, V = Viton, E = Ethylene-Propylene, N = Neoprene possible

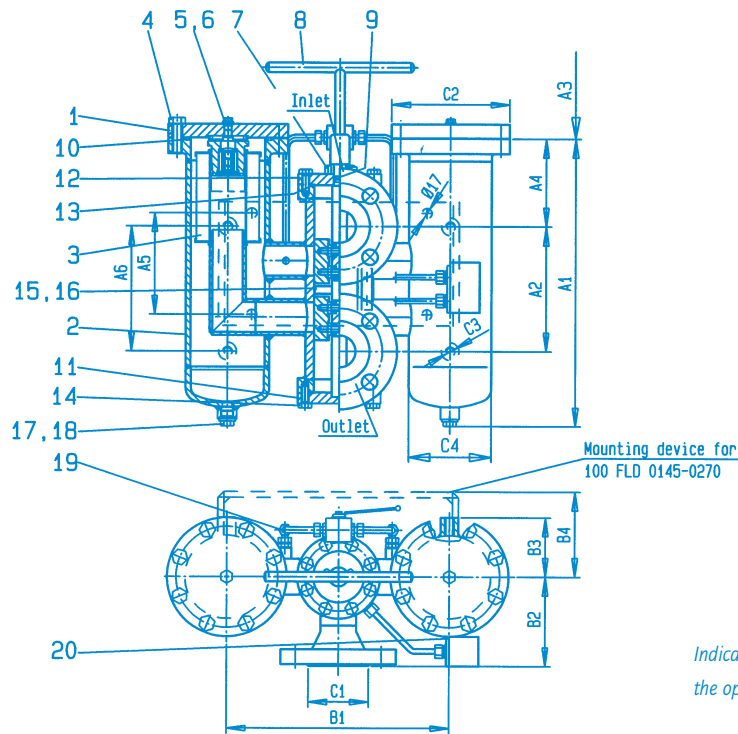
## Quality and Standardisation

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.

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 existing pressure vessel regulations, as well as in accordance with national and international norms. The CE - identification 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.

## Dimensions



Indicator pin points towards the operating side.

### Filter Housing for Filter Elements according to EPE Standard

Type	Capacity in l	Weight in kg <sup>1)</sup>	A1	A2	A3 <sup>2)</sup>	A4	A5	A6	B1	B2	B3	B4	C1 Connection DIN 2637	C2	C3	C4
100 FLD 0020	2x5	127,5	490	210	180	148	-	210	375	150	100	-	DN50	Ø200	M16	Ø139,7
100 FLD 0030	2x6	130	580		270	238										
100 FLD 0045	2x8	134,5	730	235	420	388	-	230	485	180	115	-	DN80	Ø240	M20	Ø168,3
100 FLD 0060	2x10	181,5	627		270	256										
100 FLD 0095	2x13	187	777	270	420	406	250	-	480	225	-	188	DN100	Ø260	-	Ø193,7
100 FLD 0120	2x20	199	1134		780	763										
100 FLD 0145	2x19	226	888	270	420	463	250	-	480	225	-	188	DN100	Ø260	-	Ø193,7
100 FLD 0200	2x28	322	1246		780	821										
100 FLD 0270	2x33	384	1480	270	1010	1055	250	-	480	225	-	188	DN100	Ø260	-	Ø193,7

### Filter Housing for Filter Elements according to DIN 24550

Type	Capacity in l	Weight in kg <sup>1)</sup>	A1	A2	A3 <sup>2)</sup>	A4	A5	A6	B1	B2	B3	B4	C1 Connection DIN 2637	C2	C3	C4
100 FLDN 0160	2x5	127,5	490	210	180	148	-	210	375	150	100	-	DN50	Ø200	M16	Ø139,7
100 FLDN 0250	2x6	130	580		270	238										
100 FLDN 0400	2x10	181,5	627	235	270	256	-	230	485	180	115	-	DN80	Ø240	M20	Ø168,3
100 FLDN 0630	2x13	187	777		420	406										
100 FLDN 1000	2x19	226	888	270	420	463	250	-	480	225	-	188	DN100	Ø260	-	Ø193,7

### Spare Parts List

Part	Qty	Size FLD Size FLDN	Designation	Material	0020 0160	0030 0250	0045	0060 0400	0095 0630	0120	0145 1000	0200	0270
1	2		Filter head without valve	various	9843		9842		9840		9841		
2	2		Filter head with valve	St	5979		5994		5994		5994		
3	2		Filter element	various	709		713		718		718		
3.1	2		O-ring	Buna N/Viton	709		713		718		718		
4	16 24		Hexagon screw	8.8	602		-		605		605		
5	2		Vent valve	Bronze	-		848		848		848		
			Air ventilate screw	5.8	-		4158		4158		4158		
6	2		Sealing ring	Iron	-		-		-		-		
7	3		Set screw	St	709		713		718		718		
8	1		Valve handle	St	1258	3295	1262	1260	1261	9829	9830	1264	9829
9	2		O-ring	Buna N/Viton	-		-		-		-		
10	2		O-ring	Buna N/Viton	-		-		-		-		
11	1		Bottom	St	4019		4055		4075		4075		
12	1		Cover	St	4018		4056		4058		4058		
13	2		O-ring	Buna N/Viton	-		-		-		-		
14	32 24 16		Hexagon socket head cap screw	8.8	-		654		654		662		
			Hexagon screw	8.8	594		-		-		-		
15	1		O-ring	Buna N/Viton	-		-		-		-		
16	1		Guide ribbon	PTFE/Bronze	-		-		-		-		
17	2		Blanking plug	5.8	-		789		789		790		
18	2		Sealing ring	Iron	-		-		-		-		
19	1		Pressure equalisation device	St	-		-		-		-		
20	1		Maintenance indicator	various	-		-		-		-		

<sup>1)</sup> = Weight including standard filter element and maintenance indicator

<sup>2)</sup> = Servicing height for filter element change



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## **Installation, Starting and Maintenance**

### **Installation**

Verify operating pressure on the nameplate is equal or greater than the maximum system pressure. Install the filter using a mounting points provided and check the flow direction is correct and ensure sufficient clearance for filter servicing.

### **Connection of Electrical Maintenance Indicator**

See brochure 64 .

### **Starting**

Move switching lever Part 8 to central position to fill both filter sides. Switch on system pump. De-aerate filter by opening the vent valves Part 5, 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 Part 20 red pin reaches its final position and /or the electrical switch is activated.

### **Filter Element Service**

Open valve in pressure equalisation valve Part 19, move switching lever Part 8 to opposite direction until final position on clean filter side is reached. Indicator pin points towards the operating side. Close pressure equalisation valve Part 19. Open vent valve Part 5 and depressurise system in filter out of use. Close vent valve Part 5. Unscrew filter head Part 1. Open drain plug Part 17 and drain filter housing Part 2. Close drain plug Part 17. Remove filter element Part 3, turning slightly off from its lower spigot in the filter housing Part 2. Check filter housing Part 2 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 Part 10 and replace in case of damage or wear. Install filter head Part 1 . De-aerate filter housing Part 2 by opening the vent valve Part 5, 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!

Technical modifications reserved!

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