



Industrial Filters · Accumulators

High Pressure Duplex Filters

250/400 D 56 - 900



*Filters for inline installation
for continuous operation*

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

Low pressure drop

Special high efficient filter media

Operating pressure: 250/400 bar

Connection up to SAE 2"



Quality assured!

High Pressure Duplex Filters

250 / 400 D 56 - 900

Operating pressure 250/400 bar

Operating temperature -10°C to +100°C

Application

Filtration of liquids and lubricants.

Filtration of liquids and gases.

Installation in pipelines to protect subsequent system components from contamination.

Continuous operation due to duplex filter design.

Design

Filter head with inlet, outlet and filter element locator. Filter bowl is unscrewed downwards. Filter head includes further switching valve for closure ref. starting filter side.

Material: as per spare parts list in this brochure.

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, visual and visual/electrical indicators, with one or two switching points are available.

Vent valve

For removing the air from the filter during start up and for secure de-pressurising.

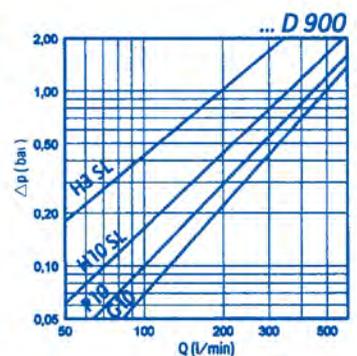
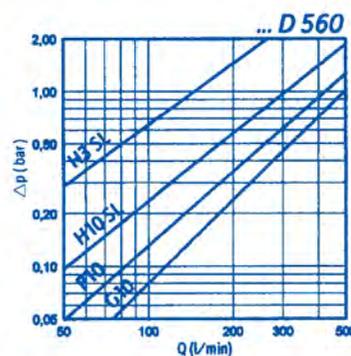
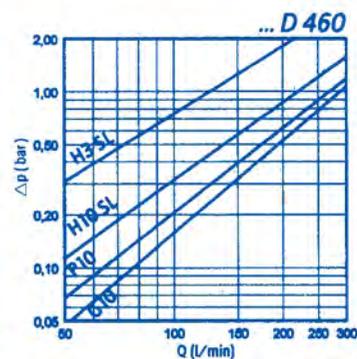
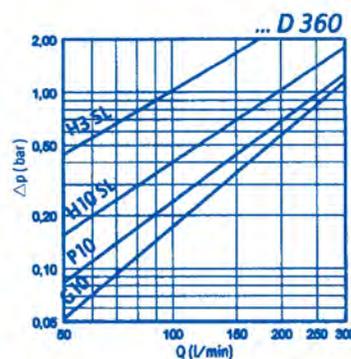
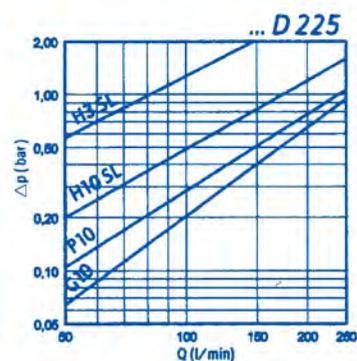
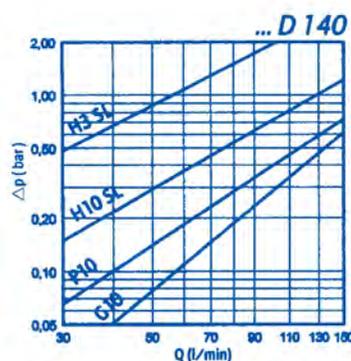
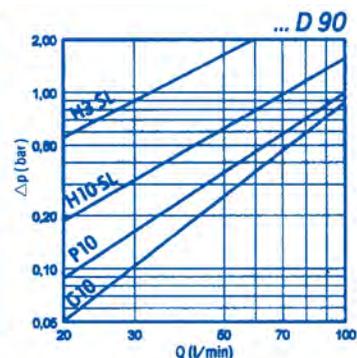
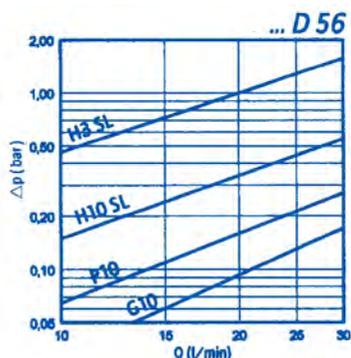
Performance Characteristics

Pressure drop curves for complete filters

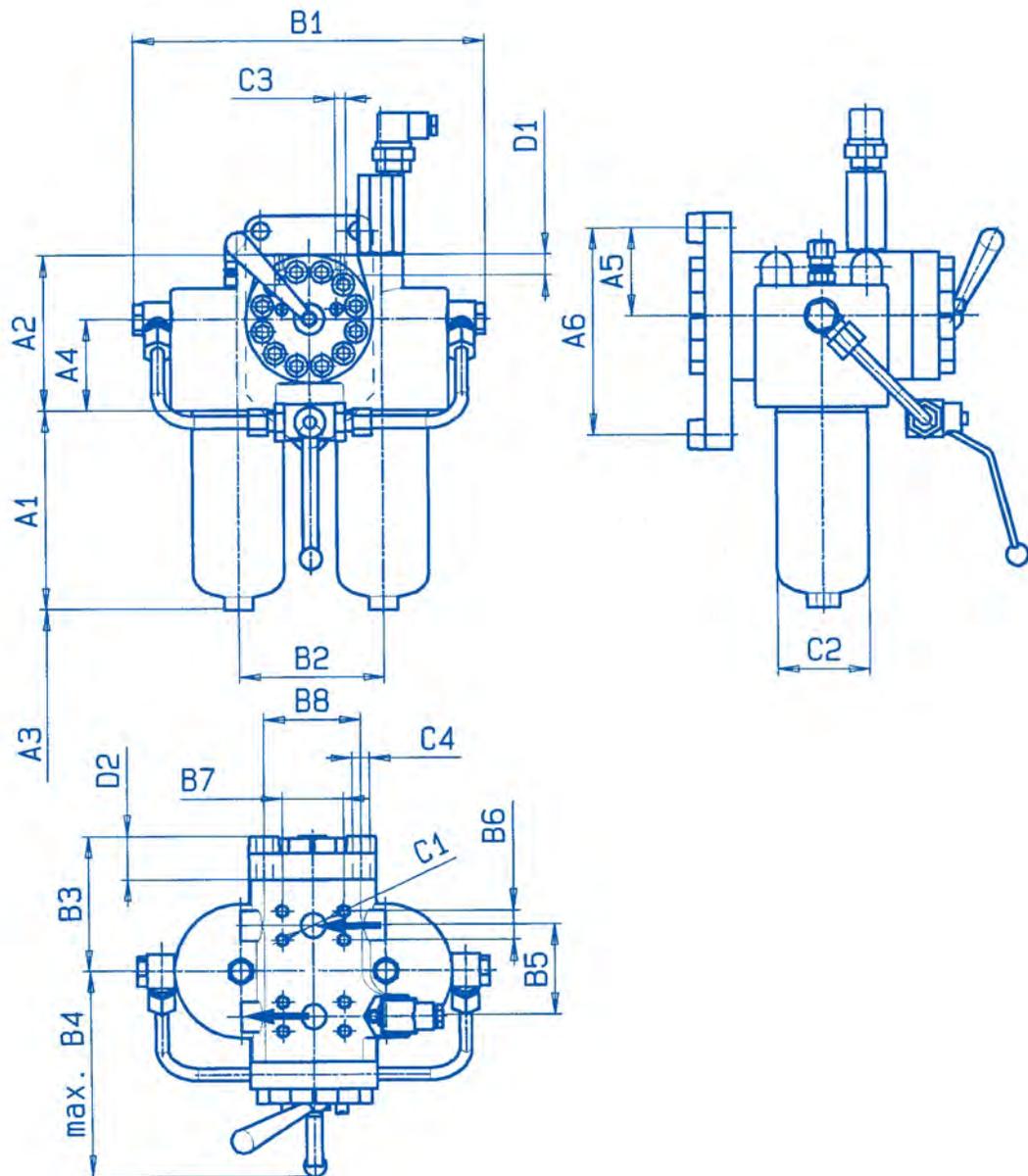
Recommended initial p for filter selection = 1,5 bar

Oil viscosity: 30 mm²/s

Specific weight: < 0,9 kg/dm³



Dimensions



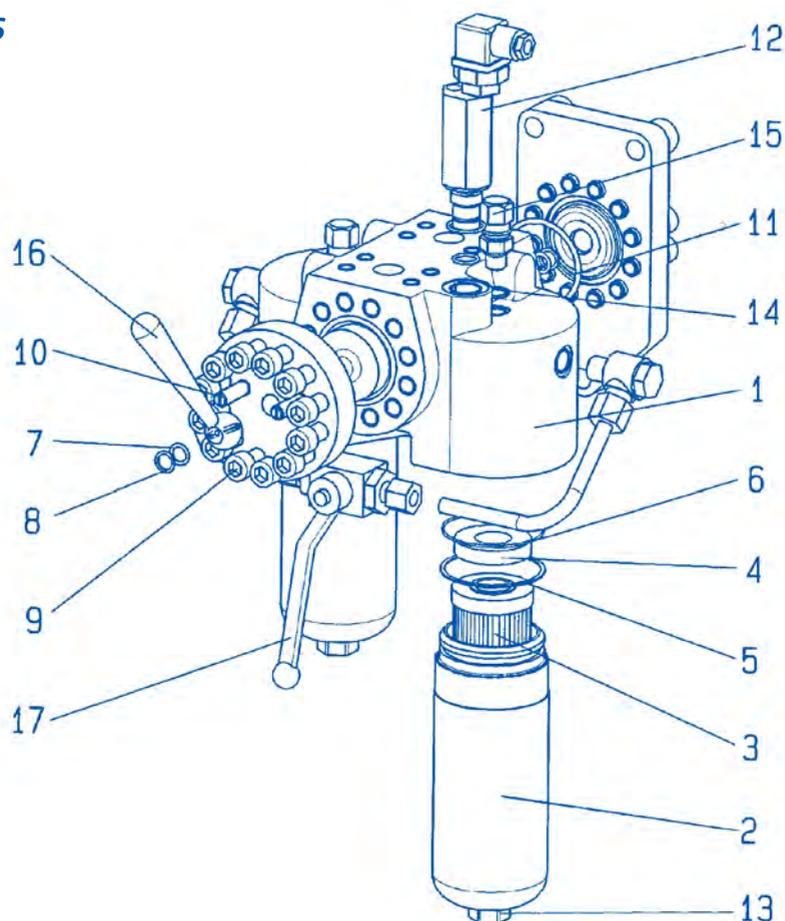
Filter housing for filter elements according to EPE standard

Type	Volume in ltrs.	Weight in kg ¹⁾	A1	A2	A3 ²⁾	A4	A5	A6	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	D1	D2	Flange	
250/400 D 56	2 x 0,36	25,2	127											23,8	50,8		ø20		M10				SAE ¾" 6000 psi	
250/400 D 90	2 x 0,52	29,0	177	127,5	100	75	72,5	170	300	120	111	170	75					ø76		ø14	17	36	SAE 1" 6000 psi	
250/400 D 140	2 x 1,06	45,3	180											27,8	57,2		ø25		M12				SAE 1¼" 6000 psi	
250/400 D 225	2 x 1,48	56,0	260											31,8	66,7		ø32		M14				SAE 1½" 6000 psi	
250/400 D 360	2 x 1,75	62,7	310	160	150	95	95	215	355	150	143	200	100				ø103		M16	ø18	20	42	SAE 1½" 6000 psi	
250/400 D 460	2 x 2,31	68,0	410											36,5	79,4		ø40						SAE 2" 6000 psi	
400 D 560	2 x 2,73	107,0	261															ø50	ø140	M20	ø23	30	41	SAE 2" 6000 psi
400 D 900	2 x 3,73	130,5	359	185		105	110	240	460	190	166	230	120	44,5	96,8	110								

¹⁾ = weight including standard filter element and maintenance indicator

²⁾ = servicing height for filter element replacement

Spare Parts



Switching lever indicates side in use

Part	Qty.	Size Designation	Material	56	90	140	225	360	460	560	900	
1	1	Filter head	GGG 50	please indicate ordering information "Filter Assembly"								
2	2	Filter bowl	Carbon steel	please indicate ordering information "Filter Assembly"								
3	2	Filter element	Various	please indicate ordering information "Filter Element"								
3.1	2	O-ring	Buna N/Viton	please indicate ordering information "Seal Kit"								
4	2	Ring magnet	Oxide	Part No. 1156	Part No. 1158				Part No. 1159			
4.1	2	Pick up ring	Steel	—							Part No. 1159	
5	2	Supporting seal	Teflon	please indicate ordering information "Seal Kit"								
6	2	O-ring	Buna N/Viton	please indicate ordering information "Seal Kit"								
7	2	O-ring	Buna N/Viton	please indicate ordering information "Seal Kit"								
8	2	Supporting seal	Teflon	please indicate ordering information "Seal Kit"								
9	24	Socket head cap screw	8.8	Part No. 979	—				Part No. 660			
9	32	Socket head cap screw	8.8	—				Part No. 654			—	
10	2	Set screw	Steel	Part No. 710	Part No. 715				Part No. 719			
11	1	O-ring	Buna N/Viton	please indicate ordering information "Seal Kit"								
12	1	Maintenance indicator	Various	refer section "Maintenance Indicator"								
13	2	Plug	Steel	—				Part No. 778		Part No. 780		
14	2	Seal	Soft iron	please indicate ordering information "Seal Kit"								
15	2	Vent valve	Brass	Part No. 848								
16	1	Lever	Steel	Part No. 3073	Part No. 3074				Part No. 3075			
16.1	1	Clamping sleeve	Spring steel	Part No. 745	Part No. 747				Part No. 748			
17	1	Pressure equalisation device	Various	please indicate ordering information "Filter Assembly"								

Quality and Standardisation

The development, manufacturing and assembly of EPE Industrial filters and filter elements is performed within the guidelines of a certified quality management system according to DIN EN ISO 9001. The calculation of strength and the filter tests are done in compliance to actual pressure vessel regulations and national & international standards.

A filter inspection by accredited certification bodies (e.g. TÜV, GL, LRS, LRIS, ABS, BV, DNV, DRIRE, UDT etc.) is possible on request.



Industrial Filters · Accumulators

Installation, Starting and Maintenance

Filter Installation

Verify operating pressure with name plate information.

Mount the filter assembly using mounting device on the head (Part 1) considering flow direction (direction arrows) and servicing height required for cleaning / replacing elements (Part 3).

Remove dust protection plugs from filter inlet and outlet, screw filter in pipeline without tension stress.

Connection of Electrical Maintenance Indicator

Connect indicator using the three wired cable.

Please verify electrical ratings on the indicators (Part 12) name plate.

Connection settings:

- | | | |
|--------------------|-------------------|------------------------|
| 1. normally closed | 1 (black & white) | + 3 (blue) |
| 2. normally open | 1 (black & white) | + 2 (brown) |
| 3. changer | 1 (black & white) | + 2 (brown) + 3 (blue) |

Starting

Switch on system pump.

Ventilate filter by opening the vent valve (Part 15), close when operating liquid emerges.

Maintenance

The filter element is clogged and needs to be replaced or cleaned when at operating temperature the visual indicator's (Part 12) red pin reaches its final position and / or the electrical switch is activated.

Filter Element Service

Open pressure-equalisation valve (Part 17) to equalise pressure in both filter housings. Switch change over valve on other side by moving lever (Part 16). Ventilate filter in use by opening vent valve (Part 15) until fluid emerges and close again.

Depressurise filter out of use by opening vent valve (Part 15). Unscrew filter bowl (Part 2) and remove filter element (Part 3), turning slightly off from its locator in the filter head (Part 1).

Check filter bowl inside and clean if necessary.

Replace filter element H...-SL and P... .

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... element also needs to be replaced. Install cleaned or replaced filter element by slightly turning it back on its locator. Check o-ring (Part 6) on filter bowl, replace in case of damage or wear. Screw filter bowl (Part 2) and tighten it at hexagon bolt using a suitable tool.

Operate filter as described above.

K. & H. Eppensteiner GmbH & Co. KG
Hardtwaldstraße 43 · D-68775 Ketsch/Rh.
Postfach 1120 · D-68768 Ketsch/Rh.
Telefon: 0 62 02 / 6 03-0
Telefax: 0 62 02 / 6 03-199
E-Mail: Eppensteiner@compuserve.com
Internet: www.Eppensteiner.de

Technical modifications reserved!

51A/01/10.99/6000