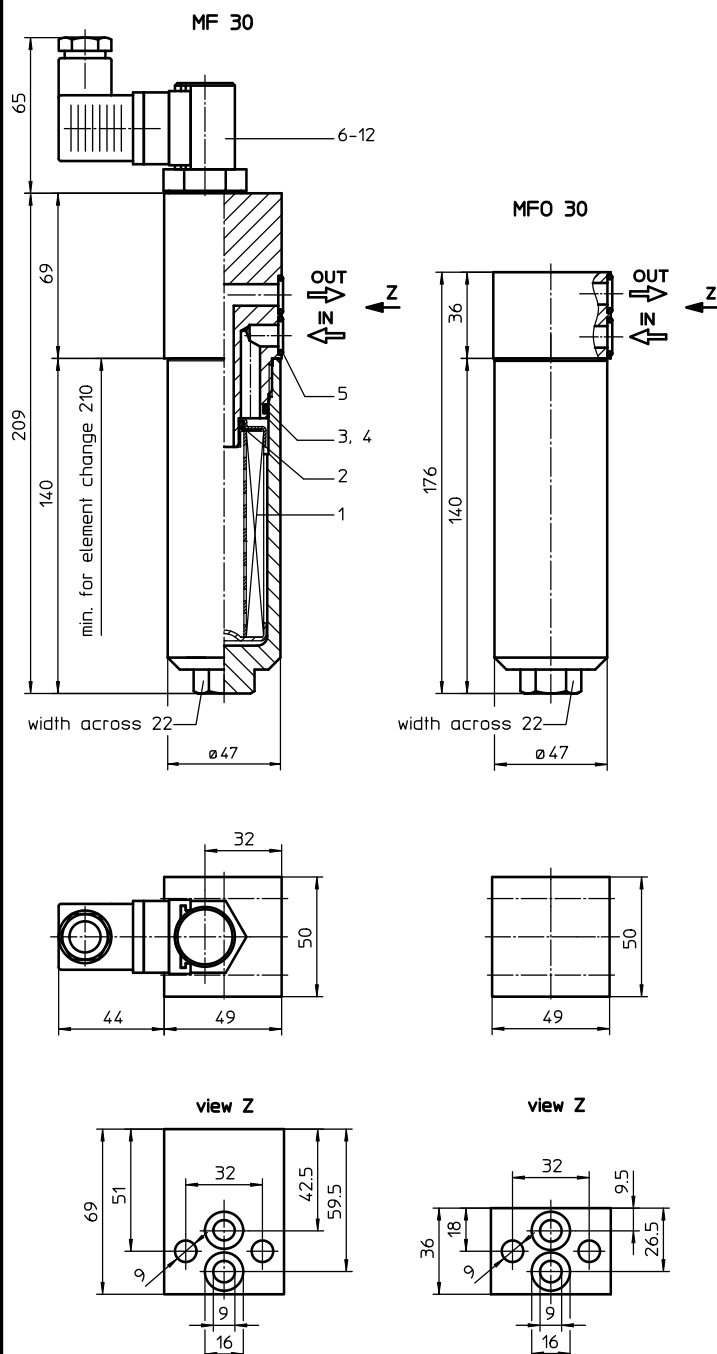


PRESSURE FILTER, manifold mounted

Series MF 30, MFO 30 DN 10 PN 160

Sheet No.
1416 G



1. Type index:

1.1. Complete filter: (ordering example)

MF. 30. 10VG. HR. E. P. -. F. 2. -. AE

1	2	3	4	5	6	7	8	9	10	11
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1 series:

MF = medium pressure filter, manifold mounted with indicator

MFO = medium pressure filter, manifold mounted without indicator

2 nominal size: 30

3 filter-material and filter-fineness:

80 G = 80 μ m, 40 G = 40 μ m, 25 G = 25 μ m
stainless steel wire mesh

25 VG = 20 μ m(c), 16 VG = 15 μ m(c), 10 VG = 10 μ m(c),

6 VG = 7 μ m(c), 3 VG = 5 μ m(c) Interpor fleece (glass fibre)

4 resistance of pressure difference for filter element:

30 = Δ p 30 bar

HR = Δ p 160 bar (rupture strenght Δ p 250 bar)

5 filter element design:

E = single-end open

6 sealing material:

P = Nitrile (NBR)

V = Viton (FPM)

7 filter element specification: (see catalog)

- = standard

VA = stainless steel

IS06 = see sheet-no. 31601

8 connection:

F = manifold mounted

9 connection size:

2 = DN 10

10 filter housing specification: (see catalog)

- = standard

IS06 = see sheet-no. 31605

11 clogging indicator or clogging sensor:

series MFO:

- = without

series MF:

AOR = visual, see sheet-no. 1606

AOC = visual, see sheet-no. 1606

AE = visual-electrical, see sheet-no. 1615

VS1 = electronical, see sheet-no. 1617

VS2 = electronical, see sheet-no. 1618

1.2. Filter element: (ordering example)

01E. 30. 10VG. HR. E. P. -

1	2	3	4	5	6	7
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1 series:

01E = filter element according to company standard

2 nominal size: 30

3 - 7 see type index-complete filter

weight without indicator: approx. 1,2 kg

weight with indicator : approx. 1,4 kg

2. Spare parts:

item	qty.	designation	dimensions	article-no.	
1	1	filter element	01E. 30		
2	1	O-ring	11 x 3	312603 (NBR)	312727 (FPM)
3	1	O-ring	32 x 2,5	306843 (NBR)	308268 (FPM)
4	1	support ring	37 x 2,1 x 1	305466	
5	2	O-ring	12 x 2	311014 (NBR)	310271 (FPM)
6	1	clogging indicator, visual	AOR or AOC	see sheet-no. 1606	
7	1	clogging indicator, visual-electrical	AE	see sheet-no. 1615	
8	1	clogging sensor, electronical	VS1	see sheet-no. 1617	
9	1	clogging sensor, electronical	VS2	see sheet-no. 1618	
10	1	O-ring	15 x 1,5	315357 (NBR)	315427 (FPM)
11	1	O-ring	22 x 2	304708 (NBR)	304721 (FPM)
12	1	O-ring	14 x 2	304342 (NBR)	304722 (FPM)

3. Description:

Pressure filter of the series MF 30 and MFO 30 are suitable for a working pressure up to 160 bar.

The pressure peaks are absorbed by a sufficient margin of safety. The filters are flange mounted to the hydraulic system.

The filter element consists of star-shaped, pleated filter material which is supported on the inside by a perforated core tube and is bonded to the end caps with a high-quality adhesive. The flow direction is from outside to inside.

Filter elements are available down to 4 $\mu\text{m}_{(e)}$.

Internormen Product Line filter elements are known as elements with a high intrinsic stability and an excellent filtration capability, a high dirt-retaining capacity and a long service life.

Internormen Product Line filter are suitable for all petroleum based fluids, HW-emulsions, most synthetic hydraulic fluids and lubrication oils.

Internormen Product Line filter elements are available up to a pressure difference resistance of Δp 160 bar and a rupture strength of Δp 250 bar.

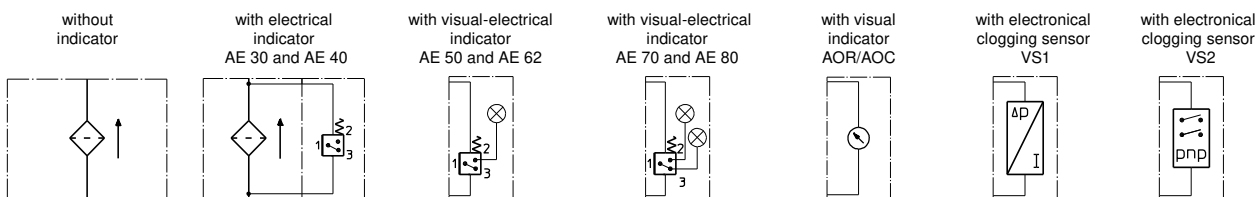
4. Technical data:

temperature range:	-10°C to + 80°C (for a short time + 100°C)
operating medium:	mineral oil, other media on request
max. operating pressure:	160 bar
test pressure:	229 bar
connection system:	manifold mounted
housing material:	Al; C-steel
sealing material:	Nitrile (NBR) or Viton (FPM), other materials on request
installation position:	vertical
volume tank:	0,1 l

Classified under the Pressure Equipment Directive 97/23/EC for mineral oil (fluid group 2), Article 3, Para. 3.

Classified under ATEX Directive 94/9/EC according to specific application (see questionnaire sheet-no. 34279-4).

5. Symbols:



6. Pressure drop flow curves:

Precise flow rates see 'Interactive Product Specifier', respectively Δp -curves - depending on filter fineness and viscosity.

7. Test methods:

Filter elements are tested according to the following ISO standards:

- ISO 2941 Verification of collapse/burst resistance
- ISO 2942 Verification of fabrication integrity
- ISO 2943 Verification of material compatibility with fluids
- ISO 3723 Method for end load test
- ISO 3724 Verification of flow fatigue characteristics
- ISO 3968 Evaluation of pressure drop versus flow characteristics
- ISO 16889 Multi-pass method for evaluating filtration performance