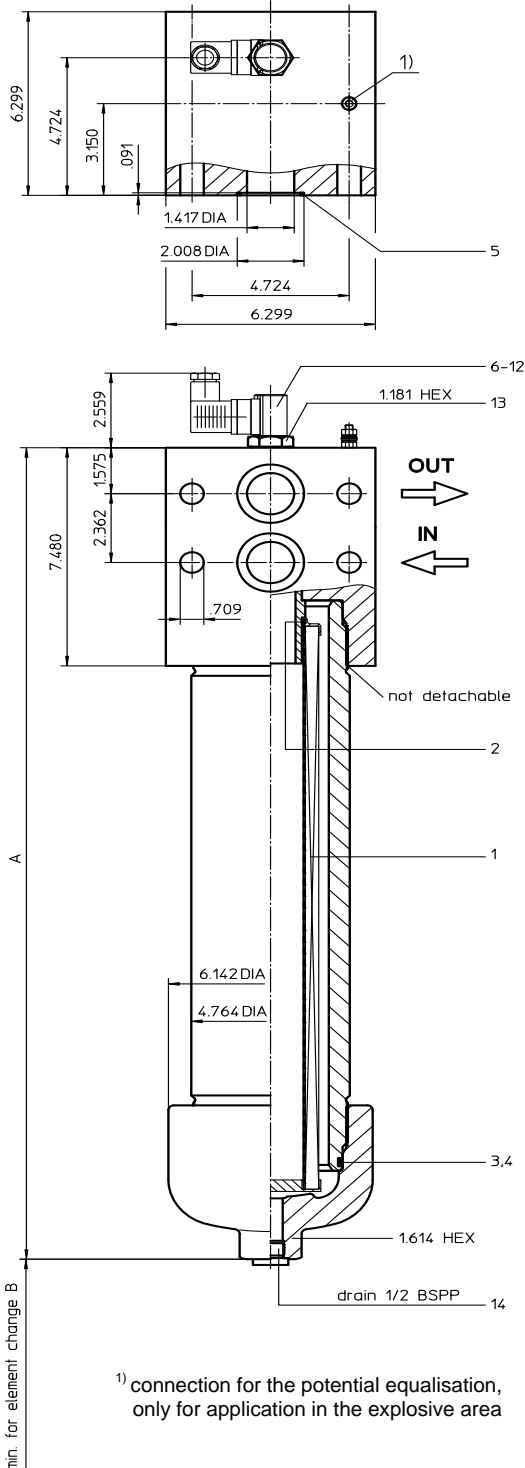


PRESSURE FILTER, manifold mounted

Series HPF 601- 1351 4568 PSI

Sheet No.
1472 L



2. Dimensions:

type	HPF 601	HPF 901	HPF 1351
connection	1 1/4"	1 1/4"	1 1/4"
A	21.93	27.83	37.60
B	12.20	18.11	27.95
weight lbs.	103	119	145
volume tank	.55 Gal.	.82 Gal.	1.21 Gal.

1. Type index:

1.1. Complete filter: (ordering example)

HPF. 901. 10VG. HR. E. P. -. F. 6. -. -. AE

1	2	3	4	5	6	7	8	9	10	11	12
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1 series:

HPF = pressure filter, manifold mounted

2 nominal size: 601, 901, 1351

3 filter-material and filter-fineness:

80 G = 80 μm , 40 G = 40 μm , 25 G = 25 μm
stainless steel wire mesh
25 VG = 20 $\mu\text{m}_{(c)}$, 16 VG = 15 $\mu\text{m}_{(c)}$, 10 VG = 10 $\mu\text{m}_{(c)}$,
6 VG = 7 $\mu\text{m}_{(c)}$, 3 VG = 5 $\mu\text{m}_{(c)}$ Interpor fleece (glass fiber)

4 resistance of pressure difference for filter element:

30 = Δp 435 PSI
HR = Δp 2320 PSI (rupture strength Δp 3625 PSI)

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
ISO6 = see sheet-no. 31601

8 connection:

F = manifold mounted

9 connection size:

6 = 1 1/4"

10 filter housing specification: (see catalog)

- = standard
ISO6 = see sheet-no. 31605

11 internal valve:

- = without
S1 = with by-pass valve Δp 51 PSI
S2 = with by-pass valve Δp 102 PSI
R = reversing valve, $Q \leq 122.94$ GPM

12 clogging indicator or clogging sensor:

- = without
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. 900. 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: 600, 900, 1350

3 - 7 see type index-complete filter

EDV 07/14

Changes of measures and design are subject to alteration!

3. Spare parts:

item	qty.	designation	dimension			article-no.
			HPF 601	HPF 901	HPF 1351	
1	1	filter element	01E.600	01E.900	01E.1350	
2	1	O-ring	48 x 3			304357 (NBR) 304404 (FPM)
3	1	O-ring	98 x 4			301914 (NBR) 304765 (FPM)
4	1	support ring	110 x 3,5 x 2			304802
5	2	O-ring	45 x 3			304991 (NBR) 304997 (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)
13	1	screw plug	20913-4			309817
14	1	screw plug	½ BSPP			304678

item 13 execution only without clogging indicator or clogging sensor

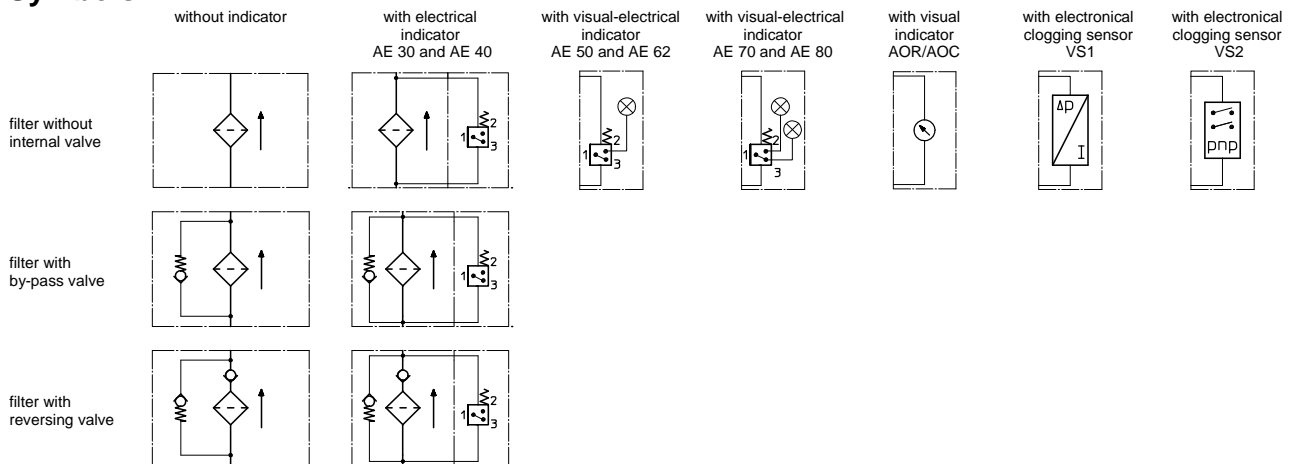
4. Description:

The pressure filters of the series HPF 601-1351 are suitable for a working pressure up to 4568 PSI. The pressure peaks are absorbed by a sufficient margin of safety. The HPF-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 the inside. Filter elements are available down to 5 $\mu\text{m}_{(c)}$. 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 2320 PSI and a rupture strength of Δp 3625 PSI. The internal valves are integrated into the centering pivot for the filter element. After reaching the opening pressure the by-pass valve causes that an unfiltered partial flow passes the filter. With the reverse valve a protection of the filter element is given when having a reverse flow inside the filter. The reverse flow will not be filtered.

5. Technical data:

temperature range: +14°F to +176°F (for a short time +212°F)
operating medium: mineral oil, other media on request
max. operating pressure: 4568 PSI
test pressure: 6525 PSI
connection system: manifold mounted
housing material: C-steel; EN-GJS-400-18-LT
sealing material: Nitrile (NBR) or Viton (FPM), other materials on request
installation position: vertical
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).

6. Symbols:



7. Pressure drop flow curves:

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

8. 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