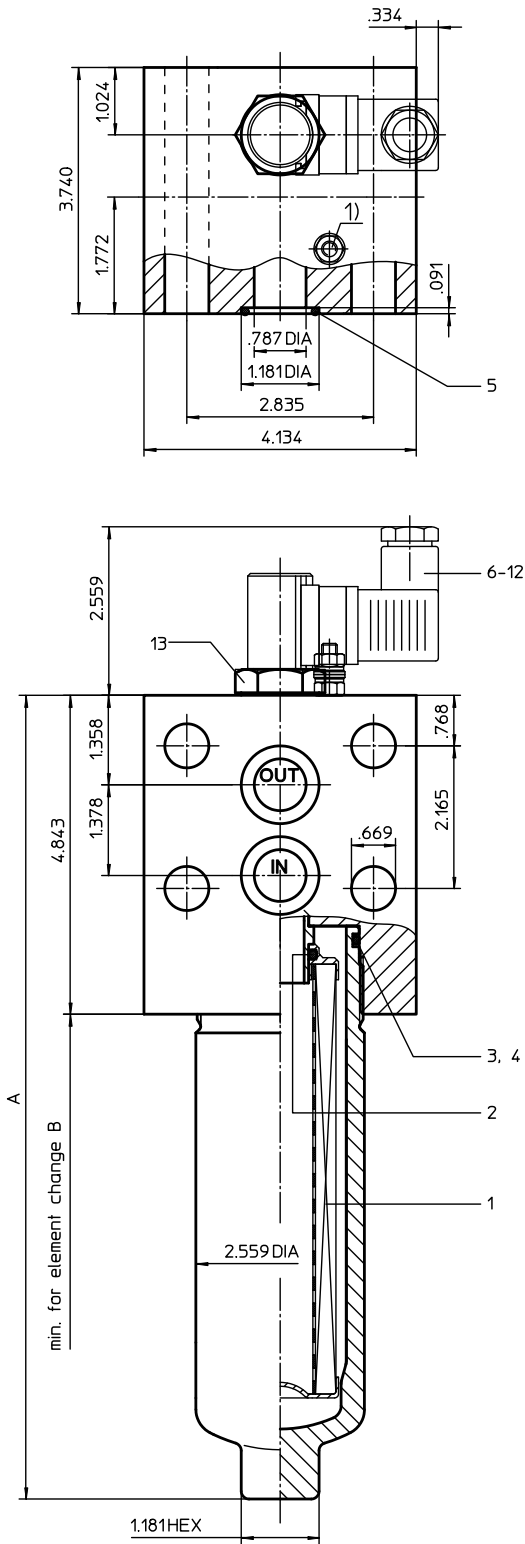


PRESSURE FILTER

Series HPX 60 - 150 4568 PSI

Sheet No.
1483 E



1) connection for the potential equalisation, only for application in the explosive area

1. Type index:

1.1. Complete filter: (ordering example)

HPX. 90. 10VG. HR. E. P. - F. 4. - - AE
1 2 3 4 5 6 7 8 9 10 11 12

- 1 | **series:**
HPX = pressure filter
- 2 | **nominal size:** 60, 90, 150
- 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
IS06 = see sheet-no. 31601
- 8 | **connection:**
F = manifold mounted
- 9 | **connection size:**
4 = $\frac{3}{4}$ "
- 10 | **filter housing specification:** (see catalog)
- = standard
IS06 = 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, $Q \leq 18.50$ 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. 90. 10VG. HR. E. P. -
1 2 3 4 5 6 7

- 1 | **series:**
01E. = filter element according to company standard
- 2 | **nominal size:** 60, 90, 150
- 3 | - | 7 | see type index-complete filter

2. Dimensions: inch

type	HPX 60	HPX 90	HPX 150
connection		$\frac{3}{4}$ "	
A	9.64	12.20	16.49
B	10.63	13.19	17.52
weight lbs.	20	21	23
volume tank	.08 Gal.	.10 Gal.	.16 Gal.

EDV 08/12

Changes of measures and design are subject to alteration!

3. Spare parts:

item	qty.	designation	dimension			article-no.	
			HPX 60	HPX 90	HPX 150		
1	1	filter element	01E.60	01E.90	01E.150		
2	1	O-ring		22 x 3,5		304341 (NBR)	304392 (FPM)
3	1	O-ring		54 x 3		304657 (NBR)	304720 (FPM)
4	1	support ring		61 x 2,6 x 1		304660	
5	2	O-ring		24 x 3		303038 (NBR)	304397 (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, electrical		VS1		see sheet-no. 1617	
9	1	clogging sensor, electrical		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	

item 13 execution only without clogging indicator or clogging sensor

4. Description:

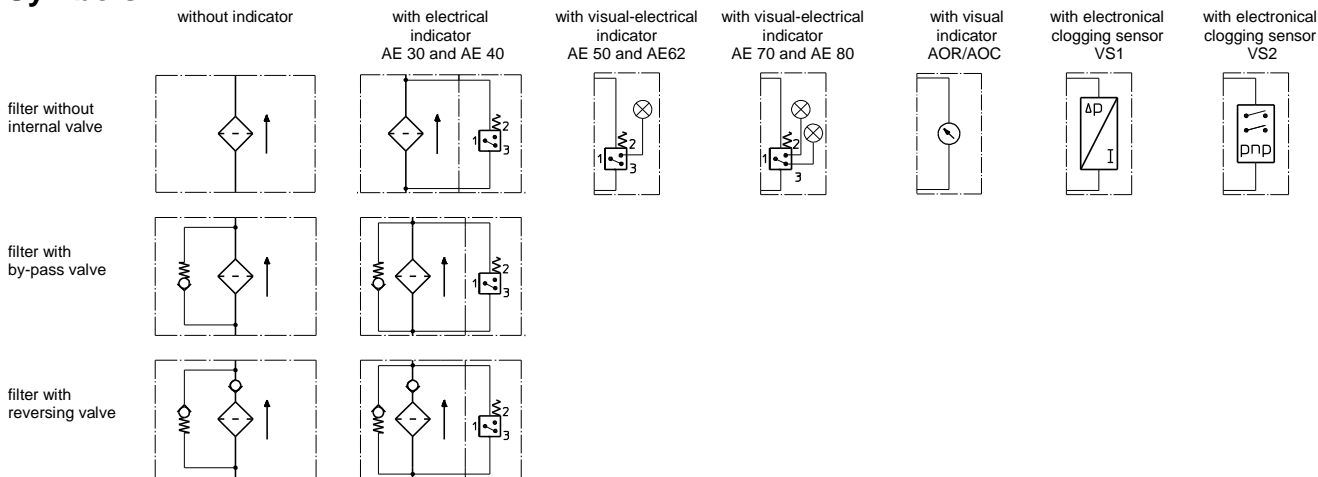
The pressure filters of the series HPX 60-150 are suitable for a working pressure up to 4568 bar. The pressure peaks are absorbed by a sufficient margin of safety. The HPX-filter are flanged to the mounting face. The filter element consists of star-shaped, pleated filter material which is supported on 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 4 $\mu\text{m}_{(c)}$. 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: 6532 PSI
connection system: manifold mounted
housing material: C-steel
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