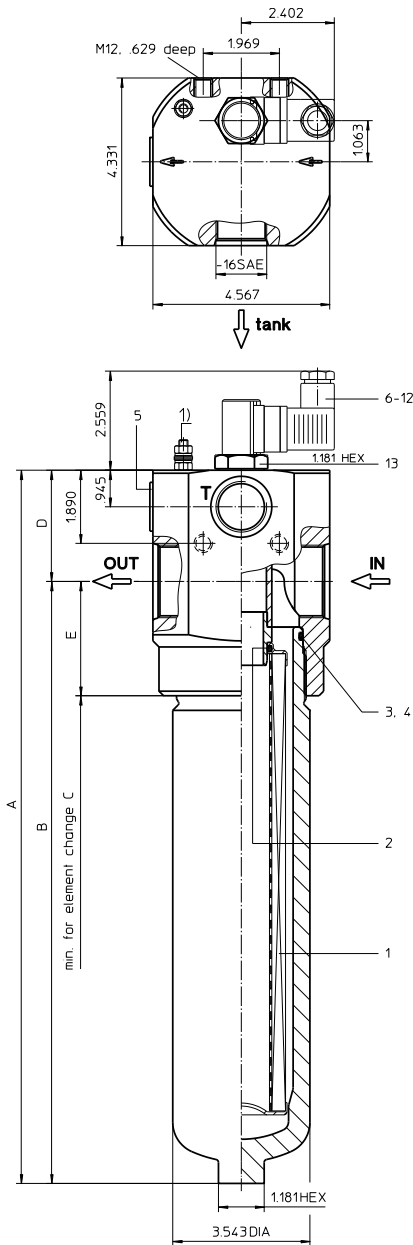


PRESSURE FILTER

Series HPV 170-450 6000 PSI

Sheet No.
1479 E



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

1. Type index:

1.1. Complete filter: (ordering example)

HPV. 360. 10VG. HR. E. P. -. UG. 7. -. D2. AE

1	2	3	4	5	6	7	8	9	10	11	12
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- 1 **series:**
HPV = pressure filter with differential pressure-valve
- 2 **nominal size:** 170, 240, 360, 450
- 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:**
- = standard
VA = stainless steel
- 8 **connection:**
UG = thread connection
- 9 **connection size:**
5 = -16 SAE
6 = -20 SAE
7 = -24 SAE
- 10 **filter housing specification:**
- = standard
- 11 **internal valve:**
D1 = differential pressure-valve Δp 51 PSI
D2 = differential pressure-valve Δp 102 PSI
- 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 = electrical, see sheet-no. 1617
VS2 = electrical, see sheet-no. 1618

1.2. Filter element: (ordering example)

01E. 360. 10VG. HR. E. P. -

1	2	3	4	5	6	7
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- 1 **series:**
01E. = filter element according company standard
- 2 **nominal size:** 170, 240, 360, 450
- 3 - 7 see type index-complete filter

2. Dimensions: inch

type	HPV 170			HPV 240			HPV 360			HPV 450		
	-16SAE	-20SAE	-24SAE	-16SAE	-20SAE	-24SAE	-16SAE	-20SAE	-24SAE	-16SAE	-20SAE	-24SAE
A	13.26	13.26	13.46	15.23	15.23	15.43	18.38	18.38	18.58	22.51	22.51	22.71
B	10.35	10.35	10.43	12.32	12.32	12.40	15.47	15.47	15.55	19.60	19.60	19.68
C	13.77	13.77	13.77	15.74	15.74	15.74	18.89	18.89	18.89	23.03	23.03	23.03
D	2.91	2.91	3.03	2.91	2.91	3.03	2.91	2.91	3.03	2.91	2.91	3.03
E	2.87	2.87	2.95	2.87	2.87	2.95	2.87	2.87	2.95	2.87	2.87	2.95
weight lbs.	30	32	33	33	35	36	37	39	40	42	44	45
volume tank	.18 Gal.			.23 Gal.			.31 Gal.			.42 Gal.		

EDV 08/12

Changes of measures and design are subject to alteration!

3. Spare parts:

item	qty.	designation	dimension HPV 170-450	article-no.	
1	1	filter element	01E. 170-450		
2	1	O-ring	34 x 3,5	304338 (NBR)	304730 (FPM)
3	1	O-ring	75 x 3	302215 (NBR)	304729 (FPM)
4	1	support ring	81 x 2,6 x 1	304581	
5	1	screw plug	¼ BSPP	308529	
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	

item 13 execution only without clogging indicator or clogging sensor

4. Description:

The pressure filters of the series HPV 170-450 are suitable for a working pressure up to 6000 PSI.

The pressure peaks are absorbed by a sufficient margin of safety. The HPV-filter is in-line mounted.

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 µm_(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 differential pressure-valve opens independently of the operating pressure at a chosen differential pressure-valve between IN and OUT and leaves an unfiltered partial-flow flowing from „IN“ to the tank.

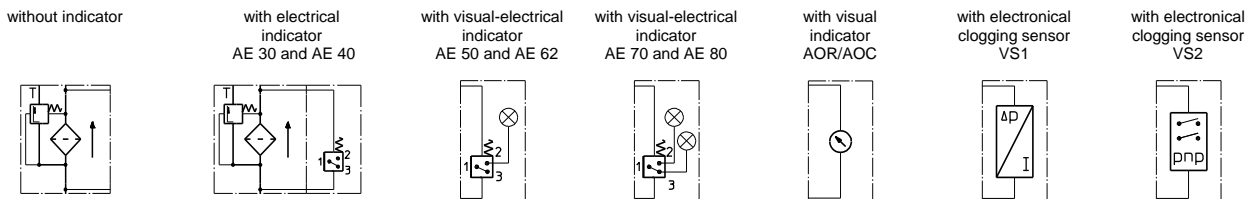
5. Technical data:

temperature range:	+ 14°F to + 176°F (for a short time + 212°F)
operating medium:	mineral oil, other media on request
max. operating pressure:	6000 PSI
test pressure:	8580 PSI
connection system:	thread connection
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