

STAINLESS STEEL-PRESSURE FILTER

Series ELF 1201-10001 232 PSI

Sheet No.
1130 C

1. Type index:

1.1. Complete filter: (ordering example)

ELF. 2001. 10VG. 10. E. P. VA. FA1. 9. VA. AE

1	2	3	4	5	6	7	8	9	10	11
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- series:**
ELF = stainless steel-in-line filter
- nominal size:** 1201, 2001, 2401, 3601, 4801, 6001, 10001
- filter material and filter fineness:**
80 G = 80 µm, 40 G = 40 µm, 25 G = 25 µm stainless steel wire mesh,
25 VG = 20 µm_(c), 16 VG = 15 µm_(c), 10 VG = 10 µm_(c), 6 VG = 7 µm_(c), 3 VG = 5 µm_(c) Interpor fleece (glass fiber)
25 API = 20 µm, 10 API = 10 µm Interpor fleece (glass fiber) according to API
- resistance of pressure difference for filter element:**
10 = Δp 145 PSI
- filter element design:**
E = without by-pass valve; S = with by-pass valve Δp 29 PSI
- sealing material:**
P = Nitrile (NBR); V = Viton (FPM)
- filter element specification:** (see catalog)
- = standard
VA = stainless steel
IS06 = see sheet-no. 31601
- connection:**
FA 1 = ANSI-flange connection CLASS 300 PSI, sealing surface rough grind 1600-3600 µin
FA 2 = ANSI-flange connection CLASS 300 PSI, sealing surface rough grind < 640µin

9. connection size:

connection	filter nominal size							
8 = 2"	1201							
9 = 2 1/2"	1201	2001	2401					
A = 3"	1201	2001	2401	3601				
B = 4"	1201	2001	2401	3601	4801	6001		
C = 5"		2001	2401	3601	4801	6001	10001	
D = 6"				3601	4801	6001	10001	
E = 8"					4801	6001	10001	
F = 10"							10001	

10. filter housing specification:

VA = stainless steel

11. clogging indicator or clogging sensor:

- = without
- AE = visual-electrical, see sheet-no.1609
- OP = visual, see sheet-no.1628;
- OE = visual-electrical, see sheet-no 1628;
- VS1 = electrical, see sheet-no.1607
- VS2 = electrical, see sheet-no.1608

1.2. Filter element: (ordering example)

01E. 2001. 10VG. 10. E. P. VA

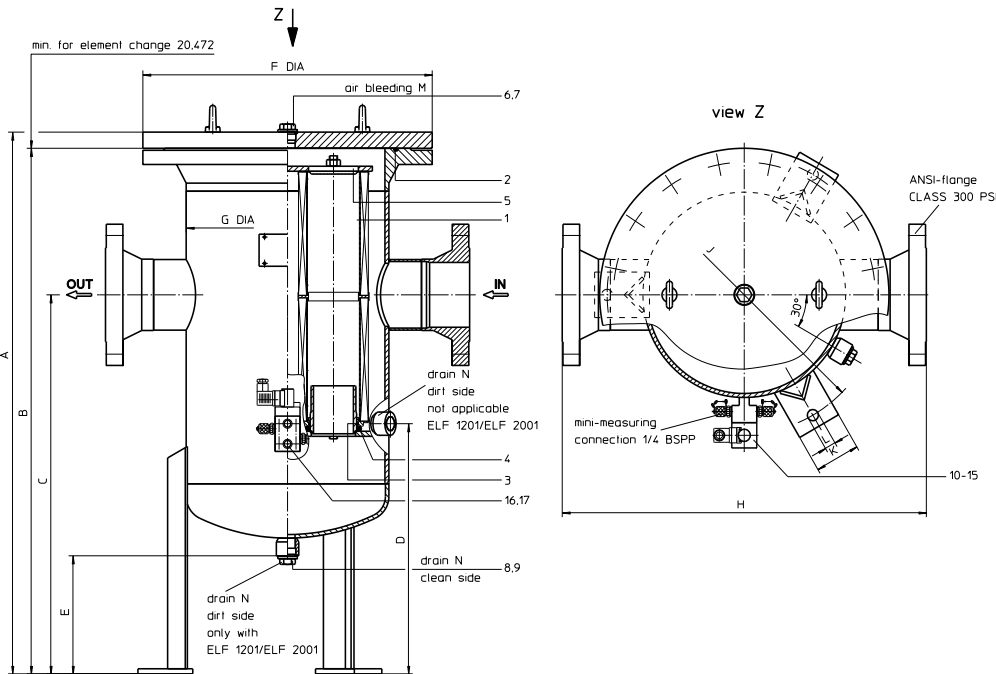
1	2	3	4	5	6	7
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- series:**
01E. = filter element according to company standard
- nominal size:** 1201, 2001
- 7 | see type index-complete filter

2. Accessories:

- measure-and bleeder -connection see sheet-no. 1650
- evacuation- and bleeder-connection see sheet-no. 1651
- counter flange, ANSI-flange 300 PSI
- lifting mechanism, see sheet-no. 1661

Changes of measures and design are subject to alteration!



3. Dimensions: inch

type	conn. ANSI	A	B	C	D	E	F	G	H	J	K	L	M	N	weight lbs.	volume tank
ELF 1201	2"	41.42	40.47	15.75	-	7.40	13.38	8.62	18.66	12.99	2.76	.71	1/2 BSPP	1 BSPP	132	6.8 Gal
	2 1/2"	42.20	41.22													7.1 Gal
	3"	41.42	40.47													6.8 Gal
	4"	44.40	43.46													7.6 Gal
ELF 2001	2 1/2"	43.03	42.00	16.73	-	7.32	15.94	10.75	22.68	14.96	2.76	.71	1 BSPP	1 BSPP	242	11.5 Gal
	3"	43.77	42.75													11.7 Gal
	4"	43.30	42.28													11.5 Gal
	5"	46.77	45.74													12.6 Gal
ELF 2401	2 1/2"	40.08	38.98	27.56	17.52	7.20	18.11	12.46	26.77	17.72	2.76	.71	1 BSPP	1 BSPP	286	14.5 Gal
	3"															
	4"															
ELF 3601	3"	42.20	40.94	29.53	19.49	9.37	22.83	15.98	28.74	21.65	3.54	.87	1 BSPP	1 BSPP	572	23.7 Gal
	4"															
	6"															
ELF 4801/6001	4"	43.94	42.52	31.50	21.06	9.13	28.15	20.00	35.04	25.95	3.54	.87	1 BSPP	1 BSPP	682	38.3 Gal
	5"															
	6"															
	8"															
ELF 10001	5"	56.10	43.70	31.50	22.44	11.14	35.83	27.99	42.91	35.43	4.72	.87	1 1/2 BSPP	1 1/2 BSPP	1232	74.7 Gal
	6"															
	8"															
	10"															

4. Spare parts:

4.1. Depending on different series:

item	designation	qty.	dimension and article-no. ELF 1201	dimension and article-no. ELF 2001	qty.	dimension and article-no. ELF 2401	dimension and article-no. ELF 3601	qty.	dimension and article-no. ELF 4801	qty.	dimension and article-no. ELF 6001	dimension and article-no. ELF 10001
1	filter element	1	01E.1201	01E.2001	2	01E.1201	01E.1201	4	01E.1201	3	01E.2001	01E.2001
2	O-ring	1	225 x 5	275 x 5	1	330 x 5	429 x 6	1	516 x 6	1	516 x 6	722 x 8
			308652 (NBR) 311473 (FPM)	307414 (NBR) 310288 (FPM)		303080 (NBR) 310273 (FPM)	308659 (NBR) 310273 (FPM)		301962 (NBR) 311474 (FPM)		301962 (NBR) 311474 (FPM)	308145 (NBR) 311805 (FPM)
3	O-ring	1	93 x 5	135 x 5	2	93 x 5	93 x 5	4	93 x 5	3	135 x 5	135 x 5
			307588 (NBR) 307589 (FPM)	306016 (NBR) 307045 (FPM)		307588 (NBR) 307589 (FPM)	307588 (NBR) 307589 (FPM)		307588 (NBR) 307589 (FPM)		306016 (NBR) 307045 (FPM)	306016 (NBR) 307045 (FPM)
4	O-ring	1	85 x 10	125 x 10	2	85 x 10	85 x 10	4	85 x 10	3	125 x 10	125 x 10
			304386 (NBR) 304541 (FPM)	304388 (NBR) 306006 (FPM)		304386 (NBR) 304541 (FPM)	304386 (NBR) 304541 (FPM)		304386 (NBR) 304541 (FPM)		304388 (NBR) 306006 (FPM)	304388 (NBR) 306006 (FPM)
5	spring	1	324967		-	-	-	-	-	-	-	-
	pressure plate	-	-		1	319252	1	319253	1	319354	1	319256
6	screw plug	1	½ BSPP 310092	1 BSPP 319275	1	1 BSPP 319275		1	1 ½ BSPP 329702		1	1 ½ BSPP 329702
7	gasket	1	A 22 x 27 320243	A 33 x 39 319276	1	A 33 x 39 319276		1	A 48 x 55 329700		1	A 48 x 55 329700
8	screw plug	1	1 BSPP 319275	1 BSPP 319275	2	1 BSPP 319275		2	1 ½ BSPP 329702		2	1 ½ BSPP 329702
9	gasket	1	A 33 x 39 319276	A 33 x 39 319276	2	A 33 x 39 319276		2	A 48 x 55 329700		2	A 48 x 55 329700

4.2. Depending on the series:

item	qty.	designation	dimension	article-no.
10	1	clogging indicator, visual	OP	see sheet-no. 1628
11	1	clogging indicator, visual-electrical	OE	see sheet-no. 1628
12	1	clogging indicator, visual-electrical	AE	see sheet-no. 1609
13	1	clogging sensor, electronical	VS1	see sheet-no. 1607
14	1	clogging sensor, electronical	VS2	see sheet-no. 1608
15	2	O-ring	14 x 2	304342 (NBR) 304722 (FPM)
16	2	screw plug	¼ BSPP	313787
17	2	gasket	A 14 x 18	323449

5. Description:

Stainless steel in-line filters of the series ELF 1201-10001 are suitable for a working pressure up to 232 PSI. Pressure peaks can be absorbed with a sufficient margin of safety.

The filter is in-line mounted. Inlet and outlet are on the same level. The filters can be installed as suction-filter, pressure-filter or return-line filter.

The filter element consist 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. The particles are held back on the outside. For cleaning (see special leaflet 21070-4 resp. 39448-4) the mesh element respectively to change the glass fiber element remove the cover and take out the element.

Filter finer than 40 microns should use throw-away elements made of paper or Interpor fleece (glass fiber). Filter elements as fine as 5 microns_(c) are available; finer filter elements on request.

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 filters are suitable for all petroleum based fluids, HW-emulsions, most synthetic hydraulic fluids and lubrication oils.

Approvals according to TÜV, and the major „Shipyards Classification Societies“ D.N.V.; B.V.; G.L.; L.R.S.; R.I.N.A.; A.B.S.; P.R.S.;USS.R.S. and others are possible.

6. Technical data:

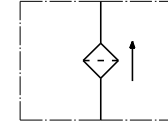
temperature range:	+14°F to +176°F (for a short time +212°F)
operating medium:	mineral oil, other media on request
max. operating pressure:	232 PSI
test pressure:	332 PSI
connection system:	ANSI-flange connection 300 PSI
housing material:	EN10088 - 1.4571 (316 Ti according to AISI)
sealing material:	Nitrile (NBR) or Viton (FPM), other materials on request
installation position:	vertical
mini-measuring connection:	¼ BSPP

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

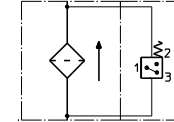
Classified under ATEX Directive 94/9/EC according to specific application (see questionnaire sheet-no. 34279-4).

7. Symbols:

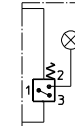
without indicator



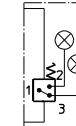
with electrical indicator
AE 30 and AE 40



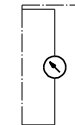
with visual -
electrical indicator
AE 50 and AE 62



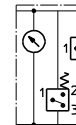
with visual -
electrical indicator
AE 70 and AE 80



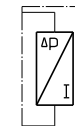
with visual
indicator
OP



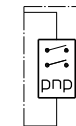
with visual -
electrical indicator
OE



with electronical
clogging sensor
VS1



with electronical
clogging sensor
VS2



8. Pressure drop flow curves:

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

9. 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