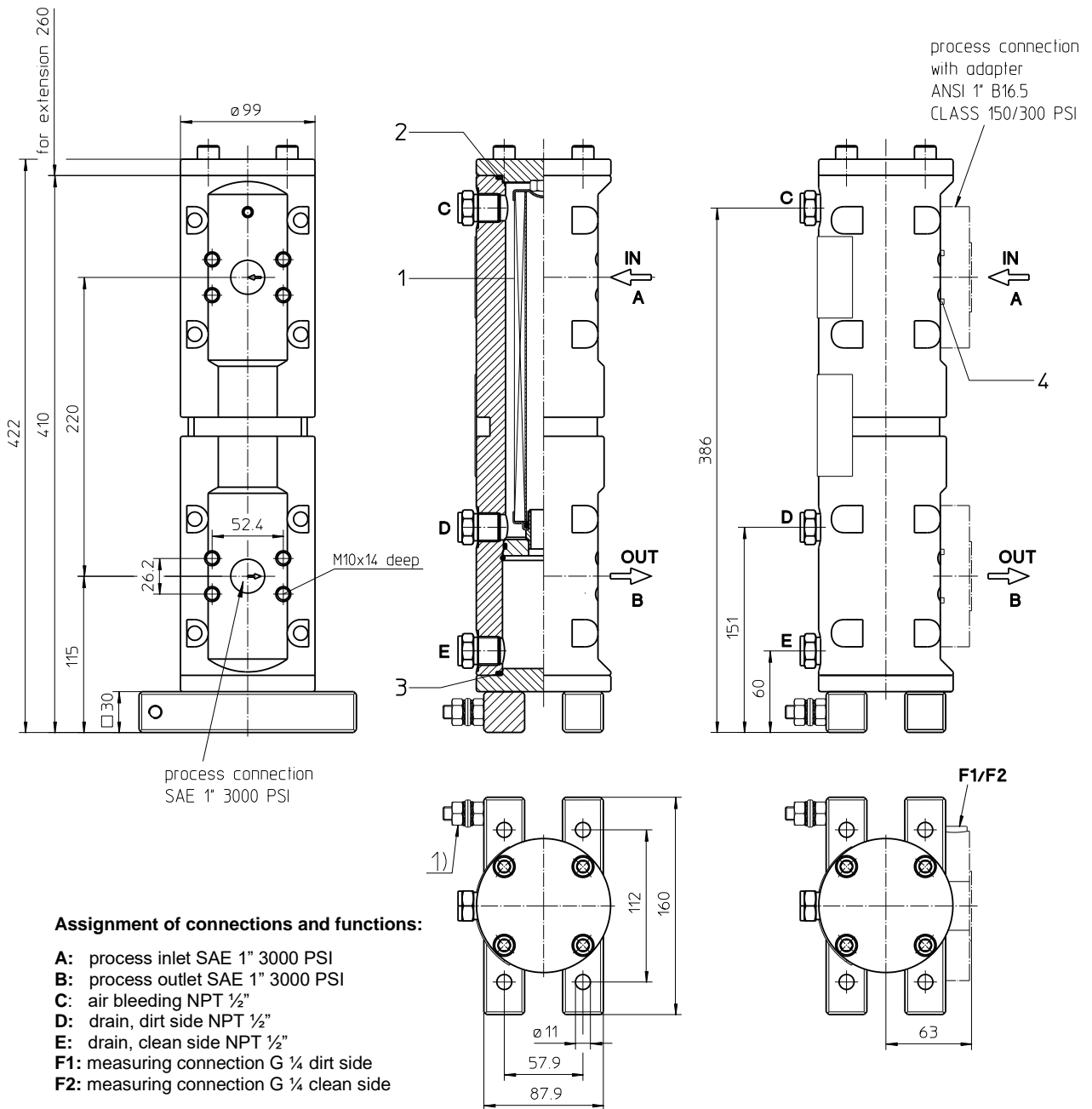


Series ELA 106

NPS 1" CLASS 150-300 PSI



Assignment of connections and functions:

- A: process inlet SAE 1" 3000 PSI
- B: process outlet SAE 1" 3000 PSI
- C: air bleeding NPT 1/2"
- D: drain, dirt side NPT 1/2"
- E: drain, clean side NPT 1/2"
- F1: measuring connection G 1/4 dirt side
- F2: measuring connection G 1/4 clean side

1) Connection for the potential equalization, only for application in the explosive area.

Weight: approx. 18 kg

Dimensions: mm

Designs and performance values are subject to change.



Powering Business Worldwide

Pressure Filter

Series ELA 106

NPS 1" CLASS 150-300 PSI

Description:

Stainless steel-inline filter series ELA 106 have a working pressure up to 40 bar. Pressure peaks can be absorbed with a sufficient safety margin.

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.

For cleaning the stainless steel mesh element (see special leaflets 21070-4 and 39448-4) or changing the filter element, remove the cover and take out the element. The mesh elements are not guaranteed to maintain 100% performance after cleaning.

For filtration finer than 40 µm use disposable elements made of microglass. Filter elements as fine as 5 µm(c) are available; finer filter elements are available upon request.

Eaton filter elements are known for a high intrinsic stability and an excellent filtration capability, a high dirt-retaining capacity and a long service life.

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

Ship classifications available upon request.

Type index:

Complete filter: (ordering example)

ELA. 106. 10VG. 30. E. P. VA. FS. 5. VA. IS21.

1	2	3	4	5	6	7	8	9	10	11
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-	-
12	13

- 1 series:**
ELA = stainless steel-inline filter according to ASME-code
- 2 nominal size:** 106
- 3 filter material:**
80G, 40G, 25G, 10G stainless steel wire mesh
25VG, 16VG, 10VG, 6VG, 3VG microglass
25API, 10API microglass according to API
- 4 filter element collapse rating:**
30 = Δp 30 bar
- 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 process connection:**
FS = flange connection SAE 3000 PSI (standard)
FA1 = flange ANSI CLASS 300 PSI ¹⁾
FA2 = flange ANSI CLASS 300 PSI ²⁾
FA11 = flange ANSI CLASS 150 PSI ¹⁾
FA12 = flange ANSI CLASS 150 PSI ²⁾
- 9 process connection size:**
5 = 1"
- 10 filter housing specification:**
VA = stainless steel, see sheet-no. 70657
- 11 specification pressure vessel:**
IS21 = ASME VIII Div.1 with U-stamp, see sheet-no. 43415
IS23 = ASME VIII Div.1 without U-stamp, see sheet-no. 55218
- 12 shut-off :**
- = without
- 13 clogging indicator:**
- = without

¹⁾ sealing surface Rz = 160 µm (not finer than 40 µm)

²⁾ sealing surface Rz = 16 µm

Filter element: (ordering example)

01NLM. 106. 10VG. 30. E. P. VA

1	2	3	4	5	6	7
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- 1 series:**
01NLM = standard filter element according to DIN 24550, T3 with hex nut
- 2 nominal size:** 106
- 3 - 7** see type index-complete filter

Technical data:

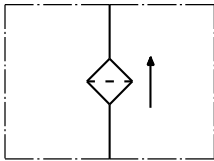
operating temperature:	-10°C to +100°C
operating medium:	mineral oil, other media on request
max. operating pressure (pressure vessel):	40 bar
test pressure acc. to ASME VIII Div. 1:	1,3 x operating pressure = 52 bar
test pressure acc. to API 614, Chapter 1:	1,5 x operating pressure = 60 bar
standard-process connection:	flange connection SAE 3000 PSI
housing material:	stainless steel, see sheet-no.70657
sealing material:	Nitrile (NBR) or Viton (FPM), other materials on request
installation position:	vertical
bleeder connection:	NPT ½"
drain connection dirt side:	NPT ½"
drain connection clean side:	NPT ½"
volume tank:	0,9 l
operating pressure adapter flanges:	according to B16.5 CLASS 150 PSI (max. 16 bar) according to B16.5 CLASS 300 PSI (max. 40 bar)

Classified under the Pressure Equipment Directive 2014/68/EU for mineral oil (fluid group 2), Article 4, Para. 3. Classified under ATEX Directive 2014/34/EU according to specific application (see questionnaire sheet-no. 34279-4)

Pressure drop flow curves:

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

Symbol:



Spare parts:

item	qty.	designation	dimension	article-no.	
1	1	filter element	01.NLM.106...		
2	1	O-ring	60 x 3.5	304377 (NBR)	304398 (FPM)
3	1	O-ring	60 x 3.5	304377 (NBR)	304398 (FPM)
4	2	O-ring (only with execution with adapter)	32,9 x 3,53	318850 (NBR)	338231 (FPM)

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



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