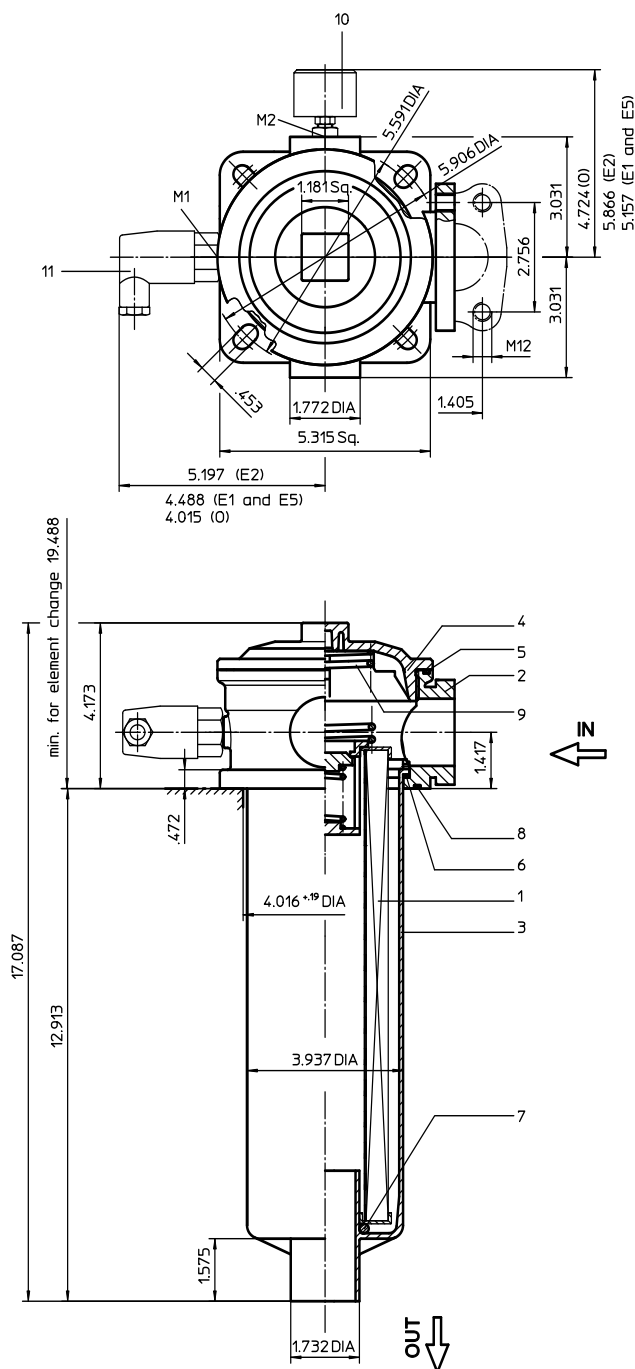


RETURN LINE FILTER

Series TEF 426 145 PSI

Sheet No.
1043 G



When equipped with one clogging indicator use preferably connection M1.

1. Type index:

1.1. Complete filter: (ordering example)

TEF. 426. 10VG. 16. S. P. -. FS. 7. -. O. E1

1	2	3	4	5	6	7	8	9	10	11	12
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- 1 **series:**
TEF = tank-mounted return-line-filter
- 2 **nominal size:** 426
- 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)
10 P = 10 μm paper
- 4 **resistance of pressure difference for filter element:**
16 = Δp 232 PSI
- 5 **filter element design:**
E = without by-pass valve
S = with by-pass valve Δp 29 PSI
- 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:**
FS = SAE-flange connection 3000 PSI
- 9 **connection size:**
7 = 1 1/2"
- 10 **filter housing specification:** (see catalog)
- = standard
IS06 = see sheet-no. 31605
- 11 **clogging indicator at M1:**
- = without
O = visual, see sheet-no. 1616
E1 = pressure switch, see sheet-no. 1616
E2 = pressure switch, see sheet-no. 1616
E5 = pressure switch, see sheet-no. 1616
- 12 **clogging indicator at M2:**
possible indicators see position 11 of the type index

1.2. Filter element: (ordering example)

01E. 425. 10VG. 16. S. P. -

1	2	3	4	5	6	7
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- 1 **series:**
01E. = filter element according to company standard specification
- 2 **nominal size:** 425
- 3 - 7 see type index-complete filter

weight: 5.7 lbs.

Changes of measures and design are subject to alteration!

2. Spare parts:

item	qty.	designation	dimension	article-no.	
1	1	filter element	01.E 425	-	
2	1	filter head	nominal size 426	313571	
3	1	filter bowl	nominal size 425	303732	
4	1	screw plug	M 120 x 3	313649	
5	1	O-ring	128 x 3	304602 (NBR)	308140 (FPM)
6	1	O-ring	98 x 4	301914 (NBR)	304765 (FPM)
7	1	O-ring	44 x 6	302222 (NBR)	304384 (FPM)
8	1	O-ring	115 x 3	303963 (NBR)	307762 (FPM)
9	1	spring	DA = 63,5	304983	
10	1	clogging indicator visual	O	see sheet-no. 1616	
11	1	clogging indicator electrical	alternatively E1, E2 or E5	see sheet-no. 1616	

3. Description:

Return-line filters of the TEF series are suitable for a working pressure up to 145 PSI.

Pressure peaks will be absorbed by a sufficient margin of safety.

The TEF-filters are directly mounted to the reservoir and connected to the return-line.

The filter element consists of a 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 is from outside to inside. Filters finer than 40 µm should use throw-away elements made of paper or Interpor fleece (glass fiber). Filter elements as fine as 5 µm_(c) are available; finer filter elements on request.

Internormen Product Line filter can be used for petroleum-based fluids, HW emulsions, water glycols, most synthetic fluids and lubrication fluids. Consult factory for specific fluid applications.

Internormen Product Line filter elements are known as stable elements which have excellent filtration capabilities and a high dirt retaining capacity, therefore having a long service life. Due to its practical design, the return-line filter is easy to service.

When changing the filter element a detachable connection between the filter head and the filter bowl prevents a flow back of dirty oil into the tank.

4. 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:

145 PSI

opening pressure by-pass valve

29 PSI

connection system:

SAE-flange connection 3000 PSI

housing material:

AL-casting; glass fiber reinforced polyamide

sealing material:

Nitrile (NBR) or Viton (FPM), other materials on request

installation position:

vertical

volume tank:

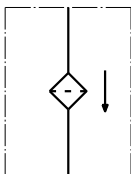
.65 Gal.

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

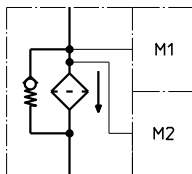
Classified under ATEX Directive 94/9/EC according to specific application (see questionnaire sheet-no. 34279-4).

5. Symbols:

without indicator



with by-pass valve



visual O



electrical contact maker E1



electrical contact breaker E5



electrical contact maker/breaker E2



6. Pressure drop flow curves:

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

7. 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