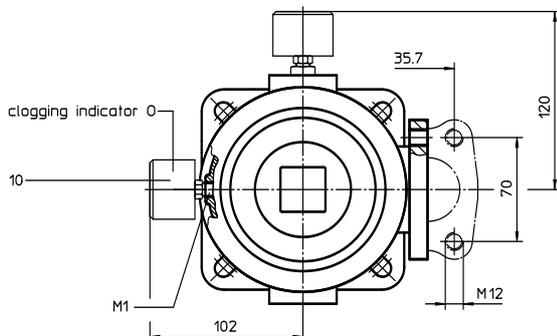
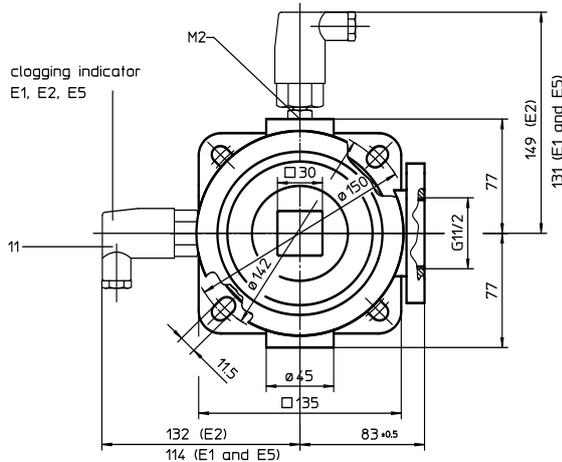
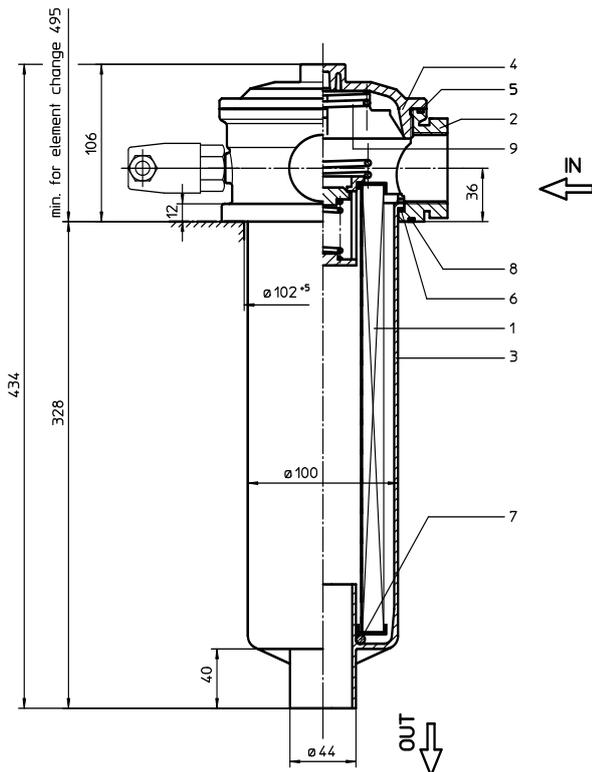


# RETURN LINE FILTER

## Series TEF 426 DN 40 PN 10

Sheet No.  
**1043 G**



When equipped with one clogging indicator use preferably connection M1.

weight: 2,6 kg

### 1. Type index:

#### 1.1. Complete filter: (ordering example)

**TEF. 426. 10VG. 16. S. P. - . G. 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  $\mu\text{m}$ , 40 G = 40  $\mu\text{m}$ , 25 G = 25  $\mu\text{m}$   
 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 fibre)  
 10 P = 10  $\mu\text{m}$  paper

**4 resistance of pressure difference for filter element:**

16 =  $\Delta p$  16 bar

**5 filter element design:**

E = without by-pass valve  
 S = with by-pass valve  $\Delta p$  2,0 bar

**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:**

G = thread connection according to DIN 3852, T2  
 FS = SAE-flange connection 3000 PSI

**9 connection size:**

7 = G 1 1/2 or 1 1/2" SAE

**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

**2 nominal size: 425**

**3 - 7 see type index-complete filter**

## 2. Spare parts:

item	qty.	designation	dimension	article-no.	
1	1	filter element	01E. 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 in the TEF series are suitable for a working pressure up to 10 bar. 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 fibre). Filter elements as fine as 5 µm<sub>(G)</sub> 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.

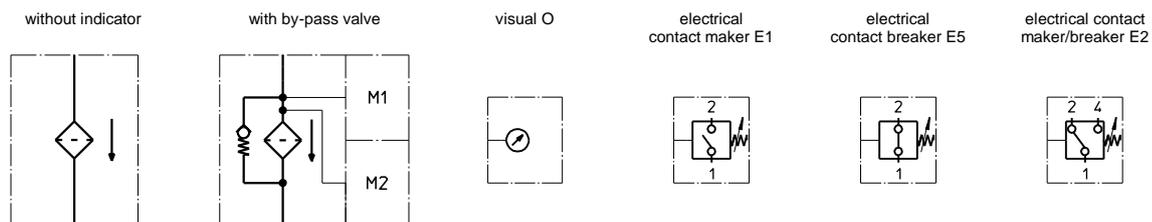
## 4. Technical data:

temperature range:	-10°C to +80°C (for a short time +100°C)
operating medium:	mineral oil, other media on request
max. operating pressure:	10 bar
opening pressure by-pass valve:	2,0 bar
connection system:	thread connection or SAE-flange connection 3000 PSI
housing material:	AL-casting; glass fibre reinforced polyamide
sealing material:	Nitrile (NBR) or Viton (FPM), other materials on request
installation position:	vertical
volume tank:	2,5 l

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:



## 6. Pressure drop flow curves:

Precise flow rates see 'Interactive Product Specifier' respectively  $\Delta p$ -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