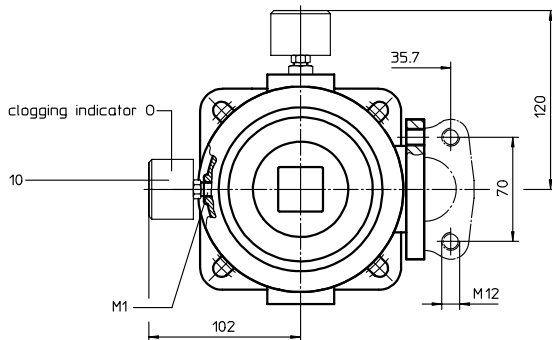
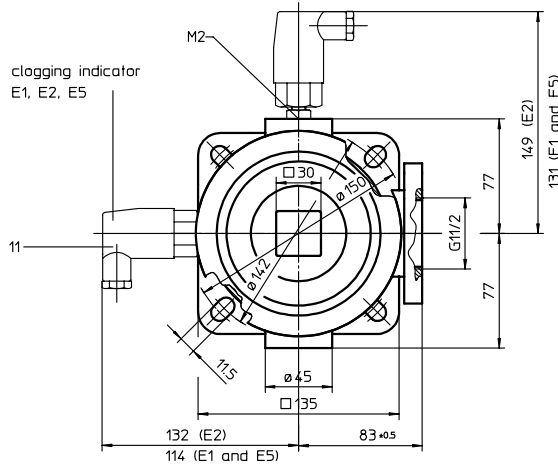
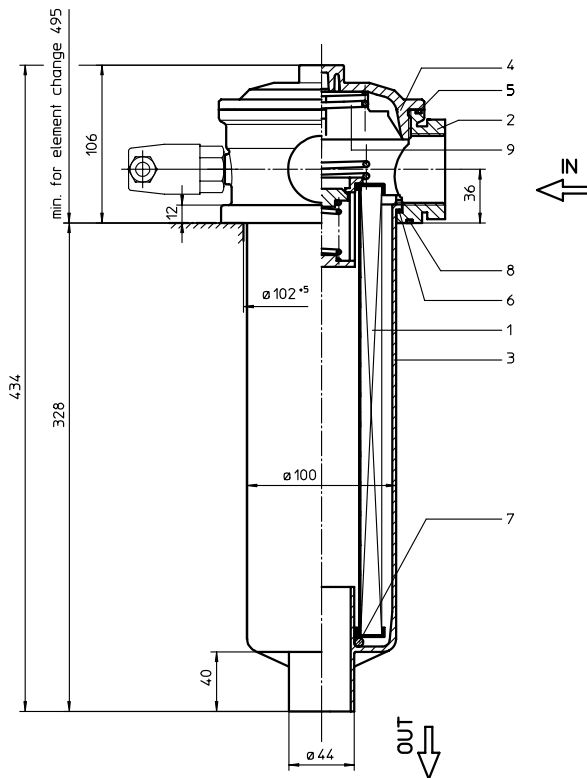


RETURN LINE FILTER

Series TEF 426 DN 40 PN 10

Sheet No.
1043 F



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. - . G. 7. - . O. E1

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

- 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 fibre)
25 P = 25 μm , 10 P = 10 μm paper
- 4 **resistance of pressure difference for filter element:**
16 = Δp 16 bar
- 5 **filter element design:**
E = without by-pass valve
S = with by-pass valve Δp 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 |
|---|---|---|---|---|---|---|

- 1 **series:**
01E. = filter element according to INTERNORMEN factory specification
- 2 **nominal size:** 425
- 3 - 7 | see type index-complete filter

weight: 2,6 kg

EDV 05/05

Changes of measures and design are subject to alteration!

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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_(c) are available; finer filter elements on request.

INTERNORMEN-Filters can be used for petroleum-based fluids, HW emulsions, water glycols, most synthetic fluids and lubrication fluids. Consult factory for specific fluid applications.

INTERNORMEN-Filters 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.

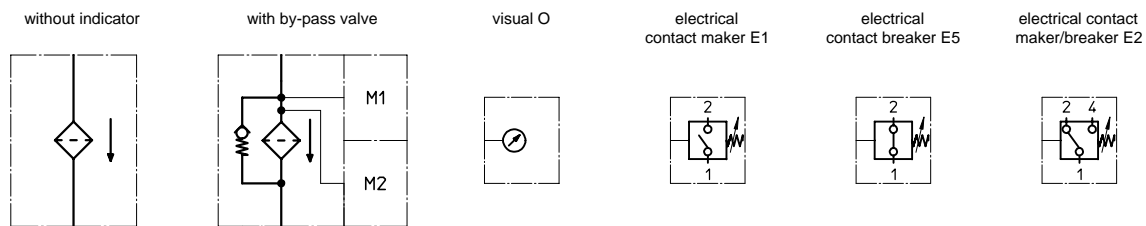
4. Technical data:

| | |
|---------------------------------|--|
| 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 'INT-Expert-System 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 |