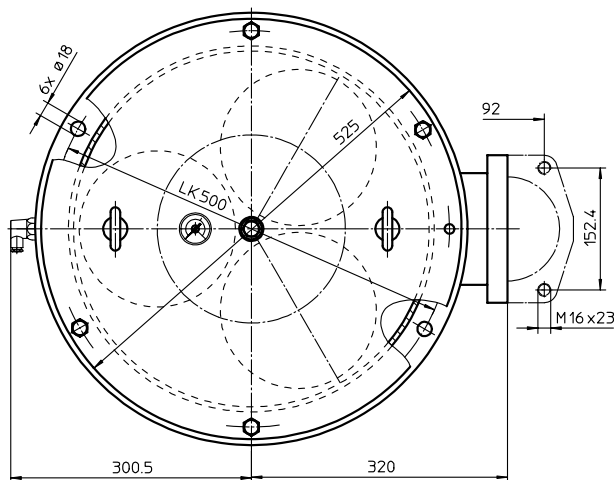
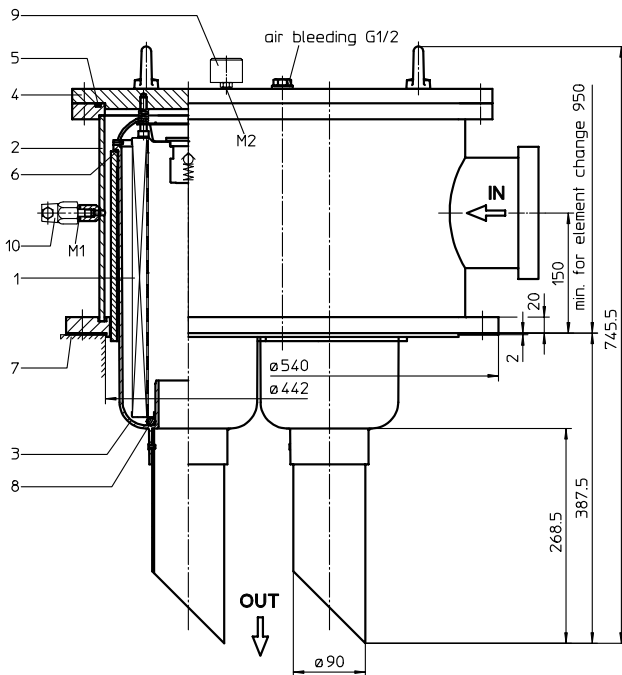


RETURN LINE FILTER

Series TEF 2551 DN 125 PN 10

Sheet No.
1015 O



When equipped with one clogging indicator use preferably connection M1.

1. Type index:

1.1. Complete filter: (ordering example)

TEF. 2551. 10VG. 10. S. P. -. FS. C. -. E1. O

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:** 2551
- 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:**
10 = Δp 10 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:**
FS = SAE-flange connection 3000 PSI
- 9 **connection size:**
C = 5"
- 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. 950. 10VG. 10. S. P. -

1	2	3	4	5	6	7
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- 1 **series:**
01E. = filter element according to INTERNORMEN factory specification
- 2 **nominal size:** 950
- 3 - 7 | see type index-complete filter

2. Accessories:

- Counter flange, see sheet-no. 1652

weight: approx. 125 kg

EDV 08/06

Changes of measures and design are subject to alteration!

3. Spare parts:

item	qty.	designation	dimension	article-no..	
1	3	filter element	01E.950		
2	1	filter head ¹⁾		313295	
3	3	filter bowl ¹⁾		327461	
4	1	filter cover ¹⁾			
5	1	O-ring	455 x 5	314742 (NBR)	314741 (FPM)
6	3	O-ring	170 x 6	304799 (NBR)	306529 (FPM)
7	1	gasket	540 x 441 x 2	313293	
8	3	O-ring	78 x 10	305017 (NBR)	305552 (FPM)
9	1	clogging indicator, visual	O	301721	
10	1	clogging indicator, electrical	E1, E2 or E5	see sheet-no. 1616	

¹⁾ In case of ordering these spare parts use the complete type index

4. 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. 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.

5. Technical data:

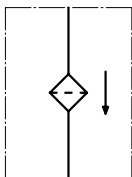
temperature range:	-10°C to +80°C (for a short time +100°C)
operating medium:	mineral oil, other media on request
max. operating pressure:	10 bar
opening pressure by-pass valve:	2,0 bar
connection system:	SAE-flange connection 3000 PSI
housing material:	C-steel. glass fiber reinforced polyamide (filter bowl)
sealing material:	Nitrile (NBR) or Viton (FPM), other materials on request
installation position:	vertical
volume tank:	47,0 l

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

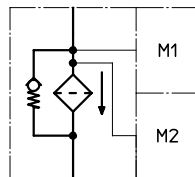
Classified under ATEX Directive 94/9/EC according to specific application (see questionnaire sheet-no. 34279-4).

6. Symbols:

without indicator



with by-pass valve



visual O



electrical contact maker E1



electrical contact breaker E5



electrical contact maker/breaker E2



7. Pressure drop flow curves:

Precise flow rates see 'INT-Expert-System Filter' respectively Δp-curves ; depending on filter fineness and viscosity.

8. 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