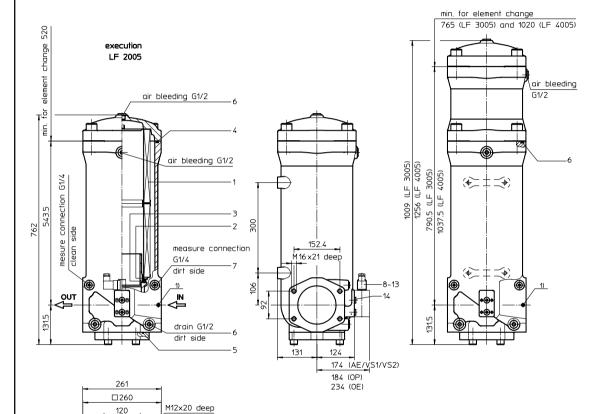
#### execution LF 3005/LF 4005



1) _	onr	ecti	on for	the	pot	entia	ıl equa	lisat	ion,
0	nly	for	appilio	ation	ı in	the	explos	ive	агес

filter	weight kg
LF 2005	81
LF 3005	112
LF 4005	129

PRESSURE FILTER

Series LF 2005-4005 **DN 125** 

**PN 32** 

Sheet No. 1128

# 1. Type index:

1.1. Complete filter: (ordering example)

LF. 2005, 10VG, 10, E. P. -, FS, C. -, AE 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

1 series:

LF = in-line filter

2 | nominal size: 2005, 3005, 4005

3 | filter-material and filter- fineness:

 $80 \text{ G} = 80 \mu\text{m}$ ,  $40 \text{ G} = 40 \mu\text{m}$ ,  $25 \text{ G} = 25 \mu\text{m}$  stainless steel wire mesh

 $25 \text{ VG} = 20 \ \mu\text{m}_{(c)}$ ,  $16 \text{ VG} = 15 \ \mu\text{m}_{(c)}$ ,  $10 \text{ VG} = 10 \ \mu\text{m}_{(c)}$ ,  $6 \text{ VG} = 7 \ \mu\text{m}_{(c)}$ ,  $3 \text{ VG} = 5 \ \mu\text{m}_{(c)}$  Interpor fleece (glass fibre)

4 resistance of pressure difference for filter element:

 $10 = \Delta p 10 bar$ 

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 or clogging sensor:

= without

= visual-electrical, see sheet-no. 1609

= visual, see sheet-no, 1628

OE = visual-electrical, see sheet-no. 1628

VS1 = electronical, see sheet-no. 1607

VS2 = electronical, see sheet-no. 1608

1.2. Filter element: (ordering example)

01E. 2001. 10VG. 10. E. P. -

1 | 2 | 3 | 4 | 5 | 6 | 7

1 series:

01E. = filter element according to INTERNORMEN factory specification

2 nominal size: 2001, 3001, 4001

3 - 7 see type index complete filter

### 2. Accessories:

- measure-and bleeder -connection, see sheet-no. 1650
- evacuation- and bleeder-connection, see sheet-no. 1651
- counter flange, see sheet-no. 1652

Changes of measures and design are subject to alteration!



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## 3. Spare parts:

Opaic	parts.					
item	designation	qty.	dimension and article-no. LF 2005	artic	ion and le-no. 3005	dimension and article-no. LF 4005
1	filter element	1	01E. 2001	01E.	3001	01E. 4001
2	O-ring	1		135 x 10	306016 (NI 307045 (FF	
3	O-ring	1		125 x 10	304388 (NI 306006 (FF	
4	O-ring (LF 2005)	1		240 x 5	307592 (NI	BR)
	O-ring (LF 3005/4005)	2			328793 (FF	PM)
5	O-ring	1	13	36,12 x 3,53	320162 (NI 320163 (FF	
6	screw plug (LF 2005)	4		G ½	304678	
	screw plug (LF 3005/4005)	5				
7	screw plug	2		G 1/4	305003	
8	clogging indicator visual-electrical	1		OE	see seet-no	o. 1628
9	clogging indicator visual	1		OP	see seet-no	o. 1628
10	clogging indicator visual-electrical	1		AE	see seet-no	o. 1609
11	clogging sensor electronical	1		VS1	see seet-no	o. 1607
12	clogging sensor electronical	1		VS2	see seet-no	o. 1608
13	O-ring	2		14 x 2	304342 (NI 304722 (FF	
14	screw plug	2		G 1/4	305003	•

item 14 execution only without clogging indicator or clogging sensor

## 4. Description:

In-line filters of the type LF 2005-4005 are suitable for a working pressure up to 32 bar. Pressure peaks are absorbed with a sufficient margin of safety.

The filter is mounted in such a way that inlet and outlet are on the same level. It can be used as suction filter, pressure filter and return-line filter. 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 (see special leaflet 21070-4 and 34448-4) the mesh element respectively to change the glass fibre element remove the cover and take out the element.

Filter 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>(c)</sub> microns are available; finer filter elements on request.

INTERNORMEN-Filter elements are known as elements with a high intrinsic stability and an excellent filtration capability, a high dirtretaining capacity and a long service life.

INTERNORMEN-Filter are suitable for all petroleum based fluids. HW-emulsions, most synthetic hydraulic fluids and lubrication oils

Approvals according to TÜV, and the major "Shipyard Classification Societies" D.N.V.; B.V.; G.L.; L.R.S.; R.I.N.A.; A.B.S. and others are possible.

## 5. Technical data:

temperature range: - 10°C to + 80°C (for a short time + 100°C)

mineral oil, other media on request operating medium:

max. operating pressure: 32 bar

test pressure: 64 bar

connection system: SAE-flange connection 3000 PSI

housing material: EN-GJS-400-18-LT

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

installation position: vertical measuring connections: G 1/4 evacuation-or bleeder connections: G 1/2 volume tank LF 2005:

23 I LF 3005: 32 I LF 4005:

Classification according to the Pressure Equipment Directive 97/23/EC for mineral oil (fluid group 2) -article 3, paragraph 3. Classified under ATEX Directive 94/9/EC according to specific application (see questionnaire sheet-no. 34279-4).

E 1128

# 6. Symbols:

without indicator



with visual

indicator

AOR/AOC/OP

with electrical indicator AE 30 and AE 40



with visual-electrical

indicator

OE

VS1



 $\otimes$ 

with visual-electrical

indicator

AE 50 and AE 62

with electronical clogging sensor



with visual-electrical indicator AE 70 and AE 80



with electronical clogging sensor VS2



7. Pressure drop flow curves: Precise flow rates see 'INT-Expert-System Filter', respectively Ap-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