

Return Line Filters ■ Type RIF300



Product Description

STAUFF RIF300 Return Line Filters are designed for in-line hydraulic applications with a maximum working pressure of 34,5 bar / 500 PSI. Used together with STAUFF Filter Elements, a high efficiency of contaminant removal is assured.

Technical Data

Construction

- In-line assembly

Materials

- Filter head: Aluminium
- Filter bowl: Steel
- Filter cover: Cast Iron
- Sealings: NBR (Buna-N®)
FPM (Viton®)
Other sealing materials on request

Port Connection

- SAE Code 61 flange

Flow Rating

- Up to 1135 l/min / 300 US GPM

Operating Pressure

- Max. 34,5 bar / 500 PSI

Burst Pressure

- Min. 103 bar / 1500 PSI

Temperature Range

- -10°C ... +100°C / +14°F ... +212°F

Filter Elements

- Specifications see page C95

Media Compatibility

- Mineral oils, other fluids on request

Options and Accessories

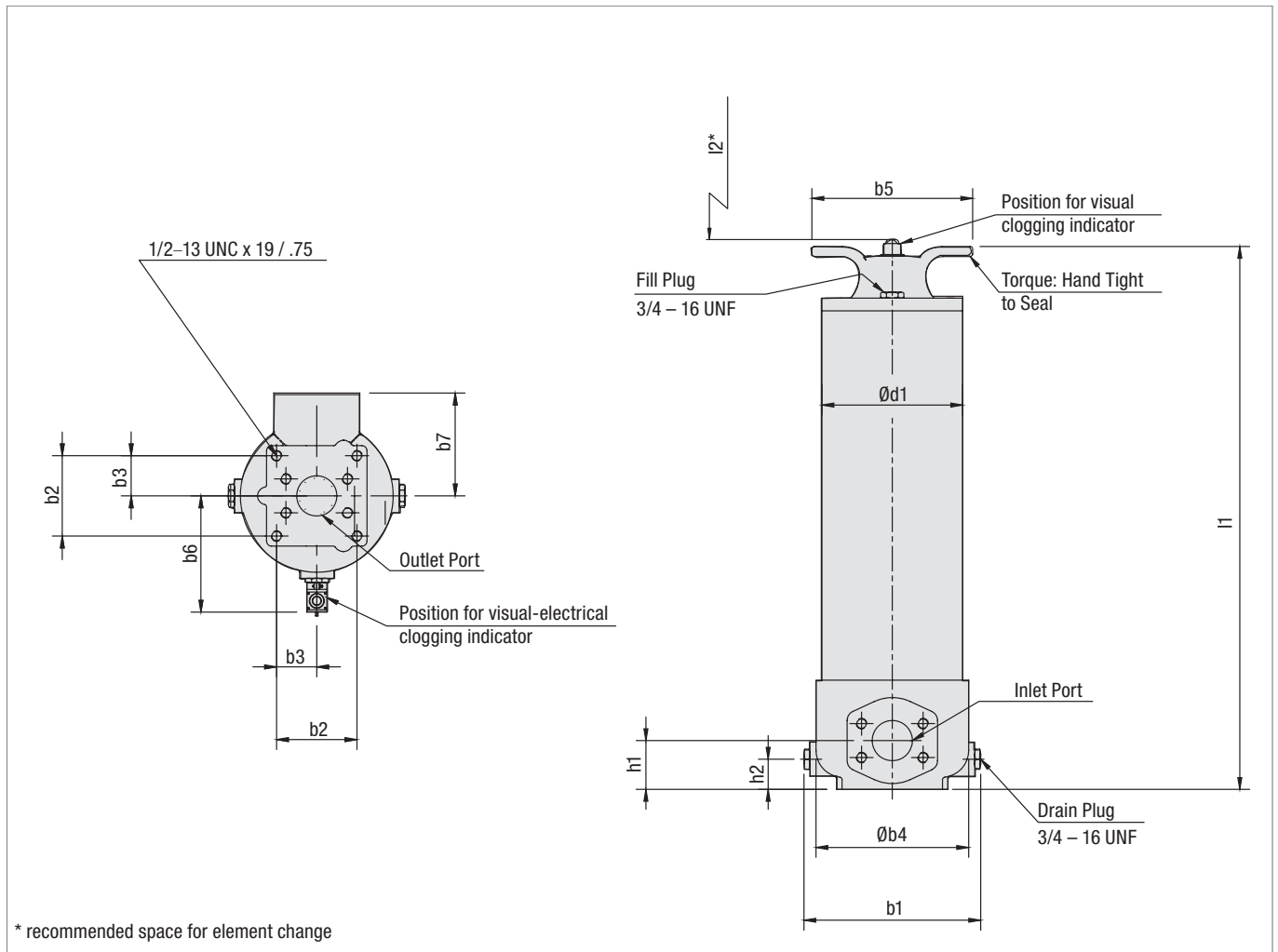
Valve

- Bypass valve (integrated in the filter housing)
Opening pressure 3,4 ^{+0,35} bar / 50 ⁺⁵ PSI
Allows unfiltered oil to bypass the contaminated element once the opening pressure has been reached
Other settings available on request

Clogging Indicators

- Visual clogging indicator 2,4 bar / 35 PSI
- Visual-electrical clogging indicator 2,4 bar / 35 PSI
Other clogging indicators available on request

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Dimensions in mm / in

Dimensions (mm/in)	Filter Size RIF 300
b1	220,4 8.68
b2	101,6 4
b3	50,8 2
b4	193 7.60
b5	186,44 7.34
b6	153,1 6.03
b7	127 5
d1	184,1 7.25
h1	61,7 2.43
h2	38,1 1.50
l1	1204 47.40
l2	991 39
Weight (kg/lbs)	39,2 86.2

Return Line Filter Housings / Complete Filters ■ Type RIF300

RIF 300 ... B / F / B / V / X

1 2 3 4 5 6 7 8 9

1 Type

Return Line Filter **RIF**

2 Group

With Standard Element **300**
With Deep Pleat Element **310**

3 Filter Material

Material	Max. Δp^* collapse	Micron ratings available	Code
Without filter element	-	-	...
Inorg. glass fibre (only RIF300)	30 bar / 435 PSI	3, 5, 10, 20	E
Inorg. glass fibre (only RIF310)	6,9 bar / 100 PSI	1, 3, 5, 10	E
Water removal (only RIF300)	6,9 bar / 100 PSI	10	EW

Note: *Collapse/burst resistance as per ISO 2941.
Other materials on request.

4 Micron Rating

1 µm	01
3 µm	03
5 µm	05
10 µm	10
20 µm	20

Note: Other micron ratings on request.

5 Sealing Material

NBR (Buna®) **B**
FPM (Viton®) **V**
Note: Other sealing materials on request.

6 Connection Style

Connection Style	Thread	Code
SAE Code 61 Flange	2-1/2	F

7 Valve

Without Valve **0**
With Bypass Valve 3,4 bar / 50 PSI **B**

8 Clogging Indicator

No Clogging Indicator **none**
Visual Clogging Indicator **V**
Visual-electrical Clogging Indicator **P**

9 Design Code

Only for Information **X**

Filter Elements ■ Type SP

SP - 300 E 10 B / X

1 2 3 4 5 6

1 Type

Filter Element Series **SP**

2 Group

According to filter housing

3 Filter Material

Material	Max. Δp^* collapse	Micron ratings available	Code
Without filter element	-	-	...
Inorg. glass fibre (only RIF300)	30 bar / 435 PSI	3, 5, 10, 20	E
Inorg. glass fibre (only RIF310)	6,9 bar / 100 PSI	1, 3, 5, 10	E
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Note: *Collapse/burst resistance as per ISO 2941.
Other materials on request.

4 Micron Rating

1 µm	01
3 µm	03
5 µm	05
10 µm	10
20 µm	20

Note: Other micron ratings on request.

5 Sealing Material

NBR (Buna®) **B**
FPM (Viton®) **V**
Note: Other sealing materials on request.

6 Design Code

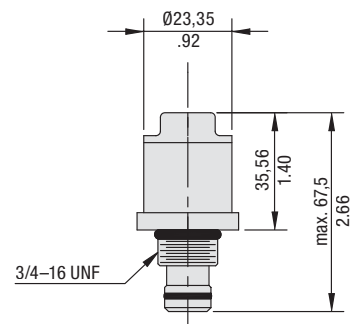
Only for information **X**

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Visual Clogging Indicator

Part number HIR-V is a clogging indicator actuated by the differential pressure across the filter element. The actuating pressure of 2,4 bar / 35 PSI allows the dirty element to be changed before the bypass setting of 3,4 bar / 50 PSI is reached.

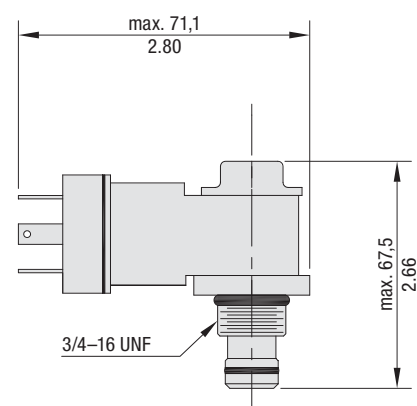
Visual Clogging Indicator



Visual/Electrical Clogging Indicator

Part number HIR-VE is used when an electrical signal is needed to indicate when the element needs changing. It is actuated by the differential pressure across the filter element. The actuating pressure of 2,4 bar / 35 PSI allows the dirty element to be changed before the bypass setting of 3,4 bar / 50 PSI is reached.

Visual/Electrical Clogging Indicator



Dimensions in mm / in

HIR-VE Rated Capacity

4 A inductive
7 A 28 V DC resistive
7 A 250 V AC

Order Code

HIR - V

1

2

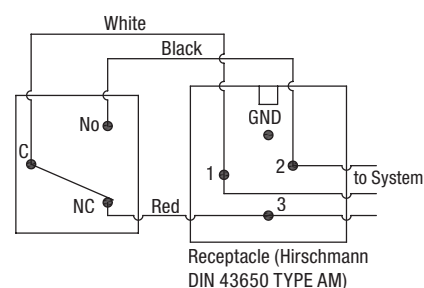
1 Type

Clogging Indicator for RIF300 **HIR**

2 Visual / Electrical

Visual **V**
Visual-electrical **VE**

Wiring Diagram



Note: The female plug (connector) is to be furnished by the customer.

Installation:

Lubricate both O-rings supplied with the indicator. Install in the cavity and torque to 41 ... 47 Nm / 30 ... 47 ft-lbs.

Return Line Filters ▀ Type RIF300 Flow Characteristics

The following characteristics are valid for mineral oils with a density of 0,85 kg/dm³ and the kinematic viscosity of 30 mm²/s (30cSt). The characteristics have been determined in accordance to ISO 3968. Multipass filter ratings have been obtained in accordance to ISO 16889. The housing pressure drop is directly proportional to the oil density. Consult STAUFF for details.

