

Technical Data

STAUFF RTF30 series return filters are designed as tank top fillers with a maximum operating pressure of 10 bar (145 PSI) and flows up to 152 l/min (40 US GPM). The filter bowl is designed to return the oil beneath the surface thus preventing entrainment of air. The RTF30 series compact design and integral breather makes them ideal for mobile hydraulic applications.

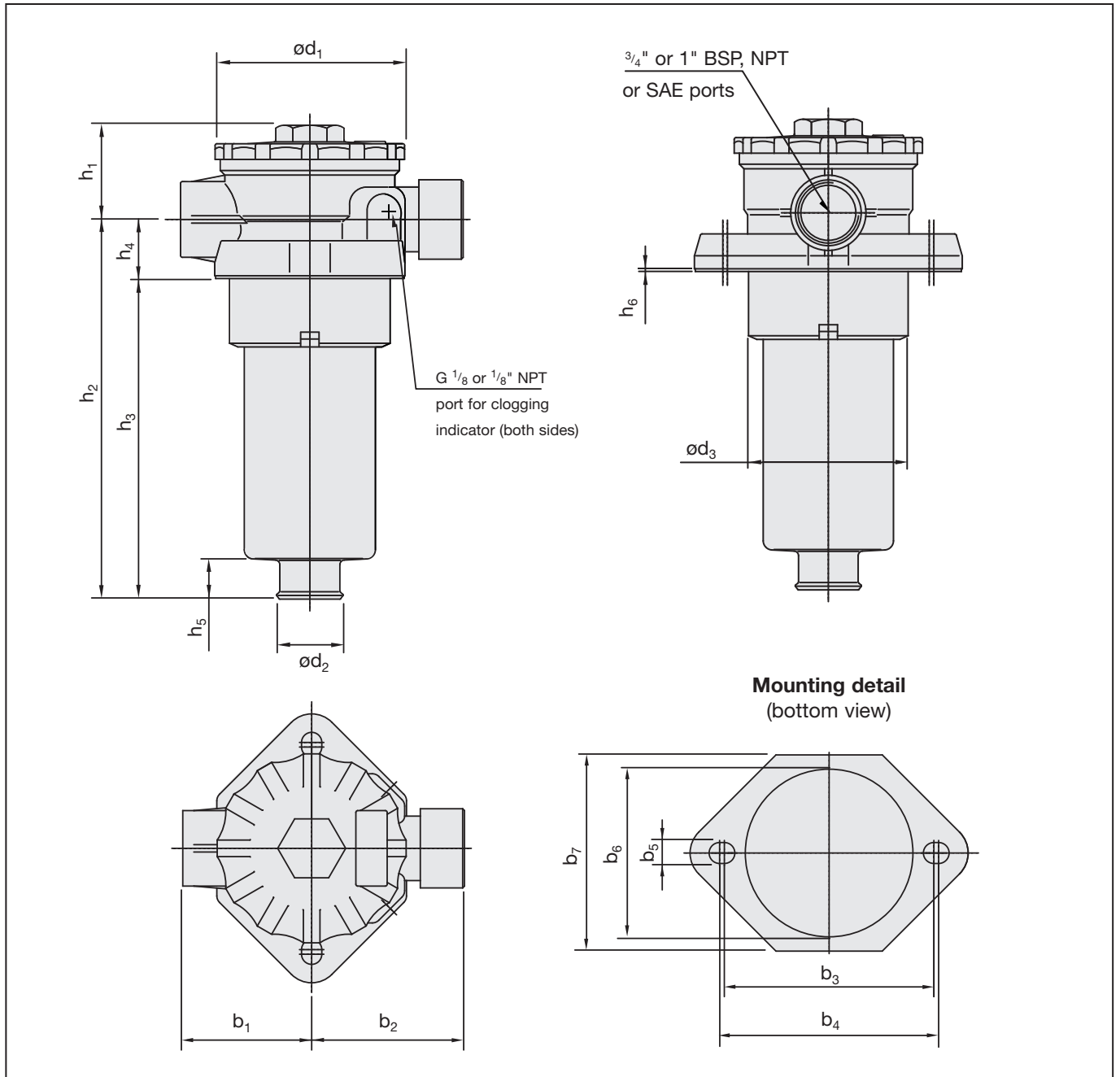


Technical Specification

Construction	Tank top flange mounting
Filter head	Die cast aluminium
Element bowl and screw cap	Polyamide
Seals	"O"-Rings NBR (Buna-N®) FPM (Viton®)
Port connections	BSP, NPT, SAE "O"-Ring thread
Flow rating	up to 152 l/min (40 US GPM) for 32 cSt (150 SUS) fluids
Operating pressure	max 10 bar (145 PSI)
Test pressure	min 24 bar (350 PSI)
Temperature range	-25°C to +100°C (-13°F to 212°F)

Integrated Breather	Filter paper 10 or 40 µm
By-pass valve (integrated in the filter element)	Allows unfiltered oil to by-pass the contaminated element once the opening pressure has been reached Opening pressure 1.7 bar (25 PSI)
Clogging indicators	Gauge indicator 0-6.9 bar (0-100 PSI) with colored segments; Electrical, 0.35 - 2.5 bar (5-35 PSI) adjustable
Filter elements	Flow characteristics see page F87
Media	Mineral oils, other fluids on request

Dimensions



Dimensions in mm (inch)

Filter Size	Dimensions															
	h_1	h_2	h_3	h_4	h_5	h_6	d_1	d_2	d_3	b_1	b_2	b_3	b_4	b_5	b_6	b_7
RTF30		140 (5.51)	110 (4.33)													
RTF31	60 (2.36)	205 (8.07)	175 (6.89)	30 (1.18)	22 (0.87)	1,5 (0.06)	104 (4.09)	36 (1.42)	min 87 max 91 (min 3.43) (max 3.58)	70 (2.76)	83 (3.27)	110 (4.33)	115 (4.53)	11 (0.43)	min 87 max 91 (min 3.43) (max 3.58)	103 (4.06)
RTF32		305 (12.01)	275 (10.83)													

Ordering Code Filter Housings

RTF31 N1 ... B V B10 D /X

Filter Type	
RTF30	110mm (4.33 in) bowl length
RTF31	175mm (6.89 in) bowl length
RTF32	275mm (10.83 in) bowl length

Connection Style		
Code	Connection Style	
B1	BSP	3/4"
B2	BSP	1"
N1	NPT	3/4"
N2	NPT	1"
S1	SAE O-Ring Thread	1-1/16 -12 UN
S2	SAE O-Ring Thread	1-5/16 -12 UN

For Complete Filters:
 identification filter material
 + micron rating code
 (see ordering code filter elements below)

Design Code	
only for information	

Dipstick	
-	Without dipstick
D	Dipstick

Breather	
B10	10 µm paper
B40	40 µm paper

Clogging Indicator	
N	without clogging indic.
V	visual
E	electrical

See page F88 for more details on the indicator options.

Seal Material	
B	NBR (Buna-N®)
V	FPM (Viton®)

FILTRATION

Ordering Code Filter Elements

RTE31 D 10 B /X

Series RTE

Group
according to filter housing

Filter Material		Micron ratings available
Code	Material	
D	Filter paper	10
G	Inorganic glass fiber	6,10,20

Design Code	
only for information	

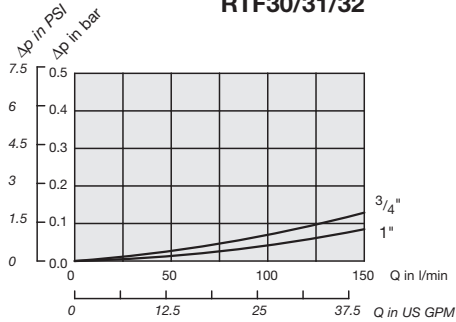
Seal Material	
B	NBR (Buna-N®)
V	FPM (Viton®)

Micron Rating	
06	6 µm
10	10 µm
20	20 µm

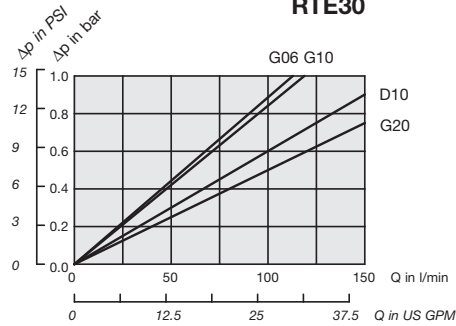
Flow Characteristics

The following characteristics are valid for mineral based fluids with a density of 0,85 kg/dm³ and the kinematic viscosity of 30 mm²/s. The characteristics have been determined in accordance to ISO 3968.

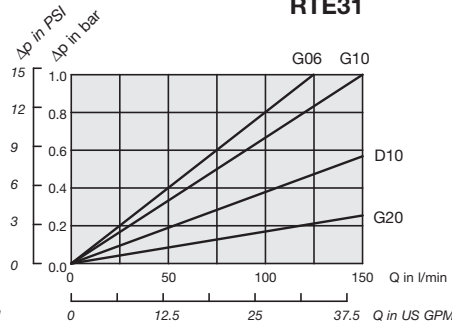
**Filter Housings
RTF30/31/32**



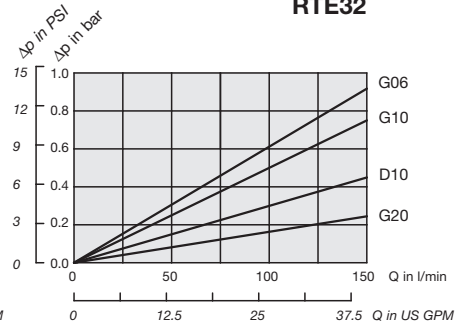
**Filter Elements
RTE30**



**Filter Elements
RTE31**



**Filter Elements
RTE32**



**Filter Breather
RTF30/31/32**

