

Technical Data

Stauff RTF 50 series return filters are designed for in-tank hydraulic applications with a maximum pressure of 6.9 bar (100 PSI). The filter bowl is designed to return the oil beneath the surface thus preventing entrainment of air. The RTF58 elements interchange with the popular "K" series and RTF59 elements interchange with the "RTE-409" series elements

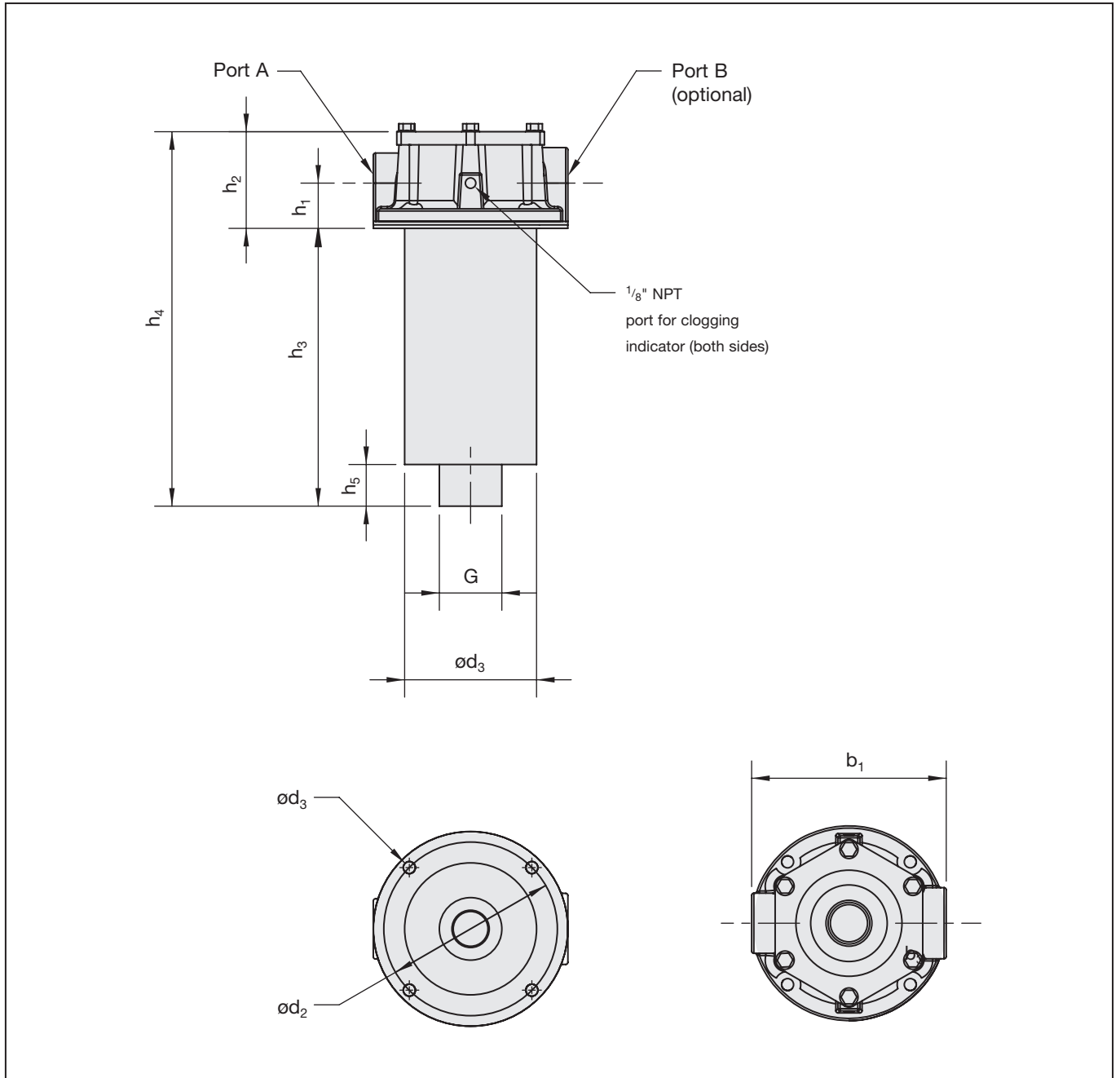


Technical Specification

Construction	Tank top flange mounting
Filter head	Die cast aluminium
Element bowl	Bowl length 1, Polyamide Bowl length 2, Steel
Seals	"O"-Rings NBR (Buna-N®)
Port connections	BSP, NPT, SAE "O"-Ring thread
Flow rating	up to 379 l/min (100 US GPM) for 32 cSt (150 SUS) fluids
Operating pressure	max 6,9 bar (100 PSI)
Temperature range	-25°C to +95°C (-13°F to 212°F)

By-pass valve	Allows unfiltered oil to by-pass the contaminated element once the opening pressure has been reached
By-pass valve	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 F79
Media	Mineral oils, other fluids on request

Dimensions



FILTRATION

Dimensions RTF50 Filters

Dimensions in mm (inch)

Bowl Length	Dimensions									
	h ₁	h ₂	h ₃	h ₄	h ₅	b ₁	d ₁	d ₂	d ₃	G
S1	49.3 (1.94)	95.5 (3.76)	246.5 (9.70)	342 (13.46)	29.5 (1.16)	177.8 (7.00)	124.8 (4.91)	158.75 (6.25)	11.2 (0.44)	1-1/2" NPT
S2	44.0 (1.73)	99.2 (3.55)	450.8 (17.75)	541 (21.30)	38.1 (1.5)					

Ordering Code Filter Housings

RTF58 N 25 ... B / S2 V / X

Filter Type RTF58 RTF59

Connection Style			
Code	Connection Style	Port A	Port B
N	NPT	1-1/4 NPT	None
NM	NPT	1-1/4 NPT	1-1/2 NPT
M	NPT	None	1-1/2 NPT
SM	Combination	1-5/8 -12 UN	1-1/2 NPT
S	SAE	1-5/8 -12 UN	None
T	SAE	None	1-7/8 -12 UN
ST	SAE	1-5/8 -12 UN	1-7/8 -12 UN
NT	Combination	1-1/4 NPT	1-7/8 -12 UN

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

Ordering Code Filter Elements

RTE58 D 10 B / X

Group
 according to filter housing

Filter Material			Micron ratings available
Code	Material	Max Δp Collapse	
D	Filter paper	10 bar (150 PSI)	03, 10, 20, 25
G	Inorganic glass fiber	10 bar (150 PSI)	03, 10, 25

Design Code
 only for information

Clogging Indicator

N	None
V	Visual
E	Electrical

See page F88 for more details on the indicator options.

Length

S1	for bowl length 1 (1 element)
S2	for bowl length 2 (2 elements)

Seal Material
B NBR (Buna-N®)
 other seal material on request

By-pass Valve

Code	
00	No by-pass
15	1 bar (15 PSI)
25	1.7 bar (24.6 PSI)

Design Code
 only for information

Seal Material
B NBR (Buna-N®)
 other seal material on request

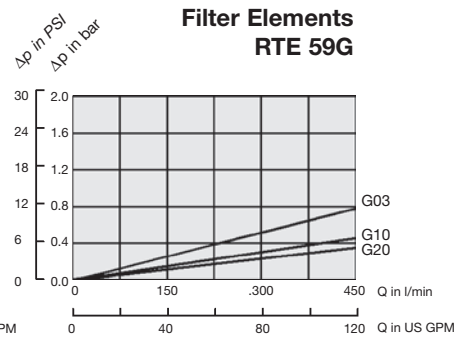
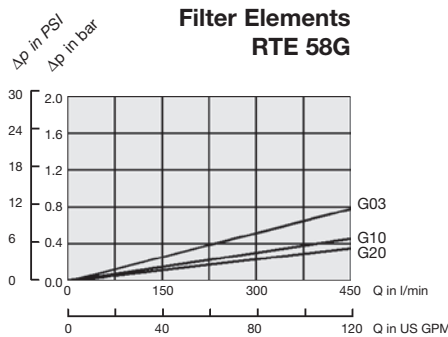
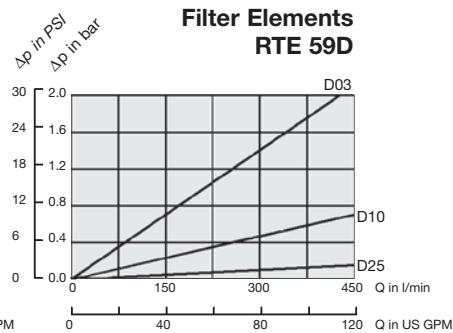
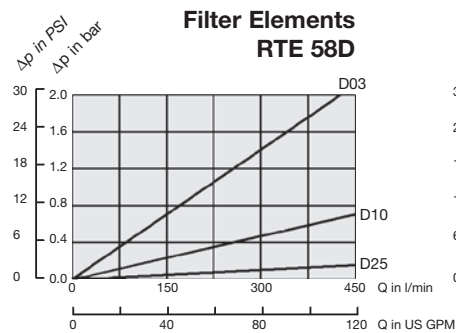
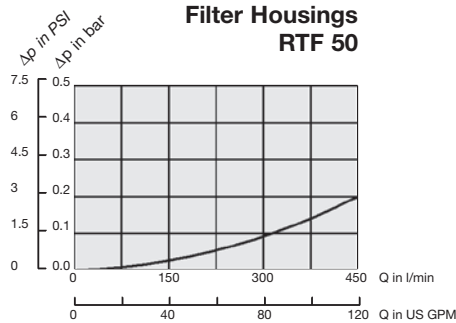
Micron Rating

Code	Rating
03	3 μm
10	10 μm
20	20 μm
25	25 μm

FILTRATION

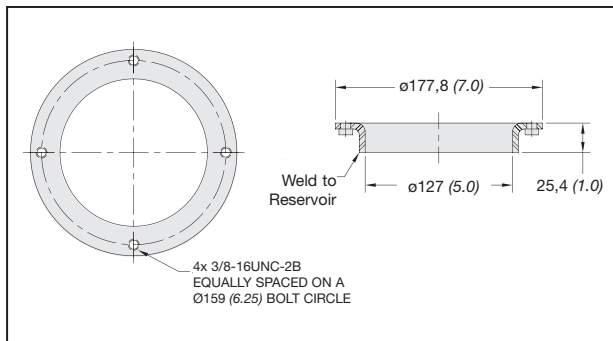
Flow Characteristics of Return Line Filters RTF50

The following characteristics are valid for mineral oils 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.



Note: Element pressure drop curves are for "S1" single elements. For "S2" double elements use 50% of the "S1" Value.

RTF Series Accessories



RTF50 Series Weld Ring WR-40

The WR-40 weld ring is welded directly to the hydraulic reservoir, eliminating the need for drilling and tapping mounting holes in the reservoir.

Material Carbon Steel