

Return Line Filter

TRT

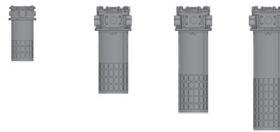


Features and Benefits

- Filter head is mounted on the tank like a standard return-line filter solution
- The protective tube can be supplied in various optional versions: 1.) as a closed tube with the outlet opening facing downwards or with a closed base and rows of operating holes at the height of the tank's oil level 2.) with an optional magnetic core connected to the filter element guaranteeing effective magnetic pre-filtration
- Patented de-aeration windows around the housing offer superior air bubble coalescence in a 360 degree discharge
- Quality Protected Element Design

 Part of Schroeder Industries' 2030 Initiative

TRT2 TRT3 TRT4 TRT5



Model No. of filter in photograph is TRT5RTZ10G.

up to 634 gpm
up to 2400 L/min
to 145 psi
to 10 bar

- IRF
- TF1
- KF3
- KL3
- LF1
- MLF1
- RLD
- GRTB
- MTA
- MTB
- ZT
- KFT
- RT
- RTI
- LRT
- ART
- BRT
- TRT**
- BFT
- QT
- KTK
- LTK
- MRT
- PAF1
- MAF1
- MF2

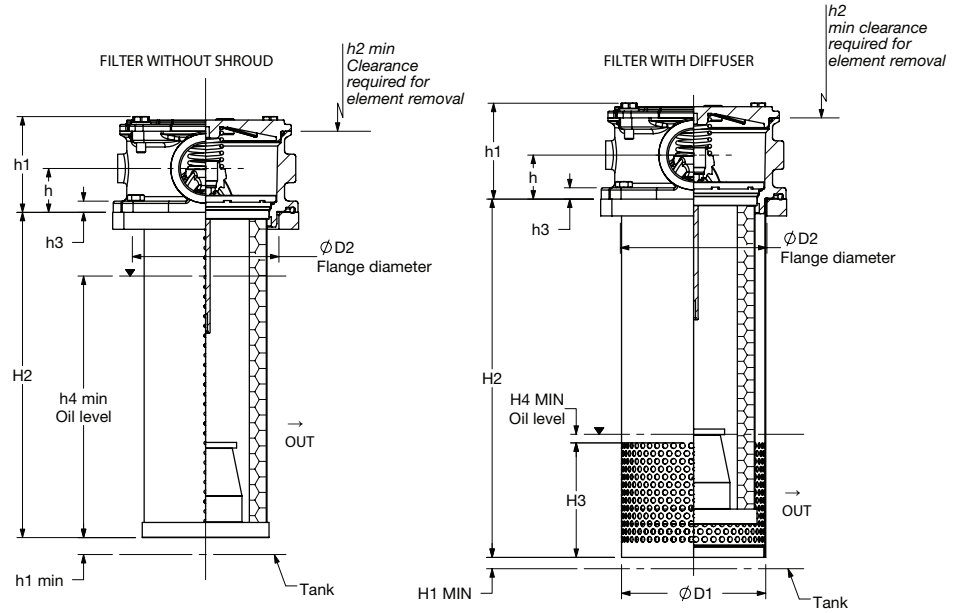
Flow Rating:	Up to 634 gpm (2400 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	145 psi (10 bar)
Temp. Range:	-22°F to 248°F (-30°C to 120°C)
Bypass Setting:	Cracking: 36 psi (2.5 bar)
Filter Head & Cover:	Aluminum
Filter Housing:	Steel
Inlet Section:	Nylon (PA66)
Seals:	Can Drop (= Perbunan Drop)
Installation:	As in-tank filter

Filter Housing Specifications

Type Fluid	Appropriate Schroeder Media
Hydraulic Oils	Schroeder Z-Media® (synthetic)
Lubrication Oils	Schroeder Z-Media® (synthetic)
Compressor Oils	Schroeder Z-Media® (synthetic)
Biodegradable Operating Fluids	Schroeder Z-Media® (synthetic)

Fluid Compatibility Accessories For Tank-Mounted Filters

Dimensions TRT2



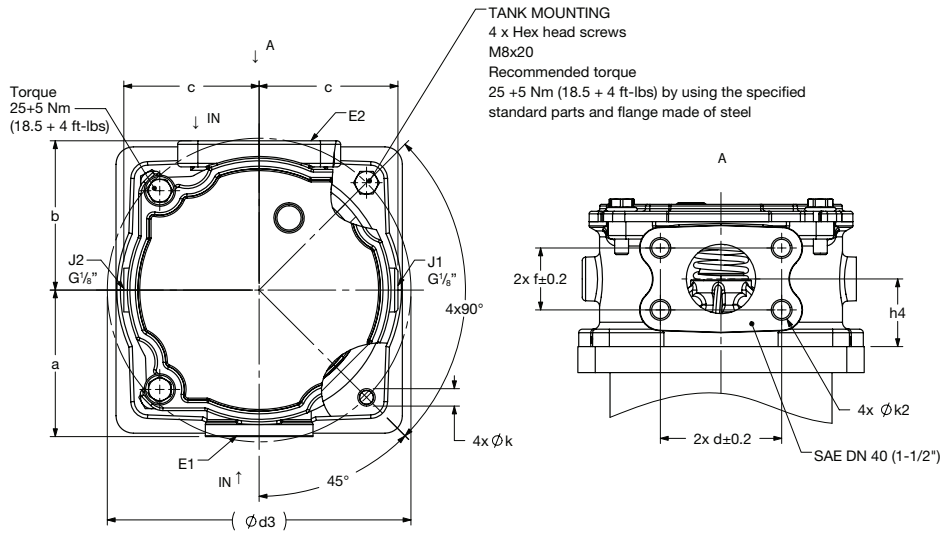
Element Performance Information

Element	Filtration Ratio Per ISO 4572/NFPA T3.10.8.8 Using automated particle counter (APC) calibrated per ISO 4402			Filtration Ratio per ISO 16889 Using APC calibrated per ISO 11171	
	$\beta_x \geq 75$	$\beta_x \geq 100$	$\beta_x \geq 200$	$\beta_x(c) \geq 200$	$\beta_x(c) \geq 1000$
2RTZ10	C/F	C/F	C/F	C/F	12.3
2RTZ25	C/F	C/F	C/F	C/F	16.2
3RTZ10	C/F	C/F	C/F	C/F	12.3
3RTZ25	C/F	C/F	C/F	C/F	18.6
4RTZ10	C/F	C/F	C/F	C/F	12.3
4RTZ25	C/F	C/F	C/F	C/F	18.6
5RTZ10	C/F	C/F	C/F	C/F	12.3
5RTZ25	C/F	C/F	C/F	C/F	18.6

Element Dirt Holding Capacity & Burst Rating

Element	DHC (g)	Element	DHC (g)
2RTZ10	81.0	4RTZ10	199.1
2RTZ25	89.9	4RTZ25	221.0
3RTZ10	150.5	5RTZ10	242.8
3RTZ25	167.1	5RTZ25	269.5

Element Burst Rating: 87 psi (6 bar) for standard elements
Flow Direction: Inside Out

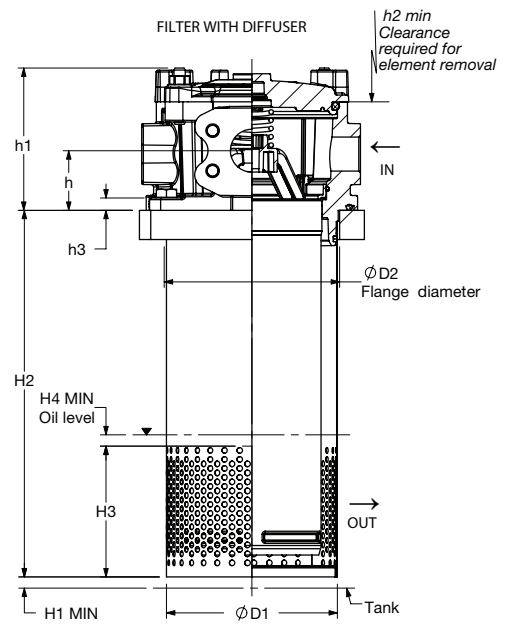
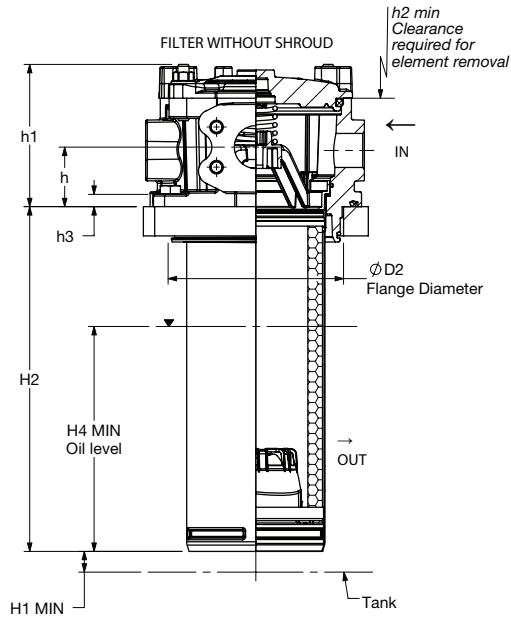


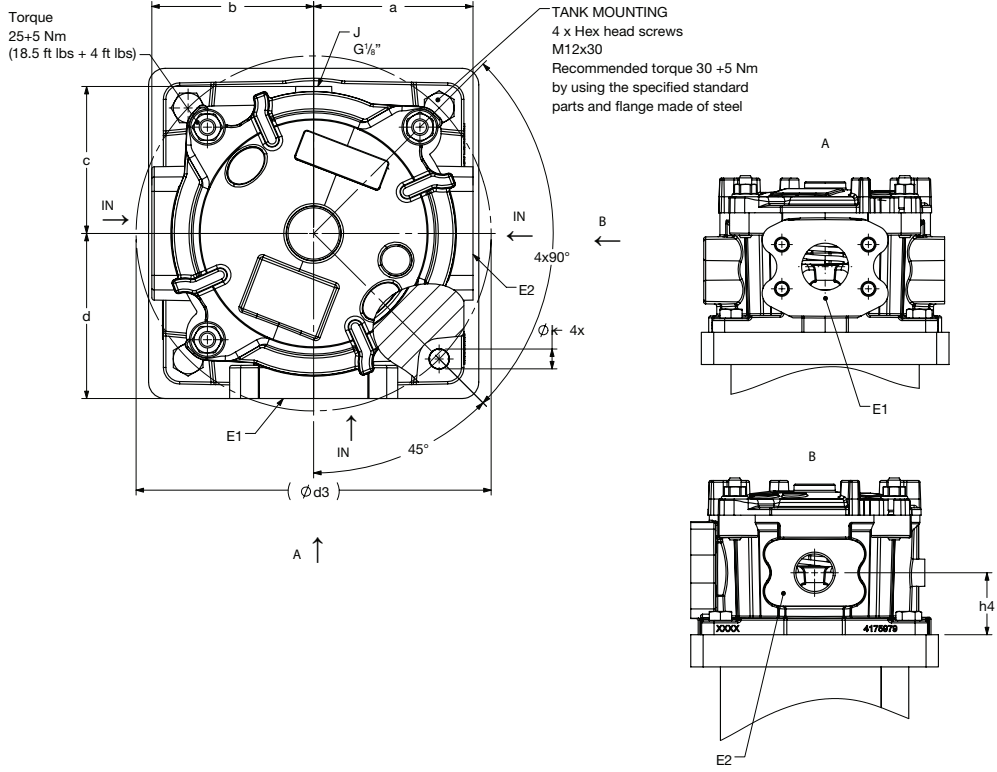
Type	Shroud Version	H1	H2	H3	H4	h	h1	h2	h3	h4	ØD1	ØD2	Ød3	a	b	c	d	f	Øk	Øk2	Wt (lbs)	
TRT2	Without shroud	[0.39]	[8.58] 218	-	[6.1] 155						-											5.7
	With shroud	10			[1.97] 50																	7.1
	With diffuser	[0.2]	[9.72] 247	[4.02] 102	[0.39] 10	[1.54] 39	[3.35] 85	[10.24] 260	[0.39] 10	-	[5.04] 128	[5.31] 135	[6.89] 175	[3.33] 84.5	[3.39] 86.0*	[3.15] 80*	[2.75] 69.9	[1.48] 37.5	[0.39] 10	M12		7.5
	Diffuser with opening	5		[4.96] 126											[3.33] 84.5*	[3.07] 78**						7.7

* Non-machined port

** Machined port

**Dimensions
TRT3, 4, 5**





Type	Design	H1	H2	H3	H4	h	h1	h2	h3	h4	ØD1	ØD2	Ød3	a	b	c	d	Øk	Wt (lbs)
TRT3	Without shroud	[0.39]	[12.03]	-	[7.87]						-								9.3
	With shroud	10	305.5	-	[2.36]			[16.54]											10.8
	With diffuser	[0.2]	[12.83]	[4.53]	[0.39]						[5.98]								11.0
	Diffuser with opening	5	326	[6.22]	[0.39]						152								11.2
TRT4	Without shroud	[0.39]	[15.96]	-	[10.63]						-								9.9
	With shroud	10	405.5	-	[2.36]	[2.09]	[4.98]	[20.47]	[0.43]	[1.97]									11.9
	With diffuser	[0.2]	[16.77]	[4.53]	[0.39]	53	126.5	520	11	50	[5.98]	[6.14]	[8.46]	[3.85]	[3.85]	[3.58]	[3.94]	[0.49]	12.1
	Diffuser with opening	5	426	[7.68]	[0.39]						152	156	215	98.0*	98.0*	91*	100	12.5	12.3
TRT5	Without shroud	[0.39]	[19.51]	-	[12.99]						-								11.0
	With shroud	10	495.5	-	[2.36]														13.2
	With diffuser	[0.2]	[20.31]	[4.53]	[0.39]			[24.02]			[5.98]								13.4
	Diffuser with opening	5	516	[10.63]	[0.39]						152								13.7

* Non-machined port

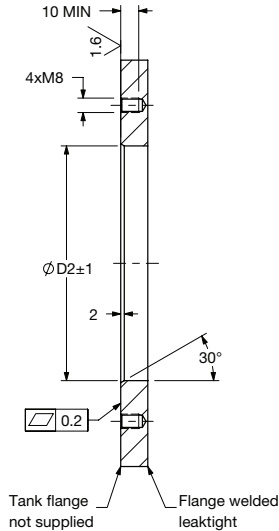
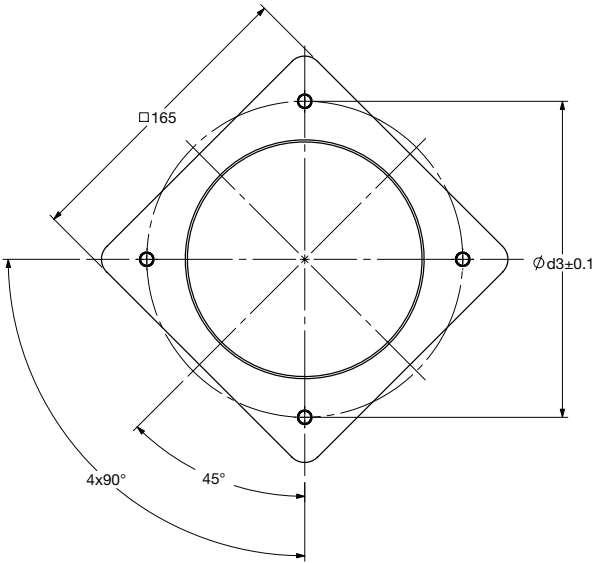
** Machined port

Dimensions TRT2

Specifications For The Tank Flange

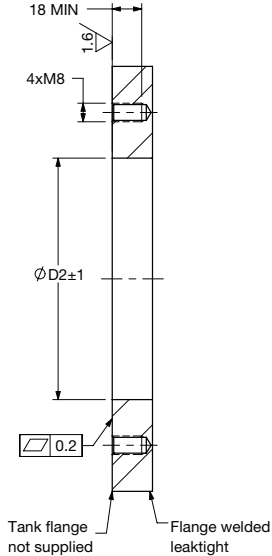
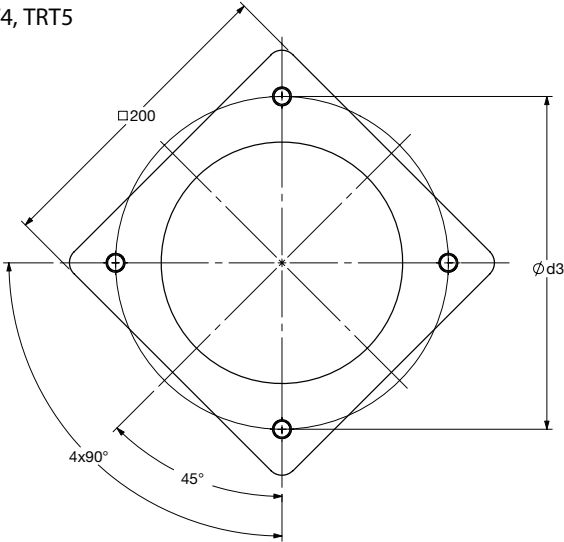
- 1. In the filter mounting interface, the tank flange should have a maximum flatness of 0.3 mm and maximum roughness of Ra 3.2 μm .
- 2. In addition, the mounting interface should be free from damage and scratches.
- 3. The mounting holes of the flange must be blind, or stud bolts. Loctite must be used to mount the filter. As an alternative, the tank flange can be continuously welded from the inside.
- 4. Both the tank sheet metal and the filter mounting flange must be sufficiently robust so that neither deform when the seal is compressed during tightening.

TRT2

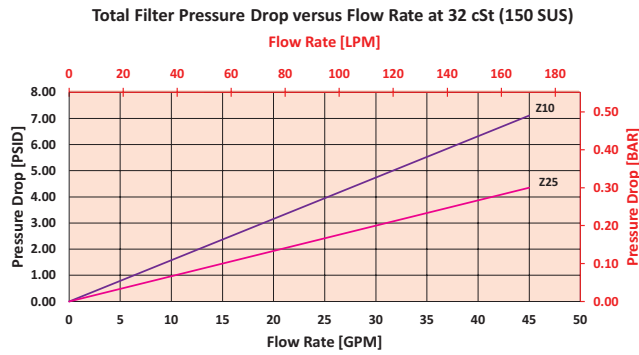


Dimensions TRT3, 4, 5

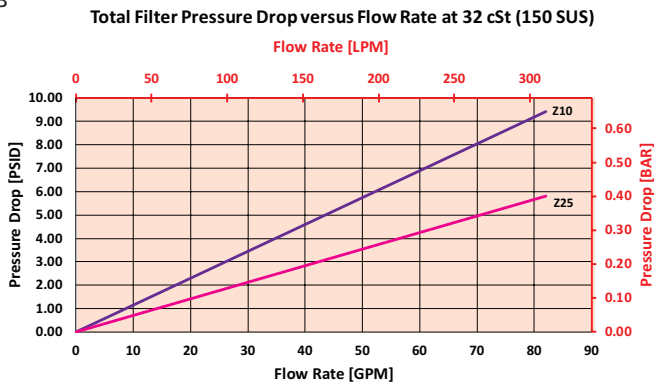
Dimensions TRT3, TRT4, TRT5



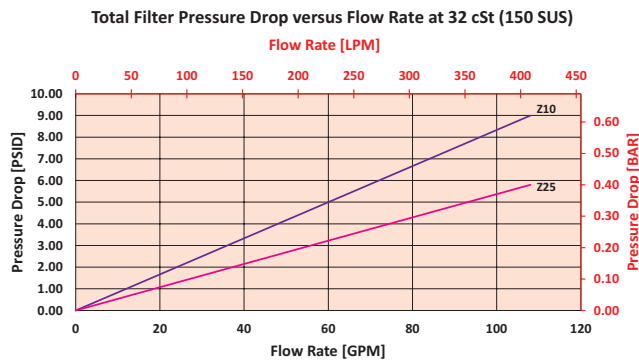
$\Delta P_{\text{element}}$
TRT2



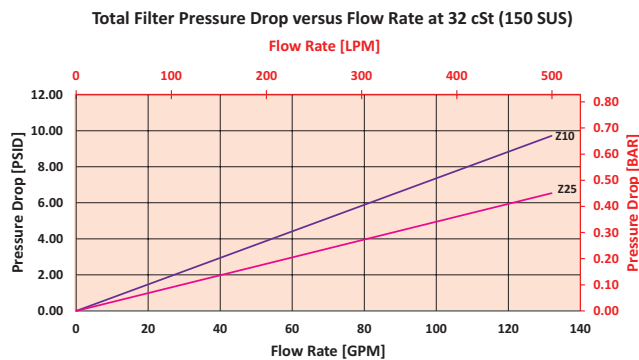
TRT3



TRT4



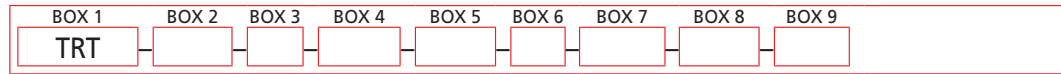
TRT5



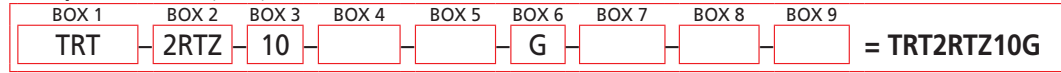
Pressure Drop Information
Based on
Flow Rate
and Viscosity

Filter Model Number Selection

How to Build a Valid Model Number for a Schroeder TRT:



Example: NOTE: One option per box



BOX 1	BOX 2	BOX 3	BOX 4
Filter Series	Size of Element	Micron Rating	Bypass
TRT	2RTZ 3RTZ 4RTZ 5RTZ	10 = 10 µm 25 = 25 µm	Omit = standard 36 psi bypass X = non bypass 12 = 12 psi bypass

BOX 5	BOX 6	BOX 7
Magnet	Porting	Housing Option
Omit = no magnetic core M = Magnet	G = 1 1/2" G S = 1 1/2" SAE	Omit = standard housing with diffuser X = no housing tube

BOX 8	BOX 9
Seal Material	Dirt Alarm® Options
Omit = Buna N V = Viton®	Omit = No Indicator, sealed up w/ screw plug
Clogging Indicators	VA = visual/electrical
	VE = electrical
	VO = visual