

Return Line Filter

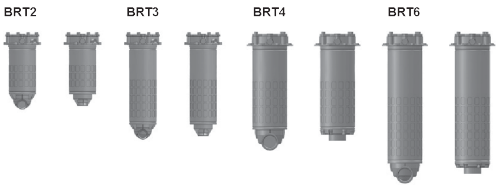
BRT



Features and Benefits

- Filter is mounted in the tank and flow comes to it from a pipe connection below it or from the side
- Optimal flow conditions created by flow from beneath guaranteeing optimal air separation, even tank mixing, and long element service intervals
- Patented de-aeration windows around the housing offer superior air bubble coalescence in a 360 degree discharge
- Quality Protected Inside-Out Flow Element Design

 Part of the Schroeder Industries 2030 Initiative



Model No. of filter in photograph is BRT6RBZ102.

to 160 gpm
to 600 L/min
to 145 psi
to 10 bar

Flow Rating:	Up to 160 gpm (600 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:	BRT 2 - 6: Aluminum
Inlet Section:	Nylon (PA66)
Seals	Buna N
Installation:	As in-tank filter

Filter Housing Specifications

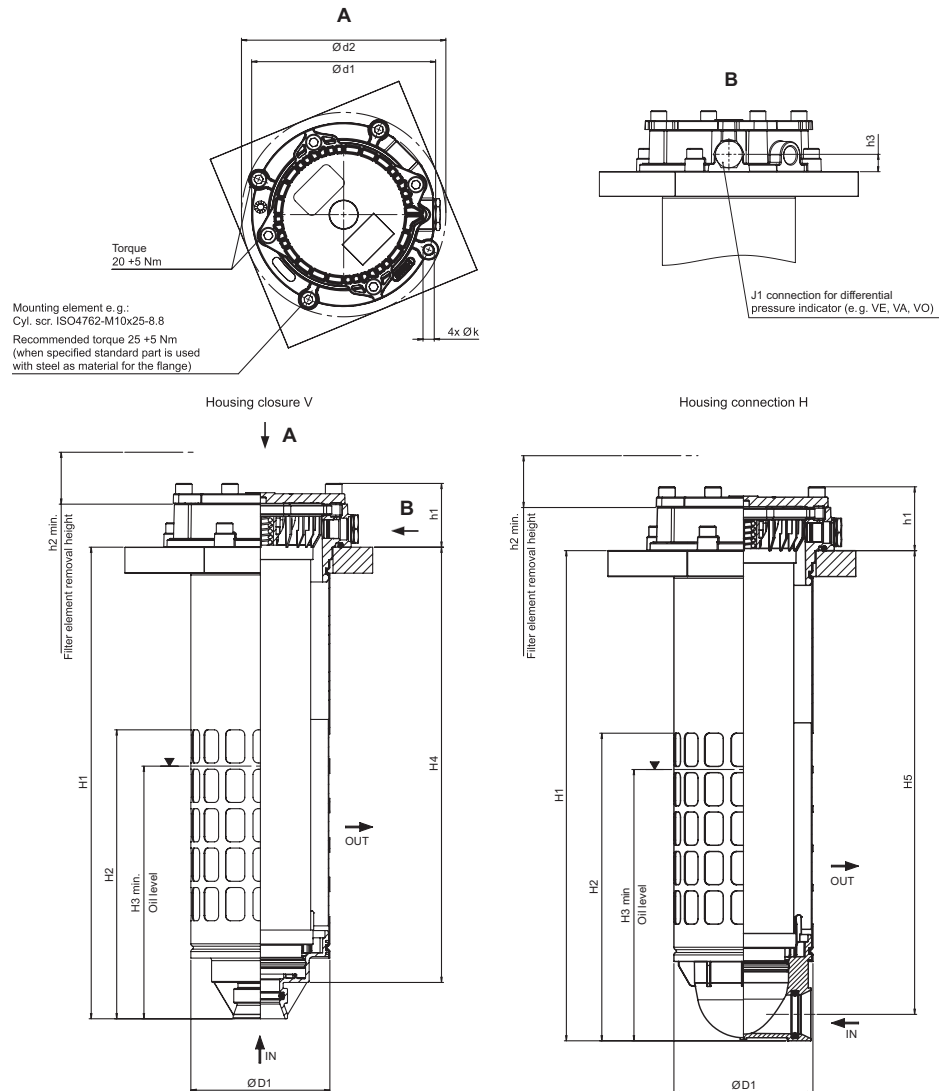
Type Fluid	Appropriate Schroeder Media
Hydraulic Oils	Schroeder Z-Media® (synthetic)
Lubrication Oils	Schroeder Z-Media® (synthetic)
Compressor Oils	Schroeder Z-Media® (synthetic)
Biodegradable Operating Fluids	Schroeder Z-Media® (synthetic)

Fluid Compatibility

Accessories For Tank-Mounted Filters

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

Dimensions BRT2 - BRT3



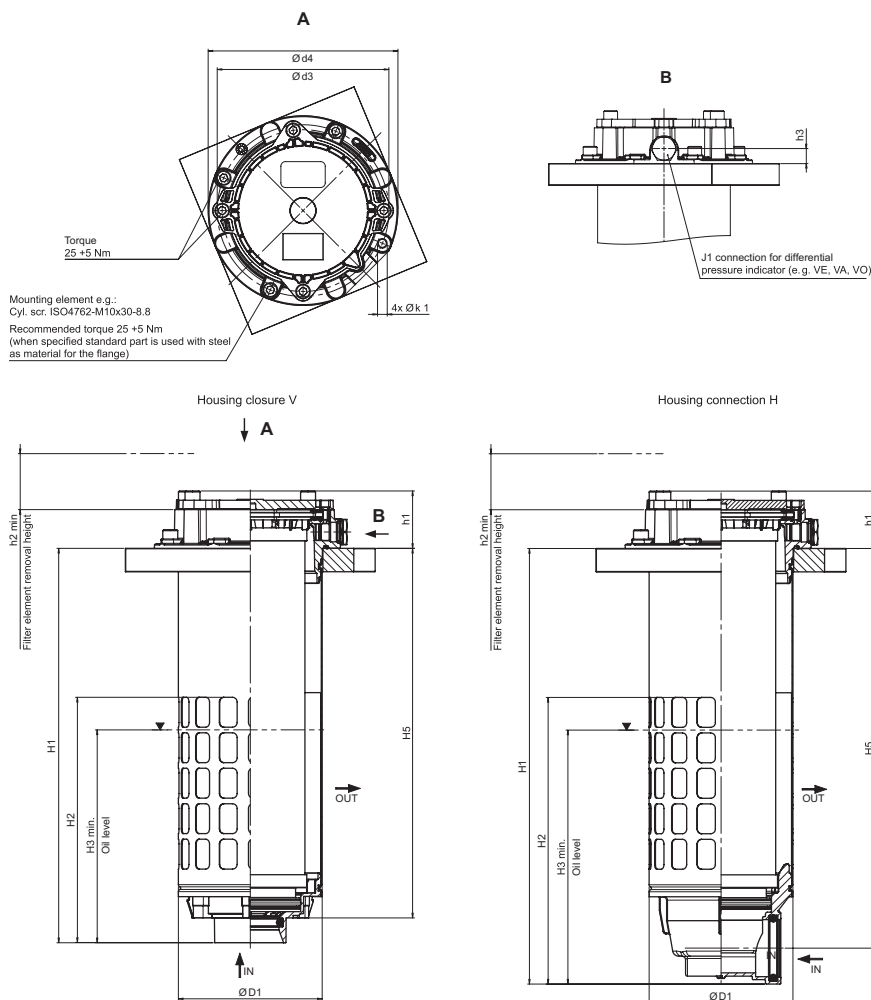
Type	Design	Connection pos.	H1	H2	H3	H4	H5	h1	h2	h3	ØD1	Ød1	Ød2	Øk	Weight [kg]
RFB 0170	Diffuser with opening	H	322.5	220.5	186	–	297	61.5	300	17.5	134	180	200	10.5	3.3
	Diffuser with opening	V	304.5	202.5	168	269.5	–		3.2						
RFB 0300	Diffuser with opening	H	472.5	296.5	262	–	447		450						3.9
	Diffuser with opening	V	454.5	278.5	244	419.5	–		4.0						

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	
	$\beta_x \geq 75$	$\beta_x \geq 100$	$\beta_x \geq 200$	$\beta_x(c) \geq 200$	$\beta_x(c) \geq 1000$
2RBZ10	C/F	C/F	C/F	C/F	11.2
2RBZ25	C/F	C/F	C/F	C/F	16.2
3RBZ10	C/F	C/F	C/F	C/F	11.2
3RBZ25	C/F	C/F	C/F	C/F	16.2
4RBZ10	C/F	C/F	C/F	C/F	11.2
4RBZ25	C/F	C/F	C/F	C/F	16.2
6RBZ10	C/F	C/F	C/F	C/F	11.2
6RBZ25	C/F	C/F	C/F	C/F	16.2

Metric dimensions mm ().

Dimensions BRT4 - BRT6



Type	Design	Connection pos.	H1	H2	H3	H4	H5	h1	h2	h3	$\varnothing D1$	$\varnothing d1$	$\varnothing d2$	$\varnothing k1$	Weight [kg]
RFB 0400	Diffuser with opening	H	466.5	307	234	—	428	61.5	430	17.5	154	185.7	205	10.5	4.5
	Diffuser with opening	V	422.4	262.6	182	393.8	—		—						4.3
RFB 0600	Diffuser with opening	H	613.7	383.2	310	—	575.2	580	—	—	—	—	—	—	5.5
	Diffuser with opening	V	561.6	331.1	258	541	—								5.3

Element	DHC (g)	Element	DHC (g)
2RBZ10	70.4	4RBZ10	152.5
2RBZ25	77.8	4RBZ25	173.4
3RBZ10	114.3	6RBZ10	190.4
3RBZ25	128.3	6RBZ25	231.7

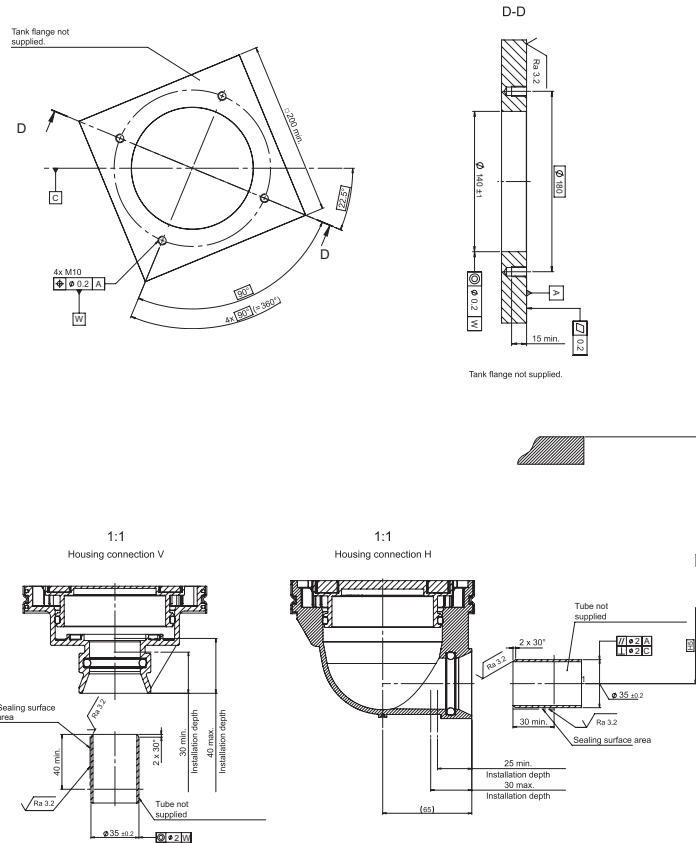
Element Burst Rating: 87 psi (6 bar) for standard elements

Flow Direction: Inside Out

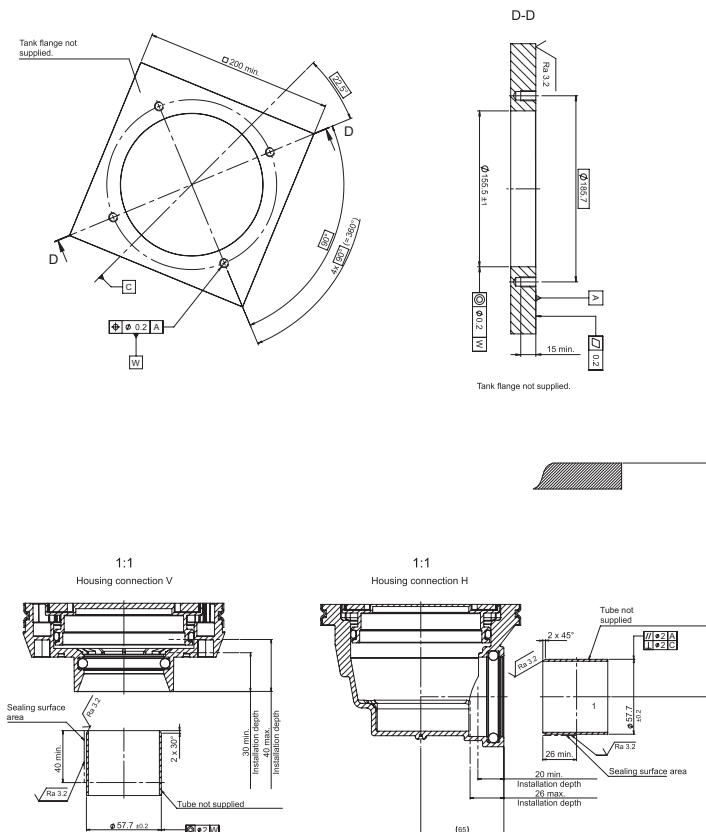
**Element
Dirt Holding
Capacity & Burst
Rating**

Metric dimensions mm ().

Dimensions BRT2 - BRT3



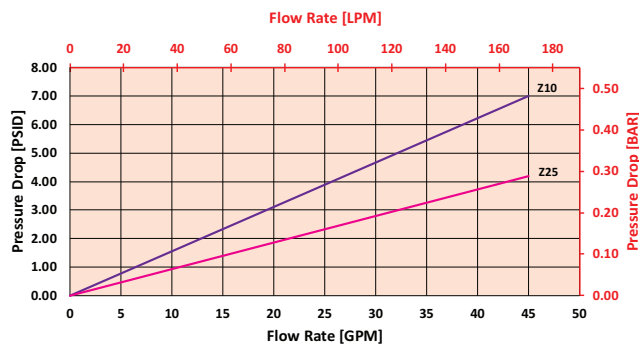
Dimensions BRT4 - BRT6



Metric dimensions mm ().

$\Delta P_{\text{element}}$
BRT2

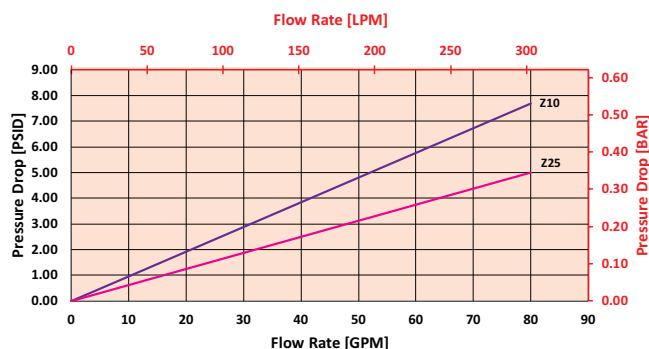
Total Filter Pressure Drop versus Flow Rate at 32 cSt (150 SUS)



Pressure
Drop
Information
Based on
Flow Rate
and Viscosity

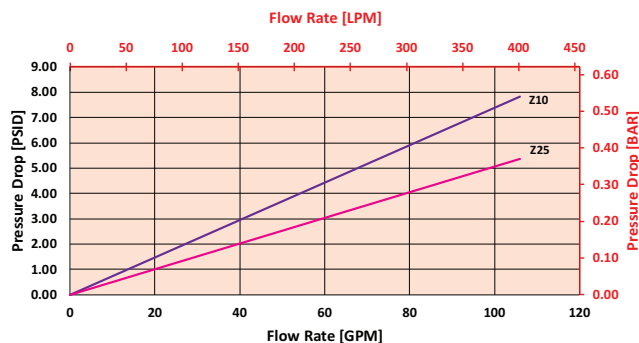
BRT3

Total Filter Pressure Drop versus Flow Rate at 32 cSt (150 SUS)



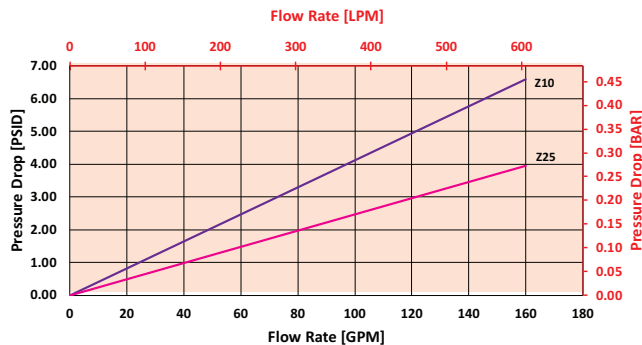
BRT4

Total Filter Pressure Drop versus Flow Rate at 32 cSt (150 SUS)



BRT6

Total Filter Pressure Drop versus Flow Rate at 32 cSt (150 SUS)



Filter Model Number Selection

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

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7
BRT						

Example: NOTE: One option per box

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7
BRT	3RB	Z	10		1	

= BRT3RBZ101Y2

BOX 1	BOX 2	BOX 3	BOX 4
Filter Series	Size of Element	Element Media Type	Micron Rating
BRT	2RB	Z = Excellement® Z-Media® (synthetic)	10 = 10 µm
	3RB		25 = 25 µm
	4RB		
	6RB		

BOX 5	BOX 6	BOX 7
Seal Material	Inlet Porting	Dirt Alarm® Options
Omit = Buna N	2 = side inlet	Omit = No Indicator, sealed up w/ screw plug VA = visual/electrical VE = electrical VO = visual
V = Viton®	1 = bottom inlet	