

SAME DAY SHIPMENT MODEL AVAILABLE!

Medium Pressure Filter

SRLT



Features and Benefits

- Smaller, compact version of the RLТ
- Quick and easy cartridge element changeouts
- Lightweight at 3 pounds
- Offered in pipe, SAE straight thread and ISO 228 porting
- Available with NPTF inlet and outlet female test ports
- Various Dirt Alarm® options
- Same day shipment model available

25 gpm
100 L/min
 1400 psi
100 bar

GH

RLT

KF5

SRLT

K9

2K9

3K9

QF5

3QF5

QFD2

QFD5

QF15

QLF15

SSQLF15

Model No. of filter in photograph is SRLT6RZ10S12D5.



INDUSTRIAL



AUTOMOTIVE
MANUFACTURING



MACHINE
TOOL



STEEL
MAKING

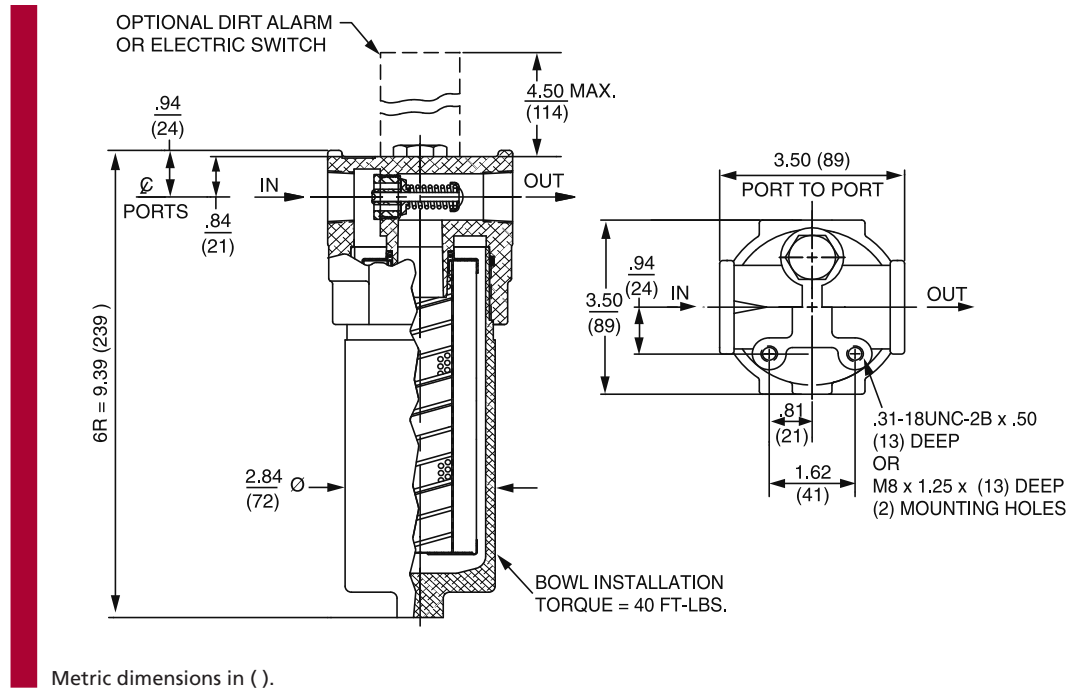


MOBILE
VEHICLES

Applications

Flow Rating:	Up to 25 gpm (100 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	1400 psi (100 bar)
Min. Yield Pressure:	4000 psi (276 bar), per NFPA T2.6.1
Rated Fatigue Pressure:	750 psi (52 bar) per NFPA T2.6.1-R1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 40 psi (2.8 bar) Full Flow: 55 psi (3.8 bar)
Porting Head:	Aluminum
Element Case:	Aluminum
Weight of SRLT-6R:	3.0 lbs. (1.4 kg)
Element Change Clearance:	2.75" (70 mm)

Filter Housing Specifications



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 wrt ISO 16889 Using APC calibrated per ISO 11171	
	$\beta_x \geq 75$	$\beta_x \geq 100$	$\beta_x \geq 200$	$\beta_x(c) \geq 200$	$\beta_x(c) \geq 1000$
6R3	6.8	7.5	10.0	N/A	N/A
6R10	15.5	16.2	18.0	N/A	N/A
6RZ1	<1.0	<1.0	<1.0	<4.0	4.2
6RZ3	<1.0	<1.0	<2.0	<4.0	4.8
6RZ5	2.5	3.0	4.0	4.8	6.3
6RZ10	7.4	8.2	10.0	8.0	10.0
6RZ25	18.0	20.0	22.5	19.0	24.0

Dirt Holding Capacity

Element	DHC (gm)
6R3	5
6R10	6
6RZ1	15
6RZ3	15
6RZ5	17
6RZ10	14
6RZ25	25

Element Collapse Rating: 150 psid (10 bar)

Flow Direction: Outside In

Element Nominal Dimensions: 2.0" (50 mm) O.D. x 6.0" (150 mm) long

Type Fluid Appropriate Schroeder Media

Petroleum Based Fluids	All E media (cellulose) and Z-Media® (synthetic)
High Water Content	All Z-Media® (synthetic)
Invert Emulsions	10 and 25 µ Z-Media® (synthetic)
Water Glycols	3, 5, 10 and 25 µ Z-Media® (synthetic)
Phosphate Esters	All Z-Media® (synthetic) with H (EPR) seal designation
Skydrol®	3, 5, 10 and 25 µ Z-Media® (synthetic) with H.5 seal designation (EPR seals and stainless steel wire mesh in element, and light oil coating on housing exterior)

Fluid Compatibility

GH

RLT

KF5

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SRLT

Pressure	Series	Element Part No.	Element selections are predicated on the use of 150 SUS (32 cSt) petroleum based fluid and a 40 psi (2.8 bar) bypass valve.				
To 1400 psi (100 bar)	E Media	6R3	6R3			See RLT	
		6R10	6R10			See RLT	
	Z-Media®	6RZ1	6RZ1		See RLT		
		6RZ3	6RZ3		See RLT		
		6RZ5	6RZ5		See RLT		
		6RZ10	6RZ10		See RLT		
		6RZ25	6RZ25				
Flow	gpm	0	5	10	15	20	25
	(L/min)	0	25	50	75	100	

Element Selection

Based on Flow Rate

K9

2K9

3K9

QF5

3QF5

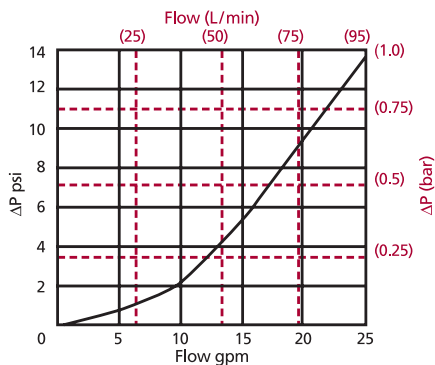
Shown above are the elements most commonly used in this housing.

Note: Contact factory regarding use of E media in High Water Content, Invert Emulsion and Water Glycol Applications. For more information, refer to Fluid compatibility: Fire Resistant Fluids, pages 19 and 20.

QFD2

ΔP_{housing}

SRLT ΔP_{housing} for fluids with sp gr = 0.86:



ΔP_{element}

ΔP_{element} = flow x element ΔP factor x viscosity factor

El. ΔP factors @ 150 SUS (32 cSt):

6R3	.45
6R10	.38
6RZ1	1.11
6RZ3	.55
6RZ5	.50
6RZ10	.46
6RZ25	.14

If working in units of bars & L/min, divide above factor by 54.9.

Viscosity factor: Divide viscosity by 150 SUS (32 cSt).

Pressure Drop Information

Based on Flow Rate and Viscosity

QFD5

QF15

QLF15

SSQLF15

sp gr = specific gravity

Sizing of elements should be based on element flow information provided in the Element Selection chart above.

Notes

ΔP_{filter} = ΔP_{housing} + ΔP_{element}

Exercise:

Determine ΔP at 15 gpm (57 L/min) for SRLT6R3P12D5 using 200 SUS (44 cSt) fluid.

Solution:

ΔP_{housing} = 5.0 psi [.37 bar]

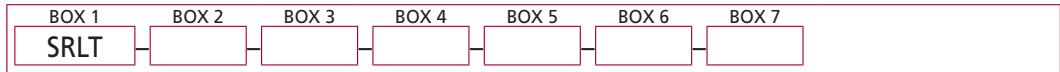
ΔP_{element} = 15 x .45 x (200÷150) = 9 psi
 or
 = [57 x (.45÷54.9) x (44÷32) = .64 bar]

ΔP_{total} = 5.0 + 9.0 = 14.0 psi
 or
 = [.37 + .64 = 1.01 bar]

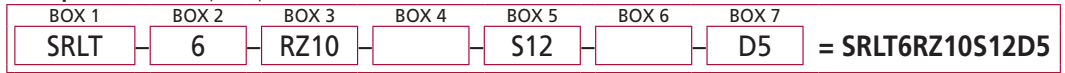
Filter Model Number Selection

Same Day Shipment Model
See inside back cover for details.

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



Example: NOTE: One option per box



BOX 1	BOX 2	BOX 3	BOX 4
Filter Series	Length of Element (in)	Element Size and Media	Seal Material
SRLT	6	R3 = R size 3 μ E media (cellulose) R10 = R size 10 μ E media (cellulose) RZ1 = R size 1 μ Excellement® Z-Media® (synthetic) RZ3 = R size 3 μ Excellement® Z-Media® (synthetic) RZ5 = R size 5 μ Excellement® Z-Media® (synthetic) RZ10 = R size 10 μ Excellement® Z-Media® (synthetic) RZ25 = R size 25 μ Excellement® Z-Media® (synthetic) RW = R size W media (water removal)	Omit = Buna N H = EPR V = Viton® H.5 = Skydrol® Compatibility

BOX 5	BOX 6	BOX 7
Porting	Additional Options	Dirt Alarm® Options
P12 = ¾" NPTF	Omit = None	Omit = None
S12 = SAE-12	L = Two ½" NPTF inlet and outlet female test ports	Visual = D5 = Visual pop-up
B12 = ISO 228 G-¾"		Visual with Thermal Lockout = D8 = Visual w/ thermal lockout
		Electrical: MS5 = Electrical w/ 12 in. 18 gauge 4-conductor cable MS5LC = Low current MS5 MS10 = Electrical w/ DIN connector (male end only) MS10LC = Low current MS10 MS11 = Electrical w/ 12 ft. 4-conductor wire MS12 = Electrical w/ 5 pin Brad Harrison connector (male end only) MS12LC = Low current MS12 MS16 = Electrical w/ weather-packed sealed connector MS16LC = Low current MS16 MS17LC = Electrical w/ 4 pin Brad Harrison male connector
		Electrical with Thermal Lockout: MS5T = MS5 (see above) w/ thermal lockout MS5LCT = Low current MS5T MS10T = MS10 (see above) w/ thermal lockout MS10LCT = Low current MS10T MS12T = MS12 (see above) w/ thermal lockout MS12LCT = Low current MS12T MS16T = MS16 (see above) w/ thermal lockout MS16LCT = Low current MS16T MS17LCT = Low current MS17T
		Electrical Visual: MS13 = Supplied w/ threaded connector & light MS14 = Supplied w/ 5 pin Brad Harrison connector & light (male end)
		Electrical Visual with Thermal Lockout: MS13DCT = MS13 (see above), direct current, w/ thermal lockout MS13DCLCT = Low current MS13DCT MS14DCT = MS14 (see above), direct current, w/ thermal lockout MS14DCLCT = Low current MS14DCT

NOTES:

- Box 2. Replacement element part numbers are a combination of Boxes 2, 3, and 4. Example: 6R3V
- Box 3. E media elements are only available with Buna N seals.
- Box 4. For options H, V, and H.5, all aluminum parts are anodized. H.5 seal designation includes the following: EPR seals, stainless steel wire mesh on elements, and light oil coating on housing exterior. Viton® is a registered trademark of DuPont Dow Elastomers. Skydrol® is a registered trademark of Solutia Inc.
- Box 5. B porting option supplied with metric mounting holes.