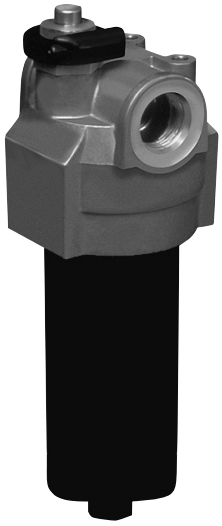
SAME DAY SHIPMENT MODEL AVAILABLE!

Medium Pressure Filter SRLT



Features and Benefits

- Smaller, compact version of the RLT
- 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

Model No. of filter in photograph is SRLT6RZ10S12D5.

Applications

INDUSTRIAL

AUTOMOTIVE MANUFACTURING

MACHINE TOOL

STEEL MAKING

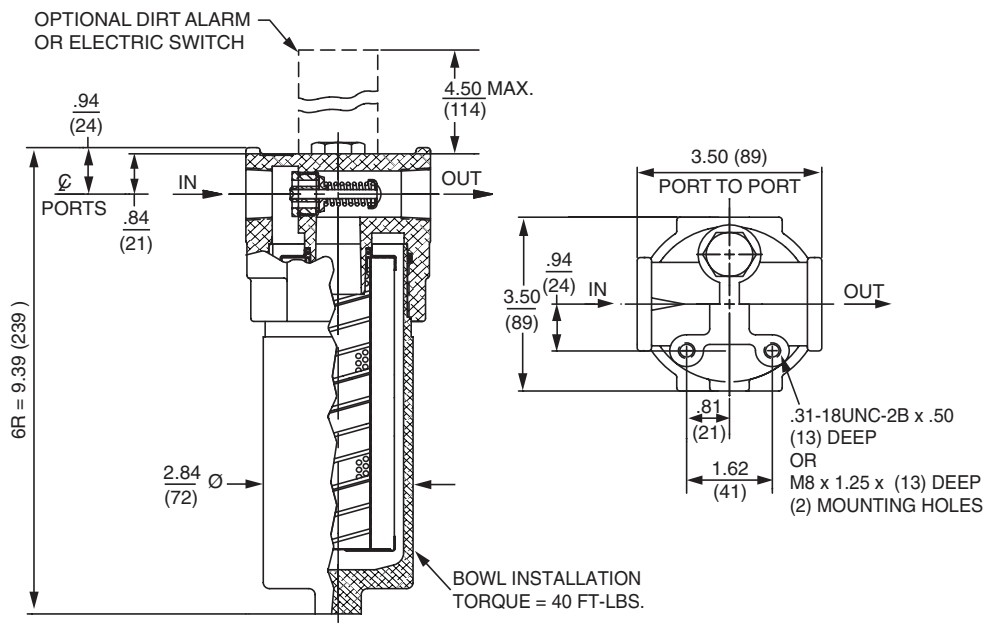
MOBILE VEHICLES

Filter Housing Specifications

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)
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: Element Case:	Aluminum Aluminum
Weight of SRLT-6R:	3.0 lbs. (1.4 kg)
Element Change Clearance:	2.75" (70 mm)

SRLT Medium Pressure Filter

SAME DAY SHIPMENT MODEL AVAILABLE!



Metric dimensions in ( ).

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

Medium Pressure Filter SRLT

Fluid Compatibility

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

Skydrol is a registered trademark of Solutia Inc.

Element Selection
Based on Flow Rate

Pressure	Element 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

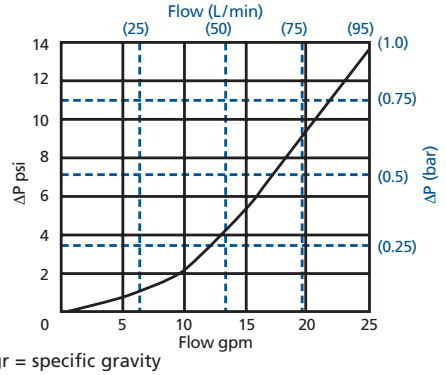
Shown above are the elements most commonly used in this housing.

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.*

Pressure Drop Information
Based on Flow Rate and Viscosity

$\Delta P_{housing}$

SRLT $\Delta P_{housing}$ for fluids with sp gr = 0.86:



sp gr = specific gravity

$\Delta P_{element}$

$\Delta P_{element}$ = 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).

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

Notes

$\Delta P_{filter} = \Delta P_{housing} + \Delta P_{element}$

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

Solution:

$\Delta P_{housing}$ = 5.0 psi [.37 bar]

$\Delta P_{element}$ = 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]

SRLT Medium Pressure Filter

SAME DAY SHIPMENT MODEL AVAILABLE!

Filter Model Number Selection

Same Day Shipment Model See Appendix E for details.

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

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

Example: *NOTE: One option per box*

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	
SRLT	6	RZ10		S12		D5	= **SRLT6RZ10S12D5**

BOX 1

Filter Series
SRLT

BOX 2

Length of Element (in)
6

BOX 3

Element Size and Media
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)

BOX 4

Seal Material
Omit = Buna N
H = EPR
V = Viton®
H.5 = Skydrol® compatibility

BOX 5

Porting
P12 = ¾" NPTF
S12 = SAE-12
B12 = ISO 228 G-¾"

BOX 6

Additional Options
Omit = None
L = Two ⅛" NPTF inlet and outlet female test ports

BOX 7

Dirt Alarm® Options	
	Omit = None
Visual	D5 = Visual pop-up
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 MS15DC = Electrical, direct current normally open, for DC use only MS15DCNC = Electrical, direct current normally closed, for DC use only 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.

SAME DAY SHIPMENT MODEL AVAILABLE!

Medium Pressure Filter RLT

Features and Benefits

- Durable, compact design
- Quick and easy cartridge element changeouts
- Available in 9" and 14" element lengths
- Lightweight at 8 pounds
- Offered in pipe, SAE straight thread, flange and ISO 228 porting
- Available with NPTF inlet and outlet female test ports
- WRLT model for water service also available – refer to Section 5 of this catalog
- Various Dirt Alarm® options
- Same day shipment model available

70 gpm
265 L/min
800 psi
55 bar

Model No. of filter in photograph is RLT9VZ10P20D5.

Applications


INDUSTRIAL


AUTOMOTIVE MANUFACTURING


MACHINE TOOL


MINING TECHNOLOGY


STEEL MAKING


PAPER INDUSTRY


AGRICULTURE

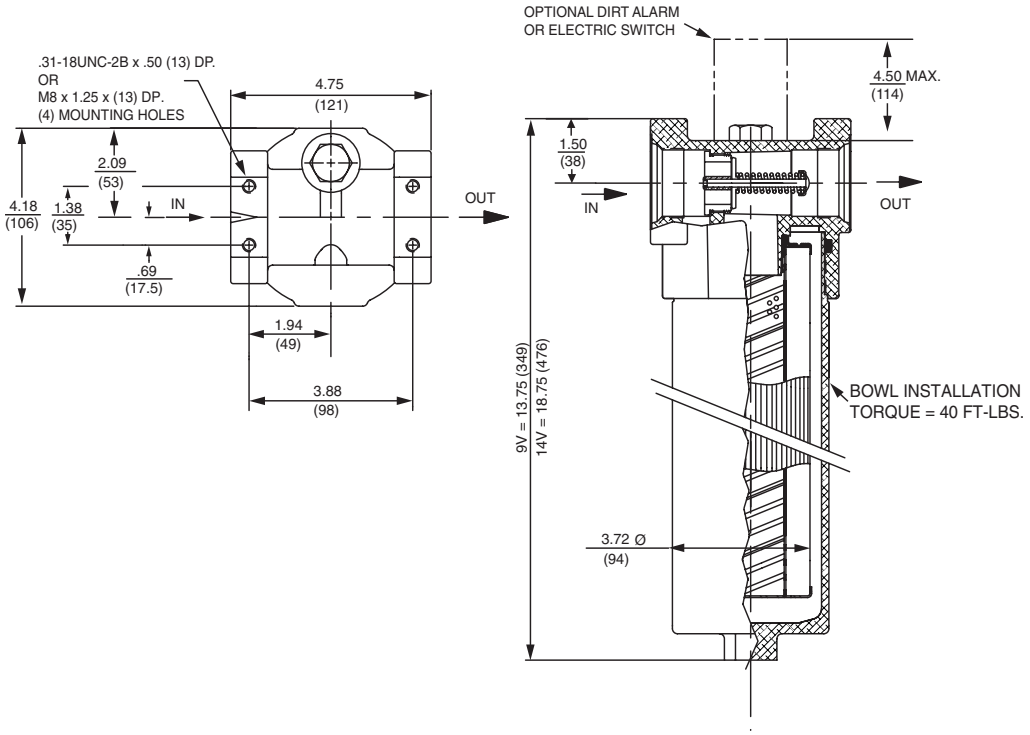

MOBILE VEHICLES

Filter Housing Specifications

Flow Rating:	Up to 70 gpm (265 L/min) for 150 SUS (32 cSt) fluids for P20, S20, & B20 porting Up to 50 gpm (190 L/min) for 150 SUS (32 cSt) fluids for P16, S16, F16, F20 & B16 porting
Max. Operating Pressure:	800 psi (55 bar)
Min. Yield Pressure:	2400 psi (165 bar)
Rated Fatigue Pressure:	415 psi (29 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) for all porting Full Flow: 57 psi (3.9 bar) for P20 & S20 porting Full Flow: 75 psi (5.2 bar) for P16, S16, F16 & F20 porting
Porting Head: Element Case:	Aluminum Aluminum
Weight of RLT-9V: Weight of RLT-14V:	6.7 lbs. (3.0 kg) 8.0 lbs. (3.6 kg)
Element Change Clearance:	9V & 14V: 2.75" (70 mm)

RLT Medium Pressure Filter

SAME DAY SHIPMENT MODEL AVAILABLE!



Metric dimensions in ( ).

Element Performance Information

Element	Filtration Ratio Per ISO 4572/NFPA T3.10.8.8 Using automated particle counter (APC) calibrated per ISO 4402 $\beta_x \geq 75$	$\beta_x \geq 100$	$\beta_x \geq 200$	Filtration Ratio wrt ISO 16889 Using APC calibrated per ISO 11171 $\beta_{x(c)} \geq 200$	$\beta_{x(c)} \geq 1000$
9V3/14V3	6.8	7.5	10.0	N/A	N/A
9V10/14V10	15.5	16.2	18.0	N/A	N/A
9VZ1/14VZ1	<1.0	<1.0	<1.0	<4.0	4.2
9VZ3/14VZ3	<1.0	<1.0	<2.0	<4.0	4.8
9VZ5/14VZ5	2.5	3.0	4.0	4.8	6.3
9VZ10/14VZ10	7.4	8.2	10.0	8.0	10.0
9VZ25/14VZ25	18.0	20.0	22.5	19.0	24.0

Dirt Holding Capacity

Element	DHC (gm)	Element	DHC (gm)
9V3	25	14V3	38
9V10	12	14V10	25
9VZ1	55	14VZ1	102
9VZ3	57	14VZ3	105
9VZ5	62	14VZ5	115
9VZ10	52	14VZ10	104
9VZ25	48	14VZ25	94

Element Collapse Rating: 150 psid (10 bar)
500 psid (34.5 bar) for hydrostatic high collapse (9V5Z10 element) version

Flow Direction: Outside In

Element Nominal Dimensions: 9V: 3.0" (75 mm) O.D. x 9.5" (240 mm) long
14V: 3.0" (75 mm) O.D. x 14.5" (370 mm) long

Medium Pressure Filter RLT

Fluid Compatibility

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

Skydrol is a registered trademark of Solutia Inc.

Element Selection
Based on Flow Rate

Pressure	Element 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 800 psi (55 bar)	E Media	9V3 & 14V3	9V3 / 14V3 / Contact Factory
		9V10 & 14V10	9V10 / 14V10 / Contact Factory
	Z Media	9VZ1 & 14VZ1	9VZ1 / 14VZ1 / Contact Factory
		9VZ3 & 14VZ3	9VZ3 / 14VZ3 / Contact Factory
		9VZ5 & 14VZ5	9VZ5 / 14VZ5
		9VZ10 & 14VZ10	9VZ10 & 14VZ10
		9VZ25 & 14VZ25	9VZ25 & 14VZ25
	Flow	gpm	0 10 20 30 40 50 60 70
		(L/min)	0 50 100 150 200 270

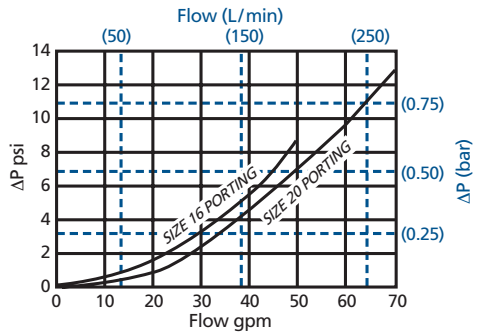
Shown above are the elements most commonly used in this housing. **requires size 20 porting**

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.*

Pressure Drop Information
Based on Flow Rate and Viscosity

$\Delta P_{housing}$

RLT $\Delta P_{housing}$ for fluids with sp gr = 0.86:



sp gr = specific gravity

$\Delta P_{element}$

$\Delta P_{element}$ = flow x element ΔP factor x viscosity factor

El. ΔP factors @ 150 SUS (32 cSt):

9V		14V	
9V3	.32	**14V3**	.19
9V10	.24	**14V10**	.15
9VZ1	.34	**14VZ1**	.21
9VZ3	.21	**14VZ3**	.17
9VZ5	.13	**14VZ5**	.09
9VZ10	.11	**14VZ10**	.08
9VZ25	.06	**14VZ25**	.05

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

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

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

Notes

$\Delta P_{filter} = \Delta P_{housing} + \Delta P_{element}$

Exercise:
Determine ΔP at 40 gpm (150 L/min) for RLT9VZ5S16D5 using 200 SUS (44 cSt) fluid.

Solution:

$\Delta P_{housing}$ = 5.5 psi [.35 bar]

$\Delta P_{element}$ = 40 x .13 x (200÷150) = 6.9 psi
or
= [150 x (.13÷54.9) x (44÷32) = .49 bar]

ΔP_{total} = 5.5 + 6.9 = 12.4 psi
or
= [.35 + .49 = .84 bar]

RLT Medium Pressure Filter

SAME DAY SHIPMENT MODEL AVAILABLE!

Filter Model Number Selection

Same Day Shipment Model See Appendix E for details.

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

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7
RLT	–	–	–	–	–	–

Example: *NOTE: One option per box*

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	
RLT	– 9	– VZ10	–	– S20	– D5	–	= **RLT9VZ10S20D5**

BOX 1

Filter Series
RLT (See Section 5 for Water Service version)
RLTN (Non-bypassing: requires V5Z high collapse elements)

BOX 2

Element Length (in)
9
14

BOX 3

Element Size and Media
V3 = V size 3 µ E media (cellulose)
V10 = V size 10 µ E media (cellulose)
VZ1 = V size 1 µ Excellement® Z media (synthetic)
VZ3 = V size 3 µ Excellement Z media (synthetic)
VZ5 = V size 5 µ Excellement Z media (synthetic)
VZ10 = V size 10 µ Excellement Z media (synthetic)
VZ25 = V size 25 µ Excellement Z media (synthetic)
VW = V size W media (water removal)
V5Z10 = V size 10 µ Excellement media, 500 psid collapse
V5Z25 = V size 25 µ Excellement media, 500 psid collapse

BOX 4

Optional Magnet
Omit = Buna N
H = EPR
V = Viton®
H.5 = Skydrol® compatibility

BOX 5

Porting Options
P16 = 1" NPTF
P20 = 1¼" NPTF
S16 = SAE-16
S20 = SAE-20
F20 = 1¼" SAE 4-bolt flange Code 61
B16 = ISO 228 G-1"
B20 = ISO 228 G-1¼"

BOX 6

Dirt Alarm® Options	
	Omit = None
Visual	D5 = Visual pop-up
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 MS15DC = Electrical, direct current normally open, for DC use only MS15DCNC = Electrical, direct current normally closed, for DC use only 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

BOX 7

Additional Options
Omit = None
L = Two ¼" NPTF inlet and outlet female test ports

NOTES:

Box 2. Replacement element part numbers are a combination of Boxes 2, 3, and 4. *Example*: 9VZ10V

Box 3. E media elements are only available with Buna N seals. V5Z10 and V5Z25 are only available with RLTN 9".

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 supplied with metric mounting holes.

Medium Pressure Filter KF8

Features and Benefits

- Meets HF4 automotive standard
- Offered in pipe, SAE straight thread, flange and ISO 228 porting
- Available with NPTF inlet and outlet female test ports
- KFN8 non-bypass version with high collapse elements also available
- WKF8 model for water service also available – refer to Section 5 of this catalog
- Various Dirt Alarm® options
- Allows consolidation of inventoried replacement elements by using K-size elements
- Also available with DirtCatcher® elements (KD & KKD)

100 gpm
380 L/min
800 psi
55 bar

Model No. of filter in photograph is KF81KZ10SD5.

Applications

INDUSTRIAL

AUTOMOTIVE MANUFACTURING

MINING TECHNOLOGY

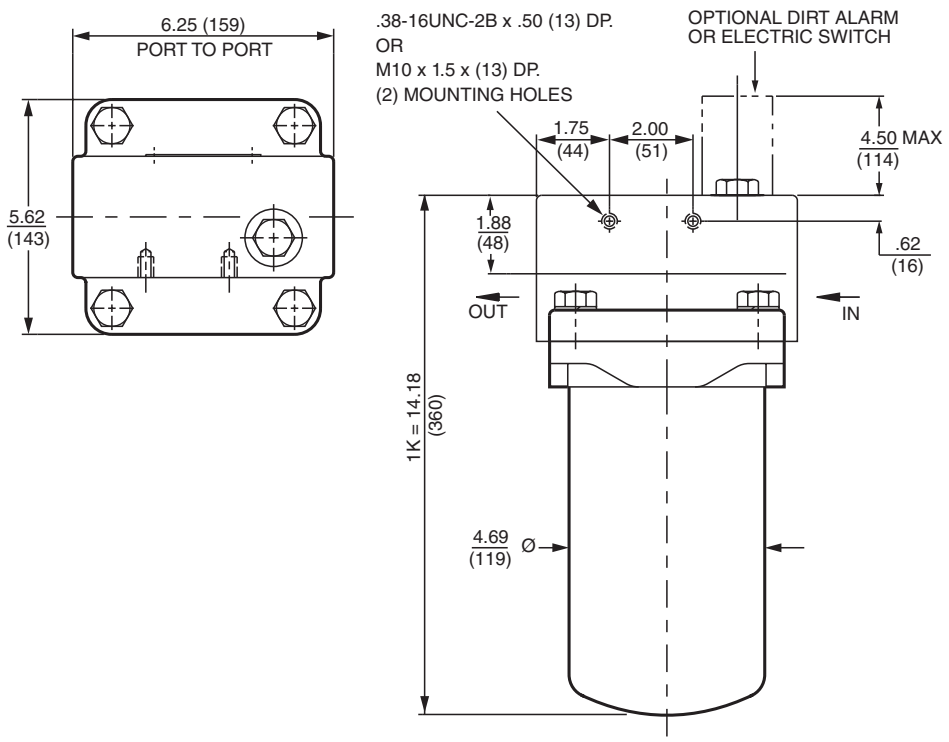
STEEL MAKING

MOBILE VEHICLES

Filter Housing Specifications

Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	800 psi (55 bar)
Min. Yield Pressure:	2600 psi (179 bar)
Rated Fatigue Pressure:	500 psi (35 bar), per NFPA T2.6.1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 40 psi (2.8 bar) Full Flow: 61 psi (4.2 bar)
Porting Head: Element Case:	Grey Cast Iron Steel
Weight of KF8-1K:	23.2 lbs. (10.5 kg)
Element Change Clearance:	2.0" (51 mm)

KF8 Medium Pressure Filter



Metric dimensions in ( ).

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	
	$\beta_x \geq 75$	$\beta_x \geq 100$	$\beta_x \geq 200$	$\beta_{x(c)} \geq 200$	$\beta_{x(c)} \geq 1000$
K3	6.8	7.5	10.0	N/A	N/A
K10	15.5	16.2	18.0	N/A	N/A
KZ1	<1.0	<1.0	<1.0	<4.0	4.2
KZ3	<1.0	<1.0	<2.0	<4.0	4.8
KZ5	2.5	3.0	4.0	4.8	6.3
KZ10	7.4	8.2	10.0	8.0	10.0
KZ25	18.0	20.0	22.5	19.0	24.0

Dirt Holding Capacity

Element	DHC (gm)	Element	DHC (gm)
K3	54	–	–
K10	44	–	–
KZ1	112	KDZ1	89
KZ3	115	KDZ3	71
KZ5	119	KDZ5	100
KZ10	108	KDZ10	80
KZ25	93	KDZ25	81

Element Collapse Rating: 150 psid (10 bar) for standard elements
3000 psid (210 bar) for high collapse (ZX) elements
5000 psid (350 bar) for high collapse (MXX) elements

Flow Direction: Outside In

Element Nominal Dimensions: 3.9" (99 mm) O.D. x 9.0" (230 mm) long

Medium Pressure Filter KF8

Fluid Compatibility

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

Skydrol is a registered trademark of Solutia Inc.

Element Selection
Based on Flow Rate

Pressure	Element Series	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 800 psi (55 bar)	E Media	K3	1K3 — KF8 housing uses only one K-size element.
		K10	1K10
		K25	1K25
	Z Media	KZ1	1KZ1
		KZ3	1KZ3
		KZ5	1KZ5
		KZ10	1KZ10
		KZ25	1KZ25
	Flow	gpm	0 20 40 60 80 100
		(L/min)	0 50 150 250 380

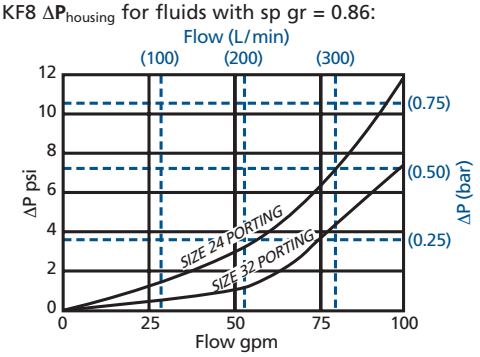
Shown above are the elements most commonly used in this housing.

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.*

Pressure Drop Information
Based on Flow Rate and Viscosity

$\Delta P_{housing}$

KF8 $\Delta P_{housing}$ for fluids with sp gr = 0.86:



sp gr = specific gravity

$\Delta P_{element}$

$\Delta P_{element}$ = flow x element ΔP factor x viscosity factor

El. ΔP factors @ 150 SUS (32 cSt):

K3	.25		
K10	.09		
K25	.02		
KZ1	.20	**KDZ1**	.24
KZ3	.10	**KDZ3**	.12
KZ5	.08	**KDZ5**	.1
KZ10	.05	**KDZ10**	.06
KZ25	.04	**KDZ25**	.04

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

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

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

Notes

$\Delta P_{filter} = \Delta P_{housing} + \Delta P_{element}$

Exercise:
Determine ΔP at 50 gpm (189 L/min) for KF81KZ10P24D5 using 200 SUS (44 cSt) fluid.

Solution:

$\Delta P_{housing}$ = 3.0 psi [.20 bar]

$\Delta P_{element}$ = 50 x .05 x (200÷150) = 3.3 psi
or
= [189 x (.05÷54.9) x (44÷32) = .24 bar]

ΔP_{total} = 3.0 + 3.3 = 6.3 psi
or
= [.20 + .24 = .44 bar]

KF8 Medium Pressure Filter

Filter Model Number Selection

How to Build a Valid Model Number for a Schroeder KF8:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7
KF8	–	–	–	–	–	–

Example: *NOTE: One option per box*

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	
KF8	1	KZ10		S24		D5	= **KF81KZ10S24D5**

BOX 1

Filter Series
KF8 (See Section 5 for Water Service version)
KFN8 (Non-bypassing: requires ZX or MXX high collapse elements)

BOX 2

No. of Elements
1

BOX 3

Element Part Number	
K Length	
K3	= 3 µ E media (cellulose)
K10	= 10 µ E media (cellulose)
K25	= 25 µ E media (cellulose)
KZ1	= 1 µ Excellement® Z media (synthetic)
KZ3	= 3 µ Excellement Z media (synthetic)
KZ5	= 5 µ Excellement Z media (synthetic)
KZ10	= 10 µ Excellement Z media (synthetic)
KZ25	= 25 µ Excellement Z media (synthetic)
KW	= W media (water removal)
KZX3	= 3 µ Excellement Z media (high collapse center tube)
KZX10	= 10 µ Excellement Z media (high collapse center tube)
KZX25	= 25 µ Excellement Z media (high collapse center tube)
KMXX25	= 10 µ M media (reusable metal; high collapse center tube)
KDZ1	= DirtCatcher® 1 µ Excellement Z media
KDZ3	= DirtCatcher 3 µ Excellement Z media
KDZ5	= DirtCatcher 5 µ Excellement Z media
KDZ10	= DirtCatcher 10 µ Excellement Z media
KDZ25	= DirtCatcher 25 µ Excellement Z media

BOX 4

Optional Magnet
Omit = Buna N
H = EPR
V = Viton®
H.5 = Skydrol® compatibility

BOX 5

Porting Options
P24 = 1½" NPTF
P32 = 2" NPTF
S24 = SAE-24
S32 = SAE-32
F24 = 1½" SAE split 4-bolt flange Code 61
B24 = ISO 228 G-1½"

BOX 6

Additional Options
Omit = None
L = Two ¼" NPTF inlet and outlet female test ports

BOX 7

Dirt Alarm® Options	
	Omit = None
Visual	D = Pointer D5 = Visual pop-up
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 MS15DC = Electrical, direct current normally open, for DC use only MS15DCNC = Electrical, direct current normally closed, for DC use only 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	MS = Cam operated switch w/ ½" conduit female connection 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 3 and 4. *Example*: KZ10V

Box 3. High collapse media only available with KFN8.

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 supplied with metric mounting holes.