



Stainless Steel Air Preparation Units

Filters, Regulators and Lubricators

Bulletin 1300 - 775/USA



FRLs & Vacuum
Exhaust Filters

Finite®



1/4" and 1/2" Stainless Steel Filters, Regulators, Lubricators: Performance you can count on!

Parker Hannifin has specifically designed a line of 316 Stainless Steel Filter, Regulator, Lubricator (FRL) components that meet NACE specifications and handle the toughest and most corrosive environments. The regulator diaphragm to valve area ratio is large to assure precise pressure regulation and high flow capacity.

Of the major American FRL manufacturers, Parker provides the most comprehensive line

of miniature Stainless Steel components and has installed stainless steel FRLs worldwide. We use the latest techniques in design and manufacturing to meet today's stringent standards. You are assured of outstanding performance and long life from the stainless steel FRLs offered by Finite, thanks to our high quality materials, tough quality control checks and decades of experience in manufacturing FRLs.



Stainless Steel FRLs in this pharmaceutical plant are used for valve protection and lubrication at point of use applications.

Applications

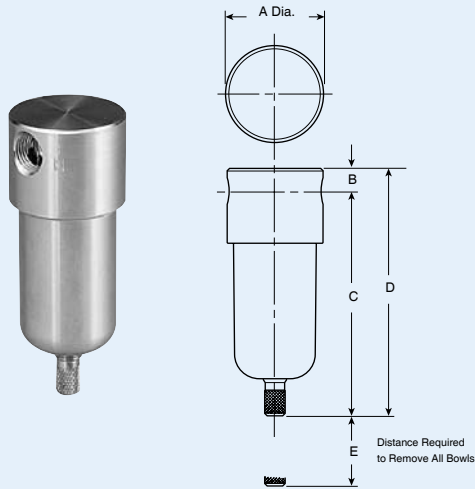
- Marine and Offshore Facilities
- Chemical and Petroleum Plants
- Process Industries
- Pollution Control
- Instrumentation
- Medical
- Pulp and Paper Products
- Research Labs
- Wastewater Treatment



This oil refinery uses stainless steel filters, regulators and lubricators for protecting instrumentation and pneumatic equipment in corrosive environments.

Air Line Miniature Filter

FF504-02DGSS



Dimensions

A	B	C	D	E
1.56	.31	3.69	4.00	1.58
40mm	8mm	94mm	102mm	40mm

Specifications:

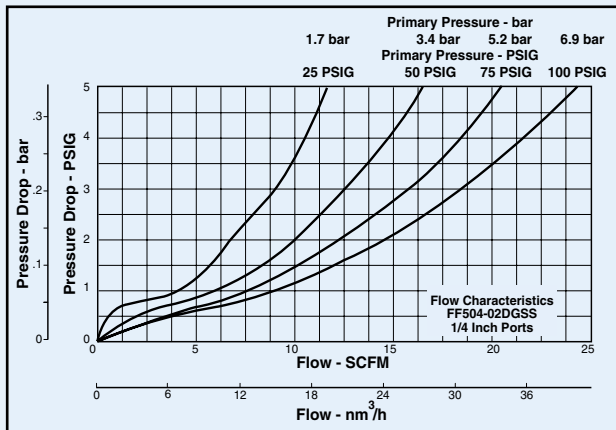
- Flow: 23 SCFM
- Port Size: 1/4" NPT
- Drain: Manual
- Filter Rating: 5 micron
- Maximum Pressure: 300 PSIG (20.7 bar)
- Maximum Temperature: 180°F (82°C)
- Weight: 0.6 lbs
- Bowl Capacity: 1 oz.

Materials of Construction:

- Body: 316 Stainless Steel
- Bowl: 316 Stainless Steel
- Seals: Fluorocarbon
- Element: Polyethylene
- Retainer: Acetal
- Drain: 316 Stainless Steel

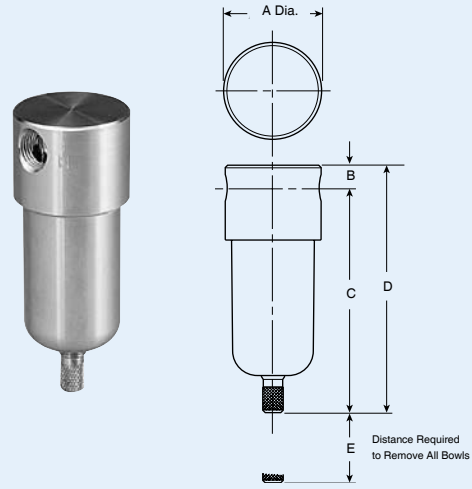
Replacement Element: EK504VY

Performance Data:



Coalescing Miniature Filter

FF501-02DHSS



Dimensions

A	B	C	D	E
1.56	.31	3.69	4.00	1.58
40mm	8mm	94mm	102mm	40mm

Specifications:

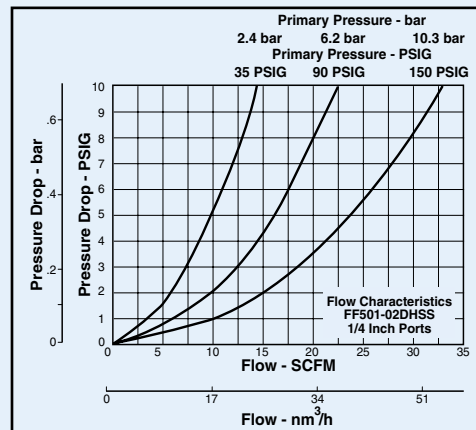
- Flow: 8 SCFM @ 100 PSIG inlet with 1.5 PSIG drop
- Port Size: 1/4" NPT
- Drain: Manual
- Coalescing Efficiency: 99.97%
- Maximum Pressure: 300 PSIG (20.7 bar)
- Maximum Temperature: 180°F (82°C)
- Weight: 0.6 lbs
- Bowl Capacity: 1 oz.

Materials of Construction:

- Body: 316 Stainless Steel
- Bowl: 316 Stainless Steel
- Seals: Fluorocarbon
- Element: Borosilicate Glass Fibers
- End Caps: Nylon
- Drain: 316 Stainless Steel

Replacement Element: 6HM06-013 X 10

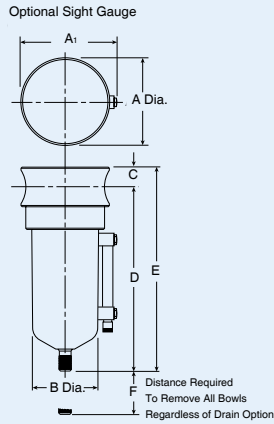
Performance Data:



FRLs & Vacuum
Exhaust Filters

Air Line Filter

FF10-04DGSS



Dimensions						
A	A ₁	B	C	D	E	F
2.38	2.50	1.75	.56	5.00	5.56	2.12
60mm	64mm	44mm	14mm	127mm	141mm	54mm

Specifications:

Flow: 72 SCFM
 Port Size: 1/2" NPT
 Drain: Manual
 Filter Rating: 5 micron
 Maximum Pressure: 300 PSIG (20.7 bar)
 Maximum Temperature: 180°F (82°C)
 Weight: 1.88 lbs.
 Bowl Capacity: 4 oz.

Materials of Construction:

Body: 316 Stainless Steel
 Bowl: 316 Stainless Steel
 Seals: Fluorocarbon
 Vane Plate: Acetal
 Element: Polyethylene
 Retainer: Acetal
 Drain: 316 Stainless Steel

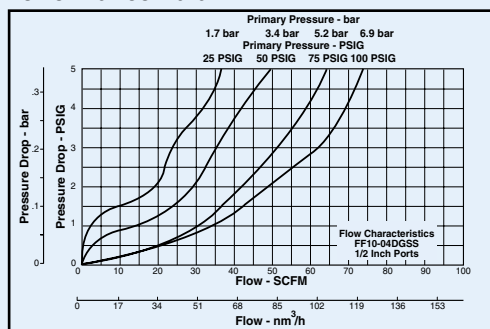
Replacement Element: EK55G

Available Options:

Part Number	Auto Drain	Sight Glass
FF10-04DGSS		
FF10-04WGSS		✓
FF10-04DGRSS	✓	
FF10-04WGRSS	✓	✓

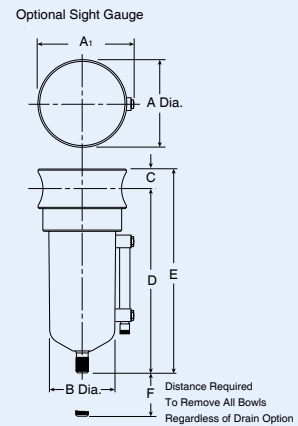
Note: The Max pressure with the auto drain is 175 PSIG and with the sight glass is 250 PSIG.

Performance Data:



Coalescing Filter

FF11-04DJSS



Dimensions						
A	A ₁	B	C	D	E	F
2.38	2.50	1.75	.56	5.00	5.56	2.12
60mm	64mm	44mm	14mm	127mm	141mm	54mm

Specifications:

Flow: 16.5 SCFM @ 100 PSIG inlet with 1.5 PSIG drop
 Port Size: 1/2" NPT
 Drain: Manual
 Coalescing Efficiency: 99.97%
 Maximum Pressure: 300 PSIG (20.7 bar)
 Maximum Temperature: 180°F (82°C)
 Weight: 1.88 lbs
 Bowl Capacity: 4 oz.

Materials of Construction:

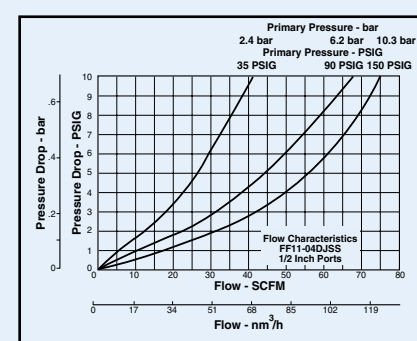
Body: 316 Stainless Steel
 Bowl: 316 Stainless Steel
 Seals: Fluorocarbon
 Element: Borosilicate Glass Fiber
 End Caps: Nylon
 Drain: 316 Stainless Steel

Replacement Element: 6HM07-019 X 10

Available Options:

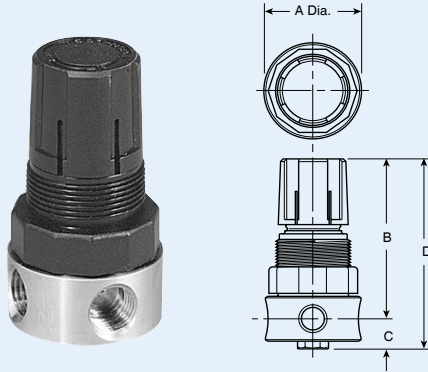
Part Number	Auto Drain	Sight Glass
FF11-04DJSS		
FF11-04WJSS		✓
FF11-04DJRSS	✓	
FF11-04WJRSS	✓	✓

Performance Data:



Note: The Max pressure with the auto drain is 175 PSIG and with the sight glass is 250 PSIG.

Miniature Regulator
 FR364-02CSS



Specifications:

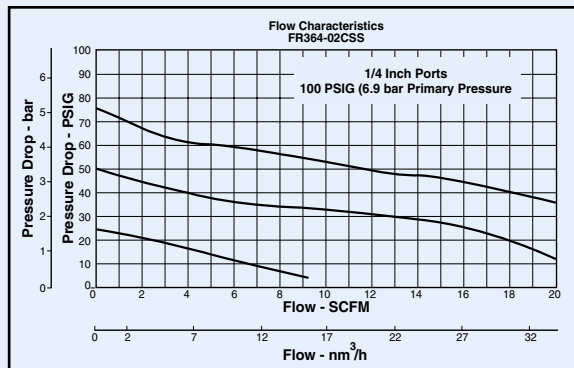
Flow: 16 SCFM
 Port Size: 1/4" NPT
 Gauge Port: 1/4" NPT
 Outlet Pressure Range: 0-125 PSIG (0-8.5 bar) std.
 Max Inlet Pressure: 300 PSIG (20.7 bar)
 Temperature Range: 40-150°F (4.4-65.6°C)
 Weight: 0.5 lbs
 Operation: Fluorocarbon Diaphragm
 Relieving: Standard (non-relieving optional)

Dimensions			
A	B	C	D
1.56	2.56	.50	3.06
40mm	65mm	13mm	78mm

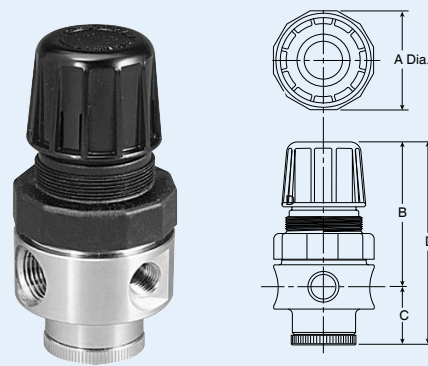
Materials of Construction:

Body: 316 Stainless Steel
 Spring Cage: Celcon
 Inner Valve: 316 Stainless Steel
 Bottom Plug: 316 Stainless Steel
 Seals: Fluorocarbon
 Adjustment Mechanism:
 316 Stainless Steel Spring and
 316 Stainless Steel Adjusting Screw

Performance Data:



Regulator
 FR10-04CSS



Specifications:

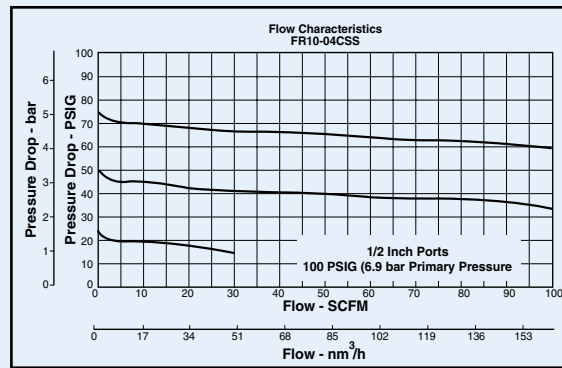
Flow: 80 SCFM
 Port Size: 1/2" NPT
 Gauge port: 1/4" NPT
 Outlet Pressure Range: 0-125 PSIG (0-8.5 bar) std.
 Max Inlet Pressure: 300 PSIG (20.7 bar)
 Temperature Range: 40-150°F (4.4-65.6°C)
 Weight: 1.79 lbs
 Operation: Fluorocarbon Diaphragm
 Relieving: Standard (non-relieving optional)

Dimensions			
A	B	C	D
2.34	3.59	1.38	4.97
60mm	91mm	35mm	126mm

Materials of Construction:

Body: 316 Stainless Steel
 Spring Cage: Glass-filled Celcon
 Inner Valve: 316 Stainless Steel
 Bottom Plug: 316 Stainless Steel
 Seals: Fluorocarbon
 Adjustment Mechanism:
 316 Stainless Steel Spring and
 316 Stainless Steel Adjusting Screw

Performance Data:



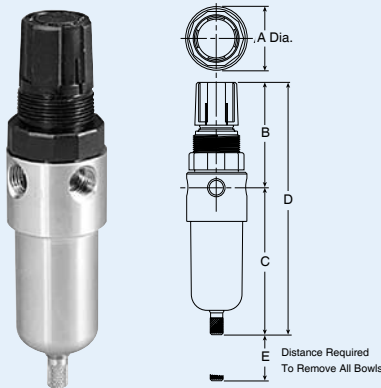
**FRLs & Vacuum
 Exhaust Filters**

"Piggyback" Filter/Regulators

Air Preparation Units Stainless Steel FRL

Miniature "Piggyback" Filter/Regulator

FB548-02DGCSS



Dimensions

A	B	C	D	E
1.56	2.63	3.63	6.25	1.58
40mm	67mm	92mm	159mm	40mm

Specifications:

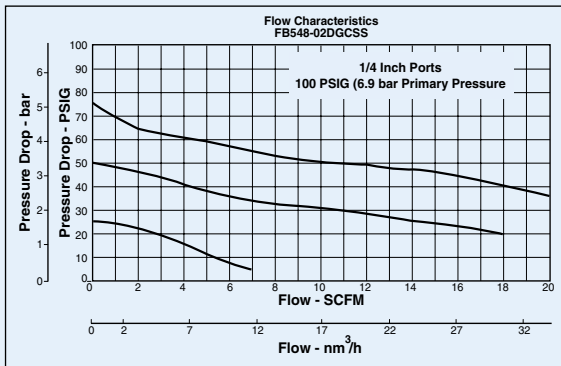
- Flow: 20 SCFM
- Port Size: 1/4" NPT
- Gauge Port: 1/4" NPT
- Drain: Manual
- Filter Rating: 5 micron
- Outlet Pressure Range: 0-125 PSIG (0-8.5 bar) std.
- Max Inlet Pressure: 300 PSIG (20.7 bar)
- Temperature Range: 40-150°F (4.4-65.6°C)
- Weight: 0.6 lbs
- Operation: Fluorocarbon Diaphragm
- Relieving: Standard (non-relieving optional)
- Bowl Capacity: 1 oz.

Materials of Construction:

- Body: 316 Stainless Steel
- Bowl: 316 Stainless Steel
- Spring Cage: Celcon
- Inner Valve: 316 Stainless Steel
- Seals: Fluorocarbon
- Adjustment Mechanism: 316 Stainless Steel Spring and 316 Stainless Steel Adjusting Screw

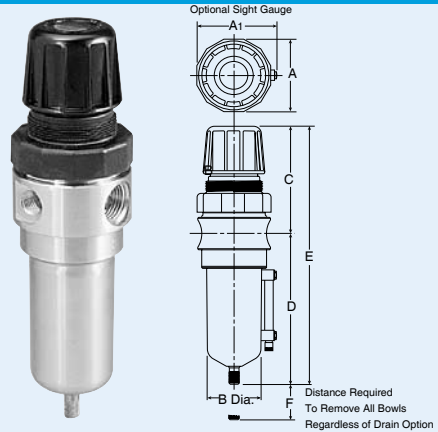
Replacement Element: EK504VY

Performance Data:



"Piggyback" Filter/Regulator

FB11-04DGCSS



Dimensions

A	A ₁	B	C	D	E	F
2.34	2.50	1.75	3.59	5.00	8.59	2.12
60mm	64mm	44mm	91mm	127mm	218mm	54mm

Specifications:

- Flow: 72 SCFM
- Port Size: 1/2" NPT
- Gauge Port: 1/4" NPT
- Drain: Manual (automatic optional)
- Filter Rating: 5 micron
- Outlet Pressure Range: 0-125 PSIG (0-8.5 bar) std.
- Max Inlet Pressure: 300 PSIG (20.7 bar)
- Temperature Range: 40-150°F (4.4-65.6°C)
- Weight: 2.42 lbs
- Operation: Fluorocarbon Diaphragm
- Relieving: Standard (non-relieving optional)
- Bowl capacity: 4 oz.

Materials of Construction:

- Body: 316 Stainless Steel
- Bowl: 316 Stainless Steel
- Spring Cage: Glass-filled Celcon
- Inner Valve: 316 Stainless Steel
- Seals: Fluorocarbon
- Adjustment Mechanism: 316 Stainless Steel Spring and 316 Stainless Steel Adjusting Screw

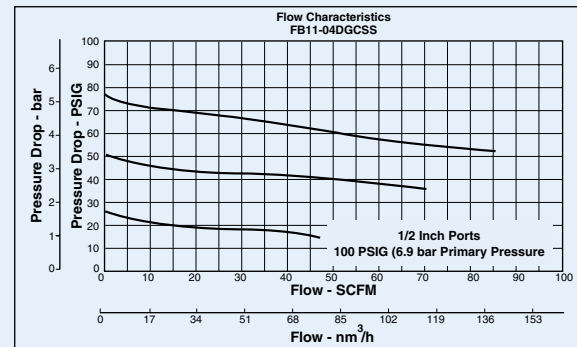
Replacement Element: EK55G

Note: The Max pressure with the auto drain is 175 PSIG and with the sight glass is 250 PSIG.

Available Options:

Part Number	Auto Drain	Sight Glass
FB11-04DGCSS		
FB11-04WGCSS		✓
FB11-04DGCRSS	✓	
FF11-04WGCRSS	✓	✓

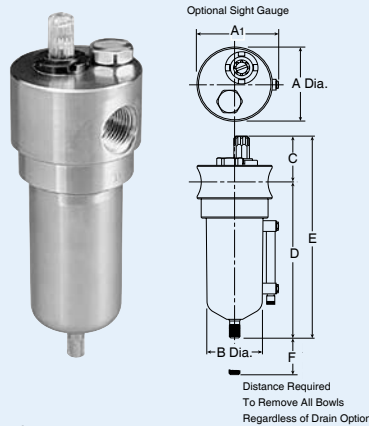
Performance Data:



FRL's & Vacuum Exhaust Filters

Lubricator

FL10-04DSS



Dimensions

A	A ₁	B	C	D	E	F
2.38	2.50	1.75	1.81	5.00	6.81	3.50
60mm	64mm	44mm	46mm	127mm	173mm	89mm

Specifications:

- Flow: 105 SCFM
- Port Size: 1/2" NPT
- Maximum Pressure: 300 PSIG (20.7 bar)
- Temperature Range: 40-150°F (4.4-65.6°C)
- Weight: 2.3 lbs
- Bowl Capacity: 4 oz.

Materials of Construction:

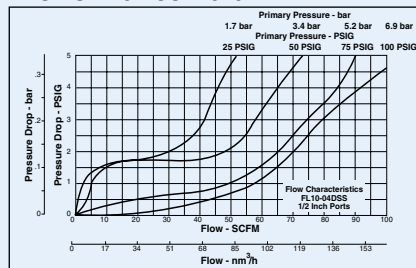
- Body: 316 Stainless Steel
- Bowl: 316 Stainless Steel
- Dip Tube: 316 Stainless Steel
- Fill Plug: 316 Stainless Steel
- Sight Dome/Drip Spout: Polyurethane
- Seals: Fluorocarbon
- Retainer: Nylon
- By-pass Assembly: Polyurethane and 316 Stainless Steel

Available Options:

Part Number	Sight Glass
FL10-04DSS	
FL10-04WSS	✓

Note: The Max pressure with a sight glass is 250 PSIG.

Performance Data:



Internal Auto Drain

FSA602MDSS

For installation in Filters
FF10, FF11 and FB11



Materials of Construction:

- 316 Stainless Steel
- Elgiloy
- Fluorocarbon
- Buna-N
- 304 Stainless Steel
- Acetal
- Max. Pressure: 15-175 PSIG
- For use with H₂S (sour gas), contact factory at 1-800-521-4357

Pressure Gauges



K4515N14160SS

(Recommended for FR364/FB548)

Specifications:

- Dial Size: 1 1/2"
- Connection: 1/4" center back

Materials of Construction:

- Bourdon Tube: 316 Stainless Steel
- Case: 304 Stainless Steel
- Face: Glass
- Connection: 316 Stainless Steel

K4520N14160SS

(Recommended for FR10/FB11)

Note: This pressure gauge does not meet NACE specs.

Specifications:

- Dial Size: 2"
- Connection: 1/4" center back

Materials of Construction:

- Bourdon Tube: 316 Stainless Steel
- Case: 304 Stainless Steel
- Face: Glass
- Connection: 316 Stainless Steel

Accessories and Kits

Description **Part Number**

Steel Panel Mount Nut

FR364/FB548	R05X51SS
FR10/FB11	R10X51SS

Regulator Repair Kits

FR10/FB11 - Relieving	RKR10YSS
FR10/FB11 - Nonrelieving	RKR10KYSS
FR364 - Relieving	RKR364YSS
FR364 - Nonrelieving	RK364KYSS
FB548 - Relieving	RK549YSS
FB548 - Nonrelieving	RK548YSS

Filter Element Kits

FF504 Particulate(5 micron)	EK504VY
FF501 Coalescing(.3 micron)	6HM06-013 X 10
FF10 Particulate(5 micron)	EK55G
FF11 Coalescing(.3 micron)	6HM07-019 X 10
FF548 Particulate(5 micron)	EK504VY
FB11 Particulate(5 micron)	EKF10VY

Cage Kits

FR364/FB548	CKR364YSS
FR10/FB11	CKR10YSS

FRLs & Vacuum Exhaust Filters