



Stainless Steel Air Preparation Units

Filters, Regulators and Lubricators

Bulletin 1300 - 775/USA



Filter, Regulator,
Lubricator (FRL)

**To Order or for
more Information call**



1-800-345-8207

Finite[®]



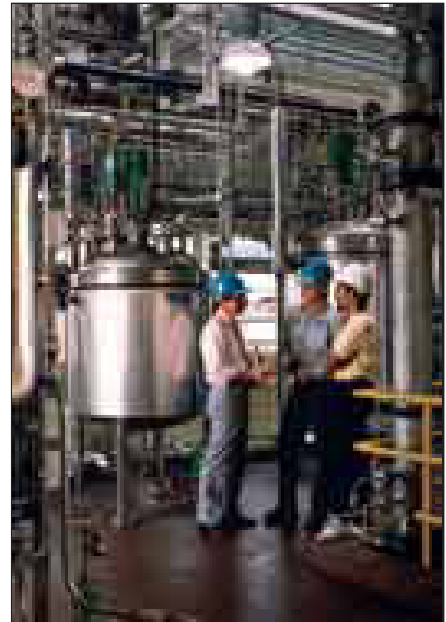
1/4" and 1/2" Stainless Steel Filters, Regulators, Lubricators: Performance you can count on!

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

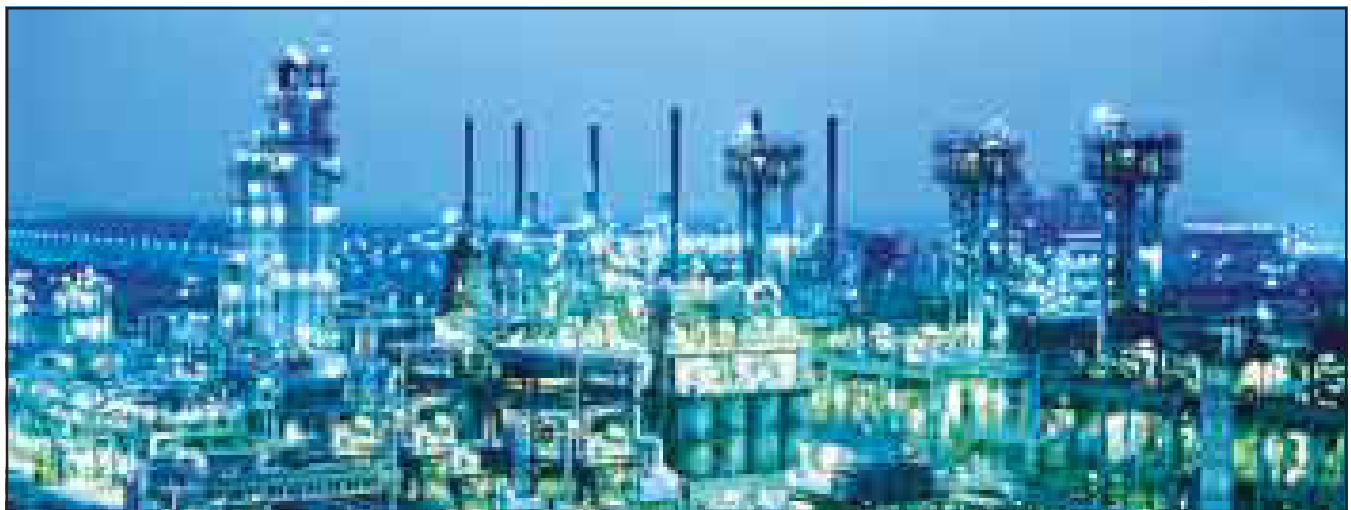
line of miniature Stainless Steel components and has installed stainless steel FRLs worldwide. We use the latest techniques in design and manufacturing to meet today's stringent standards. You are assured of outstanding performance and long life from the stainless steel FRLs offered by Finite, thanks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

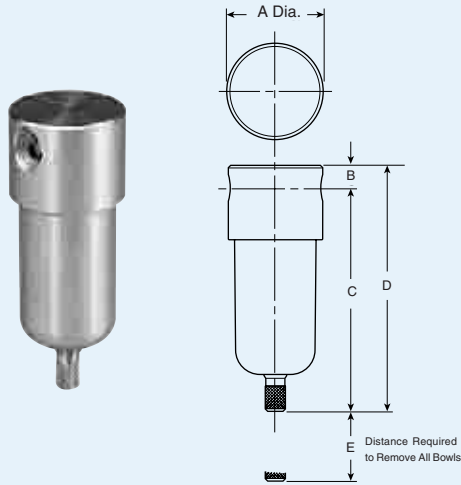
- Marine and Offshore Facilities
- Chemical and Petroleum Plants
- Process Industries
- Pollution Control
- Instrumentation
- Medical
- Pulp and Paper Products
- Research Labs
- Wastewater Treatment



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 |

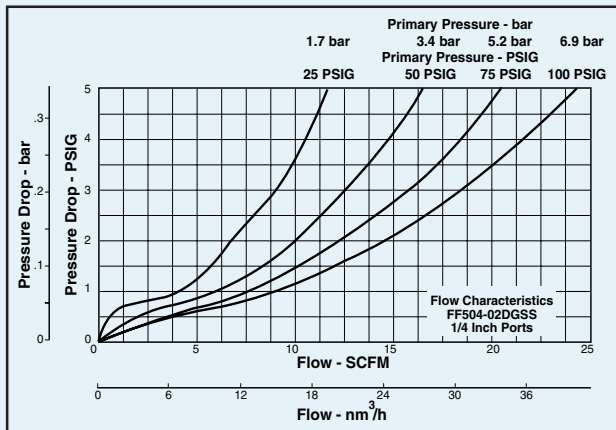
Specifications:

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:

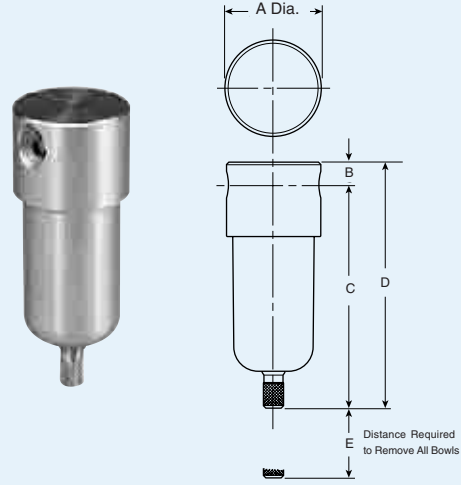
Body: 316 Stainless Steel
 Bowl: 316 Stainless Steel
 Seals: Fluorocarbon
 Element: Polyethylene
 Retainer: Acetal
 Drain: 316 Stainless Steel

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:

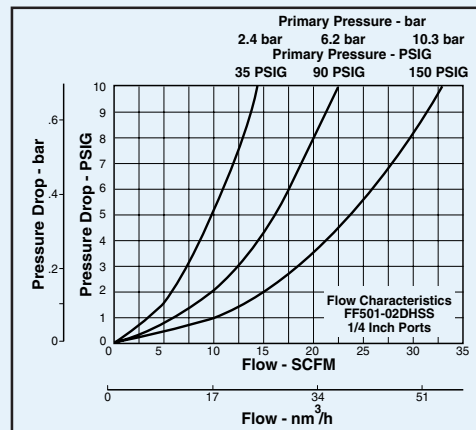
Flow: 8 SCFM @ 100 PSIG inlet with 1.5 PSIG drop
 Port Size: 1/4" NPT
 Drain: Manual
 Coalescing Efficiency: 99.97%
 Maximum Pressure: 300 PSIG (20.7 bar)
 Maximum Temperature: 180°F (82°C)
 Weight: 0.6 lbs
 Bowl Capacity: 1 oz.

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 Elements: 6HM06-013 x 10

Performance Data:



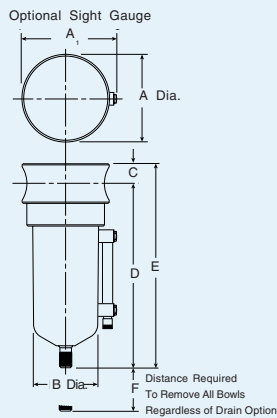
Filter, Regulator,
 Lubricator (FRL)

Filters

**Air Preparation Units
Stainless Steel FRL**

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
- Maximum Pressure: 300 PSIG (20.7 bar)
- Maximum Temperature: 180°F (82°C)
- Weight: 1.88 lbs.
- Drain: Manual
- Filter Rating: 5 micron
- Bowl Capacity: 4 oz.

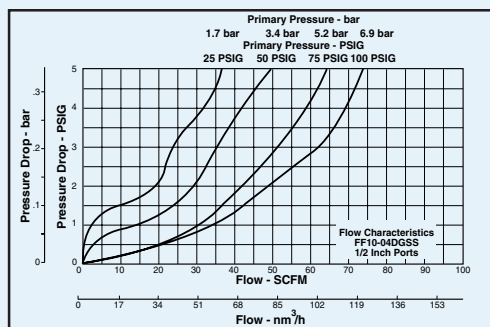
Materials of Construction:

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

Available Options:

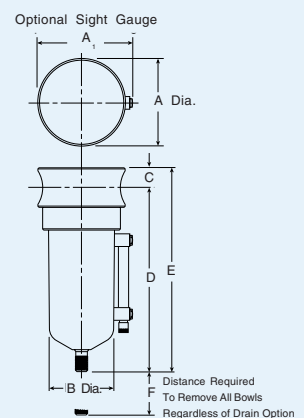
| Part Number | Auto Drain | Sight Glass |
|--------------|------------|-------------|
| FF10-04DGSS | | |
| FF10-04WGSS | | ✓ |
| FF10-04DGRSS | ✓ | |
| FF10-04WGRSS | ✓ | ✓ |

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
- Maximum Pressure: 300 PSIG (20.7 bar)
- Maximum Temperature: 180°F (82°C)
- Weight: 1.88 lbs
- Drain: Manual
- Coalescing Efficiency: 99.97%
- Bowl Capacity: 4 oz.

Materials of Construction:

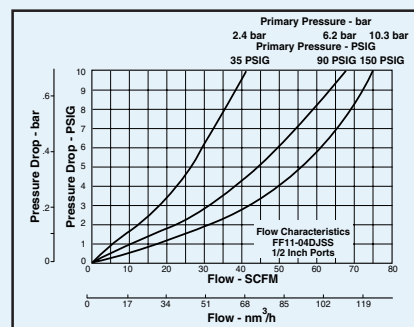
- Body: 316 Stainless Steel
- Bowl: 316 Stainless Steel
- Seals: Fluorocarbon
- Element: Borosilicate Glass Fiber
- End Caps: Nylon
- Drain: 316 Stainless Steel

Replacement Elements: 6HM07-019 x 10

Available Options:

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

Performance Data:

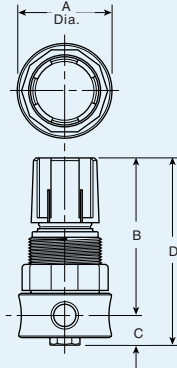


Regulators

Air Preparation Units Stainless Steel FRL

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)

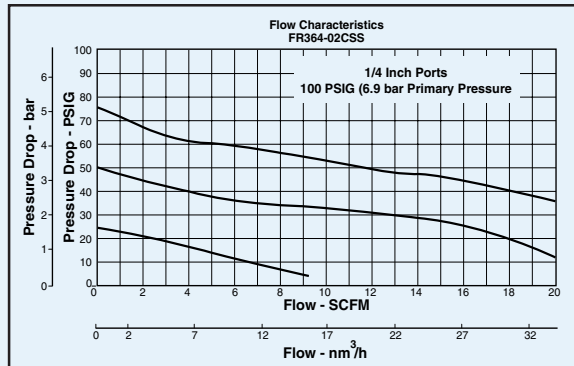
Dimensions

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

Materials of Construction:

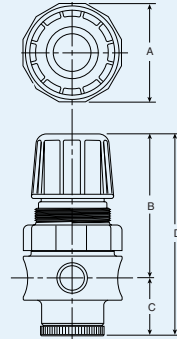
- Body: 316 Stainless Steel
- Spring Cage: Celcon
- Inner Valve: 316 Stainless Steel
- Bottom Plug: 316 Stainless Steel
- Seals: Fluorocarbon
- Adjustment Mechanism:
 - 316 Stainless Steel Spring and
 - 316 Stainless Steel Adjusting Screw

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)

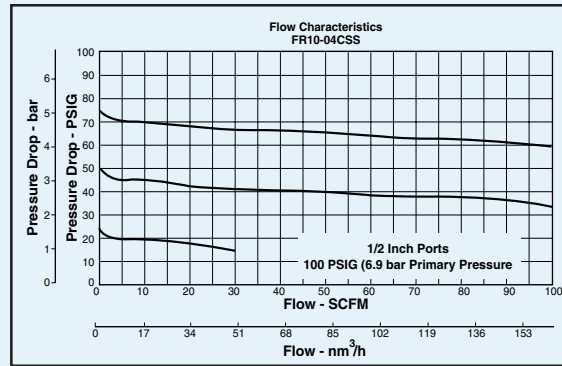
Dimensions

| 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:



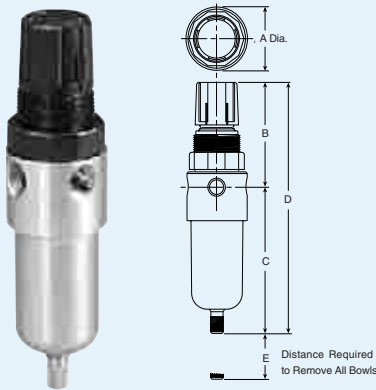
Filter, Regulator, Lubricator (FRL)

"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 |

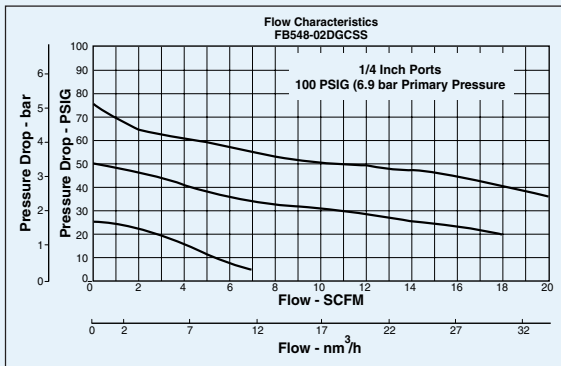
Specifications:

- 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:

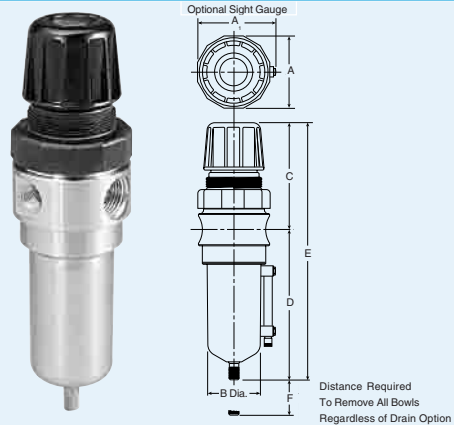
- Body: 316 Stainless Steel
- Bowl: 316 Stainless Steel
- Spring Cage: Celcon
- Inner Valve: 316 Stainless Steel
- Seals: Fluorocarbon
- Adjustment Mechanism:
 - 316 Stainless Steel Spring and
 - 316 Stainless Steel Adjusting Screw

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.

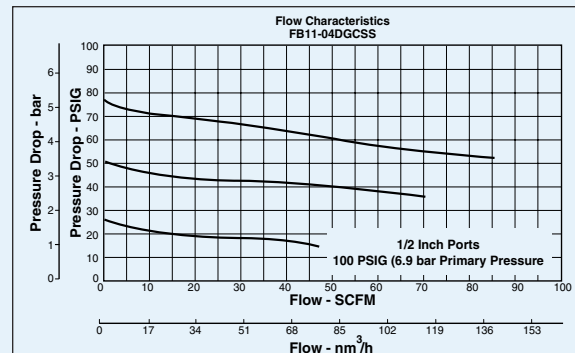
Materials of Construction:

- 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

Available Options:

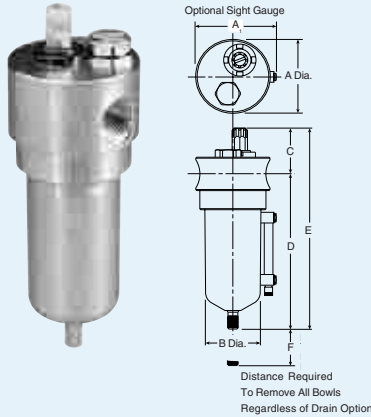
| Part Number | Auto Drain | Sight Glass |
|---------------|------------|-------------|
| FB11-04DGCSS | | |
| FB11-04WGCSS | | ✓ |
| FB11-04DGCRSS | ✓ | |
| FB11-04WGCRSS | ✓ | ✓ |

Performance Data:



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.

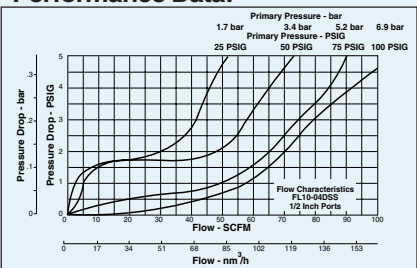
Materials of Construction:

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 | ✓ |

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
- For use with H₂ S (sour gas), contact factory at 1-800-521-4357

Pressure Gauges



274Y160SS

(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

Note: This pressure gauge does not meet NACE specs.

275Y160SS

(Recommended for FR10/FB11)

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 | RK548KYSS |

Filter Element Kits

| | |
|-----------------------------|---------|
| FF504 Particulate(5 micron) | EK504VY |
| FF501 Coalescing(.3 micron) | EKF501H |
| FF10/FB11 Particulate | EK55J |
| FF11 Coalescing | EKF71 |
| FB548 Particulate(5 micron) | EK504VY |

Cage Kits

| | |
|-------------|-----------|
| FR364/FB548 | CKR364YSS |
| FR10/FB11 | CKR10YSS |

Filter, Regulator, Lubricator (FRL)