



**Air Preparation Products
Stainless Steel Products**

PF504 Particulate Filters	F2-F3
PF10 Particulate Filters	F4-F5
PF501 Coalescing Filters	F6-F7
PF11 Coalescing Filters	F8-F9
PR354 & PR364 Regulators	F10-F11
PR10 & PR11 Regulators	F12-F13
PB548 & PB558 Filter / Regulators	F14-F15
PB11 & PB12 Filter / Regulators	F16-F17
PL10 Lubricators	F18-F19



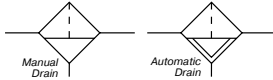
Stainless Steel
Products



Miniature Particulate Filter

PF504 Particulate Filters - Miniature

- Stainless steel construction handles most corrosive environments
- Fluorocarbon seals standard
- Meets NACE specifications MR-01-75/ISO 15156
- 1/8" female threaded drain
- 1/4" port (NPT, BSPP)



Port Size	Description	Part Number
1/4"	Twist Drain, NPT	PF504-02DHSS
1/4"	Auto Pulse Drain, NPT	PF504-02DHRSS

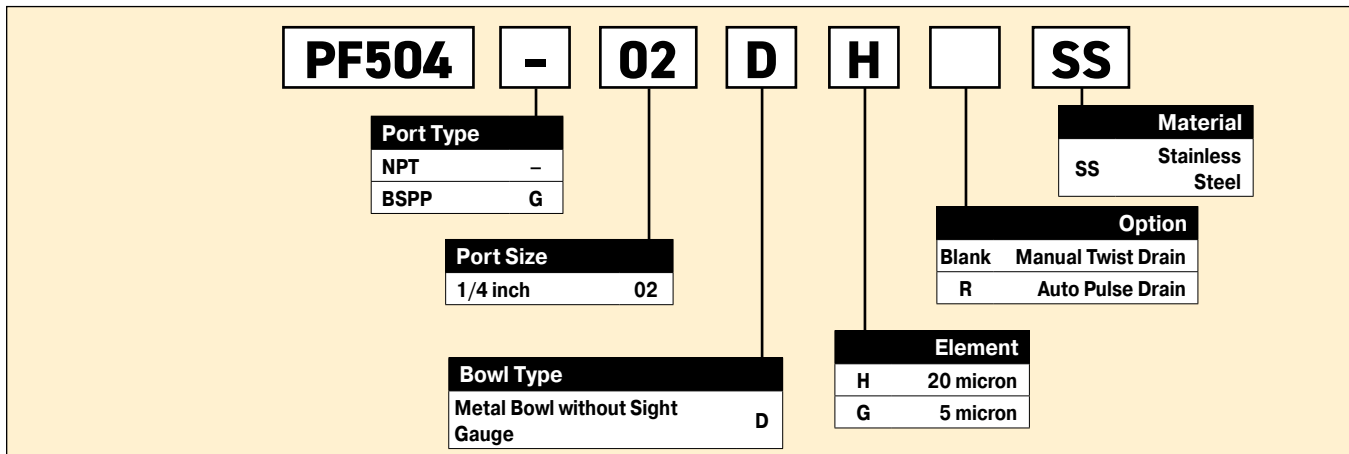
Operating information

Operating pressure:	
Twist drain	0 to 300 psig (0 to 20.7 bar)
Auto pulse drain	10 to 175 psig (0 to 12 bar)
Operating temperature:	
Twist drain	0°F to 180°F (-18°C to 82°C)
Auto pulse drain	32°F to 150°F (0°C to 66°C)
Flow capacity†:	23 scfm (10.9 dm ³ /s, ANR)
Bowl capacity:	1.0 oz.
Filter rating:	20 micron
Sump capacity:	0.4 oz.
Weight:	0.6 lb (0.27 kg)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

† scfm = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Ordering Information:



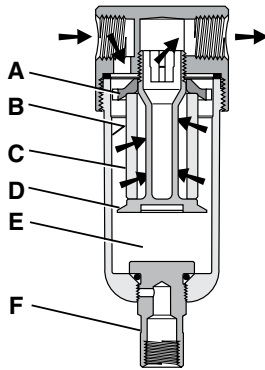
Most popular.



Stainless Steel Products
Filters
Coalescers
Regulators
Filter / Regulators
Lubricators

Miniature Particulate Filter

Operation

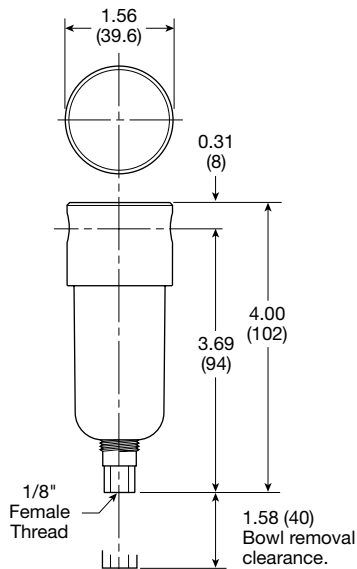


First Stage Filtration:

Air enters at inlet port and flows through deflector plate (A) which causes a swirling action. Liquids and coarse particles are forced to the bowl interior wall (B) by the centrifugal action of the swirling air. They are then carried down the bowl wall by the force of gravity. The baffle (D) separates the lower portion of the bowl into a "quiet zone" (E) where the removed liquid and particles collect, unaffected by the swirling air, and are therefore not reentrained into the flowing air.

Second Stage Filtration:

After liquids and large particles are removed in the first stages of filtration, the air flows through element (C) where smaller particles are filtered out. The filtered air then passes downstream. Collected liquids and particles in the "quiet zone" (E) should be drained before their level reaches a height where they would be reentrained in the flowing air. This can be accomplished by unscrewing the drain valve (F) slightly until the liquid begins to drain.



Inches (mm)

Air Preparation Products Stainless Steel

Material Specifications

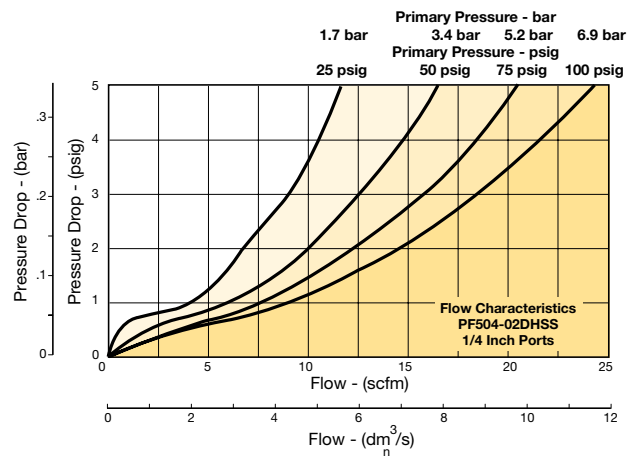
Body	316 stainless steel
Bowls	316 stainless steel
Deflector	Acetal
Drain	316 stainless steel
Element holder	Acetal
Filter element	Polyethylene
Seals	Fluorocarbon

Repair and Service Kits

Auto pulse drain	RK504SY-SS
Manual twist drain (small, old)	SA600Y7-1SS
Manual twist drain (large, new)	SAP05481
5 micron element	EK504VY
20 micron element	EK504Y
Pipe nipple, 1/4" 316 stainless steel	1/4 FF-SS

Flow Charts

PF504 1/4" Filter



F

Stainless Steel
Products

Filters

Coalescers

Regulators

Filter /
Regulators

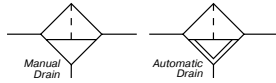
Lubricators



Standard Particulate Filter

PF10 Particulate Filters - Standard

- Stainless steel construction handles most corrosive environments
- Fluorocarbon seals standard
- Meets NACE specifications MR-01-75/ISO 15156
- 1/8" female threaded drain
- 1/2" port (NPT, BSPP)



Port Size	Description	Part Number
1/2"	Twist Drain, with Sight Gauge, NPT	PF10-04WJSS
1/2"	Auto Float Drain, with Sight Gauge, NPT	PF10-04WJRSS

Operating information

Operating pressure:	
Twist drain, no sight gauge	0 to 300 psig (0 to 20.7 bar)
Twist drain, sight gauge	0 to 250 psig (0 to 17.2 bar)
Auto float drain	10 to 175 psig (0 to 12 bar)
Operating temperature:	
Twist drain, no sight gauge	0°F to 180°F (-18°C to 82°C)
Twist drain, sight gauge	0°F to 150°F (-18°C to 66°C)
Auto float drain	32°F to 150°F (0°C to 66°C)
Flow capacity†:	70 scfm (33 dm³/s, ANR)
Bowl capacity:	4.0 oz.
Filter rating:	40 micron
Sump capacity:	1.7 oz.
Weight:	1.9 lb (0.85 kg)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

† scfm = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Ordering Information:

PF10	-	04	D	J		SS
Port Type		Port Size		Bowl Type		Material
NPT - BSPP G		1/2 inch 04		Metal Bowl without Sight Gauge D Metal Bowl with Sight Gauge W		SS Stainless Steel
				Option		Element
				Blank Manual Twist Drain R Auto Float Drain		J 40 micron G 5 micron

Most popular.

U

Stainless Steel Products

Filters

Coalescers

Regulators

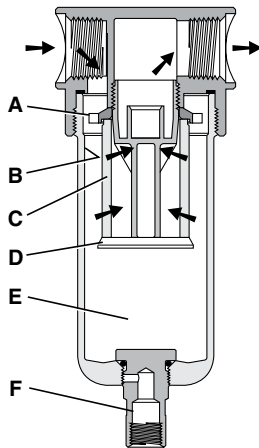
Filter / Regulators

Lubricators



Standard Particulate Filter

Operation

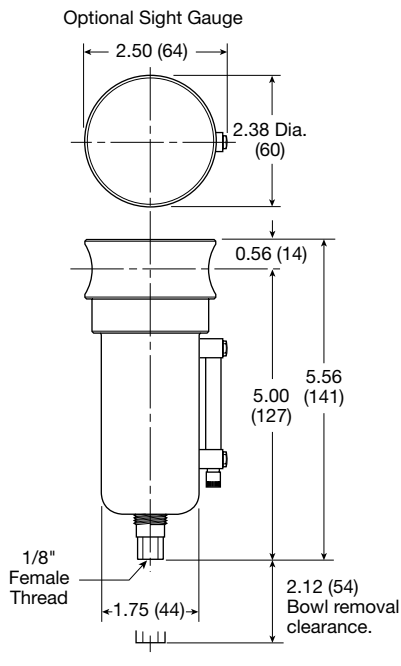


First Stage Filtration:

Air enters at inlet port and flows through deflector plate (A) which causes a swirling action. Liquids and coarse particles are forced to the bowl interior wall (B) by the centrifugal action of the swirling air. They are then carried down the bowl wall by the force of gravity. The baffle (D) separates the lower portion of the bowl into a "quiet zone" (E) where the removed liquid and particles collect, unaffected by the swirling air, and are therefore not reentrained into the flowing air.

Second Stage Filtration:

After liquids and large particles are removed in the first stages of filtration, the air flows through element (C) where smaller particles are filtered out. The filtered air then passes downstream. Collected liquids and particles in the "quiet zone" (E) should be drained before their level reaches a height where they would be reentrained in the flowing air. This can be accomplished by unscrewing the drain valve (F) slightly until the liquid begins to drain.



Inches (mm)

Air Preparation Products Stainless Steel

Material Specifications

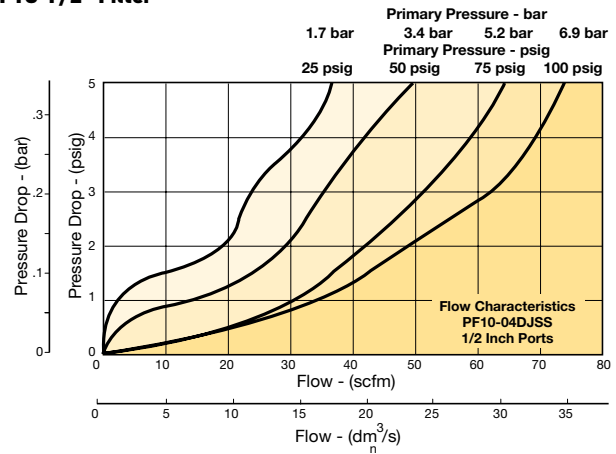
Body	316 stainless steel
Bowls	316 stainless steel
Deflector	Acetal
Drain	316 stainless steel
Element holder	Acetal
Filter element	Polyethylene
Seals	Fluorocarbon
Sight gauge	Isoplast

Repair and Service Kits

Automatic float drain	SA10MDSS
Manual twist drain (small, old)	SA600Y7-1SS
Manual twist drain (large, new)	SAP05481
40 micron element	EK55J
5 micron element	EK55G
Pipe nipple, 1/2" 316 stainless steel	616A28-SS

Flow Charts

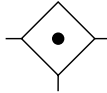
PF10 1/2" Filter



Miniature Coalescing Filter

PF501 Coalescing Filters - Miniature

- Stainless steel construction handles most corrosive environments
- Meets NACE specifications MR-01-75/ISO 15156
- 1/8" female threaded drain
- 1/4" port (NPT, BSPP)



Port Size	Description	Part Number
1/4"	Twist Drain, NPT	PF501-02DHSS
1/4"	Auto Pulse Drain, NPT	PF501-02DHRSS

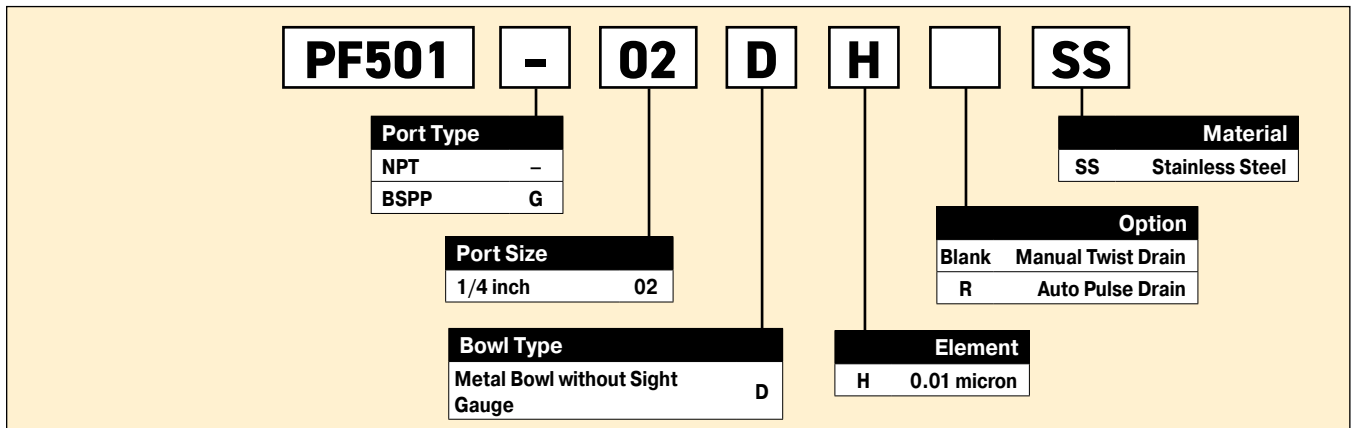
Operating information

Operating pressure:	
Twist drain	0 to 300 psig (0 to 20.7 bar)
Auto pulse drain	10 to 175 psig (0 to 12 bar)
Operating temperature:	
Twist drain	0°F to 180°F (-18°C to 82°C)
Auto pulse drain	32°F to 150°F (0°C to 66°C)
Flow capacity†:	16 scfm (7.6 dm³/s, ANR)
Bowl capacity:	1.0 oz.
Filter rating:	0.01 micron
Sump capacity:	0.4 oz.
Weight:	0.6 lb (0.27 kg)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

† scfm = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Ordering Information:

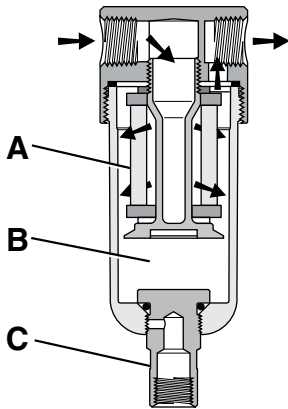


Stainless Steel Products
 Filters
 Coalescers
 Regulators
 Filter / Regulators
 Lubricators



Miniature Coalescing Filter

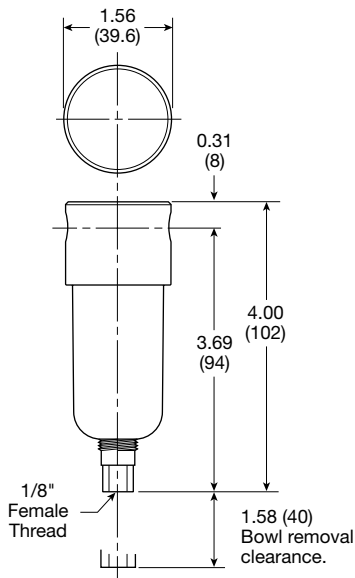
Operation



The contaminated air enters the element interior and is forced through a thick membrane (A) of "borosilicate" glass fibers coated with epoxy. Flow then passes through the element, and at this stage 99.97% of the sub-micronic particles have been removed from the air stream. The tiny droplets coalesce together and are collected from the filter element by the outer drain layer.

The clean, filtered air now passes through and out into the pneumatic system. The air line coalescing filter removes liquid aerosols and sub-micron particulate matter.

Collected liquids and particles in the "quiet zone" (B) should be drained before their level reaches a height where they would be reentrained in the flowing air. This can be accomplished by unscrewing the drain valve (C) slightly until the liquid begins to drain.



Inches (mm)

Air Preparation Products Stainless Steel

Material Specifications

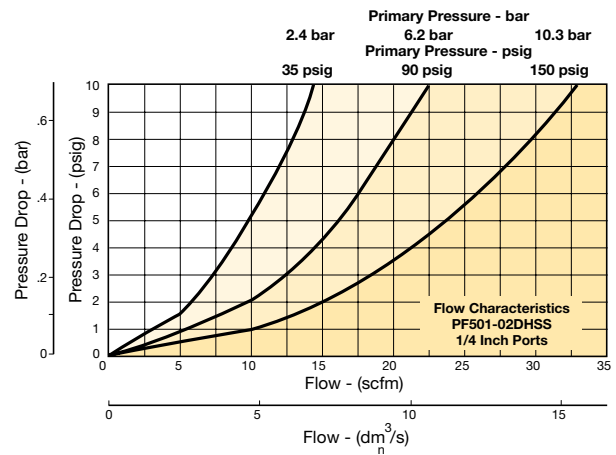
Body	316 stainless steel
Bowls	316 stainless steel
Drain	316 stainless steel
Element holder	Acetal
Filter element	Borosilicate Fiber
Seals	Fluorocarbon

Repair and Service Kits

Auto pulse drain	RK504SY-SS
Manual twist drain (small, old)	SA600Y7-1SS
Manual twist drain (large, new)	SAP05481
0.01 micron element	EKF501H
Pipe nipple, 1/4" 316 stainless steel	1/4 FF-SS

Flow Charts

PF501 1/4" Coalescing Filter



F

Stainless Steel
Products

Filters

Coalescers

Regulators

Filter /
Regulators

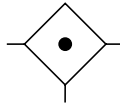
Lubricators



Standard Coalescing Filter

PF11 Coalescing Filters - Standard

- Stainless steel construction handles most corrosive environments
- Meets NACE specifications MR-01-75/ISO 15156
- 1/8" female threaded drain
- 1/2" port (NPT, BSPP)



Operating information

Operating pressure:
 Twist drain, no sight gauge 0 to 300 psig (0 to 20.7 bar)
 Twist drain, sight gauge 0 to 250 psig (0 to 17.2 bar)
 Auto float drain 10 to 175 psig (0 to 12 bar)

Operating temperature:
 Twist drain, no sight gauge 0°F to 180°F (-18°C to 82°C)
 Twist drain, sight gauge 0°F to 150°F (-18°C to 66°C)
 Auto float drain 32°F to 150°F (0°C to 66°C)

Flow capacity†: 45 scfm (21.2 dm³/s, ANR)

Bowl capacity: 4.0 oz.

Filter rating: 0.01 micron

Sump capacity: 1.7 oz.

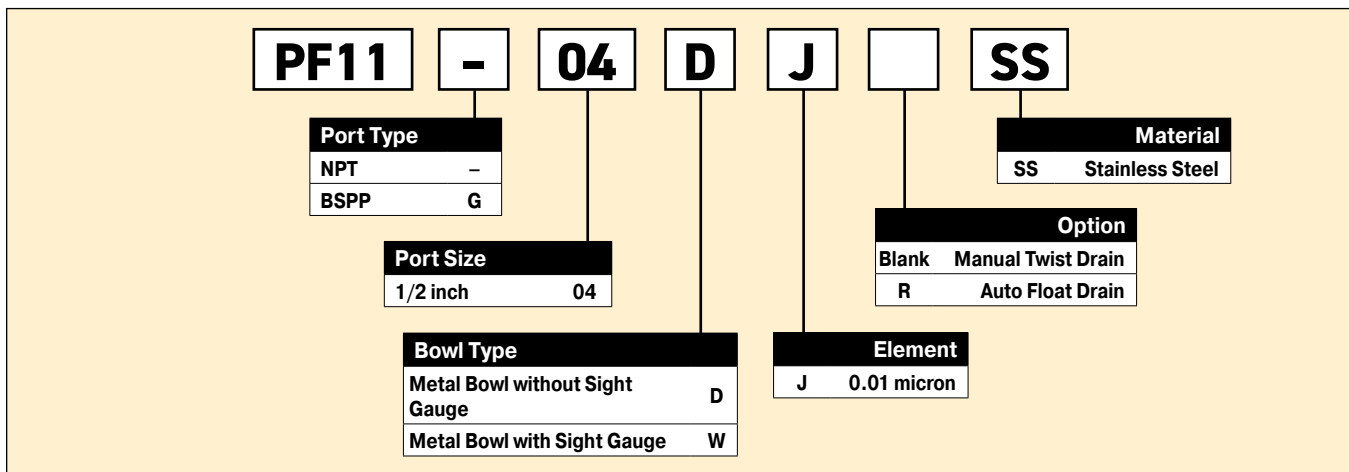
Weight: 1.9 lb (0.85 kg)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

† scfm = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Port Size	Description	Part Number
1/2"	Twist Drain, with Sight Gauge, NPT	PF11-04WJSS
1/2"	Auto Float Drain, with Sight Gauge, NPT	PF11-04WJRSS

Ordering Information:

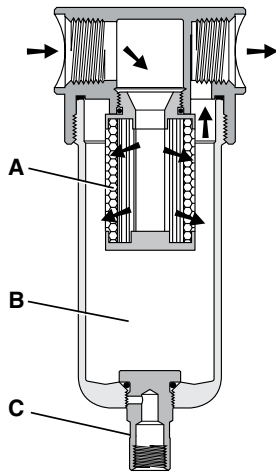


Most popular.

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 Products
 Filters
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 Regulators
 Filter /
 Regulators
 Lubricators

Standard Coalescing Filter

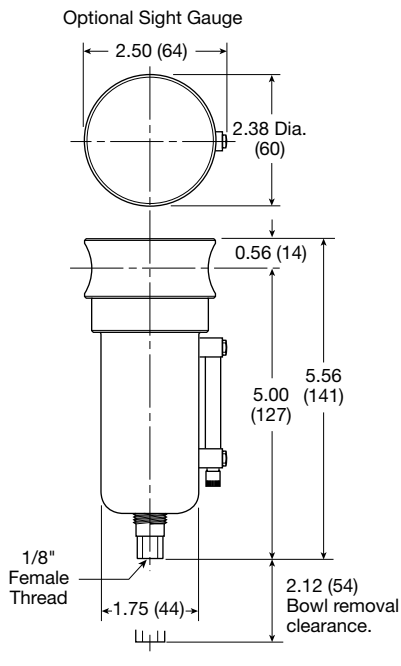
Operation



The contaminated air enters the element interior and is forced through a thick membrane (A) of "borosilicate" glass fibers coated with epoxy. Flow then passes through the element, and at this stage 99.9997% of the sub-micronic particles have been removed from the air stream. The tiny droplets coalesce together and are collected from the filter element by the outer drain layer.

The clean, filtered air now passes through and out into the pneumatic system. The air line coalescing filter removes liquid aerosols and sub-micron particulate matter.

Collected liquids and particles in the "quiet zone" (B) should be drained before their level reaches a height where they would be reentrained in the flowing air. This can be accomplished by unscrewing the drain valve (C) slightly until the liquid begins to drain.



Inches (mm)

Air Preparation Products Stainless Steel

Material Specifications

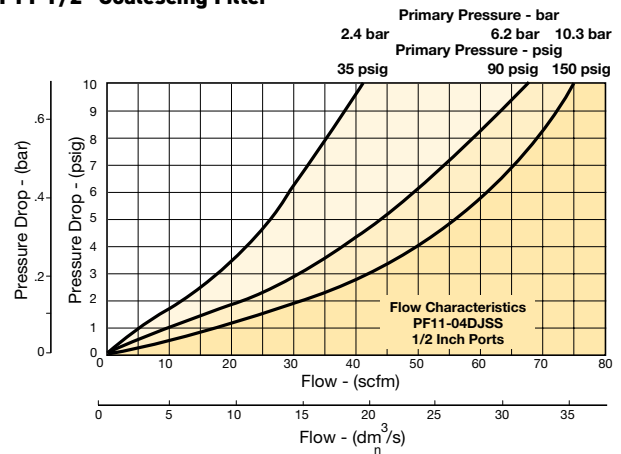
Body	316 Stainless Steel
Bowls	316 Stainless Steel
Drain	316 Stainless Steel
Element holder	Acetal
Filter element	Borosilicate Fiber
Seals	Fluorocarbon
Sight gauge	Isoplast

Repair and Service Kits

Automatic float drain	SA10MDSS
0.01 micron element	EKF71
Pipe nipple, 1/2" 316 stainless steel	616A28-SS

Flow Charts

PF11 1/2" Coalescing Filter



Miniature Regulators

PR354, PR364 Regulator - Miniature

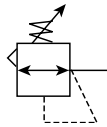
- Stainless steel construction handles most corrosive environments
- Large diaphragm to valve area ratio for precise regulation and high flow capacity
- Meets NACE specifications MR-01-75/ISO 15156
- 1/4" port (NPT, BSPP)



PR364



PR354



Port Size	Description	Part Number
1/4"	Standard Knob, NPT	PR364-02CSS
1/4"	Stainless Steel, NPT	PR354-02CSS

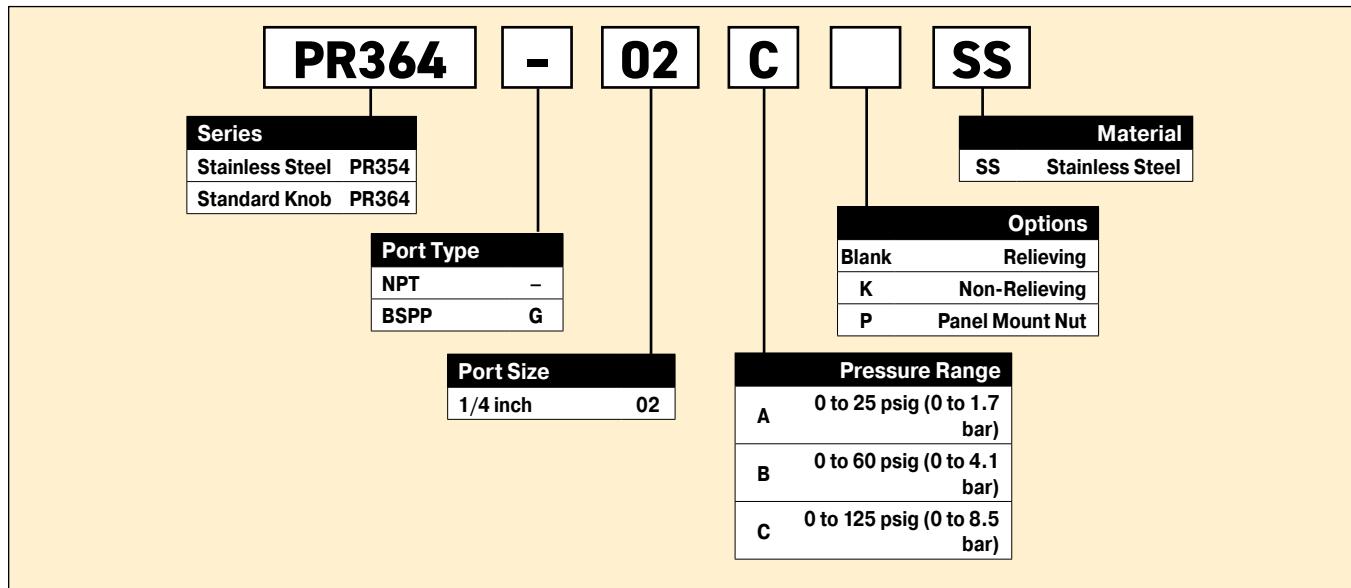
Operating information

Operating pressure:	
PR354	300 psig (20.7 bar)
PR364	300 psig (20.7 bar)
Operating temperature:	
PR354	0°F to 180°F (-18°C to 82°C)
PR364	0°F to 150°F (-18°C to 66°C)
Flow capacity†:	12 scfm (5.7 dm³/s, ANR)
Gauge port:	1/4 inch
Operation:	Fluorocarbon diaphragm
Weight:	0.5 lb (0.23 kg)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

† scfm = Standard cubic feet per minute at 100 psig inlet, 75 psig no flow secondary setting and 15 psig pressure drop.

Ordering Information:

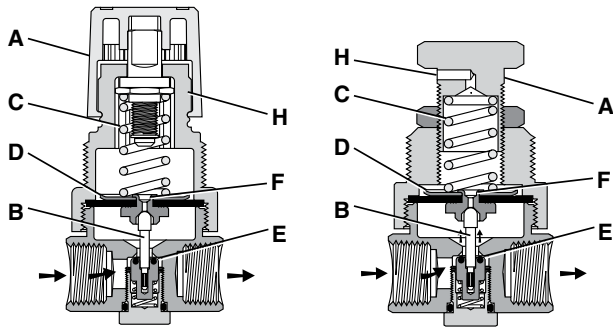


Most popular.



Miniature Regulators

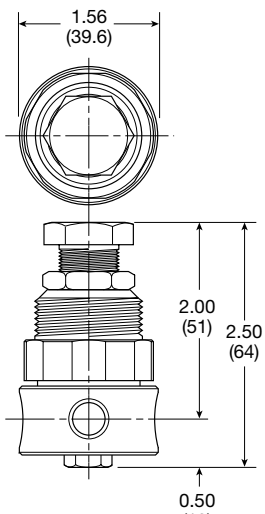
Operation



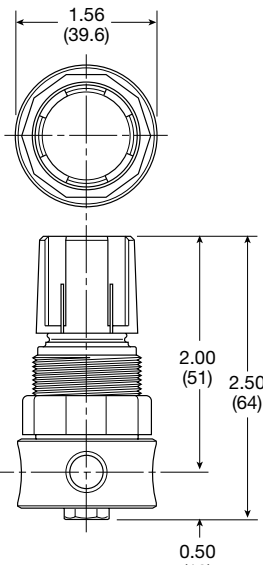
With the adjusting knob (A) turned fully counter-clockwise (no spring load), and pressure supplied to the regulator inlet port, the valve poppet assembly (B) is closed. Turning the adjusting knob clockwise applies a load to control spring (C). This load causes the diaphragm (D) and the valve poppet assembly (B) to move downward allowing flow across the seat area (E) created between the poppet assembly and the seat. Pressure in the downstream line is sensed below the diaphragm (D) and offsets the load of spring (C). As downstream pressure rises, poppet assembly (B) and diaphragm (D) move upward until the area (E) is closed and the load of the spring (C) and pressure under diaphragm (D) are in balance. A reduced outlet pressure has now been obtained, depending on spring load. Creating a demand downstream, such as opening a valve, results in a reduced pressure under the diaphragm (D). The load of control spring (C) now causes the poppet assembly to move downward opening seat area (E) allowing air to flow to meet the downstream demand. The flow of downstream air is metered by the amount of opening (E).

Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the diaphragm (D) to move upward against control spring (C), open vent hole (F), and vent the excess pressure to atmosphere through the hole in the bonnet (H). (This occurs in the relieving type regulator only.)

PR354



PR364



Inches (mm)

Air Preparation Products Stainless Steel

Material Specifications

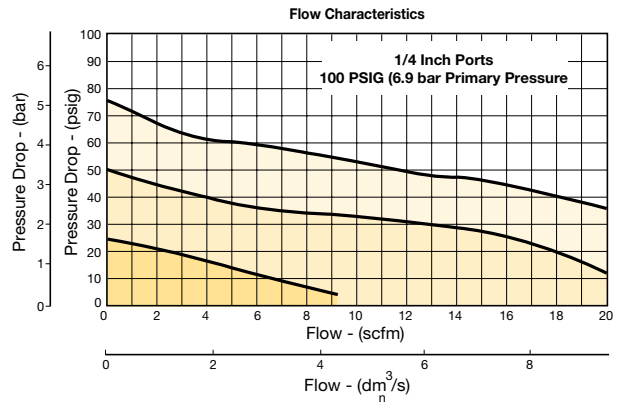
Adjustment mechanism / springs	316 stainless steel
Adjusting knob (PR354)	316 Stainless Steel
Adjusting knob (PR364)	Polypropylene
Body	316 stainless steel
Bonnet (PR354)	316 stainless steel
Bonnet (PR364)	Acetal
Bottom plug	316 stainless steel
Poppet	316 stainless steel
Seals	Fluorocarbon

Repair and Service Kits

PR354 bonnet kit	CKR354YSS
PR364 bonnet kit (knob included)	CKR364Y-1SS
1-1/2" face, 160 psig (0 to 1100 kPa), gauge (stainless)	K4515N14160SS
Panel mount bracket (Stainless)	161X57-SS
Panel mount nut, stainless	R05X51-SS
Panel mount nut, plastic	R05X51-P
Pipe nipple, 1/4" 316 stainless steel	1/4 FF-SS
Relieving	RKR364YSS
Non-relieving	RKR364KYSS
0-25 psig spring	SPR-375-2-SS
0-60 psig spring	SPR-376-1-SS
0-125 psig spring	SPR-377-1-SS

Flow Charts

PR354, PR364 1/4" Regulator



WARNING

Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed Maximum primary pressure rating.

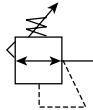
CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Standard Regulators

PR10, PR11 Regulator - Standard

- Stainless steel construction handles most corrosive environments
- Large diaphragm to valve area ratio for precise regulation and high flow capacity
- Meets NACE specifications MR-01-75/ISO 15156
- Low temperature version available
- 1/2" port (NPT, BSPP)



PR11



PR10

Operating information

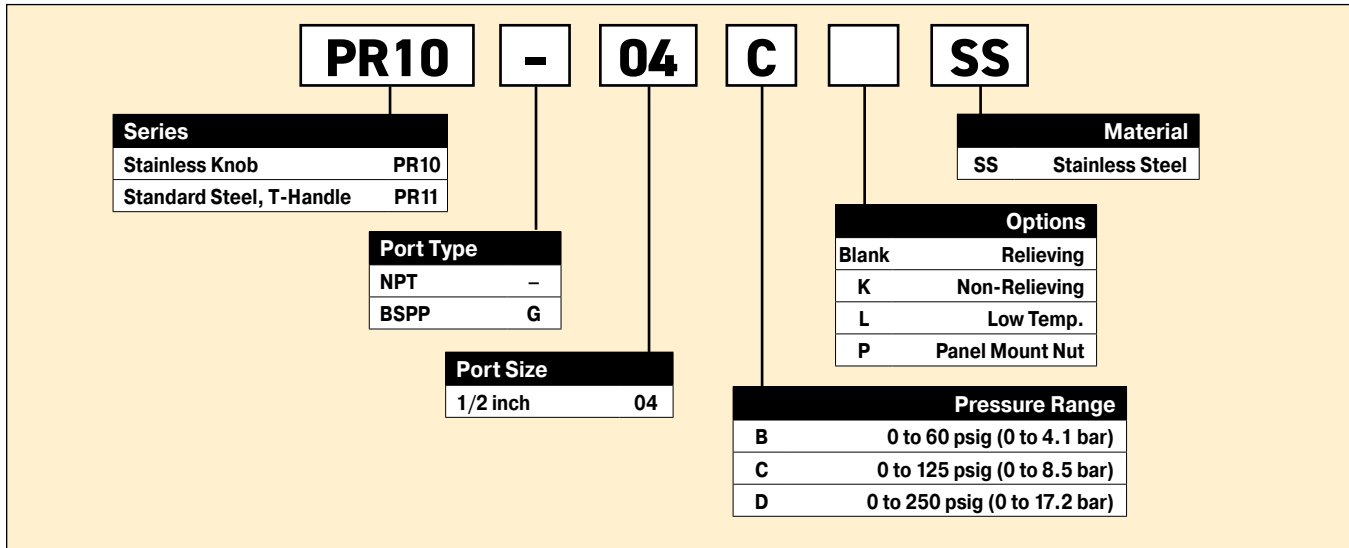
Operating pressure:	
PR10	300 psig (20.7 bar)
PR11	300 psig (20.7 bar)
Operating temperature:	
PR10	0°F to 150°F (-18°C to 66°C)
PR11	0°F to 180°F (-18°C to 82°C)
	Option "L" minimum -40°F (-40°C)
Flow capacity†:	80 scfm (37.8 dm³/s, ANR)
Gauge port:	1/4 inch
Operation:	Fluorocarbon diaphragm
Weight:	1.79 lb (0.81 kg)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

† scfm = Standard cubic feet per minute at 100 psig inlet, 75 psig no flow secondary setting and 15 psig pressure drop.

Port Size	Description	Part Number
1/2"	Standard Knob, NPT	PR10-04CSS
1/2"	Stainless Steel T-Handle, NPT	PR11-04CSS

Ordering Information:



Most popular.

U

Stainless Steel Products

Filters

Coalescers

Regulators

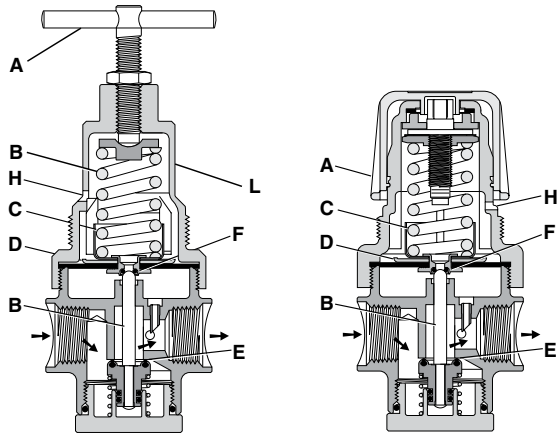
Filter / Regulators

Lubricators



Standard Regulators

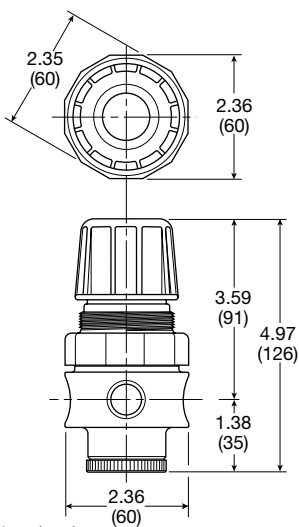
Operation



With the adjusting knob / T-Handle (A) turned fully counter-clockwise (no spring load), and pressure supplied to the regulator inlet port, the valve poppet assembly (B) is closed. Turning the adjusting knob clockwise applies a load to control spring (C). This load causes the diaphragm (D) and the valve poppet assembly (B) to move downward allowing flow across the seat area (E) created between the poppet assembly and the seat. Pressure in the downstream line is sensed below the diaphragm (D) and offsets the load of spring (C). As downstream pressure rises, poppet assembly (B) and diaphragm (D) move upward until the area (E) is closed and the load of the spring (C) and pressure under diaphragm (D) are in balance. A reduced outlet pressure has now been obtained, depending on spring load. Creating a demand downstream, such as opening a valve, results in a reduced pressure under the diaphragm (D). The load of control spring (C) now causes the poppet assembly to move downward opening seat area (E) allowing air to flow to meet the downstream demand. The flow of downstream air is metered by the amount of opening (E).

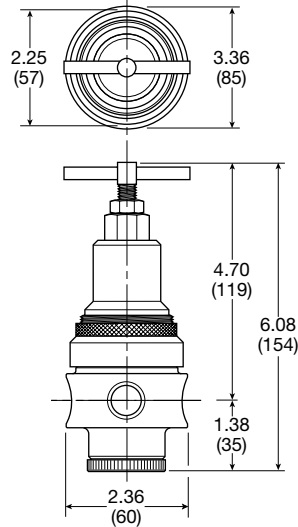
Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the diaphragm (D) to move upward against control spring (C), open vent hole (F), and vent the excess pressure to atmosphere through the hole in the bonnet (H). (This occurs in the relieving type regulator only.)

PR10



Inches (mm)

PR11



Air Preparation Products Stainless Steel

Material Specifications

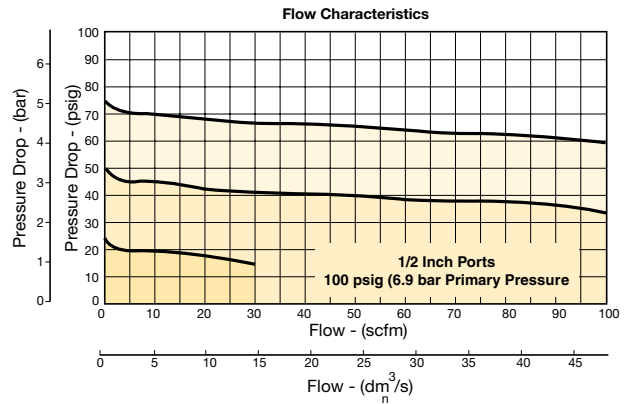
Adjustment mechanism / springs	316 stainless steel
Body	316 stainless steel
Bonnet / tee handle (PR11)	316 stainless steel
Bonnet / knob (PR10)	Acetal
Bottom plug	316 stainless steel
Poppet	316 stainless steel
Seals	Fluorocarbon

Repair and Service Kits

PR10 bonnet kit (knob included)	CKR10YSS
PR11 bonnet kit	CKR11YSS
2" Face 160 psig (0 to 1100 kPa), gauge (stainless)	K4520N14160SS
Panel mount bracket (stainless)	R10Y57-SS
Panel mount nut, stainless	R10X51-SS
Panel mount nut, plastic	R10X51-P
Pipe nipple, 1/2" 316 stainless steel	616A28-SS
Relieving	RKR10YSS
Non-relieving	RKR10KYSS
0-60 psig spring	SPR-388-1-SS
0-125 psig spring	SPR-389-1-SS
0-250 psig spring	SPR-390-1-SS

Flow Charts

PR10 1/2" Regulator



WARNING

**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed Maximum primary pressure rating.**

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.



PB548, PB558 Filter / Regulator - Miniature

- Stainless steel construction handles most corrosive environments
- Large diaphragm to valve area ratio for precise regulation and high flow capacity
- 1/8" female threaded drain
- Meets NACE specifications MR-01-75/ISO 15156
- 1/4" port (NPT, BSPP)



PB548

PB558

Port Size	Description	Part Number
1/4"	Standard Knob, NPT	PB548-02DHCSS
1/4"	Stainless Steel, NPT	PB558-02DHCSS

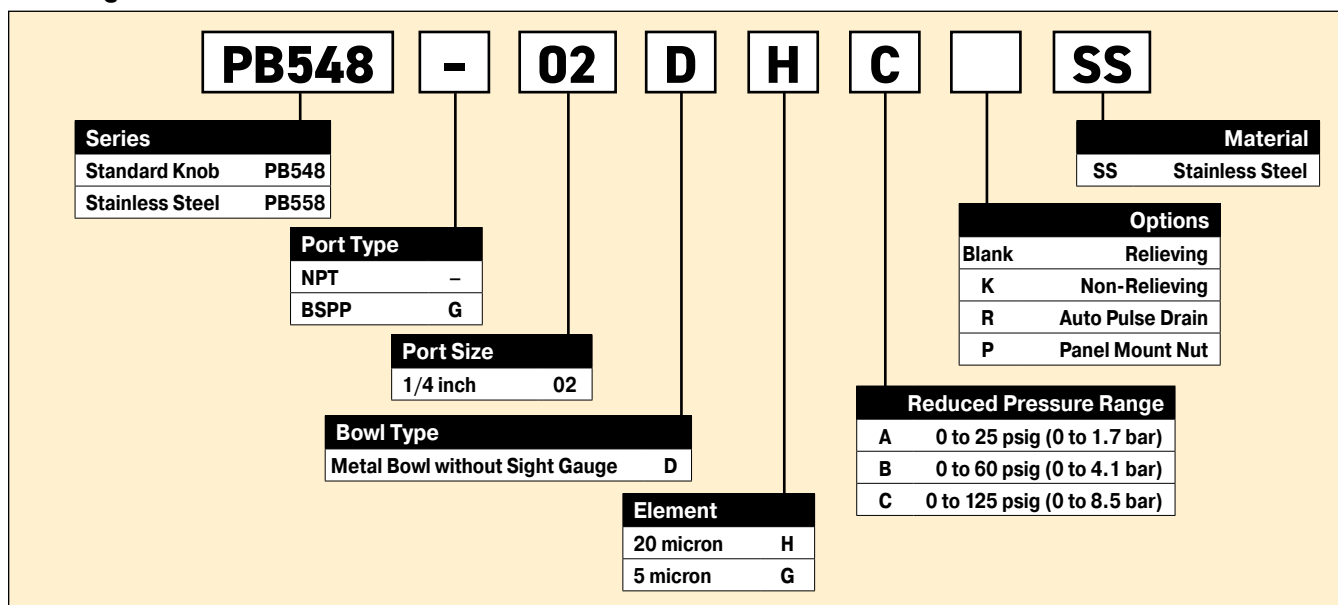
Operating information

Operating pressure:	
PB548	300 psig (20.7 bar)
PB558	300 psig (20.7 bar)
Auto pulse drain	10 to 175 psig (0 to 12 bar)
Operating temperature:	
PB548	0°F to 150°F (-18°C to 66°C)
PB558	0°F to 180°F (-18°C to 82°C)
Auto pulse drain	32°F to 150°F (0°C to 66°C)
Flow capacity†:	12 scfm (5.7 dm³/s, ANR)
Bowl capacity:	1.0 oz.
Filter rating:	20 micron
Sump capacity:	0.4 oz.
Gauge port:	1/4 inch
Operation:	Fluorocarbon diaphragm
Weight:	0.6 lb (0.27 kg)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

† scfm = Standard cubic feet per minute at 100 psig inlet, 75 psig no flow secondary setting and 15 psig pressure drop.

Ordering Information:



☐ Most popular.

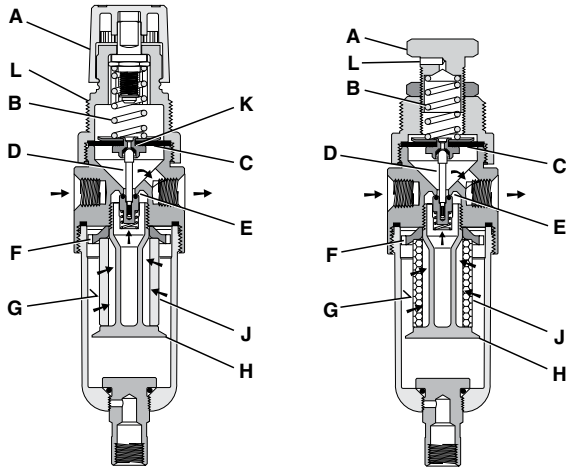
Stainless Steel Products
Filters
Coalescers
Regulators
Filter / Regulators
Lubricators



Miniature Filter / Regulator

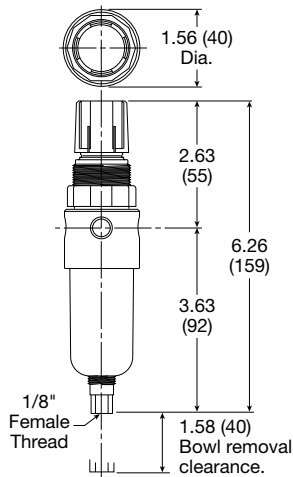
Air Preparation Products Stainless Steel

Operation



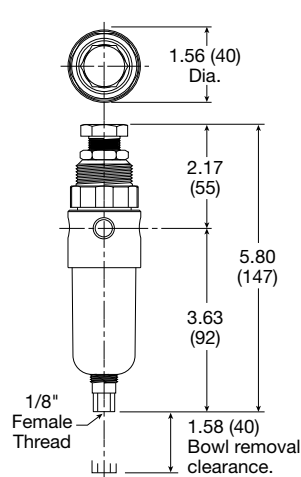
Turning the adjusting knob (A) clockwise applies a load to control spring (B) which forces diaphragm (C) and valve poppet assembly (D) to move downward allowing filtered air to flow through the seat area (E) created between the poppet assembly and the seat. "First stage filtration". Air pressure supplied to the inlet port is directed through deflector plate (F) causing a swirling centrifugal action forcing liquids and coarse particles to the inner bowl wall (G) and down below the lower baffle (H) to the quiet zone. After liquids and large particles are removed in the first stage of filtration "second stage filtration" occurs as air flows through element (J) where smaller particles are filtered out and retained. The air flow now passes through seat area (E) to the outlet port of the unit. Pressure in the downstream line is sensed below the diaphragm (C) and offsets the load of spring (B). When downstream pressure reaches the set-point, poppet valve assembly (D) and diaphragm (C) move upward closing seat area (E). Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the diaphragm (C) to move upward opening vent hole (K) venting the excess pressure to atmosphere through the hole in the bonnet (L). (This occurs in the standard relieving type filter/regulators only.)

PB548



Inches (mm)

PB558



Material Specifications

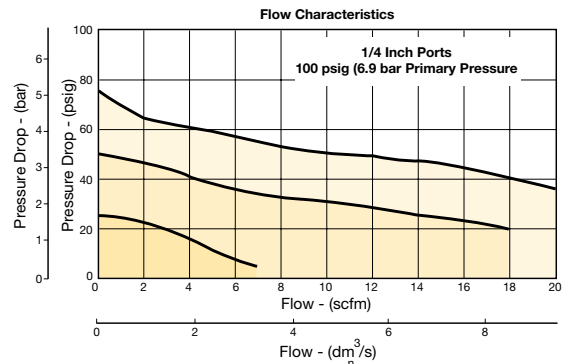
Adjustment mechanism / springs	316 stainless steel
Body	316 Stainless steel
Bonnet (PB548)	Acetal
Bonnet (PB558)	316 stainless steel
Bottom plug	316 stainless steel
Knob (PB548)	Polypropylene
Knob (PB558)	316 stainless steel
Poppet	316 stainless steel
Seals	Fluorocarbon

Repair and Service Kits

PB558 bonnet kit (knob included)	CKR354YSS
PB548 bonnet kit (knob included)	CKR364Y-1SS
Automatic pulse drain	RK504SY-SS
Manual twist drain (small, old)	SA600Y7-1SS
Manual twist drain (large, new)	SAP05481
5 micron element	EK504VY
20 micron element	EK504Y
1-1/2" face 160 psig (0 to 1100 kPa), gauge (stainless)	K4515N14160SS
Panel mount bracket (stainless)	161X57-SS
Panel mount nut, stainless	R05X51-SS
Panel mount nut, plastic	R05X51-P
Pipe nipple, 1/4" 316 stainless steel	1/4 FF-SS
Relieving	RK549YSS
Non-relieving	RK548YSS
0-25 psig spring	SPR-375-2-SS
0-60 psig spring	SPR-376-1-SS
0-125 psig spring	SPR-377-1-SS

Flow Charts

PB548, PB558 1/4" Filter / Regulator



⚠ WARNING

**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed Maximum primary pressure rating.**

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

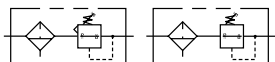
PB11, PB12 Filter / Regulator - Standard

- Stainless steel construction handles most corrosive environments
- Large diaphragm to valve area ratio for precise regulation and high flow capacity
- 1/8" female threaded drain
- Meets NACE specifications MR-01-75/ISO-15156
- Low temperature version available
- 1/2" port (NPT, BSPP)



PB11

PB12



Port Size	Description	Part Number
With Sight Gauge, NPT		
1/2"	Standard Knob, Twist Drain	PB11-04WJCSS
1/2"	Standard Knob, Auto Float Drain	PB11-04WJCRSS
1/2"	Stainless Steel T-Handle, Twist Drain	PB12-04WJCSS
1/2"	Stainless Steel T-Handle, Auto Float Drain	PB12-04WJCRSS

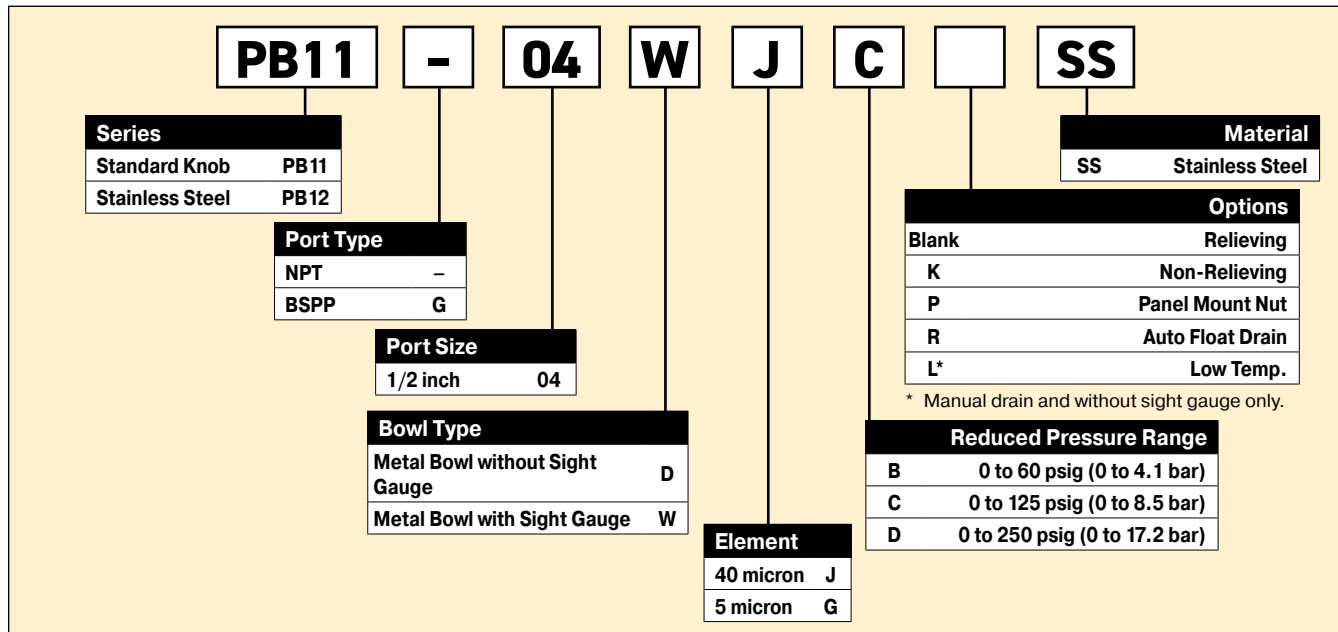
Operating information

Operating pressure:	
PB11, PB12	300 psig (20.7 bar)
Auto float drain	15 to 175 psig (1 to 12 bar)
Operating temperature:	
PB11	0°F to 150°F (-18°C to 66°C)
PB12, no sight gauge	0°F to 180°F (-18°C to 82°C)
PB12, sight gauge	0°F to 150°F (-18°C to 66°C)
Auto float drain	32°F to 150°F (0°C to 66°C)
Flow capacity [†] :	72 scfm (34 dm ³ /s, ANR)
Bowl capacity:	4.0 oz.
Filter rating:	40 micron
Sump capacity:	1.7 oz.
Gauge port:	1/4 inch
Operation:	Fluorocarbon diaphragm
Weight:	2.42 lb (1.09 kg)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

[†] scfm = Standard cubic feet per minute at 100 psig inlet, 75 psig no flow secondary setting and 15 psig pressure drop.

Ordering Information:



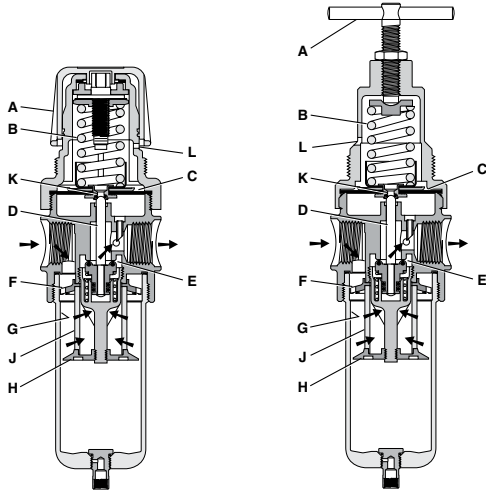
Most popular.

Products
 Stainless Steel
 Filters
 Coalescers
 Regulators
 Filter / Regulators
 Lubricators



Standard Filter / Regulator

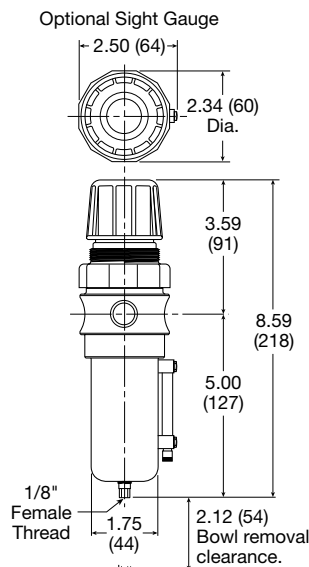
Operation



Turning the adjusting knob / T-Handle (A) clockwise applies a load to control spring (B) which forces diaphragm (C) and valve poppet assembly (D) to move downward allowing filtered air to flow through the seat area (E) created between the poppet assembly and the seat. “First stage filtration”. Air pressure supplied to the inlet port is directed through deflector plate (F) causing a swirling centrifugal action forcing liquids and coarse particles to the inner bowl wall (G) and down below the lower baffle (H) to the quiet zone. After liquids and large particles are removed in the first stage of filtration “second stage filtration” occurs as air flows through element (J) where smaller particles are filtered out and retained. The air flow now passes through seat area (E) to the outlet port of the unit. Pressure in the downstream line is sensed below the diaphragm (C) and offsets the load of spring (B). When downstream pressure reaches the set-point, poppet valve assembly (D) and diaphragm (C) move upward closing seat area (E). Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the diaphragm (C) to move upward opening vent hole (K) venting the excess pressure to atmosphere through the hole in the bonnet (L). (This occurs in the standard relieving type filter/regulators only.)

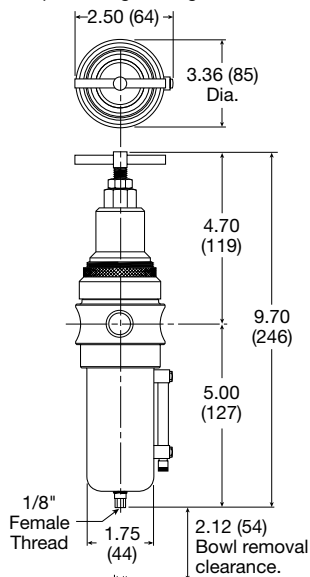
PB11

Inches (mm)



PB12

Optional Sight Gauge



Air Preparation Products Stainless Steel

Material Specifications

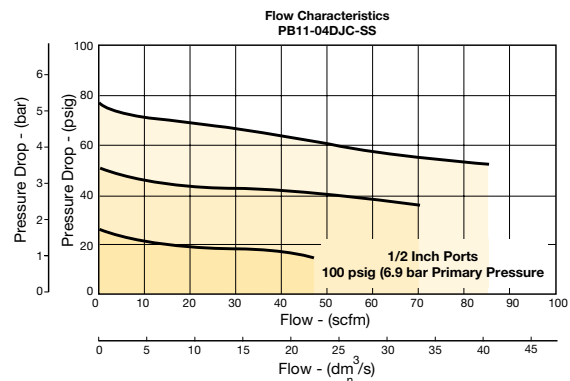
Adjustment mechanism / springs	316 stainless steel
Body	316 stainless steel
Bonnet / knob (PB11)	Acetal
Bonnet / tee handle (PB12)	316 stainless steel
Bottom plug	316 stainless steel
Poppet	316 stainless steel
Seals	Fluorocarbon
Sight gauge	Isoplast

Repair and Service Kits

PB11 bonnet kit (knob included)	CKR10YSS
PB12 bonnet kit	CKR11YSS
Auto float drain	SA10MDSS
Manual twist drain (small, old)	SA600Y7-1SS
Manual twist drain (large, new)	SAP05481
40 micron element	EKF10Y
5 micron element	EKF10VY
2" face 160 psig (0 to 1100 kPa), gauge (stainless)	K4520N14160SS
Panel mount bracket (stainless)	R10Y57-SS
Panel mount nut, stainless	R10X51-SS
Panel mount nut, plastic	R10X51-P
Pipe nipple, 1/2" 316 stainless steel	616A28-SS
Relieving	RKR10YSS
Non-relieving	RKR10KYSS
0-60 psig spring	SPR-388-1-SS
0-125 psig spring	SPR-389-1-SS
0-250 psig spring	SPR-390-1-SS

Flow Charts

PB11 1/2" Filter / Regulator



WARNING

**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed Maximum primary pressure rating.**

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.



PL10 Lubricators - Standard

- Stainless steel construction handles most corrosive environments
- 1/8" female threaded drain
- Fillable under pressure
- Meets NACE specifications MR-01-75/ISO 15156
- 1/2" port (NPT, BSPP)



Port Size	Description	Part Number
1/2"	Twist Drain, with Sight Gauge, NPT	PL10-04WSS
1/2"	Twist Drain, without Sight Gauge, NPT	PL10-04DSS

Operating information

Operating pressure:
 Metal bowl, no sight gauge 0 to 300 psig (0 to 20.7 bar)
 Metal bowl, sight gauge 0 to 250 psig (0 to 17.2 bar)

Operating temperature:
 Metal bowl, no sight gauge 0°F to 150°F (-18°C to 66°C)
 Metal bowl, sight gauge 0°F to 150°F (-18°C to 66°C)

Flow capacity†: 100 scfm (47.2 dm³/s, ANR)
 Bowl capacity: 4.0 oz.
 Weight: 1.9 lb (0.85 kg)

Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

† scfm = Standard cubic feet per minute at 90 psig inlet and 5 psig pressure drop.

Ordering Information:

PL10 - 04 W SS

Port Type	Material
NPT -	SS Stainless Steel
BSPP G	

Port Size	Bowl Type
1/2 inch 04	D Metal Bowl without Sight Gauge
	W Metal Bowl with Sight Gauge

Most popular.

PL

Stainless Steel Products

Filters

Coalescers

Regulators

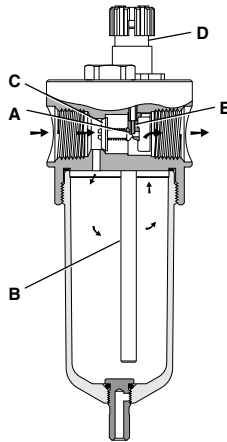
Filter / Regulators

Lubricators

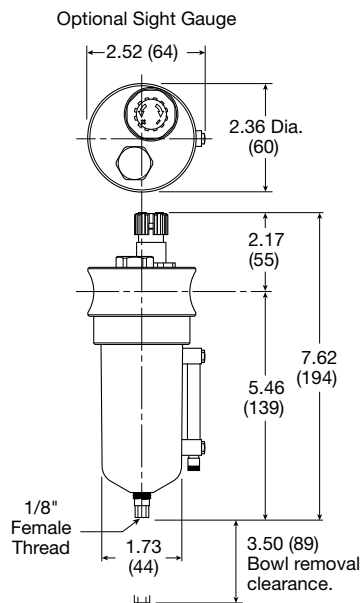


Standard Lubricator

Operation



Air flowing through the unit goes through two paths. At low flow rates the majority of the air flows through the Venturi section (A). The rest of the air opens the check valve (C). The velocity of the air flowing through the Venturi section (A) creates a pressure drop. This lower pressure allows the oil to be forced from the reservoir through the pickup tube (B) and travels up to the metering screw (D). The rate of oil delivery is then controlled by adjusting the metering screw (D). Oil flows past the metering screw (D) and forms a drop in the nozzle tube (E). As the oil drops through the dome (F) and back into the Venturi section (A), it is broken up into fine particles. It is then mixed with the air flowing past the check valve (C) and is carried downstream. As the air flow increases the check valve (C) will open more fully. This additional flow will assure that the oil delivery rate will increase linearly with the increase of air flow.



Inches (mm)

Air Preparation Products Stainless Steel

Material Specifications

Body	316 stainless steel
Bowl	316 stainless steel
Dip tube	316 stainless steel
Drain	316 stainless steel
Fill plug	316 stainless steel
Seals	Fluorocarbon
Sight dome	Nylon
Sight gauge	Isoplast

Repair and Service Kits

Manual twist drain (small, old)	SA600Y7-1SS
Manual twist drain (large, new)	SAP05481
Pipe nipple, 1/2" 316 stainless steel	616A28-SS
Sight dome kit, (old)	RKL10SS
Sight dome kit, (new)	PS740N

Flow Charts

PL10 1/2" Lubricator

