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Stainless Steel FRLs

Air Preparation Units

Catalogue PDE2504TCUK May 2014







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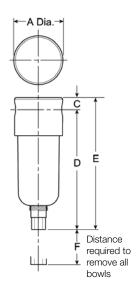
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PF504 Filter - Miniature

Features

- Stainless steel construction handles most corrosive environments
- Fluorocarbon seals standard
- Meets NACE specifications MR-01-75/ISO 15156
- High flow: 1/4" 10.85 dm³/s[§]
- 1/8" female threaded drain





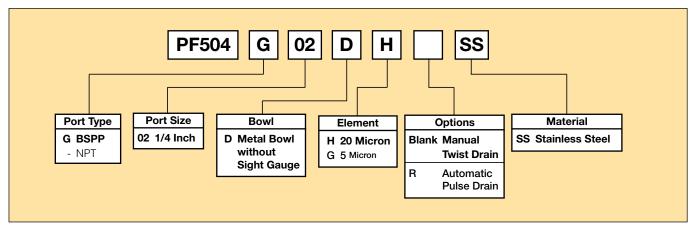
Port	BSPP	NPT	
Size Manual Twist Drain		Manual Twist Drain	
1/4"	PF504G02DHSS	PF504-02DHSS	

Standard part numbers shown bold.

For other models refer to ordering information below.

PF504 Filter Dimensions (mm)			
Α	С	D	
40	8	94	
E	F		
102	40		

Ordering Information

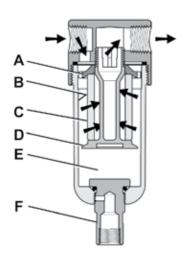




 $[\]S$ dm³/s = Flow at 6.2 bar and a 0.3 bar pressure drop.

Technical Specifications - PF504

Operation



First Stage Filtration:

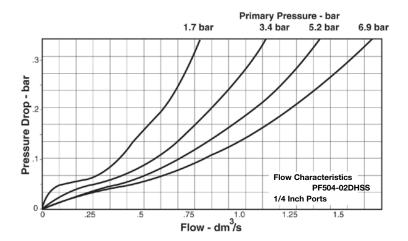
Air enters at inlet port and flows through deflector plate (A) which causes a swirling action. Liquids

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.

Technical Information



PF504 Filter Kits & Accessories

Filter Element Kits – Particulate (5 Micron) Particulate (20 Micron)	
Drain Kits -	
Automatic Pulse Drain	RK504SY-SS
Manual Twist Drain – Small (Old) Large (New)	
Pipe Nipple – 1/4" NPT 316 Stainless Steel	616Y28-SS
1/4" BSPT 316 Stainless Steel	AC-2SS
Specifications	
Bowl Capacity	29 cm ³
Filter Rating	20 Micron
Sump Capacity	12 cm ³
Port Threads	1/4 Inch

Pressure & Temperature Ratings – Manual Twist Drain 0 to 20.7 bar

Auto Pulse Drain	0 to 12 bar
Note: Air must be dry enough to avoid ice formation at temperatu 2°C.	0°C to 66°C ures below
Weight	274 g
Materials of Construction	
Body	Stainless Steel
Powle 316 9	Stainlage Staal

Бойу	3 10 314111688 31661
Bowls	316 Stainless Steel
Deflector	Acetal
Drain	316 Stainless Steel
Element Holder	Acetal
Filter Element	Polyethylene
Seals	Fluorocarbon

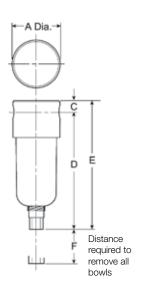


-18°C to 82°C

PF501 Coalescing Filter - Miniature

Features

- Stainless steel construction handles most corrosive environments
- Meets NACE specifications MR-01-75/ISO 15156
- High flow: 1/4" 755 dm³/s[§]
- 1/8" female threaded drain



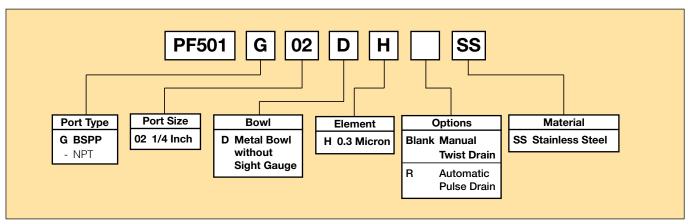


Port	BSPP	NPT	
Size Manual Twist Drain		Manual Twist Drain	
1/4"	PF501G02DHSS	PF501-02DHSS	

Standard part numbers shown bold. For other models refer to ordering information below.

PF501 Coalescing Filter Dimensions (mm)			
A 40	C 8	D 94	
E 102	F 40		

Ordering Information

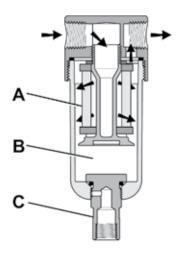




 $[\]S$ dm³/s = Flow at 6.2 bar and a 0.3 bar pressure drop.

Technical Specifications - PF501

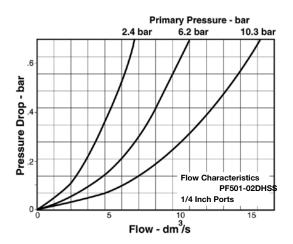
Operation



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.

Technical Information



F501 Filter Kits & Accessories

Filter Element Kits – 0.3 Micron	EKF501H
Drain Kits -	
Automatic Pulse Drain	RK504SY-SS
Manual Twist Drain – Small (Old) Large (New)	SA600Y7-1SS SAP05481
Pipe Nipple – 1/4" NPT 316 Stainless Steel	616Y28-SS
1/4" BSPT 316 Stainless Steel	AC-2SS
Specifications	
Bowl Capacity	29 cm ³
Filter Rating	0.3 Micron
Port Threads	1/4 Inch

Auto Puise Drain	0 to 12 bar
	0°C to 66°C
Note: Air must be dry enough to avoid below 2°C.	id ice formation at temperatures
Sump Capacity	12 cm ³
Weight	275 g
Materials of Construction	· •
Body	
Body	
Body	
Body Bowls Drain	

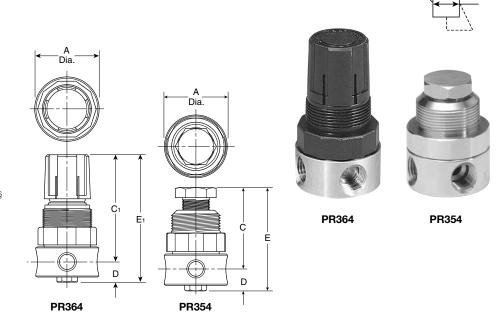


-18°C to 82°C

PR354, PR364 Regulator - Miniature

Features

- 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
- High flow: $1/4" 5.75 \text{ dm}^3/\text{s}^{\$}$



Series	Adjustment Type	Port Size	BSPP	NPT
PR364	Knob	1/4"	PR364G02CSS	PR364-02CSS
PR354	All Metal	1/4"	PR354G02CSS	PR354-02CSS

Standard part numbers shown bold.

For other models refer to ordering information below.

PR354, PR364 Regulator Dimensions (mm) A C C1 40 51 65 D E E1 13 64 78

(mm) NOTE: 32mm dia. hole required for panel mounting.

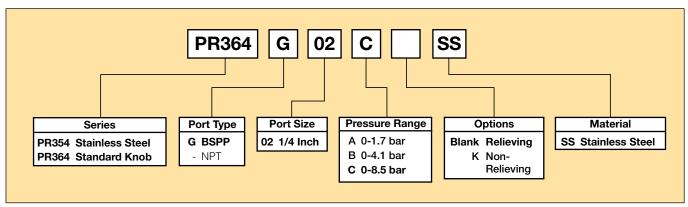
⚠ WARNING

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

Ordering Information

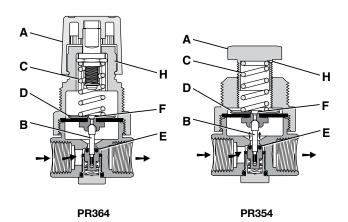




 $^{^{\}S}$ dm³/s = 7 bar inlet pressure with 5.5 bar set pressure and 1 bar pressure drop.

Technical Specifications - PR354, PR364

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.)

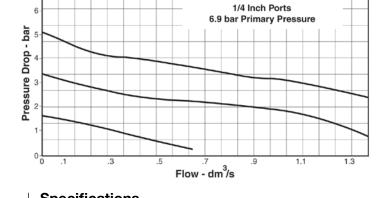
Technical Information

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.



Flow Characteristics

R354, R364 Regulator Kits & Accessories

R354 Bonnet Kit	CKR354YSS
R364 Bonnet Kit (Knob Included)	CKR364YSS
Gauge – 0 to 10 bar BSPPNPT	
Panel Mount Bracket (Stainless)	161X57-SS
Panel Mount Nut – Stainless	
Pipe Nipple – 1/4" NPT 316 Stainless Steel	
Service Kit – Relieving Non-Relieving	

|--|

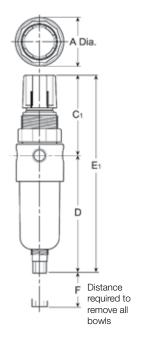
Gauge Port	1/4 Inch
Operation	Fluorocarbon Diaphragm
Port Threads	1/4 Inch
Pressure & Temperature Ratings -	
PR354	20.7 bar
	-18°C to 82°C
PR364	20.7 bar
	-18°C to 66°C
Note: Air must be dry enough to avoid below 2°C.	ice formation at temperatures
Delow 2 G.	
Weight	230 g
Materials of Construction	
Adjustment Mechanism / Springs	
Adjusting Knob (PR354)	
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



PB548, PB558 Filter / Regulator - Miniature

Features

- 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.
- High flow: $1/4" 5.75 \text{ dm}^3/\text{s}^{\$}$
- 1/8" female threaded drain





Port Size	BSPP	NPT
1/4"	PB548G02DHCSS	PB548-02DHCSS
1/4"	PB558G02DHCSS	PB558-02DHCSS

Standard part numbers shown bold.

For other models refer to ordering information below.

Piggyback Dimensions (mm)		
A	C	C ₁
40	55	67
D	E	E ₁
92	78	147
F 40		

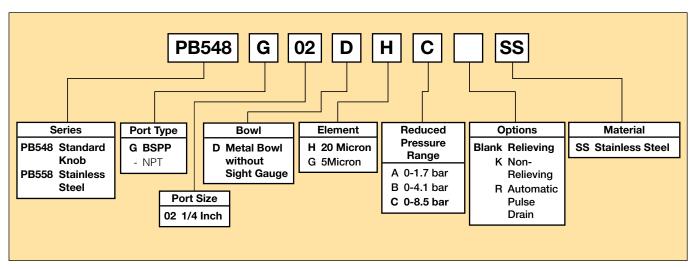
PB548, PB558

(mm) NOTE: 32mm dia. hole required for panel mounting.

⚠ WARNING

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

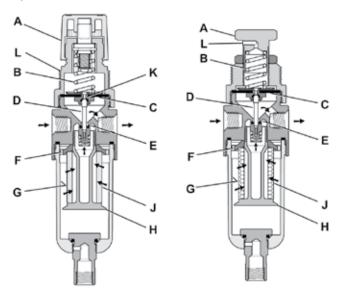
Ordering Information





 $^{^{\}S}$ dm³/s = 7 bar inlet pressure with 5.5 bar set pressure and 1 bar pressure drop.

Technical Specifications - PB548, PB558 Operation



Turning the adjusting knob clockwise applies a load tocontrol 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.)

Technical Information

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.

1/4 Inch Ports 6.9 bar Primary Pressure Pressure Drop - bar Flow - dm3/s

Flow Characteristics

PB548, B558 Regulator Kits & Accessories

Filter Element Kits –	EKEO4VV
Particulate (5 Micron)	
Gauge – 0 - 10 bar M1/40 NPT K4520N	
Drain Kits -	
Automatic Pulse DrainRK5	04SY-SS
Manual Twist Drain -	
Small (Old)SA60	00Y7-1SS
Large (New)S	SAP05481
Panel Mount Bracket (Stainless)16	31X57-SS
Panel Mount Nut – Stainless Ri Plastic F	
Pipe Nipple – 1/4" NPT 316 Stainless Steel	
Service Kit – Relieving	

Specifications	
Bowl Capacity	29 cm ³
Filter Rating	20 Micron
Gauge Port	1/4 Inch
Operation	Fluorocarbon Diaphragm
Port Threads	1/4 Inch
Pressure & Temperature Ratings -	
PB548	20.7 bar max.
	-18°C to 82°C
PB558	20.7 bar max.
	-18°C to 82°C
Auto Pulse Drain	0 to 12 bar max.
Note: Air must be dry enough to avoid below 2°C.	$\ensuremath{^{0^{\circ}\text{C}}}$ to 66°C ice formation at temperatures
Sump Capacity	12 cm ³
Weight	270 g
Materials of Construction	1
Adjustment Mechanism / Springs .	316 Stainless Steel
Body	316 Stainless Steel

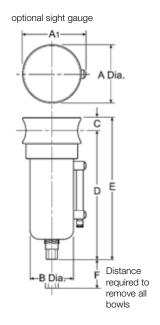
Adjustment Mechanism / Springs Body	
Bonnet (PB548)	
Bonnet (PB558)	316 Stainless Steel
Bottom Plug	316 Stainless Steel
Knob (PB548)	Polypropylene
Knob (PB558)	316 Stainless Steel
Poppet	316 Stainless Steel
Seals	Fluorocarbon

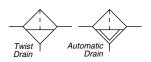


PF10 Filter - Standard

Features

- Stainless steel construction handles most corrosive environments
- Meets NACE specifications MR-01-75/ISO 15156
- High flow: $1/2" 34 \text{ dm}^3/\text{s}^{\S}$
- 1/8" female threaded drain







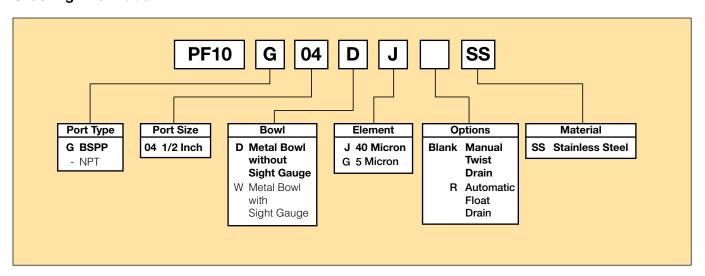
Dowt	BSPP		NPT	
Size	Port Size Manual Automat Twist Drain Float Dra		Manual Twist Drain	Automatic Float Drain
1/0"	Metal Bowl Without Sight Gauge			
1/2"	PF10G04DJSS	PF10G04DJRSS	PF10-04DJSS	PF10-04DJRSS

Standard part numbers shown bold. For other models refer to ordering information below.

PF10 Filter Dimensions (mm)		
A	A 1	B
60	64	44
C	D	E
14	127	141
F 54		

(mm)

Ordering Information

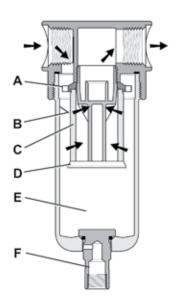




 $^{^{\}S}$ dm 3 /s = Flow at 6.2 bar and a 0.3 bar pressure drop.

Technical Specifications - PF10

Operation



First Stage Filtration:

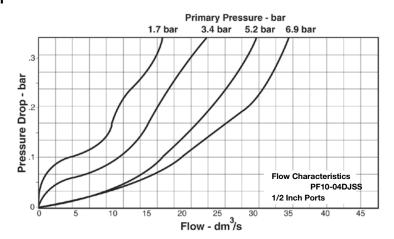
Air enters at inlet port and flows through deflector plate (A) which causes a swirling action. Liquids

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.

Technical Information



PF10 Filter Kits & Accessories

Drain Kit –
Automatic Float DrainSA10MDSS
Manual Twist Drain-
Small (Old)SA600Y7-1SS
Large (New)SAP05481
Filter Element Kits –
Particulate (40 Micron) EK55J
Particulate (5 Micron) EK55G
Pipe Nipple – 1/2" NPT 316 Stainless Steel
1/2" BSPT 316 Stainless SteelAC-4SS

Specifications

Bowl Capacity	118 cm ³
Filter Rating	
Sump Capacity	50 cm ³
Port Threads	1/2 Inch

	-18°C to 82°C
Manual Twist Drain (W)	0 to 17.2 bar
	-18°C to 66°C
Automatic Float Drain	0 to 12 bar
Note: Air must be dry enough to avoid ice for below 2°C.	0°C to 66°C mation at temperatures
Delow Z G.	

Weight 850 g

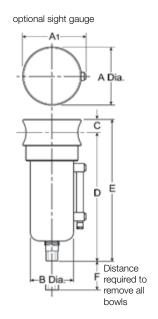
Materials of Constructio	n
Body	316 Stainless Steel
Bowls	316 Stainless Steel
Deflector	Acetal
Drain	316 Stainless Steel
Element Holder	
Filter Element	Polyethylene
Seals	Fluorocarbon
Sight Gauge	lsoplast



PF11 Coalescing Filter - Standard

Features

- Stainless steel construction handles most corrosive environments
- Meets NACE specifications MR-01-75/ISO 15156
- High flow: 1/2" 21 dm³/s[§]
- 1/8" female threaded drain
- High efficiency 0.01µm filtration
- Removes liquid aerosols and sub micron particles





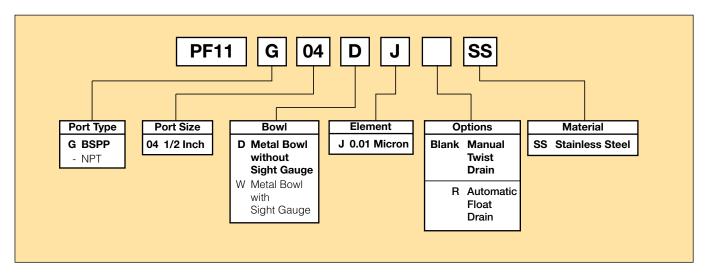
	Port Size	BSPP		NPT	
		Manual Twist Drain	Automatic Float Drain	Manual Twist Drain	Automatic Float Drain
	1 (011		Metal Bowl With	out Sight Gauge	
	1/2"	PF11G04DJSS	PF11G04DJRSS	PF11-04DJSS	PF11-04DJRSS

Standard part numbers shown bold. For other models refer to ordering information below.

F11 Coalescing Filter Dimensions (mm)			
A 60	A 1 64	B 44	
C 14	D 127	E 141	
F 54			
/mm)			

(mm)

Ordering Information

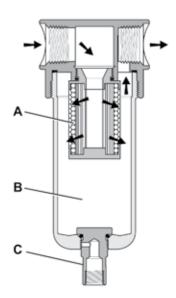




[§] dm³/s = Flow at 6.2 bar and a 0.3 bar pressure drop.

Technical Specifications - PF11

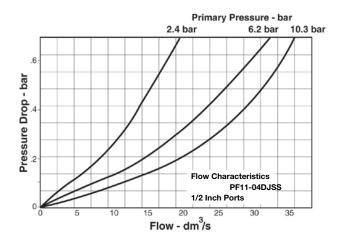
Operation



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.

Technical Information



F11 Filter Kits & Accessories

Drain Kit –	
Automatic Float Drain	SA10MDSS
Manual Twist Drain-	
Small (Old)	SA600Y7-1SS
Large (New)	SAP05481
Filter Element Kits – 0.01 Micron	EKF71
Pipe Nipple –	
1/2" NPT 316 Stainless Steel	

Specifications

Bowl Capacity	118 cm ³
Filter Rating	0.01 Micron
Sump Capacity	50 cm ³
Port Threads	1/2 Inch

Pressure & Temperature Ratings -

Note: Air must be dry enough to avoid ice for below 2°C.	mation at temperatures
	0°C to 66°C
Automatic Float Drain	0 to 12 bar
	-18°C to 66°C
Manual Twist Drain (W)	0 to 17.2 bar

Manual Twist Drain 0 to 20.7 bar

Materials of Construction

Body	316 Stainless Steel
Bowls	316 Stainless Steel
Drain	316 Stainless Steel
Element Holder	Acetal
Filter Element	Borosilicate Fiber
Seals	Fluorocarbon
Sight Gauge	lsoplast

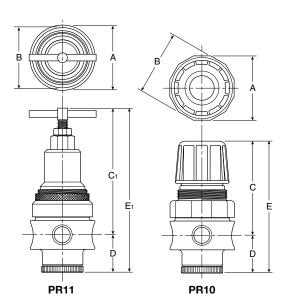


-18°C to 82°C

PR10, PR11 Regulator - Standard

Features

- Stainless steel construction handles most corrosive environments
- Large daphragm to valve area ratio for precise regulation and high flow capacity
- Meets NACE specifications MR-01-75/ISO 15156
- Low temperature version available
- High flow: 1/2" 37.75 dm³/s§





Port Size	BSPP	NPT
1/2"	PR10G04CSS	PR10-04CSS
1/2"	PR11G04CSS	PR11-04CSS

Standard part numbers shown bold.

For other models refer to ordering information below.

 § dm³/s = 7 bar inlet pressure with 5.5 bar set pressure and 1 bar pressure drop.

⚠ WARNING

Product rupture can cause serious injury.

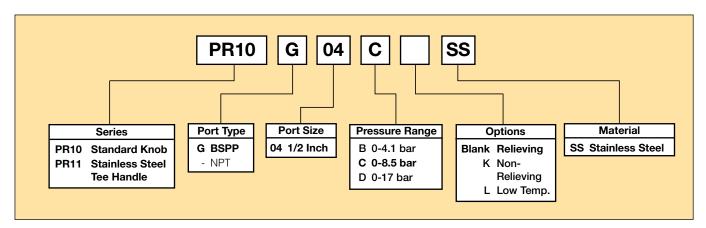
Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

PR10, PR11 Regulator Dimensions (mm)			
A	B	C	
60	62	91	
C₁	D	E	
119	35	126	
E ₁ 154			

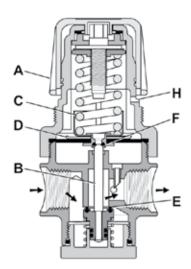
(mm) NOTE: 44mm dia. hole required for panel mounting.

Ordering Information





Technical Specifications – PR10, PR11 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.)

Technical Information CAUTION:

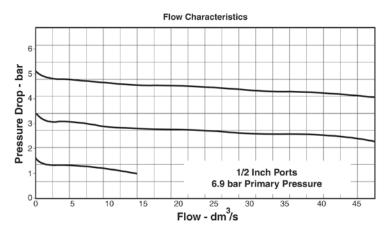
REGULATOR PRESSURE ADJUSTMENT -

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.

PR10, PR11 Regulator Kits & Accessories

R10 Bonnet Kit (Knob Included)	CKR10YSS
R11 Bonnet Kit	CKR11YSS
Gauge – 0 - 10 bar	
BSPP	
NPT	
Panel Mount Bracket (Stainless)	R10Y57-SS
Panel Mount Nut –	
Stainless	R10X51SS
Plastic	R10X51-P
Pipe Nipple – 1/2" NPT 316 Stainless Steel 1/2" BSPT 316 Stainless Steel	
Service Kit – Relieving Non-Relieving	RKR10YSS RKR10KYSS
Materials of Construction	
Adjustment Mechanism / Springs Body Bonnet / Tee Handle (PR11) Bonnet / Knob (PR10)	316 Stainless Steel316 Stainless Steel
Bottom Plug	
Poppet	
Seals	



Specifications

Gauge Port	1/4 Inch
OperationFluo	rocarbon Diaphragm
Port Threads	1/2 Inch
Pressure & Temperature Ratings –	
PR10	20.7 bar max.
	-18°C to 66°C
PR11	20.7 bar max.
	-18°C to 82°C
Option "L" minimum operating temperature* .	40° C/F
Note: Air must be dry enough to avoid ice formatic below 2°C.	n at temperatures
Weight	810 G

* Note: "Low Temperature" option is intended for applications where the ambient temperature may be down to -40° C/F.

Air supply must be free of moisture to prevent ice formation and malfunction of units. These units contain EPDM seals.

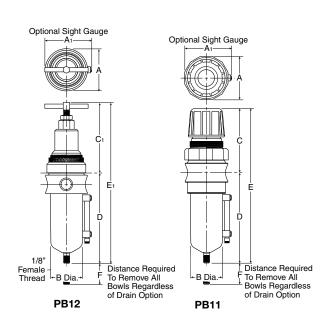
Make sure any oils in the airstream are compatible.



PB11, PB12 Filter / Regulator - Standard

Features

- 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
- High flow: 1/2" 34 dm³/s§
- 1/8" female threaded drain





Port Size	Adjustment Type	В	SPP	N	PT
		Manual Twist Drain	Automatic Float Drain	Manual Twist Drain	Automatic Float Drain
	Metal Bowl without Sight Gauge				
1/2"	Knob	PB11G04DJCSS	PB11G04DJCRSS	PB11-04DJCSS	PB11-04DJCRSS
	Tee-Handle	PB12G04DJCSS	PB12G04DJCRSS	PB12-04DJCSS	PB12-04DJCRSS

PB11, PB12 Piggyback Dimensions (mm)		
A	A 1	B
60	64	44
C	C₁	D
91	119	127
E 218	E ₁ 246	F 54

Standard part numbers shown bold. For other models refer to ordering information below.

(mm

NOTE: 44mm dia. hole required for panel mounting.

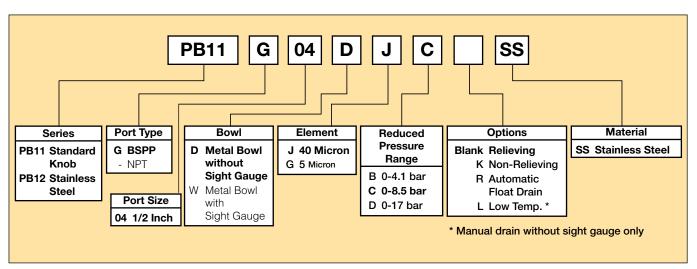
⚠ WARNING

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

Ordering Information

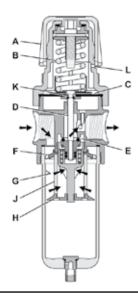




 $[\]rm ^{\S}\,dm^3/s = 7$ bar inlet pressure with 5.5 bar set pressure and 1 bar pressure drop.

Technical Specifications - PB11, PB12

Operation



Turning the adjusting knob 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 guiet 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.)

Technical Information

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.

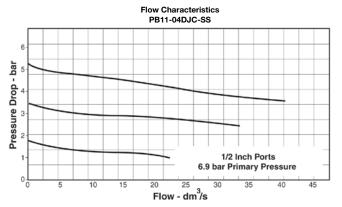
For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

PB11. PB12 Regulator Kits & Accessories

. D. I., I. D. I. I. Iogaiato: Titto a	71000001100
Drain Kits -	
Automatic Float Drain	SA10MDSS
Manual Twist Drain -	
Small (Old)	SA600Y7-1SS
Large (New)	SAP05481
Filter Element Kits – Particulate (40 Micron) Particulate (5 Micron)	
Gauge – 0 - 10 bar	
BSPP	
NPT	
Panel Mount Bracket (Stainless)	R10Y57-SS
Panel Mount Nut – Stainless Plastic	
Pipe Nipple – 1/2" NPT 316 Stainless Steel	616A28-SS AC-4SS
Service Kit – Relieving Non-Relieving	RKR10YSS RKR10KYSS

Materials of Construction

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	lsoplast



Specifications

â
118 cm ³
40 Micron
1/4 Inch
Fluorocarbon Diaphragm
1/2 Inch
20.7 bar -18°C to 66°C
20.7 bar -18°C to 82°C
20.7 bar -18°C to 66°C
1 to 12 bar 0°C to 66°C
ature*40° C/F
ormation at temperatures
50 cm ³
1090 g

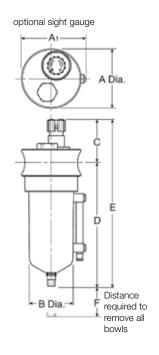
* Note: "Low Temperature" option is intended for applications where the ambient temperature may be down to -40° C/F. Air supply must be free of moisture to prevent ice formation and malfunction of units. These units contain EPDM seals. Make sure any oils in the airstream are compatible.



PL10 Lubricator - Standard

Features

- Stainless steel construction handles most corrosive environments
- Fillable under pressure
- Meets NACE specifications MR-01-75/ISO 15156
- \bullet High flow: 1/2" 47 dm³/s§
- 1/8" female threaded drain



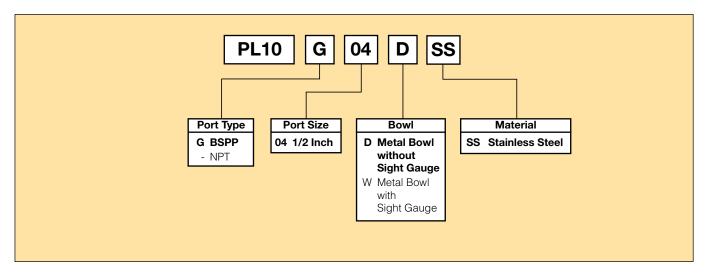


Port Size	BSPP	NPT
	Manual Twist Drain	Manual Twist Drain
1/0"	Metal Bowl Without Sight Gauge	
1/2"	PL10G04DSS	PL10-04DSS

Standard part numbers shown bold. For other models refer to ordering information below.

PL10 Lubricator Dimensions			
(mm)			
A 60	A 1 64	B 44	
C 46	D 127	E 173	
F 89			

Ordering Information

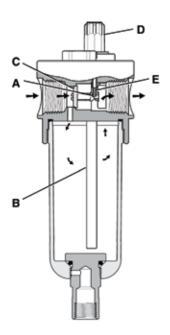




 $^{^{\}S}$ dm³/s = Flow at 6.2 bar and a 0.3 bar pressure drop.

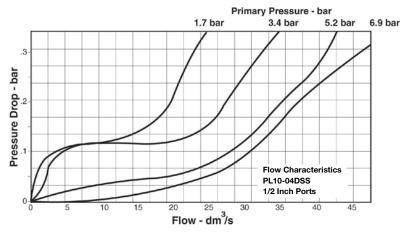
Technical Specifications - PL10

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.

Technical Information



L10 Filter Kits & Accessories

Drain Kits -	
Manual Twist Drain -	
Small (Old)	SA600Y7-1SS
Large (New)	SAP05481
Pipe Nipple – 1/2" NPT 316 Stainless Steel 1/2" BSPT 316 Stainless Steel	616A28-SS AC-4SS
Sight Dome Kit	RKL10SS
Specifications Bowl Capacity	118 cm ³
Port Threads	1/2 Inch
Pressure & Temperature Ratings – Metal Bowl (D) Metal Bowl (W)	-18°C to 66°C
Note: Air must be dry enough to avoid ice forma 2°C.	-18°C to 66°C
Weight	850 g

Materials of Construction

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







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