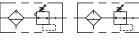
# PB548, PB558 Series 1/4 Inch Ports



# PB548, PB558 Filter / Regulator – Miniature

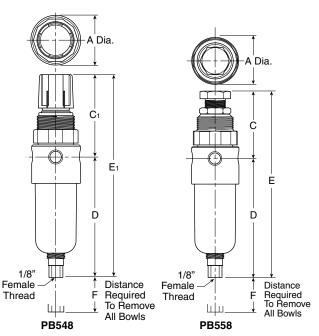




**PB548** 

#### **Features**

- 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.
- High Flow: 1/4" 12 SCFM<sup>§</sup>



Series	Adjustment Type	Port Size	NPT	BSPP
PB548	Knob	1/4"	PB548-02DHCSS	PB548G02DHCSS
PB558	All Metal	1/4"	PB558-02DHCSS	PB558G02DHCSS

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

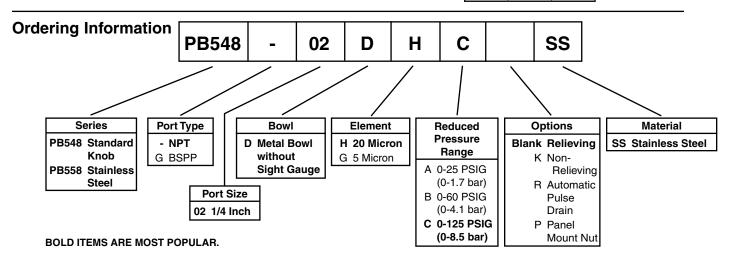
**PB558** 

# **⚠ WARNING**

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

Filte	548, PB5 r / Regul imensior	ator
<b>A</b> 1.56 (40)	<b>C</b> 2.17 (55)	<b>C</b> <sub>1</sub> 2.63 (67)
<b>D</b> 3.63 (92)	<b>E</b> 5.80 (147)	<b>E</b> <sub>1</sub> 6.26 (159)
<b>F</b> 1.58 (40)		

inches (mm) NOTE: 1.25 Dia. (32mm) hole required for panel mounting.



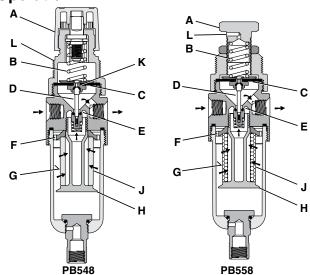




<sup>§</sup> SCFM = Standard cubic feet per minute at 100 PSIG inlet, 75 PSIG no flow secondary setting and 15 PSIG pressure drop.

# PB548, PB558 Series Filter / Regulators

# 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.)

### **Technical Information**

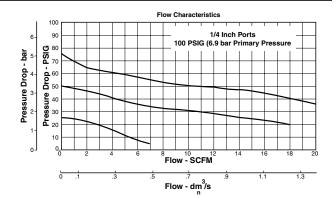
#### **CAUTION:**

**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.

# PB548, PB558 Regulator Kits & Accessories

PD346, PD336 Regulator Kits 6	x Accessories
PB558 Bonnet Kit (Knob Included)	CKR354YSS
PB548 Bonnet Kit (Knob Included)	CKR364YSS
Drain Kit –	
Automatic Pulse Drain	RK504SY-SS
Manual Twist Drain-	0.1.000/= 1.00
Small (Old)	
Large (New)	SAP05481
Filter Element Kits –	FI/F04\/\/
Particulate (5 Micron)	
Particulate (20 Micron)	EN3U41
160 PSIG (0 to 1100 kPa), 1-1/2" Face	K4515N14160SS
Panel Mount Bracket (Stainless)	
Panel Mount Nut –	
Stainless	R05Y51-SS
Plastic	
Pipe Nipple –	
1/4" 316 Stainless Steel	616Y28-SS
Service Kit –	
Relieving	RK549YSS
Non-Relieving	
Springs –	
0-25 PSIG Range	SPR-375-2-SS
0-60 PSIG Range	
0-125 PSIG Range	SPR-377-1-SS
Specifications	
-	4.0.0
Bowl Capacity	1.0 Ounces



Filler hauling	20 IVIICIOI1
Gauge Port	1/4 Inch
Operation	Fluorocarbon Diaphragm
Port Threads	1/4 Inch
Pressure & Temperature Ratings -	
PB548	300 PSIG Max. (20.7 bar) 0°F to 150°F (-18°C to 82°C)
PB558	300 PSIG Max. (20.7 bar) 0°F to 180°F (-18°C to 82°C)
Auto Pulse Drain32°F to 150°F (0°C to 66°C)	10 to 175 PSIG (0 to 12 bar)
Note: Air must be dry enough to av	
temperatures below 32°F (2°C	5)
Sump Capacity	
	0.4 Ounce
Sump Capacity Weight Materials of Construction	0.4 Ounce 0.6 lb. (0.27 kg)
Sump Capacity  Weight  Materials of Construction  Adjustment Mechanism / Springs	0.4 Ounce 0.6 lb. (0.27 kg) on 316 Stainless Steel
Sump Capacity  Weight  Materials of Construction  Adjustment Mechanism / Springs  Body	
Sump Capacity  Weight  Materials of Construction  Adjustment Mechanism / Springs	
Sump Capacity  Weight  Materials of Construction  Adjustment Mechanism / Springs  Body	
Sump Capacity Weight  Materials of Construction Adjustment Mechanism / Springs Body Bonnet (PB548)	
Sump Capacity Weight	
Sump Capacity Weight  Materials of Construction Adjustment Mechanism / Springs Body Bonnet (PB548) Bonnet (PB558) Bottom Plug Knob (PB548) Knob (PB558)	
Sump Capacity Weight  Materials of Construction Adjustment Mechanism / Springs Body Bonnet (PB548) Bonnet (PB558) Bottom Plug Knob (PB548)	





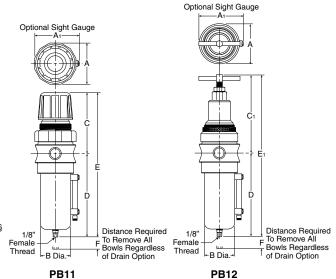
# PB11, PB12 Filter / Regulator - Standard



PB11

#### **Features**

- 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.
- High Flow: 1/2" 72 SCFM<sup>§</sup>



PB11 F	В	1	2
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			N	PT	BSPP	
Series	Adjustment Type	Port Size	Manual Twist Drain	Automatic Float Drain	Manual Twist Drain	Automatic Float Drain
				Metal Bowl wit	h Sight Gauge	
PB11	Knob	1/2"	PB11-04WJCSS	PB11-04WJCRSS	PB11G04WJCSS	PB11G04WJCRSS
PB12	Tee-Handle	1/2"	PB12-04WJCSS	PB12-04WJCRSS	PB12G04WJCSS	PB12G04WJCRSS

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

**PB12** 

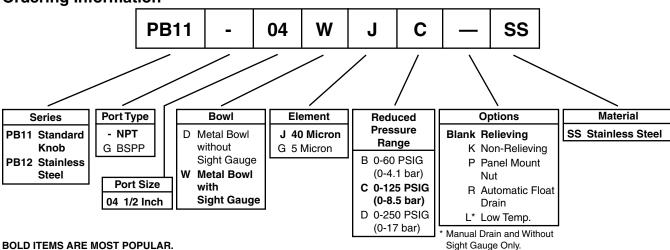
### **⚠ WARNING**

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

Filte	B11, PB1 r / Regul imensior	ator
<b>A</b>	<b>A</b> 1	<b>B</b>
2.34	2.50	1.75
(60)	(64)	(44)
<b>C</b>	<b>C</b> <sub>1</sub>	<b>D</b>
3.59	4.70	5.00
(91)	(119)	(127)
<b>E</b>	<b>E</b> <sub>1</sub>	<b>F</b>
8.59	9.70	2.12
(218)	(246)	(54)

inches (mm) NOTE: 1.75 Dia. (44mm) hole required for panel mounting.

# Ordering Information

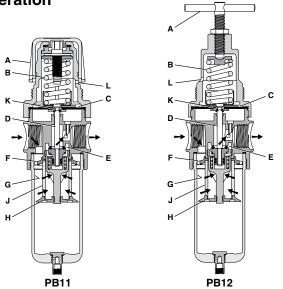


<sup>§</sup> SCFM = Standard cubic feet per minute at 100 PSIG inlet, 90 PSIG no flow secondary setting and 15 PSIG pressure drop.

# PB11, PB12 Series Filter / Regulators







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.)

# **Technical Information**

### **CAUTION:**

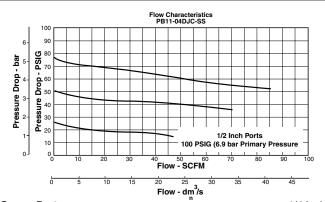
**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and 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	Regu	llator	Kits 6	&	Accessories	S

PB11 Bonnet Kit (Knob Included)	CKB10VSS
PB12 Bonnet Kit	CKR11YSS
Drain Kit –	
Automatic Float Drain	SA10MDSS
Manual Twist Drain-	
Small (Old)	SA600Y7-1SS
Large (New)	
Filter Element Kits –	
Particulate (40 Micron)	EKF10Y
Particulate (5 Micron)	
Gauge (Stainless) –	
160 PSIG (0 to 1100 kPa), 2" Face	K4520N14160SS
Panel Mount Bracket (Stainless)	
Panel Mount Nut –	
Stainless	R10Y51-SS
Plastic	
Pipe Nipple –	
1/2" 316 Stainless Steel	616400 00
	010A26-33
Service Kit –	
Relieving	
Non-Relieving	RKR10KYSS
Springs –	
0-60 PSIG Range	SPR-388-1-SS
0-125 PSIG Range	SPR-389-1-SS
0-250 PSIG Range	
Considerations	
Specifications	
Bowl Capacity	4.0 Ounces

Filter Rating ......40 Micron



Gauge Port	
Operation	Fluorocarbon Diaphragm
Port Threads	1/2 Inch
<b>Pressure &amp; Temperature Ratings</b>	
PB11 (Metal Bowl D or W)	
	0°F to 150°F (-18°C to 66°C)
PB12 (Metal Bowl D)	,
	0°F to 180°F (-18°C to 82°C)
PB12 (Metal Bowl W)	
	0°F to 150°F (-18°C to 66°C)
Automatic Float Drain	,
	32°F to 150°F (0°C to 66°C)
Option "L" Minimum Operating Te	mperature <sup>†</sup> 40° C/F
Note: Air must be dry enough to avo	id ion formation at
temperatures below 32°F (0°C)	
temperatures below 32°F (0°C)	1.7 Ounce
temperatures below 32°F (0°C) Sump Capacity	1.7 Ounce 2.42 lb. (1.09 kg)
temperatures below 32°F (0°C) Sump Capacity Weight  Materials of Constructi Adjustment Mechanism / Springs	
temperatures below 32°F (0°C) Sump Capacity Weight  Materials of Constructi	
temperatures below 32°F (0°C) Sump Capacity Weight  Materials of Constructi Adjustment Mechanism / Springs	
temperatures below 32°F (0°C) Sump Capacity Weight  Materials of Constructi Adjustment Mechanism / Springs Body Bonnet / Knob (PB11)	
temperatures below 32°F (0°C) Sump Capacity Weight  Materials of Constructi Adjustment Mechanism / Springs Body	
temperatures below 32°F (0°C) Sump Capacity Weight  Materials of Constructi Adjustment Mechanism / Springs Body Bonnet / Knob (PB11) Bonnet / Tee Handle (PB12) Bottom Plug	
temperatures below 32°F (0°C) Sump Capacity Weight  Materials of Constructi Adjustment Mechanism / Springs Body Bonnet / Knob (PB11) Bonnet / Tee Handle (PB12) Bottom Plug Poppet	
temperatures below 32°F (0°C) Sump Capacity Weight  Materials of Constructi Adjustment Mechanism / Springs Body Bonnet / Knob (PB11) Bonnet / Tee Handle (PB12) Bottom Plug	

