

## 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" 12 SCFM§







PR364

PR354

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

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

## **⚠ WARNING**

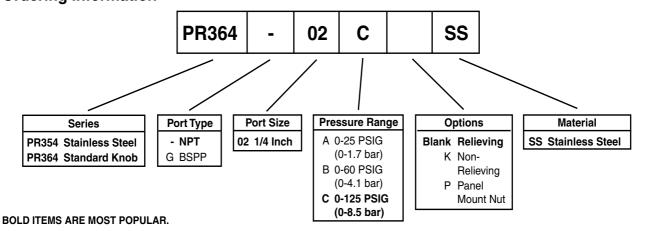
Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

←—A Dia.	
	Dia.
C <sub>1</sub>	
1 -	D
PR364	PR354

PR354, PR364 Regulator Dimensions			
<b>A</b> 1.56 (40)	<b>C</b> 2.00 (51)	<b>C</b> <sub>1</sub> 2.56 (65)	
<b>D</b> 0.50 (13)	<b>E</b> 2.50 (64)	<b>E</b> <sub>1</sub> 3.06 (78)	

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

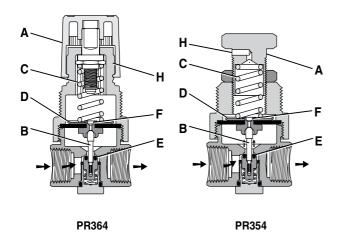
## **Ordering Information**



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

# PR354, PR364 Series

## 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 100 1/4 Inch Ports 90 100 PSIG (6.9 bar Primary Pressure **5** 80 70 Pressure Drop - bar - **do** 50 Pressure 30 30 20 Flow - SCFM Flow - dm<sup>3</sup>/s

Operation	Fluorocarbon Diaphragm
Port Threads	1/4 Inch
Pressure & Temperature Ratings –	
PR354	` ,
	0°F to 180°F (-18°C to 82°C)
PR364	300 PSIG Max (20.7 bar)
	0°F to 150°F (-18°C to 66°C)

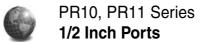
Note: Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C)

### torials of Construction

Materials of Construction	
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

## PR354, PR364 Regulator Kits & **Accessories**

R354 Bonnet Kit	CKR354YSS
PR364 Bonnet Kit (Knob Included)	CKR364YSS
Gauge (Stainless) –	
160 PSIG (0 to 1100 kPa), 1-1/2" Face	K4515N14160SS
Panel Mount Bracket (Stainless)	161X57-SS
Panel Mount Nut –	
Stainless	R05X51-SS
Plastic	R05X51-P
Pipe Nipple –	
1/4" 316 Stainless Steel	616Y28-SS
Service Kit –	
Relieving	RKR364YSS
Non-Relieving	RKR364KYSS
Springs –	
0-25 PSIG Range	SPR-375-2-SS
0-60 PSIG Range	SPR-376-1-SS
0-125 PSIG Range	SPR-377-1-SS
Specifications	
Gauge Port	1/4 Inch



## PR10, PR11 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" 80 SCFM§





PR10

Adjustment **Port** Series **NPT BSPP** Size Type PR10 1/2" **PR10-04CSS** PR10G04CSS Knob PR11 T-Handle 1/2" **PR11-04CSS** PR11G04CSS

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

## **⚠ WARNING**

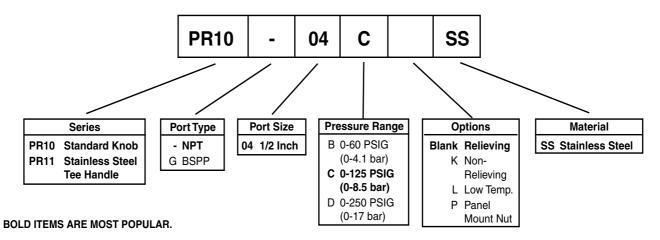
Product rupture can cause serious injury. Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

B	A	B
	C <sub>1</sub>	c
	E <sub>1</sub>	E D D
PR11		PR10

PR10, PR11 Regulator Dimensions			
<b>A</b>	<b>B</b>	<b>C</b>	
2.34	2.43	3.59	
(60)	(62)	(91)	
<b>C</b> <sub>1</sub>	<b>D</b>	<b>E</b>	
4.70	1.38	4.97	
(119)	(35)	(126)	
<b>E</b> <sub>1</sub> 6.08 (154)			

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

## **Ordering Information**

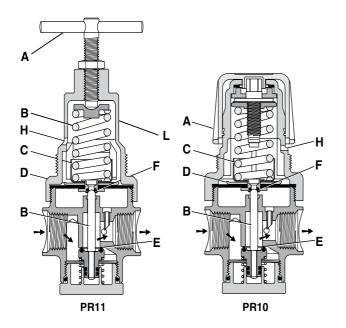




<sup>§</sup> SCFM = Standard cubic feet per minute at 100 PSIG inlet, 75 PSIG no flow secondary setting and 15 PSIG pressure drop.

## PR10, PR11 Series **Air Line Regulators**

## Operation



With the adjusting knob / T-Handle (A) turned fully counterclockwise (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**

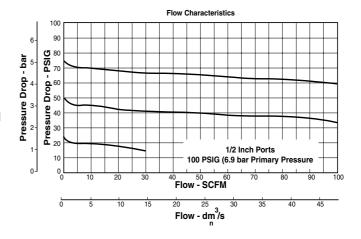
## **CAUTION:**

#### **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



i iiio, i iiii iiogulaloi kilo l	A Accessories
PR10 Bonnet Kit (Knob Included)	CKR10YSS
PR11 Bonnet Kit	CKR11YSS
Gauge (Stainless) –	
160 PSIG (0 to 1100 kPa), 2" Face	K4520N14160SS
Panel Mount Bracket (Stainless)	161X57-SS
Panel Mount Nut –	
Stainless	
Plastic	R10X51-P
Pipe Nipple –	
1/2" 316 Stainless Steel	616A28-SS
Service Kit –	
Relieving	RKR10YSS
Non-Relieving	RKR10KYSS
Springs –	
0-60 PSIG Range	SPR-388-1-SS
0-125 PSIG Range	
0-250 PSIG Range	SPR-390-1-SS

155	PR11
0SS 7-SS	Option "L" Minin
1-SS 51-P	temperatui Weight
3-SS	Materials of Adjustment Mech
YSS YSS	Body Bonnet / Tee Han Bonnet / Knob (P
1-SS 1-SS 1-SS	Bottom Plug Poppet Seals
Inch	† <b>Note:</b> "Low Tem the ambie supply mu

Pressure & Temperature Ratings -

PR10	300 PSIG Max (20.7 bar)
	0°F to 150°F (-18°C to 66°C)
PR11	300 PSIG Max (20.7 bar)
	0°F to 180°F (-18°C to 82°C)
Option "L" Minimum Operating Tempe	erature <sup>†</sup> 40° C/F
Note: Air must be dry enough to avo temperatures below 32°F (0°C)	
Weight	1.79 lb. (0.81 kg)
Materials of Construction	n
Adjustment Mechanism / Springs	316 Stainless Steel
Body	316 Stainless Steel
Bonnet / Tee Handle (PR11)	316 Stainless Steel

rajacanoni moonamoni ropinigo	
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

nperature" option is intended for applications where ent 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.

**Specifications** 

Operation ......Fluorocarbon Diaphragm