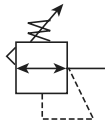
R354, R364 Regulator – Miniature

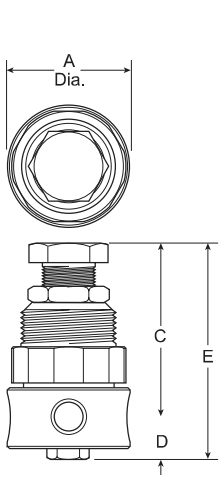


Features

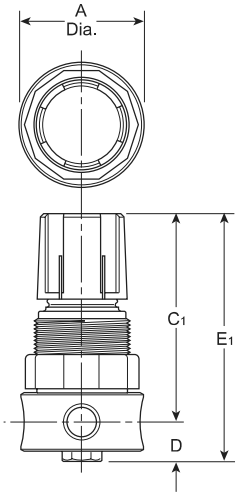
- Stainless Steel Construction Handles Most Corrosive Environments
- Large Diaphragm to Valve Area Ratio for Precise Regulation and High Flow Capacity
- Meets NACE Specifications MR-01-75/ISO 15156
- High Flow: 1/4" – 12 SCFM[§]

R364

R354



R354



R364

Series	Adjustment Type	Port Size	NPT	BSPP
R364	Knob	1/4"	**R364-02CSS**	R364G02CSS
R354	All Metal	1/4"	**R354-02CSS**	R354G02CSS

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

[§] SCFM = Standard cubic feet per minute at 100 PSIG inlet, 75 PSIG no flow secondary setting and 15 PSIG pressure drop.

R354, R364 Regulator Dimensions		
A	**C**	**C1**
1.56 (40)	2.00 (51)	2.56 (65)
D	**E**	**E1**
0.50 (13)	2.50 (64)	3.06 (78)

inches (mm)
NOTE: 1.25 Dia. (32mm) 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

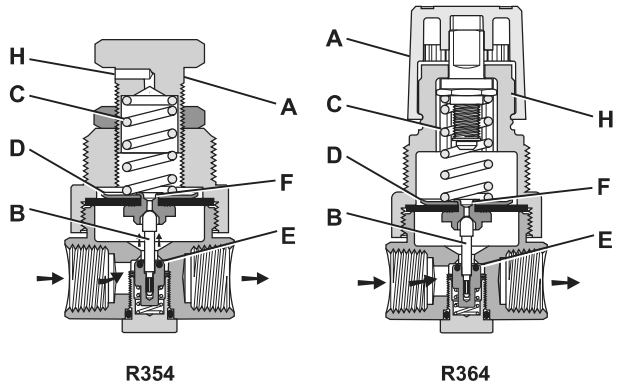
R364	—	02	C		SS

Series	Port Type	Port Size	Pressure Range	Options	Material
R354 Stainless Steel	**– NPT**	**02 1/4 Inch**	A 0-25 PSIG (0-1.7 bar)	**Blank Relieving**	**SS Stainless Steel**
R364 Standard Knob	G BSPP		B 0-60 PSIG (0-4.1 bar)	K Non-Relieving	
			C 0-125 PSIG (0-8.5 bar)	P Panel Mount Nut	

BOLD ITEMS ARE MOST POPULAR.

Pneumatic Division
Richland, Michigan
www.wattsfluidair.com

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.)

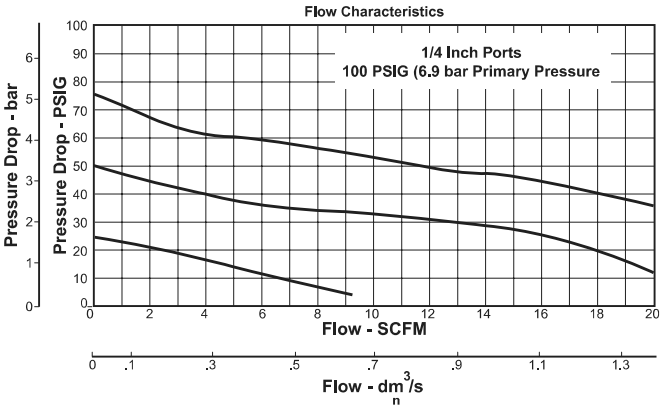
Technical Information

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.



R354, R364 Regulator Kits & Accessories

R354 Bonnet Kit CKR354YSS

R364 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

Operation ..... Fluorocarbon Diaphragm

Port Threads ..... 1/4 Inch

Pressure & Temperature Ratings –
R354 ..... 300 PSIG Max (20.7 bar)
0°F to 180°F (-18°C to 82°C)
R364 ..... 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).

Weight ..... 0.5 lb. (0.23 kg)

Materials of Construction

Adjustment Mechanism / Springs ..... 316 Stainless Steel

Adjusting Knob (R354) ..... 316 Stainless Steel

Adjusting Knob (R364) ..... Polypropylene

Body ..... 316 Stainless Steel

Bonnet (R354) ..... 316 Stainless Steel

Bonnet (R364) ..... Acetal

Bottom Plug ..... 316 Stainless Steel

Poppet ..... 316 Stainless Steel

Seals ..... Fluorocarbon

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