R91

Water or Compressed Air Pressure Regulator 1/4″ Port Size

- **Bonnet and body made from acetal plastic.**
- **R91W designed for use with deionized water and potable water systems. Plastics and metals in contact with fluid are approved by the National Sanitation Foundation (NSF) or the Food And Drug Administration (FDA) for use in potable water systems. Elastomers are food grade. Non relieving models only.**
- **R91G designed for use with non-potable water and compressed air systems. Non relieving and relieving models.**
- **Low torque, non-rising adjusting knob.**
- **Snap action knob locks pressure setting when pushed down.**
- **Can be disassembled without the use of tools or removal from the air or water line.**

Ordering Information. Models listed include PTF threads, knob adjustment, non relieving diaphragm, 5 to 125 psig (0.3 to 8.6 bar) outlet pressure adjustment range†, and without gauge.

Inlet Port	Application	Model	Flow* scfm (dm^3/s)	Flow** gpm (lpm)	Weight lb (kg)
1/4"	Industrial air and non-potable water	R91G-2AK-NLN	24 (11)	1.75 (6.6)	0.15 (0.07)
1/4"	Potable water and deionized water	R91W-2AK-NLN	24 (11)	1.75 (6.6)	0.15 (0.07)

Alternative Models

R 9 1 ★ - ★ ★ ★ - ★ ★ ★

Application	Substitute
Industrial air, non-potable water	G
Potable water, deionized water	W

Port Size	Substitute
1/4"	2

Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	G

Adjustment	Substitute
Knob	K

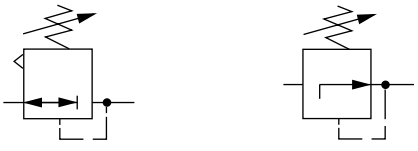
Gauge	Substitute
With	G †
Without	N

Outlet Pressure Adjustment Range††	Substitute
5 to 50 psig (0.3 to 3.5 bar)	E
5 to 125 psig (0.3 to 8.6 bar)	L

Diaphragm	Substitute
Non relieving	N
Relieving ¶	R

* Approximate flow with 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.
** Approximate flow with 100 psig (7 bar) inlet pressure, 60 psig (4 bar) set pressure and a 15 psig (1 bar) droop from set.
† Gauge with NSF approved materials not available.
†† Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.
¶ Relieving diaphragm only available with the R91G regulator.

ISO Symbols



Relieving Non Relieving

See Section ALE-24 for Accessories

Technical Data

Fluid
- R91G: Compressed air and non-potable water
- R91W: Potable water, deionized water

Maximum pressure: 150 psig (10 bar)

Operating temperature
- Water service: 35° to 125°F (2° to 52°C)
- Air service: 0° to 125°F (-20° to 52°C) *

* When used in air service, air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Typical flow for compressed air service at 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 15 psig (1 bar) from set: 24 scfm (11 dm³/s).

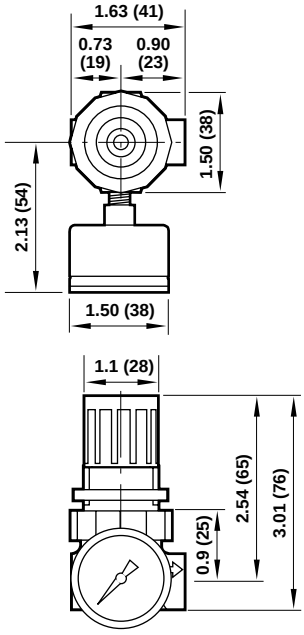
Typical flow for water service at 100 psig (7 bar) inlet pressure, 60 psig (4 bar) set pressure and a droop of 15 psig (1 bar) from set: 1.75 US gpm per minute (6.6 liters)

Gauge ports:
- 1/8 PTF with PTF main ports
- R1/8 with ISO Rc main ports
- R1/8 with ISO G main ports

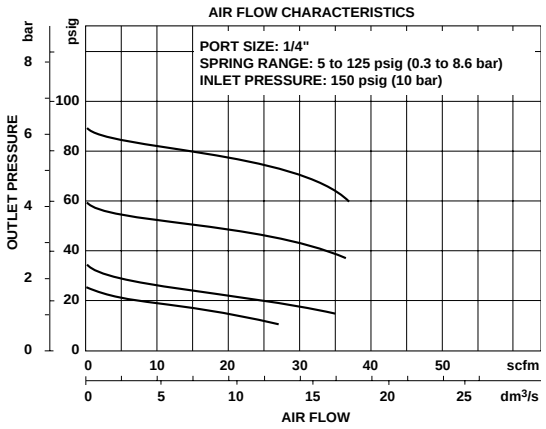
Materials
- Body and bonnet: Acetal
- Valve
  - R91G: Brass/nitrile
  - R91W: Stainless steel/food grade EPDM
- Valve seat: Acetal
- Valve seat o-ring
  - R91G: Nitrile
  - R91W: Food grade EPDM
- Diaphragm
  - R91G: Acetal/nylon inserted nitrile
  - R91W: Acetal/nylon inserted nitrile, food grade
- Gauge port plugs: Polypropylene (furnished only with PTF-ported units)

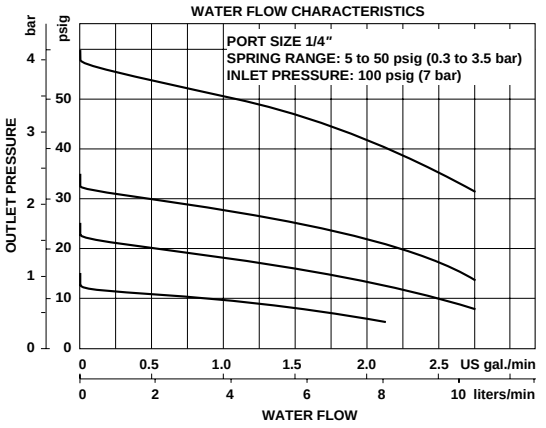
All Dimensions in Inches (mm)

Panel mounting hole diameter 1.19″ (30 mm)
Maximum panel thickness 0.25″ (6 mm)



Typical Performance Characteristics





Service Kits

Item	Type	Part number
Service kit	R91W, non relieving	3407-93
	R91G, non relieving	3407-94
	R91G, relieving	3407-95

Service kit contains slip ring, diaphragm, valve seat with o-ring, valve, and valve spring.