

**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.**


Technical Data
Fluid:

R91G: Compressed air and non-potable water

R91W: Potable water, deionized water

Maximum pressure: 10 bar (150 psig)

Operating temperature:

Water service: +2° to + 52°C (+35° to +125°F)

Air service: -20° to + 52°C (0° to +125°F) *

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

Typical flow:
Compressed air service:

11 dm³/s (24 scfm) at 10 bar (150 psig) inlet pressure,
6,3 bar (90 psig) set pressure and a droop of 1 bar (15 psig)
from set.

Water service:

6,6 litres per minute (1.75 US gpm) at 7 bar (100 psig) inlet
pressure, 4 bar (60 psig) set pressure and a droop of
1 bar (15 psig) from set.

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:

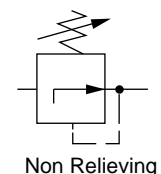
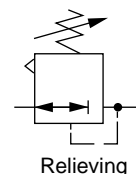
R91G: Acetal/nylon inserted nitrile

R91W: Acetal/nylon inserted nitrile, food
grade

Gauge port plugs: Polypropylene (furnished
only with PTF-ported units)

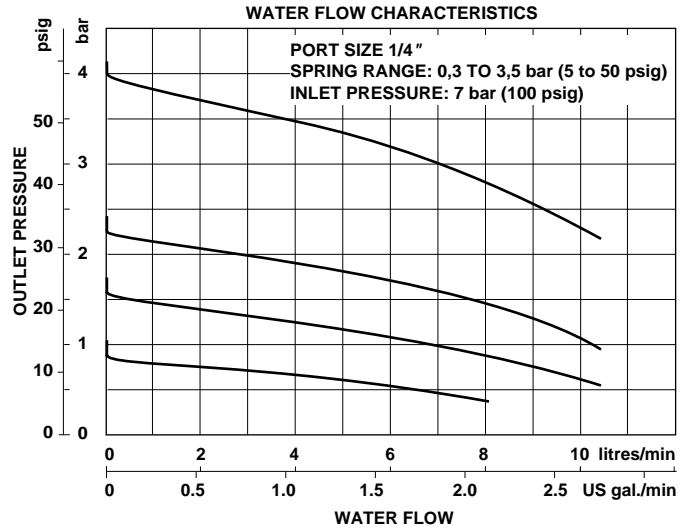
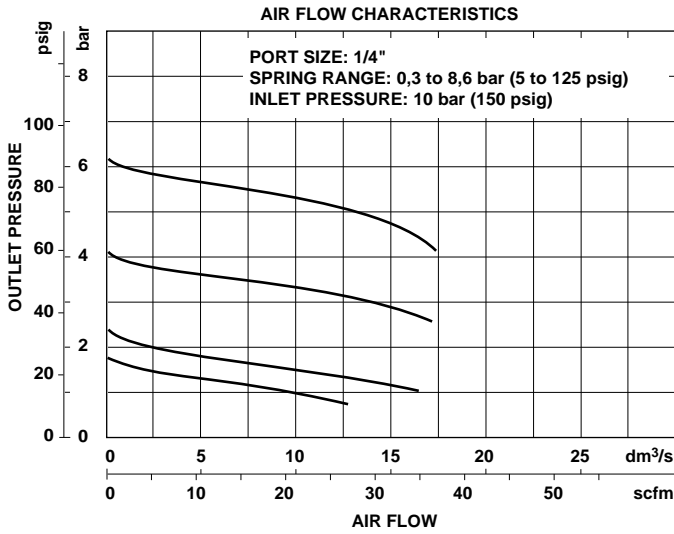
Ordering Information

See *Ordering Information* paragraphs on the following pages.

ISO Symbols




Typical Performance Characteristics



Ordering Information. Models listed include ISO G threads, knob adjustment, non relieving diaphragm, 0,3 to 8,6 bar (5 to 125 psig) outlet pressure adjustment range†, and without gauge.

Inlet Port	Application	Model	Flow* dm ³ /s (scfm)	Flow** lpm (gpm)	Weight kg (lb)
G1/4	Industrial air and non-potable water	R91G-2GK-NLN	11 (24)	6,6 (1.75)	0,07 (0.15)
G1/4	Potable water and deionized water	R91W-2GK-NLN	11 (24)	6,6 (1.75)	0,07 (0.15)

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
0,3 to 3,5 bar (5 to 50 psig)	E
0,3 to 8,6 bar (5 to 125 psig)	L
Diaphragm	Substitute
Non relieving	N
Relieving ††	R

* Approximate flow with 10 bar (150 psig) inlet pressure, 6,3 bar (90 psig) set pressure and a 1 bar (15 psig) droop from set.

** Approximate flow with 7 bar (100 psig) inlet pressure, 4 bar (60 psig) set pressure and a 1 bar (15 psig) droop from set.

† 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.

†† Gauge with NSF approved materials not available.

†† Relieving diaphragm only available with the R91G regulator.

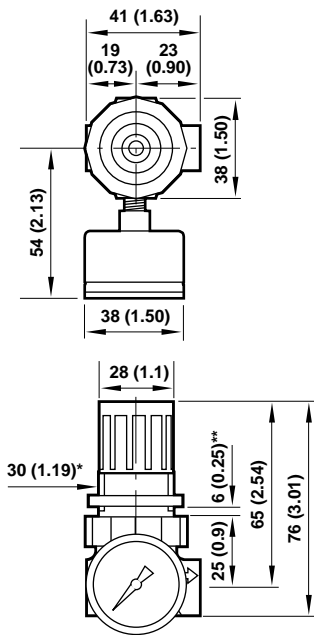
Accessories

Wall Bracket and Plastic Panel Nut	Panel Nut	Tamper Resistant Field Modification	Ø 40 mm Pressure Gauge
18-025-003	Plastic: 2962-89 Metal: 2962-04	Knob and screw: 18-001-091 Screw only: 6097-08	R1/8 Connection 1/8 PTF Connection
			60 psig (4 bar) 18-013-990 18-013-211 150 psig (10 bar) 18-013-989 18-013-212



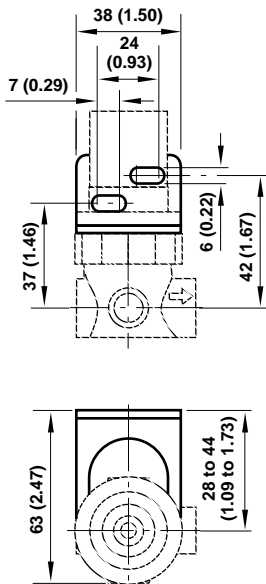
Dimensions – mm (Inches)

Panel mounting hole diameter 30 mm (1.19")
 Maximum panel thickness 0 to 6 mm (0 to 0.25")



Bracket Mounting

Use 3 mm (1/8") screws to mount bracket to wall.



Bracket Kit Reference

Model	Part number
All models	18-025-003

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.



Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where *pressures* and *temperatures* can exceed those listed under '**Technical Data**'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult Norgren.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.