

Industrial Automation

IMI Norgren

R91G, R91W Special purpose regulator Water or compressed air

- Port size: G1/4, 1/4PTF
- Bonnet and body made from acetal plastic
- R91W: Use with deionize water and potable

water systems. All elastomers are CFR 21 FDA food and water contact compliant. Non relieving models only.

- R91G: Designed for use with nonpotable water and compressed air systems. Non relieving and relieving models.
- Low torque, nonrising adjusting knob.
- Snap action knob locks pressure setting when pushed down.



Technical features

Medium:

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

Maximum inlet pressure:

10 bar (145 psi)

Pressure range:

0,3 ... 8,6 bar (4 ... 124 psi) 0,3 ... 3,5 bar (4 ... 50 psi)

Flow:

see below

Port sizes: Ambient/Media temperature:

G1/4, 1/4 PTF Water service: Gauge ports: +2° ... +52°C (+35 ... 125°F)

1/8 PTF with PTF main ports
R1/8 with ISO G main ports
Air service:
-20° ... +52°C (-4 ... 125°F)
When used in air service, air
supply must be dry enough to
avoid ice formation at

temperatures below +2°C (+35°F)

Materials:

Body and bonnet: Acetal Valve seat: Acetal Gauge port plugs: PP

R91G:

Valve: brass/NBR Valve seat o-ring: NBR Diaphragm: Acetal/PA inserted

NBR R91W*

Valve: Stainless steel/food grade

EPDM

Valve seat o-ring: food grade

EPDM

Diaphragm: Acetal/PA inserted

NBR, food grade

* NSF/ANSI 61 approved materials

Technical data, standard models

Symbol	Port size	Application	Pressure range (bar)	Flow *1) (dm3/s)	Flow *2) (lpm)	Relieving	Gauge	Weight (kg)	Model
	G1/4	Industrial air and non-potable water	0,3 8,6	11	6,6	Without	Without	0,07	R91G-2GK-NLN
	G1/4	Potable water and deionized water	0,3 8,6	11	6,6	Without	Without	0,07	R91W-2GK-NLN

^{*1)} Approximate compressed air flow with 10 bar inlet pressure, 6,3 bar set pressure and a 1 bar droop from set.

Option selector R91★-2★K-★★ Application Substitute Substitute Gauge Industrial air, non-potable G *3) With Without Potable water, deionized water Substitute Pressure range *4) Threads Substitute 0,3 ... 3,5 bar PTF 0.3 ... 8.6 bar ISO Rc taper В *3) Gauge with NSF approved materials ISO G parallel not available. Substitute Diaphragm *4) Outlet pressure can be adjusted to Non relieving pressures in excess of, and less than, those specified. Do not use these Relieving (only R91G) R units to control pressures outside of the specified ranges

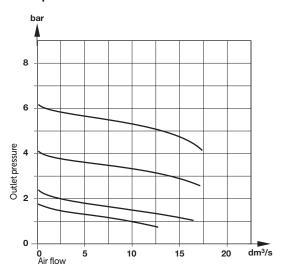
^{*2)} Approximate water flow with 7 bar inlet pressure, 4 bar set pressure and a 1 bar droop from set.



Air flow characteristics

Port size: 1/4", Spring range: 0,3 ... 8,6 bar,

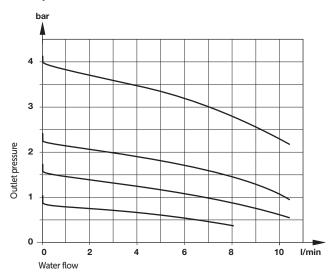
Inlet pressure: 10 bar



Water flow characteristics

Port size: 1/4", Spring range: 0,3 ... 3,5 bar,

Inlet pressure: 7 bar



Accessories



Service kit





^{*1)} Gauge with NSF approved materials not available.



Dimensions

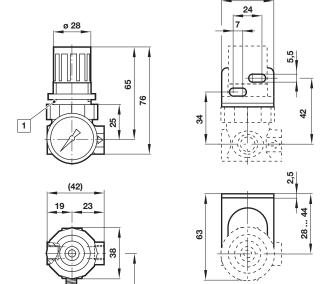
Bracket mounting

38

Dimensions in mm Projection/First angle







1 Panel mounting hole Ø 31 mm

40

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 features/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 Ltd. 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.