

R91W: Use with deionized water and potable water systems. Plastic (not assembly) is NSF approved. All elastomers are CFR 21 FDA food and water contact compliant. Non relieving models only.

R91G: Use with non-potable water (non-relieving only) and compressed air systems (Non relieving and relieving models.)



Technical data

Fluid

R91G: Compressed air and non-potable water, neutral gases

NOTE: Contact technical support for use with other media.

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).

Gauge ports:

1/8 PTF with PTF 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

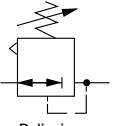
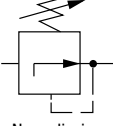
R91W: acetal, nylon inserted

nitrile, food grade

Gauge port plugs: nylon

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.

ISO Symbols	Inlet Port	Application	Model	Flow* scfm (dm3/s)	Flow** gpm (lpm)	Weight lb (kg)
 Relieving	1/4"	Industrial air and non-potable water	R91G-2AK-NLN	24 (11)	1.75 (6.6)	0.15 (0.07)
 Non relieving	1/4"	Potable water and deionized water	R91W-2AK-NLN	24 (11)	1.75 (6.6)	0.15 (0.07)

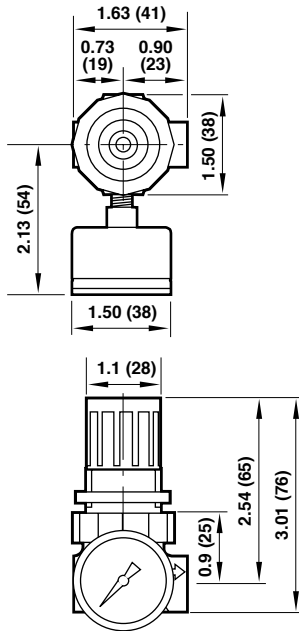
* Typical flow for compressed air service at 150 psig (10 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a droop of 15 psig (1 bar) from set.

** 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.

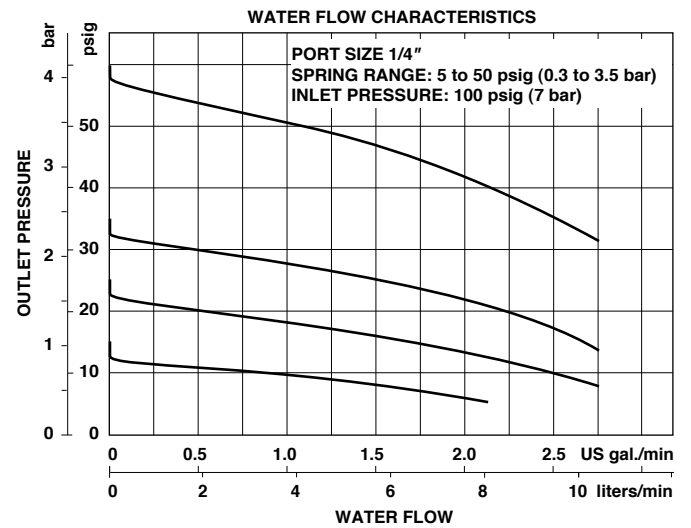
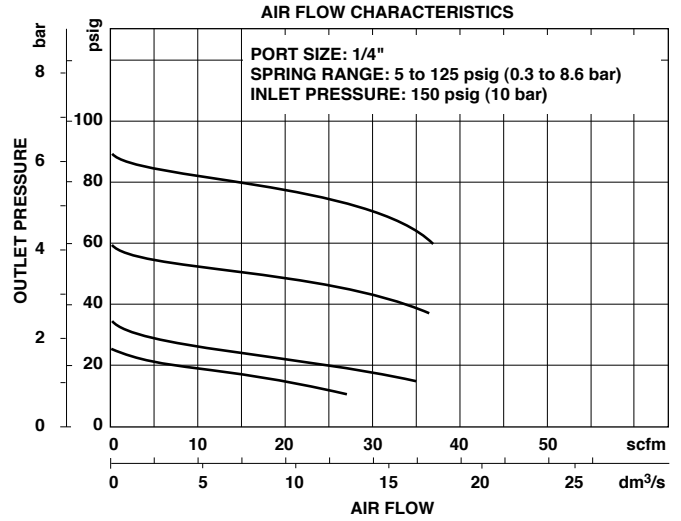
Alternative Models

Application	Substitute	R91 ★ 2AK ★ ★ N	Outlet Pressure Adjustment Range	Substitute
Industrial air, non-potable water	G	→	1 to 10 psig (0.1 to 0.7 bar)	E
Potable water, deionized water	W		5 to 50 psig (0.3 to 3.5 bar)	L
		→	Diaphragm	Substitute
			Non relieving	N
			Relieving	R

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.

Dimensions in inches (mm)