

Cylinder regulator R800 Series

↘ **Stainless steel**

↘ **High inlet pressure**

↘ **Precise outlet pressure**

↘ **Two-stage**



↘ This series of stainless steel, two stage, high purity regulators is designed for high purity, corrosive gases and gas mixtures up to 310 bar.g, requiring precise, contaminant free, pressure control. The two-stage design yields a delivery pressure change of less than 0.004 bar/10 bar inlet change. The convoluted stainless steel diaphragms provide excellent regulating characteristics and allow for internal vacuum purging. The metal to metal seal prevents contamination by eliminating the need for a soft seal and provides a leak rate of less than 2×10^{-8} mbar.l/sec He. The R800 series is not suitable for oxygen service.

Specifications

Material

Body: 316L stainless steel
 Bonnet: nickel plated brass
 Seat: Teflon®
 Inlet filter: 316L stainless steel
 Diaphragm: 316L stainless steel
 Gauge: 316L stainless steel,
 64 mm diameter
 Outlet valve: 316L stainless steel

Pressure/Temperature rating

Maximum inlet pressure: 310 bar.g
 Temperature range:
 -40 °C to +74 °C

Connections

Inlet: cylinder connection
 Outlet: 1/4 inch NPT male
 Relief valve: 1/4 inch NPT male

Flow

CV=0.05
 The flow coefficient expresses the flow capability of the regulator.
 CV is the flow of air in standard ft³/min for each psi of inlet pressure

Design leak rate

<2 x 10⁻⁸ mbar.l/sec He equivalent

Weight

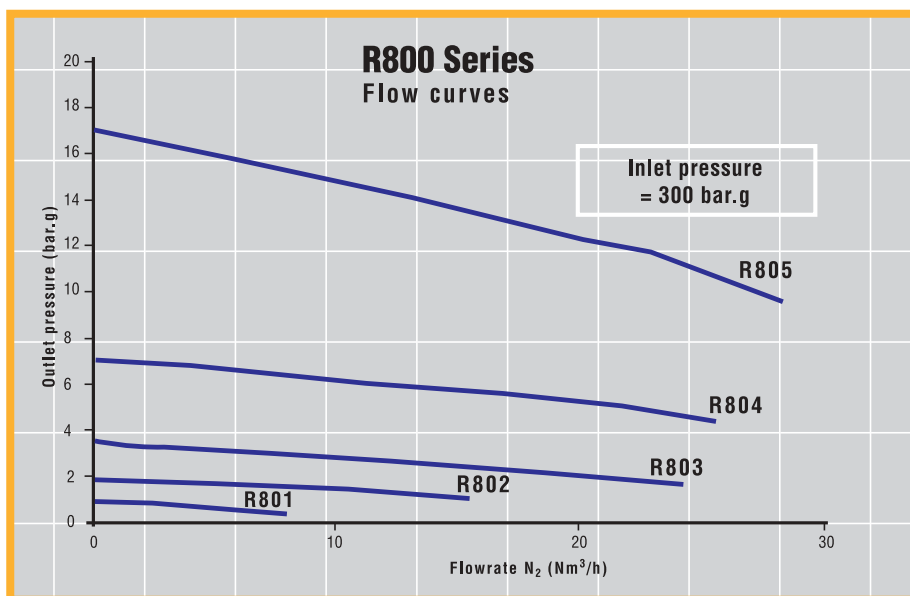
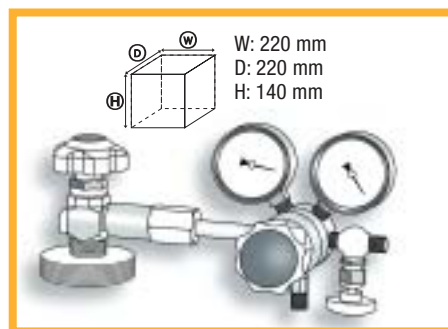
2.5 kg

Installation dimensions

WxHxD: 220 mm x 140 mm x 220 mm

Design features

- Two stage for maximum outlet pressure stability
- Inlet filter for maximum reliability
- Ultrasonically cleaned for high purity gas handling
- Relief valve fitted as standard for protection against over pressurisation
- Individually tested and certified to assure maximum leak-tightness and reliability
- High standard stainless steel finish



Ordering Information

Order Code	Recommended outlet pressure range (bar.g)	Design capacity at maximum outlet pressure (*) (Nm³/h)	Inlet gauge range (bar.g)	Outlet gauge range (bar.g)
R801	0.1 to 0.7	7	0 to 315	-1.0 to +1.5
R802	0.1 to 1.7	15	0 to 315	-1.0 to +3.0
R803	0.5 to 3.5	24	0 to 315	-1.0 to +5.0
R804	1.0 to 7.0	26	0 to 315	-1.0 to +9.0
R805	5.0 to 17.0	28	0 to 315	0.0 to +25.0

(*) For outlet pressure drops, refer to the flow curves.

OPTIONS

- D** Helium leak rate certification
- E** Panel mounting kit, consists of 2 nuts
- F** Extra 5 micron inlet filter
- G** Purge system (see datasheet)
- H** Compression fitting on outlet (available in various sizes)
- M** Mounting on a back plate
- R** No relief valve

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