

Cylinder regulator R700 Series

➤ **Stainless steel**

➤ **High inlet pressure**

➤ **Single stage**



➤ This series of stainless single-stage regulators is recommended for use with high purity, corrosive gases and gas mixtures up to 310 bar.g but is not suitable for oxygen service. The specially designed convoluted stainless steel diaphragm does not have soft seal materials and so provides good regulating performance without the possibility of contamination. Leak integrity is of the highest standard which is particularly important for toxic and corrosive gases.

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=0.06
 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

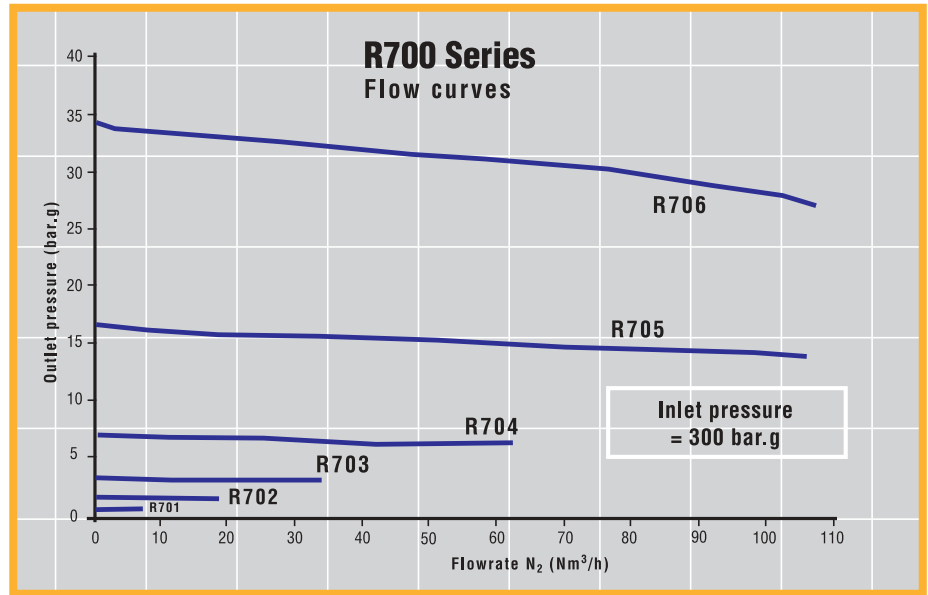
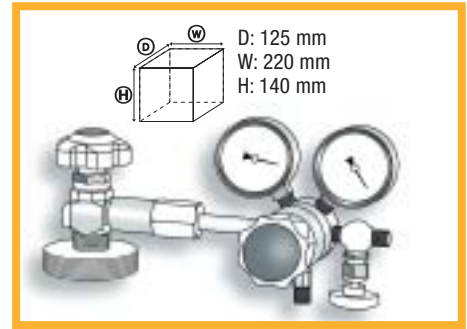
1.8 kg

Installation dimensions

WxHxD: 220 mm x 140 mm x 125 mm

Design features

- 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
- Panel mounting facility using 2 threaded holes in the rear of the regulator
- High standard stainless steel finish



Ordering Information

Order Code	Recommended outlet pressure range (bar.g)	Design capacity at maximum outlet pressure (*) (Nm ³ /h)	Inlet gauge range (bar.g)	Outlet gauge range (bar.g)
R701	0.1 to 0.7	7	0 to 315	-1.0 to +1.5
R702	0.2 to 1.7	18	0 to 315	-1.0 to +3.0
R703	0.5 to 3.5	33	0 to 315	-1.0 to +5.0
R704	1.0 to 7.0	62	0 to 315	-1.0 to +9.0
R705	5.0 to 17.0	106	0 to 315	0.0 to +25.0
R706	5.0 to 35.0	108	0 to 315	0.0 to +40.0

(*) 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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