

CENTRAL PRESSURE REGULATOR PURE GASES for high flowrate 7880 / 7890



Due to the high flowrate, the field of application of this central pressure regulator is mainly in the area of central gas supply systems for high purity gases.

Thanks to the integrated primary pressure compensation the regulator has a very high pressure constancy with decreasing inlet pressure. The central pressure regulator can be directly connected to a gas cylinder, a cylinder rack, a cylinder battery or with the corresponding adapters directly to a high pressure pipeline. The regulator has two gauges; one for the indication of the cylinder pressure and one for the indication of the working pressure.

The central pressure regulator is available for inlet pressure of 200 and 300 bar. The pressure regulation is effected by a stainless steel diaphragm, whereby the working pressure can be adjusted up to 30 bar. To prevent any unintended or unauthorised adjustment of the pressure, the pressure adjustment can only be done with the use of a tool. The adjusted pressure can be secured with a counter nut.

The regulator is equipped with an upwards-directed relief valve. On the outlet of the regulator a pipeline may be connected or directly the consumer.

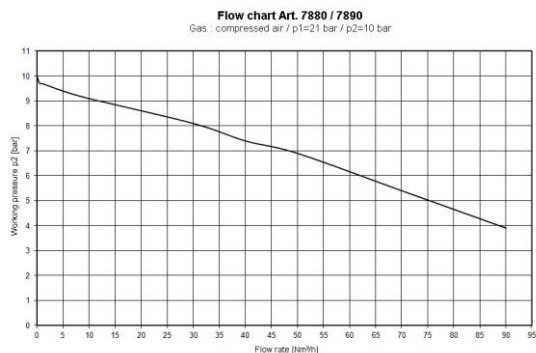
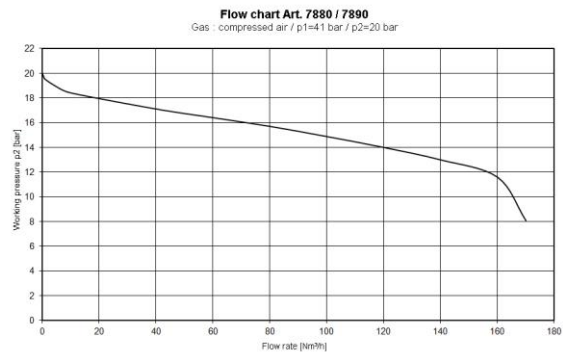
The regulator is certified in accordance with EN ISO 10524-2:2006 and EN ISO 7291:2001 and has successfully passed an ignition test for oxygen.

GLOOR

Central pressure regulator for pure gases Art.7880 / 7890 :

Inlet pressure	200 bar (Art.7880) / 300 bar (Art.7890)
Outlet pressure	10 bar / 20 bar / 30 bar
Flowrate	185 Nm ³ /h (P1=61 bar)
Gases	all pure gases and gas mixtures (up to purity 6.0) with exception of acetylene and corrosive gases
Inlet	gas and country specific screw connector according DIN 477-1 (200 bar) or ISO 5145 / NEVOC (300 bar)
Outlet	G1/4"female thread flat seal or G3/4" male thread flat seal
Material	body brass, outer parts chrome plated, spring stainless steel 1.431 and 50CrV4 zinc coated, sinter filter stainless steel SIKA R 100, diaphragm stainless steel 2.4781
Sealing material	Polyamide 6, POM, EPDM, FKM, silicone, aluminium, copper
Leaking rate helium	$< 1 \times 10^{-8}$ mbar \times l / s
Operating temperature	-20°C to + 60°C
Dimensions	B \times H \times D : 172 \times 205 \times 91 mm
Weight	3.6 kg

Flow charts



Dynamic expansion diagramme

