

Cylinder pressure regulators FMD 502-14/-16/-18



**Dual-stage,
for inert, reactive, flammable and oxidizing gases and gas mixtures,
purity max. 6.0
cylinder pressure 230 bar / 3300 psi
downstream pressure range 0.2 - 10.5 bar / 3 - 145 psi**

Special features

- Outlet pressure virtually independent of inlet pressure due to dual-stage design
- Diaphragm valve with 90°-shut-off function (FMD 502-16) or regulating valve (FMD 502-18)
- Diaphragm pressure regulator
- ATEX compliant adjustment knobs

Description

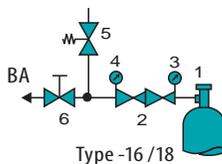
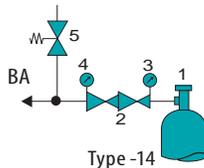
These pressure regulators consists of a cylinder connection, pressure regulator body, upstream and downstream pressure gauges, relief valve, diaphragm shut-off valve (type -16) diaphragm regulating valve (type -18) and outlet tube fittings. The use of contact gauge (accessories) in conjunction with alarm box (accessories) facilitates the monitoring of gas reserves.

Application

The cylinder pressure regulator series FMD 502 offers a wide range of uses and great performance. The FMD 502-16 allows shut-off/opening of the gas flow while maintaining the pressure regulator's adjustment. The FMD 502-18 allows for pressure setting as well as a finer apportioning of gas flow. The dual-stage design ensures the uniformity of the downstream pressure irrespectively of the level of the cylinder pressure.



Flow schematic



- 1 Cylinder connection
 - 2 Pressure regulator
 - 3 Upstream pressure gauge
 - 4 Downstream pressure gauge
 - 5 Relief valve
 - 6 Downstream shut-off valve (type -16)
/ regulating valve (type -18)
- BA Process gas outlet

Technical Data

Body:	stainless steel 316L (1.4404) specially cleaned and electro-polished or brass CW614 (CuZn39Pb3) specially cleaned, nickel-plated and chrome-plated
Seat seals 1st stage:	PCTFE
Seat seals 2nd stage:	PTFE
Seal material:	PCTFE (SS), PTFE (brass)
Relief valve seat seals:	Stainless steel: FKM, (EPDM, FFKM) * Brass: EPDM, (FKM)*
Performance data:	see chapter 5
Basic design aspects:	see page 13
Pressure gauge range:	-1 - 5 bar (-15 - 75 psi) -1 - 10 bar (-15 - 145 psi) -1 - 18 bar (-15 - 260 psi) 0 - 315 bar (0 - 4500 psi)
Weight:	approx. 2.1 kg (type -14), 2.4 kg (type -16/18)
Dimensions (w×h×d):	approx. 225×140×210 mm
Cylinder connections:	in compliance with DIN 477
Cylinder connections:	according to gas type, see chapter 5
Outlet:	NPT 1/4" f, optional tube fitting

*on request

Order code

Type	Material	upstream pressure	Downstream pressure	Inlet	Outlet	Contact gauge	Gas type
FMD 502-14	BC	F	3	DIN	CL6	Ki	Gas
FMD 502-14	BC = brass	F = 230 bar/3300 psi	1 = 0.2 - 1 bar / 3 - 15 psi	DIN	0=NPT 1/4" f	0 = without	Please
FMD 502-16	chrome-plated		3 = 0.2 - 3 bar / 3 - 45 psi	ANSI	CL6**	Ki = with	specify
FMD 502-18	SS = stainless steel		6 = 0.5 - 6 bar / 3 - 85 psi	AFNOR	CL8		
			10 = 1 - 10.5 bar / 7 - 150 psi	NBN	CL 1/8"		
				BS 341	CL 1/4"		
				CGA	N06		
				NEN			
				UNI			

** Outlet: CL6 = tube fitting for 6 mm outside diameter, N06 = hose connector for 6 mm hose inside diameter. Please note the "burst rate chart" when choosing the tube fittings in chapter 5.