

CYLINDER PRESSURE REGULATORS FMD 500-14/-16/-18



Single-stage, for inert, reactive, flammable and oxidizing gases and gas mixtures, purity max. 6.0, cylinder pressure 230 bar / 3300 psi, downstream pressure range 0.5 - 200 bar / 3 - 2900 psi

SPECIAL FEATURES

- Diaphragm valve with 90° shut-off function (FMD 500-16) or regulating valve (FMD 500-18)
- Diaphragm pressure regulator
- ATEX compliant adjustment knobs

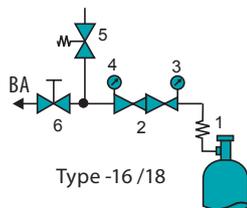
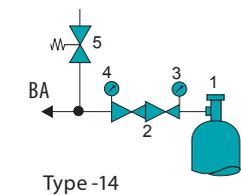
DESCRIPTION

These pressure regulators consists of a cylinder connection, pressure regulator body, upstream and downstream pressure gauges, diaphragm shut-off valve (type-16) regulating valve (type-18), relief valve (by downstream pressure >50bar RV on request) 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 500 offers a wide range of uses and great performance. The FMD 500-14 is the basic model. The FMD 500-16 allows shut-off of the gas flow while maintaining the pressure regulator's adjustment. The regulating valve of the FMD 500-18 allows a finer apportioning of gas flow.

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:	PCTFE
Seal material:	PCTFE (SS), PVDF (brass)
Relief valve:	outlet NPT1/4" f, by downstream pressure >50bar RV*
Relief valve seat seal:	SS: FKM, (EPDM, FFKM)*, MS: EPDM, (FKM)*
Pressure gauge range:	-1 - 10 bar (-15 - 145 psi) 0 - 25 bar (0 - 365 psi) 0 - 40 bar (0 - 600 psi) 0 - 80 bar (0 - 1150 psi) 0 - 315 bar (0 - 4500 psi)
Performance data:	see chapter 5
Basic design aspects:	see page 13
Weight:	approx. 1.5 kg (type -14), 1.8 kg (type -16/18)
Dimensions (w×h×d):	approx. 225×140×125mm
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 500-14	BC	F	6	DIN	CL6	Ki	GAS
FMD 500-14	BC = brass	F = 230 bar/3300 psi	6 = 0.5 - 6 bar / 3 - 85 psi	DIN	0=NPT 1/4" f	0 = without	Please specify
FMD 500-16	chrome-plated		14 = 1 - 14 bar / 15 - 200 psi	ANSI	CL6**	Ki = with	
FMD 500-18	SS = stainless steel		28 = 2.5 - 28 bar / 35 - 365 psi	AFNOR	CL8		
			50 = 2.5 - 50 bar / 35 - 720 psi	NBN	CL 1/8"		
			200 = 10 - 200 bar / 145 - 2900 psi	BS 341	CL 1/4"		
			(200 bar not with FMD 500-18)	CGA	NO6		
				NEN, UNI			

** Outlet: CL6 = tube fitting for 6 mm outside diameter, NO6 = hose connector for 6 mm hose inside diameter. Please note the "burst rate chart" when choosing the tube fittings in chapter 5.