

## 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

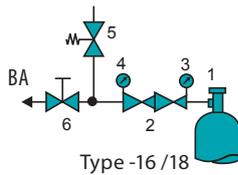
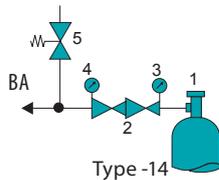
The cylinder pressure regulator series FMD 502 offers a wide range of uses and great performance. The FMD 502-16 allows shut-off/opening of the gas flow while maintaining the pressure regulator's adjustment. The FMD 502-18 allows for pressure setting as well as a finer apportioning of gas flow. The dual-stage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

### TECHNICAL DATA

Body:	stainless steel 316L (1.4404) specially cleaned and electro-polished or brass
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

### 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

### ORDER CODE

Type	Material	Upstream pressure	Downstream pressure	Inlet	Outlet	Contact gauge	Gas type
<b>FMD 502-14</b>	<b>BC</b>	<b>F</b>	<b>3</b>	<b>DIN</b>	<b>CL6</b>	<b>Ki</b>	<b>GAS</b>
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 specify
FMD 502-16	chrome-plated		3 = 0.2 - 3 bar / 3 - 45 psi	ANSI	CL6**	Ki = with	
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	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.