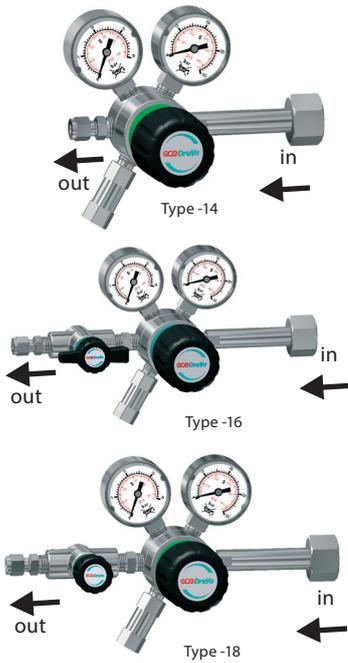


CYLINDER PRESSURE REGULATORS FMD 510/540-14/-16/-18



Single-stage, for inert, reactive, flammable and oxidizing gases and gas mixtures, purity max. 6.0
cylinder pressure 12 bar / 175 psi,
FMD 510: downstream pressure range 0.2 - 3 bar abs / 3 - 45 psi abs,
FMD 540: downstream pressure range 0.2 - 2 bar / 3 - 30 psi

SPECIAL FEATURES

- For low downstream pressure
- Subatmospheric-pressure regulation (FMD 510)
- Diaphragm valve with 90°-shut-off function (FMD Type -16) or regulating valve (FMD Type -18)
- Diaphragm regulator
- ATEX compliant adjustment knobs

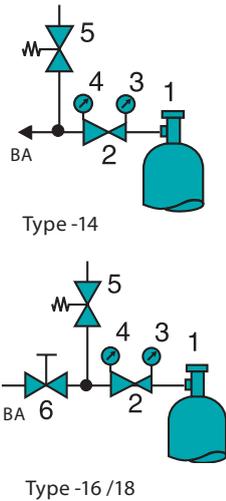
DESCRIPTION

These pressure regulators consists of a cylinder connection, pressure regulator body, upstream and downstream pressure gauges, diaphragm shut-off valve MVA 500 (type -16), regulating valve MVR 500 (type -18), relief valve and outlet tube fittings. The use of contact gauge (accessories) in conjunction with alarm box (accessories) facilitates the monitoring of gas reserves.

APPLICATION

The pressure regulator series FMD 510/540 reduces low upstream pressure to a very low downstream pressure : FMD 510 down to 0.2 bar absolut and is suitable for Subatmospheric-pressure regulation, the FMD 540 down to 0.2 bar. The FMD 510/540 would be selected depending on the requirements and needs of the downstream use, in regards of the shut-off or rather regulating of the gas stream and Subatmospheric-pressure regulation.

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
	2.0401.26 specially cleaned, nickel-plated and chrome-plated
Seat seals:	Stainless steel: FFKM, (EPDM)*
Brass:	EPDM, (FKM)*
Seal material:	PCTFE (stainless steel), PVDF (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 - 1.5 bar (-15 - 40 psi)
	-1 - 5 bar (-15 - 75 psi)
	-1 - 18 bar (-15 - 260 psi)
Optional:	0 - 600 mbar (0 - 8.5 psi) with diameter 63 mm
Weight:	approx. 1.5 kg (type -14), 1.8 kg (type -16/18)
Dimensions (wxhxd):	approx. 139×126×175 (-14), 223 (-16 and -18) mm
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 510-14	BC	D	2	DIN	CL6	Ki	GAS
FMD 510-14	BC = brass	D = 12 bar	FMD 510:	DIN	0=NPT 1/4"f	0 = without	Please
FMD 510-16	chrome-plated	/175 psi	2a = 0.2 - 2 bar abs. /3 - 30 psi abs.	ANSI	CL6**	Ki = with	specify
FMD 510-18	SS = stainless		3a = 0.2 - 3 bar abs. /3 - 45 psi	AFNOR	CL8		
FMD 540-14	steel		abs.	NBN	CL 1/8"		
FMD 540-16			FMD 540:	BS 341	CL 1/4"		
FMD 540-18			1 = 0.2 - 1 bar/3 - 15 psi	CGA	NO6		
			2 = 0.2 - 2 bar/3 - 30 psi	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.