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.

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 (wxhxhd): approx. 139×126×175 (-14), 223 (-16 and -18) mm
Cylinder connections: according to gas type, see chapter 5
Outlet: NPT 1/4", optional tube fitting

ORDER CODE

<table>
<thead>
<tr>
<th>Type</th>
<th>Material</th>
<th>Upstream pressure D</th>
<th>Downstream pressure</th>
<th>Inlet DIN</th>
<th>Outlet CL6</th>
<th>Contact gauge Ki</th>
<th>Gas type GAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMD 510-14</td>
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<td>FMD 510: 2a = 0.2 - 2 bar abs. /3 - 30 psi abs. 3a = 0.2 - 3 bar abs. /3 - 45 psi abs.</td>
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** Outlet: CL6 = tube fitting for 6 mm outside diameter, ND6 = hose connector for 6 mm hose inside diameter. Please note the "burst rate chart" when choosing the tube fittings in chapter 5.