**Product features**

- 2-stage diaphragm cylinder pressure regulator with extremely stable outlet pressure and anti-vibration device
- For non-corrosive gases and gas mixtures up to quality 6.0
- 6 ports for flexible and individual configuration
- New laboratory-style design
- Central filter
- Suitable for ECD-applications
- Pressure regulator can be evacuated
- Suitable for inlet pressures up to 300 bar
- Max. outlet pressures 1.5 up to 20 bar
- Light weight
- Compact design
- Approved for use with oxygen
- Simple outlet pressure limitation by handwheel
- Easy to install

**Technical data**

<table>
<thead>
<tr>
<th>Type</th>
<th>double-stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet pressure $P_1$</td>
<td>max. 300 bar</td>
</tr>
<tr>
<td>Outlet pressure $P_2$</td>
<td>1.5 / 4 / 10 / 20 bar</td>
</tr>
</tbody>
</table>

**Materials**

- Body regulator, relief valve: chrome plated brass
- Valve seat: PA
- Diaphragm: Hastelloy C276
- Soft goods: EPDM
- Filter: Sintered bronze

**In- and outlets**

- 1/4" NPT-F

**Temperature range**

- -30°C to +60°C

**Leak rate**

- (to atmosphere) $1 \times 10^{-8}$ mbar l/s He
- (via seat) $1 \times 10^{-9}$ mbar l/s He

**Pressure gauge**

- Safety pressure gauges ISO5171/Kl1.6/NG50

**Weight**

- 1.7 kg

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**Flow curves FM53**

![Flow curves FM53](image)
Cylinder pressure regulator FM53

**Inlet left: L**

FM53 - L - 300 - 20 - 1 - 2 - 3 - 4 - 5 - 6 - N2

**Inlet pressure P₁**
- 100 - max. 100 bar
- 200 - max. 200 bar
- 300 - max. 300 bar

**Outlet pressure P₂**
- 1.5 - to 1.5 bar
- 4 - to 4 bar
- 10 - to 10 bar
- 20 - to 20 bar

**Dimensions**
- 153 x 134

**Type of gas**
Please specify type of gas (for selection of valve seat materials)

**In- / outlets**
- CM 1/4 - 1/8/1/4/1/4 - OD compression fitting (brass)
- CM 6 - 3/6/8/10/12 - mm compression fitting (brass)
- CE 1/4 - 1/8/1/4/1/4 - OD compression fitting (stainless steel)
- CE 6 - 3/6/8/10/12 - mm compression fitting (stainless steel)
- B - plug
- A - relief valve - 1/4" NPT-F
- xxxx - detailed specification of cylinder connection including the relevant standard and number
  (e.g. BS no.3 for nitrogen up to 230 bar)
- K - contact gauge
- M - pressure gauge
- 0 - 1/4" NPT-F (port only)

For inlet pressure up to 50 bar and outlet pressure of max. 1.5 or 4 bar please use M51.