PRESSURE REGULATOR ADR 150
for acetylene

Powerful manifold pressure regulator to regulate high flows at acetylene cylinder manifolds or bundles (packs).

Benefits
- extremely low pressure drop (Δp) provide optimal draining of the manifold or bundle
  > see dynamic expansion curve
- integrated relief valve (according to ISO 7291)
- the only one in the world with
  - 150 m$^3$/h flow capacity
  - extremely stable outlet pressure
- integrated relief valve, pilot pressure regulator with pressure gauge and outlet pressure gauge

Operation / Usage
The ADR 150 for acetylene is used to reduce high pressure to working pressure in acetylene supplies as required in EN 14114. Given the high regulating accuracy and flow specifications, it is suitable for all applications with high pressure requirements.

Function
The ADR 150 consists of a pilot pressure regulator (pilot gas = shielding or inert gas) in combination with a dome loaded pressure regulator and a relief valve. The required pipeline pressure is adjusted by the pilot pressure regulator to a maximum of 1.5 bar (2 bar available on request).

Maintenance
It is recommended that a leak check to atmosphere at regular intervals be conducted. Repairs are only to be carried out by the manufacturer.

Approvals
Company certified according to ISO 9001 and PED 2014/68/EU Module H
CE-marked according to:
- PED 2014/68/EU, category III, Safety accessories

### Pressure regulator

<table>
<thead>
<tr>
<th>Dome loaded pressure regulator</th>
<th>Pilot pressure regulator</th>
<th>Relief valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>spring-loaded with secondary venting</td>
<td>spring-loaded with connecting thread for venting pipe</td>
</tr>
<tr>
<td>Gases</td>
<td>acetylene</td>
<td>shielding or inert gas as pilot gas</td>
</tr>
<tr>
<td>max. inlet pressure</td>
<td>25 bar</td>
<td>10 bar</td>
</tr>
<tr>
<td>min. inlet pressure</td>
<td>2 bar</td>
<td></td>
</tr>
<tr>
<td>Outlet pressure</td>
<td>up to 1.5 bar (2 bar available on request)</td>
<td></td>
</tr>
<tr>
<td>Nominal gas flow capacity</td>
<td>at 0.6 bar outlet pressure 96 m$^3$/h</td>
<td>at 1.5 bar outlet pressure 150 m$^3$/h</td>
</tr>
<tr>
<td>Inlet</td>
<td>M36x2, solderless pipe coupler, drill hole form W - heavy series S DN 25 - DIN 3861</td>
<td>G 1/4 female thread</td>
</tr>
<tr>
<td>Filter</td>
<td>stainless steel, filter mesh 100 µm</td>
<td></td>
</tr>
<tr>
<td>Relief valve capacity</td>
<td>according to nominal gas flow capacity</td>
<td></td>
</tr>
<tr>
<td>Outlet</td>
<td>flange, DN 50 - PN 40, DIN 2656</td>
<td>G 1/4 female thread</td>
</tr>
<tr>
<td>Materials</td>
<td>brass, stainless steel, elastomer</td>
<td>aluminium, brass, stainless steel, elastomer</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 25 kg</td>
<td>brass, stainless steel, elastomer</td>
</tr>
</tbody>
</table>
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Dimensions in mm

Flow diagram

Outlet pressure: $P_h$ [bar]

Standard volume flow [Nm$^3$/h]
(1013 mbar / 14.7 psi, 0 °C / 32 °F)

Dynamic expansion curve (1013 mbar / 14.7 psi, 0 °C / 32 °F)

Outlet pressure: $P_h$ [bar]

Inlet pressure: $P_v$ [bar]

Flow diagram

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