DOME PRESSURE REGULATOR SET 757 LE/S
Complete solution, own-medium controlled

NEW – with smart-option
See page 3

High performance dome-loaded pressure regulator set.
For high and varying flows requiring maximum pressure stability.

Features

- **Pilot Control Tube (PCT)**
  One of the features enabling highly accurate control of outlet pressure

- **Balanced Seat Design (BSD)**
  Further enabling control precision, high reliability and low maintenance

- **A complete solution, ready to use**
  With integrated pilot pressure regulator, and stainless steel pressure gauges, completely assembled and tested

- **Own-medium controlled**
  Enabling autonomous operation (no separate gas supply required)

- **Closed system**
  Self-relieving design, but no gas is released to atmosphere

- **Simple to install and operate**
  Removable spindle enables simple setting of the required outlet pressure
  Can be positioned at any angle/orientation
  For indoor and outdoor installation.

- **Glycerine-filled manometer, unfilled version for oxygen**

Maintenance

Annual testing of body leak tightness is recommended. Depending on application, moving wetted parts may need periodic replacement.

Device-specific Repair-Kit available upon request.

Approvals

Company certified according to ISO 9001, ISO 22000 and PED 2014/68/EU Module H

CE-marked according to PED 2014/68/EU

ATEX 2014/34/EU with ignition hazard analysis according to EN 1127-1, DIN EN 13463-1 and ZH1/200

Analyzed for Food Safety per HACCP-Analysis

Fulfills the requirements of EU Regulations (EC) 1935/2004, and (EC) 2023/2006

Fulfills the requirements of German Food and Feed (LFGB) Law, and is suitable for contact with food gases

Available upon request

- Lockable spindle cap
- Certificates and test reports
- Other Dome types
- Switchover systems/parallel supply systems
- Customer-specific/customized versions

Operation / Usage

Ideal for process gas supply where pressure accuracy is required even when inlet pressures and flow rates are varying.

High flow rates and outlet pressure accuracy are achieved, even when the difference between inlet and outlet pressures is small.
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<table>
<thead>
<tr>
<th>Model</th>
<th>Max. inlet pressure</th>
<th>Outlet pressure</th>
<th>Connections</th>
<th>Kv-Value</th>
<th>Cv-Value</th>
<th>Coefficient as per DIN EN ISO 7291</th>
<th>Temperature range</th>
<th>Housing</th>
<th>Cartridge</th>
<th>Membrane</th>
<th>O-Ring</th>
<th>Spring</th>
<th>Pressure gauge</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>757LE/S</td>
<td>CO₂: 363 PSI O₂: 435 PSI other gases: 580 PSI</td>
<td>7 - 145 PSI 7 - 232 PSI 7 - 435 PSI</td>
<td>Flange DN 50/PN40 DIN EN 1092-1 G 2 female 2&quot; NPT female</td>
<td>15</td>
<td>17.4</td>
<td>Coefficient of increase in pressure after closing: ( R = 0.27 ) Coefficient of unevenness: ( I = 0.32 )</td>
<td>-22°F to +122°F</td>
<td>Brass</td>
<td>Stainless steel (1.4305)</td>
<td>CR</td>
<td>NBR</td>
<td>Stainless steel (1.4310)</td>
<td>Stainless steel housing DIN EN ISO 5171 for O₂, DIN EN 837-1 glycerine-filled for other gases</td>
<td>with flange approx. 57 lb without flange approx. 37 lb</td>
</tr>
</tbody>
</table>

**Model Dimensions in inches**

<table>
<thead>
<tr>
<th>Model</th>
<th>Connection</th>
<th>G</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>H</th>
<th>L</th>
<th>O (O-ring)</th>
<th>S</th>
<th>AF</th>
</tr>
</thead>
<tbody>
<tr>
<td>757LE/S</td>
<td>2&quot; female</td>
<td>7.78</td>
<td>3.11</td>
<td>0.33</td>
<td>approx. 9.33</td>
<td>5.55</td>
<td>–</td>
<td>3.03</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>757LE/S</td>
<td>2&quot; NPT female</td>
<td>7.78</td>
<td>3.11</td>
<td>0.33</td>
<td>approx. 9.33</td>
<td>8.07 (L+2xC₁)</td>
<td>–</td>
<td>3.03</td>
<td>2.76</td>
<td></td>
</tr>
<tr>
<td>757LE/S</td>
<td>DN 50/PN 40</td>
<td>7.78</td>
<td>3.11</td>
<td>0.33</td>
<td>approx. 9.33</td>
<td>11.06</td>
<td>2.44</td>
<td>3.03</td>
<td>3.54</td>
<td></td>
</tr>
</tbody>
</table>

Other connections upon request

**For more pressure regulators visit [www.wittgas.us](http://www.wittgas.us)**
Top quality valves combined with high-tech sensors and electronic components – that's the smart-option from WITT.

<table>
<thead>
<tr>
<th>Model</th>
<th>757LE/S - with smart-option</th>
</tr>
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<tbody>
<tr>
<td><strong>Gases</strong></td>
<td>non-flammable gases</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>24 V DC</td>
</tr>
<tr>
<td><strong>Protection class</strong></td>
<td>IP 67</td>
</tr>
<tr>
<td><strong>Parameters / Accuracy</strong></td>
<td>Temperature ± 35.6°F, Pressure ± 0.7% end value 1450 PSI, current gas flow - upon request</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>M12, 12-pin plug</td>
</tr>
<tr>
<td><strong>Signals</strong></td>
<td>4 - 20 mA</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>with flange approx. 57 lb without flange approx. 37 lb</td>
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</table>

Other materials/material combinations upon request

Smart functions of dome pressure regulator

- measurement of inlet, outlet and pilot pressure
- measurement of inlet and outlet gas temperature
- calculation of current gas flow
- digital display (option)
- analog 4 – 20 mA signals
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Pressure control performance examples (N₂, 68°F : apply conversion factor of x 0.8 for CO₂)

Flowrate [m³/h], Pᵥ = Inlet pressure [bar]
1 m³/h = 35.3 scfh

Outlet pressure [bar]

Flow capacity “envelope”

Example:
Inlet pressure: 32 barₐₕₙ
Outlet pressure: 26 barₐₕₙ
Max. Flow: 5,000 Nm³/h
Gas: N₂

individual graphs with your parameters upon request
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Connection combinations

<table>
<thead>
<tr>
<th>Repair-Kit</th>
<th>Model</th>
<th>Part No.</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>757LE/S</td>
<td>962.000065</td>
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<table>
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<tr>
<th>lockable spindle cap</th>
<th>Model</th>
<th>Part No.</th>
</tr>
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<tr>
<td></td>
<td>757LE/S</td>
<td>966.061400</td>
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