Tech Master GP400 Series
4.5 Brass Barstock Regulator

Tech Master GP400 Series regulators are intended for primary pressure gas control of:

- Non-Corrosive
- High Purity gases (up to 4.5 Grade)

The Tech Master GP400 series regulators are intended for primary pressure gas control of non-corrosive, high purity gases, up to 4.5 purity grade.

GPS400 Series –
Brass Barstock Single Stage Regulator for applications where slight pressure variance in delivery pressure is acceptable (as cylinder pressure decreases)

GPT400 Series –
Brass Barstock Two Stage Regulator for applications where constant pressure is required (as cylinder pressure decreases)

GPL400 Series –
Brass Barstock Line Regulator for gas applications, for distribution systems (pipelines)
Tech Master GP400 Series
4.5 Brass Barstock Regulator

**TYPICAL APPLICATIONS**
- Purging
- Pressure testing
- Gas shielding
- Hydrocarbon service

**FEATURES**
- Five port configuration
- Rear panel mounting capabilities (line and single stage regulators)
- Encapsulated seat design
- Low wetted surface area
- Full range of inlet and outlet fittings

**MATERIALS**

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>Brass Barstock</td>
</tr>
<tr>
<td>Bonnet</td>
<td>High strength alloy</td>
</tr>
<tr>
<td>Seat</td>
<td>Nylon</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>Neoprene</td>
</tr>
<tr>
<td>Seals</td>
<td>Viton</td>
</tr>
<tr>
<td>Filter</td>
<td>10 Micron sintered 316L Stainless Steel</td>
</tr>
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</table>

**SPECIFICATION**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Maximum Inlet Pressure</td>
<td>25 bar (360 psig), 60 bar (870 psig), 207 bar (3000 psig), 300 bar (4350 psig)*</td>
</tr>
<tr>
<td>Delivery Pressure Range psig</td>
<td>0-15 psig, 0-22 psig, 0-50 psig, 0-90 psig, 0-150 psig.</td>
</tr>
<tr>
<td>Delivery Pressure Range bar</td>
<td>0-1 bar, 0-1.5 bar, 0-3 bar, 0-6 bar, 0-10 bar</td>
</tr>
<tr>
<td>Gauges</td>
<td>50mm (2&quot;) diameter snap-on tamper proof lens</td>
</tr>
<tr>
<td>Ports</td>
<td>1/4” NPT Female</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>-40º C to +60º C (60º F to 140º F)</td>
</tr>
<tr>
<td>Flow Coefficient</td>
<td>GPS / GPL, Cᵥ = 0.1; GPT, Cᵥ = 0.07</td>
</tr>
<tr>
<td>Ports</td>
<td>1/4” NPT Female</td>
</tr>
<tr>
<td>Weight (GPL400 / 410)</td>
<td>0.9kg (2.1lb)</td>
</tr>
<tr>
<td>Weight (GPS400 / 410)</td>
<td>1.05kg (2.3lb)</td>
</tr>
<tr>
<td>Weight (GPT400 / 410)</td>
<td>1.5kg (3.5lb)</td>
</tr>
</tbody>
</table>

*Singles and Two Stage regulators with no fitting fitted in to the regulator

**DIMENSIONS**

**SINGLE STAGE REGULATOR**
- **GP400 Series** – Single Stage diaphragm regulator with no relief valve

**TWO STAGE REGULATOR**
- **GP400 Series** – Two Stage diaphragm regulator with no relief valve

**LINE REGULATOR**
- **GP400 Series** – Diaphragm regulator with no relief valve
Tech Master GP400 Series
4.5 Brass Barstock Regulator

FLOW PERFORMANCE

Tech Master - Single Stage GP400 Series
Flow vs Pressure at 400 psig in - Air

Tech Master - Line GP400 Series
Flow vs Pressure at 400 psig in - Air

Tech Master - Two Stage GP400 Series
Flow vs Pressure at 2000 psig in - Air

Tech Master - Two Stage GP400 Series
Flow vs Pressure at 500 psig in - Air

MODEL NO. SELECTOR GUIDE

GPS400-03-05-01-01-054-21-L

Rules:
1) Model number for delivery pressures from 22 up to 150 psi
2) Inlet Pressure of 4350 psi (option 4) only available with no inlet fitting (option 00 - inlet fittings)

LGT510 Acetylene 1) Model number for 15 psi delivery pressure only (Acetylene regulator) Inlet Fitting CGA 510 only and 360 psi inlet pressure
Tech Master GP400 Series
4.5 Brass Barstock Regulator

GPT400-03-05-01-01-054-21-L

<table>
<thead>
<tr>
<th>PRODUCT MODEL</th>
<th>INLET PRESSURE</th>
<th>DELIVERY PRESSURE</th>
<th>INLET PRESSURE GAUGE UNIT</th>
<th>DELIVERY PRESSURE GAUGE UNIT</th>
<th>INLET FITTINGS</th>
<th>OUTLET FITTINGS</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPT400</td>
<td>01 360 psi</td>
<td>01 0-35 psi</td>
<td>00 No Gauge</td>
<td>00 No Gauge</td>
<td>00 No Inlet Fittings</td>
<td>00 No Outlet Fittings</td>
<td>A No Options</td>
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<tr>
<td>GPT401</td>
<td>03 3000 psi</td>
<td>02 0-32 psi</td>
<td>01 Brass/PSI</td>
<td>01 Brass/PSI</td>
<td>01 1/4&quot; Compression Tube Brass</td>
<td>01 1/4&quot; Compression Tube Brass</td>
<td>L Compliance Certificate</td>
</tr>
<tr>
<td></td>
<td>04 4350 psi</td>
<td>03 0-50 psi</td>
<td>Brass</td>
<td>Brass</td>
<td>03 1/4&quot; Compression Tube Brass</td>
<td>03 1/4&quot; Compression Tube Brass</td>
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<tr>
<td></td>
<td>04 0-90 psi</td>
<td>05 0-250 psi</td>
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<td></td>
<td>04 1/4&quot; NPT Male Brass</td>
<td>04 1/4&quot; NPT Male Brass</td>
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<tr>
<td></td>
<td>05 0-150 psi</td>
<td>06 0-350 psi</td>
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<td></td>
<td>06 1/4&quot; Compression Tube Brass</td>
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LGT510 Acetylene
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GPL400-02-05-00-01-000-21-L

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<td>00 No Inlet Fittings</td>
<td>00 No Outlet Fittings</td>
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<tr>
<td>GPL410</td>
<td>02 870 psi</td>
<td>02 0-22 psi</td>
<td>01 Brass/PSI</td>
<td>01 Brass/PSI</td>
<td>01 1/4&quot; Compression Tube Brass</td>
<td>01 1/4&quot; Compression Tube Brass</td>
<td>L Compliance Certificate</td>
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<tr>
<td></td>
<td></td>
<td>03 0-50 psi</td>
<td>Brass</td>
<td>Brass</td>
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