Comet Gas Outfits and Regulators
**CIGWELD Professional: when welding is your business**

At CIGWELD we distinguish ourselves from our competition through superior featured, dependable products, technical innovation and excellence in customer service and technical support.

Our upgraded Professional COMET Gas Outfit and Regulator range is proof of this commitment to deliver quality equipment that exceeds expectations. A wealth of features and options make this equipment the perfect choice for the serious welding professional.

**CIGWELD COMET Gas Outfits Range**

CIGWELD offers a sensational range of COMET Gas Cutting and Welding Kits, from the basic Starter Kit to the impressive Commander, right up to the superb Professional Plus that now has the innovative GasGuard safety feature. Starter and Commander kits are also available in either Oxy/Acetylene or Oxy/LP Gas combinations.

All of these kits are packed in sturdy stainless steel toolboxes with lift out trays and a handy lid insert which details the complete range of welding accessories and operating information for the COMET Blowpipe System.

If a full toolbox kit doesn’t meet your needs a COMET Custom Kit is now available. Containing the 4 basic elements: regulators for oxygen and acetylene or lpg; blowpipe and cutting attachment, this kit allows you to build your own customised cutting or welding kit adding only the items you specifically require.

**CIGWELD COMET Regulator Range**

Gas regulators are typically subjected to very tough conditions. The stringent requirements expected in today’s market means that regulators need to incorporate high levels of safety, accuracy, performance and low maintenance in their design. The extensive range of COMET regulators have been engineered to meet these requirements. Incorporating CIGWELD’s encapsulated seat technology, the accurate and safe delivery of gas from every regulator is ensured.

All COMET regulators are manufactured by CIGWELD under a stringent quality system, including some that are independently certified by SAI Global. These regulators display the Standardsmark tick label that is your guarantee the regulator complies with the requirements of Australian Standard AS4267 - 1995. CIGWELD has a proven history of providing quality gas equipment resulting in a regulator with long term reliability and performance.

**So don’t compromise!**

Insist on COMET to get the job done right . . . every time!

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**Key to Icons**

- **Warranty:** This equipment is manufactured to stringent CIGWELD quality standards and is backed by a conditional warranty period as indicated.

- **Gas Guard:** This safety feature ensures total gas shut off in the event the inlet connection is broken.

- **Australian Standards:** Relevant Australian Standards apply to selected items. Eg. Gas welding hose, Flashback arrestors, Welding goggles, etc.

- **Australian Standard:** Marked regulators are tested by CIGWELD to conform to AS4267 – 1995 ‘Pressure regulators for use with industrial compressed gas cylinders’.

- **Australian Standard:** COMET 700 & 500 Series Oxygen & Acetylene gauged regulators that display the Standardsmark tick label are independently certified by SAI Global to AS4267, licence 2040.

- **Quality System:** This equipment is manufactured to CIGWELD’s Certified Quality System.

- **Gas Type:** This equipment is designed for use with oxygen & acetylene.

- **Gas Type:** This equipment is designed for use with oxygen & LP gas.

- **Dual Stage:** This equipment provides precise and constant control of outlet pressure in two stages.

- **High Flow:** This equipment is suitable for applications requiring high flow.

- **High Pressure:** This equipment provides high outlet pressure.
COMET Gas Outfits

COMET Custom Kit

The COMET Custom kit allows you to build your own kit based on the four key components and then add the items that you specifically require.

**Kit contents**
COMET 700 oxygen regulator, COMET 700 acetylene regulator, COMET 3 blowpipe, COMET 3 cutting attachment.

**Ordering information**
- Oxy/Acetylene: 308353
- Oxy/Acetylene (NZ): 308356
- Oxy/LP Gas: 308358
- Oxy/LP Gas (NZ): 308361

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COMET Starter Kit

For those just starting out, or who require the basic components for oxy/acetylene gas cutting and welding, the COMET Starter Kit is the ideal option. Add extra components as required. Components comply with the relevant clauses of AS 4839.

**Kit contents**
COMET 700 oxygen regulator; COMET 700 acetylene regulator; COMET 3 blowpipe; COMET 3 cutting attachment; COMET 3 mixer; Welding tip (Size 12); Cutting nozzle (Size 12); Oxy/Acetylene gas hose (5m); Stainless steel toolbox; Accessories as pictured

**Ordering information**
- Oxy/Acetylene: 308315
- Oxy/Acetylene (NZ): 308324
- Oxy/LP Gas: 308316
- Oxy/LP Gas (NZ): 308325
The logical choice for those who require the extra components not supplied with the Starter Kit, the COMET Commander Kit is ideally suited to the intermediate user. Contains all of the necessary components required for most welding and cutting applications. Components comply with the relevant clauses of AS 4839.

**Kit contents**
COMET 700 oxygen regulator; COMET 700 acetylene regulator; COMET 3 blowpipe; COMET 3 cutting attachment; COMET 3 mixer; Welding tips (Size 8,10,12,15); Cutting nozzles (Size 6,8,12,15); Oxy/Acetylene gas hose (5m); Stainless steel toolbox; Accessories as pictured

**Ordering information**
- Oxy/Acetylene 308314
- Oxy/Acetylene (NZ) 308323
- Oxy/LP Gas 308345
The COMET Professional Plus Kit is a complete outfit containing everything the professional tradesman or other discerning buyer could possibly want for gas cutting, welding and heating. The components in this outfit provide incredible value for money. A magnificent kit that now has the GasGuard safety feature fitted as standard in the regulators. Components comply with the relevant clauses of AS 4839.

Kit contents
COMET 700 oxygen regulator GasGuard fitted; COMET 700 acetylene regulator GasGuard fitted; COMET 3 blowpipe; COMET 3 cutting attachment; COMET 3 mixer; Welding tips (Size 8,10,12,15,20); Cutting nozzles (Size 6,8,12,15); heating tip (Size 8x12 HT); oxy/acetylene gas hose (5m); F6 blowpipe flashback arrestors (AS 4603); F2 flashback arrestors (AS 4603); Stainless steel toolbox; Accessories as pictured

Ordering information
Oxy/acetylene 308313
Oxy/acetylene (NZ) 308322

GasGuard™ Safety Device
In the event of a cylinder falling over, and the regulator snaps off, GasGuard will break at a pre-determined point, allowing a once acting one-way valve to give total gas shut-off. NOTE: GasGuard fitted to COMET 700 oxygen and acetylene gauged regulators only.
Want to change fuel gases and save dollars on cylinder rental and fuel costs? CIGWELD has put all the items you need into one outfit. COMET 3 equipment performs as well on LP Gas as it does on acetylene. All you need to do is change the regulator, nozzle, welding tip and hose from acetylene to LP Gas – and it’s all right here in the one kit! The only thing you cannot do with Oxy/LP Gas is fusion weld with mild steel (black) wire. You’ll be surprised how quickly your change to LP Gas will pay for your investment.

Kit contents
COMET 500 LPG regulator; cutting nozzle (size 15); welding tip (size 15); Oxy/LP gas hose (5m); LP gas nozzle cleaning wires

Ordering information
LP Gas Conversion Kit 308134

Kit selection chart by industry

<table>
<thead>
<tr>
<th>Industry Application</th>
<th>Professional Plus</th>
<th>Commander Oxy/Acet</th>
<th>Commander Oxy/LPG</th>
<th>Starter Oxy/Acet</th>
<th>Starter Oxy/LPG</th>
<th>Custom Kit</th>
<th>Custom Kit LPG</th>
<th>Turbo Torch Air/Acet</th>
<th>Turbo torch Air/LPG</th>
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</tr>
</tbody>
</table>

NB: Kit selection is based on the best fit for the application. Other kits can be selected, however components may need to be purchased separately to accomplish all tasks that may need to be undertaken.
### COMET Regulators

**Regulator selection chart**

<table>
<thead>
<tr>
<th>Gas</th>
<th>Model Description</th>
<th>Order Part No.</th>
<th>Max. inlet pressure (kPa)</th>
<th>Max. outlet pressure (kPa)</th>
<th>Air flow (l/min) at Outlet (kPa)</th>
<th>Inlet test pressure (kPa) to achieve column on left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen</td>
<td>COMET 700 VI with GasGuard™</td>
<td>301637</td>
<td>20,000 @ 15°C</td>
<td>1000</td>
<td>1,200 @ 650</td>
<td>1,700</td>
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<tr>
<td></td>
<td>COMET 700 SI with GasGuard™</td>
<td>301657</td>
<td>20,000 @ 15°C</td>
<td>1000</td>
<td>1,200 @ 650</td>
<td>1,700</td>
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<td></td>
<td>COMET 700 VI</td>
<td>301531</td>
<td>20,000 @ 15°C</td>
<td>400</td>
<td>500 @ 370</td>
<td>900</td>
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<tr>
<td></td>
<td>COMET 700 SI</td>
<td>301595</td>
<td>20,000 @ 15°C</td>
<td>400</td>
<td>500 @ 370</td>
<td>900</td>
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<td></td>
<td>COMET 700 Gaugeless VI</td>
<td>301533</td>
<td>20,000 @ 15°C</td>
<td>1000</td>
<td>1,200 @ 650</td>
<td>1,700</td>
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<tr>
<td></td>
<td>COMET 700 Gaugeless SI</td>
<td>301603</td>
<td>20,000 @ 15°C</td>
<td>1000</td>
<td>1,200 @ 650</td>
<td>1,700</td>
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<tr>
<td></td>
<td>COMET 700 Point valve</td>
<td>301535</td>
<td>20,000 @ 15°C</td>
<td>1000</td>
<td>1,200 @ 650</td>
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<td></td>
<td>COMET 500 VI</td>
<td>301523</td>
<td>20,000 @ 15°C</td>
<td>400</td>
<td>230 @ 320</td>
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<td>COMET 500 SI</td>
<td>301604</td>
<td>20,000 @ 15°C</td>
<td>400</td>
<td>230 @ 320</td>
<td>1,000</td>
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<td></td>
<td>COMET 5000 High outlet pressure</td>
<td>301560</td>
<td>20,000 @ 15°C</td>
<td>3,000</td>
<td>1,600 @ 2,500</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td>COMET 5000 High outlet pressure</td>
<td>301561</td>
<td>20,000 @ 15°C</td>
<td>7,000</td>
<td>1,600 @ 6,500</td>
<td>8,000</td>
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<tr>
<td></td>
<td>COMET 5000 EHP inlet, high outlet pressure</td>
<td>301582</td>
<td>25,000 @ 15°C</td>
<td>20,000</td>
<td>2,000 @ 7,000</td>
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<tr>
<td>Acetylene</td>
<td>COMPACT High flow (cylinder connection), HP supply</td>
<td>TR92</td>
<td>17,500 @ 15°C</td>
<td>1,100</td>
<td>3,200 @ 600</td>
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<tr>
<td></td>
<td>COMPACT High flow (pipeline connection), LP supply</td>
<td>TR64</td>
<td>2,500 @ 15°C</td>
<td>1,100</td>
<td>2,100 @ 400</td>
<td>1,000</td>
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<tr>
<td></td>
<td>COMET 750 Dual stage VI</td>
<td>301871</td>
<td>20,000 @ 15°C</td>
<td>1,000</td>
<td>800 @ 760</td>
<td>2,100</td>
</tr>
<tr>
<td>LPG</td>
<td>COMET 500</td>
<td>301525</td>
<td>2,500 @ 15°C</td>
<td>150</td>
<td>200 @ 85</td>
<td>400</td>
</tr>
<tr>
<td>Argon &amp; Argon/CO₂</td>
<td>COMET 5000 Dual stage, flow gauge</td>
<td>301872</td>
<td>20,000 @ 15°C</td>
<td>1,000</td>
<td>800 @ 760</td>
<td>2,100</td>
</tr>
</tbody>
</table>

**Conversion Coefficient (Multiply Air flow by coefficient)**

<table>
<thead>
<tr>
<th>Test Gas</th>
<th>Air</th>
<th>Oxygen</th>
<th>Nitrogen</th>
<th>Argon</th>
<th>Hydrogen</th>
<th>Helium</th>
<th>Acetylene</th>
<th>LPG</th>
<th>Carbon Dioxide</th>
<th>Methane</th>
<th>Carbon Monoxide</th>
<th>Nitrous Oxide</th>
<th>Ethylene</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0.950</td>
<td>1.02</td>
<td>0.851</td>
<td>3.81</td>
<td>2.695</td>
<td>1.05</td>
<td>0.8</td>
<td>0.880</td>
<td>0.74</td>
<td>0.8</td>
<td>0.8</td>
<td>1.02</td>
</tr>
</tbody>
</table>

**Flow Rates**

1. Flow rates quoted apply to air. For flow rates achievable with a specific gas, use the relevant conversion coefficient for the gas. Note, flow gauge models are an exception. These read direct for each gas - they do not need to be converted.

2. Flows are rated at low inlet pressures in order to indicate a flow performance that can be maintained over the life of a cylinder's contents. Higher flows can be obtained from full cylinders – refer to the performance curves for each regulator.

3. Flow rates for liquefiable gases (CO₂, N₂O, LPG) are dependent upon inlet conditions and the refrigeration effects of pressure reduction – continuous flows in excess of 30 l/min may require multi-stage pressure reduction, manifolding of cylinders, special construction or pre-heating. Higher flows are possible for short periods.

4. Maximum capacity for short periods. These regulators are intended for low flow, high outlet pressure applications only but can deliver higher capacity for short periods.

**Important:** All regulators are to be used only with the gases for which they were designed.

‡ VI = Vertical Inlet, SI = Side Inlet

# Maximum inlet pressure at 15°C is equivalent to “cylinder fill pressure”. It includes an allowance for pressure rise in the cylinder if the contents temperature increases. For gases which are liquefied in the cylinder (CO₂, N₂O, LPG) the maximum inlet pressure is equivalent to the maximum pressure in the cylinder at its maximum service temperature.

**Conversion Coefficient (Multiply Air flow by coefficient)**

<table>
<thead>
<tr>
<th>Test Gas</th>
<th>Air</th>
<th>Oxygen</th>
<th>Nitrogen</th>
<th>Argon</th>
<th>Hydrogen</th>
<th>Helium</th>
<th>Acetylene</th>
<th>LPG</th>
<th>Carbon Dioxide</th>
<th>Methane</th>
<th>Carbon Monoxide</th>
<th>Nitrous Oxide</th>
<th>Ethylene</th>
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<tbody>
<tr>
<td></td>
<td>1</td>
<td>0.950</td>
<td>1.02</td>
<td>0.851</td>
<td>3.81</td>
<td>2.695</td>
<td>1.05</td>
<td>0.8</td>
<td>0.880</td>
<td>0.74</td>
<td>0.8</td>
<td>0.8</td>
<td>1.02</td>
</tr>
</tbody>
</table>

**NOTE:** All CIGWELD Regulator flow performance specifications are measured at low cylinder inlet pressures (in accordance with Clause 7.1 AS 4267-1995). Care should be taken when comparing these details with other manufacturer’s specifications which may be quoting flow performance at higher or full cylinder pressures. Flow specifications measured at low cylinder inlet pressures provide a more realistic value of a regulator’s over all performance.
### Regulator selection chart

<table>
<thead>
<tr>
<th>Gas</th>
<th>Model</th>
<th>Order Part No.</th>
<th>Max. inlet pressure (kPa)</th>
<th>Max. outlet pressure (kPa)</th>
<th>Air flow (l/min) @ Outlet (kPa)*</th>
<th>Inlet test pressure (kPa) to achieve column on left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Dioxide</td>
<td>COMET 700</td>
<td>301796</td>
<td>21,000</td>
<td>200</td>
<td>900 @ 640^2</td>
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<tr>
<td></td>
<td>COMET 500 Welding</td>
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<td>21,000</td>
<td>200 Preset</td>
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<td>COMET 500 Flow gauge</td>
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<td>COMET 500 Beverage manifold</td>
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<td>COMET 310SR CO₂ Twin Gauge (High flow)</td>
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<tr>
<td></td>
<td>COMET 750 Dual stage</td>
<td>301874</td>
<td>20,000 @ 15°C</td>
<td>400</td>
<td>300 @ 340</td>
<td>900</td>
</tr>
<tr>
<td>Air</td>
<td>COMET 700</td>
<td>310352</td>
<td>20,000 @ 15°C</td>
<td>1,000</td>
<td>1,200 @ 700</td>
<td>1,700</td>
</tr>
<tr>
<td></td>
<td>COMET 5000 High outlet pressure</td>
<td>310353</td>
<td>20,000 @ 15°C</td>
<td>3,000</td>
<td>1,600 @ 2,500^2</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td>COMET 5000 High outlet pressure</td>
<td>310354</td>
<td>20,000 @ 15°C</td>
<td>7,000</td>
<td>1,600 @ 6,500^2</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td>COMET 5000 EHP inlet, high outlet pressure</td>
<td>310355</td>
<td>31,500 @ 15°C</td>
<td>20,000</td>
<td>2,000 @ 7,000^2</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>COMET 750 Dual stage</td>
<td>310356</td>
<td>20,000 @ 15°C</td>
<td>1,000</td>
<td>700 @ 780</td>
<td>2,100</td>
</tr>
<tr>
<td></td>
<td>COMET 750 Dual stage</td>
<td>310357</td>
<td>20,000 @ 15°C</td>
<td>400</td>
<td>300 @ 340</td>
<td>900</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>COMET 700</td>
<td>310345</td>
<td>20,000 @ 15°C</td>
<td>1,000</td>
<td>1,200 @ 700</td>
<td>1,700</td>
</tr>
<tr>
<td></td>
<td>COMET 5000 High outlet pressure</td>
<td>310346</td>
<td>20,000 @ 15°C</td>
<td>3,000</td>
<td>1,600 @ 2,500^2</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td>COMET 5000 High outlet pressure</td>
<td>310347</td>
<td>20,000 @ 15°C</td>
<td>7,000</td>
<td>1,600 @ 6,500^2</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td>COMET 5000 EHP inlet, high outlet pressure</td>
<td>310348</td>
<td>31,500 @ 15°C</td>
<td>20,000</td>
<td>2,000 @ 7,000^2</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>COMET 750 Dual stage</td>
<td>310350</td>
<td>20,000 @ 15°C</td>
<td>1,000</td>
<td>700 @ 780</td>
<td>2,100</td>
</tr>
<tr>
<td></td>
<td>COMET 750 Dual stage</td>
<td>310351</td>
<td>20,000 @ 15°C</td>
<td>400</td>
<td>300 @ 340</td>
<td>900</td>
</tr>
<tr>
<td></td>
<td>Medalist Purging Regulator</td>
<td>310349</td>
<td>20,000 @ 15°C</td>
<td>3,500</td>
<td>1,700 @ 2,600</td>
<td>8,000</td>
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<tr>
<td>Hydrogen,</td>
<td>COMET 700</td>
<td>301797</td>
<td>20,000 @ 15°C</td>
<td>800</td>
<td>900 @ 340</td>
<td>1,700</td>
</tr>
<tr>
<td>Ethylene,</td>
<td>COMET 5000 High outlet pressure</td>
<td>301722</td>
<td>20,000 @ 15°C</td>
<td>7,000</td>
<td>2,200 @ 2,500^2</td>
<td>8,000</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>COMET 750 Dual stage</td>
<td>301875</td>
<td>20,000 @ 15°C</td>
<td>800</td>
<td>750 @ 350</td>
<td>1,700</td>
</tr>
<tr>
<td>Ethylene</td>
<td>COMET 700 Flow gauge</td>
<td>301799</td>
<td>21,000</td>
<td>300</td>
<td>30 (No back pressure)^2</td>
<td>N/A</td>
</tr>
<tr>
<td>Nitrous Oxide</td>
<td>COMET 750 Dual stage</td>
<td>301877</td>
<td>21,000</td>
<td>800</td>
<td>600 @ 640^2</td>
<td>1,700</td>
</tr>
</tbody>
</table>

**Important:** All regulators are to be used only with the gases for which they were designed.  
‡ VI = Vertical Inlet, SI = Side Inlet  
# Maximum inlet pressure at 15°C is equivalent to “cylinder fill pressure”. It includes an allowance for pressure rise in the cylinder if the contents temperature increases. For gases which are liquefied in the cylinder (CO₂, N₂O, LPG) the maximum inlet pressure is equivalent to the maximum pressure in the cylinder at its maximum service temperature.

**Flow Rates**

1. Flow rates quoted apply to air. For flow rates achievable with a specific gas, use the relevant conversion coefficient for the gas. Note, flow gauge models are an exception. These read direct for each gas - they do not need to be converted.

**Conversion Coefficient (Multiply Air flow by coefficient)**

<table>
<thead>
<tr>
<th>Test Gas</th>
<th>Air</th>
<th>Oxygen</th>
<th>Nitrogen</th>
<th>Argon</th>
<th>Hydrogen</th>
<th>Helium</th>
<th>Acetylene</th>
<th>LPG</th>
<th>Carbon Dioxide</th>
<th>Methane</th>
<th>Carbon Monoxide</th>
<th>Nitrous Oxide</th>
<th>Ethylene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>1</td>
<td>0.950</td>
<td>1.02</td>
<td>0.851</td>
<td>3.81</td>
<td>2.695</td>
<td>1.05</td>
<td>0.8</td>
<td>0.808</td>
<td>0.74</td>
<td>1.02</td>
<td>0.8</td>
<td>1.02</td>
</tr>
</tbody>
</table>

2. Flows are rated at low inlet pressures in order to indicate a flow performance that can be maintained over the life of a cylinder’s contents. Higher flows can be obtained from full cylinders – refer to the performance curves for each regulator.

3. Flow rates for liquefiable gases (CO₂, N₂O) are dependent upon inlet conditions and the refrigeration effects of pressure reduction - continuous flows in excess of 30 l/min may require multi-stage pressure reduction, manifolding of cylinders, special construction or pre-heating. Higher flows are possible for short periods.

4. Maximum capacity for short periods. These regulators are intended for low flow, high outlet pressure applications only but can deliver higher capacity for short periods.

**NOTE:** All CIGWELD Regulator flow performance specifications are measured at low cylinder inlet pressures (in accordance with Clause 7.1 AS 4267-1995). Care should be taken when comparing these details with other manufacturer’s specifications which may be quoting flow performance at higher or full cylinder pressures. Flow specifications measured at low cylinder inlet pressures provide a more realistic value of a regulator’s overall performance.
COMET Regulators

COMET Regulators – safety by design
Gas regulators are typically subjected to very tough conditions. The stringent requirements expected in today’s market means that regulators need to incorporate high levels of safety, accuracy, performance and low maintenance in their design. The latest range of COMET regulators have been engineered to meet these requirements. Incorporating CIGWELD encapsulated seat technology, the accurate and safe delivery of gas from every regulator is ensured. All COMET regulators are manufactured by CIGWELD under a stringent quality system, resulting in a regulator with long term reliability and performance.

CONTROL KNOB
Colour coded for instant gas service recognition. Hi-tech reinforced, fire retardant nylon with easy-grip fins. Also captive to prevent loss or inter-changing.

PRESSURE GAUGES
Solid baffle wall between the pressure measuring components and the dial face prevents any parts being thrown forward if a pressure overload causes the Bourdon tube to burst. Safety backs ensure pressure is relieved safely away from operator. Complies with AS 1349. Dial faces incorporate coloured markings to assist in setting correct pressures for operation.

BONNET
A strong zinc diecasting. In the unlikely case of seat failure, the assembly can safely vent up to full cylinder pressure, ensuring safety of the operator.

INLET CONNECTION
Non-interchangeable for safety reasons. Inlets for each gas are selected from AS2473. The O-ring seal on the inlet nipple further ensures against costly and dangerous gas leaks.

FILTER
Double filter system (excluding COMET 500) ensures trouble free operation. A filter in the inlet nipple and in each seat prevents entry or contamination when in use and when serviced.

COMET 700 OXYGEN REGULATOR pictured

GasGuard SAFETY DEVICE
In the event of the cylinder falling over, and the regulator snaps off, GasGuard will break at a predetermined point, allowing a once acting one-way valve to give total gas shut-off. NOTE: GasGuard™ fitted to selected COMET 700 Oxygen and Acetylene gauged regulators.

PRESET CONTROL SETTING
To ensure safe maximum delivery range.

BODY
Solid forged brass body tested to ensure a safety factor of over 3 times the cylinder pressure.
**COMET Regulators**

**INDEPENDENTLY CERTIFIED TO AS4267**

CIGWELD oxygen and acetylene gauged regulators independently certified to AS4267 by the highly regarded Quality Assurance Services Pty Ltd (QAS), a subsidiary of Standards Australia.

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**COMET ENCAPSULATED SEAT**

COMET encapsulated seats have been designed by CIGWELD to meet the most stringent criteria. Each encapsulated seat is painstakingly assembled and tested under strict conditions prior to being assembled into a regulator.

**DIAPHRAGM**

Made of gas compatible elastomer. Its large surface area reduces pressure rise and provides a sensitive pressure flow control. A brass diaphragm protection plate also provides flame protection in the unlikely event of an internal fire from flashback.

**SPECIAL ALLOY BODY**

**SEAT FLUOROPOLYMER**

CIGWELD uses high density fluoropolymer material as it will not react or contaminate gas.

**PLATED SEAT HOLDER**

**SPECIAL ALLOY SPRING**

Closes the seat within the seat capsule independently of gas pressure.

**SINTERED FILTER**

Along with the filter in the inlet nipple, prevents contamination entering seat capsule.

**BREAK POINT**

Machined groove designed to break at a pre-determined point.

**VALVE**

Once acting - One Way Valve to give total gas shut off.

---

GasGuard SAFETY DEVICE
COMET Regulators

COMET 500 Oxygen & Acetylene Regulators

Applications

The COMET 500 has been designed for use with the range of COMET blowpipe equipment, and can be used for most light to medium duty cutting, welding and heating applications.

Features

• The compact, robust COMET 500 regulators provide precise and accurate pressure/flow control, incorporating many of the features of the larger COMET 700.
• The regulators feature the same colour coded gauges, eye catching gas colour coding, and incorporate the revolutionary encapsulated seat.
• The COMET 500 is manufactured to the same stringent CIGWELD standards as the larger COMET 700s.
• This regulator can be easily repaired when required and is the economical alternative to the top of the range regulator.
• Oxygen max. rated flow – 230 l/min.
• Acetylene max. rated flow – 100 l/min.
• Independently certified to AS4267-1995.

Applications

The COMET 500 LP Gas regulator has been designed for use with the range of COMET blowpipe equipment, and can be used for most cutting, welding and heating applications.

Features

• This small, compact regulator offers steady accurate pressure and flow control, and is simple to use.
• The required outlet pressure can be easily set by the control knob and read at a glance on a large clear pressure gauge.
• The rear inlet design and compact size allows the regulator to be connected to the majority of LP Gas cylinders which are fitted with POL type cylinder valves.
• The pressure adjustment knob and regulator labelling is colour coded orange for easy gas identification.
• Type tested for conformance to AS4267-1995.
**COMET 500 MIG & TIG Regulators**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Gas</th>
<th>Max. Outlet Pressure (kPa)</th>
<th>Rated Air Flow (l/min)</th>
<th>Gauge Range (kPa)</th>
<th>Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>301527</td>
<td>Argon, Ar/CO₂</td>
<td>200 Preset</td>
<td>220</td>
<td>30,000</td>
<td>AS 2473 Type 10 (5/8&quot; BSP RH Ext) V₁</td>
</tr>
<tr>
<td>301784</td>
<td>Argon, Ar/CO₂</td>
<td>200 Preset</td>
<td>230</td>
<td>30,000</td>
<td>AS 2473 Type 10 (5/8&quot; BSP RH Ext) S₁</td>
</tr>
<tr>
<td>301529</td>
<td>Argon, Ar/CO₂</td>
<td>400 Preset</td>
<td>400</td>
<td>30,000</td>
<td>AS 2473 Type 10 (5/8&quot; BSP RH Ext) S₁</td>
</tr>
<tr>
<td>301600</td>
<td>Argon, Ar/CO₂</td>
<td>400 Preset</td>
<td>400</td>
<td>30,000</td>
<td>AS 2473 Type 10 (5/8&quot; BSP RH Ext) S₁</td>
</tr>
<tr>
<td>301683</td>
<td>CO₂</td>
<td>200 Preset</td>
<td>200</td>
<td>30,000</td>
<td>AS 2473 Type 30 (.860&quot;-14 TPI RH Int)</td>
</tr>
</tbody>
</table>

**Applications**

Argon and Argon/CO₂ mixture regulators are designed for use with MIG and TIG welding processes. CO₂ regulators are designed for flux cored arc and solid MIG arc welding processes. Flow gauges are suitable for broad flow control applications. Flow meters (see p.23) are used where more accurate, sensitive control of shielding gases is required; they are also ideal for low flow TIG applications.

**Features**

- The compact, robust COMET 500 regulators provide precise and accurate pressure/flow control, incorporating many of the features of the larger COMET 700.
- P.T.F.E. coated neoprene diaphragms to enhance chemical resistance from gas, ensuring long term reliability.
- Encapsulated Seat Technology (EST) ensures superior performance, accuracy and resistance to ‘surging’.
- The regulators feature colour coded gauges and eye catching gas colour coding.
- The COMET 500 is manufactured to the same stringent CIGWELD standards as the larger COMET 700s.
- This regulator can be easily repaired when required and is the economical alternative to the top of the range regulator.
- Type tested for conformance to AS4267-1995.

**Spare Parts**

- Gauge – 30,000 kPa: 301628
- Gauge – 30,000 kPa (CO₂): 301622
- Gauge – Flow 55 lpm: 301625
- Inlet nipple – type 10: 301790
- Inlet nipple – type 30: 310288
- Inlet nut – type 10: 302624
- Inlet nut – type 30: R25
- Outlet connection – RH: 303209
- Outlet connection – RH (flow regulator): 303249
- CO₂ Inlet Washer: RG134

**NOTE:** To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.
COMET Regulators

COMET 500 Beverage Regulators

Applications
Self-contained beer dispensing (“party” regulator); beer dispensing systems (as OEM component in manifolds, complete systems, etc); soft drink dispensing systems (as OEM component); other OEM drink dispensing applications eg wine.

Features
• Specially designed for controlled delivery of CO2 and Nitrogen/CO2 mixtures to beverage dispensing systems from cylinder or pipeline supply.
• Stainless steel encapsulated seat technology capsule for high wear resistance, with fine mesh filter and fluoropolymer seat
• PTFE coated diaphragm to protect against CO2
• Non Return Valve (NRV) options to protect against backflow of liquids
• Pressure relief valves to protect against overpressurisation of downstream equipment.
• Unique design allows the same regulator to perform equally as well on a beer board or cylinder.

Spare Parts
Gauge – 30,000 kPa 301822
Gauge – Flow 55 l/min Part No. 310362
Inlet nipple & nut kit – type 50 Part No. 310361
Outlet connection Part No. 315268
O-Ring kit T50/60 Part No. 310363

NOTE: To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.

COMET 500 Nitrogen Flow Regulator

Applications
Ideally suited for wine making, allowing accurate control of Nitrogen gas for sparging and pressure transfer of product and purging of tanks, vessels and barrels.

Features
• The compact, robust COMET 500 regulators provide precise and accurate pressure/flow control, incorporating many of the features of the larger COMET 700.
• Chrome plated finish for food grade compatibility.
• Encapsulated Seat Technology (EST) ensures superior performance, accuracy and resistance to ‘surging’.
• The COMET 500 is manufactured to the same stringent CIGWELD standards as the larger COMET 700s.

Spare Parts
Gauge – 30,000 kPa Part No. 301822
Gauge – Flow 55 l/min Part No. 310362
Inlet nipple & nut kit – type 50 Part No. 310361
Outlet connection Part No. 315268
O-Ring kit T50/60 Part No. 310363

Part No. Gas Max. Outlet Pressure (kPa) Rated Air Flow* (l/min) Gauge Range (kPa) Inlet Outlet Inlet Outlet Connections
301681 CO2 400 200 30,000 600 AS 2473 Type 30 (.860"-14 TPI RH Int) 5/8"-18 UNF RH Ext PRV
301682 CO2 400 250 - 600 7/8-14 WHIT RH Int 5/8"-18 UNF RH Ext PRV
301744 CO2 800 - 30,000 1,000 AS 2473 Type 50 (24x2mm Whit Form RH Ext) 1/4" Tube RH PRV(2)
301712 CO2 800 - 30,000 800 7/8-14 UNF RH Ext PRV
301753 CO2 400 200 - 600 7/8-14 WHIT RH Int 1/2"-20 UNF RH Int 1/4" Tube RH Ext PRV

Part No. Gas Max. Outlet Pressure (kPa) Rated Air Flow* (l/min) Gauge Range (kPa) Inlet Outlet Inlet Outlet Connections
310360 Nitrogen – 50 30,000 55 l/min AS 2473 Type 50 (24x2mm Whit Form RH Int) 5/8"-18 UNF RH Ext
The CO2 Greenhouse Kit is for dispensing Fogg Grade CO2 into greenhouses and shade houses to promote plant growth. Plants convert carbon dioxide to oxygen by the photosynthesis process during normal plant growth. Very significant increases in yields and plant quality can be achieved by increasing the concentration of carbon dioxide in the greenhouse atmosphere.

**Features**

- Specifically designed for controlled delivery of Fogg Grade CO2.
- Stainless steel encapsulated seat technology for high wear resistance, with fine mesh filter and fluoropolymer seat.
- PTFE coated diaphragm to protect against CO2.
- Pressure relief valve (PRV) to protect against over pressurisation of downstream equipment.

**Applications**

**Spare Parts**

Gauge – 30,000 kPa

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Gas Description</th>
<th>Max. Outlet Pressure (kPa)</th>
<th>Rated Air Flow (l/min)</th>
<th>Gauge Range (kPa)</th>
<th>Connections</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>301793</td>
<td>Fogg Grade CO2</td>
<td>0-15</td>
<td>30,000</td>
<td>AS 2473 Type 42 (1/2&quot; BSP LH Int)</td>
<td>1/4&quot; NPT RH Int (solenoid valve) PRV</td>
<td></td>
</tr>
</tbody>
</table>
**COMET Regulators**

**COMET 700 Oxygen & Acetylene Regulators**

**Applications**

The COMET 700 regulators are suitable for the majority of cutting, welding and heating applications. Ideally suited for use with ‘G’ and ‘E’ size Oxygen and Acetylene cylinders.

**Spare Parts**

- Gauge – 30,000 kPa Oxy 301626
- Gauge – 1,800 kPa Oxy 301623
- Gauge – 4,000 kPa Acet 301627
- Gauge – 300 kPa Acet 301624
- Inlet nipple – type 10.5 301917
- Inlet nipple – type 20 301790
- Inlet nut – type 10.5 315039
- Inlet nut – type 20 302625
- Inlet – GasGuard nut & nipple kit Oxy 310331
- Inlet – GasGuard nut & nipple kit Acet 310334
- Outlet connection – RH 303209
- Outlet connection – LH 303210
- O-Ring kit T10.5 T10/20 301073
- Service tag 315237

**NOTE:** To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.

**Features**

- These revolutionary single-stage regulators incorporating our Encapsulated Seat Technology (EST), offer steady, precise pressure and flow control of Oxygen and Acetylene under all conditions.
- The large, clear, colour-coded gauges enable both inlet and delivery to be read on site at a glance.
- In the unlikely event of the regulator failing, the pressure gauges will fail safe, being designed to ensure that no parts are thrown.
- Oxygen max. rated flow – 1200 l/min.
- Acetylene max. rated flow – 200 l/min.
- Each regulator is clearly colour coded, so that the units are used with the gases for which they were designed. Further to this, left and right-hand threads on the inlet and outlet connections prevent the use of the regulators with the wrong gases.
- Independently certified to AS4267 -1995.

**Table**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Gas</th>
<th>Max. Outlet Pressure (kPa)</th>
<th>Rated Air Flow (l/min)</th>
<th>Gauge Range (kPa)</th>
<th>Inlet</th>
<th>Outlet</th>
<th>Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>301637</td>
<td>Oxygen</td>
<td>1000</td>
<td>1,200</td>
<td>30,000</td>
<td>1,600</td>
<td>AS 2473 Type 10.5 (5/8” BSP RH Ext) VI</td>
<td>5/8”-18 UNF RH Ext</td>
</tr>
<tr>
<td>301657</td>
<td>Oxygen</td>
<td>1000</td>
<td>1,200</td>
<td>30,000</td>
<td>1,600</td>
<td>AS 2473 Type 10.5 (5/8” BSP RH Ext) SI</td>
<td>5/8”-18 UNF RH Ext</td>
</tr>
<tr>
<td>301531</td>
<td>Oxygen</td>
<td>400</td>
<td>500</td>
<td>30,000</td>
<td>1,000</td>
<td>AS 2473 Type 10.5 (5/8” BSP RH Ext) VI</td>
<td>5/8”-18 UNF RH Ext</td>
</tr>
<tr>
<td>301595</td>
<td>Oxygen</td>
<td>400</td>
<td>500</td>
<td>30,000</td>
<td>1,000</td>
<td>AS 2473 Type 10.5 (5/8” BSP RH Ext) SI</td>
<td>5/8”-18 UNF RH Ext</td>
</tr>
<tr>
<td>301532</td>
<td>Acetylene</td>
<td>150</td>
<td>200</td>
<td>4,000</td>
<td>300</td>
<td>AS 2473 Type 20 (5/8” BSP LH Ext)</td>
<td>5/8”-18 UNF LH Ext</td>
</tr>
</tbody>
</table>
COMET 700 Gaugeless Regulators

Applications

Gaugeless models indicate pressure by a strong durable brass pin indicator on the side of the regulator. The required working pressure is set by aligning the edge of the pressure adjusting knob with the appropriate mark on the bonnet pressure scale. Suitable for most medium to heavy duty applications where tough working environments mean it is subjected to abuse or rough treatment and gauges are often damaged.

Spare Parts

- Pin indicator kit – Oxygen 301631
- Pin indicator kit – Acetylene 301632
- O-Ring kit T10.5 T10/20 301073

NOTE: To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.

COMET 700 Point Valve Regulators

Applications

Suitable for use on pipeline systems with low inlet pressures (may be connected to higher inlet pressures i.e. Oxygen 20,000 kPa, Acetylene 2,500 kPa). An inlet pressure gauge is not required as the pressure in the pipeline is constant. Ideal for educational institutions, workshops and assembly lines.

Spare Parts

- Gauge – 1,600 kPa Oxy 301660
- Gauge – 300 kPa Acet 301624
- Inlet nipple – type 10.5 301917
- Inlet nipple – type 20 301790
- Inlet nut – type 10.5 315039
- Inlet nut – type 20 302625
- Outlet connection – RH 303209
- Outlet connection – LH 302210
- O-Ring kit T10.5 T10/20 301073

NOTE: To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.

Features

- These COMET 700 regulators are designed for use on pipeline systems.
- Encapsulated Seat Technology (EST) offers steady, precise pressure and flow control.
- Fitted with a clear, easy-to-read, colour coded delivery pressure gauge which allows for precise, accurate setting of required working pressure.
- An inlet pressure gauge is not required as the pressure in pipelines is constant.
- Independently certified to AS4267 -1995.
COMET Regulators

COMET 700 Industrial Regulators

Features

- These revolutionary single-stage regulators incorporating our Encapsulated Seat Technology, offer steady, precise pressure and flow control of Industrial gases under all conditions.
- The large, clear, colour-coded gauges enable both inlet and delivery to be read on site at a glance.
- In the unlikely event of the regulator failing, the pressure gauges will fail safe, being designed to ensure that no parts are thrown.
- Each regulator is clearly colour coded, so that the units are used with the gases for which they were designed. Further to this, left and right-hand threads on the inlet and outlet connections prevent the use of the regulators with the wrong gases.
- Gauges comply to AS1349. Inlet connections comply to AS2473.

Applications

Non-fuel gas models (Air and Inert gases, CO\textsubscript{2}) are fitted with pressure relief valves (protects against the unlikely event of minor seat failures).

Air and Nitrogen

COMET air and nitrogen regulators are suitable for most general purpose industrial and laboratory gas control applications. Air and nitrogen models are fitted with pressure relief valves to protect downstream equipment against increases above the maximum outlet pressure of the regulator.

Inert Gases

Suitable for use with inert gases such as Helium, Argon and Inert gas mixtures. They are not intended for use with Oxygen. Suitable for most general purpose industrial and laboratory gas control applications.

Carbon Dioxide

Used for beverage dispensing and gas shielding of MIG welding.

Hydrogen

Typical applications include cutting, underwater cutting, lead burning, plasma arc cutting, chemical processing, and laboratory applications.

Ethylene

Used extensively in the fruit industry for ripening and colouring applications. Can also be used in industrial applications involving plastics. Gas flow from the outlet is controlled by a push button combined into the hose nipple. This special safety feature is an automatic shut-off which prevents toxic gas from escaping into the atmosphere.

Spare Parts

- Gauge – 30,000 kPa 301628
- Gauge – 30,000 kPa (CO\textsubscript{2}) 301822
- Gauge – 1,000 kPa 301856
- Gauge – Flow Ethylene 301308
- Inlet nipple – type 10 301790
- Inlet nipple – type 20 301917
- Inlet nipple – type 30 310288
- Inlet nut – type 10 302624
- Inlet nut – type 20 302625
- Inlet nut – type 30 R25
- Inlet nipple & nut kit – type 50 310338
- Inlet nipple & nut kit – type 60 310340
- Outlet connection – RH 303209
- Outlet connection – LH 303210
- Outlet connection – Ethylene 303729
- CO\textsubscript{2} Inlet Washer RG134
- O-Ring kit 110/20 301973
- O-Ring kit 150/60 310363

NOTE: To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.
COMET 750 Dual Stage Regulators

Applications

COMET 750 regulators provide all the advantages of two stage control and should be used where precise and constant control of outlet pressure is required regardless of variations of the inlet pressure – such as that which occurs over the life of a cylinder's contents.

Spare Parts

Gauge – 30,000 kPa Oxy 301626
Gauge – 1,600 kPa Oxy 301853
Inlet nipple – type 10.5 301917
Outlet connection – RH 303209
D-Ring kit T10.5 301073

NOTE: To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.

Features

• Optimum safety through pre-set first stage pressure reduction (approx. 1500 kPa).
• Highly accurate via sensitive adjustment of second stage outlet.
• Excellent pressure/flow characteristics.
• Encapsulated Seat Technology in both first and second stage.
• Constant outlet pressure regardless of variations of inlet pressure.
• The regulator is fitted with twin gauges enabling clear indication of outlet and inlet pressures.
• Gauges comply to AS1349. Inlet connections comply to AS2473.

Part No. Gas Max. Outlet Pressure (kPa) Rated Air Flow* (l/min) Gauge Range (kPa) Inlet Outlet Inlet Outlet Connections Outlet
301871 Oxygen 1,000 800 30,000 1,600 AS 2473 Type 10.5 (5/8" BSP RH Ext) V1! 5/8"-18 UNF RH Ext
301597 Oxygen 1,000 800 30,000 1,600 AS 2473 Type 10.5 (5/8" BSP RH Ext) S1! 5/8"-18 UNF RH Ext

Part No. Gas Max. Outlet Pressure (kPa) Rated Air Flow* (l/min) Gauge Range (kPa) Inlet Outlet Inlet Outlet Connections Outlet
310356 Air 1,000 700 30,000 1,600 AS 2473 Type 60 (27x2mm Whit Form RH Int) 5/8"-18 UNF RH Ext
310357 Air 400 300 30,000 600 AS 2473 Type 60 (27x2mm Whit Form RH Int) 5/8"-18 UNF RH Ext
310350 Nitrogen 1,000 700 30,000 1,600 AS 2473 Type 50 (24x2mm Whit Form RH Int) 5/8"-18 UNF RH Ext
310351 Nitrogen 400 300 30,000 600 AS 2473 Type 50 (24x2mm Whit Form RH Int) 5/8"-18 UNF RH Ext
301873 Inert gases 1,000 700 30,000 1,600 AS 2473 Type 10 (5/8" BSP RH Ext) 5/8"-18 UNF RH Ext
301874 Inert gases 400 300 30,000 600 AS 2473 Type 10 (5/8" BSP RH Ext) 5/8"-18 UNF RH Ext
310372 CO2 400 200 30,000 600 AS 2473 Type 30 (.860"-14 TPI RH Int) 1/2" BSP RH Ext
301875 CO2 800 750 30,000 1,000 AS 2473 Type 20 (5/8" BSP LH Ext) 5/8"-18 UNF LH Ext
310377 Nitrous Oxide7 800 600 20,000 1,000 AS 2473 Type 30 (.860"-14 TPI RH Int) 5/8"-18 UNF RH Ext
310376 MIG & TIG Shielding Gases
310225 Argon, Ar/CO2 400 40 30,000 55 l/min AS 2473 Type 10 (5/8" BSP RH Ext) 5/8"-18 UNF RH Ext

Features

• Optimum safety through pre-set first stage pressure reduction (approx. 1500 kPa).
• Highly accurate via sensitive adjustment of second stage outlet.
• Excellent pressure/flow characteristics.
• Encapsulated Seat Technology in both first and second stage.
• Constant outlet pressure regardless of variations of inlet pressure.
• The regulator is fitted with twin gauges enabling clear indication of outlet and inlet pressures.
• Gauges comply to AS1349. Inlet connections comply to AS2473.
• Safety ensured with internal and external relief devices.

Spare Parts

Gauge – 30,000 kPa Oxy 301628
Gauge – 1,600 kPa Oxy 301854
Inlet nipple – type 10 301917
Outlet connection – RH 303209
Outlet connection – LH 303210
Inlet nut – type 10 R25
Outlet connection – RH 303209
Outlet connection – LH 303210
Inlet nut – type 20 R25
Outlet connection – RH 303209
Outlet connection – LH 303210
Inlet nut – type 30 R25
Outlet connection – RH 303209
Outlet connection – LH 303210
Inlet nut – type 50 310338
Outlet nut & nut kit – type 50 310338
Outlet nut & nut kit – type 60 310340
Outlet nut – type 10 302624
Outlet nut – type 20 302625
Outlet nut – type 30 R25
Outlet connection – RH 303209
Outlet connection – LH 303210
Inlet washer – R25 213134
D-Ring kit T10.20 301073
D-Ring kit T50.60 310363

NOTE: To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.
COMET 5000 High Outlet Pressure Regulators

Applications

Ideally suited for industrial or laboratory work, pneumatic loading of test apparatus, static testing of pressure components, pressurising high pressure systems or high pressure decanting.

Spare Parts

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Gas</th>
<th>Max. Outlet Pressure (kPa)</th>
<th>Rated Air Flow^1 (l/min)</th>
<th>Gauge Range (kPa)</th>
<th>Inlet</th>
<th>Outlet</th>
<th>Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>301560</td>
<td>Oxygen</td>
<td>3,000</td>
<td>1,600</td>
<td>20,000</td>
<td>4,000</td>
<td>30,000</td>
<td>AS 2473 Type 10.5 (5/8&quot; BSP RH Ext) 1/4&quot; Tube fitting</td>
</tr>
<tr>
<td>301561</td>
<td>Oxygen</td>
<td>7,000</td>
<td>2,000</td>
<td>40,000</td>
<td>30,000</td>
<td>10,000</td>
<td>AS 2473 Type 10.5 (5/8&quot; BSP RH Ext) 1/4&quot; Tube fitting</td>
</tr>
<tr>
<td>301562</td>
<td>Oxygen</td>
<td>20,000</td>
<td>2,000</td>
<td>50,000</td>
<td>30,000</td>
<td>10,000</td>
<td>AS 2473 Type 11 (5/8&quot; BSP RH Ext) 1/4&quot; Tube fitting</td>
</tr>
<tr>
<td>310353</td>
<td>Air</td>
<td>3,000</td>
<td>1,600</td>
<td>50,000</td>
<td>30,000</td>
<td>40,000</td>
<td>AS 2473 Type 60 (27x2mm Whit Form RH int) 1/4&quot; Tube fitting</td>
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<td>310354</td>
<td>Air</td>
<td>7,000</td>
<td>2,000</td>
<td>80,000</td>
<td>40,000</td>
<td>10,000</td>
<td>AS 2473 Type 60 (27x2mm Whit Form RH int) 1/4&quot; Tube fitting</td>
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<tr>
<td>310355</td>
<td>Air</td>
<td>20,000</td>
<td>2,000</td>
<td>120,000</td>
<td>40,000</td>
<td>10,000</td>
<td>AS 2473 Type 61 (0,83&quot; – 14 NGO RH Int) 1/4&quot; Tube fitting</td>
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<tr>
<td>310346</td>
<td>Nitrogen</td>
<td>3,000</td>
<td>1,600</td>
<td>50,000</td>
<td>30,000</td>
<td>40,000</td>
<td>AS 2473 Type 50 (24x2mm Whit Form RH int) 1/4&quot; Tube fitting</td>
</tr>
<tr>
<td>310347</td>
<td>Nitrogen</td>
<td>7,000</td>
<td>2,000</td>
<td>90,000</td>
<td>50,000</td>
<td>10,000</td>
<td>AS 2473 Type 50 (24x2mm Whit Form RH int) 1/4&quot; Tube fitting</td>
</tr>
<tr>
<td>310348</td>
<td>Nitrogen</td>
<td>20,000</td>
<td>2,000</td>
<td>150,000</td>
<td>90,000</td>
<td>10,000</td>
<td>AS 2473 Type 51 (1,040” – 14 NGO RH Ext) 1/4&quot; Tube fitting</td>
</tr>
<tr>
<td>301563</td>
<td>Inert gases</td>
<td>3,000</td>
<td>1,600</td>
<td>50,000</td>
<td>30,000</td>
<td>30,000</td>
<td>AS 2473 Type 10 (5/8&quot; BSP RH Ext) 1/4&quot; Tube fitting</td>
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<tr>
<td>301564</td>
<td>Inert gases</td>
<td>7,000</td>
<td>2,000</td>
<td>100,000</td>
<td>30,000</td>
<td>50,000</td>
<td>AS 2473 Type 10 (5/8&quot; BSP RH Ext) 1/4&quot; Tube fitting</td>
</tr>
<tr>
<td>301565</td>
<td>Inert gases</td>
<td>20,000</td>
<td>2,000</td>
<td>250,000</td>
<td>50,000</td>
<td>50,000</td>
<td>AS 2473 Type 11 (5/8&quot; BSP RH Ext) 1/4&quot; Tube fitting</td>
</tr>
</tbody>
</table>

Features

- Based on the COMET regulator design. Provides safe and accurate control of pressures up to 20,000kPa (2,800psi).
- Pressure relief valves for the 3,000kPa and 7,000kPa delivery regulators.
- 20,000 kPa models are fitted with a Type II inlet nut for EHP cylinder connection.
- Special hardened diaphragms for strength and accuracy.
- ‘T’ screw control permits easy pressure settings and clear, easy-to-read safety gauges.
- Tube outlet connectors prevent accidental connection to low pressure equipment.
- Gauges comply to AS1349. Inlet connections comply to AS2473.

Applications

- Ideal for industrial or laboratory work, pneumatic loading of test apparatus, static testing of pressure components, pressurising high pressure systems or high pressure decanting.

Spare Parts

- Gauge – 30,000 kPa 301628
- Gauge – 30,000 kPa Oxygen 301626
- Gauge – 50,000 kPa 301823
- Gauge – 4,000 kPa Oxygen 301816
- Gauge – 10,000 kPa Oxygen 301819
- Gauge – 30,000 kPa Oxygen Plain 301858
- Gauge – 4,000 kPa 301817
- Gauge – 10,000 kPa 301818
- Inlet nipple – type 10 301790
- Inlet nipple – type 10.5 301917
- Inlet nipple – type 11 Oxygen 310284
- Inlet nipple – type 11 Inert 310197
- Inlet nipple & nut kit – Nitrogen, type 50 310338
- Inlet nipple & nut kit – Nitrogen, type 51 310341
- Inlet nipple & nut kit – Air, type 60 310340
- Inlet nipple & nut kit – Air, type 61 310342
- Inlet nut – type 10 302624
- Inlet nut – type 10.5 310309
- Inlet nut – type 11 RG40
- Outlet connection 1/4” tube 303710
- O-Ring kit T50/60 310363

Warning: Pressure relief valves for 301560 and 301561 are set to relieve outlet pressures marginally in excess of 3000kPa and 7000kPa respectively. 301562 is not fitted with a pressure relief valve. When using these regulators to pressurise a closed system it is recommended to fit an independent safety valve to protect downstream equipment and ensure operator safety. This safety valve must be set at or below the maximum test pressure of the system and equipment.

NOTE: To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.
**Compact High Flow Regulator - Oxygen**

**Applications**

This high flow regulator is suitable for most manifold high flow applications such as heavy heating, machine cutting, heavy cutting (i.e. above 400 mm), plate splitting, mechanical welding, “J” grooving, etc. The TR92 is particularly suited to Oxygen enrichment or Oxygen injection applications. Ideally suited to high pressure manifold systems and “G” size cylinder packs.

**Spare Parts**

- Gauge – 30,000 kPa 301626
- Gauge – 1,600 kPa 301853
- Adaptor for cylinder connection 360117

**NOTE:** To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.

**Compact High Flow Regulator - Oxygen (Pipeline)**

**Applications**

This regulator is suited for use on all Oxygen high flow pipelines. Particularly suited to heavy heating, machine cutting where multiple blowpipes are used. Also suitable for heavy cutting, plate splitting, mechanical welding and “J” grooving. Ideal for large industrial applications.

**Spare Parts**

- Gauge – 1,600 kPa 301853

**NOTE:** To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.
Compact High Flow Regulator - Acetylene

Applications
This high flow regulator is ideal for most applications such as heavy heating, machine cutting, plate splitting, mechanical welding, ‘J’ grooving, etc.

Spare Parts
Gauge – 4,000 kPa Part No 301627
Gauge – 300 kPa Part No 301624

NOTE: To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.

Features
• Designed for use on either acetylene cylinders or manifold systems which operate on full cylinder pressure.
• Rear entry connection provides easy fitting to permanent installations and gas cylinder packs.
• High flow rate up to 500 l/min.

Part No. | Gas | Max. Outlet Pressure (kPa) | Rated Air Flow (l/min) | Gauge Range (kPa) | Connections |
---|---|---|---|---|---|
TR93 | Acetylene | 150 | 500 | 4,000 | AS 2473 Type 20 (5/8” BSP LH Ext) |

COMET 310SR High Flow CO₂ Regulators

Applications
CO₂ shielding gas applications (particularly high gas flow requirements such as heavy flux cored welding); high flow beverage dispensing; scientific and experimental applications/laboratories; and general industry CO₂ applications.

Spare Parts
Gauge – 30,000 kPa 301822
Gauge – 600 kPa 301854
Gauge – Flow 301625
Inlet nipple – type 30 310288
Inlet nut – type 30 3225
Outlet connection for P/N310099, 310100 303209
Outlet connection for P/N 310102 303249

NOTE: To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.

Features
• Designed specifically for high flow CO₂ applications.
• Unique design eliminates the need for a heater.
• Factory set maximum outlet pressure (captive control knob on adjustable models prevents loss and tampering).
• Machined Aluminium body and bonnet.
• Relief valve protects against minor seat failures (not designed to protect downstream equipment).
• Sintered inlet filter.
• Maximum working pressure compatible with AS2473 inlet fittings.
• Part Numbers 310100 and 310102 are recommended for MIG welding applications.

Part No. | Gas | Max. Outlet Pressure (kPa) | Rated Air Flow (l/min) | Gauge Range (kPa) | Connections |
---|---|---|---|---|---|
310099 | CO₂ | 400 (Adjustable) | 450 | 30,000 | AS 2473 Type 30 (.860”-14 TPI RH Int) |
310100 | CO₂ | 400 (Preset) | Flowmeter 60 l/min | 30,000 | - |
310102 | CO₂ | 400 (Adjustable) | 50 | 30,000 | Flow Gauge |

(Adjustable) Flow Gauge
(Adjustable)
COMET Regulators

COMET Welding Flowmeters

Applications

Two models are available to provide fine adjustment control and flow measurement for shielding gases in MIG and TIG welding or other specialised low flow gas applications.

Spare Parts

Flow tube kit 1-15 lpm 310281
Flow tube kit 10-40 lpm 310282
Control valve kit 301825
Shroud kit 301827

NOTE: To protect your product warranty and to ensure a safe, quality repair, use a CIGWELD Accredited Service Repair Agent.

Features

• Incorporates durable impact resistant polycarbonate outer and metering tubes, an inlet filter and a fail safe shroud which will vent excessive pressure should it occur within the flowmeter assembly.
• Initially designed for medical application, COMET welding flowmeters have built in safety, reliability and accuracy.
• Not sensitive to back pressure.
• Maximum working pressure 600 kPa. Calibrated for 200 kPa.
• Fine flow adjustment valve which also provides an “ON-OFF” facility.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Gas</th>
<th>Max. Outlet Pressure (kPa)</th>
<th>Rated Air Flow (l/min)</th>
<th>Gauge Range (kPa)</th>
<th>Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>301711</td>
<td>Argon &amp; CO2</td>
<td>10-40</td>
<td>-</td>
<td>5/8&quot;-18 UNF RH Int</td>
<td>5/8&quot;-18 UNF RH Ext</td>
</tr>
</tbody>
</table>
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