

**CIGWELD**  
Professional

# Comet Gas Outfits and Regulators



# Introduction

## **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

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AS

AS 4267

ISO  
9001



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



# COMET Starter Kit

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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



# COMET Commander Kit



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



# COMET Gas Outfits

## COMET Professional Plus Kit



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.



# COMET LP Gas Conversion Kit



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

Industry Application	Professional Plus	Commander Oxy/Acet	Commander Oxy/LPG	Starter Oxy/Acet	Starter Oxy/LPG	Custom Kit	Custom Kit LPG	Turbo Torch Air/Acet	Turbo torch Air/LPG
Fabrication	•	•	•	•	•	•	•		
Construction	•	•	•	•	•	•	•		
Plumbing	•	•	•		•			•	•
Cutting			•	•	•	•	•		
Pre-heating	•								
Maintenance & repair	•	•							
Rural applications	•	•	•	•	•	•	•		
Metal workshops	•	•							
Demolition & scrapyards			•	•	•	•	•		
Handyman	•	•	•					•	•
Air conditioning			•					•	•
Refrigeration			•					•	•
Emergency service		•	•	•	•	•	•		
Step brazing								•	•
Jewellery manufacture									•
Auto repair	•	•							

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

Gas	Model	Order Part No.	Max. inlet pressure (kPa)	Max. outlet pressure (kPa)	Air flow (l/min) @ Outlet (kPa) <sup>2</sup>	Inlet test pressure (kPa) to achieve column on left
Oxygen	 COMET 700 VI <sup>‡</sup> with GasGuard™	301637	20,000 @ 15°C	1000	1,200 @ 650	1,700
	 COMET 700 SI <sup>‡</sup> with GasGuard™	301657	20,000 @ 15°C	1000	1,200 @ 650	1,700
	 COMET 700 VI <sup>‡</sup>	301531	20,000 @ 15°C	400	500 @ 370	900
	 COMET 700 SI <sup>‡</sup>	301595	20,000 @ 15°C	400	500 @ 370	900
	 COMET 700 Gaugeless VI <sup>‡</sup>	301533	20,000 @ 15°C	1000	1,200 @ 650	1,700
	 COMET 700 Gaugeless SI <sup>‡</sup>	301603	20,000 @ 15°C	1000	1,200 @ 650	1,700
	 COMET 700 Point valve	301535	20,000 @ 15°C	1000	1,200 @ 650	1,700
	 COMET 500 VI <sup>‡</sup>	301523	20,000 @ 15°C	400	230 @ 320	1,000
	 COMET 500 SI <sup>‡</sup>	301604	20,000 @ 15°C	400	230 @ 320	1,000
	 COMET 5000 High outlet pressure	301560	20,000 @ 15°C	3,000	1,600 @ 2,500 <sup>4</sup>	8,000
	 COMET 5000 High outlet pressure	301561	20,000 @ 15°C	7,000	1,600 @ 6,500 <sup>4</sup>	8,000
	 COMET 5000 EHP inlet, high outlet pressure	301562	25,000 @ 15°C	20,000	2,000 @ 7,000 <sup>4</sup>	10,000
	 COMPACT High flow (cylinder connection), HP supply	TR92	17,500 @ 15°C	1,100	3,200 @ 600	1,500
	 COMPACT High flow (pipeline connection), LP supply	TR64	2,500 @ 15°C	1,100	2,100 @ 400	1,000
	 COMET 750 Dual stage VI <sup>‡</sup>	301871	20,000 @ 15°C	1,000	800 @ 760	2,100
	 COMET 750 Dual stage SI <sup>‡</sup>	301597	20,000 @ 15°C	1,000	800 @ 760	2,100
Acetylene	 COMET 700 with GasGuard™	301532	2,500	150	200 @ 85	400
	 COMET 700 Gaugeless	301534	2,500	150	200 @ 85	400
	 COMET 700 Point valve	301536	2,500	150	200 @ 85	400
	 COMET 500 VI <sup>‡</sup>	301524	2,500	150	100 @ 85	400
	 COMET 500 SI <sup>‡</sup>	301605	2,500	150	100 @ 85	400
	 COMPACT High flow	TR93	2,500	150	500 @ 50	500
LPG	 COMET 500	301525	2,500	400	340 @ 200	700
	 COMET 500 Gaugeless (Preset)	301702	2,500	400 Preset	340 @ 200	700
	 COMET 500 High Flow	310369	2,500	400	480 @ 200	600
Argon & Argon/CO <sub>2</sub>	 COMET 500 VI <sup>‡</sup>	301527	20,000 @ 15°C	200 Preset	230 @ 160	1,000
	 COMET 500 SI <sup>‡</sup>	301794	20,000 @ 15°C	200 Preset	230 @ 160	1,000
	 COMET 500 Flow gauge VI <sup>‡</sup>	301526	20,000 @ 15°C	400	40 (No back pressure) <sup>1</sup>	N/A
	 COMET 500 Flow gauge SI <sup>‡</sup>	301600	20,000 @ 15°C	400	40 (No back pressure) <sup>1</sup>	N/A
	 COMET 500 Flow orifice	310224	20,000 @ 15°C	400	40 (No back pressure) <sup>1</sup>	N/A
	 COMET 750 Dual Stage, flow gauge	310225	20,000 @ 15°C	400	40 (No back pressure) <sup>1</sup>	N/A

**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 liquified in the cylinder (CO<sub>2</sub>, N<sub>2</sub>O, LPG) the maximum inlet pressure is equivalent to the maximum pressure in the cylinder at its maximum service temperature.

### Flow Rates

- 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)
































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

- 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.
- Flow rates for liquefiable gases (CO<sub>2</sub>, N<sub>2</sub>O) 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.
- 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 over all performance.**



## Regulator selection chart

Gas	Model	Order Part No.	Max. inlet pressure (kPa)	Max. outlet pressure (kPa)	Air flow (l/min) @ Outlet (kPa) <sup>2</sup>	Inlet test pressure (kPa) to achieve column on left
Carbon Dioxide <sup>3</sup>	 COMET 700	301796	21,000	800	900 @ 640 <sup>3</sup>	1,700
	 COMET 500 Welding	301528	21,000	200 Preset	200 @ 150 <sup>3</sup>	400
	 COMET 500 Flow gauge	301683	21,000	200	20 (No back pressure) <sup>1,3</sup>	N/A
	 COMET 500 Beverage Cylinder	301681	21,000	400	200 @ 300 <sup>3</sup>	900
	 COMET 500 Beverage manifold	301682	21,000	400	250 @ 350 <sup>3</sup>	900
	 COMET 500 Beverage manifold	301859	21,000	400	300 @ 370 <sup>3</sup>	690
	 COMET 310SR CO <sub>2</sub> Twin Gauge (High flow)	310099	21,000	400	450 @ 360 <sup>3</sup>	90
	 COMET 310SR CO <sub>2</sub> Flowmeter (High flow)	310100	21,000	400 Preset	60 l/min <sup>3</sup>	-
	 COMET 310SR CO <sub>2</sub> Flow gauge (High flow)	310102	21,000	400	50 (No back pressure) <sup>1,3</sup>	N/A
 COMET 750 Dual stage	301872	21,000	400	200 @ 360 <sup>3</sup>	900	
Inert Gases & Mixtures	 COMET 700	301800	20,000 @ 15°C	800	700 @ 700	1,700
	 COMET 5000 High outlet pressure	301563	20,000 @ 15°C	3,000	1,600 @ 2,500 <sup>4</sup>	8,000
	 COMET 5000 High outlet pressure	301564	20,000 @ 15°C	7,000	1,600 @ 6,500 <sup>4</sup>	8,000
	 COMET 5000 EHP inlet, high outlet pressure	301565	31,500 @ 15°C	20,000	2,000 @ 7,000 <sup>4</sup>	10,000
	 COMET 750 Dual stage	301873	20,000 @ 15°C	1,000	700 @ 780	2,100
 COMET 750 Dual stage	301874	20,000 @ 15°C	400	300 @ 340	900	
Air	 COMET 700	310352	20,000 @ 15°C	1,000	1,200 @ 700	1,700
	 COMET 5000 High outlet pressure	310353	20,000 @ 15°C	3,000	1,600 @ 2,500 <sup>4</sup>	8,000
	 COMET 5000 High outlet pressure	310354	20,000 @ 15°C	7,000	1,600 @ 6,500 <sup>4</sup>	8,000
	 COMET 5000 EHP inlet, high outlet pressure	310355	31,500 @ 15°C	20,000	2,000 @ 7,000 <sup>4</sup>	10,000
	 COMET 750 Dual stage	310356	20,000 @ 15°C	1,000	700 @ 780	2,100
	 COMET 750 Dual stage	310357	20,000 @ 15°C	400	300 @ 340	900
Nitrogen	 COMET 700	310345	20,000 @ 15°C	1,000	1,200 @ 700	1,700
	 COMET 5000 High outlet pressure	310346	20,000 @ 15°C	3,000	1,600 @ 2,500 <sup>4</sup>	8,000
	 COMET 5000 High outlet pressure	310347	20,000 @ 15°C	7,000	1,600 @ 6,500 <sup>4</sup>	8,000
	 COMET 5000 EHP inlet, high outlet pressure	310348	31,500 @ 15°C	20,000	2,000 @ 7,000 <sup>4</sup>	10,000
	 COMET 750 Dual stage	310350	20,000 @ 15°C	1,000	700 @ 780	2,100
	 COMET 750 Dual stage	310351	20,000 @ 15°C	400	300 @ 340	900
	 Medalist Purging Regulator	310349	20,000 @ 15°C	3,500	1,700 @ 2,600	8,000
Hydrogen,	 COMET 700	301797	20,000 @ 15°C	800	900 @ 340	1,700
Ethylene,	 COMET 5000 High outlet pressure	301722	20,000 @ 15°C	7,000	2,200 @ 2,500 <sup>4</sup>	8,000
Carbon Monoxide	 COMET 750 Dual stage	301875	20,000 @ 15°C	800	750 @ 350	1,700
Ethylene	 COMET 700 Flow gauge	301799	21,000	300	30 (No back pressure) <sup>1</sup>	N/A
Nitrous Oxide <sup>3</sup>	 COMET 750 Dual stage	301877	21,000	800	600 @ 640 <sup>3</sup>	1,700

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 liquified in the cylinder (CO<sub>2</sub>, N<sub>2</sub>O, LPG) the maximum inlet pressure is equivalent to the maximum pressure in the cylinder at its maximum service temperature.

### Flow Rates

- 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)

Test Gas	Air	Oxygen	Nitrogen	Argon	Hydrogen	Helium	Acetylene	LPG	Carbon Dioxide	Methane	Carbon Monoxide	Nitrous Oxide	Ethylene
Air	1	0.950	1.02	0.851	3.81	2.695	1.05	0.8	0.808	0.74	1.02	0.8	1.02

- 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.
- Flow rates for liquefiable gases (CO<sub>2</sub>, N<sub>2</sub>O) 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.
- 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 over all 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.

### 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.

### 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.

### 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.

### 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.

### 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.

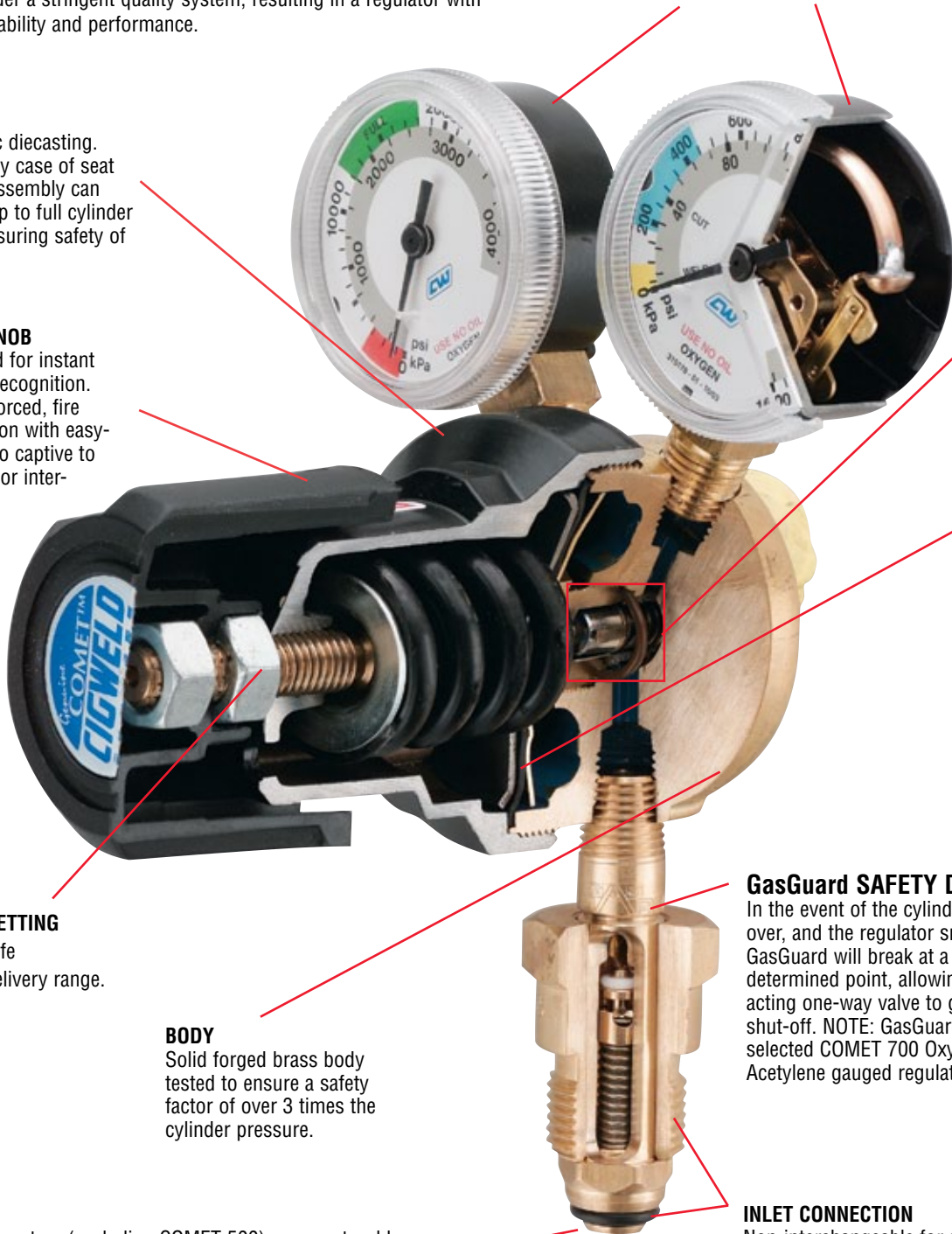
### GasGuard SAFETY DEVICE

In the event of the 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 selected COMET 700 Oxygen and Acetylene gauged regulators.

### 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.

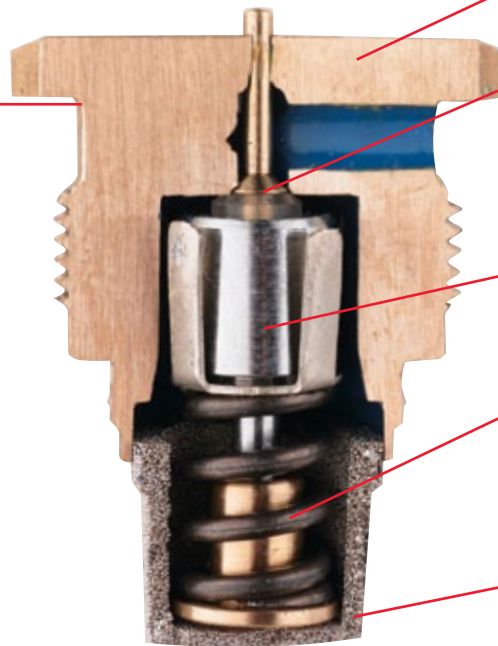
COMET 700 OXYGEN REGULATOR pictured



# COMET Regulators

**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.

## COMET ENCAPSULATED SEAT

### 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.

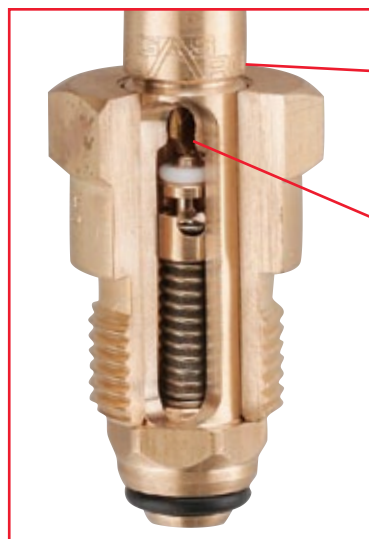


**Australian Standard**

AS 4267 LIC2040  
Standards Australia  
For COMET 700 & 500  
Gauged Oxygen & Acetylene  
Regulators only



GasGuard SAFETY DEVICE



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

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

# COMET Regulators

## COMET 500 Oxygen & Acetylene Regulators

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Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
301523	Oxygen	400	230	30,000	1,000	AS 2473 Type 10.5 (5/8" BSP RH Ext) VI'	5/8"-18 UNF RH Ext	
301604	Oxygen	400	230	30,000	1,000	AS 2473 Type 10.5 (5/8" BSP RH Ext) SI'	5/8"-18 UNF RH Ext	
301524	Acetylene	150	100	4,000	300	AS 2473 Type 20 (5/8" BSP LH Ext) VI'	5/8"-18 UNF LH Ext	
301605	Acetylene	150	100	4,000	300	AS 2473 Type 20 (5/8" BSP LH Ext) SI'	5/8"-18 UNF LH Ext	



### 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 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.

### Spare Parts

Gauge – 30,000 kPa Oxy	301626
Gauge – 1,000 kPa Oxy	310364
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
Outlet connection – RH	303209
Outlet connection – LH	303210
O-Ring kit T10.5/20	301073

## COMET 500 LP Gas Regulator

5  
YEAR

AS  
4267

Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
301525	LPG	400	340	-	600	AS 2473 Type 21 CGA 510 (0.880"-14 NGO LH Ext)	5/8"-18 UNF LH Ext	
301702	LPG	400	340	-	-	AS 2473 Type 21 CGA 510 (0.880"-14 NGO LH Ext)	5/8"-18 UNF LH Ext	
310369	LPG	400	480	-	600	AS 2473 Type 21 CGA 510 (0.880"-14 NGO LH Ext)	5/8"-18 UNF LH Ext	



### 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.

### 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.

### Spare Parts

Gauge – 600 kPa	301854
Inlet nipple	310283
Inlet nut – type 21CGA 510	AW46
Outlet connection – LH	303210

# COMET 500 MIG & TIG Regulators

5  
YEAR

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4267

Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
301527	Argon, Ar/CO <sub>2</sub>	200 Preset	230	30,000	-	AS 2473 Type 10 (5/8" BSP RH Ext) VI'		5/8"-18 UNF RH Ext
301794	Argon, Ar/CO <sub>2</sub>	200 Preset	230	30,000	-	AS 2473 Type 10 (5/8" BSP RH Ext) SI'		5/8"-18 UNF RH Ext
301526	Argon, Ar/CO <sub>2</sub>	400	40	30,000	55 l/min	AS 2473 Type 10 (5/8" BSP RH Ext) VI'		5/8"-18 UNF RH Ext
301600	Argon, Ar/CO <sub>2</sub>	400	40	30,000	55 l/min	AS 2473 Type 10 (5/8" BSP RH Ext) SI'		5/8"-18 UNF RH Ext
310225	Argon, Ar/CO <sub>2</sub>	400	40	30,000	55 l/min	AS 2473 Type 10 (5/8" BSP RH Ext) DS'		5/8"-18 UNF RH Ext
301528	CO <sub>2</sub>	200 Preset	200 <sup>1</sup>	30,000	-	AS 2473 Type 30 (.860"-14 TPI RH Int)		5/8"-18 UNF RH Ext
301683	CO <sub>2</sub>	200	20 <sup>1</sup>	30,000	55 l/min	AS 2473 Type 30 (.860"-14 TPI RH Int)		5/8"-18 UNF RH Ext

## 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.

## Applications

Argon and Argon/CO<sub>2</sub> mixture regulators are designed for use with MIG and TIG welding processes. CO<sub>2</sub> 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.

## Spare Parts

Gauge – 30,000 kPa	301628
Gauge – 30,000 kPa (CO <sub>2</sub> )	301822
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
CO <sub>2</sub> Inlet Washer	RG134

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



301527  
Argon Preset



301526  
Argon Flow



301683  
CO<sub>2</sub> Flow



301528  
CO<sub>2</sub> Preset

# COMET Regulators

## COMET 500 Beverage Regulators

5  
YEAR

AS  
4267

Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Connections		
				Inlet	Outlet	Inlet	Outlet	Other
#301681 <sup>2</sup>	CO <sub>2</sub>	400	200 <sup>a</sup>	30,000	600	AS 2473 Type 30 (.860"-14 TPI RH Int)		
301859 <sup>2</sup>	CO <sub>2</sub>	400	300 <sup>a</sup>	-	600	7/8"-14 WHIT RH Int		
301682 <sup>2</sup>	CO <sub>2</sub>	400	250 <sup>a</sup>	-	600	7/8"-14 WHIT RH Int		
#310344 <sup>2</sup>	Nitrogen/CO <sub>2</sub>	400	100	30,000	600	AS 2473 Type 50 (24x2mm Whit Form RH Ext)		
#301778 <sup>2</sup>	Nitrogen/CO <sub>2</sub>	400	100	30,000	600	AS 2473 Type 10 (5/8" BSP RH Ext)		
301744	CO <sub>2</sub>	800	-	30,000	1,000	AS 2473 Type 30 (.860"-14 TPI RH Int)		
301712	CO <sub>2</sub>	800	-	30,000	800	1/2"-20 UNF RH Int		
301753	CO <sub>2</sub>	400	200	-	600	7/8"-14 WHIT RH Int		



### Features

- Specially designed for controlled delivery of CO<sub>2</sub> and Nitrogen/CO<sub>2</sub> 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 CO<sub>2</sub>
- Non Return Valve (NRV) options to protect against backflow of liquids
- Pressure relief valves to protect against over pressurisation of downstream equipment.
- Unique design allows the same regulator to perform equally as well on a beer board or cylinder.

### 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.

# Note: Regulators marked with an "#" are type-tested for conformance to AS4267-1995. Regulators with other inlet connections are not covered by AS4267-1995 as they are not intended for cylinder connection.

### Spare Parts

Gauge – 30,000 kPa	301822
Gauge – 600 kPa	301854
Gauge – 1,600 kPa	301857
Inlet nipple – type 30	310288
Inlet nut – type 30	R25
CO <sub>2</sub> Inlet Washer	RG134
O-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 500 Nitrogen Flow Regulator

5  
YEAR

HF

Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Connections		
				Inlet	Outlet	Inlet	Outlet	Other
310360	Nitrogen	-	50	30,000	55 l/min	AS 2473 Type 50 (24x2mm Whit Form RH Int)		



### 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.

### 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.

### 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

# COMET 500 CO<sub>2</sub> Greenhouse Kit



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Connections		Other
				Inlet	Outlet	Inlet	Outlet	
301793	Fogg Grade CO <sub>2</sub>	-	0-15	30,000	-	AS 2473 Type 42 (1/2" BSP LH Int)	1/4" NPT RH Int (solenoid valve) PRV	



## Features

- Specifically designed for controlled delivery of Fogg Grade CO<sub>2</sub>.
- Stainless steel encapsulated seat technology for high wear resistance, with fine mesh filter and fluoropolymer seat.
- PTFE coated diaphragm to protect against CO<sub>2</sub>.
- Pressure relief valve (PRV) to protect against over pressurisation of downstream equipment.

## Applications

The CO<sub>2</sub> Greenhouse Kit is for dispensing Fogg Grade CO<sub>2</sub> 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.

## Spare Parts

Gauge – 30,000 kPa	301822
Solenoid valve*	303656

\* NOTE: Solenoid valve warranty is only 1 year

# COMET Regulators

## COMET 700 Oxygen & Acetylene Regulators

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YEAR



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Connections	
				Inlet	Outlet	Inlet	Outlet
301637	Oxygen	1000	1,200	30,000	1,600	AS 2473 Type 10.5 (5/8" BSP RH Ext) VI <sup>1</sup>	5/8"-18 UNF RH Ext
301657	Oxygen	1000	1,200	30,000	1,600	AS 2473 Type 10.5 (5/8" BSP RH Ext) SI <sup>1</sup>	5/8"-18 UNF RH Ext
301531	Oxygen	400	500	30,000	1,000	AS 2473 Type 10.5 (5/8" BSP RH Ext) VI <sup>1</sup>	5/8"-18 UNF RH Ext
301595	Oxygen	400	500	30,000	1,000	AS 2473 Type 10.5 (5/8" BSP RH Ext) SI <sup>1</sup>	5/8"-18 UNF RH Ext
301532	Acetylene	150	200	4,000	300	AS 2473 Type 20 (5/8" BSP LH Ext)	5/8"-18 UNF LH Ext

### 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.

### 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 – 1,600 kPa Oxy	301660
Gauge – 600 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.





# COMET 700 Gaugeless Regulators



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
301533	Oxygen	1000	1,200	-	-	AS 2473 Type 10.5 (5/8" BSP RH Ext) VI <sup>1</sup>		5/8"-18 UNF RH Ext
301603	Oxygen	1000	1,200	-	-	AS 2473 Type 10.5 (5/8" BSP RH Ext) SI <sup>1</sup>		5/8"-18 UNF RH Ext
301534	Acetylene	150	200	-	-	AS 2473 Type 20 (5/8" BSP LH Ext)		5/8"-18 UNF LH Ext



## Features

- Based on the COMET 700 single stage regulator design, but without pressure gauges fitted.
- Cylinder pressure is indicated by a 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.
- Oxygen max. rated flow – 1200 l/min.
- Acetylene max. rated flow – 200 l/min.

## 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



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
301535	Oxygen	1000	1,200	-	1,600	AS 2473 Type 10 (5/8" BSP RH Ext)		5/8"-18 UNF RH Ext
301536	Acetylene	150	200	-	300	AS 2473 Type 20 (5/8" BSP LH Ext)		5/8"-18 UNF LH Ext



## 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.
- Oxygen max. rated flow – 1200 l/min.
- Acetylene max. rated flow – 200 l/min.
- Independently certified to AS4267 -1995.

## 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	303210
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 Regulators

# COMET 700 Industrial Regulators

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YEAR

Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
310352	Air	1,000	1,200	30,000	1,600	AS 2473 Type 60 (27x2mm Whit Form RH Int)	5/8"-18 UNF RH Ext	
310345	Nitrogen	1,000	1,200	30,000	1,600	AS 2473 Type 50 (24x2mm Whit Form RH Int)	5/8"-18 UNF RH Ext	
301800	Inert gases	800	700	30,000	1,000	AS 2473 Type 10 (5/8" BSP RH Ext)	5/8"-18 UNF RH Ext	
301796	CO <sub>2</sub>	800	900	30,000	1,000	AS 2473 Type 30 (.860"-14 TPI RH Int)	5/8"-18 UNF RH Ext	
301797	Hydrogen	800	900	30,000	1,000	AS 2473 Type 20 (5/8" BSP LH Ext)	5/8"-18 UNF LH Ext	
301799	Ethylene	300	30	30,000	30 l/min	AS 2473 Type 20 (5/8" BSP LH Ext)	Barbed nipple push button	



## 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<sub>2</sub>) 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 <sub>2</sub> )	301822
Gauge – 1,000 kPa	301856
Gauge – Flow Ethylene	301308
Gauge – 1,600 kPa	301857
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 <sub>2</sub> Inlet Washer	RG134
O-Ring kit T10/20	301073
O-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 750 Dual Stage Regulators



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>2</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
301871	Oxygen	1,000	800	30,000	1,600	AS 2473 Type 10.5 (5/8" BSP RH Ext)	VI1	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)	SI1	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.

## 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
Inlet nut – type 10.5	315039
Outlet connection – RH	303209
O-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.

# COMET 750 Dual Stage Industrial Gas Regulators



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>2</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	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
301872	CO <sub>2</sub>	400	200 <sup>2</sup>	30,000	600	AS 2473 Type 30 (.860"-14 TPI RH Int)		1/2" BSP RH Ext
301875	Hydrogen	800	750	30,000	1,000	AS 2473 Type 20 (5/8" BSP LH Ext)		5/8"-18 UNF LH Ext
301877	Nitrous Oxide <sup>2</sup>	800	600	20,000	1,000	AS 2473 Type 30 (.860"-14 TPI RH Int)		5/8"-18 UNF RH Ext
<b>MIG &amp; TIG Shielding Gases</b>								
310225	Argon, Ar/CO <sub>2</sub>	400	40	30,000	55 l/min	AS 2473 Type 10 (5/8" BSP RH Ext)		5/8"-18 UNF RH Ext



**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.
- Safety ensured with internal and external relief devices.

## Spare Parts

Gauge – 30,000 kPa	301628
Gauge – 30,000 kPa (CO <sub>2</sub> )	301822
Gauge – 20,000 kPa (N <sub>2</sub> O)	301299
Gauge – 600 kPa	301854
Gauge – 1,600 kPa	301857
Gauge – 1,000 kPa	301856
Gauge – 1,000 kPa (N <sub>2</sub> O)	301290
Gauge – flow 55 lpm	301625
Inlet nipple – type 10	301790
Inlet nipple – type 20	301917
Inlet nipple – type 30	310288
Inlet nipple & nut kit – type 50	310338
Inlet nipple & nut kit – type 60	310340
Inlet nut – type 10	302624
Inlet nut – type 20	302625
Inlet nut – type 30	R25
Outlet connection – RH	303209
Outlet connection – LH	303210
Outlet connection – CO <sub>2</sub>	303596
CO <sub>2</sub> inlet washer	RG134
O-Ring kit T10/20	301073
O-Ring kit T50/60	310363

# COMET Regulators

## COMET 5000 High Outlet Pressure Regulators



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
301560	Oxygen	3,000	1,600	30,000	4,000	AS 2473 Type 10.5 (5/8" BSP RH Ext)		1/4" Tube fitting
301561	Oxygen	7,000	1,600	30,000	10,000	AS 2473 Type 10.5 (5/8" BSP RH Ext)		1/4" Tube fitting
301562 <sup>1</sup>	Oxygen	20,000	2,000	40,000	30,000	AS 2473 Type 11 (5/8" BSP RH Ext)		1/4" Tube fitting
310353	Air	3,000	1,600	30,000	4,000	AS 2473 Type 60 (27x2mm Whit Form RH Int)		1/4" Tube fitting
310354	Air	7,000	1,600	30,000	10,000	AS 2473 Type 60 (27x2mm Whit Form RH Int)		1/4" Tube fitting
310355	Air	20,000	2,000	50,000	30,000	AS 2473 Type 61 (0.830" – 14 NGO RH Int)		1/4" Tube fitting
310346	Nitrogen	3,000	1,600	30,000	4,000	AS 2473 Type 50 (24x2mm Whit Form RH Int)		1/4" Tube fitting
310347	Nitrogen	7,000	1,600	30,000	10,000	AS 2473 Type 50 (24x2mm Whit Form RH Int)		1/4" Tube fitting
310348	Nitrogen	20,000	2,000	50,000	30,000	AS 2473 Type 51 (1.040" – 14 NGO RH Ext)		1/4" Tube fitting
301563	Inert gases	3,000	1,600	30,000	4,000	AS 2473 Type 10 (5/8" BSP RH Ext)		1/4" Tube fitting
301564	Inert gases	7,000	1,600	30,000	10,000	AS 2473 Type 10 (5/8" BSP RH Ext)		1/4" Tube fitting
301565 <sup>1</sup>	Inert gases	20,000	2,000	50,000	30,000	AS 2473 Type 11 (5/8" BSP RH Ext)		1/4" Tube fitting
301722	Hydrogen	7,000	2,200	30,000	10,000	AS 2473 Type 20 (5/8" BSP LH Ext)		1/4" Tube fitting



### 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

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

Gauge – 30,000 kPa	301628
Gauge – 30,000 kPa Oxygen	301626
Gauge – 40,000 kPa	301823
Gauge – 50,000 kPa	301824
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	301917
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	315039
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

2  
YEAR



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
TR92	Oxygen	1,100	3,200	30,000	2,500	1" BSP RH Int		5/8" BSP RH Ext



## Features

- Designed for use on either cylinders or manifold systems which operate on full cylinder pressure.
- Rear entry connection provides easy fitting to permanent installations.
- "T" Screw control gives positive, precise adjustment.
- Use adaptor Part No. 360117 (1" BSP RH Ext to 5/8" BSP RH Ext), for cylinder connection.

Note: TR92 incorporates a special compensation device which automatically reduces outlet pressure variance as the cylinder empties. Regulator is Australian made, and manufactured to a CIGWELD standard which ensures safety and quality.

## 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)

2  
YEAR



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
TR64	Oxygen	1,100	2,100	-	1,600	1" BSP RH Int		5/8" BSP RH Ext



## Features

- Designed to supply and accurately control high flow rates where the inlet pressures remain between 1000-2500 kPa e.g. liquid vessel supply.
- Fitted with a clear, easy to read outlet pressure gauge.
- Inlet pressure gauge not required because inlet pressure is constant in pipelines.
- Rear entry connection provides easy fitting to permanent installations.
- Regulator is manufactured to a CIGWELD standard which ensures safety and quality.

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

# COMET Regulators

## Compact High Flow Regulator - Acetylene

2  
YEAR



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
TR93	Acetylene	150	500	4,000	300	AS 2473 Type 20 (5/8" BSP LH Ext)		5/8"-BSP LH Ext



### 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.

### 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.

## COMET 310SR High Flow CO<sub>2</sub> Regulators

5  
YEAR



Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>3</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
310099	CO <sub>2</sub>	400 (Adjustable)	450	30,000	600	AS 2473 Type 30 (.860"-14 TPI RH Int)		5/8"-18 UNF RH Ext
310100	CO <sub>2</sub>	400 (Preset)	Flowmeter 60 l/min	30,000	-	AS 2473 Type 30 (.860"-14 TPI RH Int)		5/8"-18 UNF RH Ext
310102	CO <sub>2</sub>	400 (Adjustable)	50	30,000	50 l/min Flow Gauge	AS 2473 Type 30 (.860"-14 TPI RH Int)		5/8"-18 UNF RH Ext

### Features

- Designed specifically for high flow CO<sub>2</sub> 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.

### Applications

CO<sub>2</sub> 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 CO<sub>2</sub> applications.

### Spare Parts

Gauge – 30,000 kPa	301822
Gauge – 600 kPa	301854
Gauge – flow	301625
Inlet nipple – type 30	310288
Inlet nut – type 30	R25
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.



# COMET Welding Flowmeters

5  
YEAR

Part No.	Gas	Max. Outlet Pressure (kPa)	Rated Air Flow <sup>2</sup> (l/min)	Gauge Range (kPa)		Inlet	Connections	Outlet
				Inlet	Outlet			
301710	Argon		1-15 l/min	-	-	5/8"-18 UNF RH Int		5/8"-18 UNF RH Ext
301711	Argon & CO <sub>2</sub>		10-40 l/min	-	-	5/8"-18 UNF RH Int		5/8"-18 UNF RH Ext

## 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.

## 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

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301710 1 - 15 l/min



301711 10 - 40 l/min

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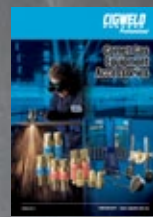


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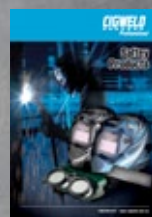


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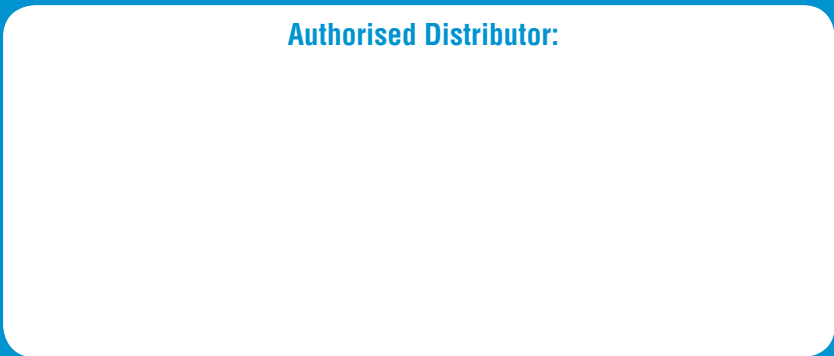
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