

# **Air Products Equipment**

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# Balloonium® Equipment

A range of quick-fit Conwin inflators and associated equipment for exclusive use with the revolutionary Balloonium® lightweight cylinder range.

Equipment Name	Equipment Part No.	Description	
Universal Inflator	301014	A flex tip inflator for latex balloons. Available in packs of two.	
Push Valve	301016	The Push Valve is tapered to easily fit all sizes of latex and valved latex balloons. Available in packs of two.	
Universal Plus	301012	The Universal Plus has a flex tip inflator for inflation of latex balloons and a seperate auto-fill fall outlet that automatically cuts out when the foil balloon is inflated	
10 foot extension hose	38614	A 10ft extension hose with hand- held trigger valve. Includes eight inch and two inch tips.	
Conwin Dual Sizer Conversion Kit	18075	A connection hose for use with the Conwin Dual Sizer/Duplicator. For use on models without seperate second stage regulator.	
Balloonium® Decorator Trolley	498248	A robust Decorator Trolley with safety straps, handy ribbon holder/cutter and integrated supply basket designed to help transport Balloonium® cylinders safely and easily.	

# Flashback arrestors (FBA) Specifications

A range of flashback arrestors designed for use with either Air Products' Integra® cylinders or with regulators used on conventional cylinders. All units comply with EN ISO 5175-1.



Cylinder	Integra® cylinder version		Standard cylinder			
Туре	Non-resettable		Resettable		Non-resettable	
Service	Oxygen	Acetylene	Oxygen and compressed air	Fuel gases: acetylene / propane / propylene	Oxygen and compressed air	Fuel gases: acetylene / propane / propylene
Inlet	Integra® cylinder – quick fit (oxygen)	Integra® cylinder – quick fit (fuel)	3/8" BSP (female) right-hand thread	3/8" BSP (female) left-hand thread	3/8" BSP (female) right-hand thread	3/8" BSP (female) left-hand thread
Outlet	3/8" BSP (male) right-hand thread	3/8" BSP (male) left-hand thread	3/8" BSP (male) right-hand thread	3/8" BSP (male) left-hand thread	3/8" BSP (male) right-hand thread	3/8" BSP (male) left-hand thread
Max operating pressure	15.0 bar	1.5 bar	15.0 bar (based on oxygen)	1.5 bar (based on acetylene)	25.0 bar (based on oxygen)	1.5 bar (based on acetylene)
Order code	EQ124523	EQ124524	EQ18171	EQ18169	EQ18175	EQ18174

#### All units feature:

- Dust filter promotes long life
- Gas non-return valve (check valve) prevents dangerous gas mixtures (NV)
- Flame arrestor prevents flashback (FA)
- Thermal cut-off valve prevents excessive temperatures (TV)
- Pressure-sensitive cut-off valve interrupts the further gas flow on pressure shocks (PV) (only with resettable flashback arrestors)

Follow 'Instructions for use' and 'Maintenance' provided with the above units which should be retained for future reference.

It is recommended that Flashback arrestors are tested for leaks and gas return flow safety at least once per year.





# Integra® Flow Optimisers

- No need for extra regulators or flow meters
- Simply change the connector and with one click you have the correct gas flow
- Available in a range of flows: 8, 10, 12, 15 and 18 litres per minute
- Reduces gas consumption saves you money.

Material	Brass
ressure range	Max. inlet pressure 20 bar
Operational temperature range	-20°C /+60°C
nlet connection type	QC acc to EN 561 - N
Outlet connection type	G3/8" right hand (RH) acc to EN 560
Veight	79g
ize	Diameter: 21mm Length: 51mm

#### **Order details**

Product code	Pre-set flow/capacity, litres per minute (I/min)
461340	8 l/min
461341	10 l/min
461342	12 l/min
461343	15 l/min
461344	18 l/min
461345	20 l/min



Product code: 461343 (15 l/min IFO)

# Integra® Dial a Flow & Accessories

- Pre-defined for best welding results
- Adjustable flow in steps from 4-6-8-10-12-15-18-22 to max. 30 litres per minute.

Material	Brass
Pressure range	Max. inlet pressure 4 bar
Temperature range	-15°C /+40°C
Inlet connection type	QC acc to EN 561 - N
Outlet connection type	6mm hose connection, G3/8" right hand (RH) acc to EN 560
Weight	400g (dial-a-flow)
Size	Diameter: 35mm Length: 105mm

#### **Order details**

Product code	Pre-set flow/selection
302005	4-6-8-10-12-15-18-22-26

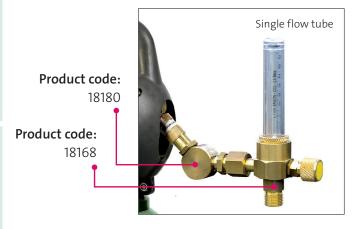


Order details	
Product code	Description
302013	3/8" BSP T-piece
18168	Flowmeter Column meter 3/8" -1/4"

# **Integra® Purging Assemblies**

- Available with two (double) or one (single) flow tube and an adaptor
- For flows from 2-14 litres per minute

Material	Brass (with plastic flow tube)
Pressure range	Max. inlet pressure 4 bar
Temperature range	-15°C /+40°C
Inlet connection type	QC acc to EN 561 - N
Outlet connection type	18168 & 18180: G3/8" right hand (RH) acc to EN 5 18177: QC acc to EN 561 - N





#### **Order details**

Product code	Description
18180	Quick Connector – unrestricted flow unit
18168	Single flow tube unit
18177	Double flow tube unit

### Argon/Argon Mix

Suitable for all cylinders and packs up to 230 bar with a BS341 No3 (5/8" right hand thread) outlet connection. This single-stage regulator is suited for all Argon/Argon mixtures. There are two gauges and an outlet delivering 0-40 litres per minute (lpm).

Part Number	Description	Max Inlet (bar)	Delivery Pressure	Max Flow (Ipm)	Inlet Connection	
464531	Single-stage Argon / Mix regulator	230	Max 3.5 bar	0-40 lpm	BS341 No3 (5/8" BSP)	
464530	Single-stage Argon/ Mix regulator	300	Max 3.5 bar	0-30 lpm	NEVOC	

### Nitrogen/Helium/Air

Suitable for all cylinders and packs up to 230 bar with a BS341 No3 (5/8" right hand thread) outlet connection. This single-stage regulator is suited for all inert (Argon, Helium and Nitrogen) gases/mixtures. There are two gauges, an outlet delivering 0-4 bar and a maximum flow of 105 m3/h).

Part Number	Description	Max Inlet (bar)	Delivery Pressure	Max Flow (m³/h)	Inlet Connection	
466782	Single-stage Inert 4 bar regulator	230	0-4 bar	105	BS341 No3 (5/8" BSP)	
464532	Two-stage Inert 4 bar regulator	230	0-4 bar	85	BS341 No3 (5/8" BSP)	
466783	Single-stage Inert 10 bar regulator	230	0-10 bar	175	BS341 No3 (5/8" BSP)	
464533	Two-stage Inert 10 bar regulator	230	0-10 bar	100	BS341 No3 (5/8" BSP)	

#### Oxygen

Suitable for all cylinders and packs up to 230 bar with a BS341 No3 (5/8" right hand thread) outlet connection. This single-stage regulator is suited for Oxygen. There are two gauges, an outlet delivering 0-4 bar and a maximum flow of 105 m3/h.

Part Number	Description	Max Inlet (bar)	Delivery Pressure	Max Flow (m³/h)	Inlet Connection	
466784	Single-stage Oxygen 4 bar regulator	230	0-4 bar	105	BS341 No3 (5/8" BSP)	
464535	Single-stage Oxygen 10 bar regulator	230	0-10 bar	175	BS341 No3 (5/8" BSP)	
464534	Two-stage Oxygen 10 bar regulator	230	0-10 bar	100	BS341 No3 (5/8" BSP)	

#### Acetylene

Suitable for all acetylene cylinders and packs with a BS341 No4 (5/8" left hand thread) outlet connection (not suitable for Integra® cylinders - please see our separate range). This single-stage regulator has two gauges, an outlet delivering 0-1.5 bar and a maximum flow of 30 m3/h.

Part Number	Description	Max Inlet (bar)	Delivery Pressure	Max Flow (m³/h)	Inlet Connection	
464536	Single-stage Acetylene 1.5 bar regulator	25	0-1.5 bar	30	BS341 No4 (5/8" BSP)	

#### Propane/Propylene

Suitable for all Propane and Apachi® Propylene cylinders and packs with a BS341 No4 (5/8" left hand thread) outlet connection. This single-stage regulator does not have any gauges to withstand demanding environments. The outlet delivers 0-4 bar and a maximum flow of 16.5 m3/h.

Part Number	Description	Max Inlet (bar)	Delivery Pressure	Max Flow (m³/h)	Inlet Connection	
464537	Single-stage Propane 4 bar guage regulator	25	0-4 bar	16.5	BS341 No4 (5/8" BSP)	
466785	Single-stage Propane 4 bar regulator	25	0-4 bar	16.5	BS341 No4 (5/8" BSP)	

#### **Carbon Dioxide**

Suitable for all Industrial Carbon Dioxide (CO2) cylinders and packs with a BS341 No8 (0.860" x 14 tpi) outlet connection. This single-stage regulator has two gauges, an outlet delivering 0-10 bar and a maximum flow of 155 m3/h.

Part Number	Description	Max Inlet (bar)	Delivery Pressure	Max Air Flow (m³/h)	Inlet Connection	
466787	Single-stage CO₂ 10 bar regulator	230	0-10 bar	155	BS341 No8 (0.860" x 14tpi)	
464539	Two-stage CO₂ 10 bar regulator	230	0-10 bar	100	BS341 No8 (0.860" x 14tpi)	

### **High Flow Regulators and Equipment for Lasing Applications**

Code	Description	Inlet (Max)	Outlet	Service
401238	GA1500 200 bar oxygen	200 bar	41 bar	-
401234	GA2500 200 bar nitrogen	200 bar	100 bar	Nitrogen
401235	GA1500 300 bar nitrogen NEVOC	300 bar	100 bar	Nitrogen
401237	GA2500 300 bar nitrogen NEVOC	300 bar	172 bar	Nitrogen
401954	GA3500 300 bar nitrogen NEVOC	300 bar	241 bar	Nitrogen
404549	GA3500 200 bar nitrogen BS3	200 bar	241 bar	Nitrogen
199953	High flow oxygen regulator	200 bar	14 bar	Nitrogen

#### **Laser Gas Resonator Regulators**

Code	Description	Inlet (Max)	Outlet	Service
199895	Two stage regulator for resonator-premix multi stage s/s/reg RH BS3	-	-	-
199956	Two stage regulator for resonator-CO <sub>2</sub> multi stage s/s/reg RH CO <sub>2</sub>	57 bar	10 bar	CO <sub>2</sub>
199954	Two stage regulator for resonator-N₂ multi stage s/s/reg RH BS3	200 bar	11 bar	Nitrogen
199955	Two stage regulator for resonator-He multi stage s/s/reg RH BS3	200 bar	12 bar	Helium
403141	Two stage regulator for resonator-He multi stage s/s/reg RH NEVOC	300 bar	12 bar	Helium

#### **Food Grade Regulators**

Code	Description
3960002084	Two Stage, BS3 Connection, 0-10 Bar
3960004217	Two Stage, BS8 Connection, 0-10 Bar
420520	RgltrPrs_Inrt_200B_1S_V_2G_NEVOC

#### Hoses

### Nitrogen (laser applications)

Our high pressure nitrogen hoses are fitted with an anti-whip cable for safety based on operating pressure of 40 bar.

Equipment Part number	Description	Conformity	Specification	Fittings
6016738	5 meter rubber hose with anti-whip cable, 10.3mm bore	ISO 14113	Process cleaned	3/8" BSP (Female) x 3/8" BSP (Female)
6016739	10 meter rubber hose with anti-whip cable, 10.3mm bore	ISO 14113	Process cleaned	3/8" BSP (Female) x 3/8" BSP (Female)
6016740	20 meter rubber hose with anti-whip cable, 10.3mm bore	ISO 14113	Process cleaned	3/8" BSP (Female) x 3/8" BSP (Female)

#### High pressure gas hose suitable for food use

Our food grade, double braided stainless-steel hose is 3 metres in length and fitted with stainless steel fittings. Designed to work at a working pressure of 10 Bar.

Equipment Part number	Description	Conformity	Specification	Fittings
6026091	3 metre PTFE hose constructed of STST braid reinforcement, with food grade approval		Oxygen cleaned (<50mg/m2)	3/8" BSP (60 degree cone seat) Swivel female – Stain- less steel x ¼" NPT Fixed Female – Stainless steel 9

#### **Heaters**

Argon/C0<sup>2</sup> heaters are designed to fit directly to the gas cylinder and work by preheating the gas before it enters the regulator which reduces the occurrence of freezing.

- CE approved and marked.
- Incorporated temperature monitoring prevents the overheating of the preheater, when it is in permanent use and guarantees a safe operation.
- Can be connected directly to the cylinder as well as incorporated in manifolds or piping systems

Equipment Part number	Description	Fittings
GCP01138	ARGON/CO2 HEATER 230V	BS341 No3 (5/8" BSP)
GCP01177	ARGON/CO2 HEATER 230V	NEVOC

#### **Technical Data**

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Maximum Inlet Pressure:	up to 300 bar
Output:	200 watt
Power Supply:	230 V AC 200W 50Hz
Inlet Connection:	BS341 No. 3 male or
	BS341 No. 30 female
Outlet Connection:	BS341 No. 3 female or
	BS341 No. 30 male
Temperature Range:	-20°C to +60°C
Dimensions:	Length 150mm
	Height 90mm
	Diameter 90mm
Weight:	2Kgs
Enclosure Rating:	IP65



The CO<sub>2</sub> Heater is designed to vaporise liquid carbon dioxide from syphon type CO<sub>2</sub> cylinders where a greater flow rate is required than is available from standard gas off-take cylinders.

- Compact design, the compact robust casing ensures maximum service life and minimal maintenance.
- A safety bursting disc is incorporated in the body of the unit which ruptures at 190 bar to safeguard the vaporiser from overpressure.
- A themostatically controlled element protected by a heat fuse ensures that the heater provides gas on demand and cuts out during the rest periods. A neon indicator is incorporated to show when the element is heating.
- CE approved and marked.

#### **Technical Data**

**Maximum Flow** 

**Rate:** 3.2 kg/h (28 l/min)

Design Pressure: 190 bar

Inlet Connection:

BS341 No. 8, female

**Outlet Connection:** 

BS341 No. 8 male

**Dimensions:** Length: 170mm

Width: 100mm Height: 70mm

Weight: 1.1 Kg Enclosure Rating: IP21

Power Supply:

230 V AC 200 W 50 Hz

# Liquid

<b>Equipment Part Number</b>	Description
196432	3/8" to 3/8" Male-Male Adapter
196433	3/8" to 1/2" Male-Male Adapter
196484	3/8" to 3/4" Male-Male Adapter
196045	3/4" Phase Separator
196043	1/2" Phase Separator
196044	3/8" Phase Separator
196682	3/4" x 6ft Stainless Steel Decant Hose
196681	1/2" x 5ft Stainless Steel Decant Hose
196680	3/8" x 4ft Stainless Steel Decant Hose



# Trolleys

Equipment Part Number	Description
404462	Standard single X30/X47 trolley
404461	Standard single X10 cylinder trolley
18114	Trolley_2 cylStand. O2 and Acetylene
419128	Standard double X10 trolley
404460	Standard double X30/X47 trolley
498248	Decorator_Balloonium_Trolley

# **Adaptors**

Description
NEVOC TO BS3 ADAPTOR
STRAIGHT ADAPTOR RH
STRAIGHT ADAPTOR LH
90° ADAPTOR RH
90° ADAPTOR LH



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