

All about



Besides CO2 Cylinder Manifolds we also manufacture and supply:

- Automatic CO2 Production Plants
- CO2 Stack Gas Recovery Plants
- CO2 Gas Recovery Systems for Dry Ice Machines
- Dry Ice Slices/Block/Pelletizer Machines
- Dry Ice Blasting Systems ASCOJET
- Cryogenic and CO2 Static and Transportable Tanks
- CO2 Pumps and Cylinder Filling Systems
- CO2 Atmospheric Vaporisers
- CO2 Detectors
- CO2 Flowmeters
- Low to Low Pressure CO2 Transfer Pumps
- CO2 Testing Equipment (Dew Point / Purity / Carbonation)
- Ancillary CO2 Equipment

Ask us for further details and offer:

Switzerland
Industriestr. 2, CH-8590 Romanshorn
Tel. + 41 71 466 80 80 Fax + 41 71 466 80 66
e-mail: info@ascoco2.com

ASCO CARBON DIOXIDE LTD

www.ascoco2.com

New Zealand
P.O.Box 16134, NZ-Christchurch
Tel. + 64 3 349 7029 Fax + 64 3 349 4337
e-mail: info@asco.co.nz

1299e

CO₂ Cylinder Manifolds



For continuous CO2 gas supply with the following advantages:

- High quality
- Accurate and constant gas flow
- Safe operation
- Easy installation
- Low cost investment

ASCO CO2 Cylinder Manifold System consists of:



ASCO CO2 cylinder manifold for 5 cylinders

Approx. continuous hourly gas withdrawal rate when using 30 kg CO2 cylinders:

size of manifold	hourly capacity with 50 % of cylinders in use	hourly capacity if all cylinders are in use
2 x 5 CO2 cylinders	15 kg/h	30 kg/h
2 x 10 CO2 cylinders	30 kg/h	60 kg/h
2 x 20 CO2 cylinders	60 kg/h	120 kg/h
2 x 30 CO2 cylinders	90 kg/h	180 kg/h

High pressure copper connecting pipe

Diameter 3 x 13 mm, to connect two or more manifolds with the reducing valve RV100.
 Diameter 21.7 x 14G/1" female connections.
 Length 360 mm



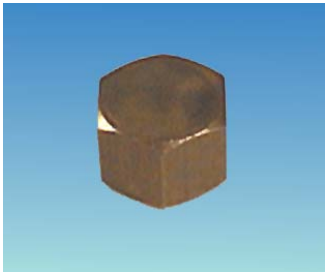
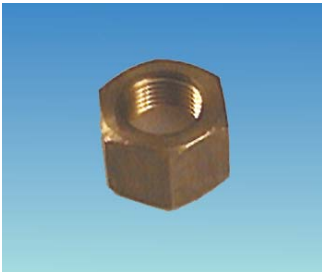
High pressure copper connecting pipe

Diameter 4 x 7 mm, to connect the cylinder to the manifold.
 Diameter 21.7 x 14G/1" female connections on the manifold and cylinder side.
 Length 1100 mm



End plug

In order to close unused connections on cylinder manifold.



Connection pipes, valves and plugs for ASCO CO2 cylinder manifolds

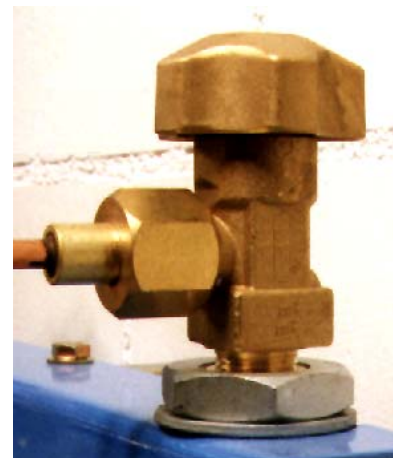
Cylinder Manifold

With all connections and valves



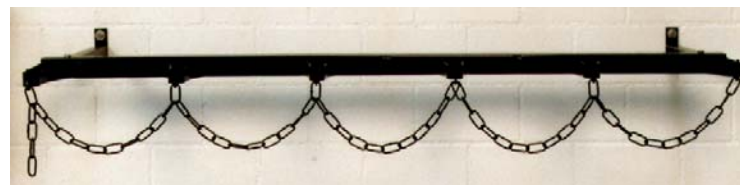
Right angle valve

Used on the manifolds



Cylinder support rack

Each suited for 5 cylinders. Protects cylinders with an external diameter of up to 229 mm from accidental falls. Painted in black, complete with support for mounting to the wall.



Po-s.	Description	Features
A	Reducing valve	To reduce the maximum inlet pressure of 200 bar to a maximum outlet pressure of 15 bar. Outlet pressures adjustable.
B	Preheater	For larger hourly CO2 flow rates.
C	Manifold	Works as collector of the CO2 gas coming from the CO2 cylinders.
D	High pressure connecting pipe	As connection between the pressure reducing valve and the manifold or, to connect two or more manifolds together. Diameter: 3 x 13 mm, 21.7 x 14f1" threaded right-hand female connection. Length: 360 mm
E	End plug	Needed to close the manifold on one end.
F	High pressure cylinder connecting pipe	To connect the right-angle valve of the manifold with the cylinder. Diameter: 4 x 7 mm, 21.7 x 14f1" threaded right-hand female connections on the manifold and cylinder side. Length: 1100 mm
G	Right angle valve	Brass connection valve with a 21.7 x 14f1" diameter threaded right-hand male fitting. For mounting onto the manifolds.
H	Cylinder support rack	Protects cylinders from accidental falls. Painted in black, complete with support for mounting to the wall.

Important:

When choosing the size of the manifold it is important to remember the following rule:

From each standard cylinder (without syphon tube) approx. 10 % of its max. CO2 content can be withdrawn as gas every hour (based on an ambient temperature of approx. 20°C. With higher temperatures a higher withdrawal rate is possible). Higher hourly withdrawals may result in freezing of the cylinders.

Reducing valve systems type RV100PH (with preheater) and RV100 (without preheater)

A blue rectangular CO2 refrigeration unit is mounted on a white brick wall. The unit features two circular pressure gauges at the top, a central horizontal service valve, and a large blue circle with the text "CO2" in white. Copper piping is connected to the unit, with loops on the left and right sides. A red-handled valve is visible at the top of the unit.

Reducing valve system type RV100

- Maximum inlet pressure: 200 bar Maximum outlet (operating) pressure: 15 bar

Features:

- sheet metal board (size 535 x 310 mm) complete with support for mounting to the wall
- reducing valve complete with inlet filter, outlet valve (G 3/4"), high and low pressure gauges, over-pressure safety valve
- shut-off valves for manifolds (two inlets)

Maximum CO₂ gas output per hour at various outlet pressures:

- | Type | at 5 bar | at 10 bar | at 15 bar |
|-------------------------|----------|-----------|-----------|
| RV100PH with preheater | 120 kg/h | 200 kg/h | 270 kg/h |
| RV100 without preheater | 60 kg/h | 100 kg/h | 135 kg/h |



Preheater



**Coil inside of
preheater**