

# CO<sub>2</sub> Cylinder Manifolds

## CO<sub>2</sub> Cylinder Manifolds



The **ASCO** CO<sub>2</sub> Cylinder Manifold is a smart solution for small demand of CO<sub>2</sub> with maximum flexibility.

**ASCO** CO<sub>2</sub> Cylinder Manifold Systems are complete with pressure reducing valve station RV100 and cylinder support racks and assure a continuous CO<sub>2</sub> gas supply. Four different sizes of cylinder manifold systems are standardly available, other sizes available on request.

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. CO<sub>2</sub> content can be withdrawn as gas every hour (based on an ambient temperature of approx. 20 °C. With higher temperatures a higher withdrawal rate is possible).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.

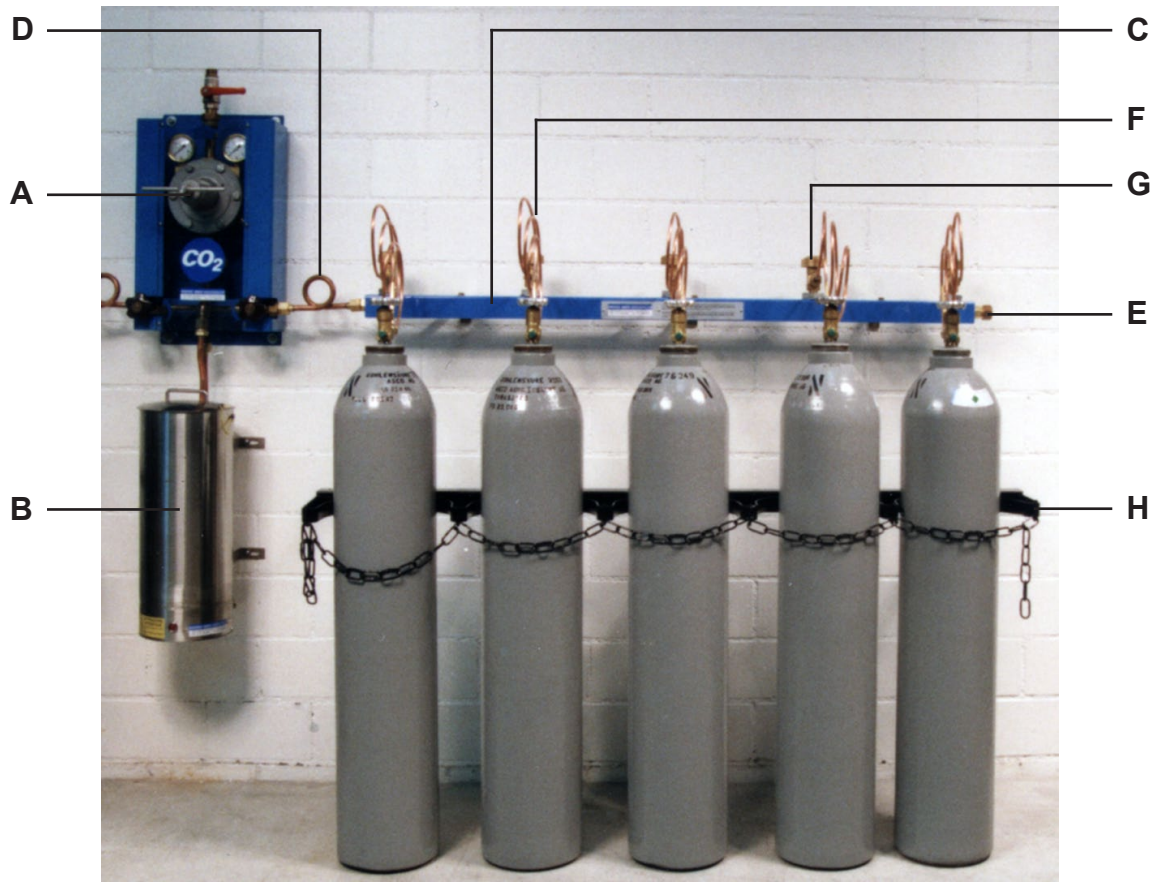
### Advantages of a CO<sub>2</sub> Cylinder Manifold:

- high quality
- accurate and constant gas flow
- safe operation
- easy installation
- low cost investment

Approx. continuous hourly gas withdrawal rate when using 30 kg CO<sub>2</sub> cylinders:

Size of manifold	Hourly capacity with 50 % of cylinders in use	Hourly capacity if all cylinders are in use
2 x 5 CO <sub>2</sub> cylinders	15 kg/hr	30 kg/hr
2 x 10 CO <sub>2</sub> cylinders	30 kg/hr	60 kg/hr
2 x 20 CO <sub>2</sub> cylinders	60 kg/hr	120 kg/hr
2 x 30 CO <sub>2</sub> cylinders	90 kg/hr	180 kg/hr

## Special features of CO<sub>2</sub> Cylinder Manifold:



ASCO CO<sub>2</sub> Cylinder Manifold for 5 cylinders

Pos.	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 CO <sub>2</sub> flow rates.
C	Manifold	Works as collector of the CO <sub>2</sub> gas coming from the CO <sub>2</sub> 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: 1'100 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.

## Special features of CO<sub>2</sub> Cylinder Manifold:

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



Reducing valve system type RV100

Maximum inlet pressure: 200 bar

Maximum outlet (operating) pressure: 15 bar

Features:

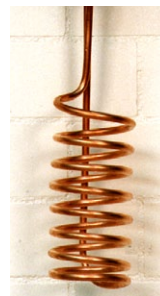
- sheet metal board (size 535 x 310 mm) complete with support for mounting to the wall
- reducing valve complete with inlet filter, outlet valve (G 3/4"), high and low pressure gauges, over-pressure safety valve
- shut-off valves for manifolds (two inlets)

**Maximum CO<sub>2</sub> gas output per hour at various outlet pressures:**

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



Preheater



Coil inside of preheater

## Available standard CO<sub>2</sub> Cylinder Manifolds:

Pos. 001

### CO<sub>2</sub> Cylinder Manifold 2x5 with support racks

part no. 914010

Consisting of:

- 2 pcs modular cylinder manifolds for 5 cylinders each
- 10 pcs high pressure flex. copper cylinder connecting pipe coils
- 2 pcs high pressure copper pipe coils
- 2 pcs end plugs
- 1 pcs CO<sub>2</sub> reducing valve station type RV100
- 1 pce preheater with thermostat 1 kW
- 2 pcs cylinder support racks for 5 cylinders each

Also available without support racks (part no. 914023)

Pos. 002

### CO<sub>2</sub> Cylinder Manifold 2x10 with support racks

part no. 914009

Consisting of:

- 4 pcs modular cylinder manifolds for 5 cylinders each
- 20 pcs high pressure copper cylinder connecting pipe coils
- 4 pcs high pressure copper pipe coils
- 2 pcs end plugs
- 1 pcs CO<sub>2</sub> reducing valve station type RV100 PH with preheater
- 4 pcs cylinder support racks for 5 cylinders each

Also available without support racks (part no. 914064)

Pos. 003

### CO<sub>2</sub> Cylinder Manifold 2x20 with support racks

part no. 914065

Consisting of:

- 8 pcs modular cylinders manifolds for 5 cylinders each
- 40 pcs high pressure copper cylinder connecting pipe coils
- 8 pcs high pressure copper pipe coils
- 2 pcs end plugs
- 1 pce CO<sub>2</sub> reducing valve station type RV100 PH with preheater
- 8 pcs cylinder support racks for 5 cylinders each

Also available without support racks (part no. 914066)

Pos. 004

### CO<sub>2</sub> Cylinder Manifold 2x30 with support racks

part no. 914067

Consisting of:

- 12 pcs modular cylinder manifolds for 5 cylinders each
- 60 pcs high pressure copper cylinder connecting pipe coils
- 12 pcs high pressure copper pipe coils
- 2 pcs end plugs
- 1 pcs CO<sub>2</sub> reducing valve station type RV100 PH with preheater
- 12 pcs cylinder support racks for 5 cylinders each

Also available without support racks (part no. 914068)