

# Air-hydro Unit CC Series

The air-hydro unit consists of a converter and a valve unit that are compactly integrated. It converts air pressure to an equivalent hydraulic pressure, and this hydraulic pressure is used for operating an actuator, thus solving the problem that is associated with the compression characteristics of air. Thus, in spite of using pneumatic equipment, it performs similarly to a hydraulic unit, operating at a constant speed during starting or in the presence of load fluctuations, and at the same time solving the problems of sticking and slipping associated with low speed operations. This unit is ideal for achieving accurate and constant speed of the cylinder, intermediate stopping, skip movement, or for slow operation of a rotary actuator.

A selection of valve unit is available to suit your application.

## High cylinder driving speed.

Through the availability of a wide range of series in terms of converter capacity and valve unit flow rate control capability, speed as high as 180 mm/s (throttle valve) can be achieved with a ø80 cylinder.

(Operating pressure: 0.5 MPa, unloaded, Piping: Bore 19 mm x 1 m)

Although the converter and the valve unit are integrated, they can also be operated by providing individual piping.



## CC Air-hydro Unit Part No. Combinations

Converter nominal size	Valve unit size	Control valve	Combined valve
63	S	0	2
		1	0, 1, 2, 3
		2	0, 1, 2, 3
		3	0, 1, 2, 3
100	S	0	2
		1	0, 1, 2, 3
		2	0, 1, 2, 3
		3	0, 1, 2, 3
	L	0	2
		1	0, 1, 2, 3
160	L	2	0, 1, 2, 3
		0	2
		1	0, 1, 2, 3

## How to Order

**CC 63 - 100 S 1 1 - 1 G**

- Converter nominal size**

63	63 mm
100	100 mm
160	160 mm
- Effective oil level stroke (mm)**
- Valve unit size**

S	Small flow
L	Large flow
- Control valve**

0	None
1	Flow control valve (With pressure compensation)
2	Throttle valve
3	Timid flow control valve (Only CCVS series)
- Electrical entry of solenoid valve**

NH	Air operated
G	Grommet
D	DIN terminal
- Solenoid valve rated voltage**

1	100 VAC, 50/60 Hz
2	200 VAC, 50/60 Hz
3*	110 VAC, 50/60 Hz
4*	220 VAC, 50/60 Hz
5	24 VDC
6*	12 VDC
7*	240 VAC, 50/60 Hz

\* Semi-standard
- Combined valve**

0*	None
1	Stop valve, Skip valve
2	Stop valve
3	Skip valve

\* For the one without combined valve (0), solenoid valve does not come with.  
<Example> CC63-100S10

