

# Air-hydro Unit Series CC

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  $\phi 80$  cylinder.

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

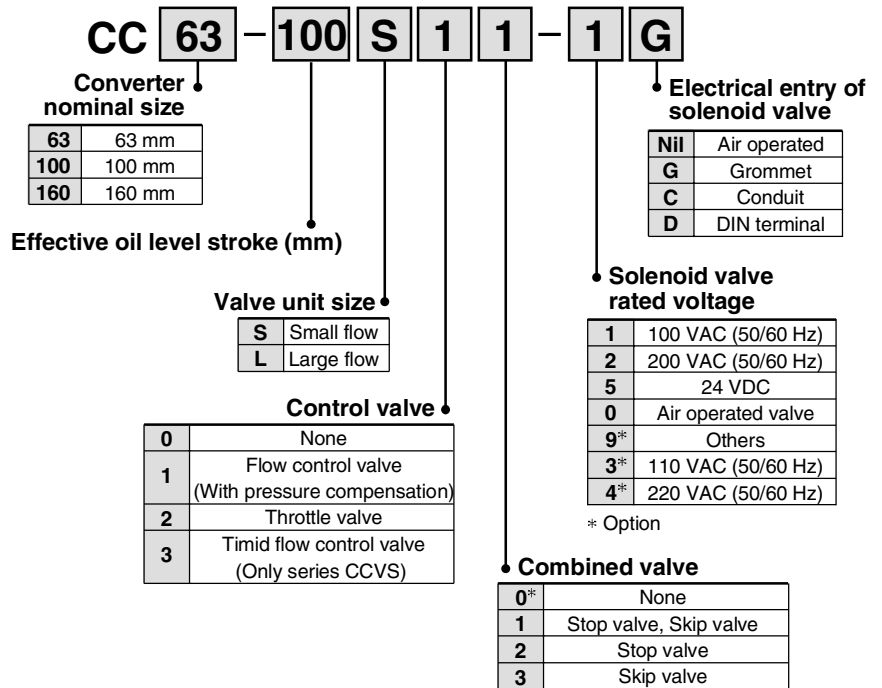
Although the converter and the valve unit are integrated, they can also be operated by providing individual piping.



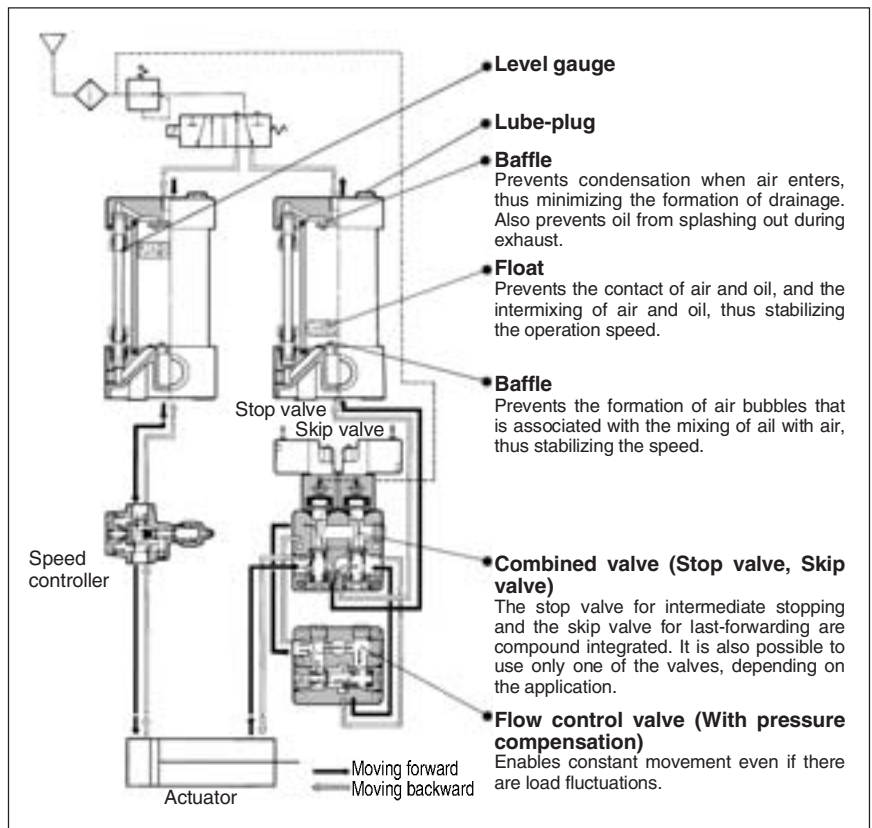
### CC Air-hydro Unit Part No. Combinations

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
	L	0	2
		1	0, 1, 2, 3
		2	0, 1, 2, 3
160	L	0	2
		1	0, 1, 2, 3
		2	0, 1, 2, 3

## How to Order

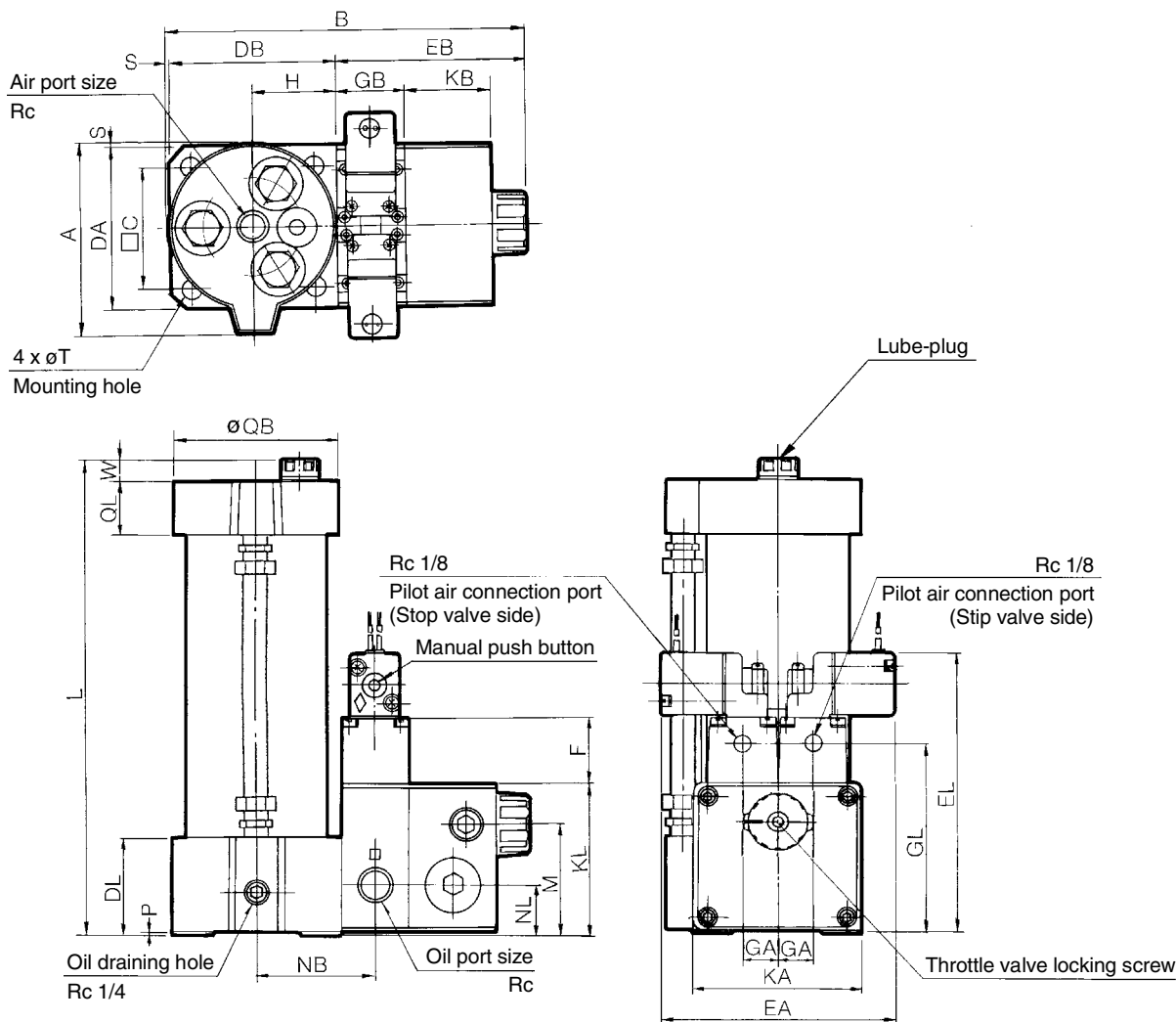


\* For the one without combined valve (0), solenoid valve does not come with.  
<Example> CC63-100S10



## Dimensions

### Hydro Unit



Model	Air port size Rc	Oil port size Rc	A	B	C	DA	DB	DL	EA	EB	EL	F	GA	GB	GL	H	KA	KB	KL	M
CC63-□S□1-□G	3/8	1/2	104	186	64	86	88	53	121.8	98	151.5	35	18	35	104	45	86	45	83	60
CC100-□S□1-□G	1/2	1/2	139	223	92	116	123	61	121.8	98	156.5	35	18	35	109	65	86	45	88	65
CC100-□L□1-□G	1/2	3/4	139	259	92	116	123	61	133.8	134	185.5	40	24	50	140	65	116	66	112	85
CC160-□L□1-□G	3/4	3/4	202.5	319.5	144	180	183	60	133.8	134	181.5	40	24	50	136	93	116	66	108	81

Model	NB	NL	P	QB	QL	S	T*	W
CC63-□S□1-□G	62.5	28	3	86	30	0	11	9.5
CC100-□S□1-□G	82.5	33	5	120	32	2	13	7
CC100-□L□1-□G	92	33	5	120	32	2	13	7
CC160-□L□1-□G	120	29	0	185	46	2.5	20	7

### L Dimension

Effective oil level stroke	50	100	200	300	400	500	600	700	800
CC63-□S□1-□G	228.5	278.5	378.5	503.5	603.5	728.5	—	—	—
CC100-□□□1-□G	—	286	386	511	611	736	836	—	—
CC160-□L□1-□G	—	—	399	524	624	749	849	949	1049

\* Hexagon socket head cap screw is used for mounting hole.