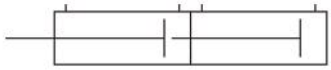
JIG CYLINDERS C SERIES TANDEM CYLINDERS

**Double Acting Type,
Single Acting Push Type**

Symbols

● Double acting type



● Single acting push type

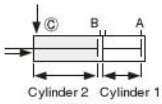
Specifications

Item \ Bore size mm [in.]		12 [0.472]	16 [0.630]	20 [0.787]	25 [0.984]	32 [1.260]	40 [1.575]	50 [1.969]	63 [2.480]	80 [3.150]	100 [3.940]
Operation type		Double acting type, Single acting push type							Double acting type		
Media		Air									
Operating pressure range MPa [psi.]	Double acting type	0.2～1.0 [29～145]						0.1～1.0 [15～145]			
	Single acting type	0.3～1.0 [44～145]						0.2～1.0 [29～145]	—		
Proof pressure MPa [psi.]		1.5 [218]									
Operating temperature range °C [°F]		0～60 [32～140] (The heat resistant specification is 120 [248]. Note1)									
Operating speed range mm/s [in./sec.]	Double acting type	30～500 [1.2～19.7]						30～300 [1.2～11.8]			
	Single acting type	100～500 [3.9～19.7]						100～300 [3.9～11.8]	—		
Cushion	Double acting type	Rubber bumper (Option Note2)									
	Single acting type	None							—		
Lubrication		Not required (If lubrication is required, use Turbine Oil Class 1 [**ISO VG32**] or equivalent.)									
Port size		M5×0.8				Rc1/8		Rc1/4		Rc3/8	

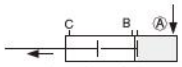
Remark: For Handling Instructions and Precautions, see p.205.
Notes: 1. For heat resistant specification, consult us.
2. Not available for heat resistant specification.

Operation of Tandem Cylinders

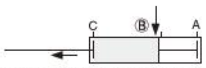
Tandem Cylinders are a set of 2 cylinders joined end to end.
It can be used as a two-stage stroke cylinder by supplying air to either Port A or Port B. It can also obtain twice the thrust within the "stroke I" range.



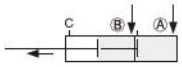
The rods retract strokes Ⅱ and Ⅰ when air is supplied from Port Ⓒ.



The rod moves stroke Ⅰ when air is supplied from Port Ⓐ.



The rod moves stroke Ⅱ when air is supplied from Port Ⓑ.



Twice the thrust is obtained within the stroke Ⅰ range when air is supplied from Ports Ⓐ and Ⓑ.

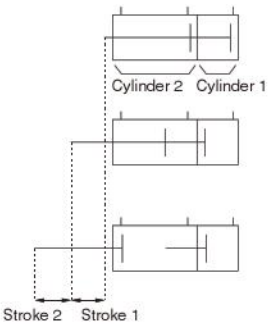
Bore Size and Stroke

For non-standard strokes, see p.206.

mm

Operation type	Stroke1 / Bore size	5	10	15	20	25	30	35	40	45	50	75	100
Double acting type **CDAT CDATS**	**12、16**	0,5,10 15,20,25	0,5,10 15,20	0,5,10,15	0,5,10	0,5	0	—	—	—	—	—	—
	20、25	0,5,10,15 20,25,30 35,40,45	0,5,10,15 20,25,30 35,40	0,5,10 15,20,25 30,35	0,5,10,15 20,25,30	0,5,10 15,20,25	0,5,10 15,20	0,5,10,15	0,5,10	0,5	0	—	—
	32、40	0,5,10,15 20,25,30,35 40,45,70,95	0,5,10,15 20,25,30,35 40,65,90	0,5,10,15 20,25,30 35,60,85	0,5,10,15 20,25,30 55,80	0,5,10 15,20,25 50,75	0,5,10 15,20 45,70	0,5,10,15 40,65	0,5,10 35,60	0,5,30,55	0,25,50	0,25	0
	50、63 80、100	—	0,5,10,15 20,25,30,35 40,65,90	0,5,10,15 20,25,30 35,60,85	0,5,10,15 20,25,30 55,80	0,5,10 15,20,25 50,75	0,5,10,15 20,45,70	0,5,10,15 40,65	0,5,10 35,60	0,5,30,55	0,25,50	0,25	0
Single acting type **CSAT CSATS**	**12、16、20 25、32、40**	0,5,10 15,20,25	0,5,10 15,20	0,5,10,15	0,5,10	0,5	0	—	—	—	—	—	—
	50	—	0,5,10,15 20,25,30	0,5,10 15,20,25	0,5,10 15,20	0,5,10,15	0,5,10	0,5	0	—	—	—	—

Remarks: 1. Stroke tolerance: Stroke 1 side $^{+1}_{-0.2}\left[^{+0.039in.}_{-0.008in.}\right]$ stroke 2 side $^{+1}_{0}\left[^{+0.039in.}_{0}\right]$
2. The figures in the table are combinations of stroke 2 (standard) responding to stroke 1 (standard).
3. In most cases, body cutting is used for the non-standard strokes.
However, body cutting is not used for "Stroke 1" or "Stroke 1 + Stroke 2" under the condition mentioned below. The collar packed is used for these cases.
ϕ 12 ～ ϕ 40: less than 5mm
ϕ 50 ～ ϕ 100: less than 10mm



● About stroke 1 and stroke 2

Stroke 1 is the stroke of cylinder 1.
Stroke 2 is obtained by subtracting stroke 1 from the stroke of cylinder 2.