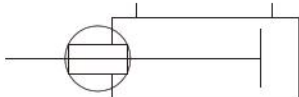


TWIN ROD CYLINDERS B SERIES

Double Acting Type

Symbol



Specifications

Item	Bore size mm [in.]				
	10 [0.394]	16 [0.630]	20 [0.787]	25 [0.984]	32 [1.260]
Operation type	Double acting type				
Media	Air				
Mounting type	Side mount				
Operating pressure range MPa [psi.]	0.15~0.7 [22~102]	0.1~0.7 [15~102]			
Proof pressure MPa [psi.]	1.05 [152]				
Operating temperature range °C [°F]	0~60 [32~140]				
Operating speed range mm/s [in./sec.]	100~500 [3.9~19.7]				
Cushion	Rubber bumper				
Lubrication	Not required (If lubrication is required, use Turbine Oil Class 1 [ISO VG32] or equivalent.)				
Non-rotating accuracy	±0.4°	±0.3°			
Stroke adjusting range mm [in.]	-5~0 [-0.197~0] (To the specification stroke)				
Port size	M5X0.8			Rc1/8	

Bore Size and Stroke

Bore size	Standard strokes	Maximum available stroke	mm
			Pull side stroke adjusting range
10	10, 20, 30, 40, 50, 60, 70	140	-5~0
16	10, 20, 30, 40, 50, 60, 70 80, 90, 100	200	
20	10, 20, 30, 40, 50, 60, 70 80, 90, 100	200	
25	10, 20, 30, 40, 50, 60, 70 80, 90, 100	200	
32	10, 20, 30, 40, 50, 60, 70 80, 90, 100	200	

Note: Consult us for delivery of strokes that exceed the standard strokes.
Remark: Use the above table for non-ion specification, as well.

Order Codes

TBDA Twin rod cylinder B series double acting type ^{Note1}	16X30 Bore size X Stroke	Non-ion specification ^{Note2} Blank — Standard specification The standard specification of φ10, φ16, and φ20 can also be used as non-ion specification. NCU — Non-ion specification for φ25, φ32 (Made to order)	Sensor switch Blank — No sensor switch ZE135 — 2-lead wire, Solid state type with indicator lamp DC10~28V Horizontal lead wire ZE235 — 2-lead wire, Solid state type with indicator lamp DC10~28V Vertical lead wire ZE155 — 3-lead wire, Solid state type with indicator lamp DC4.5~28V Horizontal lead wire ZE255 — 3-lead wire, Solid state type with indicator lamp DC4.5~28V Vertical lead wire ZE101 — 2-lead wire, Reed switch type without indicator lamp DC5~28V AC85~115V Horizontal lead wire ZE201 — 2-lead wire, Reed switch type without indicator lamp DC5~28V AC85~115V Vertical lead wire ZE102 — 2-lead wire, Reed switch type with indicator lamp DC10~28V AC85~115V Horizontal lead wire ZE202 — 2-lead wire, Reed switch type with indicator lamp DC10~28V AC85~115V Vertical lead wire	Lead wire length A : 1000mm [39in.] B : 3000mm [118in.] Number of sensor switches 1 — With 1 sensor switch 2 — With 2 sensor switches
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Notes: 1. In the standard cylinder, the magnet for sensor switch is built-in.

2. Non-ion specifications of φ25, φ32 are made to order. The standard specification of φ10, φ16, and φ20 can also be used as non-ion specification. Consult us for specifications and delivery.

● For details of sensor switches, see p.1544.