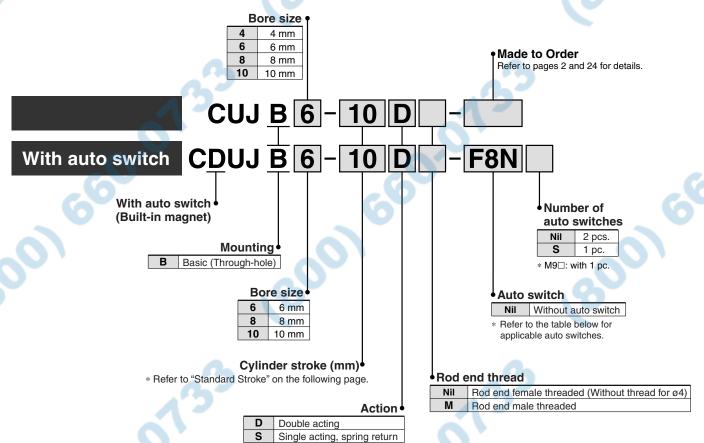
# Mini Free Mount Cylinder Series CUJ ø4, ø6, ø8, ø10

#### **How to Order**

101660



#### **Built-in Magnet Cylinder Model**

In the case of built-in magnet without auto switch, the symbol for auto switch is "Nil". (Example) CDUJB8-15DM

#### Applicable Auto Switches/Refer to pages 21 through to 23 for additional information on auto switches.

							_												
	7	Special function Electrical entry		Flaction bit	) A (!!	Load voltage		Auto swite	Auto switch model Lead wire		e length (m) *			Due mined					
	Type			Wiring (Output)			DC AC		al entry	0.5	1	3	5	Pre-wired connector	Appli	cable load			
П				= -	르	= -	<u> </u>	(Output)	. 6	DC	AC	Perpendicular	In-line	(Nil) (M) (L) (Z)		(Z)	COMMECTOR		
					3-wire (NPN)				_	M9N	•	_		0	0				
	switch	— Grommet Ye	— Grommet Ves	3-wire (INPIN)		5 V,		F8N	_	•	<b> </b> —	•	0	0	IC				
				3-wire	3-wire (PNP)		12 V		_	M9P	•	_	• 0	0	0	circuit			
					3-WITE (FINE)				F8P	_	•	<b> </b> —		0	0		Relay,		
	state			2-wire 24	24 V	24 V	_ [	_	M9B	•	_	•	0	0		PLC			
				2-wire		12 V		F8B	_	• •			0	0	_	1 20			
	Solid	Diagnostic			3-wire (NPN)		5 V,		_	M9NW			•	0	0	IC			
	δ	indication			3	3-w	3-wire (PNP)		12 V		_	M9PW		•	•	0	0	circuit	
		(2-color indication)			2-wire		12 V	1	_	M9BW		•	•	0	0	_			

<sup>\*</sup> Lead wire length symbols: 0.5 m ······· Nil (Example) M9NW 1 m ····· M (Example) M9NWM

3 m ...... L (Example) M9NWL 5 m ..... Z (Example) M9NWZ \* Auto switches marked with "O" are produced upon receipt of order.

Note 1) For 2-color indication type, use caution on hysteresis. Refer to page 19, "Auto Switch Hysteresis" prior to use. Note 2) Refer to pages 21 through to 23 for detailed auto switch specifications.

<sup>\*</sup> Refer to "Best Pneumatics" catalog for further information on auto switches with pre-wired connector.

<sup>\*</sup> Auto switches are included, (but not assembled).

# Mini Free Mount Cylinder Series CUJ



# JIS Symbol Double acting, single rod



#### Single acting, spring return



#### **Standard Stroke**

Action	Bore size (mm)	Standard stroke (mm)			
	4	4, 6, 8, 10, 15, 20			
Double acting	6	4, 6, 8, 10, 15, 20			
	8, 10	25, 30			
0:	4	4, 6			
Single acting, spring return	6	4, 6, 8			
spring return	8, 10	4, 6, 8, 10			



Symbol	Contents
-XB6	Heat resistant cylinder (-10 to 150°C)

660.01

Note) Except models with auto switch and singleacting, spring return type Except bore size 4

### **Specifications**

Bore s	size (mm)	4	6	8	10		
Action		Double acting; Single acting, spring return					
Fluid		Air					
Proof pressure		1.05	MPa				
Minimum operating	Double acting		0.1 MPa				
pressure	Single acting, spring return	0.35 MPa	0.3 l	0.2 MPa			
Maximum operating	g pressure	0.7 MPa					
Ambient and fluid	Without auto switch: -10 to 70°C (No freezing) With auto switch: -10 to 60°C (No freezing)						
Cushion		None					
Lubrication		Non-lube					
Piston speed		50 to 500 mm/s					
Stroke length toler	rance	+0.5 0					
Mounting		Through-hole					

## **Theoretical Output: Double Acting**



Child									
Bore size	Rod size	Operating	Piston area	Operating pressure (MPa)					
(mm)	(mm)	direction	(mm²)	0.3	0.5	0.7			
4	2	OUT	12.6	3.76	6.28	8.79			
4		IN	9.4	2.82	4.71	6.59			
6	4	OUT	28.3	8.48	14.13	19.79			
0		IN	15.7	4.71	7.85	10.99			
8	5	OUT	50.3	15.07	25.13	35.18			
•	9	IN	30.6	9.18	15.31	21.44			
10	c	OUT			39.26	54.97			
10	6	IN	50.3	15.07	25.13	35.18			

## **Spring Reaction Force: Single Acting, Spring Return**

Spring in pre-loaded condition  $\stackrel{\text{IN}}{\longrightarrow}$ 



Spring in loaded condition OUT

When the spring is set in the cylinder.

When the spring is contracted by applying air. Unit: N

3.2

Bore size	Bore size Spring		Stroke (mm)						
(mm)	condition	4	6	8	10				
4	Pre-loaded	1.70	1.27	_	_				
4	Loaded	2.55	2.55	_	_				
6	Pre-loaded	2.45	2.01	1.57	_				
6	Loaded	3.33	3.33	3.33	- 0				
•	Pre-loaded	4.67	3.76	2.86	1.96				
8	Loaded	ded 6.47 6.47			6.47				
10	Pre-loaded	5.04	4.18	3.31	2.45				
10	Loaded	6.77	6.77	6.77	6.77				

# Mass: Double Acting

CUJB10

Unit: g Bore size Standard stroke (mm) Additional mass (mm) Built-in magnet Rod end male threaded 15 CUJB4 7.2 7.9 8.6 9.3 11.1 12.8 0.4 CUJB6 12.4 13.6 14.8 16.0 18.9 21.8 24.7 2.7 8.0 CUJB8 15.6 17.0 18.4 19.7 23.0 26.4 29.9 33.4 3.0 1.5

22.3 25.9

# Mass: Single Acting, Spring Return

Unit:

2.6

- Child								
Bore size		Standard s	troke (mm)	Additional mass				
(mm)	4	6	8	10	Built-in magnet	Rod end male threaded		
CUJB4	7.2	7.9	_	_	_	0.4		
CUJB6	12.8	14.0	15.2	_	2.4	0.8		
CUJB8	15.8	17.2	18.6	19.9	2.5	1.5		
CUJB10	17.9	19.4	20.8	22.3	2.4	2.6		

