

**Ø20, Ø25, Ø32, Ø40**



# Air Cylinder: Standard Type **CM2 Series** Double Acting, Single Rod

## Specifications



### Symbol

Double acting, Single rod

Air cushion



Refer to pages 262 to 266 for cylinders with auto switches

- Auto switch proper mounting position (detection at stroke end) and its mounting height
- Minimum stroke for auto switch mounting
- Operating range
- Auto switch mounting brackets/Part no.



**Made to Order: Individual Specifications**  
(For details, refer to page 267.)

Symbol	Specifications
-X446	PTFE grease

### Made to Order

(For details, refer to pages 1703 to 1896.)

Symbol	Specifications
-XA□	Change of rod end shape
-XB6	Heat resistant cylinder (-10 to 150°C)
-XB7	Cold resistant cylinder (-40 to 70°C)*1
-XB9	Low speed cylinder (10 to 50 mm/s)*1
-XB12	External stainless steel cylinder*2
-XB13	Low speed cylinder (5 to 50 mm/s)*2
-XC3	Special port location
-XC4	With heavy duty scraper
-XC5	Heat resistant cylinder (-10 to 110°C)
-XC6	Made of stainless steel
-XC8	Adjustable stroke cylinder/Adjustable extension type
-XC9	Adjustable stroke cylinder/Adjustable retraction type
-XC10	Dual stroke cylinder/Double rod type*1
-XC11	Dual stroke cylinder/Single rod type
-XC12	Tandem cylinder*1
-XC13	Auto switch rail mounting
-XC20	Head cover axial port
-XC22	Fluororubber seal
-XC25	No fixed throttle of connection port*1
-XC27	Double clevis and double knuckle pins made of stainless steel
-XC29	Double knuckle joint with spring pin
-XC35	With coil scraper*1
-XC52	Mounting nut with set screw
-XC85	Grease for food processing equipment

\*1 Rubber bumper only.

\*2 The shape is the same as the current product.

Bore size (mm)			20	25	32	40
Type			Pneumatic			
Action			Double acting, Single rod			
Fluid			Air			
Proof pressure			1.5 MPa			
Maximum operating pressure			1.0 MPa			
Minimum operating pressure			0.05 MPa			
Ambient and fluid temperature			Without auto switch: -10°C to 70°C With auto switch: -10°C to 60°C (No freezing)			
Lubrication			Not required (Non-lube)			
Stroke length tolerance			$^{+1.4}_0$ mm			
Piston speed			50 to 750 mm/s			
Cushion			Rubber bumper, Air cushion			
Allowable kinetic energy	Rubber bumper	Male thread	0.27 J	0.4 J	0.65 J	1.2 J
		Female thread	0.11 J	0.18 J	0.29 J	0.52 J
	Air cushion (Effective cushion length (mm))	Male thread	0.54 J (11.0)	0.78 J (11.0)	1.27 J (11.0)	2.35 J (11.8)
		Female thread	0.11 J	0.18 J	0.29 J	0.52 J

\* Operate the cylinder with in the allowable kinetic energy.

## Standard Strokes

Bore size (mm)	Standard stroke (mm) Note 1)	Maximum manufacturable stroke (mm)
20	25, 50, 75, 100, 125, 150, 200, 250, 300	1000
25		1500
32		2000
40		

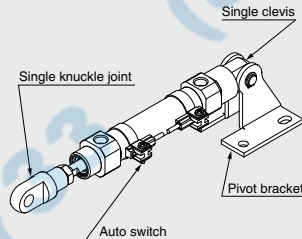
Note 1) Intermediate strokes not listed above are produced upon receipt of order.

Manufacture of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

Note 2) Applicable strokes should be confirmed according to the usage. For details, refer to "Air Cylinders Model Selection" on front matter pages. In addition, the products that exceed the standard stroke might not be able to fulfill the specifications due to the deflection etc.

## Option: Ordering Example of Cylinder Assembly

Cylinder model: CDM2C20-50Z-NV-M9BW



**Mounting C: Single clevis**  
**Pivot bracket N: Yes**  
**Rod end bracket V: Single knuckle joint**  
**Auto switch D-M9BW: 2 pcs.**

\* Pivot bracket, single knuckle joint and auto switch are shipped together with the product, but not assembled.

\* Pivot bracket is available only for C, T, U, E, V, UZ mounting types.

\* No bracket is provided for the female rod end.

CJ1

CJP

CJ2

JCM

CM2

CM3

CG1

CG3

JMB

MB

MB1

CA2

CS1

CS2

D-□

-X□

Technical Data