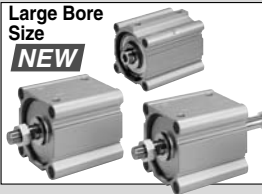
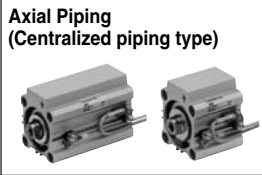


Compact Cylinder *Series CQ2*

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100, ø125, ø140, ø160, ø180, ø200

With a short overall length, the space-saving cylinder helps to make various jigs and equipment more compact.

Series Variations

Series	Action	Type	Bore size (mm)	Standard stroke (mm)	Page
Standard 	Double acting	Single rod CQ2	12 16 20 25 32 40 50 63 80 100 125 140 160 180 200	ø12, ø16: 5 to 30 ø20, ø25: 5 to 50 ø32, ø40: 5 to 100 ø50 to ø100: 10 to 100	1
		Double rod CQ2W		ø12, ø16: 5 to 30 ø20, ø25: 5 to 50 ø32, ø40: 5 to 100 ø50 to ø100: 10 to 100	22
	Single acting	Spring return/ Spring extend CQ2		ø12 to ø40: 5, 10 ø50: 10, 20	38
Large Bore Size 	Double acting	Single rod CQ2		10 to 300	57
		Double rod CQ2W		10 to 300	63
Long Stroke 	Double acting	Single rod CQ2		125 to 300	69
Non-rotating Rod 	Double acting	Single rod CQ2K		ø12, ø16: 5 to 30 ø20, ø25: 5 to 50 ø32, ø40: 5 to 100 ø50, ø63: 10 to 100	78
		Double rod CQ2KW		ø12, ø16: 5 to 30 ø20, ø25: 5 to 50 ø32, ø40: 5 to 100 ø50, ø63: 10 to 100	92
Axial Piping (Centralized piping type) 	Double acting	Single rod CQP2		ø12, ø16: 5 to 30 ø20, ø25: 5 to 50 ø32, ø40: 5 to 100 ø50 to ø100: 10 to 100	103
	Single acting	Spring return/ Spring extend CQP2		ø12 to ø40: 5, 10 ø50: 10, 20	112
Anti-lateral Load 	Double acting	Single rod CQ2□S		ø32 to ø40: 5 to 100 ø50 to ø100: 10 to 100	128
With End Lock 	Double acting	Single rod CBQ2		ø20 to ø63: 10 to 100 ø80, ø100: 25 to 100	140
Water Resistant 	Double acting	Single rod CQ2□R		ø20, ø25: 5 to 50 ø32, ø40: 5 to 100 ø50 to ø100: 10 to 100	156
Smooth Cylinder (Low friction) CQ2Y 	Refer to Best Pneumatics No. 3.		Low-speed Cylinder CQ2X 		
		Refer to Best Pneumatics No. 3.			

Combinations of Standard Products and Made to Order Specifications

Series CQ2

Series CQ2

● : Standard
◎ : Made to Order
○ : Special product (For details, please contact SMC.)
— : Not available

Made to Order: For details, refer to pages 177 to 207.

Symbol	Specifications	Applicable bore size	ø12 to ø100		ø12 to ø50		ø125 to ø200				ø32 to ø100	ø12 to ø63		ø12 to ø100	ø12 to ø50		ø32 to ø100	ø20 to ø100	
Standard	Standard product	ø12 to ø100	●	●	●	●	●	●			●	●	●	●	●	●	●	●	●
D	Built-in magnet		●	●	●	●	●	●			●	●	●	●	●	●	●	●	●
CQ2□A	Both ends tapped		●	●	●	●	●	●			● Note 4)	● Note 4)	○	○	○	●	●	●	●
CQ2□-□M	Rod end male thread		●	●	●	●	●	●			●	●	●	●	●	●	●	●	●
CQ2□-□C	With rubber bumper		●	●	○	○	● Note 2)	● Note 2)			● Note 2)	○ Note 1)	○ Note 1)	●	○	○	● Note 2)	● Note 2)	● Note 2)
CQ2□-□F	With boss on head end		●	—	●	●	○	—			○	●	—	● Note 3)	● Note 3)	● Note 3)	●	○	○
CQ2□F	With one-touch fittings	ø32 to ø63	●	●	●	●	○	○			●	●	●	○	○	○	●	○	○
CQ2 ^{LF} _G	Foot/Flange	ø12 to ø100	●	●	●	●	○	○			●	● Note 4)	● Note 4)	○	○	○	●	●	●
CQ2D	Double clevis		●	—	●	●	○	—			●	● Note 4)	—	○	○	○	●	●	●
CQ2□H	Air-hydro type	ø20 to ø100	●	●	—	—	○	○			○	—	—	●	—	—	○	—	—
10-, 11-	Clean series	ø12 to ø200	●	○	○	○	○	○			○	○	○	○	○	○	○	○	○
20-	Copper and fluorine-free series		●	●	●	●	●	●			●	● Note 5)	● Note 5)	●	●	●	●	●	○
CQ2□ ^R _V	Water resistant	ø20 to ø100	●	● Note 6)	○	○	○	○			○	—	—	● Note 7)	○	○	○	○	○
XB6	Heat resistant cylinder (−10 to 150°C)	ø12 to ø100	◎	◎	○	○	○	○			○	○	○	◎	○	○	○	○	○
XB7	Cold resistant cylinder (−40 to 70°C)	ø12 to ø40	◎	◎	○	○	○	○			○	○	○	◎	○	○	○	—	—
XB9	Low-speed cylinder (10 to 50 mm/s)	ø12 to ø100	◎	◎	○	○	○	○			○	○	○	◎	○	○	○	○	○
XB10	Intermediate stroke (Exclusive body type)	ø12 to ø200	◎	◎	◎	○	◎	◎			◎	◎ Note 4)	◎ Note 4)	○	○	○	◎	◎	◎
XB10A	Intermediate stroke (Spacer-installed type)	ø32 to ø100	◎	○	○	○	○	○			○	○	○	○	○	○	○	○	○
XB11	Long stroke (Air-hydro type only)	ø20 to ø100	◎	—	—	—	—	—			—	—	—	—	—	—	—	—	—
XB13	Low-speed cylinder (5 to 50 mm/s)	ø12 to ø100	◎	◎	○	○	○	○			○	○	○	◎	○	○	○	○	—
XB14 ^{Note 12)}	Cylinder with heat resistant auto switch	ø16 to ø63	◎	○	○	○	○	○			○	○	○	○	○	○	○	○	○
XC4	With heavy-duty scraper	ø20 to ø100	◎	◎ Note 6)	○	○	○	○			◎	—	—	◎ Note 7)	○	○	○	○	○
XC6	Piston rod/Retaining ring/Rod end nut material: Stainless steel	ø12 to ø100	◎	◎	◎	◎	○	○			◎	○	○	◎	◎	◎	◎	◎	○
XC8	Adjustable stroke cylinder/Adjustable extension type		◎	—	○	○	○	—			○	◎	—	○	○	○	○	○	○ Note 8)
XC9	Adjustable stroke cylinder/Adjustable retraction type		◎	—	○	○	○	—			○	◎	—	○	○	○	○	○	○ Note 9)
XC10	Dual stroke cylinder/Double rod		◎	—	○	○	○	—			○	◎	—	—	—	—	○	○	○
XC11	Dual stroke cylinder/Single rod		◎	—	○	○	○	—			○	◎	—	○	○	○	○	○	○
XC26	With split pins for double clevis pin/ double knuckle joint pin and flat washers		◎	—	◎	◎	○	○			◎	◎ Note 4)	—	○	○	○	◎	◎	◎
XC27	Double clevis pin/Double knuckle joint pin material: Stainless steel 304	◎	○	◎	◎	○	○			◎	◎	○	○	○	○	◎	◎	○	
XC35	With coil scraper	ø32 to ø100	◎	◎	○	○	○	○			○	—	—	◎	○	○	○	○	○
XC36	With boss on rod end	ø12 to ø100	◎	◎	◎	◎	○	○			◎ Note 10)	◎ Note 10)	◎ Note 10)	◎	◎	◎	○	○	○
X144	Special port location	ø12 to ø25	◎	◎	◎	◎	—	—			—	○	○	—	—	—	—	—	—
X202	Full length dimension is the same as Series CQ1.	ø12 to ø100	◎	—	◎	◎	—	—			—	—	—	—	—	—	—	—	—
X203	L dimension from rod cover is the same as Series CQ1.	ø12 to ø32	◎	—	◎	◎	—	—			—	—	—	—	—	—	—	—	—
X235	Special rod end for double rod cylinder	ø12 to ø200	—	◎	—	—	—	◎			—	—	○	—	—	—	—	—	—
X271	Fluororubber seals	ø12 to ø160	◎	◎	◎	◎	◎ Note 11)	◎ Note 11)			◎	○	○	◎	◎	◎	◎	◎	○
X293	Full length dimension is the same as Series CQ1W.	ø12 to ø100	—	◎	—	—	—	—			—	—	—	—	—	—	—	—	—
X525	Long stroke of adjustable extension stroke cylinder (-XC8)		◎	—	○	○	○	—			○	○	—	○	○	○	○	○	○ Note 8)
X526	Long stroke of adjustable retraction stroke cylinder (-XC9)		◎	—	○	○	○	—			○	○	—	○	○	○	○	○	○ Note 9)
X633	Intermediate stroke of double rod cylinder	ø12 to ø200	—	◎	—	—	—	◎			—	—	◎	—	—	—	—	—	—
X636	Long stroke of dual stroke single rod cylinder	ø12 to ø100	◎	—	○	—	○	—			○	○	—	○	○	—	○	○	○
X1876	Cylinder tube: With concave boss on head end	ø20 to ø100	◎	—	◎	◎	—	—			—	◎	—	—	—	—	◎	○	○

Note 1) ø12 with auto switch: With rubber bumper (Standard)
Note 2) With rubber bumper (Standard)
Note 3) ø12 to ø16: (○), for ø20 to ø100 only (up to ø50 for single acting type)

Note 4) ø12 to ø32: (○), for ø40 to ø63 only
Note 5) ø12: (—)
Note 6) ø20 to ø32: (○), for ø40 to ø100 only

Note 7) ø20 to ø25: (○), for ø32 to ø100 only
Note 8) Rod end lock: (—), for head end lock only
Note 9) Head end lock: (—), for rod end lock only

Note 10) With boss on rod end (Standard)
Note 11) ø180 to ø200: (○), for ø125 to ø160 only
Note 12) The body shape is the same as the existing product.



Standard

Large Bore Size

Long Stroke

Non-rotating Rod

Axial Piping

Anti-lateral Load

With End Lock

Water Resistant

With Auto Switch

Auto Switch

Made to Order