

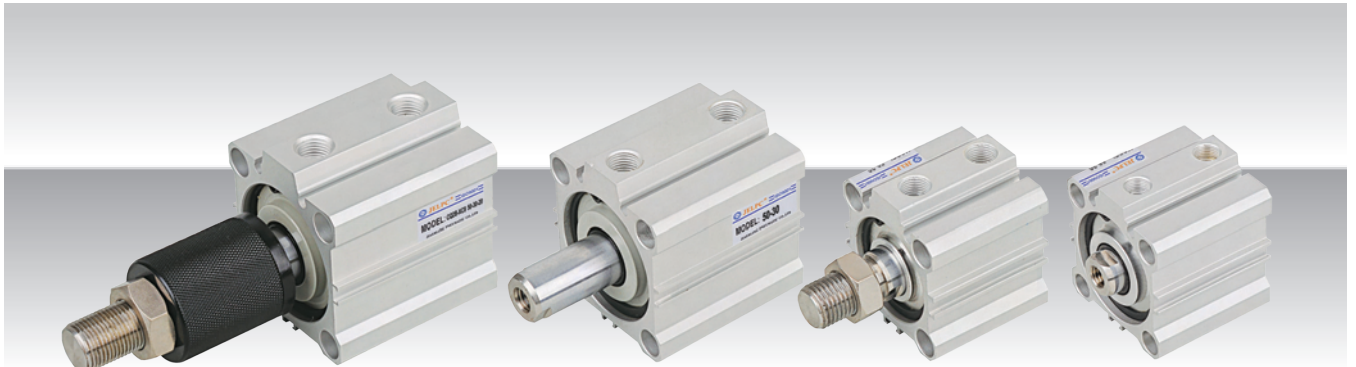
CQ2 Series

Thin Type Cylinder



The way to automation

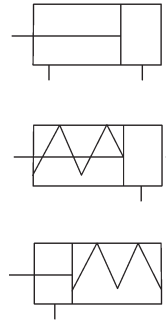
- Cylinder
- Sizing
- SI
- SI A.
- SC / SU
- SCT
- SC A.
- DSN
- DSN A.
- MA
- MAL
- MA/MAL A.
- SDA
- CQ2**
- CJ2
- CDU
- TN
- CXS
- MGP
- MSQ



Ordering Code

C	D	Q2	B	20	30	25	D	C	MT
Inner Magnet			Mountings	Bore	Stroke	Adjustable Stroke	Operation	Thread	Sensor
Blank:			B: Topped stroke length on 4 holes	12	As S/M chart		D: Double acting	Blank: Female thread	D-A73
Without magnet			A: Both end thread hole	16			W: Double shaft	M: Male thread	
D: With magnet				20			XC8: Stroke adjustable	C: Rubber Buffer	
				25			S: Single acting (Spring-in)		
				32			T: Single Acting (Spring-out)		
				40			*Bore size of single acting cylinder is from $\phi 12 \sim \phi 50$		
				50					
				63					
				80					
				100					

Symbol



Specification

Bore (mm)	12	16	20	25	32	40	50	63	80	100
Operating Fluid	Air									
Operation	Double Acting/ Single Acting: Spring-in, Spring-out									
Proof Pressure	1.5 MPa									
Max. Operating Pressure	1.0 MPa									
Ambient and Fluid Temperature	5°C ~ 60 °C									
Piston Rod Thread	Female thread (Standard), Male thread (Optional)									
Cushion	Non-lub									
Piston Acting Speed	50-500 mm/s									
Tolerance Stroke	+1.0 mm 0 mm									
Lubricant	Non-Lub									
Installation	Through Hole (Standard), Two side dove tails (Optional)									
Port Size	M5 x 0.8				1/8		1/4		3/8	

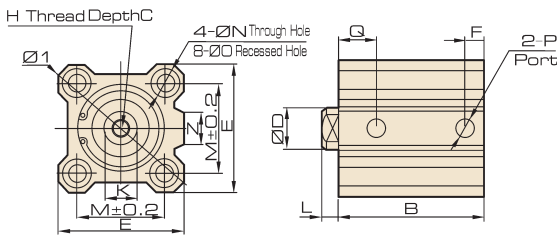
Stroke/Sensor Switch Model

Bore	Standard Stroke (mm)	*With Sensor
12,16	5, 10, 15, 20, 25, 30	5.10
20,25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	
32,40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100	10.20
50	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100	
63,80,100		-

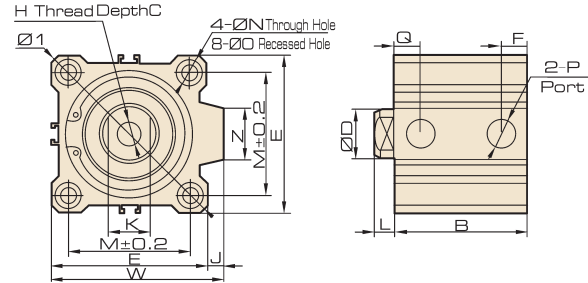
* To choose proper sensor switch, please refer to sensor switch pages. Lead wire length code as follow: Blank - 0.5m, L-3m, Z-5m Example: A72,A72L
* For slide installation.

Overall Dimension

CQ2B Ø10~Ø25



CQ2B Ø32~Ø100



Double Acting Cylinder Dimension Chart

Bore/Symbol	Stroke Range (mm)	B	ΦD	E	F	H	C	ΦI	J	K	L	M	ΦN	ΦO	P	Q	W	Z	
12	5~30	17+st	6	25	5	M3x0.5	6	32	-	5	3.5	15.5	3.5	6.5 deep 3.5	M5X0.8	7.5	-	-	10
16	5~30	18.5+st	8	29	5.5	M4x0.7	8	38	-	6	3.5	20	3.5	6.5 deep 3.5	M5X0.8	8	-	-	10
20	5~50	19.5+st	10	36	5.5	M5x0.8	7	47	-	8	4.5	25.5	5.5	9 deep 7	M5X0.8	9	-	-	10
25	5~50	22.5+st	12	40	5.5	M6x1.0	12	52	-	10	5	28	5.5	9 deep 7	M5X0.8	11	-	-	10
32	5 10~50	23+st	16	45	5.5 7.5	M8x1.25	13	60	4.5	14	7	34	5.5	9 deep 7	M5X0.8 1/8	11.5 10.5	49.5	18	
40	5~50	29.5+st	16	52	8	M8x1.25	13	69	5	14	7	40	5.5	9 deep 7	1/8	11	57	18	
50	10~50	30.5+st	20	64	10.5	M10x1.5	15	86	7	17	8	50	6.6	11 deep 8	1/4	10.5	71	22	
63	10~50	36+st	20	77	10.5	M10x1.5	15	103	7	17	8	60	9	14 deep 10.5	1/4	15	84	22	
80	10~50	43.5+st	25	98	12.5	M16x2.0	21	132	6	22	10	77	11	17.5 deep 13.5	3/8	16	104	26	
100	10~50	53+st	30	117	13	M20x2.5	27	156	6.5	27	12	94	11	17.5 deep 13.5	3/8	23	123.5	26	

Remark2) Long Stroke

st=Stroke

Model	Stroke(mm)	B	F	P	Q
32	75,100	33	7.5	1/8	10.5
40	75,100	39.5	8	1/8	11
50	75,100	40.5	10.5	1/4	10.5
63	75,100	46	10.5	1/4	15
80	75,100	53.5	12.5	3/8	16
100	75,100	63	13	3/8	23

- Standard stroke is classified every 5 mm.
- 5, 10, 15 or 20 mm thick gaskets are applied on stroke from 55mm to 100mm (55, 60, 65, 70, 80, 85, 90, 95).
- Unless specified, the dimension of 4 holes tapped with stroke length cylinder and two side cover tall cylinder are the same.

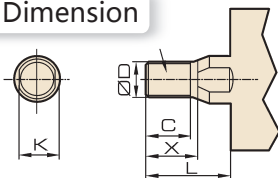
Single Acting Cylinder

Bore/Symbol	B			ΦD	E	F		H	C	ΦI	J	K	L	M	ΦN	ΦO	P			Q		W	Z	
	5st	10st	20st			5st	10st										5st	10st	5st	10st				
12	22	27	-	6	25	5	5	M3x0.5	6	32	-	5	3.5	15.5	3.5	6.5 deep 3.5	M5x0.8	-	7.5	7.5	-	-	-	-
16	23.5	28.5	-	8	29	5.5	5.5	M4x0.7	8	38	-	6	3.5	20	3.5	6.5 deep 3.5	M5x0.8	-	8	8	-	-	10	
20	24.5	29.5	-	10	36	5.5	5.5	M5x0.8	7	47	-	8	4.5	25.5	5.5	9 deep 7	M5x0.8	-	9	9	-	-	10	
25	27.5	32.5	-	12	40	5.5	5.5	M6x1.0	12	52	-	10	5	28	5.5	9 deep 7	M5x0.8	-	11	11	-	-	10	
32	28	33	-	16	45	7.5	7.5	M8x1.25	13	60	4.5	14	7	34	5.5	9 deep 7	M5x0.8 1/8	-	11.5	10.5	49.5	18		
40	34.5	39.5	-	16	52	8	8	M8x1.25	13	69	5	14	7	40	5.5	9 deep 7	1/8	-	11	11	57	18		
50	-	40.5	50.5	20	64	10.5	10.5	M10x1.5	15	86	7	17	8	50	6.6	11 deep 8	-	1/4	10.5	10.5	71	22		

st=Stroke

Male Piston Rod Thread

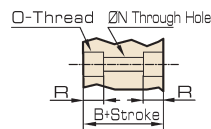
Overall Dimension



Male Piston Rod Thread

Bore(mm)	C	X	ΦD	H	L	K
12	9	10.5	6	M5x0.8	14	5
16	10	12	8	M6x1.0	15.5	6
20	12	14	10	M8x1.25	18.5	8
25	15	17.5	12	M10x1.25	22.5	10
32	20.5	23.5	16	M14x1.5	28.5	14
40	20.5	23.5	16	M14x1.5	28.5	14
50	26	28.5	20	M18x1.5	33.5	17
63	26	28.5	20	M18x1.5	33.5	17
80	32.5	35.5	25	M22x1.5	43.5	22
100	32.5	35.5	30	M26x1.5	43.5	27

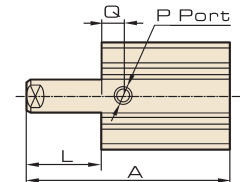
Both ends Inner thread /CQ2A



Remark3) Both ends Inner thread

Bore(mm)	O	R
12	M4x0.7	7
16	M4x0.7	7
20	M6x1.0	10
25	M6x1.0	10
32	M6x1.0	10
40	M6x1.0	10
50	M18x1.25	14
63	M10x1.5	18
80	M12x1.75	22
100	M12x1.75	22

Single Acting, Spring-out Φ12~Φ50



Single Acting, Spring-out

Bore(mm)	A			L		
	5st	10st	20st	5st	10st	20st
12	30.5	40.5	-	8.5	13.5	-
16	32	42	-	8.5	13.5	-
20	34	44	-	9.5	14.5	-
25	37.5	47.5	-	10	15	-
32	40	50	-	12	17	-
40	46.5	56.5	-	12	17	-
50	-	58.5	78.5	-	18	28

* Unless Specified, the dimension of the type stroke length cylinder end two side cover tall cylinder are the same.

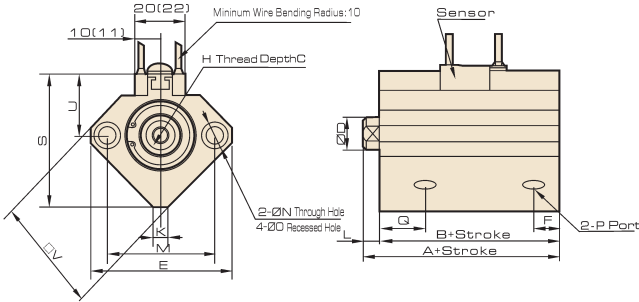
CQ2 Series Thin Type Cylinder



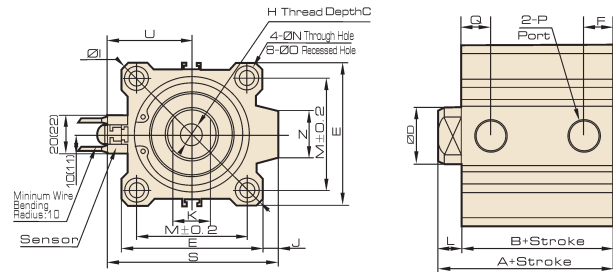
The way to automation

Dimension

CDQ2B Ø10~Ø25



CDQ2B Ø32~Ø100



※ Above is D-A7.D-8A sensor switch dimension
※ () : In the bracket is D-F79L, D-J79L dimension

Dimension

Bore/Symbol	Remark1) Stroke Range(mm)	A	B	ΦD	E	F	H	C	ΦI	J	K	L	M	ΦN	ΦO	P	Q	S	U	V	Z
12	5~30	31.5	28	6	32	6.5	M3x0.5	6	-	-	5	3.5	22	3.5	6.5 deep 3.5	M5X0.8	11	35.5	19.5	25	-
16	5~30	34	30.5	8	38	5.5	M4x0.7	8	-	-	6	3.5	28	3.5	6.5 deep 3.5	M5X0.8	10	41.5	22.5	29	-
20	5~50	36	31.5	10	46.8	5.5	M5x0.8	7	-	-	8	4.5	36	5.5	9 deep 7	M5X0.8	10.5	48	24.5	36	-
25	5~50	37.5	32.5	12	52	5.5	M6x1.0	12	-	-	10	5	40	5.5	9 deep 7	M5X0.8	11	53.5	27.5	40	-
32	5~50	40	33	16	45	7.5	M8x1.25	13	60	4.5	14	7	34	5.5	9 deep 7	1/8	10.5	58.5	31.5	-	18
40	5~50	46.5	39.5	16	52	8	M8x1.25	13	69	5	14	7	40	5.5	9 deep 7	1/8	11	66	35	-	18
50	10~50	48.5	40.5	20	64	10.5	M10x1.5	15	86	7	17	8	50	6.6	11 deep 8	1/4	10.5	80	41	-	22
63	10~50	54	46	20	77	10.5	M10x1.5	15	103	7	17	8	60	9	14 deep 10.5	1/4	15	93	47.5	-	22
80	10~50	63.5	53.5	25	98	12.5	M16x2.0	21	132	6	22	10	77	11	17.5 deep 13.5	3/8	16	112.5	57.5	-	26
100	10~50	75	63	30	117	13	M20x2.5	27	156	6.5	27	12	94	11	17.5 deep 13.5	3/8	23	132.5	67.5	-	26

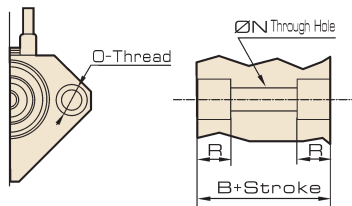
Remark2) Long Stroke

Model	Stroke(mm)	A	B	F	P	Q
32	75,100	40	33	7.5	1/8	10.5
40	75,100	46.5	39.5	8	1/8	11
50	75,100	48.5	40.5	10.5	1/4	10.5
63	75,100	54	46	10.5	1/4	15
80	75,100	63.5	53.5	12.5	3/8	16
100	75,100	75	63	13	3/8	23

- Standard stroke is classified every 5 mm.
- 5, 10, 15 or 20 mm thick gaskets are applied on stroke from 55mm to 100mm (55, 60, 65, 70, 80, 85, 90, 95).
- Unless specified, the dimension of 4 holes tapped with stroke length cylinder and two side cover tall cylinder are the same.
- Cylinder of 5mm stroke just can be applied one sensor switch.

Overall Dimension

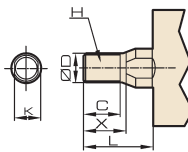
Both ends Inner thread : CDQ2A



Remark3) Both ends Inner thread

Bore(mm)	O	R
12	M4x0.7	7
16	M4x0.7	7
20	M6x1.0	10
25	M6x1.0	10
32	M6x1.0	10
40	M6x1.0	10
50	M18x1.25	14
63	M10x1.5	18
80	M12x1.75	22
100	M12x1.75	22

Male Piston Rod Thread



Male Piston Rod Thread

Bore(mm)	C	X	ΦD	H	L	K
12	9	10.5	6	M5x0.8	14	5
16	10	12	8	M6x1.0	15.5	6
20	12	14	10	M8x1.25	18.5	8
25	15	17.5	12	M10x1.25	22.5	10
32	20.5	23.5	16	M14x1.5	28.5	14
40	20.5	23.5	16	M14x1.5	28.5	14
50	26	28.5	20	M18x1.5	33.5	17
63	26	28.5	20	M18x1.5	33.5	17
80	32.5	35.5	25	M22x1.5	43.5	22
100	32.5	35.5	30	M22x1.5	43.5	27