C(D)Q2, Compact Cylinder, Double Acting Single Rod, Long Stroke w/Auto Switch Mounting Groove

CQ2A32TF-175DCMZ

Datasheet

General series information

- Compact Cylinder: Long Stroke Double Acting, Single Rod
- Bore sizes (mm): 32, 40, 50, 63, 80, 100
- Standard stroke range (mm): 125 to 300
- Port threads: Rc, NPT or G
- Can mount small auto switches on 4 surfaces.

Double-acting, single-rod cylinder

Standard specifications

Magnet	None
Mounting	A (Both Ends Tapped)
Type	Standard
Bore Size	Ø32 mm
Port Thread	TF [G]
Stroke	175
Cushion	C (Rubber Bumper)
Body Option	M (Rod End Male Thread)
Auto Switch	No Switch
Lead Wire or Pre-wired Connector	0.5 m (Or None in the Case of No Switch)
Number	2 pcs.
Rod End Options	None
Made of Stainless Steel	None
Fluororubber Seal	None
Pressure medium	Compressed air
Maximum temperature of pressure medium	70 ºC
Minimum temperature of pressure medium	-10 °C
Maximum operating pressure	1.0 MPa

Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

SMC CORPORATION Zuazobidea 14, 01012, Vitoria-Gasteiz, Álava +34 945184100 +34 945184126 www.smc.eu support.marketingeurope@smc.com

Minimum operating pressure	0.05 MPa
Proof pressure	1.5 MPa
Maximum ambient temperature	70 ºC
Minimum ambient temperature	-10 °C
Number of pneumatic connections	2 pcs.
Pneumatic input connection	G 1/8
Mode of operation of drive	Double acting
Maximum piston speed	500 mm/s
Type of cushioning	Elastically
Piston rod end	Male-Thread
Geometric form of the piston rod	Single rod
Male thread of rod end	M14 x 1.5
Female thread of rod end	M8 x 1.25
Minimum piston speed	50 mm/s
Weight	1.400 Kg

Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

SMC CORPORATION Zuazobidea 14, 01012, Vitoria-Gasteiz, Álava +34 945184100 +34 945184126 www.smc.eu support.marketingeurope@smc.com

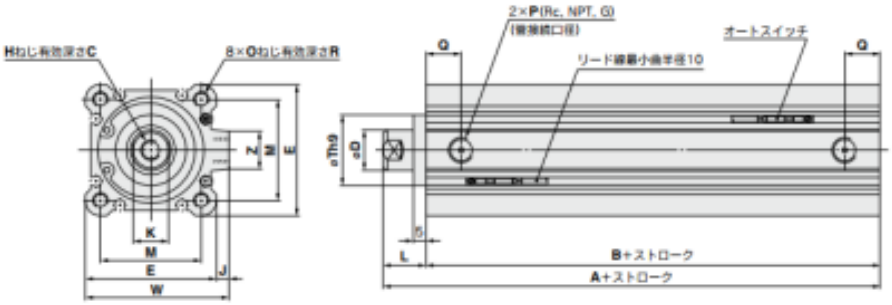
Dimensions

チューブ内径

ø32～ø100 オートスイッチ用磁石なし、磁石付

オートスイッチ用磁石なし、付とも外形寸法は同じです。

両端タップタイプ／C回Q2A

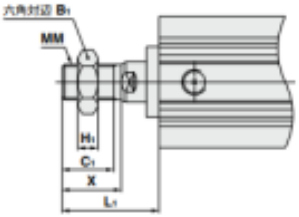


(mm)

チューブ内径(mm)	ストローク範囲(mm)	A	B	C	D	E	H	J	K	L	M	O	P	Q	R	Th9	W	Z
32	125, 150, 175, 200, 250, 300	62.5	45.5	13	16	45	M8×1.25	4.5	14	17	34	M6×1.0	1/8	10	10	22 $^{0}_{-0.052}$	49.5	14
40		72	55	13	16	52	M8×1.25	5	14	17	40	M6×1.0	1/8	12.5	10	28 $^{0}_{-0.052}$	57	15
50		73.5	55.5	15	20	64	M10×1.5	7	17	18	50	M8×1.25	1/4	14	14	35 $^{0}_{-0.062}$	71	19
63		75	57	15	20	77	M10×1.5	7	17	18	60	M10×1.5	1/4	16.5	18	35 $^{0}_{-0.062}$	84	19
80		86	66	21	25	98	M16×2.0	6	22	20	77	M12×1.75	3/8	19	22	43 $^{0}_{-0.062}$	104	25
100		97.5	75.5	27	30	117	M20×2.5	6.5	27	22	94	M12×1.75	3/8	23	22	59 $^{0}_{-0.074}$	123.5	25

※ロッド先端ナットおよび付属金具の詳細につきましてはP.26、27
注1) 中間ストロークの長手寸法の算出方法につきましてはP.73
注2) オートスイッチの適正取付位置・取付高さ寸法につきましてはP.139～145

ロッド先端おねじ



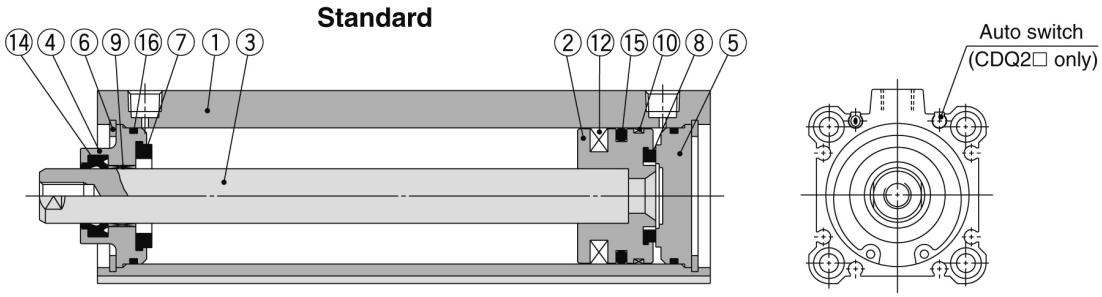
(mm)

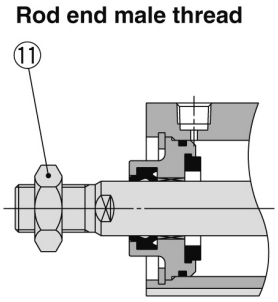
チューブ内径 (mm)	B1	C1	H1	L1	MM	X
32	22	20.5	8	38.5	M14×1.5	23.5
40	22	20.5	8	38.5	M14×1.5	23.5
50	27	26	11	43.5	M18×1.5	28.5
63	27	26	11	43.5	M18×1.5	28.5
80	32	32.5	13	53.5	M22×1.5	35.5
100	41	32.5	16	53.5	M26×1.5	35.5

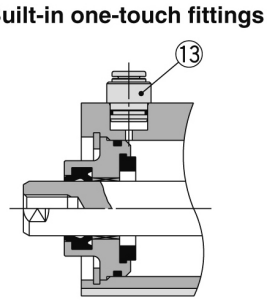
Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

SMC CORPORATION Zuazobidea 14, 01012, Vitoria-Gasteiz, Álava +34 945184100 +34 945184126 www.smc.eu support.marketingeurope@smc.com

Constructions







Component Parts

No.	Description	Material	Note
1	**Cylinder tube**	Aluminum alloy	Hard anodised
2	**Piston**	Aluminum alloy	Chromated
3	**Piston rod**	Carbon steel	Hard chrome plated
4	**Collar**	Aluminum alloy	Anodised
5	**Bottom plate**	Aluminum alloy	Anodised
6	**Retaining ring**	Carbon tool steel	Phosphate coated
7	**Bumper A**	Urethane	
8	**Bumper B**	Urethane	
9	**Bushing**	Bearing alloy	
10	**Wear ring**	Resin	
11	**Rod end nut**	Carbon steel	Nickel plated
12	**Magnet**	—	For CDQ2A□ only
13	**One-touch fitting**	—	ø32 to ø63
14 *	**Rod seal**	NBR	
15 *	**Piston seal**	NBR	
16 *	**Tube gasket**	NBR	

Replacement Parts/Seal Kit

Bore size (mm)	Kit no.	Contents
32	CQ2A32-L-PS	Kits include items ⑭, ⑮, ⑯ from the table.
40	CQ2A40-L-PS	
50	CQ2A50-L-PS	
63	CQ2A63-L-PS	
80	CQ2A80-L-PS	
100	CQ2A100-L-PS	

* Seal kit includes ⑭, ⑮, ⑯. Order the seal kit, based on each bore size.
* Since the seal kit does not include a grease pack, order it separately.
Grease pack part no.: GR-S-010 (10 g)

Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

SMC CORPORATION Zuazobidea 14, 01012, Vitoria-Gasteiz, Álava +34 945184100 +34 945184126 www.smc.eu support.marketingeurope@smc.com

Additional information

Catalogue	CQ2-Z-D_EU.pdf
Operation manuals	OM_CQ2x_OM0002MEN.pdf

Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

SMC CORPORATION Zuazobidea 14, 01012, Vitoria-Gasteiz, Álava +34 945184100 +34 945184126 www.smc.eu support.marketingeurope@smc.com