

MCKQI3 series

ISO 15552 STANDARD PROFILE CYLINDER WITH NON-ROTATING ROD



Table for standard stroke

Tube I.D.	Stroke (mm)	Max. stroke (mm)
ø32,40	50,75,100,125,150,175,200,300,400,500	700

* Intermediate stroke are available, please contact us.

Tightening torque

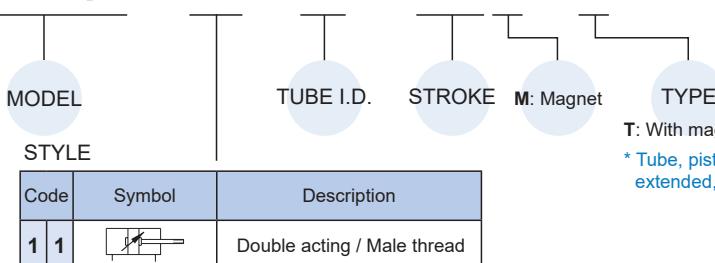
Tube I.D.	Rod thread	Tightening torque (kgf-cm)
ø32	M10×1.25	190
ø40	M12×1.25	330

* Make sure the tightening torque of rod thread does not exceed the value above.

* The tolerance of tightening torque is $\pm 5\%$.

Order example

MCKQI3 – 11 – 32 – 100M – T

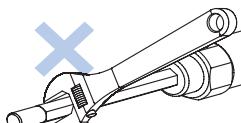


* Order example for special specification, refer to page 0-7.

* Rc or NPT thread are also available, please contact us.

Caution

Please don't attempt to rotate the piston rod.



Features

■ Hexagonal rod design & Non lubrication

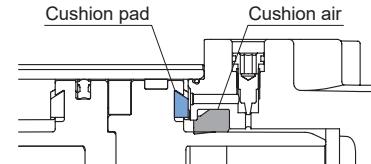
Cylinder with hexagonal rod design for non-rotating feature. Special housing and bushing enables self lubrication of piston rod.

■ High quality long service life

Hard anodised aluminium cylinder tubes offer high corrosion resistance and low internal friction.

■ Low noise level

Add cushion pad to reduce impact sound and vibration.



■ ISO 15552 standard specification

Conforms to ISO 15552 specification, make worldwide interchangeability.

■ Easy to insert reed switch

With four grooves on the tube, proximity and reed sensors can be easily inserted into any position.

Specification

Model		MCKQI3	
Tube I.D. (mm)	32	40	
Medium	Air		
Operating pressure range	0.05~1 MPa		
Proof pressure	1.5 MPa		
Ambient temperature	-5~+60°C (No freezing)		
Available speed range	50~500 mm/sec		
Rod non-rotating accuracy	$\pm 0.5^\circ$		
Allowable rotational torque	2.5 kgf-cm	4.5 kgf-cm	
Sensor switch	RCI (Please refer to page 8-14)		

T: With magnet, TA/TB is assembled

* Tube, piston rod and tie rod are extended, and an extra piston is added.

MCKQI3 Order example of accessories

ISO 15552 STANDARD PROFILE CYLINDER WITH NON-ROTATING ROD



■ Accessories & Connector

Accessories							Rod nut
Code	LB (Purchase 2 pcs)	CA	CB	CDB (Purchase CB+PIN)	FAC	FBC	NUT
Mounting Tube I.D.							
ø32	LB-Q2-32	CA-Q2-32	CB-Q2-32	CDB-Q2-32	FAC-Q2-32	FBC-Q2-32	NUT-M10x1.25x5Hx17B
ø40	LB-Q2-40	CA-Q2-40	CB-Q2-40	CDB-Q2-40	FAC-Q2-40	FBC-Q2-40	NUT-M12x1.25x6Hx19B

Accessories ⚠ Factory assembled and shipped (self-assembled is not recommended)			Connector		
Code	TA	TB	TC	Y	I
Mounting Tube I.D.					
ø32	TC-Q3-32		Y-Q2-32		I-Q2-32
ø40	TC-Q3-40		Y-Q2-40		I-Q2-40
			YS-Q2-32		YS-Q2-40

Pin

Applicable	YS connector	Y&l connector	CA&CB accessories
Code	PIN-S	PIN-Y-P (with split pin)	PIN-CB-P (with split pin)
Fig Tube I.D.			
ø32	PIN-Q2-32-S	PIN-Q2-32-2-P	PIN-Q2-32-1-P
ø40	PIN-Q2-40-S	PIN-Q2-40-2-P	PIN-Q2-40-1-P

■ Order example of self-assembled

The tube I.D. ø40 of LB accessories, Y connector and pin.

No.	Order number	Qty
1	LB-Q2-40	2
2	Y-Q2-40	1
3	PIN-Q2-40-2-P	1

* To order accessories/ connectors/ pin separately, please place orders separately according to the order codes in the above table.

■ Order example of factory assembled

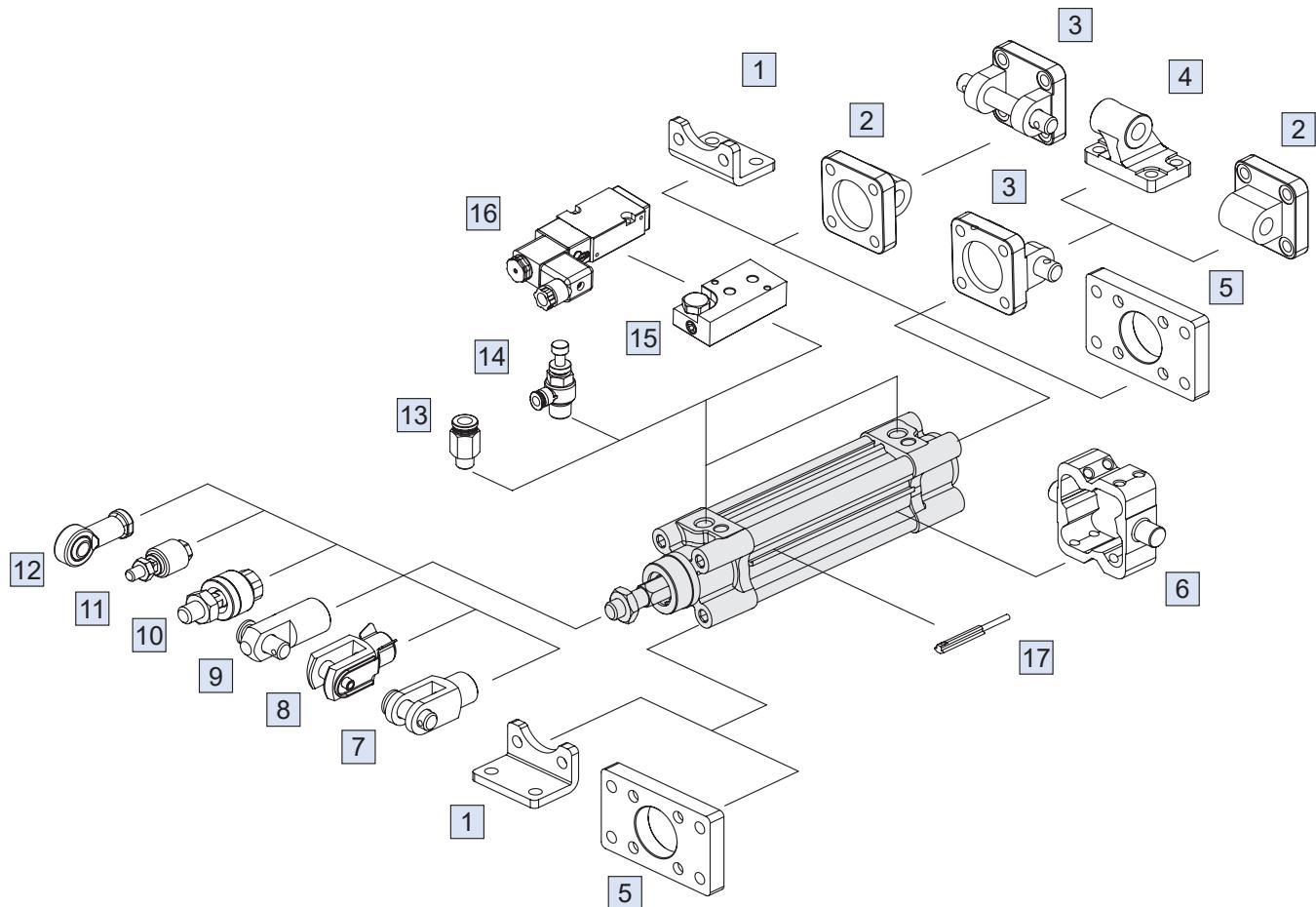
⚠ Cylinders and accessories are distinguished by the symbol " + ".

MCKQI3 – Standard model no. + TA

■ Cylinder weight

Init. k_0

Model	Basic weight	Basic weight (magnet)	Stroke 25 mm
Tube I.D.			
ø32	0.507	0.513	0.065
ø40	0.758	0.770	0.088



No.	Accessories	Material	Page
1	Mounting accessories LB	Carbon steel	1-83
2	Mounting accessories CA	Cast iron	1-86
	Mounting accessories CA2	Aluminum alloy	1-87
3	Mounting accessories CB+PIN	Cast iron / *1	1-86, 57
	Mounting accessories CB2+PIN	Aluminum alloy	1-87, 57
4	Mounting accessories CDB	Cast iron	1-86
	Mounting accessories CDB2	Aluminum alloy	1-87
5	Mounting accessories FAC/FBC	Carbon steel	1-84
	Mounting accessories FAC2/FBC2	Aluminum alloy	1-85
6	Mounting accessories TA/TB/TC	Cast iron	1-88
7	Accessories Y+PIN	Cast iron / *1	1-57
8	Accessories YS (Y+Floating pin)	Carbon steel	1-57

No.	Accessories	Material	Page
9	Accessories I+PIN	Carbon steel	1-57
10	Floating joint MFC	Carbon steel	8-2
11	Floating joint MFCS	Carbon steel	8-5
12	Female rod ends PHS	Carbon steel	8-7
13	Fitting PC (PISCO)	—	8-3 (Vol.1)
14	Speed controller JSC (PISCO)	—	8-15 (Vol.1)
15	Cylinder link seats MVSN-300-C *3	Aluminum alloy	1-69 (Vol.1)
16	Solenoid valve MVSN-220 / 300 *3	—	1-65, 67 (Vol.1)
17	Sensor switch RCI	—	8-14

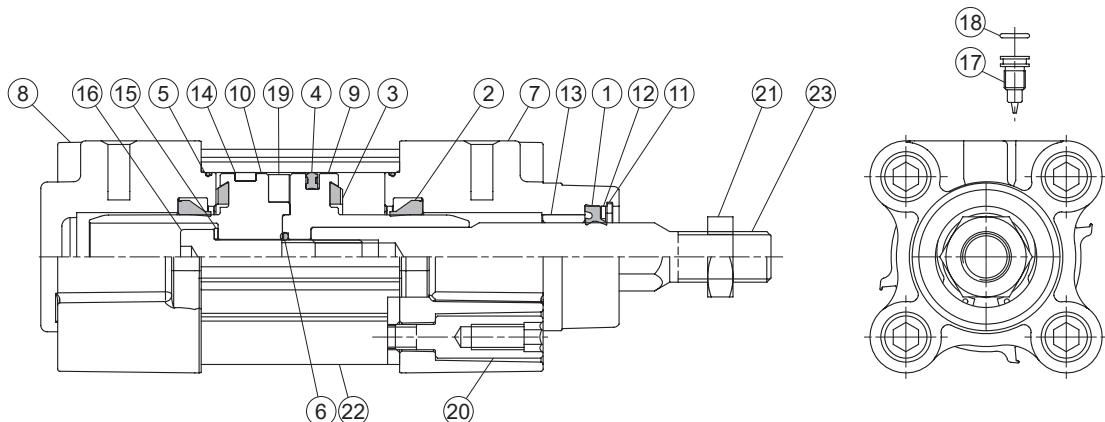
*1. PIN material is carbon steel. *2. Bronze alloy.

*3. Only for tube I.D. ø40.

MCKQI3 Inside structure & Parts list / Dimensions



ISO 15552 STANDARD PROFILE CYLINDER WITH NON-ROTATING ROD

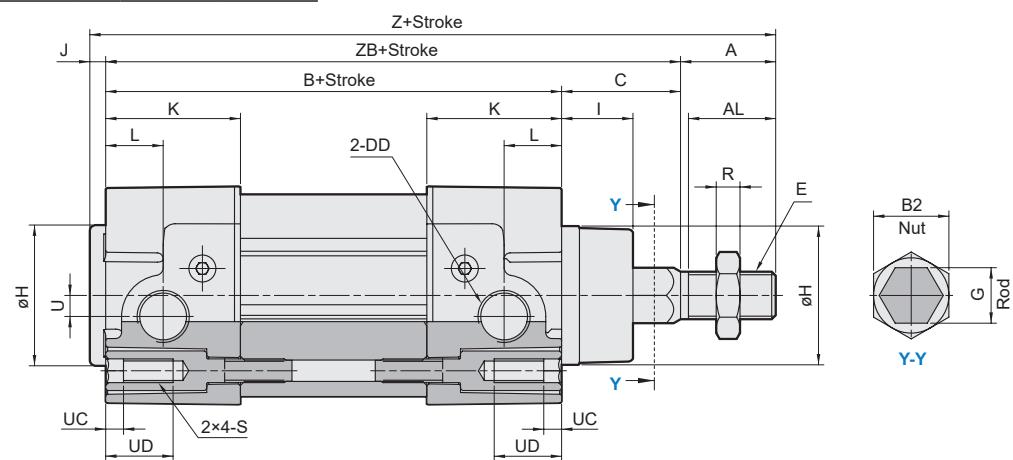
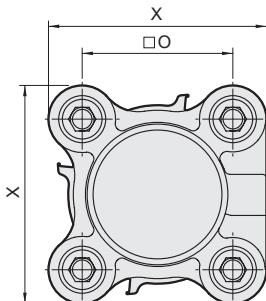


Material

No.	Part name	Material	Q'y	Component parts (inclusion)	Repair kits (inclusion)
1	Rod packing	NBR	1	●	●
2	Cushion packing	NBR	2	●	●
3	Cushion pad	NBR	2	●	●
4	Piston packing	NBR	1	●	●
5	O-ring	NBR	2	●	●
6	O-ring	NBR	1	●	●
7	Rod cover	Aluminum alloy	1	●	
8	Head cover	Aluminum alloy	1	●	
9	Piston-R	Aluminum alloy	1	●	
10	Piston-H	Aluminum alloy	1	●	
11	Snap ring	Spring steel	1	●	
12	Washer	Carbon steel	1	●	
13	Bush	Bearing alloy	1	●	
14	Wear ring	Resin	1	●	
15	Washer	Carbon steel	1	●*	
16	Bolt	Carbon steel	1	●	
17	Needle valve	Copper alloy	2	●	
18	O-ring	NBR	2	●	
19	Magnet ring	Magnet material	1	●	
20	Screw	Carbon steel	8	●	
21	Rod nut	Carbon steel	1	●	
22	Cylinder tube	Aluminum alloy	1		
23	Piston rod	Stainless steel	1		

* Only for ø40.

Dimensions



Code Tube I.D.	A	AL	B	B2	C	DD	E	G	H	I	J	K	L	O	R	S	U	UC	UD	X	Z	ZB
32	22	19.5	94	17	26	G1/8	M10×1.25	12	30	15	4	30.5	20	32.5	5	M6×1.0	4.5	4.5	16	47	146	120
40	24	22	105	19	30	G1/4	M12×1.25	14	35	18	4	34	14.5	38	6	M6×1.0	5.3	4.5	16	55	163	135