

MCQN series

STANDARD CYLINDERS



Features:

■ Non lubrication:

Special housing and bushing enables self lubrication of piston rod.

■ High quality long service life:

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

■ Full range of NFPA interchangeable mounting configurations

Mounting dimensions are in accordance with ANSI (NFPA) T3.6.7 R2-1996, fluid power systems and products-square head industrial cylinders-mounting dimensions.

Specification:

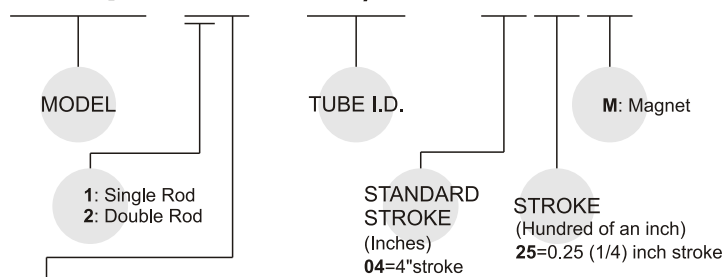
Model	MCQN				
Tube I.D. (inch)	1 1/2"	2"	2 1/2"	3 1/4"	4"
Tube I.D. (mm)	40	50	63	80	100
Port size	NPTF 3/8			NPTF 1/2	
Medium	Air				
Max. operating pressure	9.9 kgf/cm ²				
Min. operating pressure	0.5 kgf/cm ²				
Proof pressure	15 kgf/cm ²				
Ambient temperature	− 5~ + 60℃ (No freezing)				
Sensor switch	RCA				
Sensor switch holder	HV1	HV2		HV3	

Table for standard stroke

Tube I.D.(inch)	Stroke (inch)
φ 1 1/2"	1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20
φ 2", 2 1/2"	1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 24
φ 3 1/4", 4"	1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 24

Order example:

MCQN – 11 – 1 1/2 – 0425 M

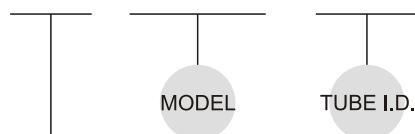


STYLE:

Code	Symbol	Description
1 1		Double acting / Male thread
2 1		Double rod / Male thread
2 7		Double rod / Adjustable male thread (Please mark "adjustable distance(in)" at order list)

Mounting accessories:

FAC – MCQN – 1 1/2



MOUNTING TYPE:

	LB
	FAC
	FBC
	I

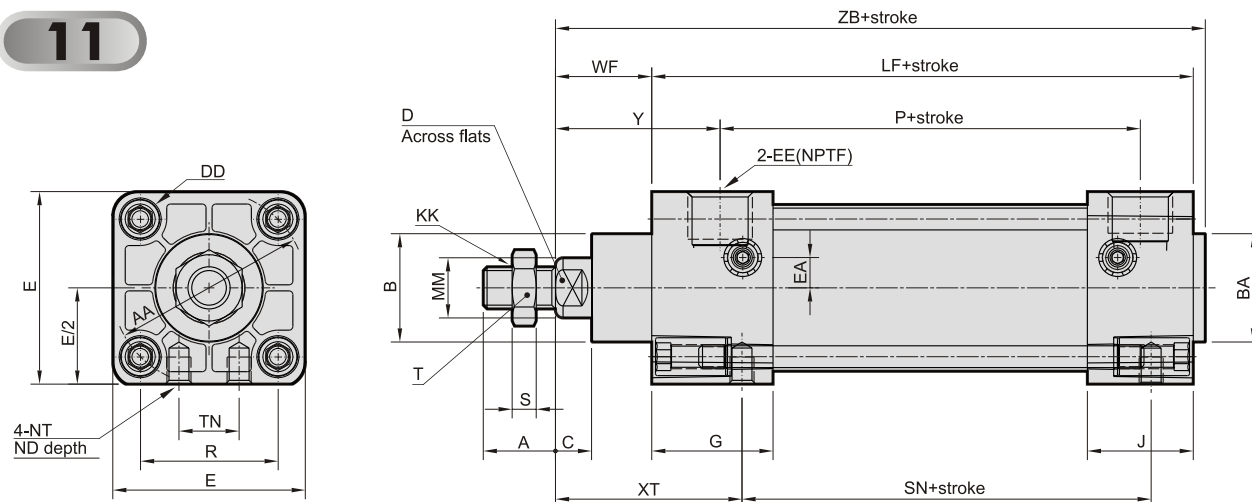
※ Order example for special specification, refer to page H-03.

MCQN Dimensions $\phi 1\frac{1}{2}" \sim \phi 4"$

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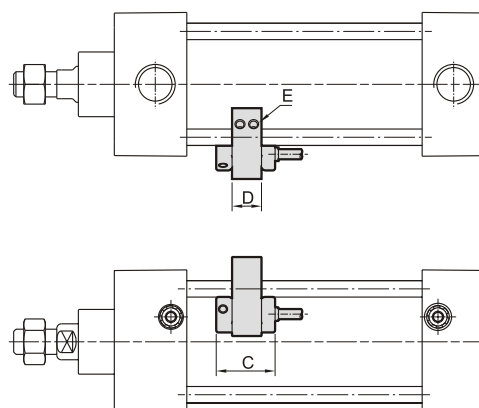
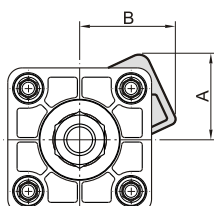
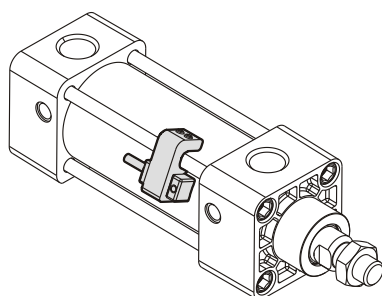
11



Code Tube I.D.	A	AA	B	BA	C	D	DD	E	EA	EE	G	J	KK	LF	MM	ND	NT	P	R	S	SN
1 1/2"	3/4	2.02	1 1/8	1 1/8	3/8	9/16	1/4-28	2	0.32	3/8	1.26	1.01	7/16-20	3 5/8	5/8	9/32	1/4-20	2.36	1.43	0.26	2 1/4
2"	3/4	2.6	1 1/8	1 1/8	3/8	9/16	5/16-24	2 1/2	0.43	3/8	1.26	1.06	7/16-20	3 5/8	5/8	7/16	5/16-18	2.4	1.84	0.26	2 1/4
2 1/2"	3/4	3.1	1 1/8	1 1/8	3/8	9/16	5/16-24	3	0.47	3/8	1.3	1.06	7/16-20	3 3/4	5/8	19/32	3/8-16	2.48	2.19	0.26	2 3/8
3 1/4"	1 1/8	3.9	1 1/2	1 1/2	1/2	7/8	3/8-24	3 3/4	0	1/2	1.57	1.18	3/4-16	4 1/4	1	5/8	1/2-13	2.72	2.76	0.42	2 5/8
4"	1 1/8	4.7	1 1/2	1 1/2	1/2	7/8	3/8-24	4 1/2	0	1/2	1.57	1.18	3/4-16	4 1/4	1	5/8	1/2-13	2.72	3.32	0.42	2 5/8

Code Tube I.D.	T	TN	WF	XT	Y	ZB
1 1/2"	0.69	0.625	1	1 15/16	1.71	4 3/4
2"	0.69	0.875	1	1 15/16	1.71	4 3/4
2 1/2"	0.69	1.25	1	1 15/16	1.75	4 7/8
3 1/4"	1.12	1.5	1 3/8	2 7/16	2.34	5 53/64
4"	1.12	2.0625	1 3/8	2 7/16	2.34	5 53/64

Installation of sensor switch



Code Tube I.D.	Sensor switch	Hold	A	B	C	D	E
1 1/2"	RCA	HV1	1.10	1.47	1.02	0.51	M4 × 10L
2"	RCA	HV2	1.49	1.68	1.02	0.51	M4 × 10L
2 1/2"	RCA	HV2	1.66	1.86	1.02	0.51	M4 × 10L
3 1/4"	RCA	HV3	1.87	2.13	1.02	0.51	M4 × 10L
4"	RCA	HV3	2.15	2.42	1.02	0.51	M4 × 10L

MCQN Mounting accessories $\phi 1\frac{1}{2}" \sim \phi 4"$

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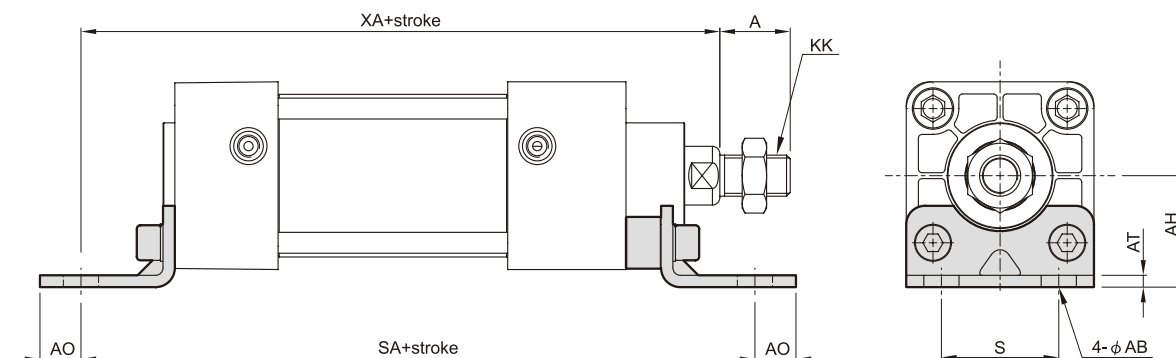
Cylinder weight

unit: kg

Model	Basic weight MCQN-11	Basic weight (magnet) MCQN-11	Stroke 1 inch MCQN-11
Tube I.D.			
$\phi 1\frac{1}{2}"$	0.664	0.676	0.078
$\phi 2"$	0.965	0.981	0.096
$\phi 2\frac{1}{2}"$	1.314	1.334	0.108
$\phi 3\frac{1}{4}"$	2.482	2.510	0.200
$\phi 4"$	3.266	3.300	0.220

Model	LB	FAC/FBC	I	PIN
Tube I.D.				
$\phi 1\frac{1}{2}"$	0.160	0.246	0.150	0.065
$\phi 2"$	0.240	0.403	0.150	0.065
$\phi 2\frac{1}{2}"$	0.300	0.576	0.150	0.065
$\phi 3\frac{1}{4}"$	0.633	1.408	0.522	0.175
$\phi 4"$	0.955	2.015	0.522	0.175

LB



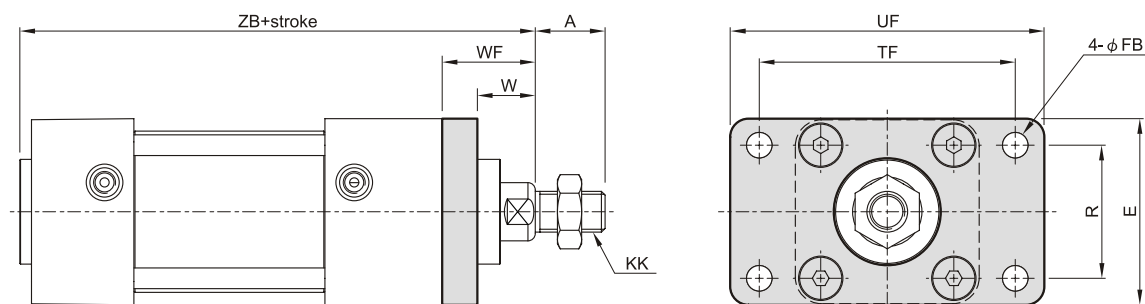
Code Tube I.D.	A	AB	AH	AT	AO	KK	S	SA	XA
1 1/2"	3/4	3/8	1 3/16	1/8	7/16	7/16-20	1 1/4	6	5 5/8
2"	3/4	3/8	1 7/16	1/8	9/16	7/16-20	1 3/4	6	5 5/8
2 1/2"	3/4	3/8	1 5/8	1/8	9/16	7/16-20	2 1/4	6 1/8	5 3/4
3 1/4"	1 1/8	1/2	1 15/16	11/64	3/4	3/4-16	2 3/4	7 3/8	6 7/8
4"	1 1/8	1/2	2 1/4	15/64	3/4	3/4-16	3 1/2	7 3/8	6 7/8

MCQN Mounting accessories $\phi 1\frac{1}{2}" \sim \phi 4"$

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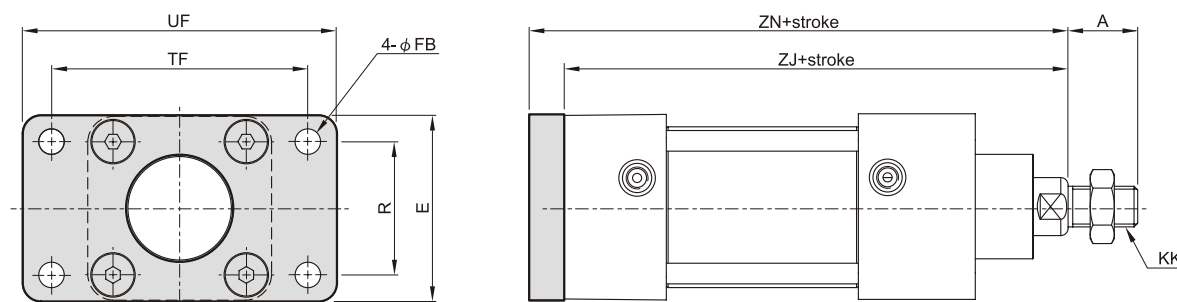


FAC



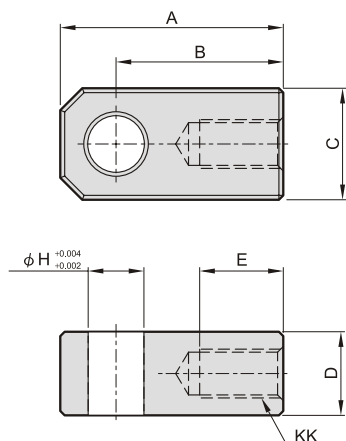
Code Tube I.D.	A	E	FB	KK	R	TF	UF	W	WF	ZB
1 1/2"	3/4	2	0.25	7/16-20	1.43	2.75	3.375	0.63	1	4 3/4
2"	3/4	2 1/2	0.31	7/16-20	1.84	3.375	4.13	0.63	1	4 3/4
2 1/2"	3/4	3	0.31	7/16-20	2.19	3.88	4.63	0.63	1	4 7/8
3 1/4"	1 1/8	3 3/4	0.38	3/4-16	2.76	4.68	5.5	0.75	1 3/8	5 53/64
4"	1 1/8	4 1/2	0.38	3/4-16	3.32	5.44	6.25	0.75	1 3/8	5 53/64

FBC



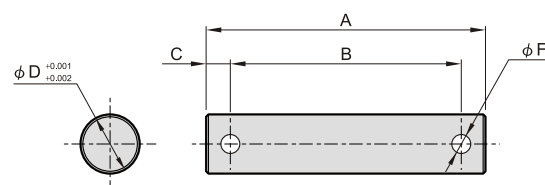
Code Tube I.D.	A	E	FB	KK	R	TF	UF	ZJ	ZN
1 1/2"	3/4	2	0.25	7/16-20	1.43	2.75	3.375	4.63	5
2"	3/4	2 1/2	0.31	7/16-20	1.84	3.375	4.13	4.63	5
2 1/2"	3/4	3	0.31	7/16-20	2.19	3.88	4.63	4.75	5.13
3 1/4"	1 1/8	3 3/4	0.38	3/4-16	2.76	4.68	5.5	5.63	6.25
4"	1 1/8	4 1/2	0.38	3/4-16	3.32	5.44	6.25	5.63	6.25

I connector



Code Tube I.D.	A	B	C	D	E	H	KK
1 1/2" ~ 2 1/2"	2	1.5	1	0.75	0.75	0.5	7/16-20
3 1/4" ~ 4"	2.81	2.06	1.5	1.25	1.13	0.75	3/4-16

Pin



Code Tube I.D.	A	B	C	D	F
1 1/2" ~ 2 1/2"	2.36	1.95	0.2	0.5	0.16
3 1/4" ~ 4"	3.13	2.74	0.19	0.75	0.2

PIN-MCQN-1 1/2-I-P

