



Table for standard stroke

Tube I.D	Stroke (inch)
ø1 1/2"	1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20
ø2", 2 1/2"	1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 24
ø3 1/4", 4"	1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 24

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.

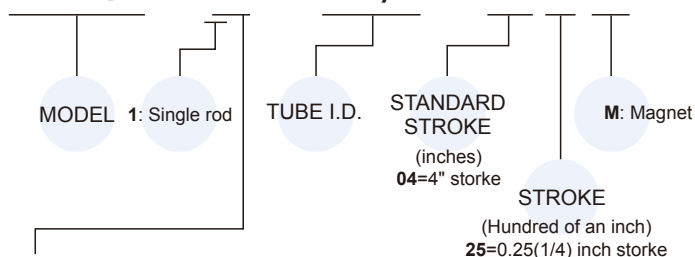
Specification

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	NPT3/8			NPT1/2	
Medium	Air				
Operating perssure range	0.05~1 MPa				
Proof pressure	1.5 MPa				
Ambient temperature	-5~+60°C (No freezing)				
Available speed range	50~500 mm/sec				
Sensor switch (*)	RCA				
Sensor switch holder	HV1	HV2	HV2	HV3	HV3

* RCA specification, please refer to page 8-6.

Order example

MCQN — 11 — 1 1/2 — 0425M



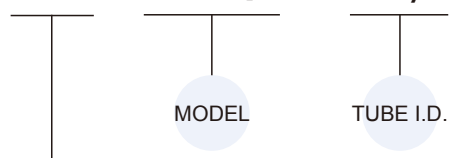
STYLE

Code	Symbol	Description
1 1		Double acting / Male thread

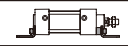
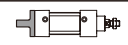
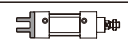
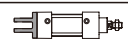
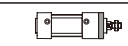
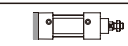
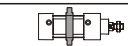
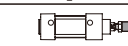
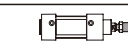
* Order example for special specification, refer to page 0-7.

Mounting accessories

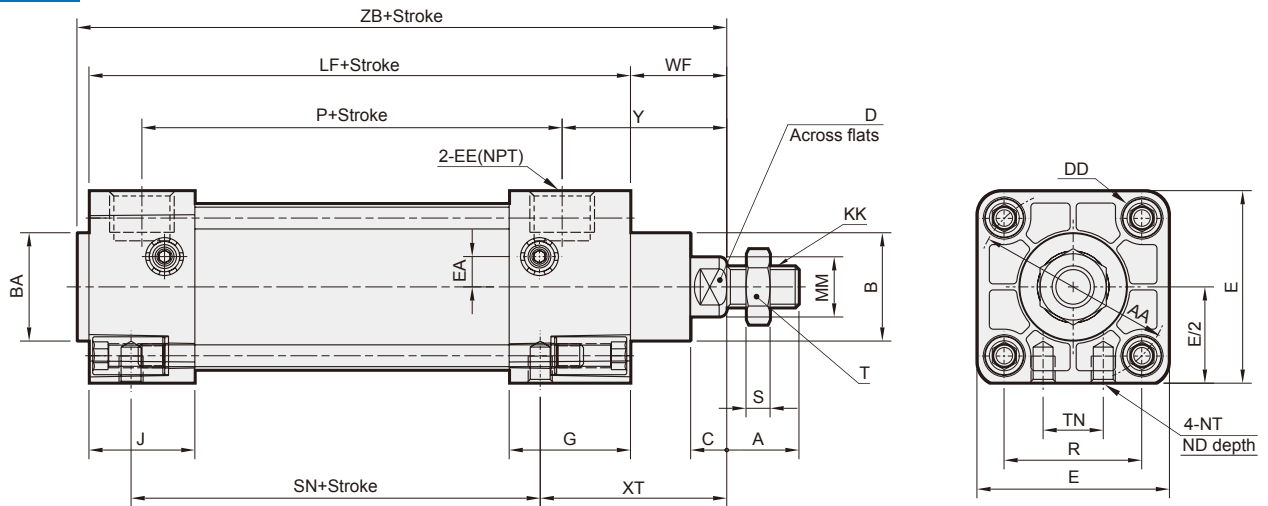
FAC — MCQN — 1 1/2



MOUNTING TYPE

	LB
	CA
	CB
	CB2
	FAC
	FBC
	TC
	Y
	I

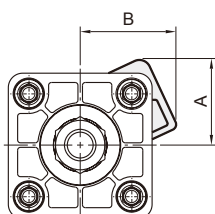
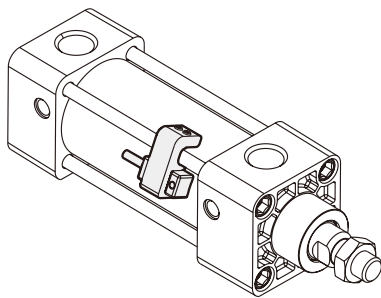
11



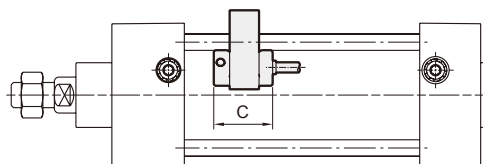
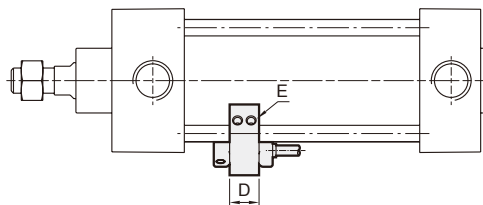
Code Tube I.D.	A	AA	B	BA	C	D	DD	E	EA	EE	G	J	KK	LF	MM	ND	NT	P	R	S	SN
1 1/2"	3/4	2.02	1 1/8	1 1/8	3/8	9/16	1/4-28	2	0.32	3/8	1.26	1.10	7/16-20	3 5/8	5/8	9/32	1/4-20	2.36	1.43	0.26	2 1/4
2"	3/4	2.60	1 1/8	1 1/8	3/8	9/16	5/16-24	2 1/2	0.43	3/8	1.26	1.06	7/16-20	3 5/8	5/8	7/16	5/16-18	2.40	1.84	0.26	2 1/4
2 1/2"	3/4	3.10	1 1/8	1 1/8	3/8	9/16	5/16-24	3	0.47	3/8	1.30	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	3.90	1 1/2	1 1/2	1/2	7/8	3/8-24	3 3/4	—	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	4.70	1 1/2	1 1/2	1/2	7/8	3/8-24	4 1/2	—	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	0.63	1	1 15/16	1.71	4 3/4
2"	0.69	0.88	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	1.50	1 3/8	2 7/16	2.34	5 53/64
4"	1.12	2.06	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 $\varnothing 1\frac{1}{2}" \sim \varnothing 4"$

STANDARD CYLINDER



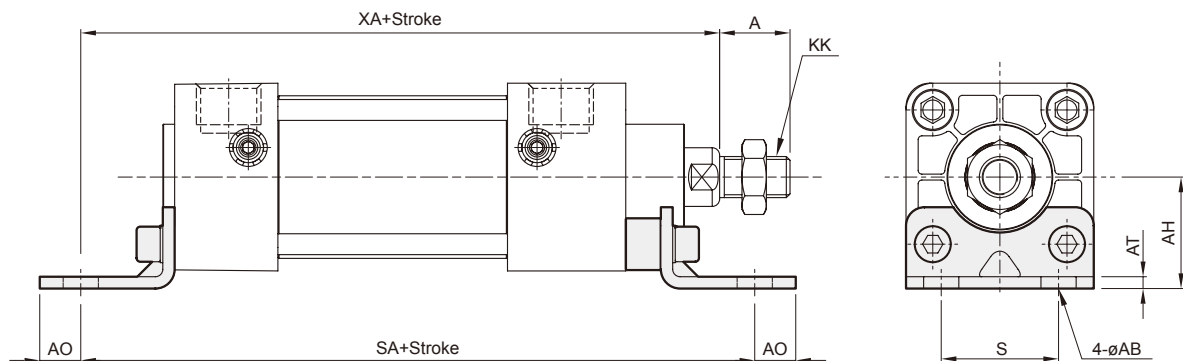
Cylinder weight

Unit: kg

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

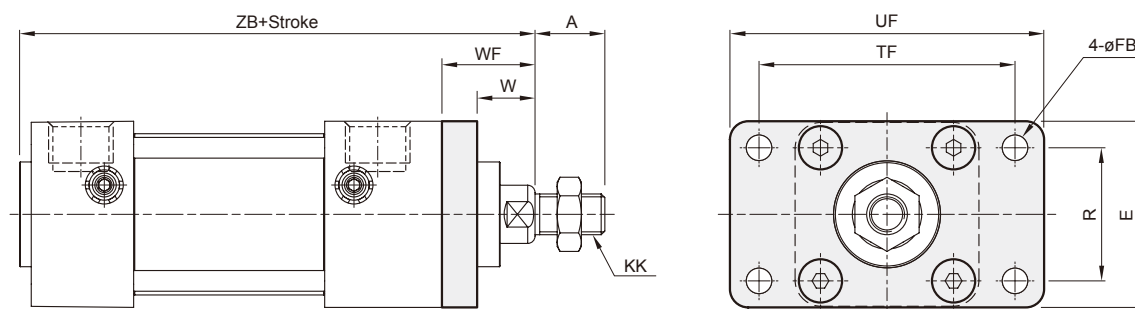
Model	LB	FAC/FBC	I	PIN	Y	TC	CB	CB2
Tube I.D.								
$\varnothing 1\frac{1}{2}"$	0.160	0.246	0.150	0.065	0.205	0.554	0.229	0.287
$\varnothing 2"$	0.240	0.403	0.150	0.065	0.205	0.644	0.377	0.424
$\varnothing 2\frac{1}{2}"$	0.300	0.576	0.150	0.065	0.205	0.840	0.521	0.563
$\varnothing 3\frac{1}{4}"$	0.633	1.408	0.522	0.175	0.662	1.098	1.302	1.482
$\varnothing 4"$	0.955	2.015	0.522	0.175	0.662	1.450	1.821	2.033

LB



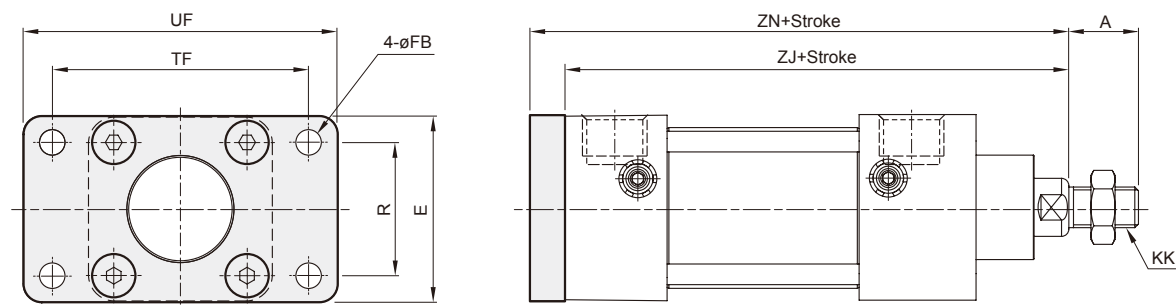
Code Tube I.D.	A	AB	AH	AT	AO	KK	S	SA	XA
1 1/2"	3/4	3/8	1 3/16	1/8	7/16	7/16-20	1 1/4	6	5 5/8
2"	3/4	3/8	1 7/16	1/8	9/16	7/16-20	1 3/4	6	5 5/8
2 1/2"	3/4	3/8	1 5/8	1/8	9/16	7/16-20	2 1/4	6 1/8	5 3/4
3 1/4"	1 1/8	1/2	1 15/16	11/64	3/4	3/4-16	2 3/4	7 3/8	6 7/8
4"	1 1/8	1/2	2 1/4	15/64	3/4	3/4-16	3 1/2	7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

FAC



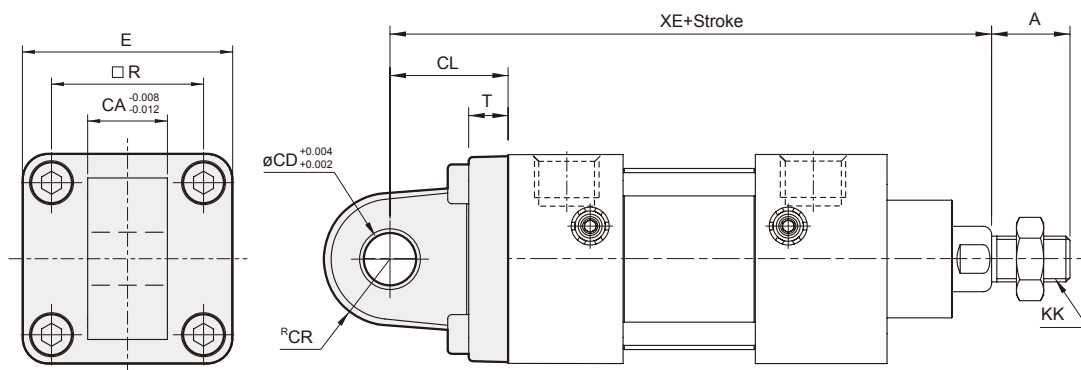
Code Tube I.D.	A	E	FB	KK	R	TF	UF	W	WF	ZB
1 1/2"	3/4	2	0.25	7/16-20	1.43	2.75	3.38	0.63	1	4 3/4
2"	3/4	2 1/2	0.31	7/16-20	1.84	3.38	4.13	0.63	1	4 3/4
2 1/2"	3/4	3	0.31	7/16-20	2.19	3.88	4.63	0.63	1	4 7/8
3 1/4"	1 1/8	3 3/4	0.38	3/4-16	2.76	4.68	5.50	0.75	1 3/8	5 53/64
4"	1 1/8	4 1/2	0.38	3/4-16	3.32	5.44	6.25	0.75	1 3/8	5 53/64

FBC



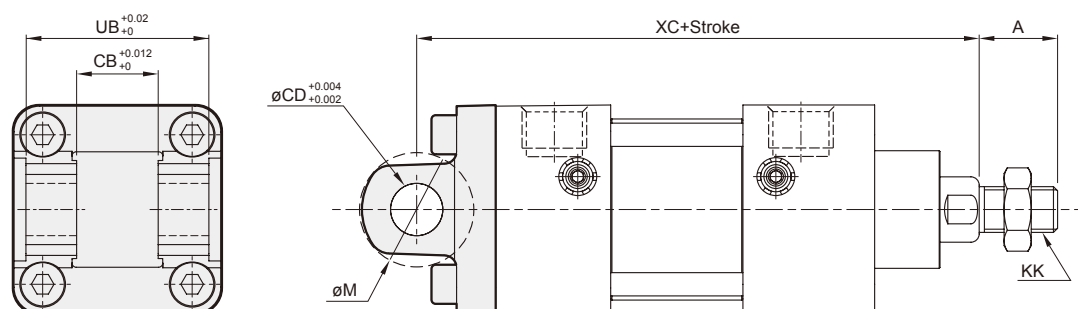
Code Tube I.D.	A	E	FB	KK	R	TF	UF	ZJ	ZN
1 1/2"	3/4	2	0.25	7/16-20	1.43	2.75	3.38	4.63	5.00
2"	3/4	2 1/2	0.31	7/16-20	1.84	3.38	4.13	4.63	5.00
2 1/2"	3/4	3	0.31	7/16-20	2.19	3.88	4.63	4.75	5.13
3 1/4"	1 1/8	3 3/4	0.38	3/4-16	2.76	4.68	5.50	5.63	6.25
4"	1 1/8	4 1/2	0.38	3/4-16	3.32	5.44	6.25	5.63	6.25

CA



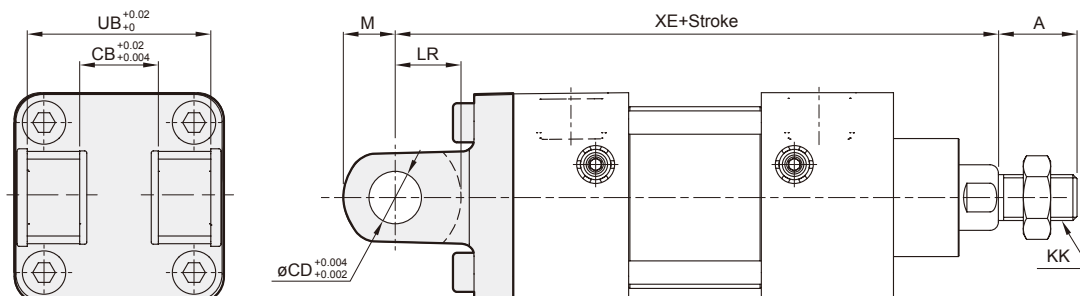
Code Tube I.D.	A	CA	CD	CL	CR	E	KK	R	T	XE
1 1/2"	3/4	0.75	0.50	1.125	0.63	2	7/16-20	1.43	0.375	5 3/4
2"	3/4	0.75	0.50	1.125	0.63	2 1/2	7/16-20	1.84	0.375	5 3/4
2 1/2"	3/4	0.75	0.50	1.125	0.63	3	7/16-20	2.19	0.375	5 7/8
3 1/4"	1 1/8	1.25	0.75	1.875	0.87	3 3/4	3/4-16	2.76	0.625	7 1/2
4"	1 1/8	1.25	0.75	1.875	0.87	4 1/2	3/4-16	3.32	0.625	7 1/2

CB



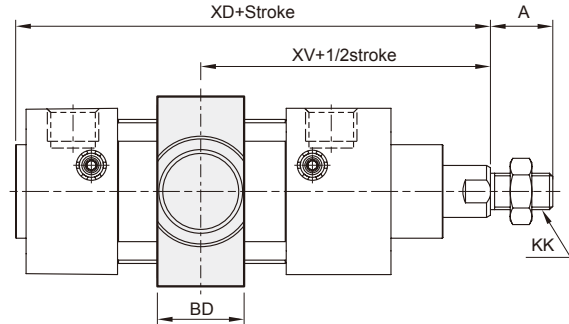
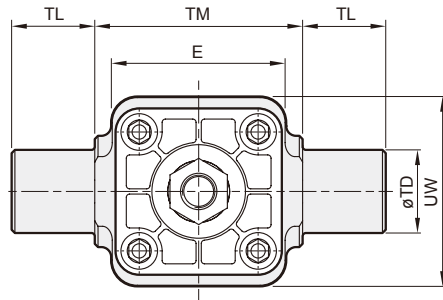
Code Tube I.D.	A	CB	CD	KK	M	UB	XC
1 1/2"	3/4	0.78	0.50	7/16-20	1.24	1.75	5.38
2"	3/4	0.78	0.50	7/16-20	1.24	1.75	5.38
2 1/2"	3/4	0.78	0.50	7/16-20	1.24	1.75	5.50
3 1/4"	1 1/8	1.28	0.75	3/4-16	1.88	2.50	6.88
4"	1 1/8	1.28	0.75	3/4-16	1.88	2.50	6.88

CB2



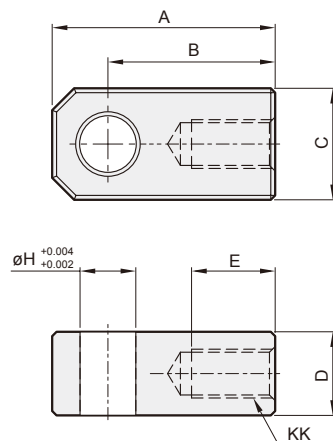
Code Tube I.D.	A	CB	CD	KK	LR	M	UB	XE
1 1/2"	3/4	0.75	0.50	7/16-20	5/8	0.5	1.75	5 3/4
2"	3/4	0.75	0.50	7/16-20	5/8	0.5	1.75	5 3/4
2 1/2"	3/4	0.75	0.50	7/16-20	5/8	0.5	1.75	5 7/8
3 1/4"	1 1/8	1.25	0.75	3/4-16	1	0.75	2.50	7 1/2
4"	1 1/8	1.25	0.75	3/4-16	1	0.75	2.50	7 1/2

TC



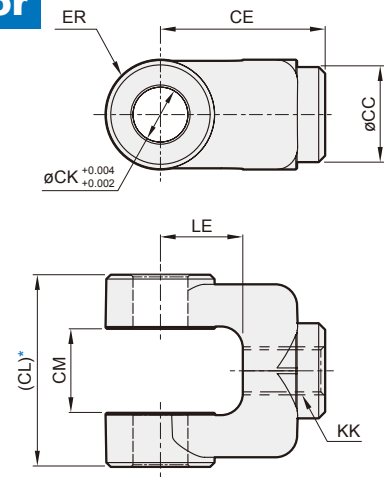
Code Tube I.D.	A	BD	E	KK	TD	TM	TL	UW	XD	XV
1 1/2"	3/4	1.04	2.11	7/16-20	1	2.50	1	2.28	4.94	3.20
2"	3/4	1.04	2.60	7/16-20	1	3.00	1	2.60	5.03	3.32
2 1/2"	3/4	1.10	3.09	7/16-20	1	3.50	1	3.23	5.07	3.33
3 1/4"	1 1/8	1.18	3.70	3/4-16	1	4.50	1	4.17	6.16	4.19
4"	1 1/8	1.22	4.49	3/4-16	1	5.25	1	4.96	6.18	4.19

I connector



Code Tube I.D.	A	B	C	D	E	H	KK
1 1/2"~2 1/2"	2.00	1.50	1.0	0.75	0.75	0.50	7/16-20
3 1/4"~4"	2.81	2.06	1.5	1.25	1.13	0.75	3/4-16

Y connector



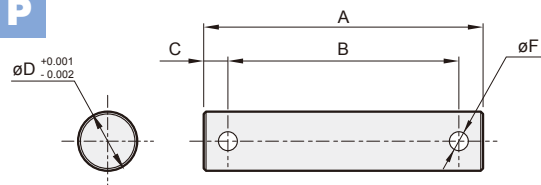
Code Tube I.D.	CC	CE	CL	CM	CK	ER	KK	LE
1 1/2"~2 1/2"	0.87	1.50	1.75	0.765	0.50	0.50	7/16-20	0.75
3 1/4"~4"	1.34	2.38	2.50	1.265	0.75	0.75	3/4-16	1.25

* Please do not take the sand casting plate as the mounting plate, because we do not machine it. If you have this special demand, please contact our sales representative.

PIN

for CB & CB2 accessory and Y & I connector.

P



Code Tube I.D.	A	B	C	D	F
1 1/2"~2 1/2"	2.36	1.95	0.20	0.50	0.16
3 1/4"~4"	3.13	2.74	0.19	0.75	0.20

Order example

PIN — MCQN — 1 1/2 — P

MODEL

TUBE I.D.

P: With split pin