

AIR CYLINDER

ISO-VDMA STANDARD CYLINDERS

MCQV SERIES

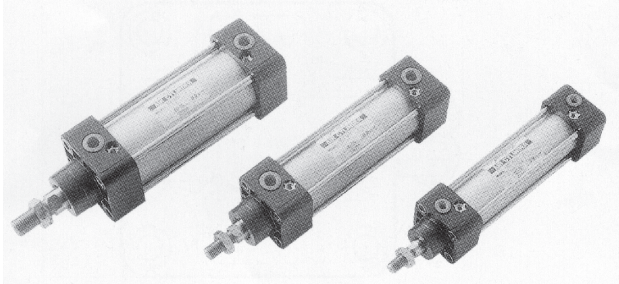


TABLE FOR STANDARD STROKE

tube I.D.	stroke (mm)
φ 32,40	50,75,100,125,150,175,200,250,300,350,400,450,500
φ 50,63	↑ 600
φ 80,100,160	↑ 600,700

- Stroke out of specification is also available.
- Please consult us if stroke out of specification.

FEATURES:

■ NON-LUBRICATION:

Designs of oil-filled alloy, special housing and bushing provide the needed self-lubrication of piston rod.

■ HIGH QUALITY-LONG SERVICE LIFE:

Hard anodized aluminum cylinder tubes resist corrosion and abrasion.

■ ISO-VDMA STANDARD SPECIFICATION:

Conformance to ISO-6431 & VDMA-24562 specification. Unified design, most parts of each type are interchangeable among each other.

■ CYLINDER MOUNTINGS:

Available with a comprehensive selection of mountings for fixed or flexible installation.

■ Port thread PT. NPT. are also available.

MODEL	MCQV
Tube I.D. (mm)	32,40,50,63,80,100,160
Media	Air
Operating pressure	0.5-9kgf/cm ²
Proof pressure	15kgf/cm ²
Ambient temperature	5~60°C

HOW TO ORDER

MCQV — 11 — 40 — 100(M) — FAC

MODEL

TUBE I.D.

M:MAGNET

MOUNTING TYPE

1:SINGLE ROD
2:DOUBLE ROD

STROKE

STYLE:

CODE	SYMBOL	DESCRIPTION
1 1		Double acting/Male thread
2 7		Dual rod/Adjustable/Male thread (Please mark "adjustable distance(mm)" at order list)
2 1		Dual rod/Male thread

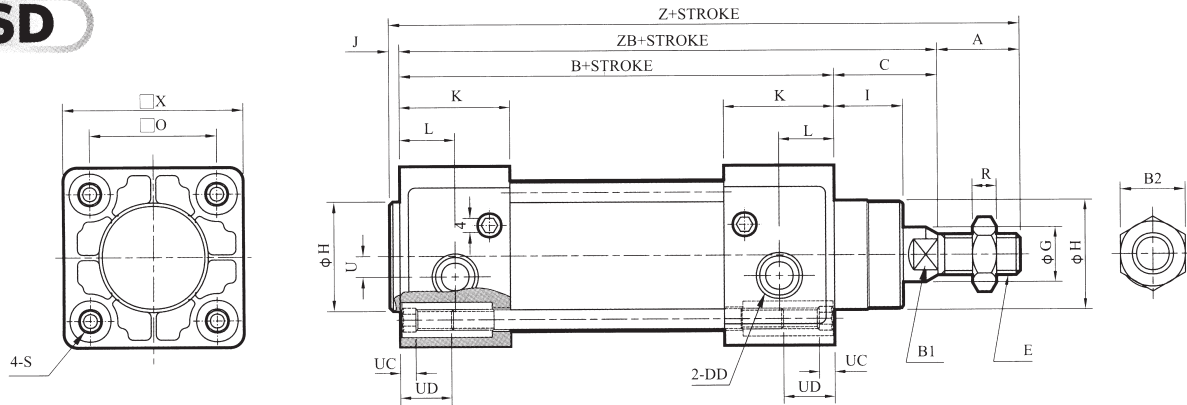
	LB
	FAC
	FBC
	CA
	CB
	CDB (+CB)
	TC
	TA
	TB

AIR CYLINDER

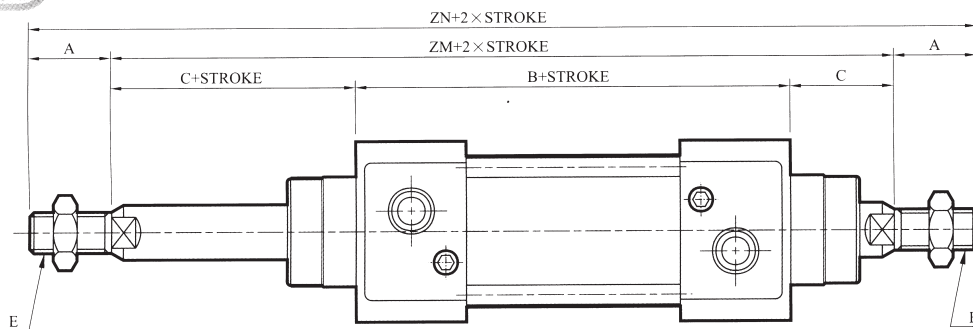
ISO-VDMA STANDARD CYLINDERS

MCQV SERIES

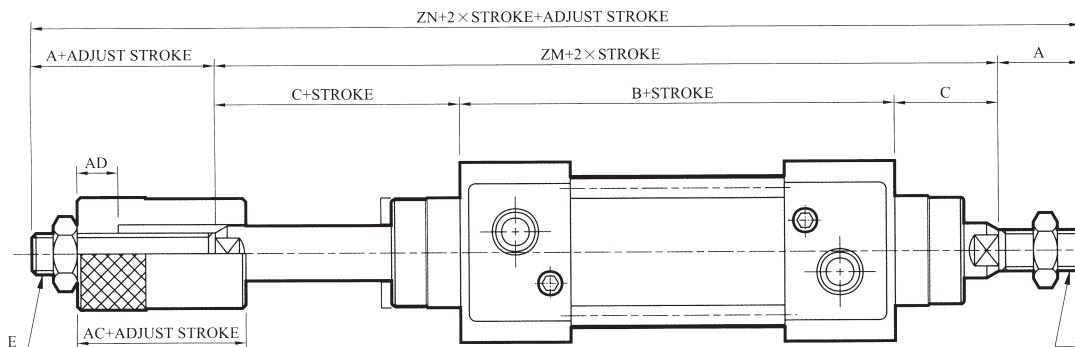
SD



SDW



SDJ

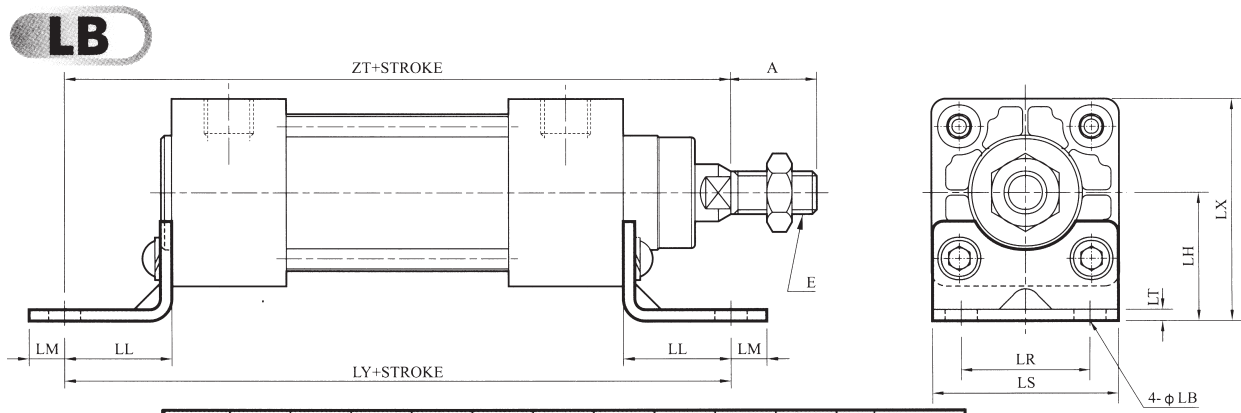


CODE TUBE I.D.	A	C	DD	E	G	H	I	J	K	L	U	O	R	S	X	B	B1	B2	UC	UD	ZB	Z	ZM	ZN	AC	AD
32	22	26	G 1/8	M10×1.25	12	30	16	4	26	13	4	32.5	6	M6×1.0	47	94	10	17	4	12	120	146	146	190	22	10
40	24	30	G 1/4	M12×1.25	16	35	20	4	30	15	4	38	7	M6×1.0	53	105	14	19	4	12	135	163	165	213	24	12
50	32	37	G 1/4	M16×1.5	20	40	25	4	30	15	4	46.5	8	M8×1.25	65	106	17	24	4	16	143	179	180	244	30	15
63	32	37	G 3/8	M16×1.5	20	45	25	4	32	16	7	56.5	8	M8×1.25	75	121	17	24	4	16	158	194	195	259	30	15
80	40	46	G 3/8	M20×1.5	25	45	32	6	38	19	7	72	12	M10×1.5	95	128	22	27	4	18	174	220	220	300	35	20
100	40	51	G 1/2	M20×1.5	25	55	35	6	40	20	7	89	12	M10×1.5	115	138	22	30	4	18	189	235	240	320	35	20

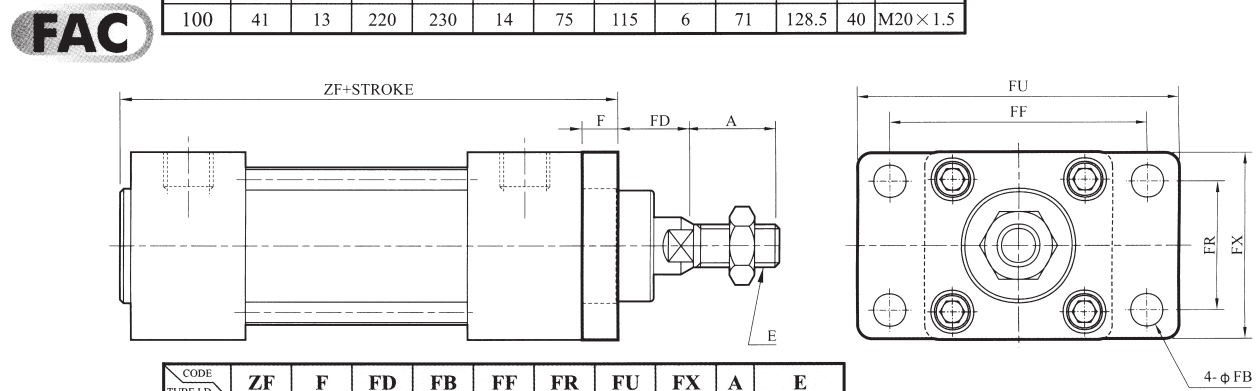
AIR CYLINDER

ISO-VDMA STANDARD CYLINDERS

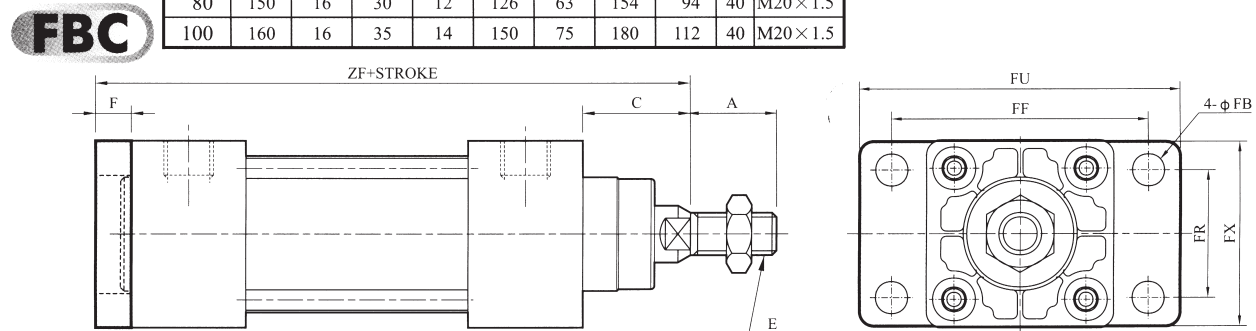
MCQV SERIES



CODE TUBE I.D.	LL	LM	LY	ZT	LB	LR	LS	LT	LH	LX	A	E
32	24	8	142	144	7	32	47	5	32	55.5	22	M10×1.25
40	28	10	161	163	9	36	53	5	36	62.2	24	M12×1.25
50	32	10	170	175	9	45	65	5	45	77.5	32	M16×1.5
63	32	10	185	190	9	50	75	5	50	87.5	32	M16×1.5
80	41	13	210	215	12	63	95	6	63	110.5	40	M20×1.5
100	41	13	220	230	14	75	115	6	71	128.5	40	M20×1.5



CODE TUBE I.D.	ZF	F	FD	FB	FF	FR	FU	FX	A	E
32	108	10	16	7	64	32	79	50	22	M10×1.25
40	120	10	20	9	72	36	90	52	24	M12×1.25
50	123	12	25	9	90	45	110	65	32	M16×1.5
63	138	12	25	9	100	50	125	76	32	M16×1.5
80	150	16	30	12	126	63	154	94	40	M20×1.5
100	160	16	35	14	150	75	180	112	40	M20×1.5



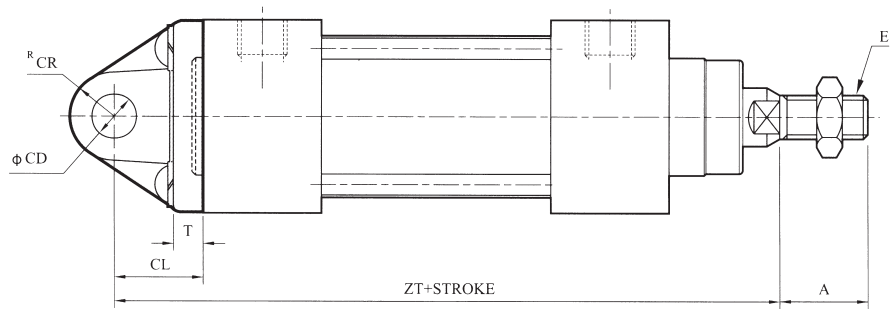
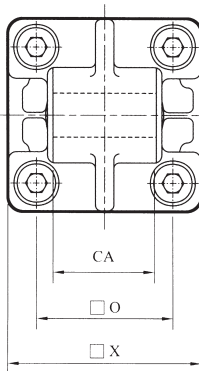
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32	130	10	26	7	64	32	79	50	22	M10×1.25
40	145	10	30	9	72	36	90	52	24	M12×1.25
50	155	12	37	9	90	45	110	65	32	M16×1.5
63	170	12	37	9	100	50	125	76	32	M16×1.5
80	190	16	46	12	126	63	154	94	40	M20×1.5
100	205	16	51	14	150	75	180	112	40	M20×1.5

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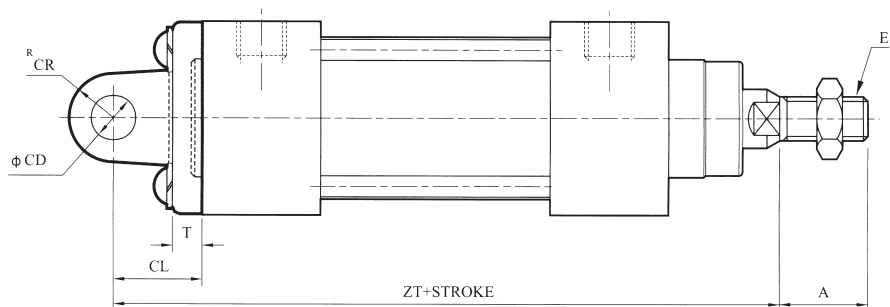
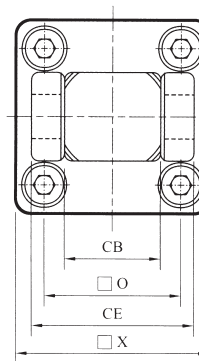
MCQV SERIES

CA



CODE TUBE I.D.	ZT	O	X	CA	CD	CL	CR	T	A	E
32	142	32.5	47	$26_{-0.3}^{-0.1}$	10^{H9}	22	10.5	10	22	M10×1.25
40	160	38	53	$28_{-0.3}^{-0.1}$	12^{H9}	25	12	10	24	M12×1.25
50	170	46.5	65	$32_{-0.3}^{-0.1}$	12^{H9}	27	12	12	32	M16×1.5
63	190	56.5	75	$40_{-0.3}^{-0.1}$	16^{H9}	32	18	12	32	M16×1.5
80	210	72	95	$50_{-0.3}^{-0.1}$	16^{H9}	36	17	16	40	M20×1.5
100	230	89	115	$60_{-0.3}^{-0.1}$	20^{H9}	41	21	16	40	M20×1.5

CB



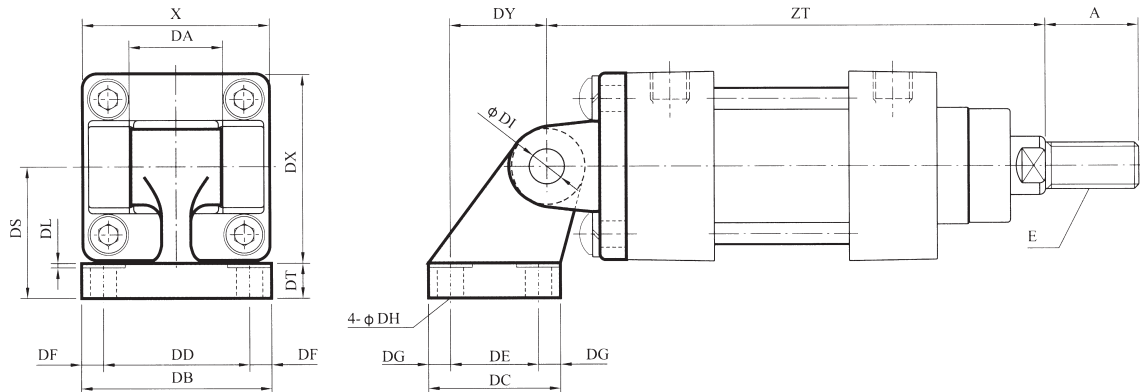
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32	142	45	32.5	47	$26_{-0.1}^{-0.3}$	10^{H9}	22	10.5	10	22	M10×1.25
40	160	52	38	53	$28_{+0.1}^{-0.3}$	12^{H9}	25	12	10	24	M12×1.25
50	170	60	46.5	65	$32_{-0.1}^{-0.3}$	12^{H9}	27	12	12	32	M16×1.5
63	190	70	56.5	75	$40_{+0.1}^{-0.3}$	16^{H9}	32	18	12	32	M16×1.5
80	210	90	72	95	$50_{-0.1}^{-0.3}$	16^{H9}	36	17	16	40	M20×1.5
100	230	110	89	115	$60_{+0.1}^{-0.3}$	20^{H9}	41	21	16	40	M20×1.5

AIR CYLINDER

ISO-VDMA STANDARD CYLINDERS

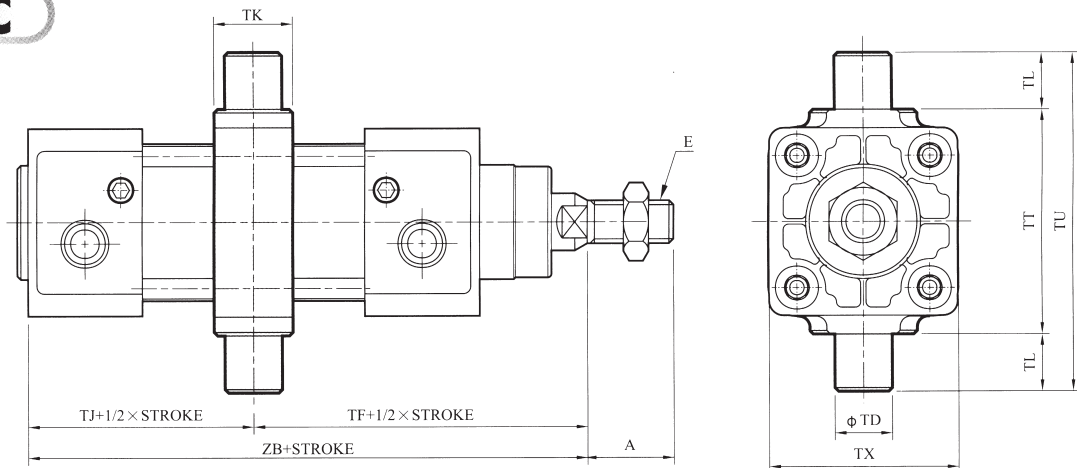
MCQV SERIES

CDB (+CB)



CODE TUBE I.D.	A	X	E	DA	DB	DC	DD	DE	DF	DG	DH	DI	DL	DS	DT	DX	DY	ZT
32	22	47	M10×1.25	26	50	30	38	18	6	6	6.6	10	1.5	32	8	47.5	21	142
40	24	53	M12×1.25	28	53	34	41	22	6	6	6.6	12	1.5	36	10	52.5	24	160
50	32	65	M16×1.5	32	65	45	50	30	7.5	7.5	9	12	1.5	45	12	65.5	33	170
63	32	75	M16×1.5	40	67	50	52	35	7.5	7.5	9	16	1.5	50	12	75.5	37	190
80	40	95	M20×1.5	50	86	60	66	40	10	10	11	16	2.5	63	14	96.5	47	210
100	40	115	M20×1.5	60	96	70	76	50	10	10	11	20	2.5	71	15	113.5	55	230

TC



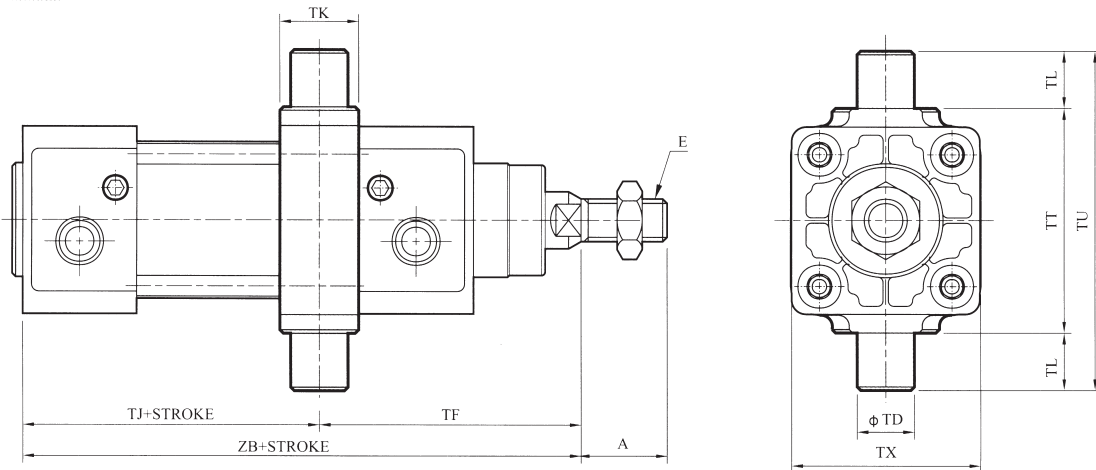
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32	73	47	120	22	12 ^{ck}	47	50	12	74	22	M10×1.25
40	82.5	52.5	135	22	16 ^{ck}	53	63	16	95	24	M12×1.25
50	90	53	143	22	16 ^{ck}	66	75	16	107	32	M16×1.5
63	97.5	60.5	158	28	20 ^{ck}	78	90	20	130	32	M16×1.5
80	110	64	174	34	20 ^{ck}	95	110	20	150	40	M20×1.5
100	120	69	189	40	25 ^{ck}	114	132	25	182	40	M20×1.5

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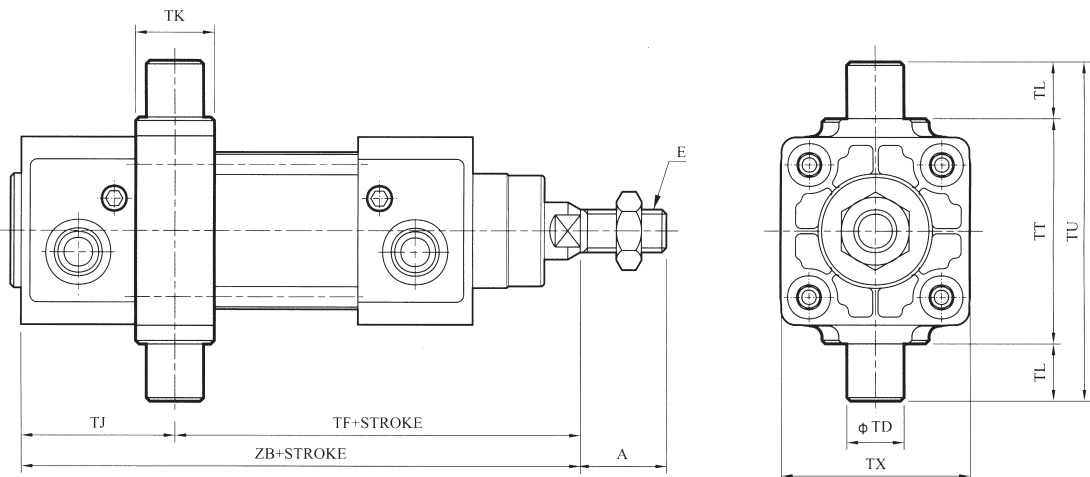
MCQV SERIES

TA



CODE TUBE I.D.	TF	TJ	ZB	TK	TD	TX	TT	TL	TU	A	E
32	64	56	120	22	12 ^{es}	47	50	12	74	22	M10×1.25
40	72	63	135	22	16 ^{es}	53	63	16	95	24	M12×1.25
50	79	64	143	22	16 ^{es}	66	75	16	107	32	M16×1.5
63	84	74	158	28	20 ^{es}	78	90	20	130	32	M16×1.5
80	102	72	174	34	20 ^{es}	95	110	20	150	40	M20×1.5
100	112	77	189	40	25 ^{es}	114	132	25	182	40	M20×1.5

TB



CODE TUBE I.D.	TF	TJ	ZB	TK	TD	TX	TT	TL	TU	A	E
32	82	38	120	22	12 ^{es}	47	50	12	74	22	M10×1.25
40	93	42	135	22	16 ^{es}	53	63	16	95	24	M12×1.25
50	101	42	143	22	16 ^{es}	66	75	16	107	32	M16×1.5
63	111	42	158	28	20 ^{es}	78	90	20	130	32	M16×1.5
80	118	56	174	34	20 ^{es}	95	110	20	150	40	M20×1.5
100	128	61	189	40	25 ^{es}	114	132	25	182	40	M20×1.5

AIR CYLINDER

ISO-VDMA STANDARD PROFILE CYLINDERS

MCQI SERIES



FEATURES:

■ NON-LUBRICATION:

Designs of oil-filled alloy, special housing and bushing provide the needed self-lubrication of piston rod.

■ HIGH QUALITY-LONG SERVICE LIFE:

Hard anodized aluminum cylinder tubes resist corrosion and abrasion.

■ ISO-6431 VDMA STANDARD SPECIFICATION:

Conformance to ISO-6431 & VDMA-24562 specification. Unified design, most parts of each type are interchangeable among each other.

■ CYLINDER MOUNTINGS:

Available with a comprehensive selection of mountings for fixed or flexible installation.

■ Port thread PT. NPT. are also available.

TABLE FOR STANDARD STROKE

tube I.D.	stroke (mm)
φ 32,40	50,75,100,125,150,175,200,250,300,350,400,450,500
φ 50,63	↑ 600
φ 80,100	↑ 600,700

- Stroke out of specification is also available.
- Please consult us if stroke out of specification.

MODEL	MCQI
Tube I.D. (mm)	32,40,50,63,80,100
Media	Air
Operating pressure	0.5-9.9kgf/cm ²
Proof pressure	15kgf/cm ²
Ambient temperature	5~60°C

HOW TO ORDER

MCQI — 11 — 40 — 100(M) — FAC

MODEL

TUBE I.D.

M:MAGNET

MOUNTING TYPE

1:SINGLE ROD
2:DOUBLE ROD

STROKE

STYLE:

CODE	SYMBOL	DESCRIPTION
1 1		Double acting/Male thread
2 7		Dual rod/Adjustable/Male thread (Please mark "adjustable distance(mm)" at order list)
2 1		Dual rod/Male thread

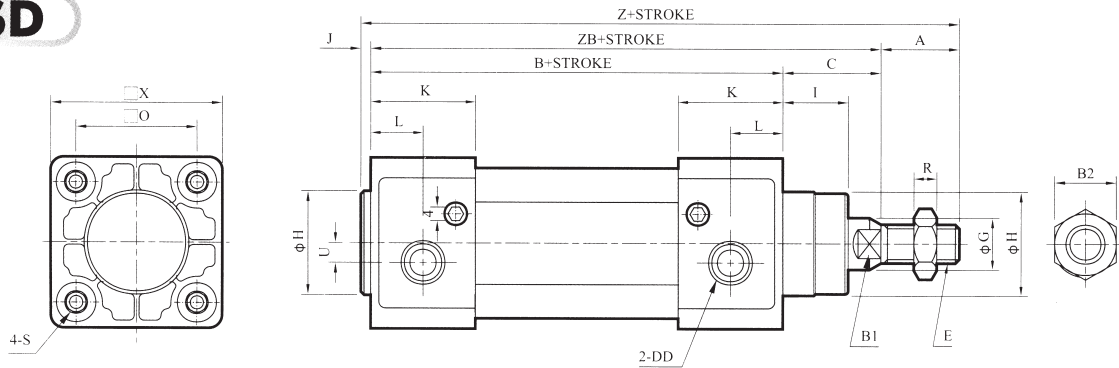
	LB
	FAC
	FBC
	CA
	CB
	CDB (+CB)
	TC
	TA
	TB

PROFILE AIR CYLINDER

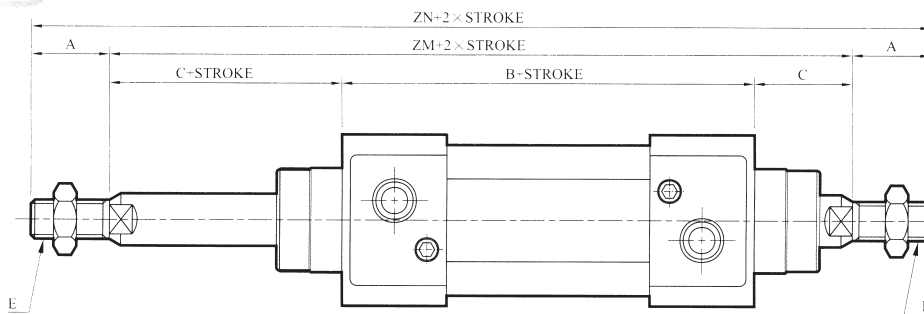
ISO-VDMA STANDARD PROFILE CYLINDERS

MCQI SERIES

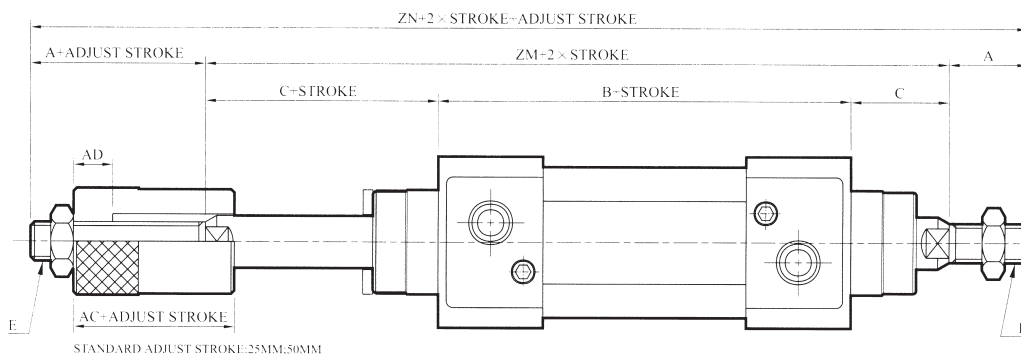
SD



SDW



SDJ



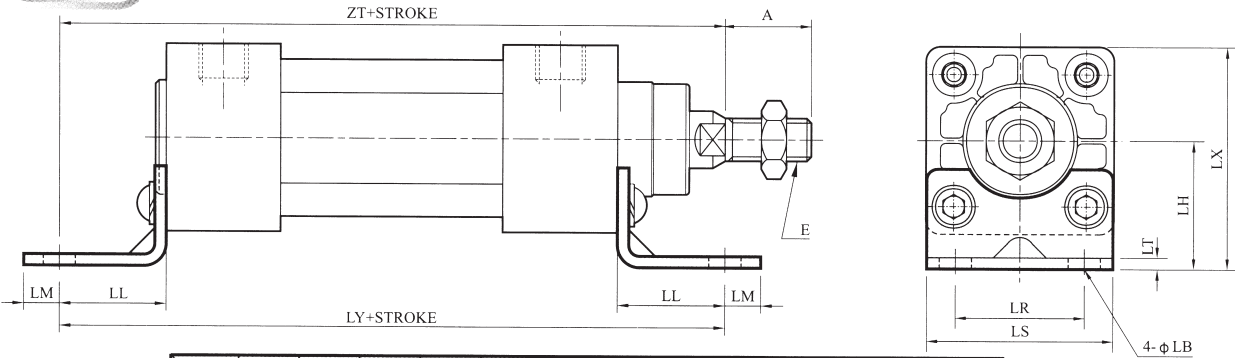
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32	22	26	G 1.8	M10 × 1.25	12	30	16	4	26	13	4	32.5	6	M6 × 1.0	47	94	10	17	120	146	146	190	22	10
40	24	30	G 1.4	M12 × 1.25	16	35	20	4	30	15	4	38	7	M6 × 1.0	53	105	14	19	135	163	165	213	24	12
50	32	37	G 1.4	M16 × 1.5	20	40	25	4	30	15	4	46.5	8	M8 × 1.25	65	106	17	24	143	179	180	244	30	15
63	32	37	G 3.8	M16 × 1.5	20	45	25	4	32	16	7	56.5	8	M8 × 1.25	75	121	17	24	158	194	195	259	30	15
80	40	46	G 3.8	M20 × 1.5	25	45	32	6	38	19	7	72	12	M10 × 1.5	95	128	22	27	174	220	220	300	35	20
100	40	51	G 1.2	M20 × 1.5	25	55	35	6	40	20	7	89	12	M10 × 1.5	115	138	22	27	189	235	240	320	35	20

PROFILE AIR CYLINDER

ISO-VDMA STANDARD PROFILE CYLINDERS

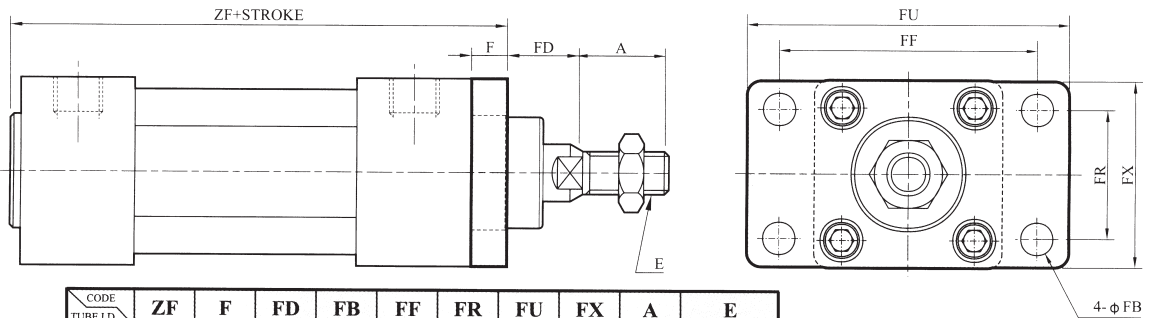
MCQI

LB



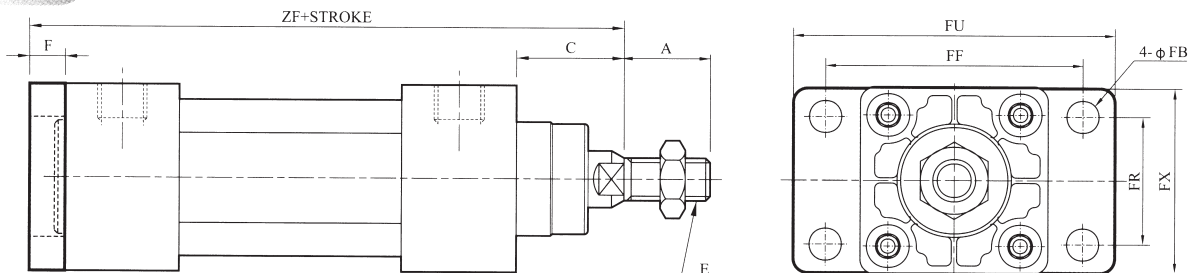
CODE TUBE I.D.	LL	LM	LY	ZT	LB	LR	LS	LT	LH	LX	A	E
32	24	8	142	144	7	32	47	5	32	55.5	22	M10×1.25
40	28	10	161	163	9	36	53	5	36	62.2	24	M12×1.25
50	32	10	170	175	9	45	65	5	45	77.5	32	M16×1.5
63	32	10	185	190	9	50	75	5	50	87.5	32	M16×1.5
80	41	13	210	215	12	63	95	6	63	110.5	40	M20×1.5
100	41	13	220	230	14	75	115	6	71	128.5	40	M20×1.5

FAC



CODE TUBE I.D.	ZF	F	FD	FB	FF	FR	FU	FX	A	E
32	108	10	16	7	64	32	79	50	22	M10×1.25
40	120	10	20	9	72	36	90	55	24	M12×1.25
50	123	12	25	9	90	45	110	65	32	M16×1.5
63	138	12	25	9	100	50	120	75	32	M16×1.5
80	150	16	30	12	126	63	153	95	40	M20×1.5
100	160	16	35	14	150	75	178	115	40	M20×1.5

FBC



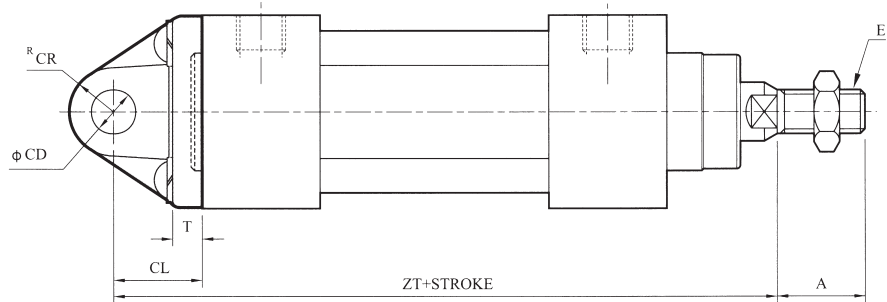
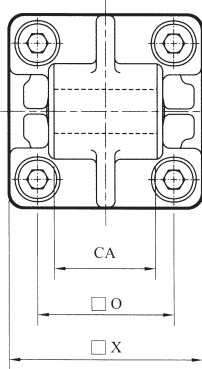
CODE TUBE I.D.	ZF	F	C	FB	FF	FR	FU	FX	A	E
32	130	10	26	7	64	32	79	50	22	M10×1.25
40	145	10	30	9	72	36	90	55	24	M12×1.25
50	155	12	37	9	90	45	110	65	32	M16×1.5
63	170	12	37	9	100	50	120	75	32	M16×1.5
80	190	16	46	12	126	63	153	95	40	M20×1.5
100	205	16	51	14	150	75	178	115	40	M20×1.5

PROFILE AIR CYLINDER

ISO-VDMA STANDARD PROFILE CYLINDERS

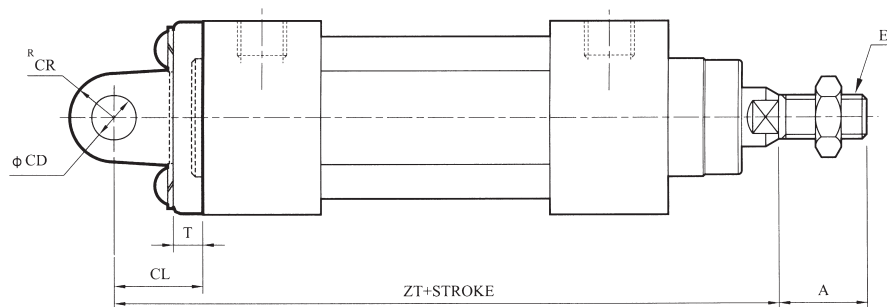
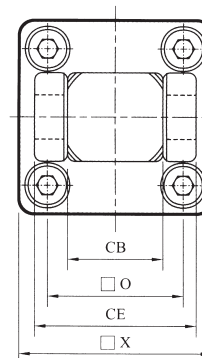
MCQI SERIES

CA



CODE TUBE I.D.	ZT	O	X	CA	CD	CL	CR	T	A	E
32	142	32.5	47	26 ^{-0.1} _{-0.3}	10 ^{H9}	22	10.5	10	22	M10×1.25
40	160	38	53	28 ^{-0.1} _{-0.3}	12 ^{H9}	25	13	10	24	M12×1.25
50	170	46.5	65	32 ^{-0.1} _{-0.3}	12 ^{H9}	25	13	12	32	M16×1.5
63	190	56.5	75	40 ^{-0.1} _{-0.3}	16 ^{H9}	32	17	12	32	M16×1.5
80	210	72	95	50 ^{-0.1} _{-0.3}	16 ^{H9}	36	17	16	40	M20×1.5
100	230	89	115	60 ^{-0.1} _{-0.3}	20 ^{H9}	41	21	16	40	M20×1.5

CB



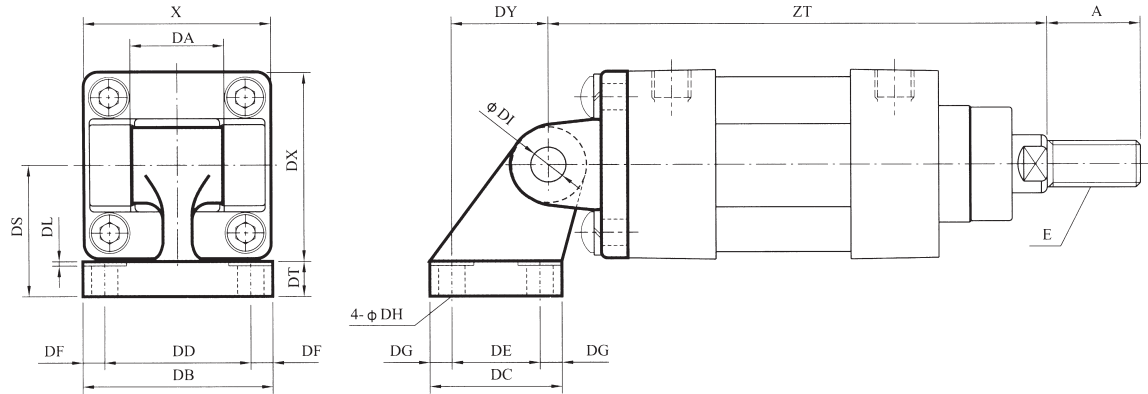
CODE TUBE I.D.	ZT	CE	O	X	CB	CD	CL	CR	T	A	E
32	142	45	32.5	47	26 ^{+0.3} _{+0.1}	10 ^{H9}	22	10.5	10	22	M10×1.25
40	160	52	38	53	28 ^{+0.3} _{+0.1}	12 ^{H9}	25	13	10	24	M12×1.25
50	170	60	46.5	65	32 ^{+0.3} _{+0.1}	12 ^{H9}	27	13	12	32	M16×1.5
63	190	70	56.5	75	40 ^{+0.3} _{+0.1}	16 ^{H9}	32	17	12	32	M16×1.5
80	210	90	72	95	50 ^{+0.3} _{+0.1}	16 ^{H9}	36	17	16	40	M20×1.5
100	230	110	89	115	60 ^{+0.3} _{+0.1}	20 ^{H9}	41	21	16	40	M20×1.5

PROFILE AIR CYLINDER

ISO-VDMA STANDARD PROFILE CYLINDERS

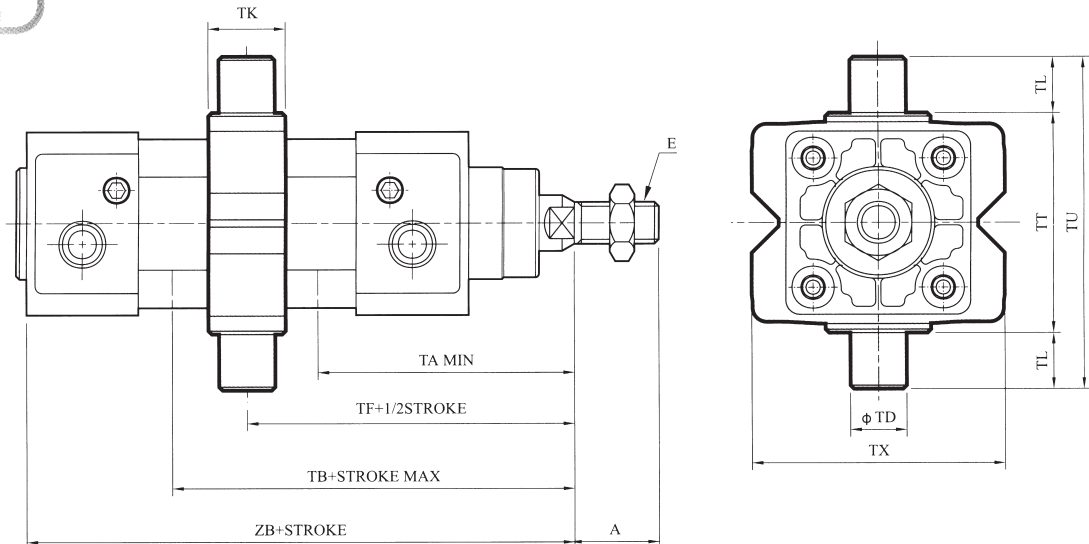
MCQI SERIES

CDB (+CB)



CODE TUBE I.D.	A	X	E	DA	DB	DC	DD	DE	DF	DG	DH	DI	DL	DS	DT	DX	DY	ZT
32	22	47	M10×1.25	26	50	30	38	18	6	6	6.6	10	1.5	32	8	47.5	21	142
40	24	53	M12×1.25	28	53	34	41	22	6	6	6.6	12	1.5	36	10	52.5	24	160
50	32	65	M16×1.5	32	65	45	50	30	7.5	7.5	9	12	1.5	45	12	65.5	33	170
63	32	75	M16×1.5	40	67	50	52	35	7.5	7.5	9	16	1.5	50	12	75.5	37	190
80	40	95	M20×1.5	50	86	60	66	40	10	10	11	16	2.5	63	14	96.5	47	210
100	40	115	M20×1.5	60	96	70	76	50	10	10	11	20	2.5	71	15	113.5	55	230

TC

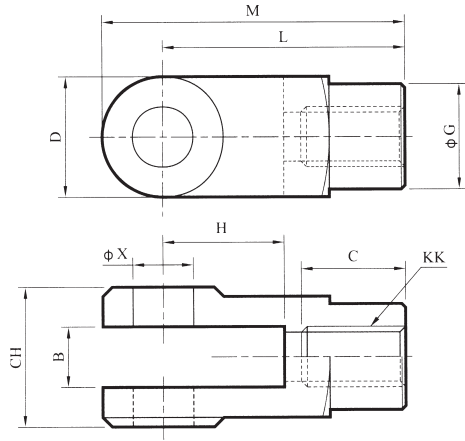


CODE TUBE I.D.	TF	TA	ZB	TK	TD	TX	TT	TL	TU	TB	A	E
32	73	73	120	22	12 ^{es}	58	50	12	74	73	22	M10×1.25
40	82.5	77	135	28	16 ^{es}	70	63	16	95	88	24	M12×1.25
50	90	86	143	32	16 ^{es}	85	75	16	107	94	32	M16×1.5
63	97.5	89.5	158	35	20 ^{es}	100	90	20	130	105.5	32	M16×1.5
80	110	107	174	40	20 ^{es}	120	110	20	150	113	40	M20×1.5
100	120	116.5	189	45	25 ^{es}	145	132	25	182	123.5	40	M20×1.5

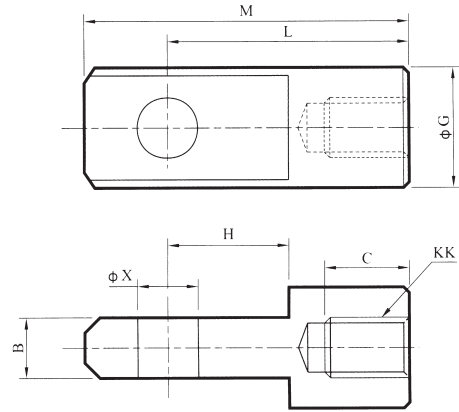
AIR CYLINDER ACCESSORY

FOR MCQV/MCQP SERIES

Y CONNECTOR

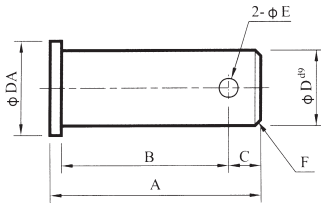


I CONNECTOR



CODE TUBE I.D.	L		H		G		B		X ^{H9}	KK		C		CH		M		D	
	Y	I	Y	I	Y	I	Y	I		Y	I	Y	I	Y	I	Y	I	Y	I
32	40	40	20	15	φ18	φ24	10 ^{-0.3} _{-0.1}	10 ^{-0.1} _{-0.2}	φ10 ^{-0.04} ₀	M10×1.25	20	17	19	/	52	52	19	/	/
40	48	48	24	18	φ20	φ24	12 ^{-0.3} _{+0.1}	12 ^{-0.1} _{-0.2}	φ12 ^{+0.04} ₀	M12×1.25	24	21	22	/	62	62	22	/	/
50	64	64	32	32	φ28	φ32	16 ^{-0.3} _{+0.1}	16 ^{-0.1} _{-0.3}	φ16 ^{+0.04} ₀	M16×1.5	28	23	32	/	89	86	32	/	/
63	64	64	32	32	φ28	φ32	16 ^{-0.3} _{+0.1}	16 ^{-0.1} _{-0.3}	φ16 ^{+0.04} ₀	M16×1.5	28	23	32	/	89	86	32	/	/
80	80	80	40	40	φ36	φ36	20 ^{+0.3} _{+0.1}	20 ^{-0.1} _{-0.3}	φ20 ^{+0.05} ₀	M20×1.5	33	30	45	/	100	108	40	/	/
100	80	80	40	40	φ36	φ36	20 ^{-0.3} _{-0.1}	20 ^{-0.1} _{-0.3}	φ20 ^{+0.05} ₀	M20×1.5	33	30	45	/	100	108	40	/	/

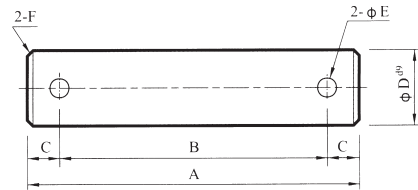
PIN FOR Y.I CONNECTOR



FOR Y.I CONNECTOR

CODE TUBE I.D.	A	B	C	D ^{d9}	E	F	DA	SPLIT PIN
32	30	25	3.5	φ10 ^{-0.06} _{-0.09}	3.2	1	14	3.2×20L
40	37	30	5	φ12 ^{-0.06} _{-0.09}	3.2	1	16	3.2×20L
50 63	47	37	7	φ16 ^{-0.05} _{-0.09}	4	1	22	4×25L
80 100	62	50	8	φ20 ^{-0.06} _{-0.11}	5	1.5	30	5×35L

PIN FOR CA.CB



FOR CA.CB

CODE TUBE I.D.	A	B	C	D ^{d9}	E	F	SPLIT PIN
32	69	55	7	φ10 ^{-0.05} _{-0.09}	4	1.0	4×20L
40	76	62	7	φ12 ^{-0.05} _{-0.09}	4	1.0	4×20L
50	84	70	7	φ12 ^{-0.05} _{-0.09}	4	1.0	4×20L
63	94	80	7	φ16 ^{-0.05} _{-0.09}	4	1.0	4×30L
80	117	100	8.5	φ16 ^{-0.05} _{-0.09}	5	1.5	5×30L
100	137	120	8.5	φ20 ^{-0.05} _{-0.09}	5	1.5	5×35L