

Motor type	Servo / Step
Environment	Standard
Transmission	Ball screw
Guide type	Slide guide

Specification

Model	MEQI											
Size	32			40			50			63		
Positioning repeatability (mm)	±0.02											
Lead *1 (mm)	1	2	5	10	20	5	10	20	5	10	20	
Ball screw (ø)	C7ø8			C7ø12			C7ø16			C7ø20		
Stroke (mm)	100~400			100~600			100~800			100~1000		
Anti-rotation tolerance (°)	±0.4											
Start torque (N.m)	<0.05	<0.1	<0.05	<0.1	<0.2	<0.2	<0.25	<0.3	<0.3	<0.35	<0.4	
Sensor switch	RDFE (Refer to page 5-11)											
With AC servo motor (W)	50 (100)						200 (400)					
Max. speed *2 (mm/s)	50	100	250	500	1000	250	500	1000	250	500	1000	
Max. axial force (N)	720 (1600)	360 (800)	140 (320)	70 (160)	35 (80)	680 (1400)	340 (700)	170 (350)	680 (1400)	340 (700)	170 (350)	
Rated axial load *3 (kg)	3.3	5.5	23	27	37	38.5	35.5	27	50.5	64	37	
With step motor	□42						□56					
Max. speed *2 (mm/s)	50	100	250	500	1000	250	500	1000	250	500	1000	
Min. thrust (N)	325	162	65	32	16	110	55	27	110	55	27	

*1. Special accuracy and lead are available.

*2. 3000 rpm with 0.2 seconds of acceleration or deceleration time.

*3. The rated load refers to a 10,000 km estimated service life.

Please refer to page 4-86 for information on other load conditions.

Order example

MEQI — 50 L05 — 200 — BC — S 56

Model	Size	Ball screw lead	Stroke	Size	Motor position	Flange (For motor installation)				
32	L01	1 mm	100~400	32	BC Direct connection	M	Mitsubishi	10	50/100W servo	32, 40
	L02	2 mm	100~600	40			Yaskawa	40	200/400W servo	50, 63
40	L05	5 mm	100~800	50	BA Turned	P	Panasonic	10	50/100W servo	50, 63
								20	200W servo	
50	L10	10 mm	100~1000	63				40	400W servo	
63	L20	20 mm								
S	Mindman							42	□42 Step (*2)	32, 40
								56	□56 Step (*2)	50, 63

*1. Motor not included. Please refer to the "Motor Selection Table" on page 4-122 for details.

*2. Step motors are without brake.

Accessories & Connector

Accessories							
Code	LB (Purchase 2 pcs)	LC (Purchase 2 pcs)	CA	CB	CDB (Purchase CB+PIN)	FAC	FBC
Mounting Size							
32	LB-Q2-32	LC-EQ1-32	CA-Q2-32	CB-Q2-32	CDB-Q2-32	FAC-Q2-32	FAC-Q2-32
40	LB-Q2-40	LC-EQ1-40	CA-Q2-40	CB-Q2-40	CDB-Q2-40	FAC-Q2-40	FAC-Q2-40
50	LB-Q2-50	LC-EQ1-50	CA-Q2-50	CB-Q2-50	CDB-Q2-50	FAC-Q2-50	FAC-Q2-50
63	LB-Q2-63	LC-EQ1-63	CA-Q2-63	CB-Q2-63	CDB-Q2-63	FAC-Q2-63	FAC-Q2-63

Accessories			Connector			
Code	TFA	TFB	TC	Y	I	YS (Y+Floating pin)
Mounting Size						
32	TFA-EQ1-32		TC-EQ1-32	Y-Q2-32	I-Q2-32	YS-Q2-32
40	TFA-EQ1-40		TC-EQ1-40	Y-Q2-40	I-Q2-40	YS-Q2-40
50	TFA-EQ1-50		TC-EQ1-50	Y-Q2-50	I-Q2-50	YS-Q2-50
63	TFA-EQ1-63		TC-EQ1-63			

Pin

Applicable	YS connector	Y&I connector	CA&CB accessories
Code	PIN-S	PIN-Y-P (with split pin)	PIN-CB-P (with split pin)
Fig Size			
32	PIN-Q2-32-S	PIN-Q2-32-2-P	PIN-Q2-32-1-P
40	PIN-Q2-40-S	PIN-Q2-40-2-P	PIN-Q2-40-1-P
50	PIN-Q2-50-S	PIN-Q2-50-2-P	PIN-Q2-50-1-P
63			PIN-Q2-63-1-P

Order example of self-assembled

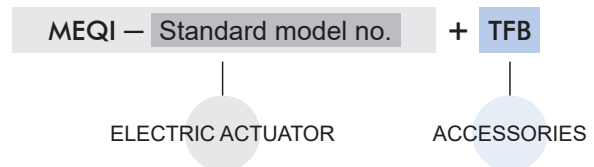
The size 50 of LB accessories, Y connector and pin.

No.	Order number	Qty
1	LB-Q2-50	2
2	Y-Q2-50	1
3	PIN-Q2-50-2-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

△ Actuator and accessories are distinguished by the symbol "+".

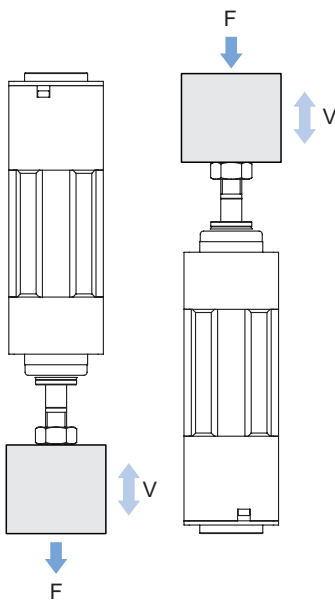


Life – Axial Force relationship chart

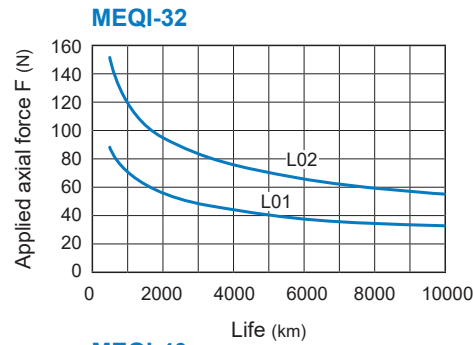
The estimated service life under an axial load of F is shown in the plot. The environmental condition is 25°C, and a safety factor of 1.5 is used for both the ball screw and ball bearing.

Speed – Stroke relationship chart

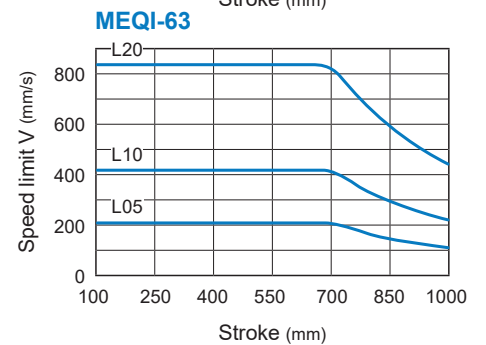
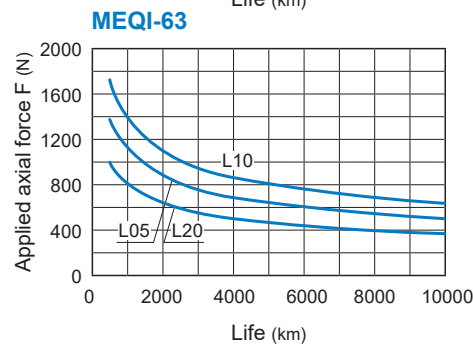
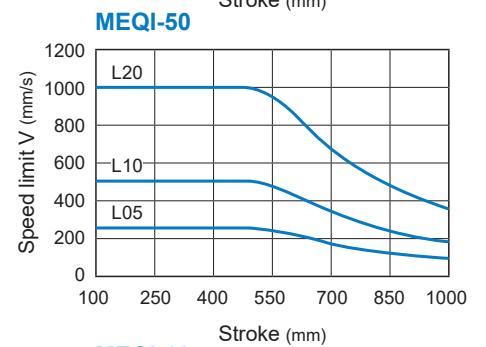
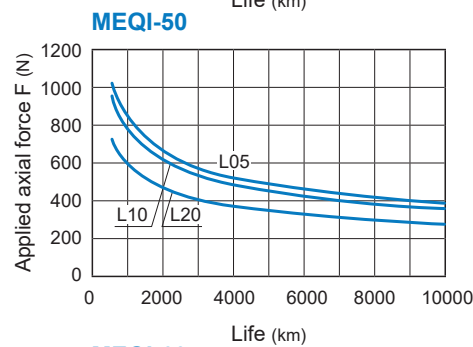
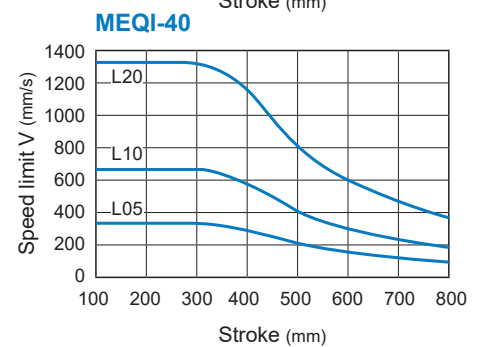
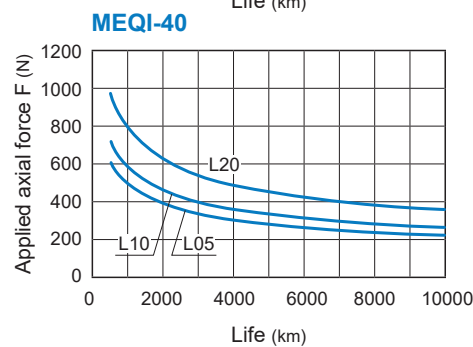
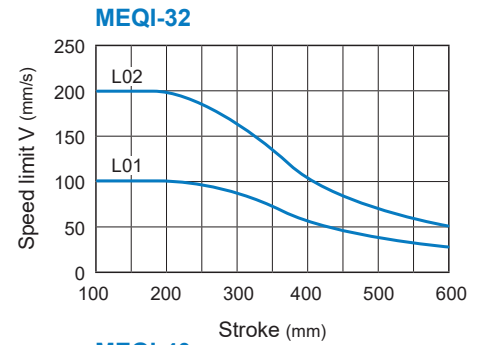
The maximum working speed is constrained by the product's stroke, as depicted in the plot.



Life – Applied axial force relationship chart



Max speed limit – Stroke relationship chart

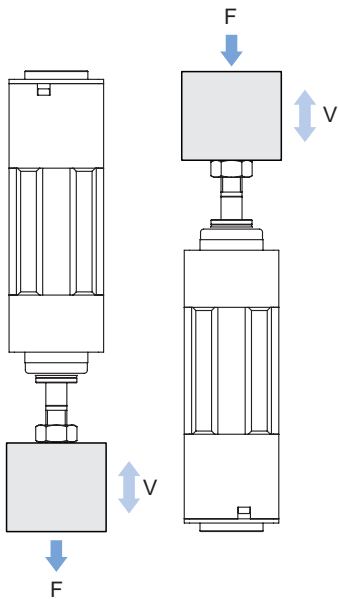


Motor output chart

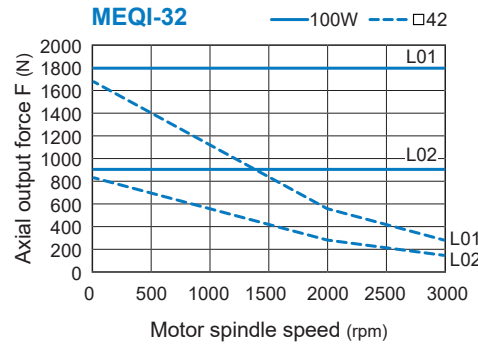
The relationship between axial output force and motor spindle speed is depicted in the plot. The default gear ratio is 1:1.

Speed chart

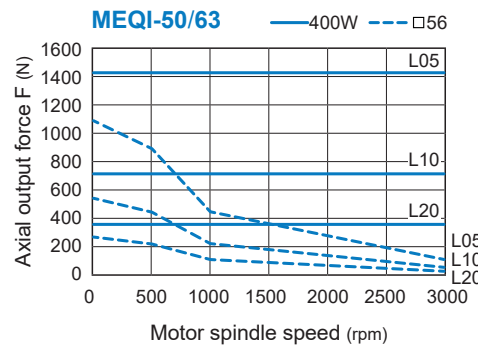
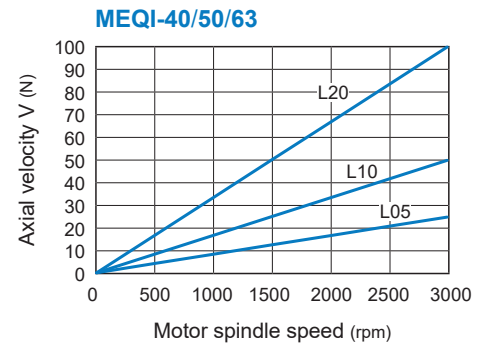
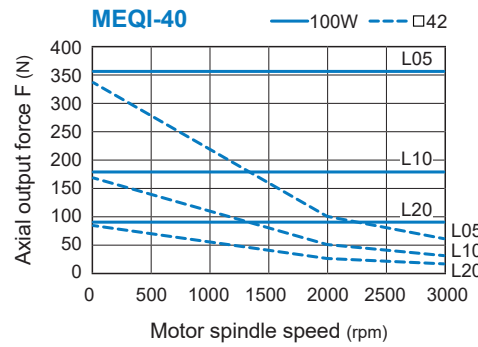
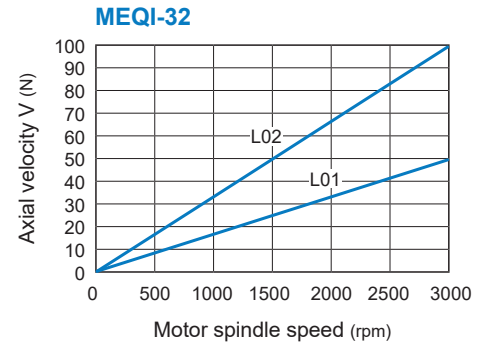
The relationship between axial velocity and motor spindle speed is depicted in the plot. The default gear ratio is 1:1.



Motor spindle speed – Axial output force relationship chart



Motor spindle speed – Axial velocity relationship chart



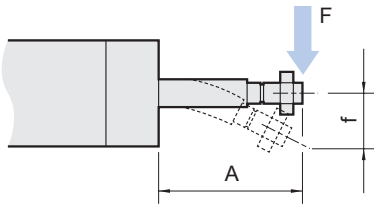
MEQI Capacity & Weight



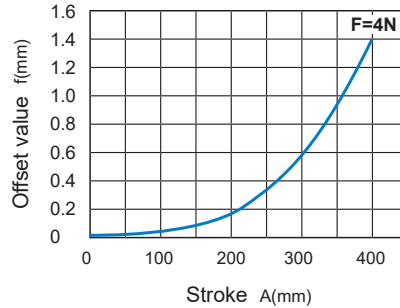
ISO 15552 STANDARD ROD ELECTRIC ACTUATOR (WITHOUT MOTOR)

Mindman

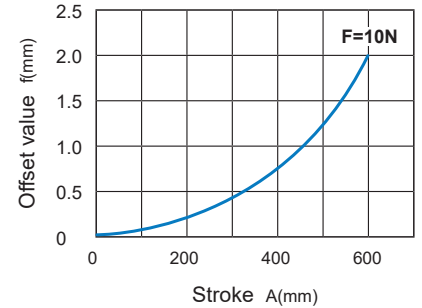
Rod bending offset



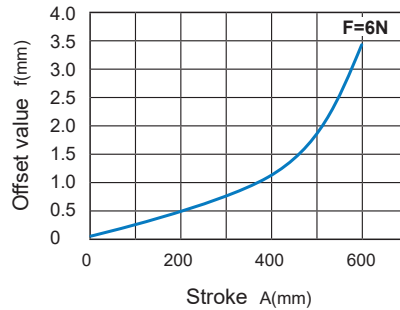
MEQI-32



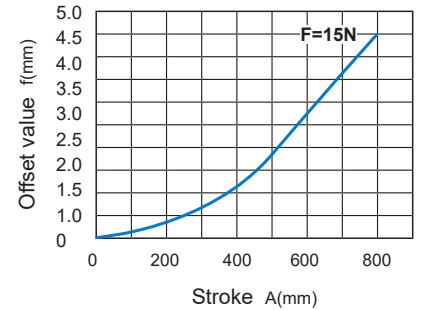
MEQI-50



MEQI-40



MEQI-63



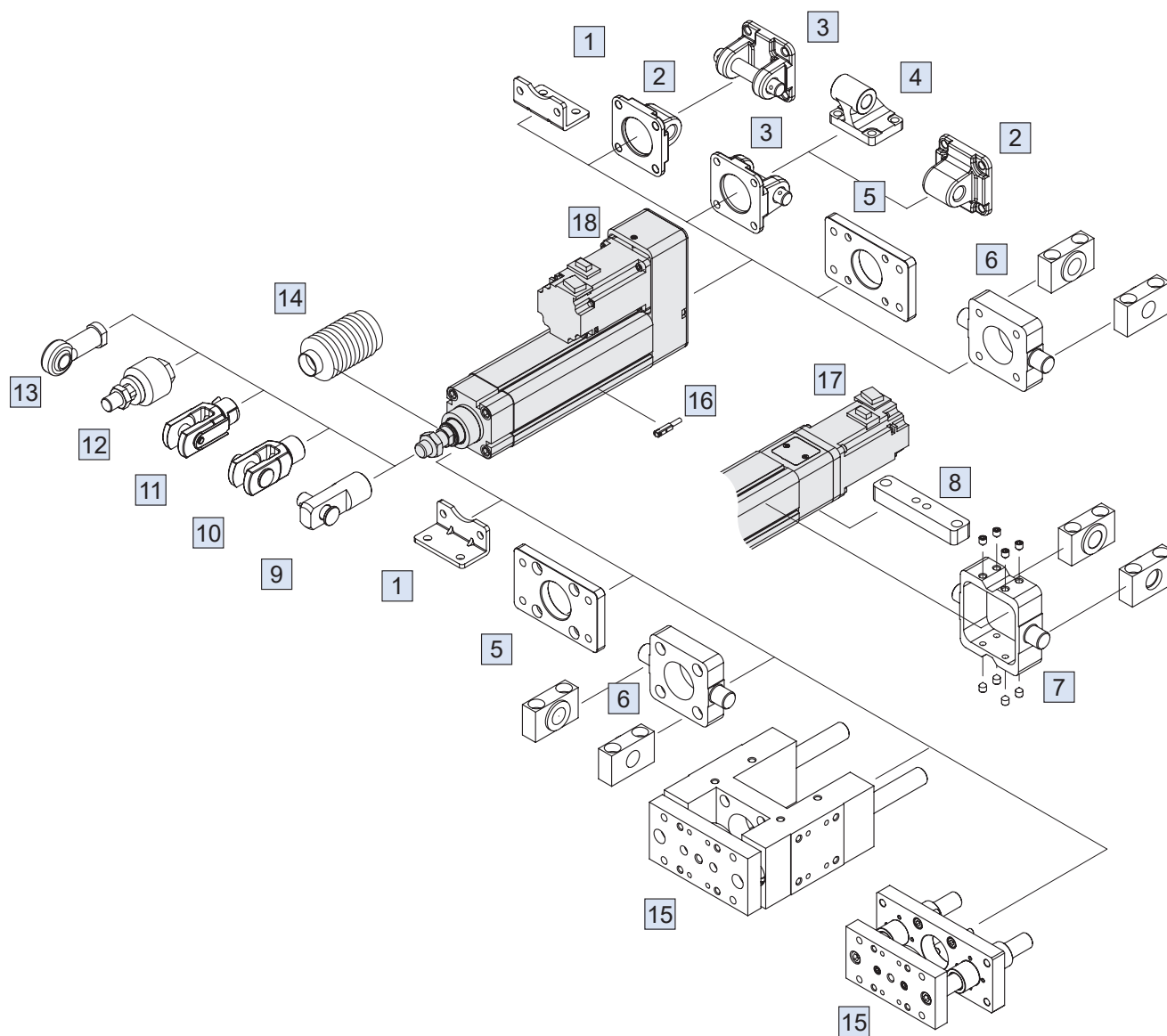
Weight

Unit: kg

Model	Basic weight MEQI - 32	Each 100 mm MEQI - 32	Basic weight MEQI - 40	Each 100 mm MEQI - 40	Basic weight MEQI - 50	Each 100 mm MEQI - 50	Basic weight MEQI - 63	Each 100 mm MEQI - 63	
Size									
Motor position	BC	1.10	0.43	2	0.53	2.58	0.73	4.15	0.99
	BA	1.25	0.43	2	0.53	2.99	0.73	4.39	0.99

Model	LB	LC	CA	CB	CDB	FAC / FBC
Size						
32	0.16	0.05	0.22	0.19	0.17	0.24
40	0.21	0.05	0.25	0.22	0.23	0.30
50	0.32	0.06	0.39	0.35	0.46	0.46
63	0.40	0.08	0.67	0.54	0.55	0.68

Model	TC	TFA / TFB	Y	I	PIN		YS
					Y / I	CA / CB	
Size							
32	0.21	0.20	0.07	0.09	0.02	0.04	0.02
40	0.43	0.40	0.12	0.14	0.03	0.06	0.03
50	0.51	0.61	0.27	0.34	0.08	0.07	0.07
63	0.80	1.20	0.27	0.33	0.08	0.15	0.07

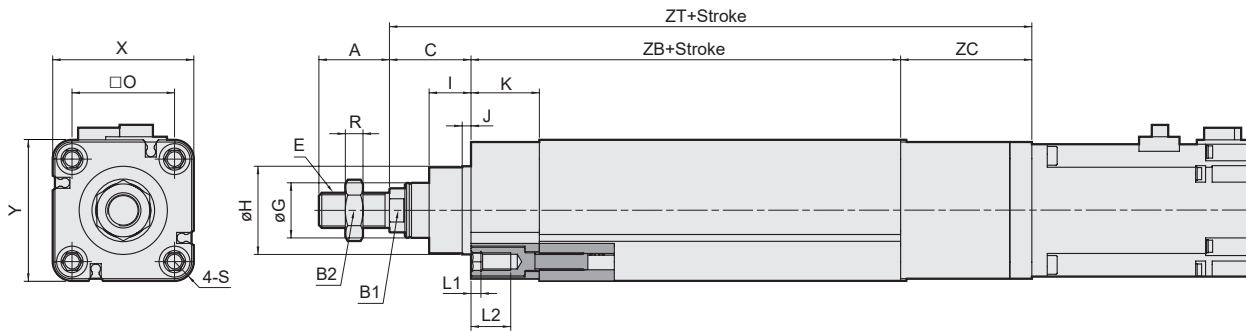


No.	Accessories	Page
1	Mounting accessories LB	4-87
2	Mounting accessories CA	4-89
3	Mounting accessories CB	4-89
4	Mounting accessories CDB	4-90
5	Mounting accessories FAC/FBC	4-88
6	Mounting accessories TFA/TFB	4-91
7	Mounting accessories TC	4-90
8	Mounting accessories LC	4-87
9	Accessories I+PIN	4-92
10	Accessories Y+PIN	4-92

No.	Accessories	Page
11	Accessories YS	4-92
12	Floating joint MFC	8-2 (Vol.2)
13	Female rod ends PHS	8-6 (Vol.2)
14	Protective bellows kit	—
15	MGTB/TU/TX Guide holder assembly	4-39 (Vol.2)
16	Sensor switch RDFE	5-11
17	Motor direct connection kit BC	4-86
18	Motor Turned kit BA	4-86

BC

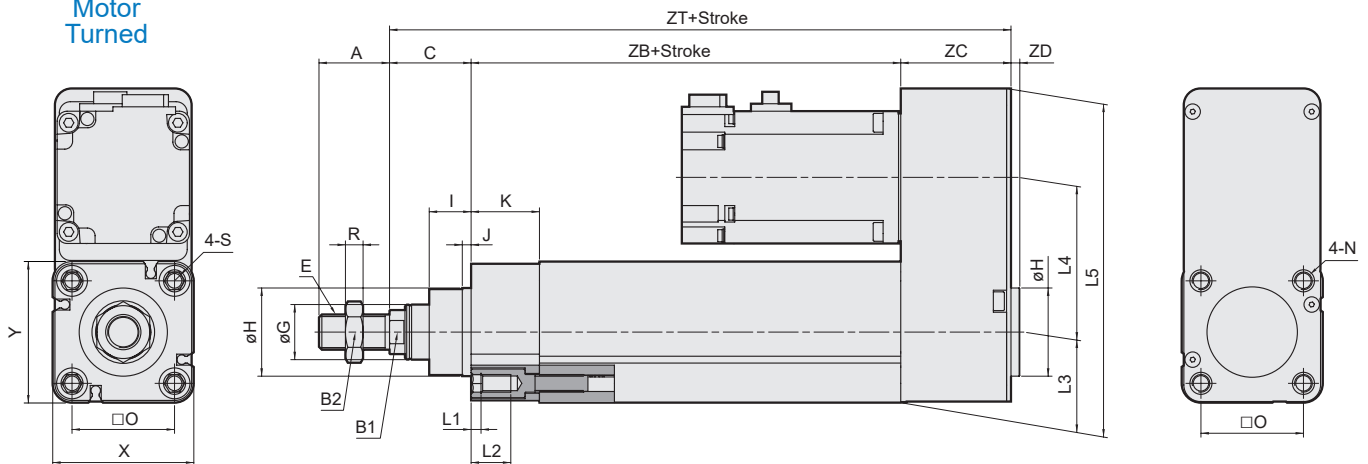
Motor direct connection



Code Size	A	B1	B2	C	E	G	H	I	J	K	L1	L2	O	R	S	X	Y	ZB	ZC	ZT
32	22	10	17	25.5	M10×1.25	20	30	10	5	27	4.5	17	32.5	8	M6×1.0	45	48.5	87	51.0	163.5
40	24	13	19	30.5	M12×1.25	20	35	12	4	30	4.5	17	38	6	M6×1.0	53	56	131	46.5	177.5
50	32	17	24	37	M16×1.5	25	40	19	4	31	4.5	18	46.5	8	M8×1.25	64	64	152	59.5	248.5
63	32	17	24	37	M16×1.5	30	45	19	4	35	4.5	18	56.5	8	M8×1.25	77	77	162	64.0	263.0

BA

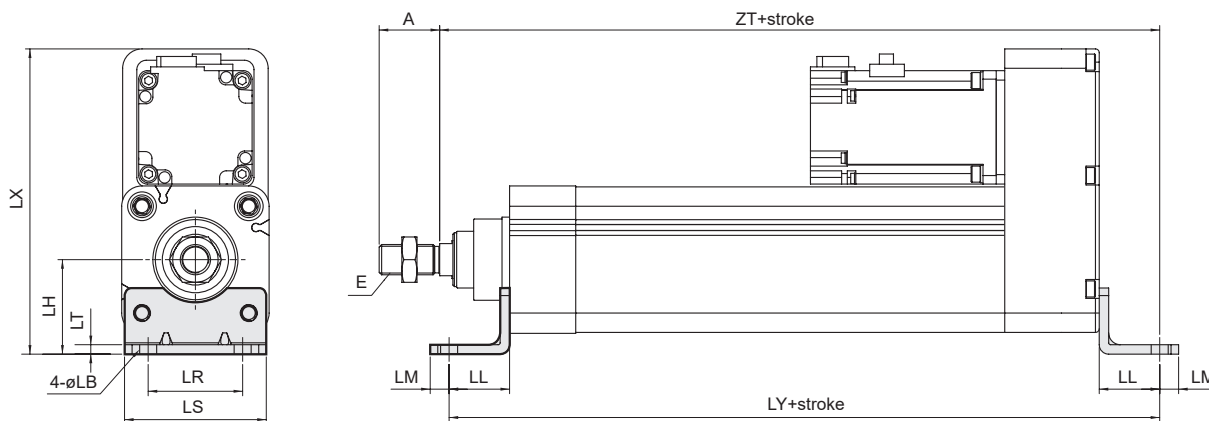
Motor Turned



Code Size	A	B1	B2	C	E	G	H	I	J	K	L1	L2	L3	L4	L5	N	O	R	S	X	Y	ZB	ZC	ZD	ZT
32	22	10	17	25.5	M10×1.25	20	30	10	5	27	4.5	17	24.5	48	100	M6×1.0×16L	32.5	8	M6×1.0	45	48.5	87	42	4	154.5
40	24	13	19	30.5	M12×1.25	20	35	12	4	30	4.5	17	28	51	108.5	M6×1.0×16L	38	6	M6×1.0	53	56	131	39	4	170
50	32	17	24	37	M16×1.5	25	40	19	4	31	4.5	18	32	70	142.5	M8×1.25×18L	46.5	8	M8×1.25	64	64	152	50	4	239
63	32	17	24	37	M16×1.5	30	45	19	4	35	4.5	18	39	70	150.5	M8×1.25×12L	56.5	8	M8×1.25	78	78	162	50	4	249

LB

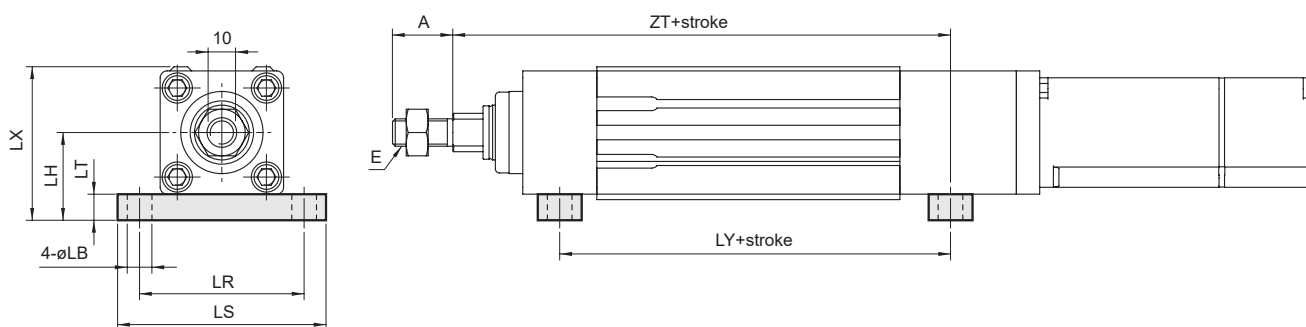
* Only for (BA) motor turned type.



Code Size	A	E	LB	LH	LL	LM	LR	LS	LT	LX	LY	ZT
32	22	M10×1.25	7	32	24	8	32	46.5	5	107.5	177	178.5
40	24	M12×1.25	9	36	28	10	36	53	5	116.5	226	228
50	32	M16×1.5	9	45	32	10	45	65	5	163.0	266	271
63	32	M16×1.5	9	50	32	10	50	75	5	161.5	276	281

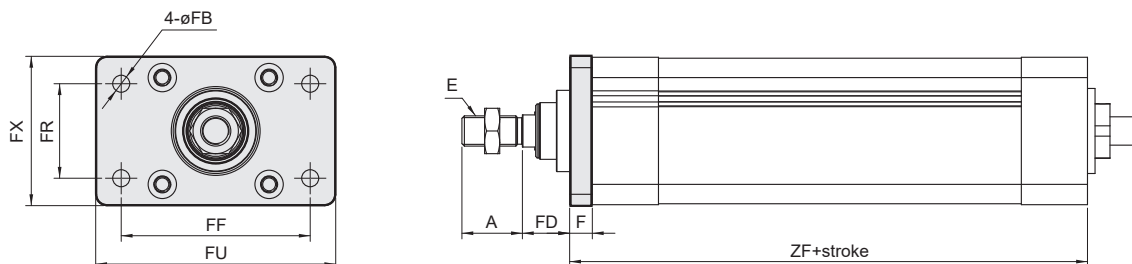
LC

* Only for (BC) motor direct connection type.



Code Size	A	E	LB	LH	LR	LS	LT	LX	LY	ZT
32	22	M10×1.25	9	32	60	76	9.5	56	92	131
40	24	M12×1.25	9	36	68	84	9.5	64	144	189.5
50	32	M16×1.5	9	45	81	94	14	77	168	221
63	32	M16×1.5	9	50	92	110	12.5	88.5	176.5	231

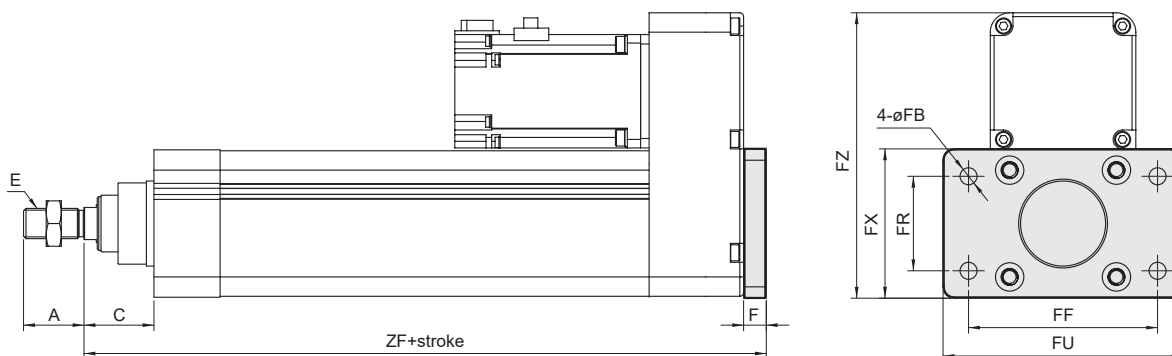
FAC



Code Size	A	E	F	FB	FD	FF	FR	FU	FX	ZF
32	22	M10×1.25	10	7	15.5	64	32	79	50	97
40	24	M12×1.25	10	9	20.5	72	36	90	52	141
50	32	M16×1.5	12	9	25	90	45	112	67	164
63	32	M16×1.5	12	9	25	100	50	127	79	174

FBC

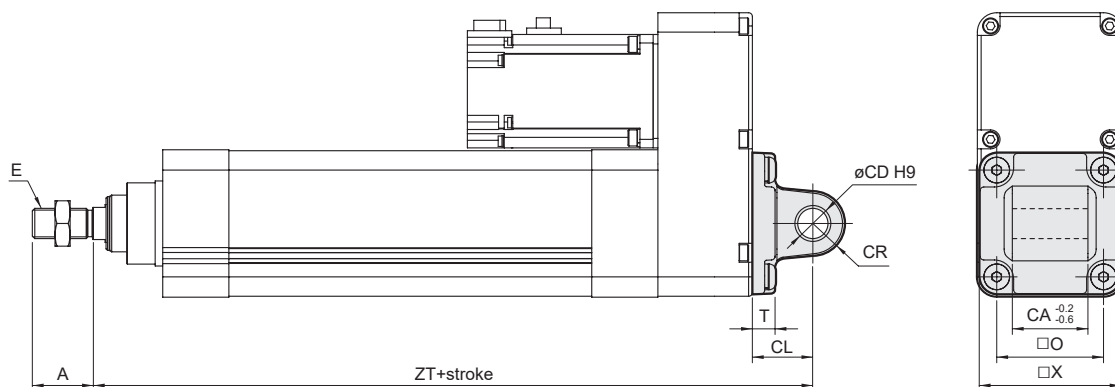
* Only for (BA) motor turned type.



Code Size	A	C	E	F	FB	FF	FR	FU	FX	FZ	ZF
32	22	25.5	M10×1.25	10	7	64	32	79	50	100.5	164.5
40	24	30.5	M12×1.25	10	9	72	36	90	52	106.5	210.5
50	32	37	M16×1.5	12	9	90	45	112	67	151.5	251
63	32	37	M16×1.5	12	9	100	50	127	79	151.0	261

CA

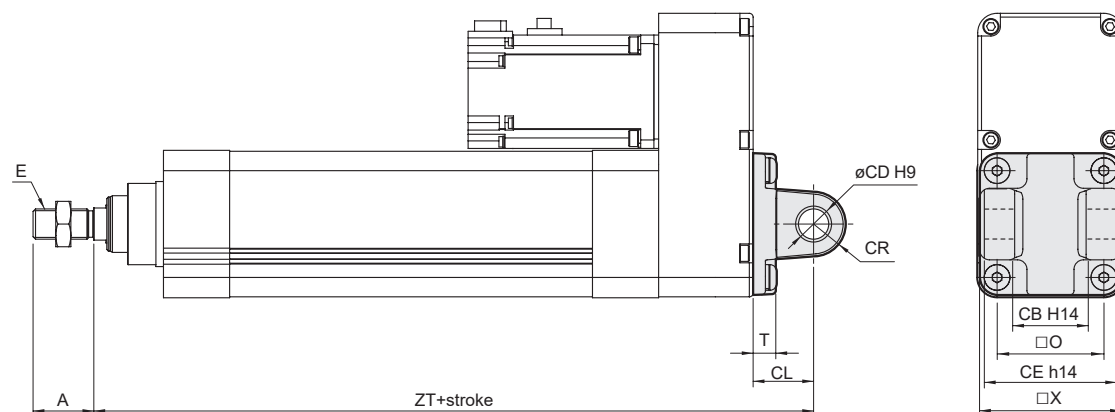
* Only for (BA) motor turned type.



Code Size	A	CA	CD	CL	CR	E	O	T	X	ZT
32	22	26	10	22	R10.5	M10×1.25	32.5	10	46.5	176.5
40	24	28	12	25	R12	M12×1.25	38	10	54	225.5
50	32	32	12	27	R13	M16×1.5	46.5	12	64	266
63	32	40	16	32	R17	M16×1.5	56.5	12	75	281

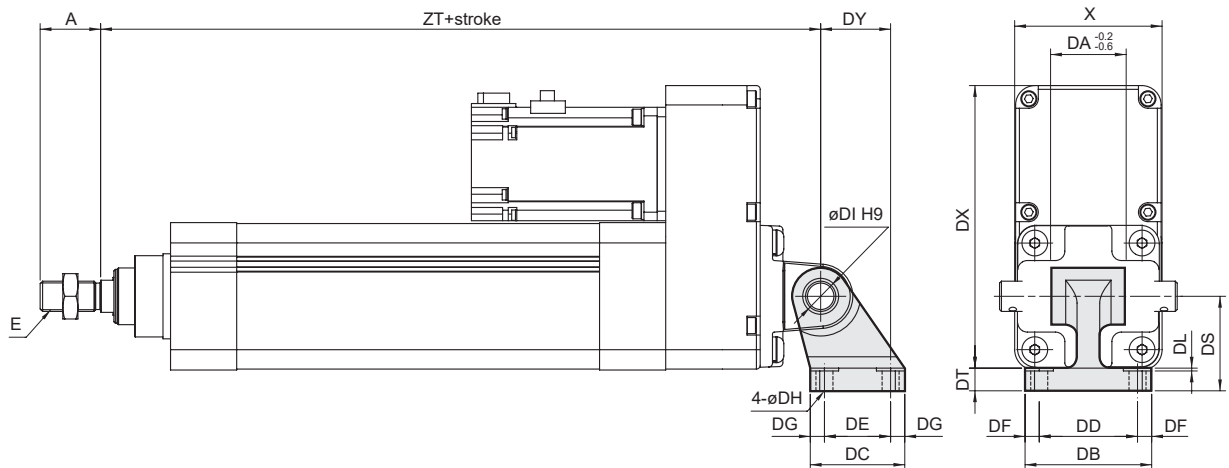
CB

* Only for (BA) motor turned type.



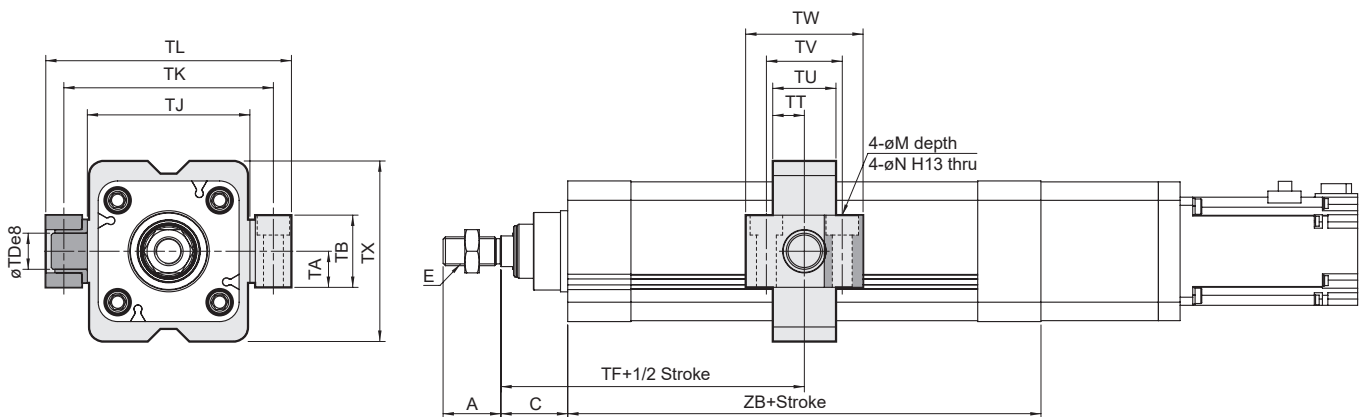
Code Size	A	CB	CD	CE	CL	CR	E	O	T	X	ZT
32	22	26	10	45	22	R10.5	M10×1.25	32.5	10	46.5	176.5
40	24	28	12	52	25	R12	M12×1.25	38	10	54	225.5
50	32	32	12	60	27	R13	M16×1.5	46.5	12	64	266
63	32	40	16	70	32	R17	M16×1.5	56.5	12	75	281

CDB CB+Pin (Extra purchase) * Only for (BA) motor turned type.



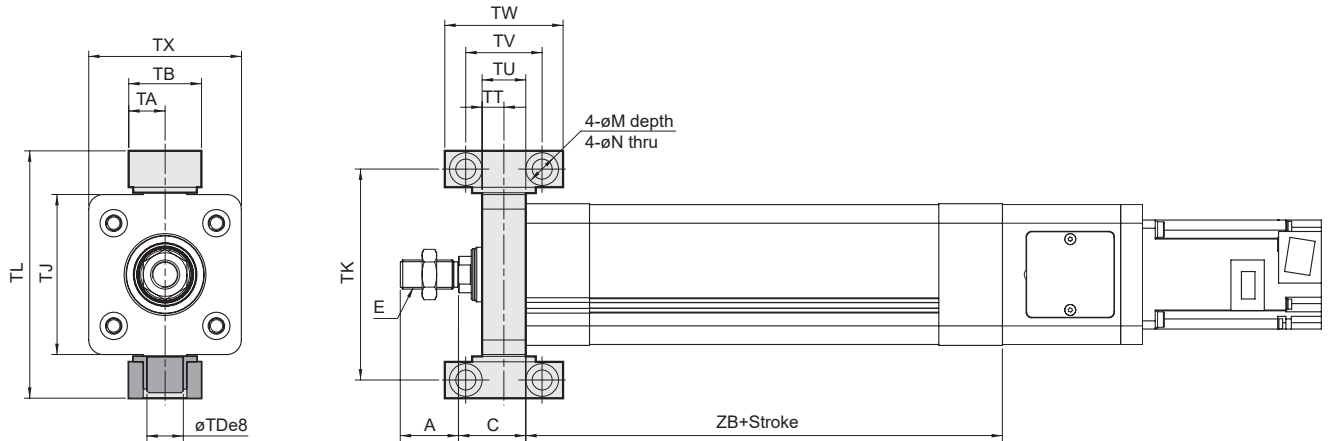
Code Size	A	DA	DB	DC	DD	DE	DF	DG	DH	DI	DL	DS	DT	DX	DY	E	X	ZT
32	22	26	50	30	38	18	6	6	6.6	10	1.5	32	8	101	21	M10×1.25	45	176.5
40	24	28	54	35	41	22	6.5	6.5	6.6	12	1.5	36	10	116.5	24	M12×1.25	53	225.5
50	32	32	65	45	50	30	7.5	7.5	9	12	1.5	45	12	151.0	33	M16×1.5	64	266
63	32	40	67	50	52	35	7.5	7.5	9	16	1.5	50	12	149.5	37	M16×1.5	78	281

TC * For (BA) motor turned type usage, the stroke must exceed 250mm.



Code Size	A	C	E	M	N	TA	TB	TD	TF	TJ	TK	TL	TT	TU	TV	TW	TX	ZB
32	22	25.5	M10×1.25	11×6.8	6.6	15	30	12	44.5	50	71	86	12.5	25	32	46	65	87
40	24	30.5	M12×1.25	15×8.8	9	18	36	16	64	63	87	105	14	28	36	55	75	131
50	32	37	M16×1.5	15×9	9	18	36	16	113	75	99	117	16	32	36	55	85	152
63	32	37	M16×1.5	18×11	11	20	40	20	118	90	116	136	17.5	35	42	65	100	162

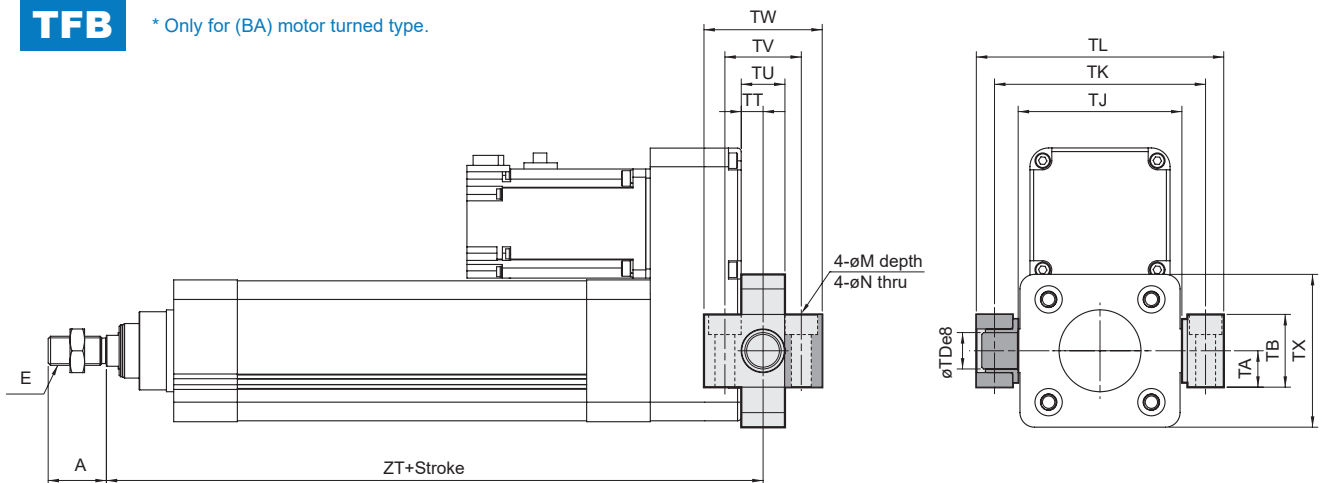
TFA



Code Size	A	C	E	M	N	TA	TB	TD	TJ	TK	TL	TT	TU	TV	TW	TX	ZB
32	22	25.5	M10×1.25	11×6.8	6.4	15	30	12	50	71	90	7	14	32	46	65	87
40	24	30.5	M12×1.25	15×8.8	9	18	36	16	63	87	105	10	20	36	55	54	131
50	32	37	M16×1.5	15×9	9	18	36	16	75	99	117	9.5	19	36	55	69	152
63	32	37	M16×1.5	18×11	11	20	40	20	90	116	136	12	24	42	65	84	162

TFB

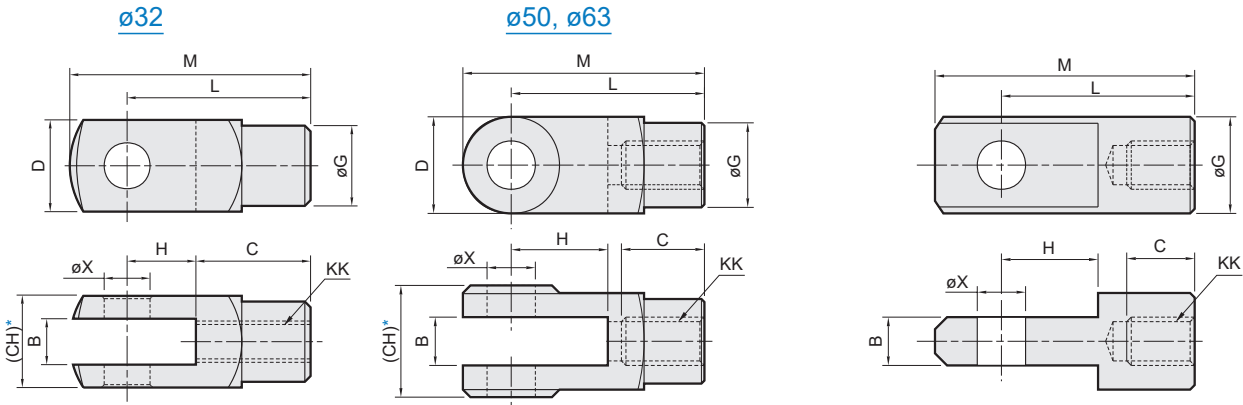
* Only for (BA) motor turned type.



Code Size	A	E	M	N	TA	TB	TD	TJ	TK	TL	TT	TU	TV	TW	TX	ZT
32	22	M10×1.25	11×6.8	6.4	15	30	12	50	71	90	7	14	32	46	65	161.5
40	24	M12×1.25	15×8.8	9	18	36	16	63	87	105	10	20	36	55	54	210.5
50	32	M16×1.5	15×9	9	18	36	16	75	99	117	9.5	19	36	55	69	248.5
63	32	M16×1.5	18×11	11	20	40	20	90	116	136	12	24	42	65	84	261.0

Y connector

I connector

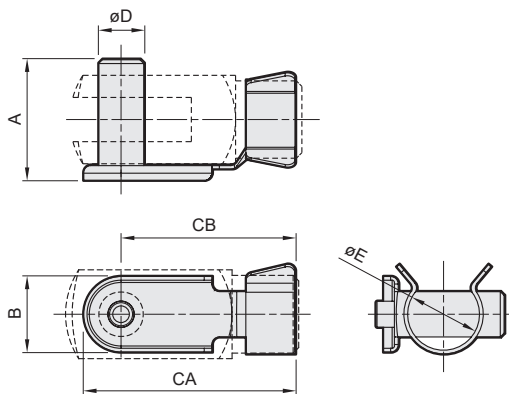


* Please do not use the sand casting plate as datum plane, because we do not machine it. If you have this special demand, please contact our sales representative.

Code Tube I.D.	B		C		CH		D		G		H		KK		L		M		X ^{H9}
	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I	
32	10 ^{+0.5/+0.15}	10 ^{-0.1/-0.2}	20	17	19	—	19	—	ø18	ø20	20	15	M10×1.25	40	40	52	52	ø10 ^{+0.04/0}	
40	12 ^{+0.5/+0.15}	12 ^{-0.1/-0.2}	24	21	22	—	22	—	ø20	ø24	24	18	M12×1.25	48	48	62	62	ø12 ^{+0.04/0}	
50	16 ^{+0.3/+0.1}	16 ^{-0.1/-0.3}	28	23	32	—	32	—	ø28	ø32	32	32	M16×1.5	64	64	89	86	ø16 ^{+0.04/0}	
63	16 ^{+0.3/+0.1}	16 ^{-0.1/-0.3}	28	23	32	—	32	—	ø28	ø32	32	32	M16×1.5	64	64	89	86	ø16 ^{+0.04/0}	

PIN

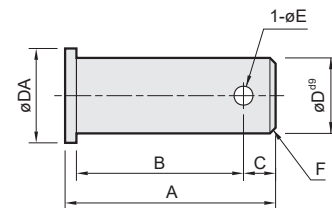
S



for floating pin

Code Tube I.D.	A	B	CA	CB	D ^{d9}	E
32	26	14	45	38	ø10 ^{-0.04/-0.07}	17
40	31	16	54	46	ø12 ^{-0.05/-0.09}	19
50,63	42	20	70	60	ø16 ^{-0.05/-0.09}	27

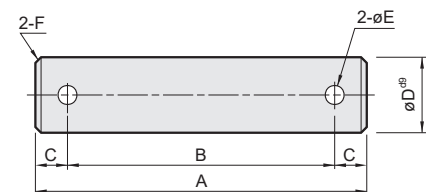
P



for Y & I connector

Code Tube I.D.	A	B	C	D ^{d9}	DA	E	F	Split pin
32	30	25	3.5	ø10 ^{-0.06/-0.09}	14	3.2	1	3.2×20L
40	37	30	5	ø12 ^{-0.06/-0.09}	16	3.2	1	3.2×20L
50,63	47	37	7	ø16 ^{-0.05/-0.09}	22	4	1	4×25L

P



for CA & CB

Code Tube I.D.	A	B	C	D ^{d9}	E	F	Split pin
32	69	55	7	ø10 ^{-0.05/-0.09}	4	1.0	4×20L
40	76	62	7	ø12 ^{-0.05/-0.09}	4	1.0	4×20L
50	84	70	7	ø12 ^{-0.05/-0.09}	4	1.0	4×20L
63	94	80	7	ø16 ^{-0.05/-0.09}	4	1.0	4×30L