

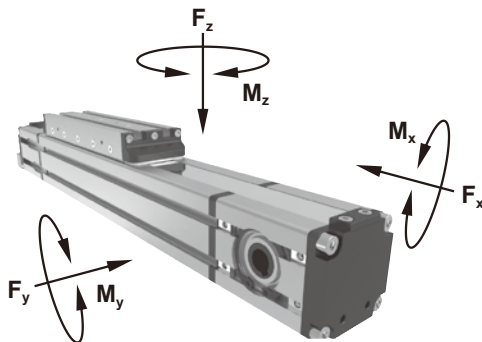


Max values for dynamic conditions.

Please refer to the following formula when combined loads are applied.

$$\frac{F_{yA}}{F_y} + \frac{F_{zA}}{F_z} + \frac{M_{xA}}{M_x} + \frac{M_{yA}}{M_y} + \frac{M_{zA}}{M_z} \leq 1$$

* The A letters show the calculated value.



Features

- Belt driven unit with railway integrated.
- Extruded aluminum anodized 6060 alloy, tempered stainless steel protection band.
- Carriage with sealed system to protect against pollution.

Specification

Model		METB		
Size	mm	42	55	80
Max. speed	m/s	3	3	3
Max. stroke length	mm	6000	6000	6000
Min. stroke length	mm	100	100	100
Pulley drive ratio	mm	90	120	160
Number of teeth of pulley	mm	18	24	32
Teeth belt with steel reinforced polyurethane ATL 5 profile clearance 0, width	mm	12	16	25
Max rpm	g/min	2000	1500	1150
Base weight	Kg	1.6	4.4	6
Add for 100 mm of stroke	Kg	0.25	0.37	0.9
Max. load	Fx N	460	820	1650
	Fy N	1560	1850	4500
	Fz N	1560	1850	4500
Moments	Mx Nm	20	25	80
	My Nm	55	120	450
	Mz Nm	55	120	450
Inertia moment aluminum profile	Ix cm ⁴	11.8	36	183
	Iy cm ⁴	14.2	45	226
Repeatability	mm	±0.05	±0.05	±0.05
Max. radial load on input shaft	N	220	300	300
No load torque	Nm	>0.1	>0.5	0.9
Sensor switch (*)		RCI		

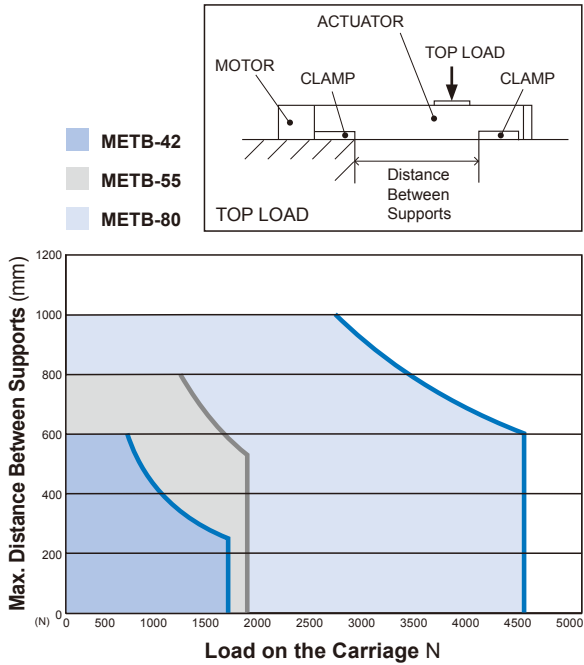
* RCI specification, please refer to page 5-7.

Order example

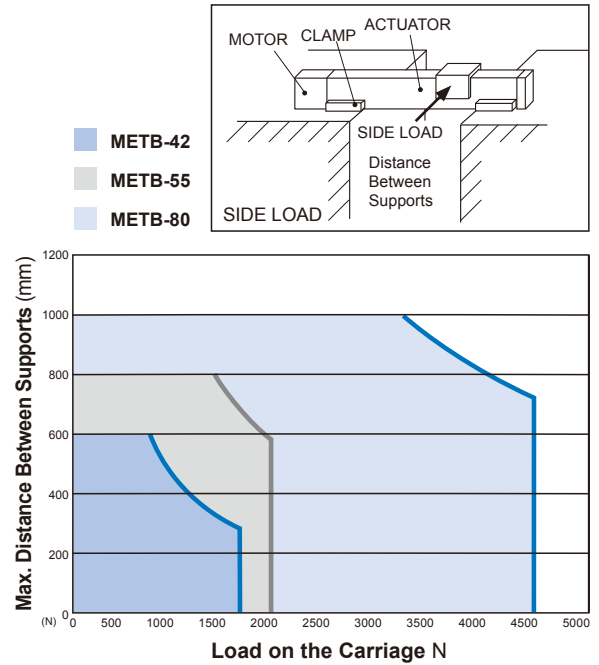
METB - 42 - 0100 - F08 L - EM2A

Model	Size (mm)	Stroke	Shaft versions				Male shaft		Accessory		
METB			Size	Type	ø	Part No.	L	Left shaft	E	End cap mounting	
Female shaft	42 42×42	100-6000 mm (4 codes) <small>* Minimum stroke unit 1mm.</small>	42	Female shaft	8	F08	R	Right shaft	M□ ^{*1}	Mid section mounting	
	55 55×55			Male shaft	12	M12		A□ ^{*2}	Limit switch adapters		
	80 80×80			Double male shaft	12	D12		*A type only for size 80.			
								*1. Number of accessory			
Male shaft			55	Female shaft	8	F08			Blank	1 set (2 pcs)	
		Male shaft		16	M16			2	2 set (4 pcs)		
		Double male shaft		16	D16			n	"n" set (n×2 pcs)		
Double male shaft			80	Female shaft	19	F19			*2. Number of accessory		
		Male shaft		19	M19			Blank	1 pc		
		Double male shaft		19	D19			2	2 pcs		
									n	"n" pcs	

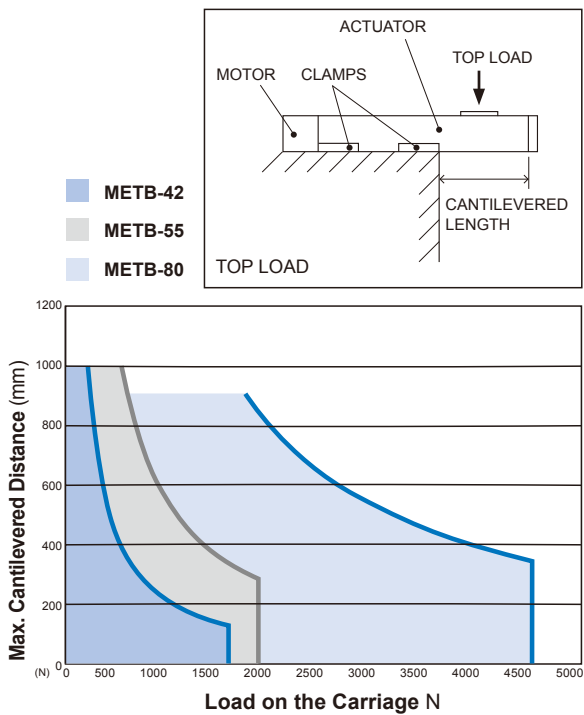
End supported top load



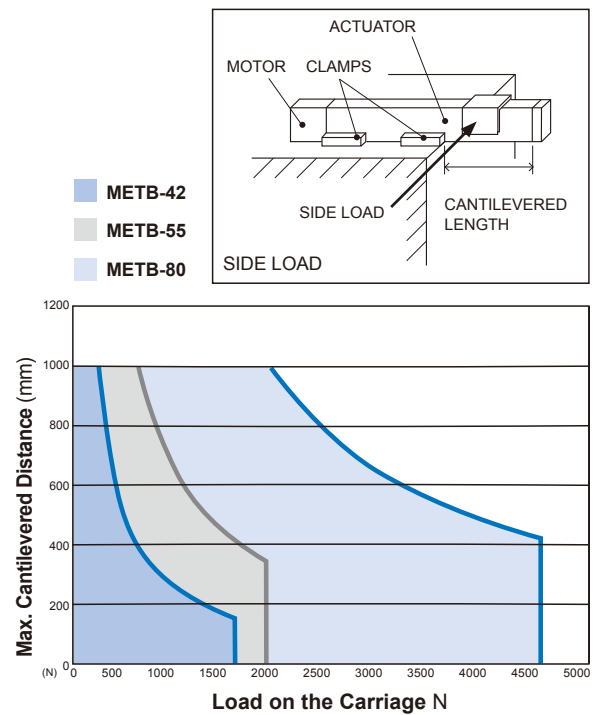
End supported side load



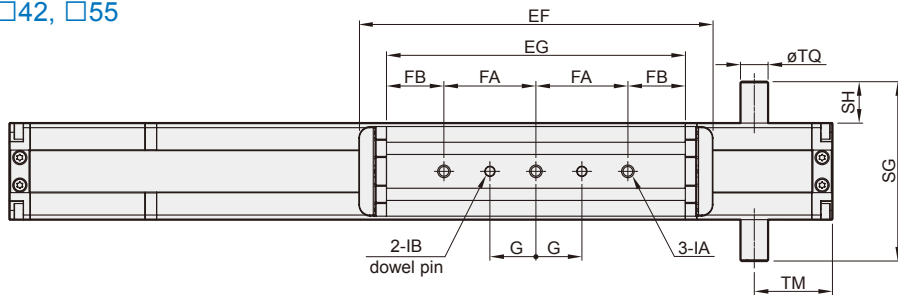
Cantilevered top load



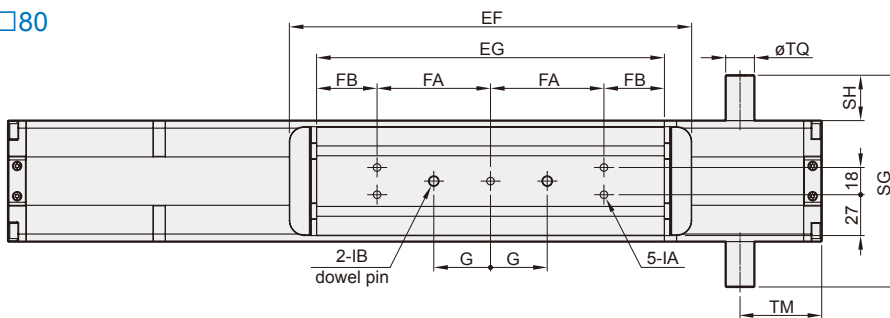
Cantilevered side load



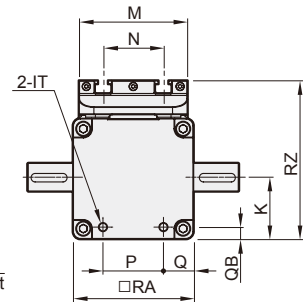
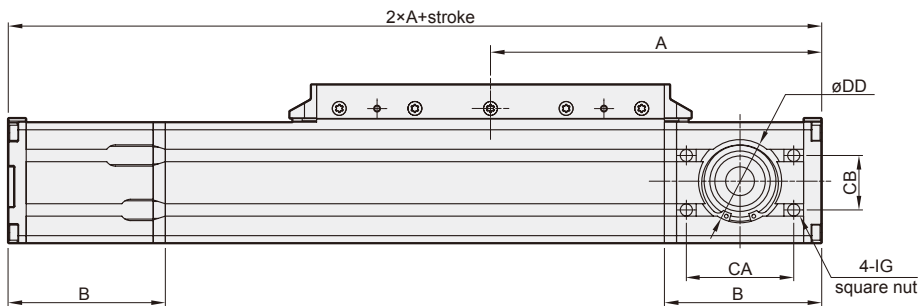
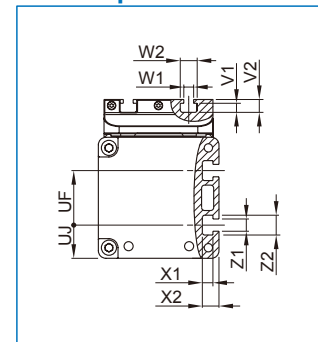
□42, □55



□80

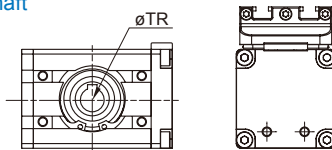


Groove position

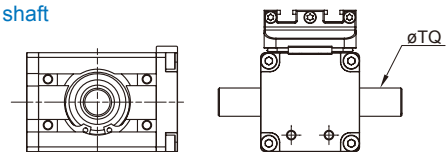


Shaft versions

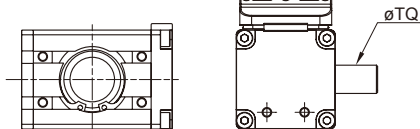
Female shaft



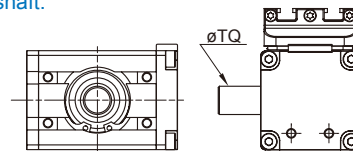
Double male shaft



Single male shaft:
side right



Single male shaft:
side left

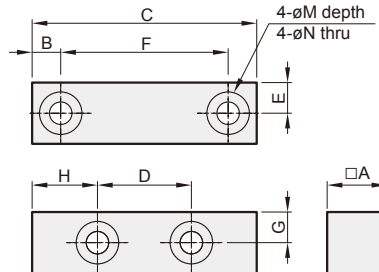


Code Tube I.D.	A	B	CA	CB	DD	EF	EG	FA	FB	G	IA	IB	IG
42	129	64	max. 42	19.5	∅28×H7×1.5 depth	154	130	40	25	20	M5×0.8×5 depth	∅4×H7×5 depth	M5×0.8 DIN 562
55	166	88	max. 55	22	∅32×H7×1.5 depth	190	150	55	20	30	M5×0.8×7.5 depth	∅5×H7×5 depth	M5×0.8 DIN 562
80	219	104	max. 71	35.9	∅55×H7×1.5 depth	266	230	75	40	37.5	M6×1.0×10 depth	∅6×H7×10 depth	M8×1.25 DIN 562

Code Tube I.D.	IT	K	M	N	P	Q	QB	RA	RZ	SG	SH	TM	TQ	TR	UF	UJ	V1	V2	W1	W2	X1	X2	Z1	Z2
42	M4×7 depth	21	39	20	16	13	7	42	60	82	20	34	12	8	19.5	11	3.2	4.9	5.3	8.6	3.2	4.9	5.3	8.6
55	M5×7 depth	25	50	28	23	16	8	55	76	92	18.5	48.5	16	8	22	16.5	4.2	6.2	5.2	8.4	4.3	6.3	5.3	8.6
80	M6×8 depth	41	72	40	40	20	8	80	105	140	30	54	19	19	36	22	6	8.5	6.5	11.2	7	11	8.2	13.2

End cap mounting

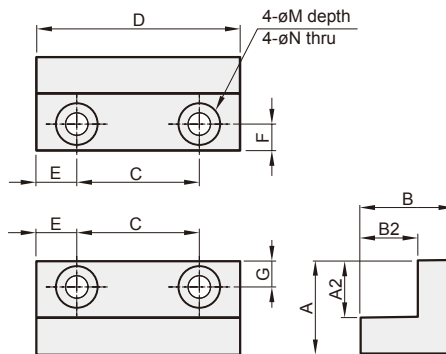
(2 pcs/set)



Code Size	A	B	C	D	E	F	G	H	M	N	Order number
METB-42	14	5	42	16	7	32	7	13	8×4.4 depth	4.5	ETB42-1
METB-55	15	7	55	23	7.5	41	7	16	10×5 depth	5.5	ETB55-1
METB-80	16	8	80	40	8	64	8	20	11×6 depth	6.6	ETB80-1

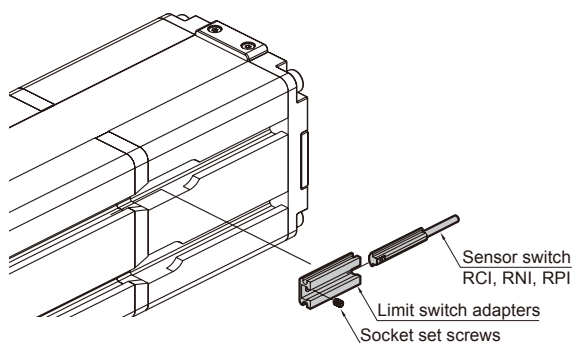
Mid section mounting

(2 pcs/set)



Code Size	A	A2	B	B2	C	D	E	F	G	M	N	Order number
METB-42	17	12	17	12	25	40	7.5	6	6	10×3.5 depth	5.5	ETB42-2
METB-55	23	14	23	14	30	50	10	6.5	6.5	10×5.5 depth	5.5	ETB55-2
METB-80	32	19	34	21	40	60	10	8	10	15×8.6 depth	9	ETB80-2

Installation of sensor switch



Limit switch adapters

ETB80-3 (Only for size 80)

