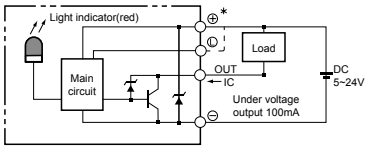
METS-6M series

SLIDER ELECTRIC CYLINDER - BALL SCREW DRIVE (WITHOUT MOTOR)



Sensor layout



Specification

Model		METS-6M		
Repeatability (mm)		±0.01		
Belt lead (mm)		2	5	10
Stroke (mm)		100~800 / 50 pitch		
Ball screw ø (mm)		C7ø12		
High rigidity linear guide (mm)		W42×H9.5		
Home sensor	Outside	EE-SX672 (NPN)		
	Built in	-		
Stepping motor		**□57**		
Max. speed (mm/s)		16	41	83
Rated thrust (N)		1225	490	245
Max. payload (kg)	Horizontal	30	30	15
	Vertical	15	10	5
Coupling (mm)		7×6.35		
Max. static torque (N.m)		0.39		
Servo motor		**100 W**		
Max. speed (mm/s)		100	250	500
Rated thrust (N)		854	341	170
Max. payload (kg)	Horizontal	30	30	15
	Vertical	15	10	5
Coupling (mm)		7×8		

* When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown.

Order example

METS-6M — L05 — 100 — BC — 57M — C4 — M5 — 0001

M10B

Model / **Spec.**

Stroke: **100~800** mm, 50 mm pitch

Installation hole

-	Upwards lock type
M5	Down lock type

Special order no.

Ball screw brand

L	T-Standard MIT

Ball screw lead

02	2 mm
05	5 mm
10	10 mm

Motor position

BC	Exposed
BM	On lower side
BR	On right side
BL	On left side

Stepping motor brand

	□42 STEP motor
57M	Tamagawa (TS3653N1E2)
	Oriental (PK264-02A)
	Sanyo (103H7121-0140)

Home sensor

	Out side
C	Motor side
D	Opposite motor side
	No sensor
E	None

Limit sensor

	Out side
3	1 Pc
4	2 Pcs
	No sensor
5	None

Motor brand, power output, brakes

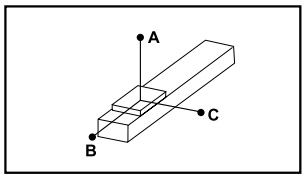
100W SERVO motor				
M	Mitsubishi	10	100W	B
P	Panasonic			
Y	Yaskawa			
T	Delta			

* Need not show **B** with no brake.

METS-6M Performance charts

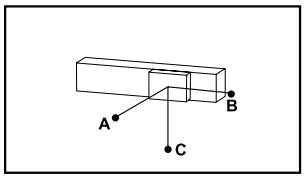
SLIDER ELECTRIC CYLINDER - BALL SCREW DRIVE (WITHOUT MOTOR)

Allowable overhang N.m



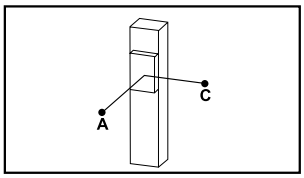
Unit: mm

Horizontal installation		A	B	C
Lead 2	10kg	898	34	120
	30kg	350	0	27
	-	-	-	-
Lead 5	10kg	374	33	109
	30kg	159	0	25
	-	-	-	-
Lead 10	3kg	624	125	335
	8kg	273	41	121
	15kg	216	24	77



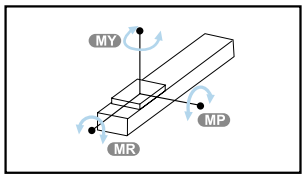
Unit: mm

Wall installation		A	B	C
Lead 2	15kg	25	0	110
	30kg	0	0	0
	-	-	-	-
Lead 5	5kg	204	45	530
	10kg	72	0	245
	30kg	0	0	0
Lead 10	3kg	293	96	510
	8kg	89	14	210
	15kg	43	0	130



Unit: mm

Vertical installation		A	C
Lead 2	5kg	58	58
	15kg	0	0
	-	-	-
Lead 5	2kg	171	172
	4kg	73	74
	10kg	23	26
Lead 10	1kg	355	352
	2kg	165	165
	5kg	70	72



Unit: N.m

Static loading moment	
MY	70
MP	80
MR	75

Standard stepping motors

Brand	Max static torque	AC-Voltage	Stepping motor model	Compatible driver model
Tamagawa	0.39	DC24V	2-phase-TS3653N1E2	CD-2D34M 200/400/800/1600 P/rev
Oriental	0.39	DC24V	2-phase-PK264-02A	CMD2120P 200/400/800/1600/3200 P/rev
Sanyo	0.39	DC24V	2-phase-103H7121-0140	CMD2120P 200/400/800/1600/3200 P/rev

Standard servo motors

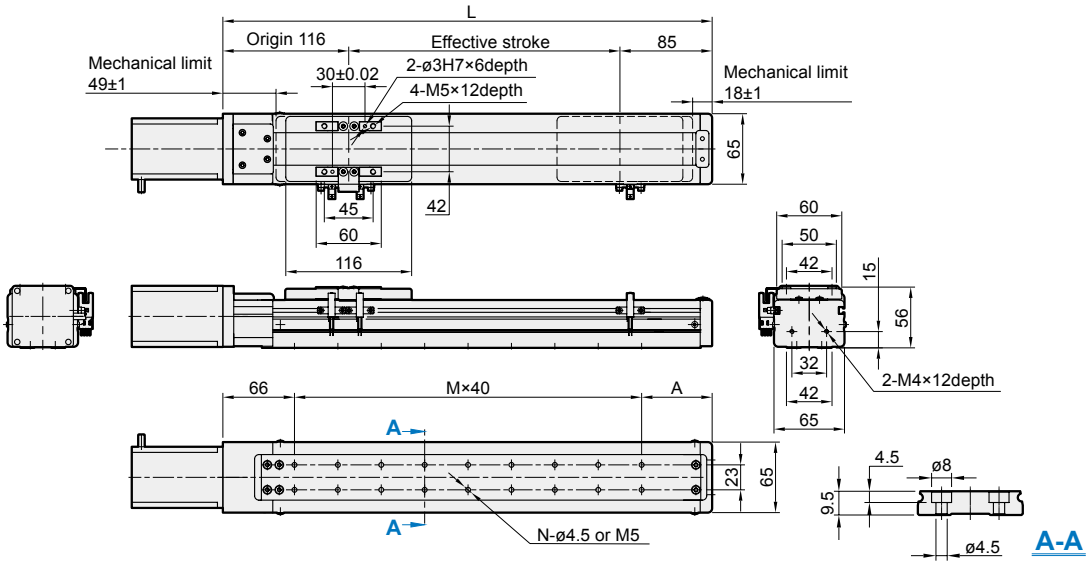
Brand	Mark	Brake	Watp	AC-Voltage	Motor model	Compatible driver model
Mitsubishi	**M**	No brake(Horizontal type)	100	220	HP-KP13	MR-J3-10A
		With brake(Vertical type)	100	220	HP-KP13B	MR-J3-10A
Panasonic	**P**	No brake(Horizontal type)	100	220	MSMD012P1S	MADDT1205
		With brake(Vertical type)	100	220	MSMD012P1T	MADDT1205
Delta	**T**	No brake(Horizontal type)	100	220	ECMA-C20401ES	ASD-B20121-B
		With brake(Vertical type)	100	220	ECMA-C20401FS	ASD-B20121-B

METS-6M Stepping motor □57 / Dimensions

SLIDER ELECTRIC CYLINDER - BALL SCREW DRIVE (WITHOUT MOTOR)

BC

Motor exposed

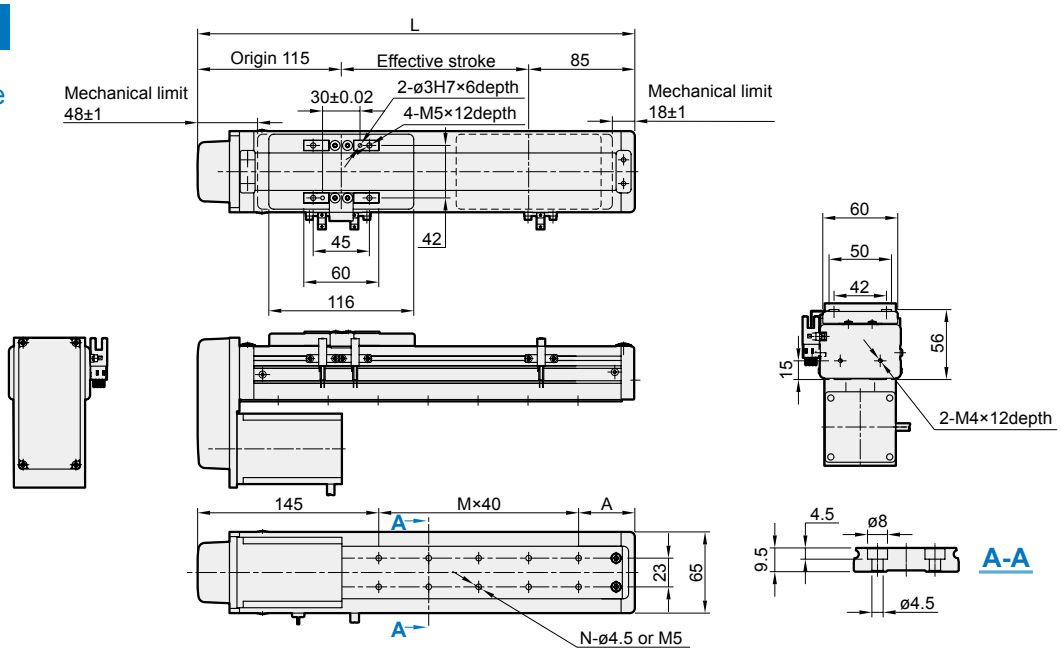


Unit: mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	301	351	401	451	501	551	601	651	701	751	801	851	901	951	1001
A	35	45	55	65	35	45	55	65	35	45	55	65	35	45	55
M	5	6	7	8	10	11	12	13	15	16	17	18	20	21	22
N	12	14	16	18	22	24	26	28	32	34	36	38	42	44	46
KG	2.82	3.05	3.27	3.5	3.72	3.94	4.17	4.39	4.62	4.84	5.06	5.29	5.51	5.74	5.94

BM

Motor on lower side



Unit: mm

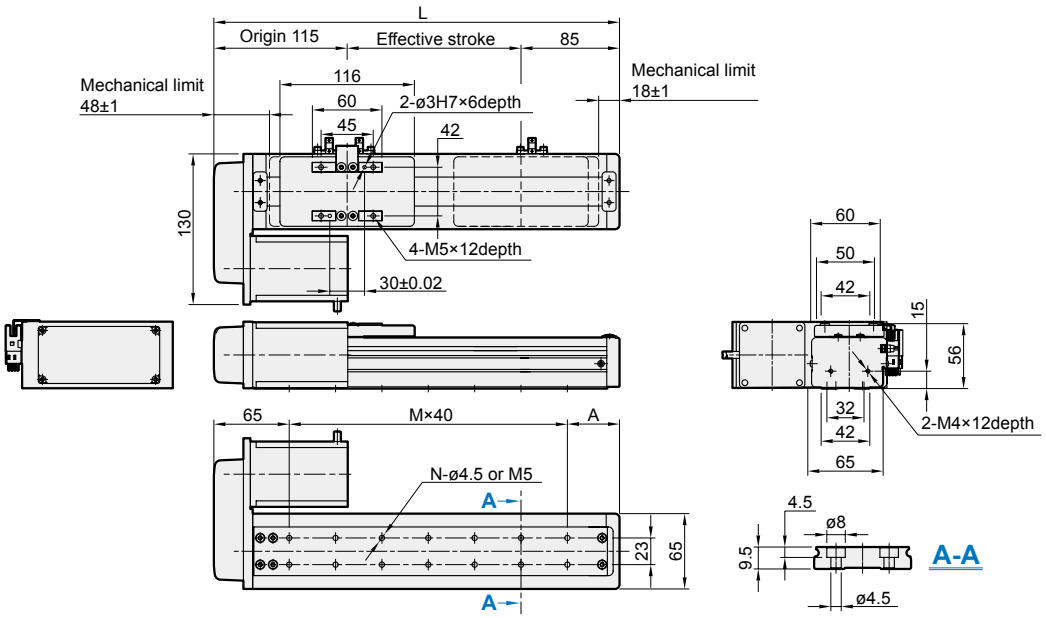
Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	35	45	55	65	35	45	55	65	35	45	55	65	35	45	55
M	3	4	5	6	8	9	10	11	13	14	15	16	18	19	20
N	8	10	12	14	18	20	22	24	28	30	32	34	38	40	42
KG	2.86	3.09	3.31	3.54	3.77	3.99	4.22	4.44	4.67	4.9	5.12	5.35	5.57	5.8	5.99

METS-6M Stepping motor □57 / Dimensions

SLIDER ELECTRIC CYLINDER - BALL SCREW DRIVE (WITHOUT MOTOR)

mindman

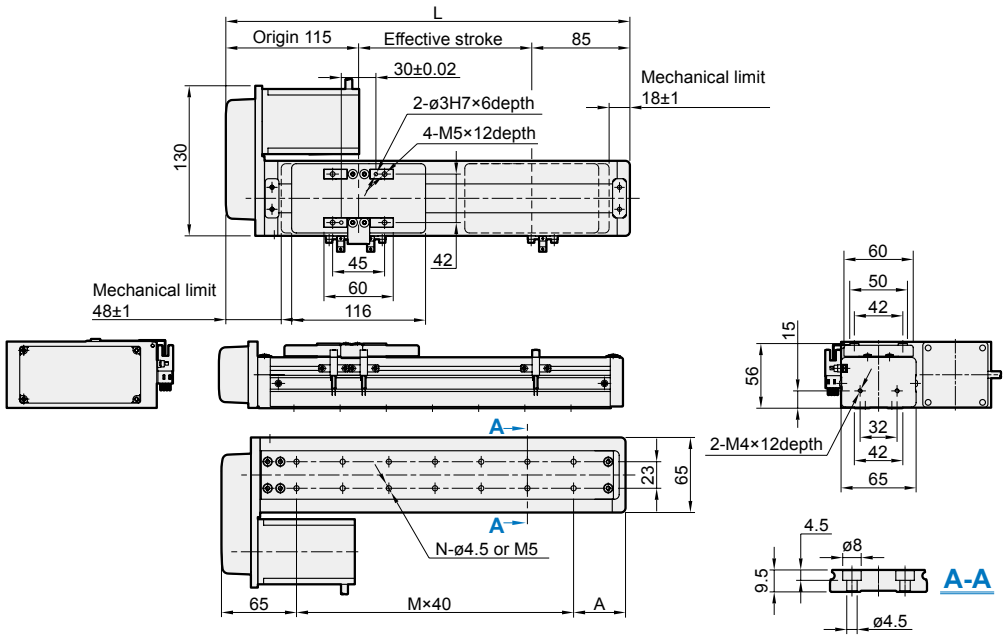
BL
Motor on left side



Unit: mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	35	45	55	65	35	45	55	65	35	45	55	65	35	45	55
M	5	6	7	8	10	11	12	13	15	16	17	18	20	21	22
N	12	14	16	18	22	24	26	28	32	34	36	38	42	44	46
KG	2.86	3.09	3.31	3.54	3.77	3.99	4.22	4.44	4.67	4.9	5.12	5.35	5.57	5.8	5.99

BR
Motor on right side



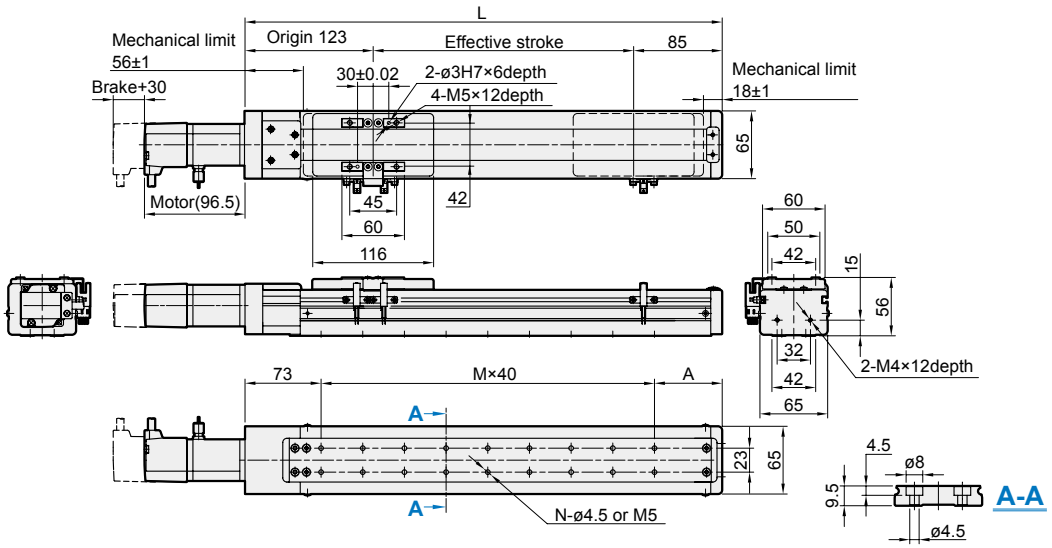
Unit: mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	35	45	55	65	35	45	55	65	35	45	55	65	35	45	55
M	5	6	7	8	10	11	12	13	15	16	17	18	20	21	22
N	12	14	16	18	22	24	26	28	32	34	36	38	42	44	46
KG	2.86	3.09	3.31	3.54	3.77	3.99	4.22	4.44	4.67	4.9	5.12	5.35	5.57	5.8	5.99

METS-6M Servo motor 100W / Dimensions

SLIDER ELECTRIC CYLINDER - BALL SCREW DRIVE (WITHOUT MOTOR)

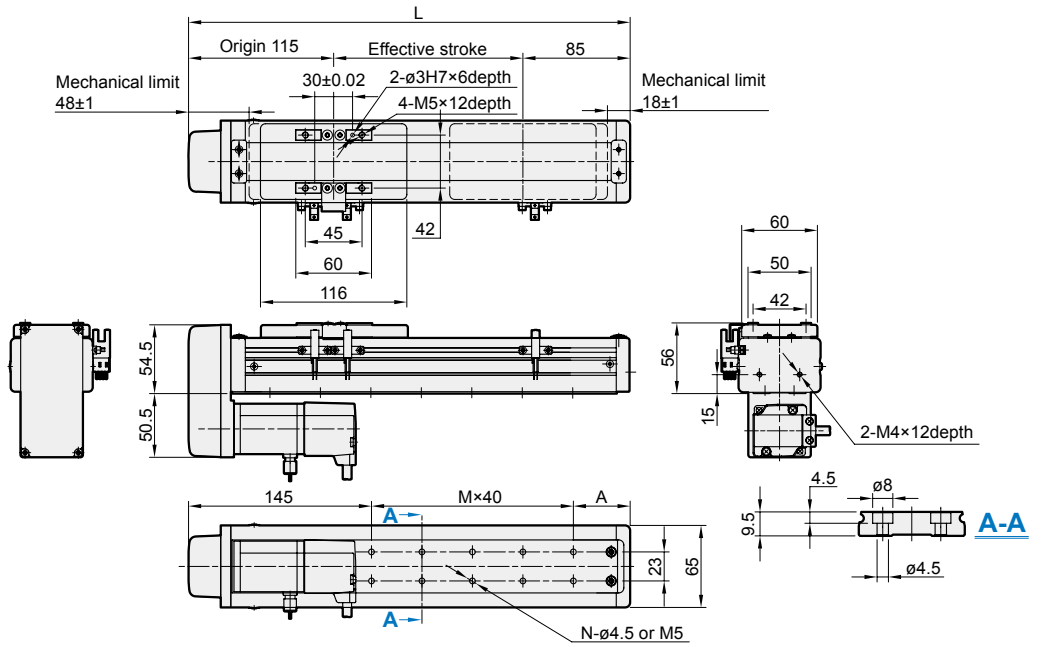
BC
Motor exposed



Unit: mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008
A	35	45	55	65	35	45	55	65	35	45	55	65	35	45	55
M	5	6	7	8	10	11	12	13	15	16	17	18	20	21	22
N	12	14	16	18	22	24	26	28	32	34	36	38	42	44	46
KG	2.82	3.05	3.27	3.5	3.72	3.94	4.17	4.39	4.62	4.84	5.06	5.29	5.51	5.74	5.94

BM
Motor on lower side



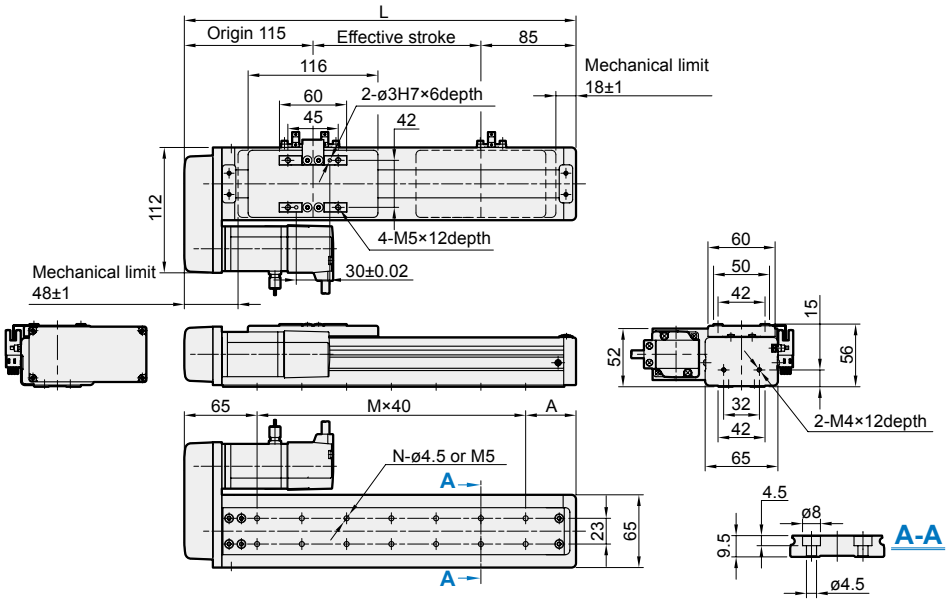
Unit: mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	35	45	55	65	35	45	55	65	35	45	55	65	35	45	55
M	3	4	5	6	8	9	10	11	13	14	15	16	18	19	20
N	8	10	12	14	18	20	22	24	28	30	32	34	38	40	42
KG	2.86	3.09	3.31	3.54	3.77	3.99	4.22	4.44	4.67	4.9	5.12	5.35	5.57	5.8	5.99

METS-6M Servo motor 100W / Dimensions

SLIDER ELECTRIC CYLINDER - BALL SCREW DRIVE (WITHOUT MOTOR)

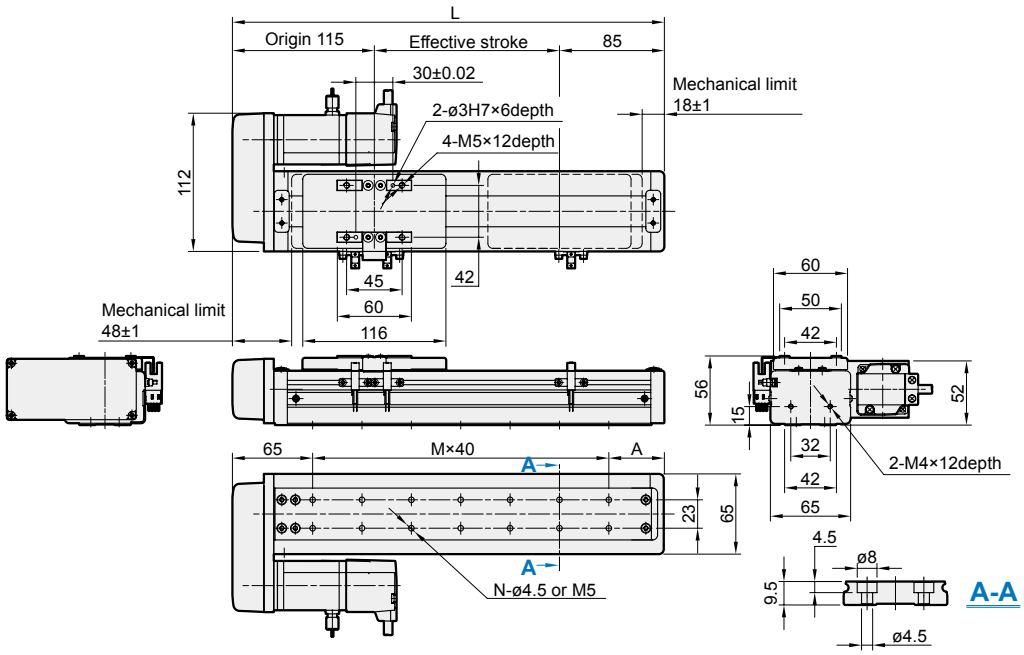
BL
Motor on left side



Unit: mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	35	45	55	65	35	45	55	65	35	45	55	65	35	45	55
M	5	6	7	8	10	11	12	13	15	16	17	18	20	21	22
N	12	14	16	18	22	24	26	28	32	34	36	38	42	44	46
KG	2.86	3.09	3.31	3.54	3.77	3.99	4.22	4.44	4.67	4.9	5.12	5.35	5.57	5.8	5.99

BR
Motor on right side



Unit: mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	35	45	55	65	35	45	55	65	35	45	55	65	35	45	55
M	5	6	7	8	10	11	12	13	15	16	17	18	20	21	22
N	12	14	16	18	22	24	26	28	32	34	36	38	42	44	46
KG	2.86	3.09	3.31	3.54	3.77	3.99	4.22	4.44	4.67	4.9	5.12	5.35	5.57	5.8	5.99