

METG-4 series

SLIDER ELECTRIC CYLINDER – BUILT-IN GUIDEWAY (WITHOUT MOTOR)



Specification

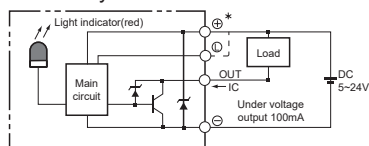
Model	METG-4		
Positioning repeatability (mm)	±0.005		
Ball screw lead (mm)	2	6	12
Max. speed (*1) (mm/s)	100	300	600
AC servo motor (W)	50, 100		
Max. payload (*2)	Horizontal (kg)	25	20
	Vertical (kg)	8 (8)	5 (8)
Rated thrust (N)	424	414	71
Stroke (*3) (mm)	50~800 / 50 pitch		
Ball screw (mm)	C7ø8		
Coupling (mm)	7×8		
Home sensor	EE-SX674 (NPN)		

*1. Acceleration and deceleration value is set 0.2 second.

*2. () The value for power output 100W.

*3. When the stroke is over 550mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstance.

Sensor layout



Order example

METG – 4 – L02 – 100 – BC – M05 – C4

Model

Size

Stroke

50~800 mm

50 mm pitch

Ball screw lead

L02	2 mm
L06	6 mm
L12	12 mm

Motor position

BC	Direct connection
BM	Lower side
BR	Right side
BL	Left side

Motor brand, power output

SERVO motor			
M	Mitsubishi	05 10	50W 100W
	Yaskawa		
	Delta		
P	Panasonic		

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

* When the stroke is 50mm, the sensor installation has the following restrictions.

1. Home sensor and limit sensor has to be installed on the different side of body.
2. Both sides of slider need to install the sensor trigger device.

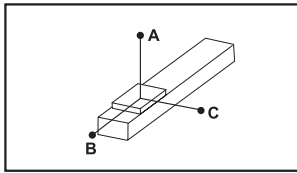
METG-4 Performance charts



SLIDER ELECTRIC CYLINDER – BUILT-IN GUIDEWAY (WITHOUT MOTOR)

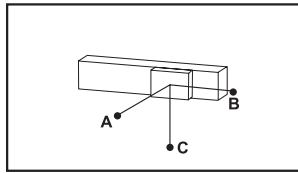
Mindman

Allowable overhang



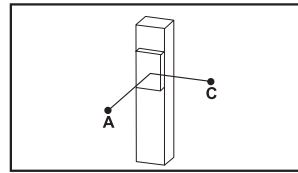
Unit: mm

Horizontal installation		A	B	C
Lead 2	12kg	1000	55	80
	18kg	750	35	50
	25kg	500	23	32
Lead 6	10kg	550	53	70
	15kg	350	32	45
	20kg	250	22	31
Lead 12	8kg	305	59	75
	10kg	240	45	57
	12kg	195	37	47



Unit: mm

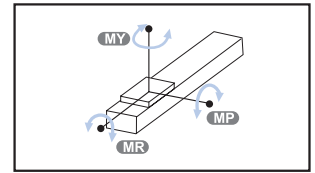
Wall installation		A	B	C
Lead 2	12kg	80	55	1000
	18kg	50	35	750
	25kg	32	23	500
Lead 6	10kg	72	52	550
	15kg	45	32	345
	20kg	31	22	250
Lead 12	8kg	75	59	300
	10kg	45	32	240
	12kg	31	22	250



Unit: mm

Vertical installation		A	C
Lead 2	4kg	200 (195)	200 (195)
	8kg	100	100
Lead 6	3kg	200 (150)	200 (150)
	5kg	120 (75)	120 (75)
Lead 12	1.5kg	350 (260)	350 (260)
	2kg	260 (150)	260 (150)

Static loading moment



Unit: N.m

MY	79
MP	79
MR	116

- The torque value in the chart indicate the center of gravity.
- Operation life is 10000km when the product is using under the specified conditions.
- Data information is not for ceiling-mount inverse use.
Contact us for the details if you want to apply ceiling-mount inverse usage.
- () The value for power output 100W.

Standard servo motors

Brand	Mark	Power output	Motor model (Without brake)	Motor model (With brake)	Motor rod dia -shaft length (mm)	Centring collar diameter (mm)	Centring collar depth (mm)	Motor mount P.C.D (mm)	Mounting port (mm)
Mitsubishi	M	50W	HG-KR053	HG-KR053B	ø8-25	ø30	2.5	ø46	2-ø4.5
		100W	HG-KN13J	HG-KN13BJ	ø8-25	ø30	2.5	ø46	2-ø4.5
Yaskawa		50W	SGM7J-A5A7D61	SGM7J-A5A7D6C	ø8-25	ø30	2.5	ø46	2-ø4.3
		100W	SGM7J-01A7A21	SGM7J-01A7A2C	ø8-25	ø30	2.5	ø46	2-ø4.3
Delta		50W	ECMA-C1040FES	ECMA-C1040FFS	ø8-25	ø30	2.5	ø46	2-ø4.5
		100W	ECMA-C20401ES	ECMA-C20401FS	ø8-25	ø30	2.5	ø46	2-ø4.5
Panasonic	P	50W	MSMD5A2G1U	MSMD5A2G1V	ø8-25	ø30	3	ø45	4-ø3.4
		100W	MSMF012L1U2M	MSMF012L1V2M	ø8-25	ø30	3	ø45	4-ø3.4

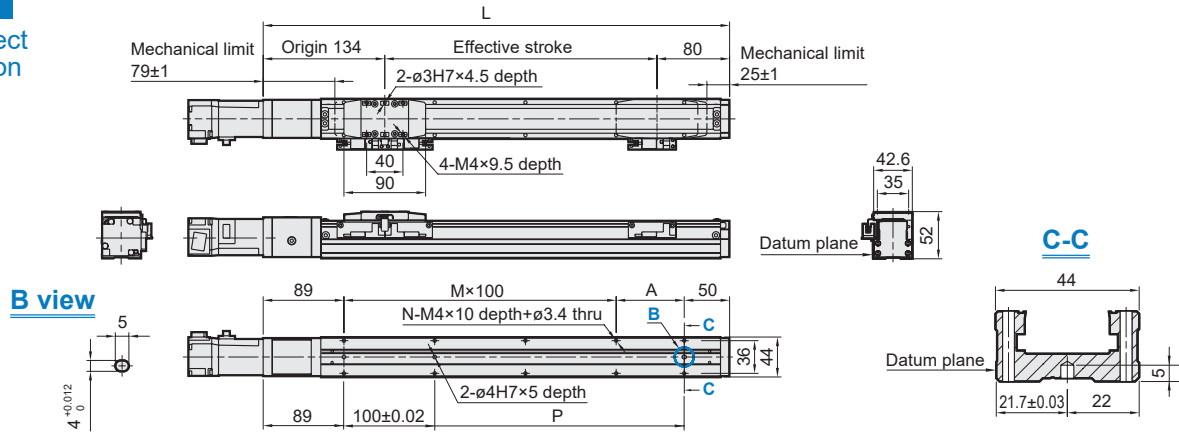
METG-4 Dimensions

SLIDER ELECTRIC CYLINDER – BUILT-IN GUIDEWAY (WITHOUT MOTOR)



BC

Motor direct connection

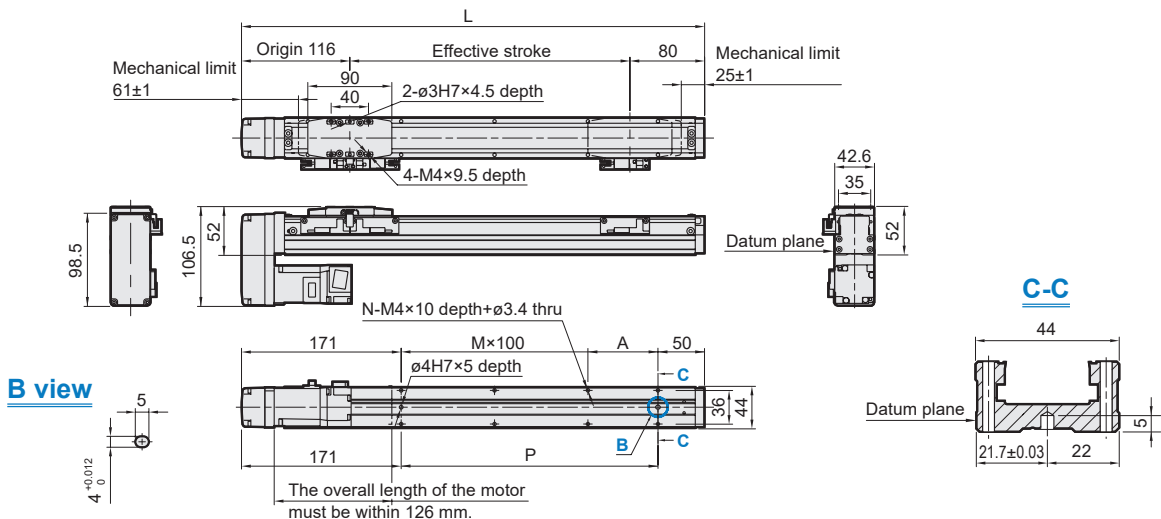


Unit: mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.36	1.61	1.86	2.11	2.35	2.6	2.85	3.1	3.34	3.59	3.84	4.09	4.34	4.59	4.84	5.09

BM

Motor on lower side



Unit: mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	15	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.66	1.91	2.16	2.4	2.65	2.9	3.14	3.39	3.64	3.89	4.14	4.39	4.64	4.89	5.14	5.39

* When motor with brake assembled on down side, or the total length over than spec limit, it may not use standard pinhole. Please contact us if you need more information and requirement.

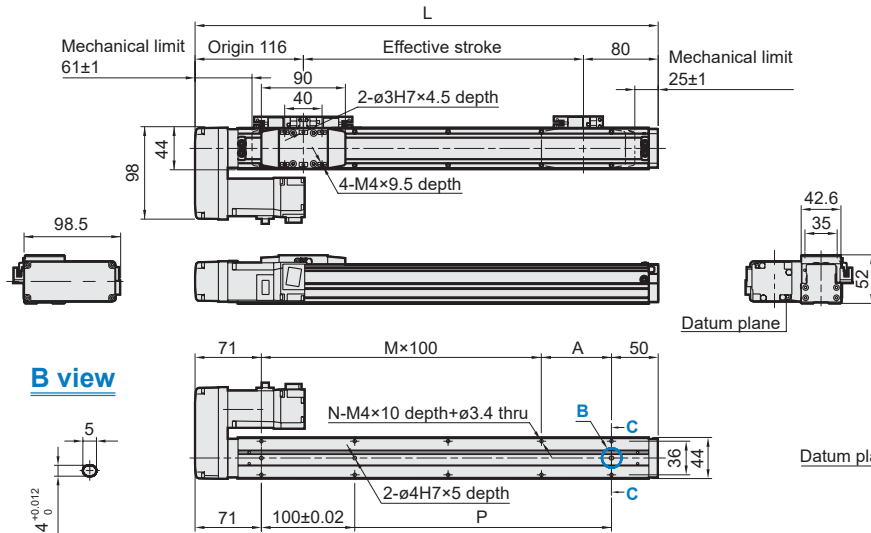
METG-4 Dimensions

SLIDER ELECTRIC CYLINDER – BUILT-IN GUIDEWAY (WITHOUT MOTOR)



BL

Motor on left side



B view

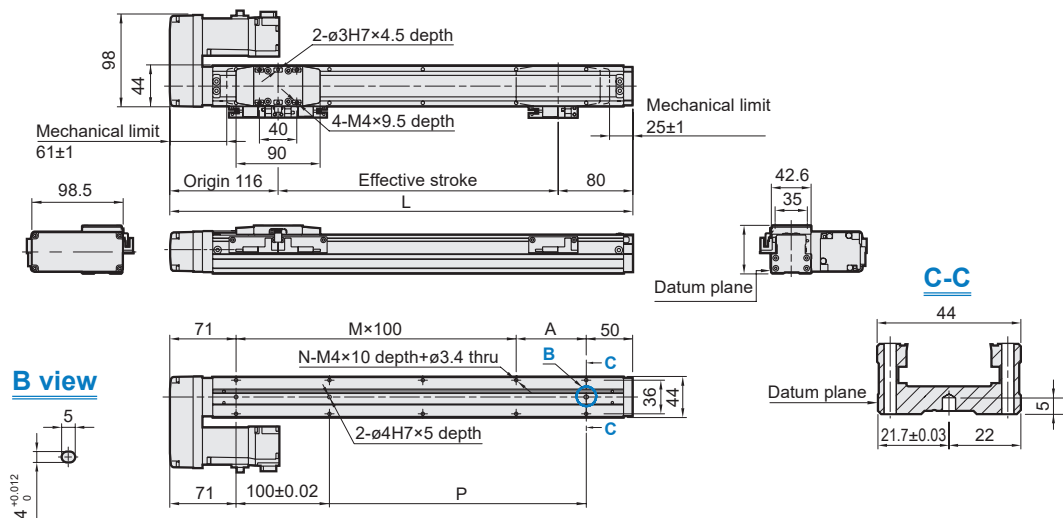
C-C

Unit: mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.66	1.91	2.16	2.4	2.65	2.9	3.14	3.39	3.64	3.89	4.14	4.39	4.64	4.89	5.14	5.39

BR

Motor on right side



B view

C-C

Unit: mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.66	1.91	2.16	2.4	2.65	2.9	3.14	3.39	3.64	3.89	4.14	4.39	4.64	4.89	5.14	5.39