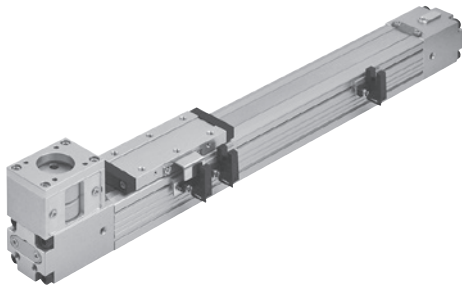


METFB-25 series

SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



Motor type	Servo / Step	Transmission	Timing belt
Environment	Standard	Guide type	Linear guide

Specification

Model	METFB-25	
Positioning repeatability (mm)	±0.05	
Lead (mm/rev)	50	
Belt pitch (mm)	2	
Stroke (mm)	100~1000/50 pitch	
No-load torque (N.m)	0.1	
Slot-type photomicrosensor	RLT (Please refer to page 5-16)	
Motor type	AC servo	Step
Power output / size	100W	□42
Max. speed *1 (mm/s)	1500	500
Work load *2,3	Horizontal (kg)	5
	Vertical (kg)	—

*1. Acceleration and deceleration value is set 0.5 second.

*2. The operating speed under work load is less than maximum speed.

*3. Not available for vertical condition.

Order example of electric cylinder

METFB—25

N

—

1000

BW

—

S42

B

—

A3

—

XA00

Model

Size

Stroke

Special order No.

100~1000 mm
50 mm pitch

Guide installation

Motor position

Motor brand

Flange face

Brakes

Sensor switch

N	Without guide
GR	Guide right side
GL	Guide left side

BW	Top side
BM	Down side

M	Mitsubishi	10	100W Servo
P	Panasonic		
Y	Yaskawa		
D	Delta		
S	Mindman	42	□42 Step*1
B			

—	No brake
B	With brake

—	No sensor
A1	1 pc
A2	2 pcs
A3	3 pcs

* With cable 2m.

* With cable 2m.

*1. Step motors are without brake.

*2. Standard type is without motor.

Please refer to the list of standard motors for flange size.

Order example of controller

CK10		—	03	—	N	—	015
Model		Power + Encoder cable of motor		Switch type		I/O cable length	
CK10	CM20 *1	01	1 m *2	N	NPN	015	1.5 m
			015				3 m
			03				5 m
			05				

*1. Sensors would be needed.

*2. Only for CM20.

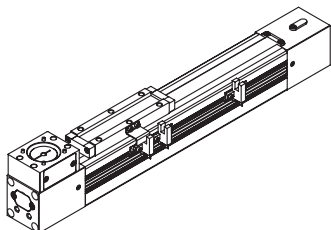
*3. Only for CK10.

METFB-25 Motor specification

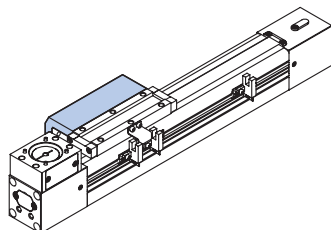
SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



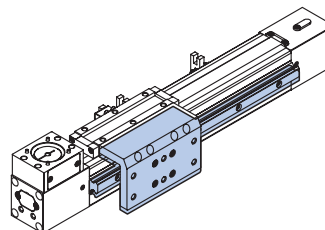
Guide installtion



N Without guide

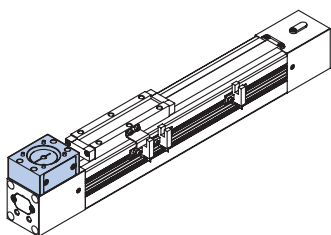


GR Guide right side

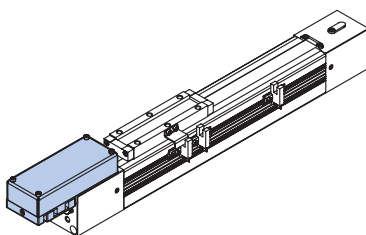


GL Guide left side

Motor position



BW Top side



BM Down side

Weight

Unit: kg

Model	Basic weight METFB-25N	Stroke 100 mm METFB-25N	Basic weight (with guide) METFB-25G*	Stroke 100 mm (with guide) METFB-25G*
Size				
25	0.97	0.18	1.3	0.27

* The form is the weight of the type of motor top side.

Standard 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	100W	HG-KN13J	HG-KN13B J	ø8-25	ø30	2.5	ø46	2-ø4.5
Panasonic	P	100W	MSMF012L1U2M	MSMF012L1V2M	ø8-25	ø30	3	ø45	4-ø3.4
Yaskawa	Y	100W	SGM7J-01A7A21	SGM7J-01A7A2C	ø8-25	ø30	2.5	ø46	2-ø4.3
Delta	D	100W	ECMA-C20401PS	ECMA-C20401FS	ø8-25	ø30	2.5	ø46	2-ø4.5

* If your inquiry is not included in above table, please kindly contact us.

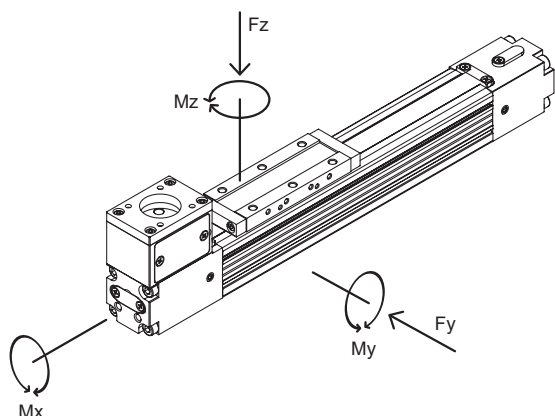
Brand	Mark	Dimensions of motor	Motor model (Without brake)	With controller	Motor rod dia-shaft length (mm)	Centring collar diameter (mm)	Centring collar depth (mm)	Mounting holes position (mm)	Mounting port (mm)
Mindman	S	□42	SM-42L-F	CK10	ø5-24	ø22	2	□31	4-M3×4.5L
	B	□42	BM-42M	CM20	ø5-20	ø22	2	□31	4-M3×4L

METFB-25 Capacity

SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



Mindman



Forces & Moments

Model		Mx	My	Mz	Fy	Fz
		Max. allowed moment (N.m)			Max. allowed load(N)	
METFB-25	Without guide	5	12	12	—	300
	With guide	38	42	42	2400	2700

Attention: In case of undefinable situations the above max. values have to be reduced by 10~20%.

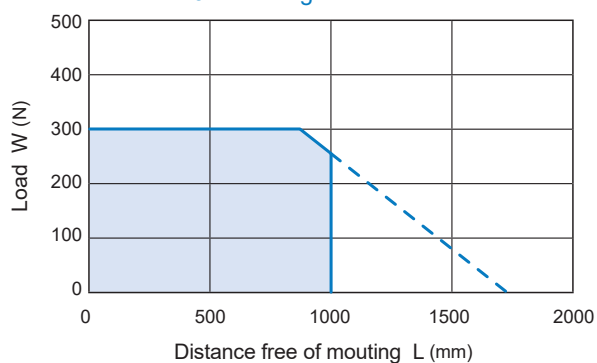
Please refer to the following formula when combined loads are applied.

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

* The A letters show the calculated value.

Positioning of cylinder mountings

METFB-25 Without guide



METFB-25 With guide

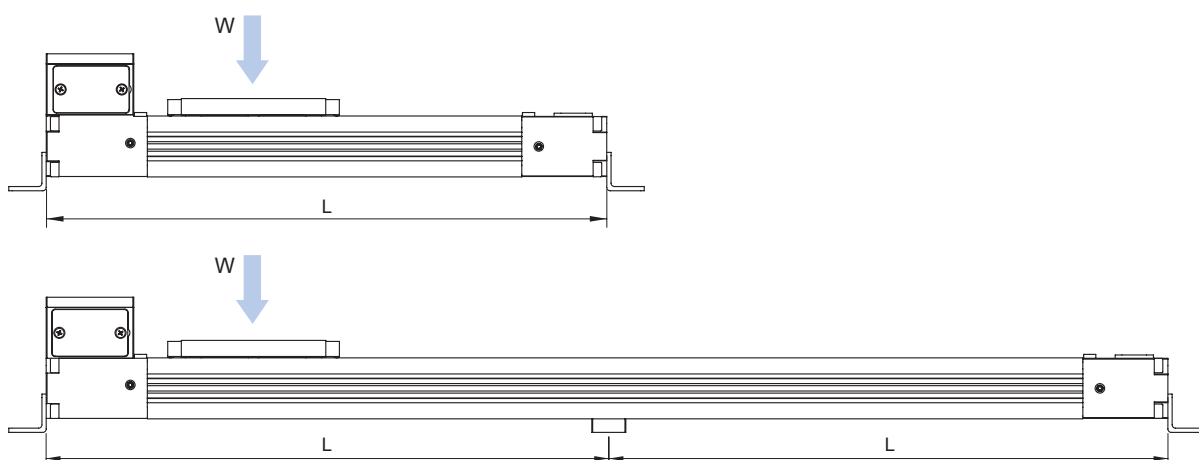
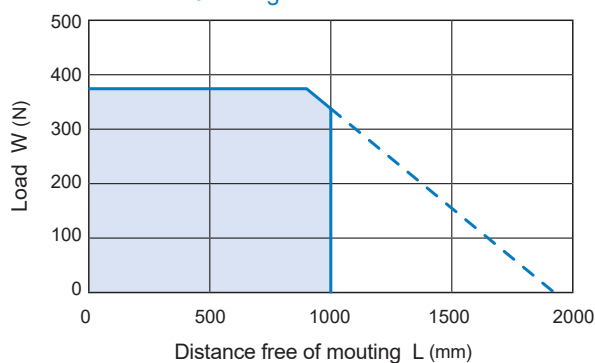


Diagram information

- Calculated deflections without support of 0.5~1 mm allow exceeding of the approved limits.
- Calculated deflections without support of > 1~1.5 mm require reduction of approved limits.

METFB-25 Dimensions

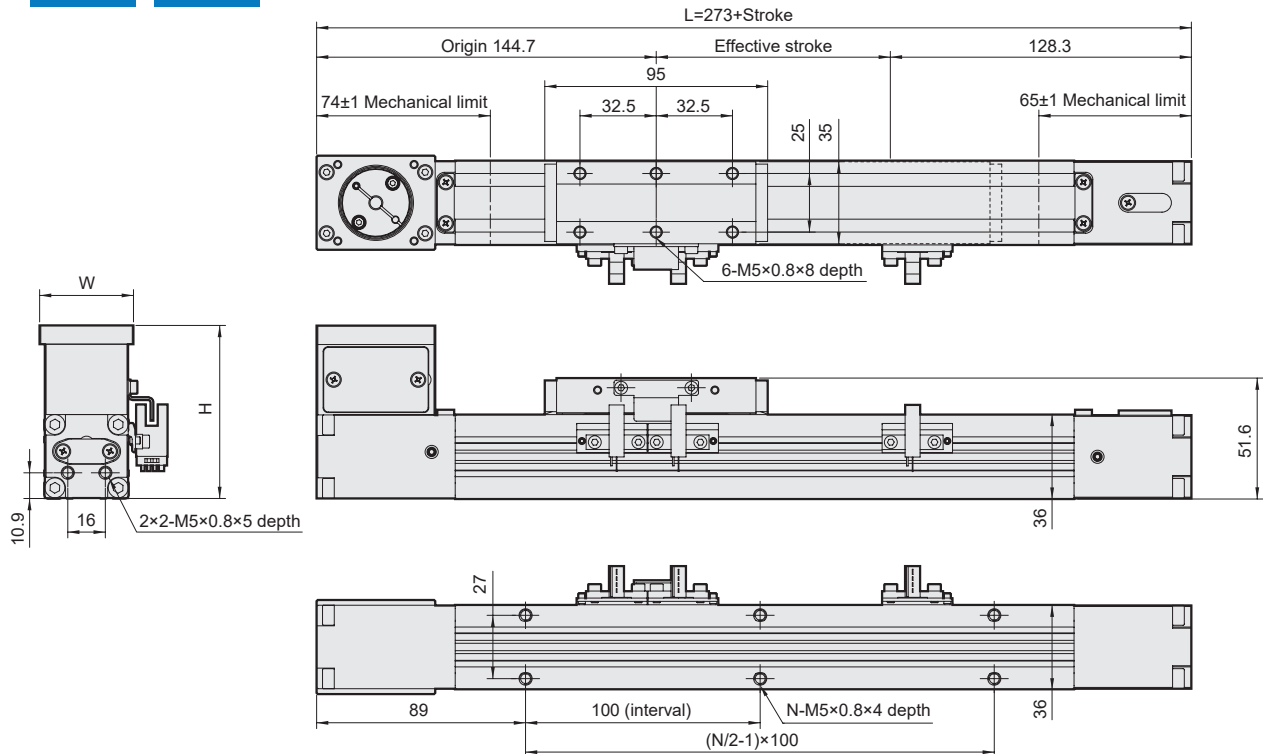
SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



N

BW

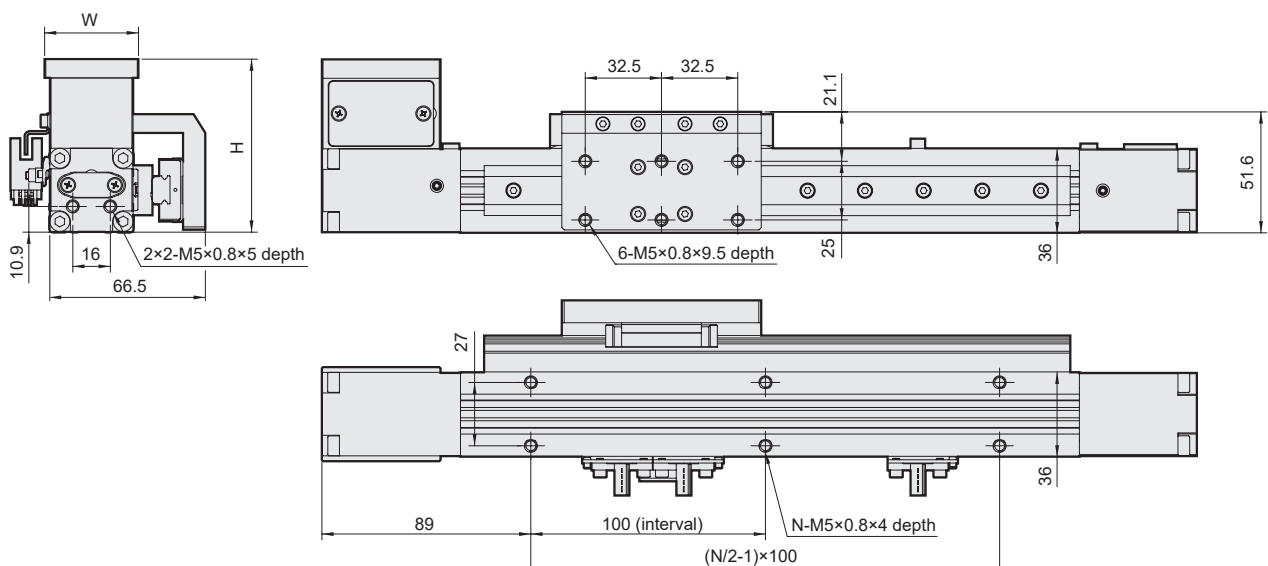
Without guide • Motor top side



GL

BW

Guide left side • Motor top side



Unit: mm

Stroke Code	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L	373	423	473	523	573	623	673	723	773	823	873	923	973	1023	1073	1123	1173	1223	1273
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24

Stroke Code	Servo	Step
W	40	42
H	73.8	71.8

METFB-25 Dimensions

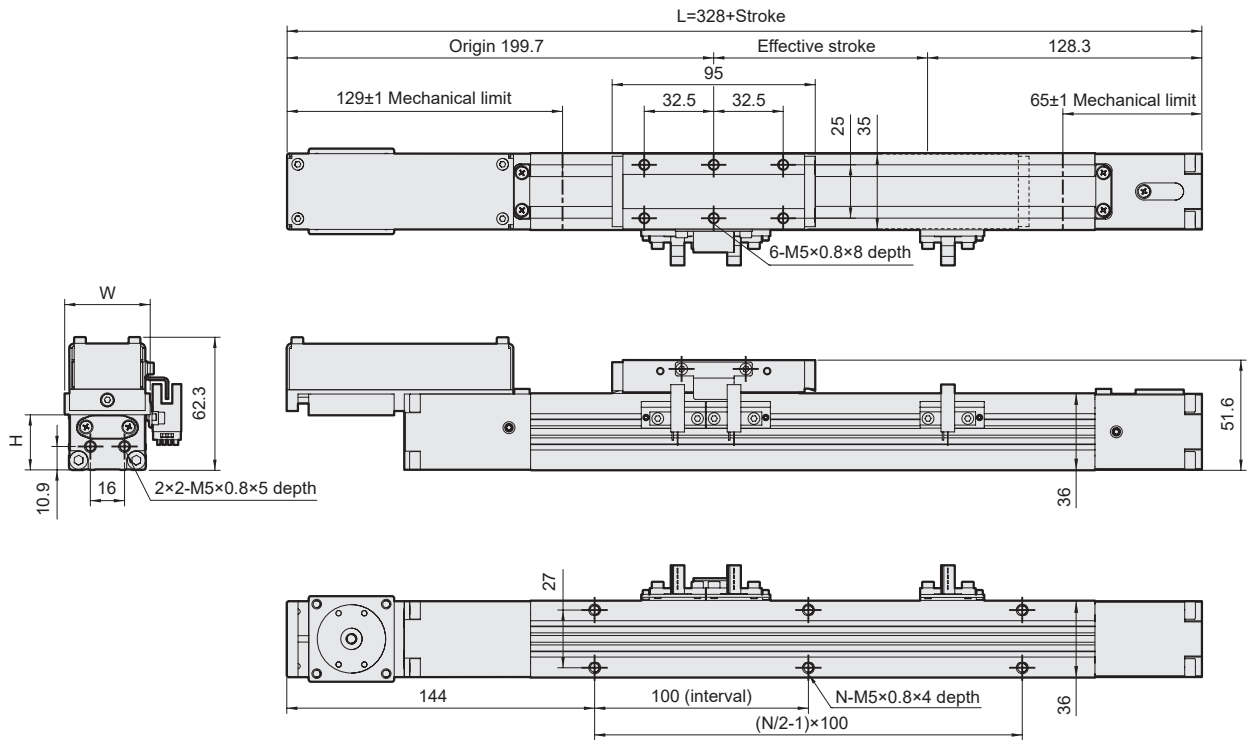
SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



N

BM

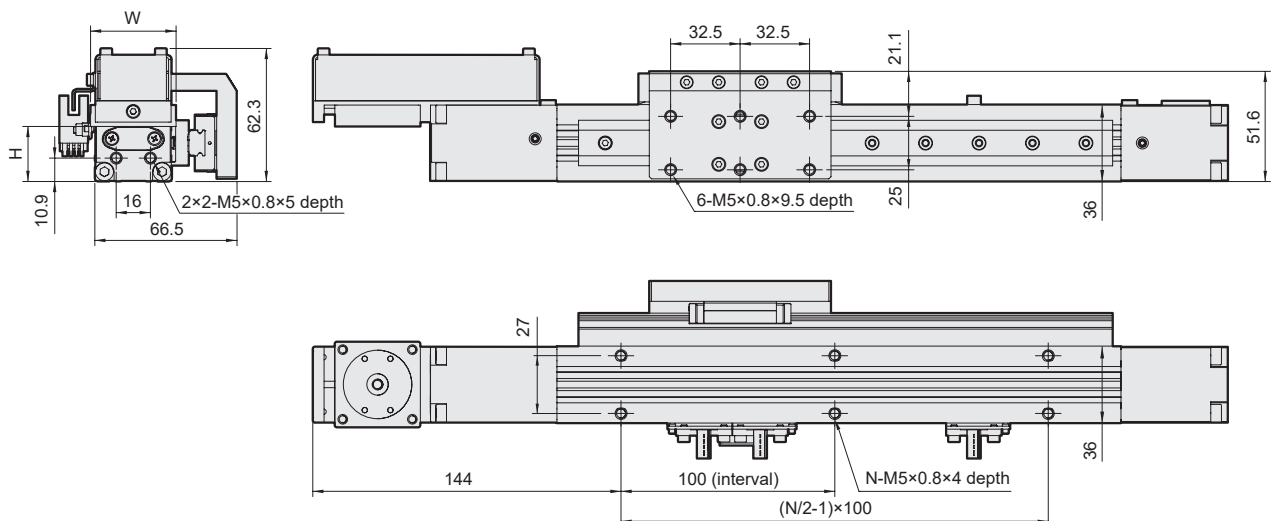
Without guide • Motor down side



GL

BM

Guide left side • Motor down side



Unit: mm

Stroke Code	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24

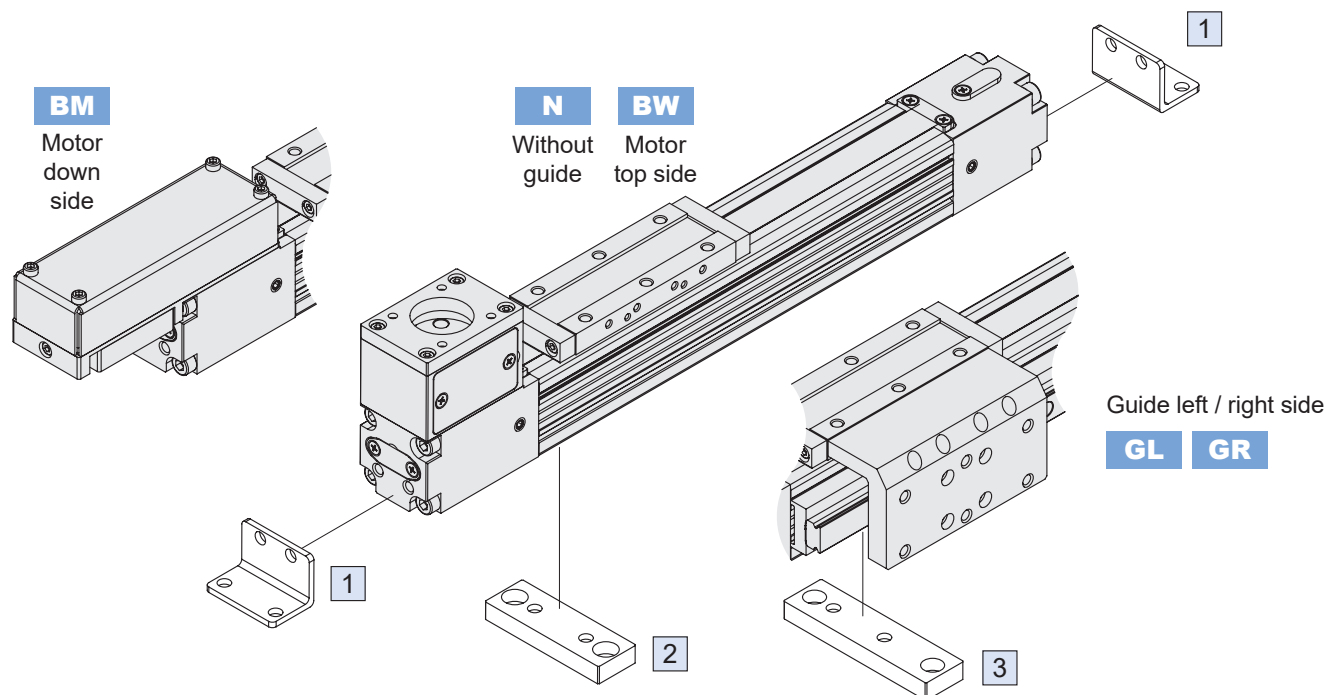
Stroke Code	Servo	Step
W	40	42
H	25.8	25.8

METFB-25 Mounting accessories

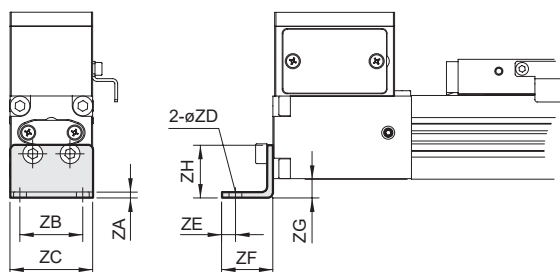
SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



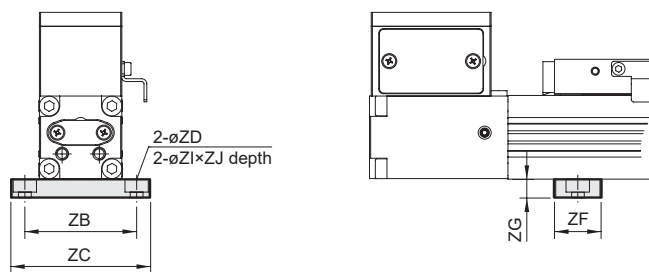
Mindman



1 End cover bracket (2pcs/set)

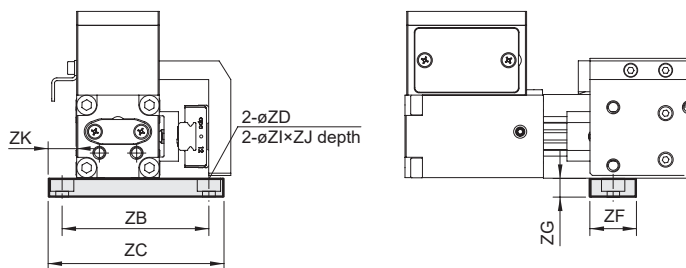


2 Mid section support *Applicable for (N) without guide.



* Not applicable for (BM) motor down side.

3 Mid section support * Applicable for (GR / GL) with guide.



Unit: mm

Item	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	Weight (g)	Order number
1	2.5	27	35.5	5.5	6	22	8	22.6	—	—	—	27	ETFB25-1
2	—	48	60	5.5	—	20	8	—	10	5.5	—	21	ETFB25-2
3	—	63	75	5.5	—	20	8	—	10	5.5	12	27	ETFB25-3