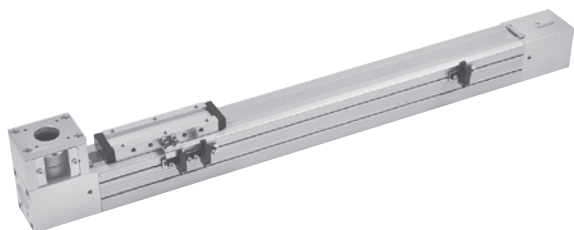


METFB-32 series

SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



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

Specification

Model	METFB-32	
Positioning repeatability (mm)	±0.05	
Lead (mm/rev)	72	
Belt pitch (mm)	3	
Stroke (mm)	100~2000/50 pitch	
No-load torque (N.m)	0.2	
Slot-type photomicrosensor	RLT (Please refer to page 5-16)	

Motor type	AC servo	Step
Power output / size	200W	□42
Max. speed *1 (mm/s)	2400	720
Work load *2,3	Horizontal (kg)	9
	Vertical (kg)	4

*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—32		N—1000		BW—S42		B—A3—XA00					
Model		Size		Stroke		Special order No.					
				100~2000 mm 50 mm pitch							
Guide installation		Motor position		Motor brand		Flange face		Brakes		Sensor switch	
N	Without guide	BW	Top side	M	Mitsubishi	20	200W Servo	—	No brake	—	No sensor
GR	Guide right side	BM	Down side	P	Panasonic			B	With brake	A1	1 pc
GL	Guide left side			Y	Yaskawa					A2	2 pcs
				D	Delta					A3	3 pcs
				S	Mindman	42	□42 Step*1				
				B							
* 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				N			
CM20 *1				NPN			
		01	1 m *2			015	1.5 m
		015	1.5 m *3			03	3 m
		03	3 m				
		05	5 m				

*1. Sensors would be needed.

*2. Only for **CM20**.

*3. Only for **CK10**.

*1. Sensors would be needed.

*2. Only for CM20.

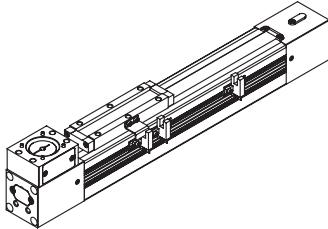
*3. Only for CK10.

METFB-32 Motor specification

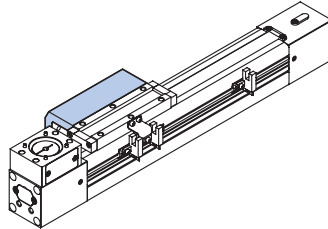
SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



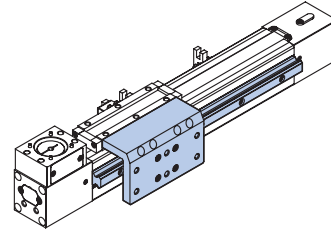
Guide installtion


N

Without guide

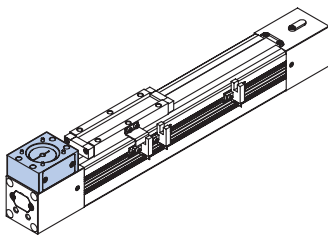

GR

Guide right side

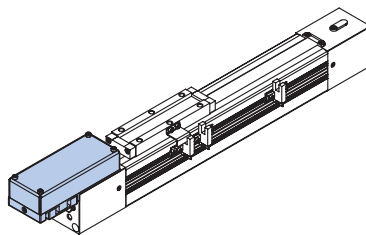

GL

Guide left side

Motor position


BW

Top side


BM

Down side

Weight

Unit: kg

Model	Basic weight METFB-32N	Stroke 100 mm METFB-32N	Basic weight (with guide) METFB-32G*	Stroke 100 mm (with guide) METFB-32G*
Size				
32	2.06	0.36	2.7	0.49

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

Standard motors

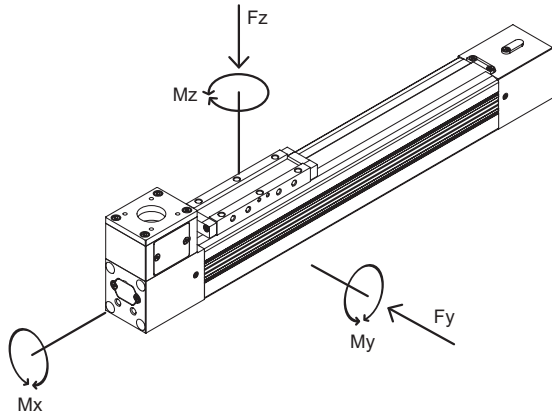
Brand	Mark	Power output	Motor model (Without brake)	Motor model (With brake)	Motor rod dia-shaft length (mm)	Centring collar diameter (mm)	Centring collar depth (mm)	Motor mount P.C.D (mm)	Mounting port (mm)
Mitsubishi	M	200W	HG-KN23J	HG-KN23B J	ø14-30	ø50	3	ø70	4-ø5.8
Panasonic	P	200W	MHMF022L1U2M	MHMF022L1V2M	ø14-30	ø50	3	ø70	4-ø4.5
Yaskawa	Y	200W	SGM7J-02A7A21	SGM7J-02A7A2C	ø14-30	ø50	3	ø70	4-ø5.5
Delta	D	200W	ECMA-C20602PS	ECMA-C20602FS	ø14-30	ø50	3	ø70	4-ø5.5

* 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-32 Capacity

SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



Forces & Moments

Model		Mx	My	Mz	Fy	Fz
		Max. allowed moment (N.m)			Max. allowed load(N)	
METFB-32	Without guide	5.5	22	22	—	500
	With guide	47.5	48	48	2800	3300

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

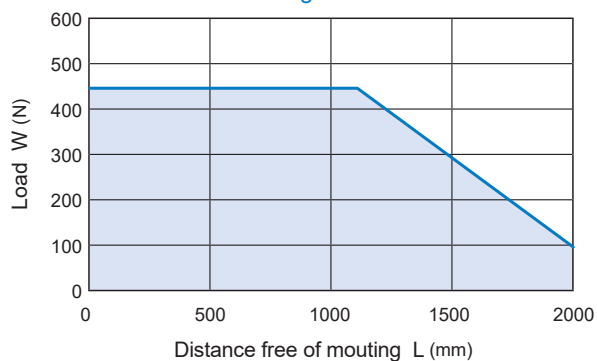
Please refer to the following formula when combined loads are applied.

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

* The A letters show the calculated value.

Positioning of cylinder mountings

METFB-32 Without guide



METFB-32 With guide

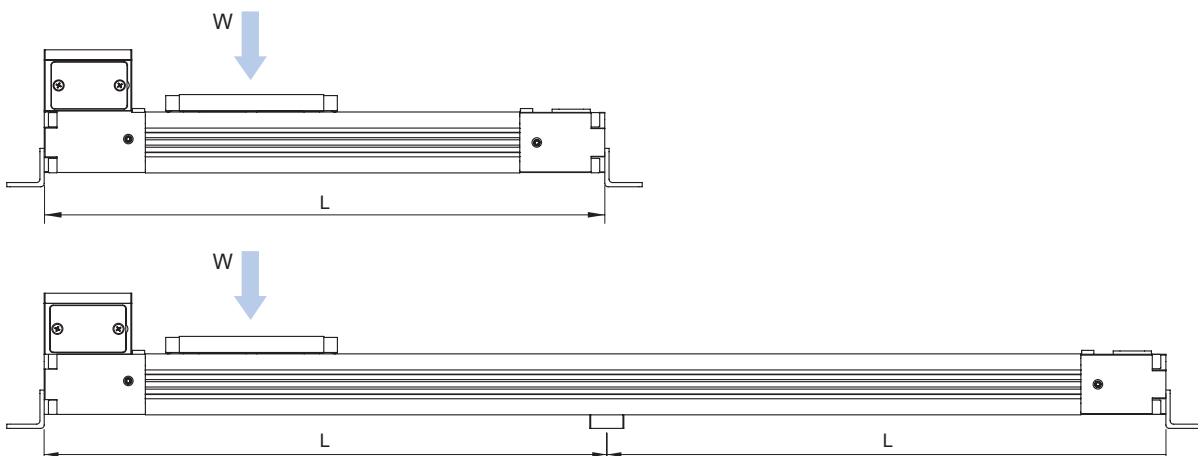
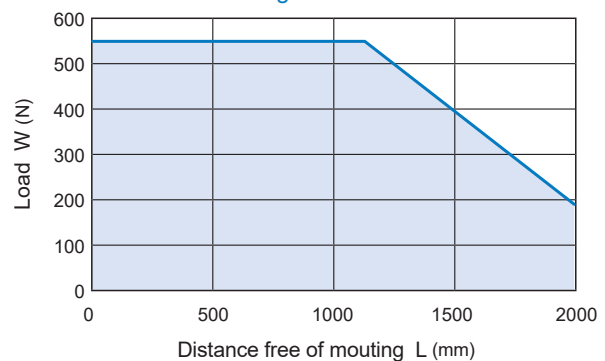


Diagram information

- 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-32 Dimensions

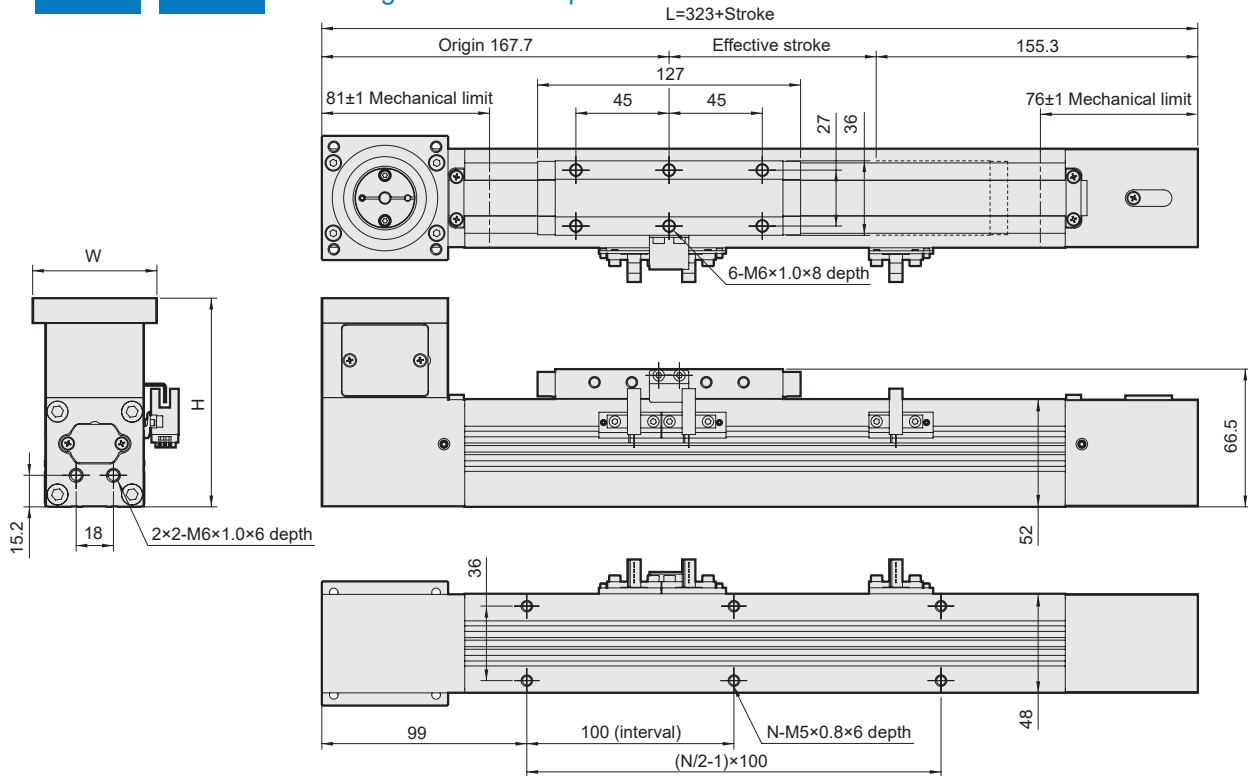
SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



N

BW

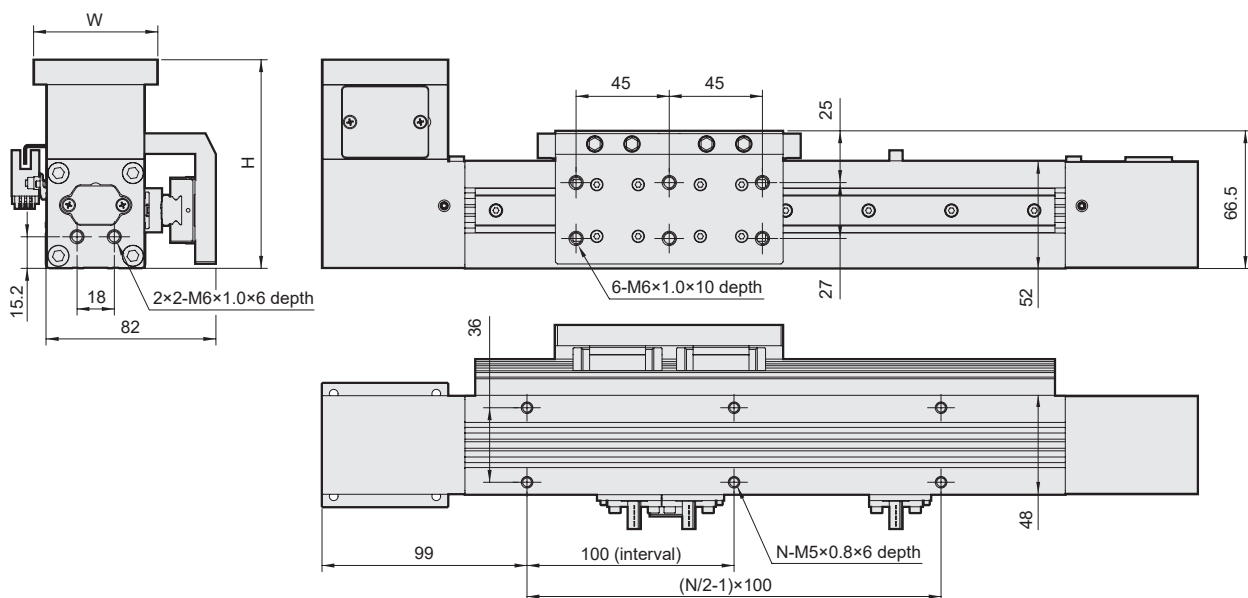
Without guide • Motor top side



GL

BW

Guide left side • Motor top side



Unit: mm

Stroke Code	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
L	423	523	623	723	823	923	1023	1123	1223	1323	1423	1523	1623	1723	1823	1923	2023	2123	2223	2323
N	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44

Stroke Code	Servo	Step
W	60	47.6
H	100.8	94.8

METFB-32 Dimensions

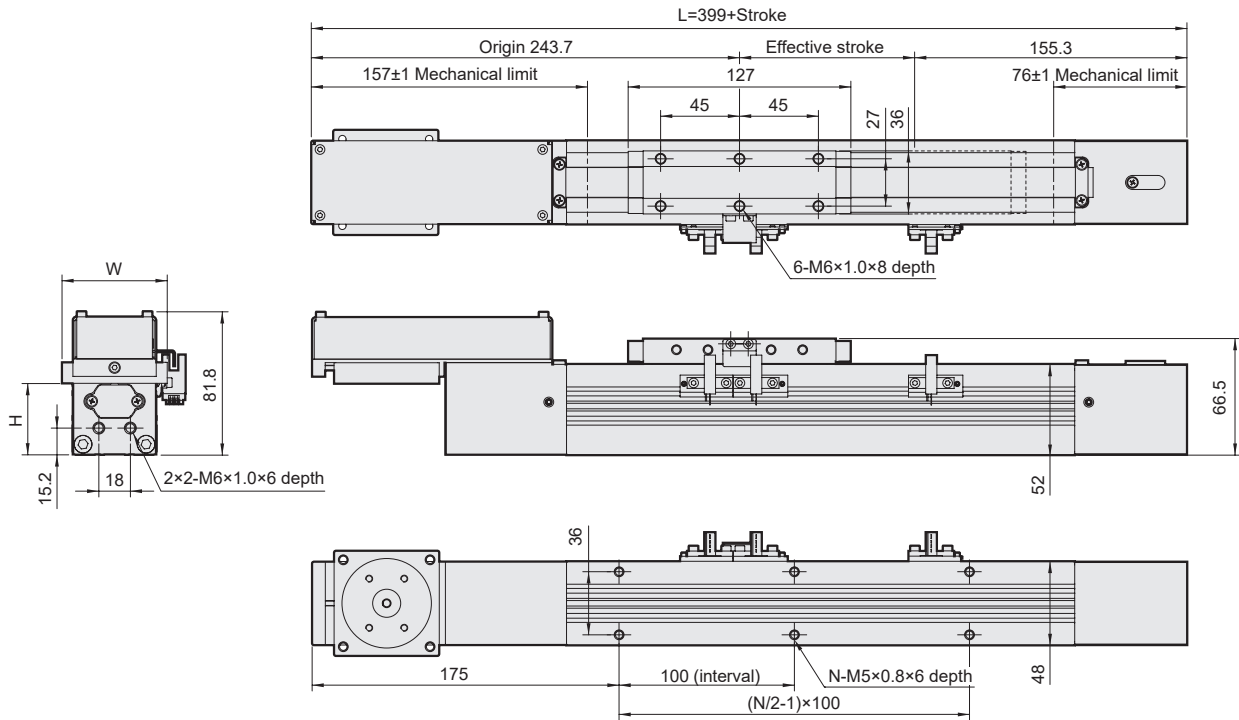
SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



N

BM

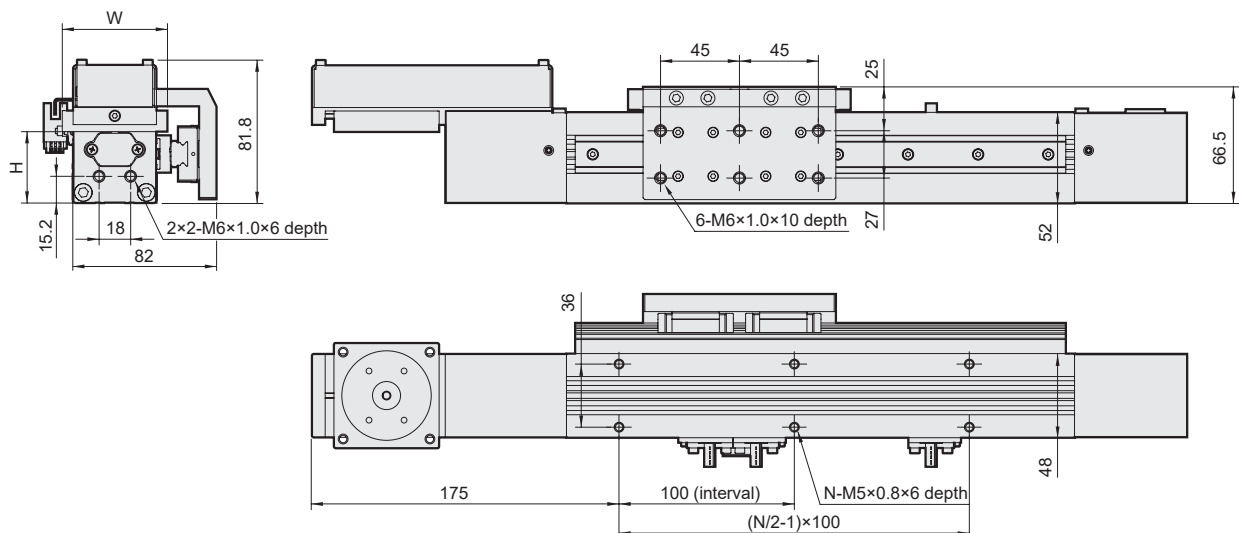
Without guide • Motor down side



GL

BM

Guide left side • Motor down side



Unit: mm

Stroke Code	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
L	499	599	699	799	899	999	1099	1199	1299	1399	1499	1599	1699	1799	1899	1999	2099	2199	2299	2399
N	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44

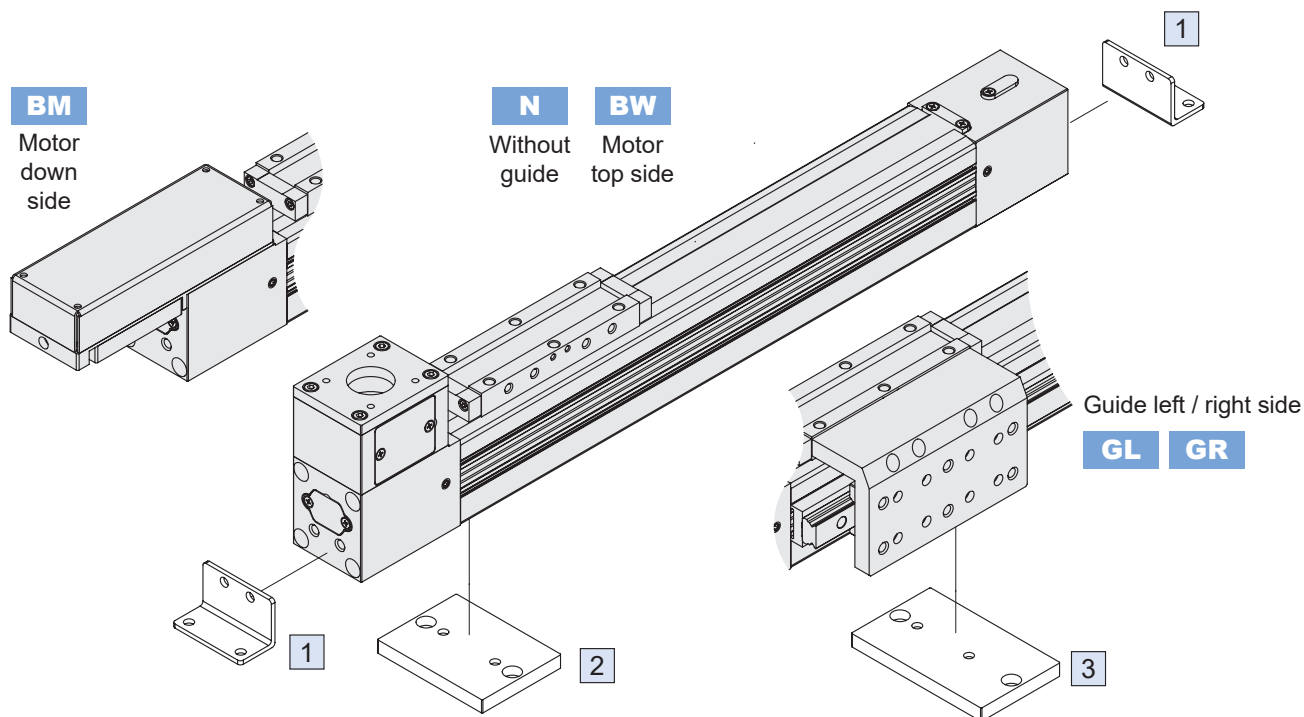
Stroke Code	Servo	Step
W	60	47.6
H	40.8	42.8

METFB-32 Mounting accessories

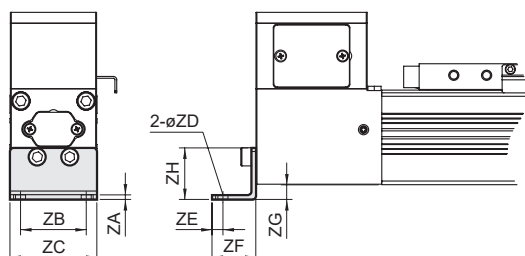
SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



Mindman

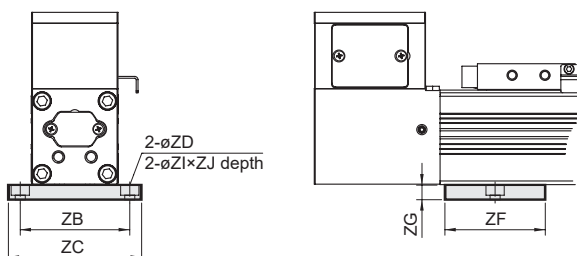


1 End cover bracket (2pcs/set)

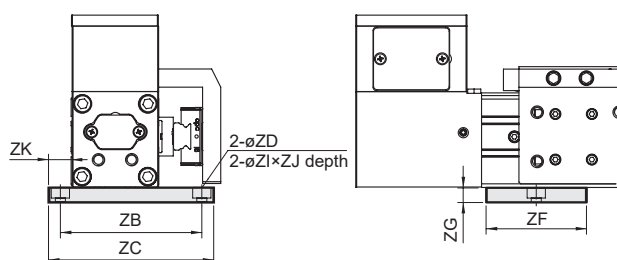


* Not applicable for (BM) motor down side.

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



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	36	47.6	5.5	6	24	8	28.3	—	—	—	46	ETFB32-1
2	—	60	72	5.5	—	55	8	—	10	5.5	—	82	ETFB32-2
3	—	78	90	5.5	—	55	8	—	10	5.5	12.5	103	ETFB32-3