

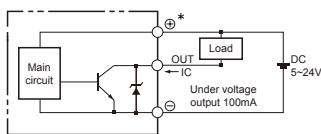
# METS2-14 series

## SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



Use environment	Standard	Servo motor	200W / 400W
Actuation type	Ball screw	Guide type	Linear guide

Sensor layout



### Feature

- Modular product can save your time of designing and assembly, and greatly increase your development efficiency.
- High stiffness body made with integrated aluminum extrusion.
- It provides several position for motor installment.
- It is available for customized service.

### Specification

Model	METS2-14		
Position repeatability (mm)	±0.01		
Lead (mm)	5	10	20
Max. speed (mm/s)	250	500	1000
Stroke (mm)	100~1000 / 50 pitch		
Ball screw O.D. (mm)	C7 ø16		
Coupling (mm)	10×14 / 10×11 (*1)		
Home sensor	EE-SX672 (NPN)		

AC servo motor	200W			
Max. payload	Horizontal (kg)	95	75	35
	Vertical (kg)	27	18	6
Rated thrust (N)		683	341	174

AC servo motor	400W			
Max. payload	Horizontal (kg)	110	88	40
	Vertical (kg)	33	22	8
Rated thrust (N)		1388	694	347

\*1. Motor (200W) shaft diameter : Panasonic ø11, other ø14.

\*2. When the stroke is over 750mm, the run-out of the ball screw will occur. We recommend to low down the working speed under this circumstances.

\*3. Acceleration and deceleration value is set 0.2 second.

### Order example

**METS2-14 - L05 - 100 - BC - M20 B - A3 - XA00**

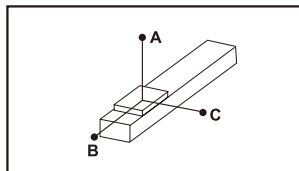
Model		Size		Motor position		Motor brand		Power output		Brakes		Limit sensor	
<b>L05</b>	5 mm	<b>100~1000</b> mm 50 mm pitch	<b>M</b>	Motor built-in	<b>M</b>	Mitsubishi	<b>20</b> <b>40</b>	200W 400W	-	No brake	-	No sensor	
<b>L10</b>	10 mm		<b>BC</b>	Motor exposed	<b>P</b>	Panasonic			<b>B</b>	With brake	<b>A1</b>	1 pc	
<b>L20</b>	20 mm		<b>BM</b>	Motor bottom side	<b>Y</b>	Yaskawa			<b>A2</b>	2 pcs			
		<b>BR</b>	Motor right side	<b>D</b>	Delta	<b>A3</b>			3 pcs				
		<b>BL</b>	Motor left side	<b>E</b>	Else								

\* Sensor is packaged separately, and is freely operated for customer's adjustment.

\* If you choose built-in position, we will need to be notified whether a brake is used in your motor. Our default length will be the motor equipped with brake.

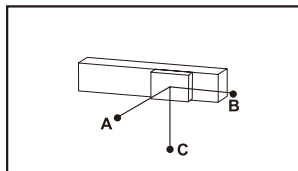
\* If customized service is required, please kindly contact us.

### Allowable overhang



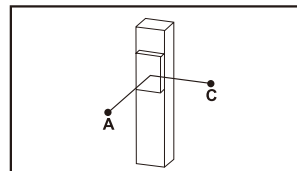
Unit: mm

Horizontal installation	A	B	C
AC servo motor 200W			
Lead 5	60kg	2300	250
	80kg	1600	180
	95kg	1150	145
Lead 10	30kg	2000	500
	50kg	1400	280
	75kg	1000	170
Lead 20	10kg	2300	1200
	20kg	1400	600
	35kg	1000	330



Unit: mm

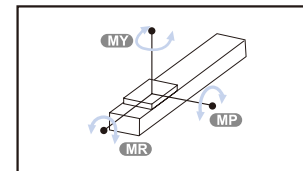
Wall installation	A	B	C
AC servo motor 200W			
Lead 5	60kg	200	110
	80kg	130	55
	95kg	85	25
Lead 10	30kg	415	330
	50kg	235	155
	75kg	130	55
Lead 20	10kg	995	1200
	20kg	500	555
	35kg	270	230



Unit: mm

Vertical installation	A	C
AC servo motor 200W		
Lead 5	20kg	755
	25kg	605
	27kg	500
Lead 10	10kg	1350
	15kg	900
	18kg	675
Lead 20	6kg	1695
	—	—
	—	—

### Static loading moment



Unit: N.m

Horizontal	
AC servo motor 200W	
MY	262
MP	262
MR	261

\* When the motor power is 400W, the max. payload is 110 kg (lead 5), 88 kg (lead 10), 40 kg (lead 20), and the load torque distance remains unchanged.

AC servo motor 400W		
Lead 20	4kg	2400
	6kg	1700
	8kg	1300

\* When the motor power is 400W, the max. payload is 33 kg (lead 5), 22kg (lead 10), and the load torque distance remains unchanged.

### Standard servo motors

Brand	Mark	Power output	Motor model (Without brake)	Motor model (With brake)	Motor rod dim. (mm)	Motor mount P.C.D (mm)	Mounting port (mm)
Mitsubishi	M	200W	HG-KN23J	HG-KN23B J	ø14	ø70	4-ø5.8
		400W	HG-KN43J	HG-KN43B J	ø14	ø70	4-ø5.8
Panasonic	P	200W	MHMF022L1U2M	MHMF022L1V2M	ø11	ø70	4-ø4.5
		400W	MHMF042L1U2M	MHMF042L1V2M	ø14	ø70	4-ø4.5
Yaskawa	Y	200W	SGM7J-02A7A21	SGM7J-02A7A2C	ø16	ø70	4-ø5.5
		400W	SGM7J-04A7A21	SGM7J-04A7A2C	ø16	ø70	4-ø5.5
Delta	D	200W	ECMA-C20602PS	ECMA-C20602FS	ø14	ø70	4-ø4.5
		400W	ECMA-C20604PS	ECMA-C20604QS	ø14	ø70	4-ø5.5

\*1. Motor (200W) shaft diameter : Panasonic ø11, other ø14.

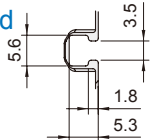
\*2. If your inquiry is not included in above table, please kindly contact us.

# METS2-14 Dimensions

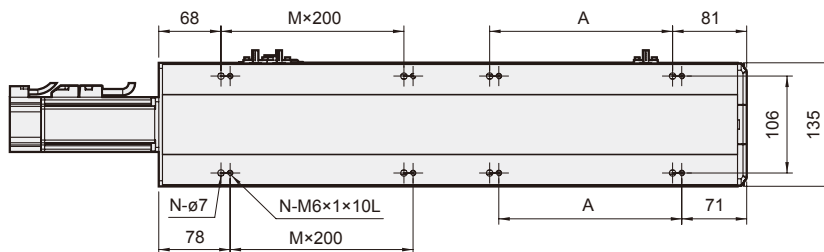
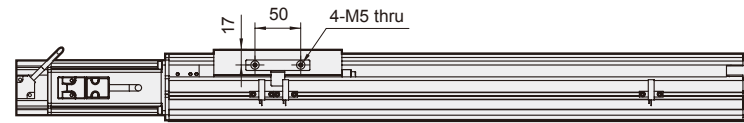
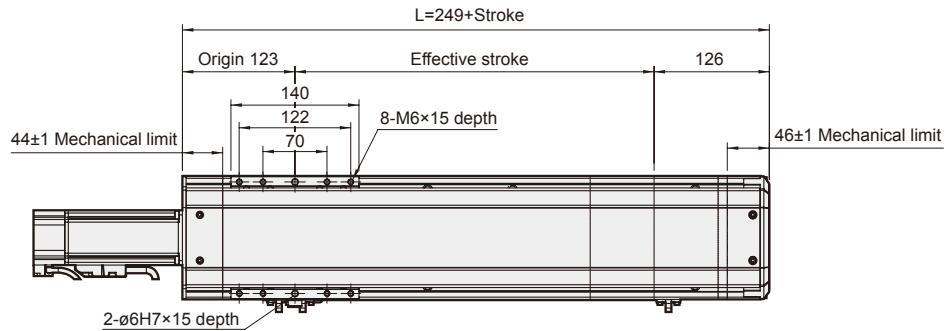
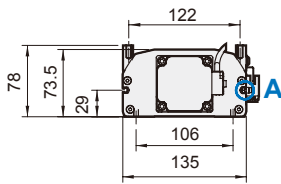
## SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



**BC**  
Motor exposed

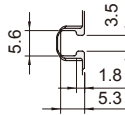


**A view**

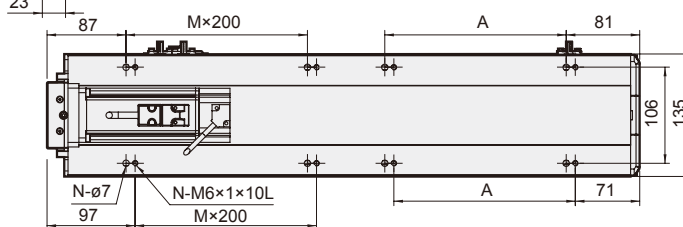
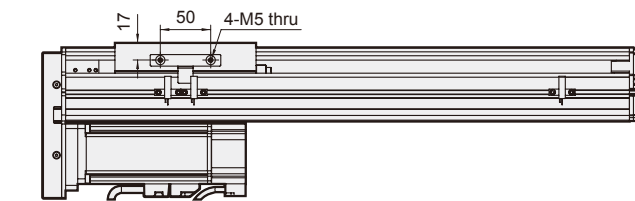
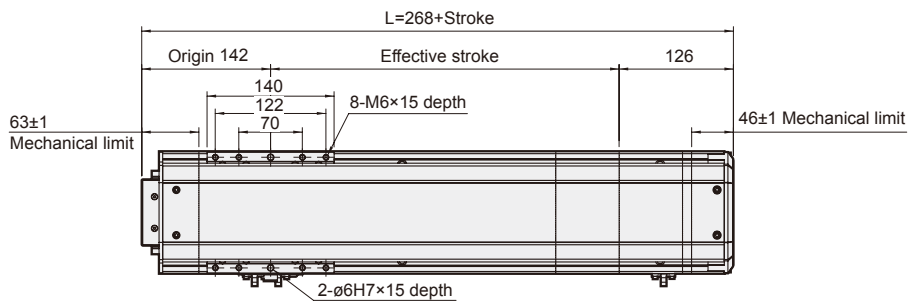
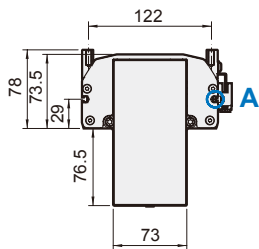


**BM**

Motor bottom side



**A view**



Unit: mm

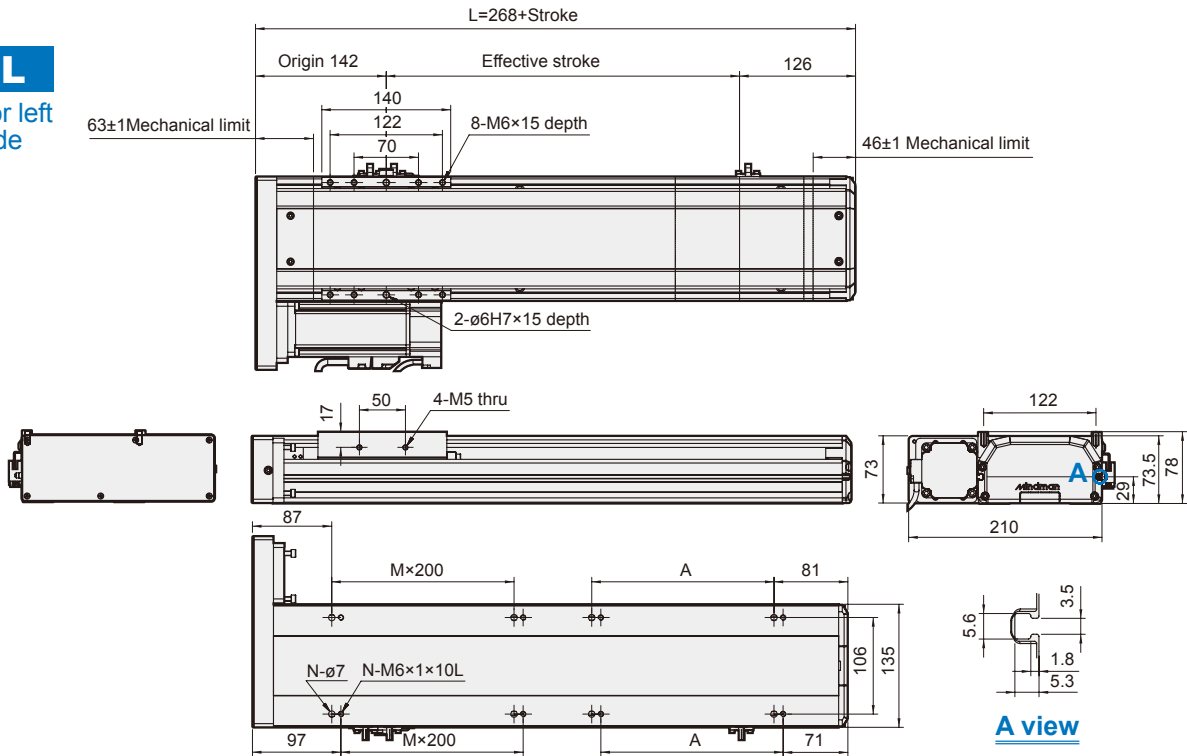
Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
L	BC	349	399	449	499	549	599	649	699	749	799	849	899	949	999	1049	1099	1149	1199	1249
	BM	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14

# METS2-14 Dimensions

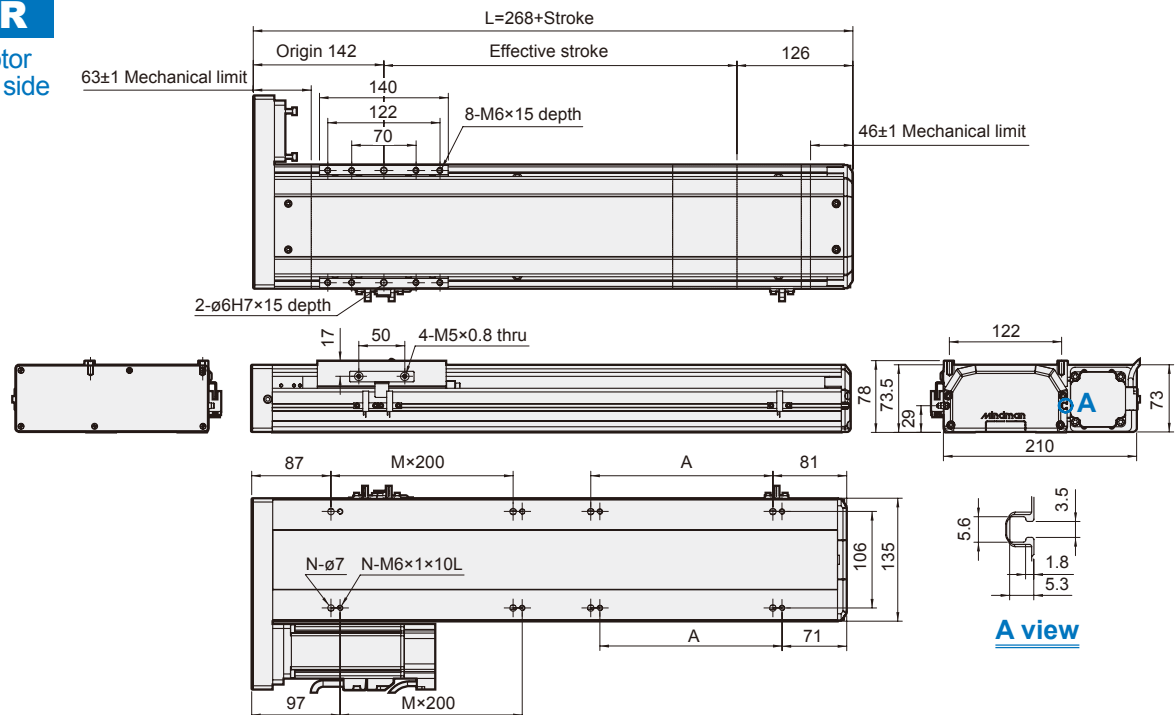
## SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



**BL**  
Motor left side



**BR**  
Motor right side



Unit: mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
L	BL	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268
	BR	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268
A		200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M		0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5
N		4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14

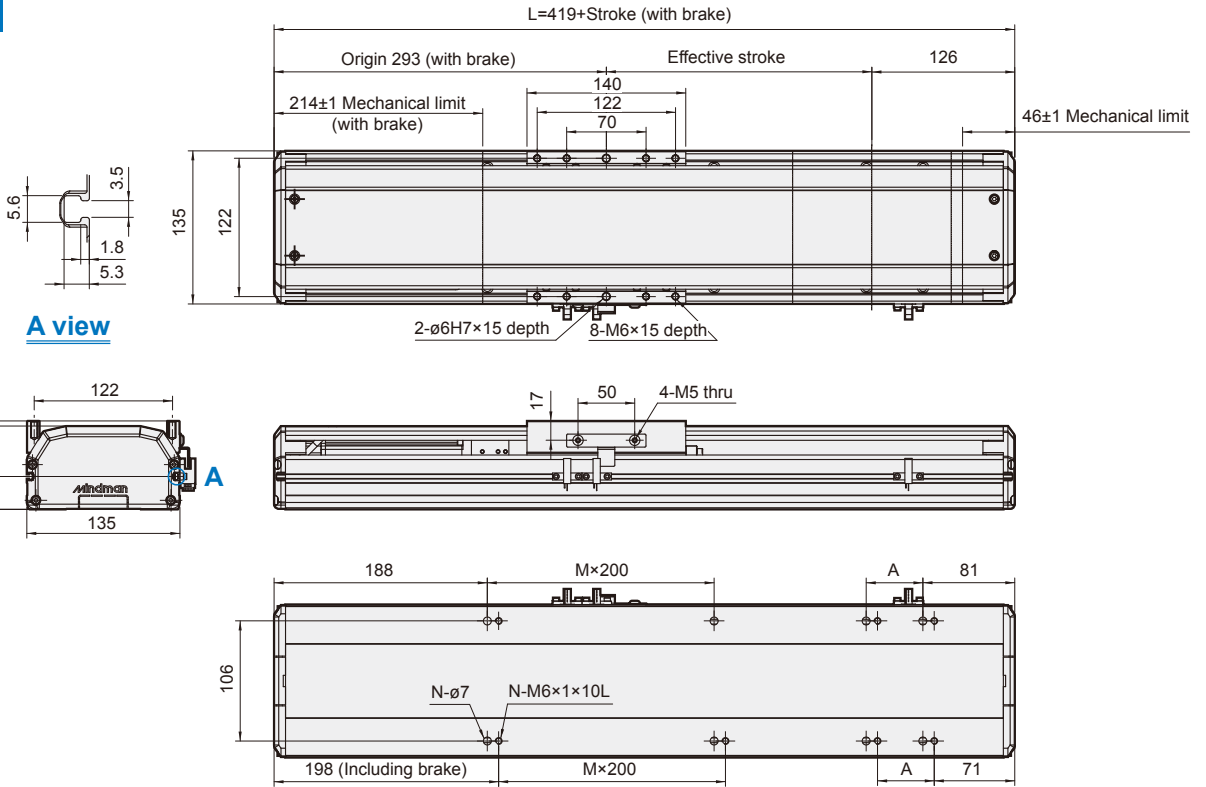
# METS2-14 Dimensions

## SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)



**M**

Motor built-in



Unit: mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
<b>L</b>	519	569	619	669	719	769	819	869	919	969	1019	1069	1119	1169	1219	1269	1319	1369	1419
<b>A</b>	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
<b>M</b>	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
<b>N</b>	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14