METS2-17 series

SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)

mindman

Selection table
Applications
Inner structure
Measuring tools
Reference data
Motor selection
Caution for safety
(Read before installing)



Environment	Standard
Actuation type	Ball screw
Servo motor	200/ 400/ 750W
Guide type	Linear guide

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			METS2-17		
Positioning repeatability		(mm)	±0.01		
Lead		(mm)	5	10	20
Max. speed		(mm/s)	250	500	1000
Stroke		(mm)	100~1200		
Ball screw O.D.		(mm)	C7 ø20		
Coupling diameter		(mm)	ø10		
Slot-type photomicro sensor			RLT		
AC servo motor		(W)	400 (200)		
Rated load	Horizontal	(kg)	120	110	75
	Vertical	(kg)	40	30	14
Max. thrust		(N)	1388 (694)	694 (347)	347 (173)
AC servo motor		(W)	750		
Rated load	Horizontal	(kg)	120	120	83
	Vertical	(kg)	50	40	25
Max. thrust		(N)	2563	1281	640

*1. Reduce the speed when the stroke exceeds 750 mm due to resmance.
*2. Acceleration and deacceleration value are set to 0.2 second.

Order example

METS2 – 17 – L05 – 100 – BC – M40 B

Model: METS2

Size: 17

Ball screw lead

L05	5 mm
L10	10 mm
L20	20 mm

Stroke: 100~1200 mm

Motor position

M	Built-in (*1)
BC	Direct connection
BM	Lower side
BR	Right side
BL	Left side

Flange (For motor installation)

Applicable motor brand (*2)		Dimensions	
M	Mitsubishi	40	200/ 400W
	Yaskawa	75	750W servo
	Delta		
P	Panasonic	20	200W
		40	400W
		75	750W

Brakes (*3)

–	No brake
B	With brake

*1. Not applicable for 750W servo.
*2. Motor not included. Please refer to the "Motor Selection Table" for details.
*3. Determination is required only when "Built-in" type is chosen.

Slot-type photomicro sensor set

RZ – ET1 – 14 – N

Sensor set: RZ – ET1

Size: 14

Sensor type

N	NPN
P	PNP

* With RLT sensor, bolt, nut and cable 2m.
* Use the same sensor set with METS2-14.

Accessory kits

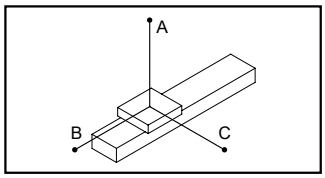
AK – ET1 – 17

Accessory kits: AK – ET1

Size: 17

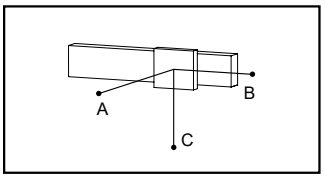
* With light baffle and bolt.

Allowable overhang



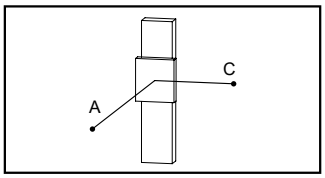
Unit: mm

Horizontal installation		A	B	C
AC servo motor 400W / 750W				
Lead 5	70kg	3235	349	408
	90kg	2482	263	306
	120kg	1850	187	217
Lead 10	65kg	1911	338	373
	85kg	1445	248	276
	110kg	1102	182	202
	120kg*	1000	164	182
Lead 20	35kg	1666	547	538
	55kg	1030	331	328
	75kg	733	231	230
	83kg*	654	206	204



Unit: mm

Wall installation		A	B	C
AC servo motor 400W / 750W				
Lead 5	75kg	377	322	2988
	95kg	288	246	2333
	120kg	218	187	1850
Lead 10	60kg	408	368	2092
	80kg	296	266	1554
	110kg	202	182	1102
	120kg*	182	164	1002
Lead 20	30kg	633	644	1961
	50kg	365	369	1143
	75kg	230	231	733
	83kg*	204	206	656

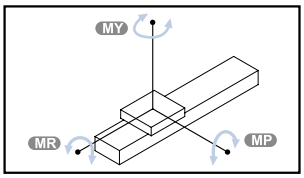


Unit: mm

Vertical installation		A	C
AC servo motor 400W / 750W			
Lead 5	20kg	1368	1368
	30kg	911	911
	40kg	683	683
	50kg*	546	546
Lead 10	15kg	1618	1618
	25kg	970	970
	30kg	808	808
	40kg*	607	607
Lead 20	10kg	1922	1922
	14kg	1377	1377
	25kg*	769	769

* Only for 750W motor.

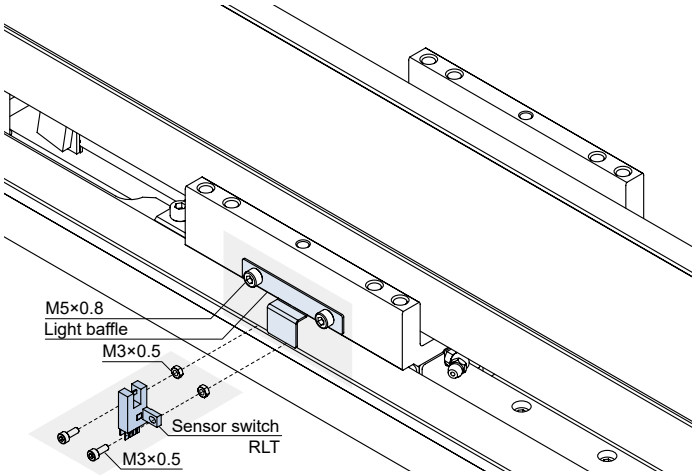
Static loading moment



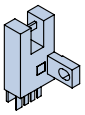
Unit: N.m

Horizontal	
AC servo motor 400W / 750W	
MY	1032
MP	1034
MR	908

Slot-type photomicro sensor mounting

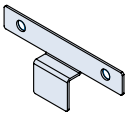


Sensor set

	 M3	 M3
Sensor switch (×1)	Bolt (×2)	Nut (×2)

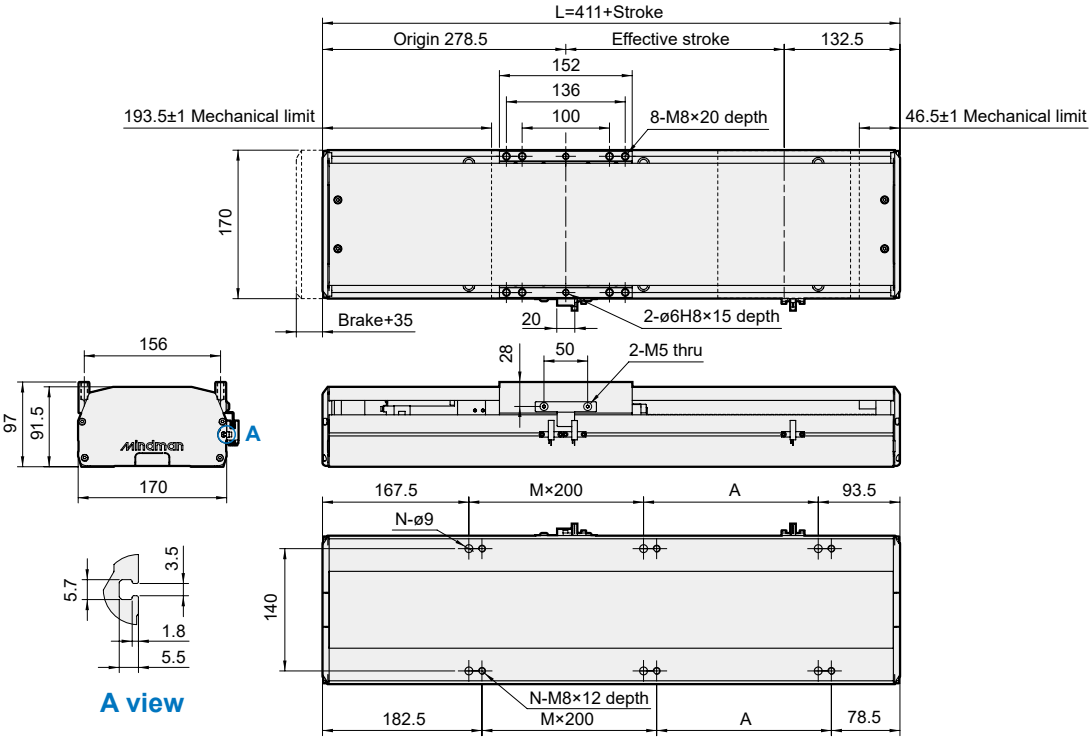
* With cable 2m.

Accessory kits

	 M5
Light baffle (×1)	Bolt (×2)

Dimensions

M
Motor built-in



Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
L	511	561	611	661	711	761	811	861	911	961	1011	1061	1111	1161	1211	1261	1311	1361	1411	1461	1511	1561	1611
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
Weight (kg)	10.69	11.54	12.40	13.25	14.11	14.96	15.81	16.67	17.52	18.38	19.23	20.08	20.94	21.79	22.65	23.50	24.35	25.21	26.06	26.91	27.77	28.62	29.48

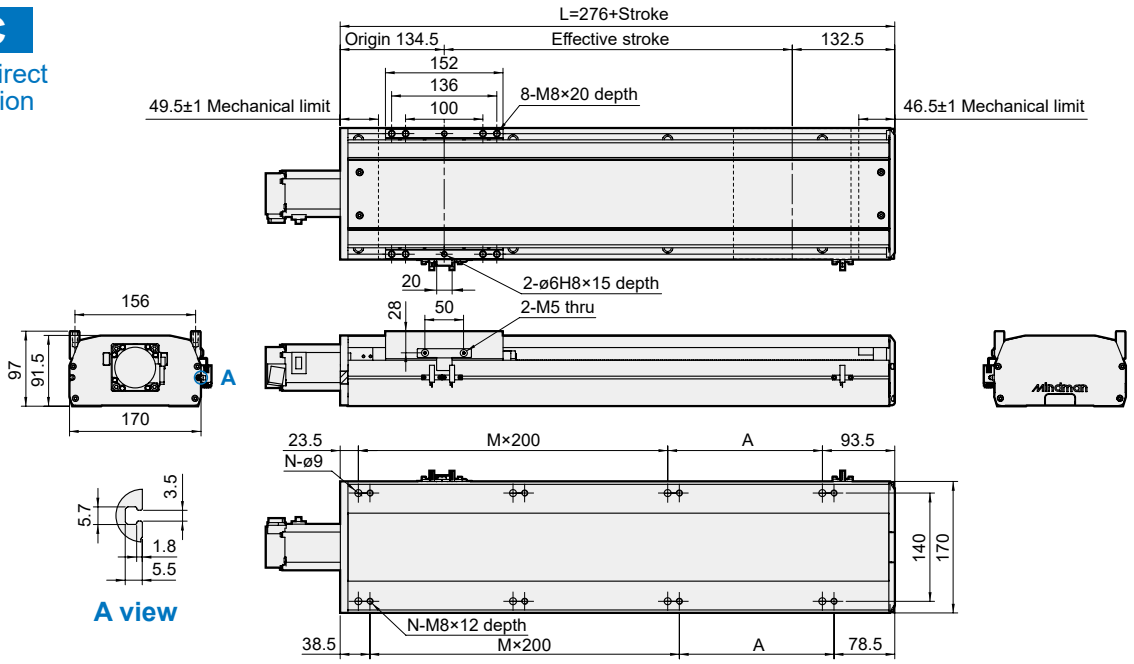
* The brake of gross weight + 0.48 kg.

METS2-17 Dimensions

SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)

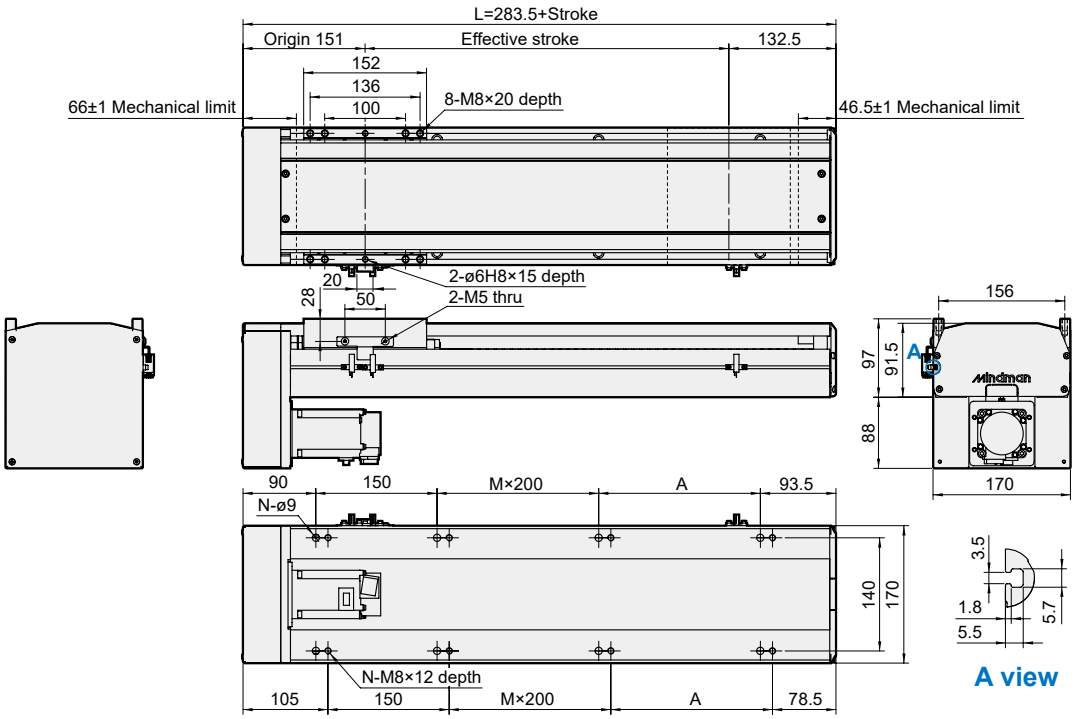
BC

Motor direct connction



BM

Motor on lower side

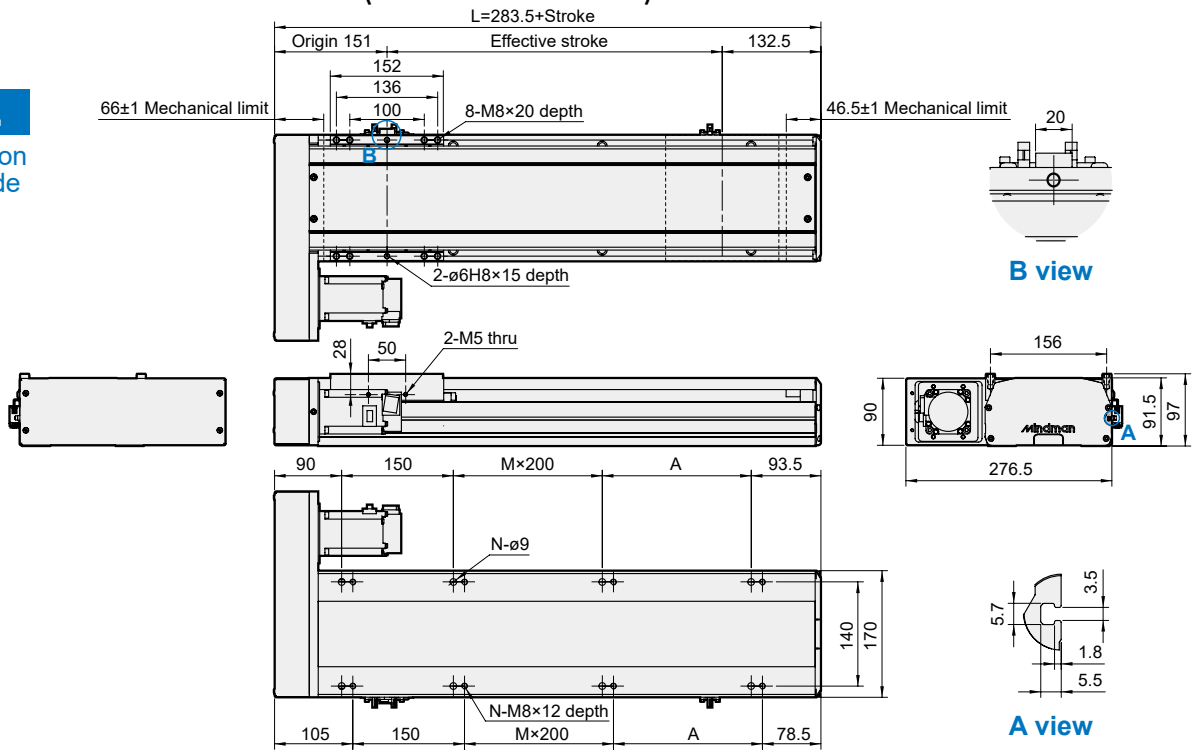


Stroke		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
L	BC	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	1417	1467
	BM	383.5	433.5	483.5	533.5	583.5	633.5	683.5	733.5	783.5	833.5	883.5	933.5	983.5	1033.5	1083.5	1133.5	1183.5	1233.5	1283.5	1333.5	1383.5	1433.5	1483.5
A		50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	BC	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
	BM	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N		6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
Weight (kg)	BC	9.60	10.45	11.30	12.16	13.01	13.87	14.72	15.57	16.43	17.28	18.13	18.99	19.84	20.70	21.55	22.40	23.26	24.11	24.96	25.82	26.67	27.53	28.38
	BM	10.72	11.57	12.43	13.28	14.13	14.99	15.84	16.69	17.55	18.40	19.26	20.11	20.96	21.82	22.67	23.52	24.38	25.23	26.09	26.94	27.79	28.65	29.50

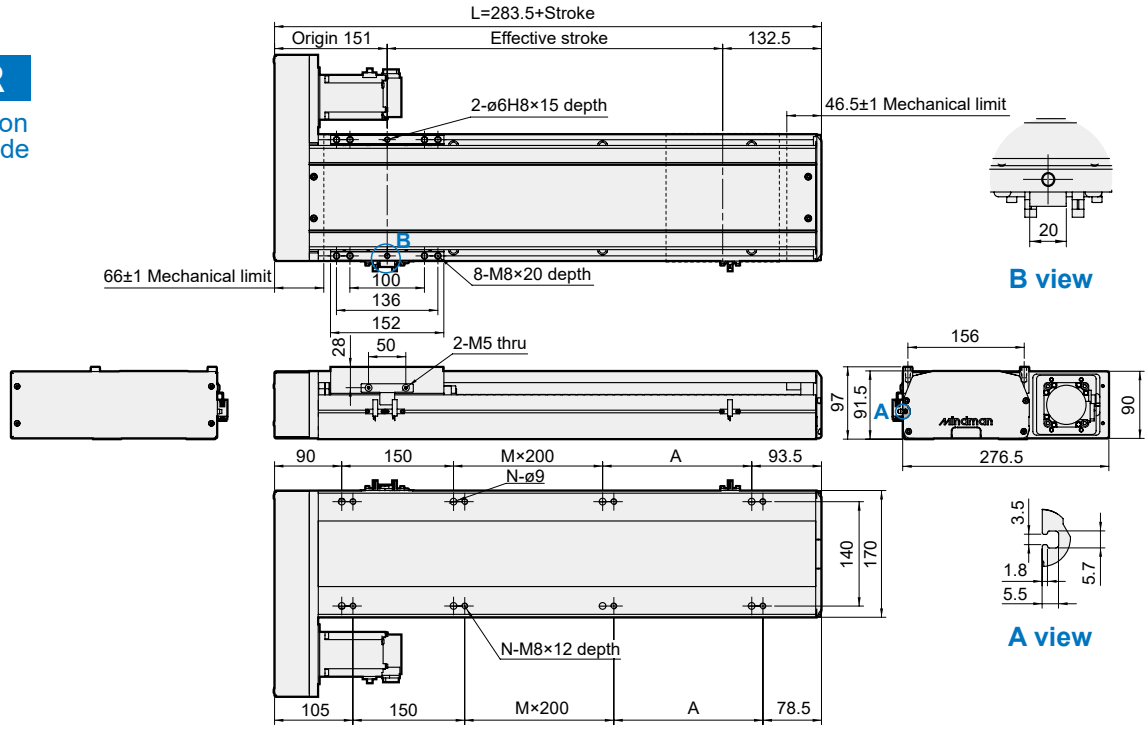
METS2-17 Dimensions

SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)

BL
Motor on left side



BR
Motor on right side



Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
L	383.5	433.5	483.5	533.5	583.5	633.5	683.5	733.5	783.5	833.5	883.5	933.5	983.5	1033.5	1083.5	1133.5	1183.5	1233.5	1283.5	1333.5	1383.5	1433.5	1483.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
Weight (kg)	10.55	11.40	12.26	13.11	13.97	14.82	15.67	16.53	17.38	18.23	19.09	19.94	20.80	21.65	22.50	23.36	24.21	25.06	25.92	26.77	27.63	28.48	29.33