METS-22 series

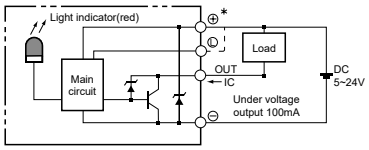
SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)

mindman

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



Sensor layout



Specification

Model			METS-22			
Positioning repeatability		(mm)	±0.01			
Ball screw lead		(mm)	5	10	25	40
Max. speed		(mm/s)	250	500	1250	2000
AC servo motor		(W)	750W			
Rated load	Horizontal	(kg)	150	150	120	60
	Vertical	(kg)	55	45	20	10
Max. thrust		(N)	2563	1281	640	320
Stroke		(mm)	100~1500 / 50 pitch			
Ball screw		(mm)	C7ø25	C7ø25	C7ø25	C7ø20
High rigidity linear guide		(mm)	W23×H18			
Coupling		(mm)	17×19			12×19
Slot-type photomicro sensor	Outside		EE-SX672 (NPN)			
	Built in		EE-SX674 (NPN)			

Order example

METS–22 – L10 – 100 – M – M75 B– C4

Model: METS–22

Size: L10

Stroke: 100~1500 mm, 50 mm pitch

Brakes (*2)

–	No brake
B	With brake

Ball screw lead

L05	5 mm
L10	10 mm
L25	25 mm
L40	40 mm

Motor position

M	Built-in
BC	Direct connection
BM	Lower side
BR	Right side
BL	Left side

Flange (For motor installation)

Applicable motor brand (*1)		Dimensions	
M	Mitsubishi	75	750W servo
	Yaskawa		
	Delta		
P	Panasonic		

Home sensor

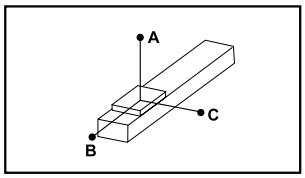
In side	
A	Motor side
B	Opposite motor side
Out side	
C	Motor side
D	Opposite motor side
No sensor	
E	None

Limit sensor

In side	
1	1 Pc
2	2 Pcs
Out side	
3	1 Pc
4	2 Pcs
No sensor	
5	None

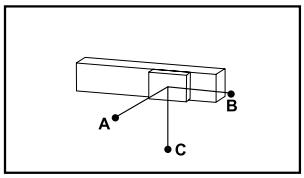
*1. Motor not included. Please refer to the "Motor Selection Table" for details.
*2. Determination is required only when "Built-in" type is chosen.

Allowable overhang



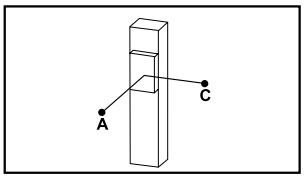
Unit: mm

Horizontal installation		A	B	C
Lead 5	60kg	3672	653	866
	100kg	3000	370	497
	150kg	2493	273	363
Lead 10	60kg	2652	899	994
	100kg	1775	526	593
	150kg	1396	317	267
Lead 25	50kg	2862	956	1191
	80kg	2412	581	773
	120kg	2025	373	556
Lead 40	10kg	4010	4010	3460
	30kg	3011	2003	1911
	60kg	2453	730	980



Unit: mm

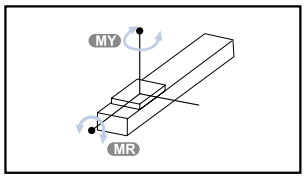
Wall installation		A	B	C
Lead 5	60kg	795	525	3657
	100kg	416	248	2993
	150kg	290	159	2479
Lead 10	60kg	982	815	2573
	100kg	569	442	1680
	150kg	337	232	1258
Lead 25	50kg	1207	879	2862
	80kg	779	504	2412
	120kg	515	295	2025
Lead 40	10kg	3057	4113	4113
	30kg	2112	2108	3387
	60kg	1020	668	2461



Unit: mm

Vertical installation		A	C
Lead 5	30kg	2688	2688
	50kg	1893	1893
	70kg	1640	1640
Lead 10	20kg	2297	2297
	30kg	1518	1518
	45kg	999	999
Lead 25	15kg	2767	2767
	20kg	2100	2100
	25kg	1702	1702
Lead 40	-	-	-
	-	-	-
	-	-	-

Static loading moment



Unit: N.m

MY	2052
MP	2052
MR	1810

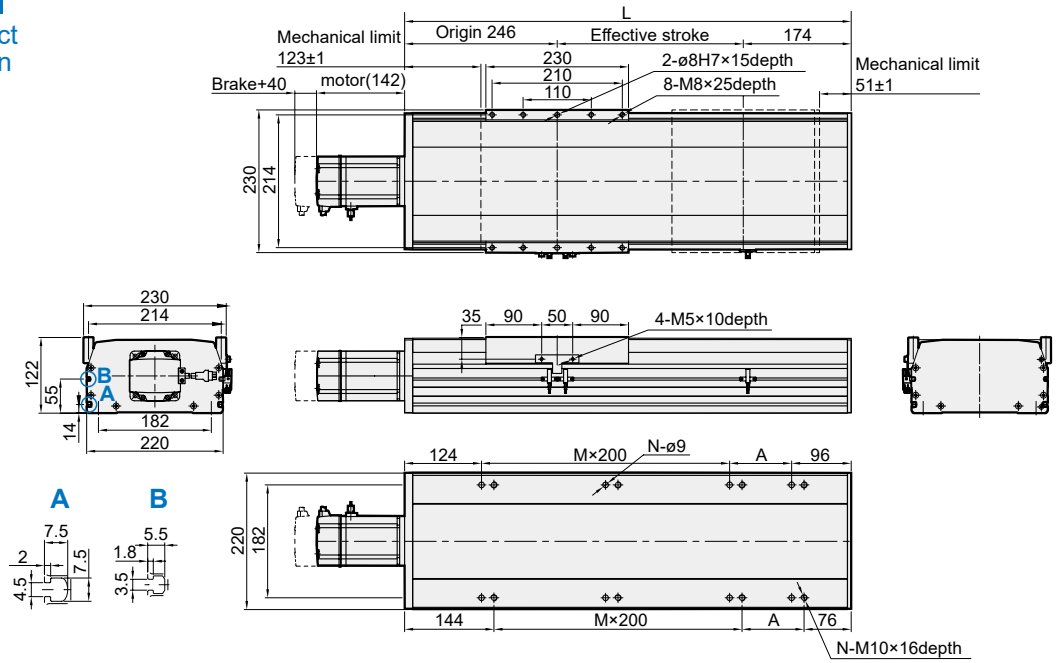
METS-22 Dimensions – Servo motor 750W

SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)

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BC

Motor direct connection

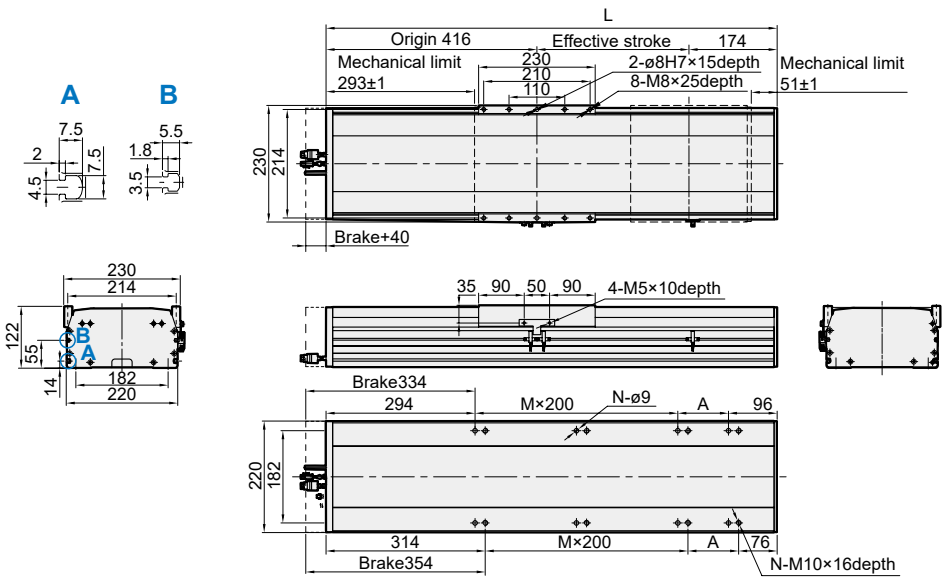


Unit: mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	25.4	26.86	28.32	29.78	31.24	32.7	34.16	35.62	37.08	38.54	40	41.46	42.92	44.38	45.84	47.3	48.76	50.22	51.68	53.14	54.6	56.06	57.52	58.98	60.44	61.9	63.36	64.82	66.28	67.74

M

Motor built-in



Unit: mm

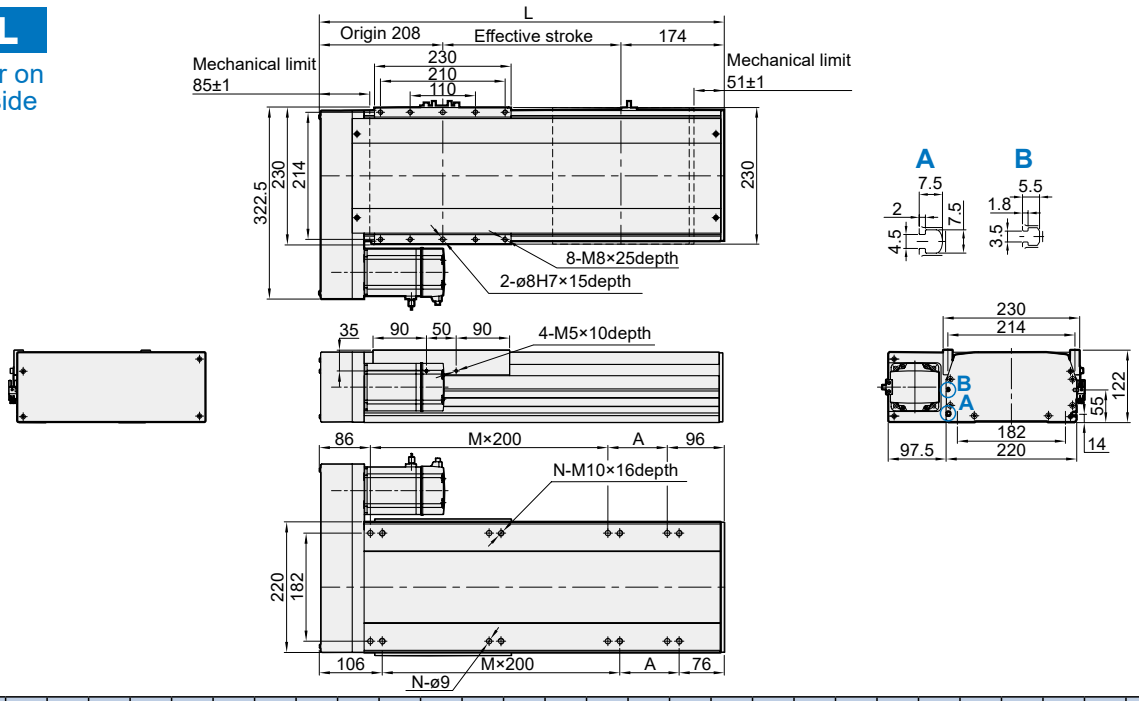
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	640	690	740	790	840	890	940	990	1040	1090	1140	1190	1240	1290	1340	1390	1440	1490	1540	1590	1640	1690	1740	1790	1840	1890	1940	1990	2040	2090
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	27.85	29.32	30.79	32.26	33.73	35.2	36.67	38.14	39.61	41.08	42.55	44.02	45.49	46.96	48.43	49.9	51.37	52.84	54.31	55.78	57.25	58.72	60.19	61.66	63.13	64.6	66.07	67.54	69.01	70.48

METS-22 Dimensions – Servo motor 750W

SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)

BL

Motor on left side

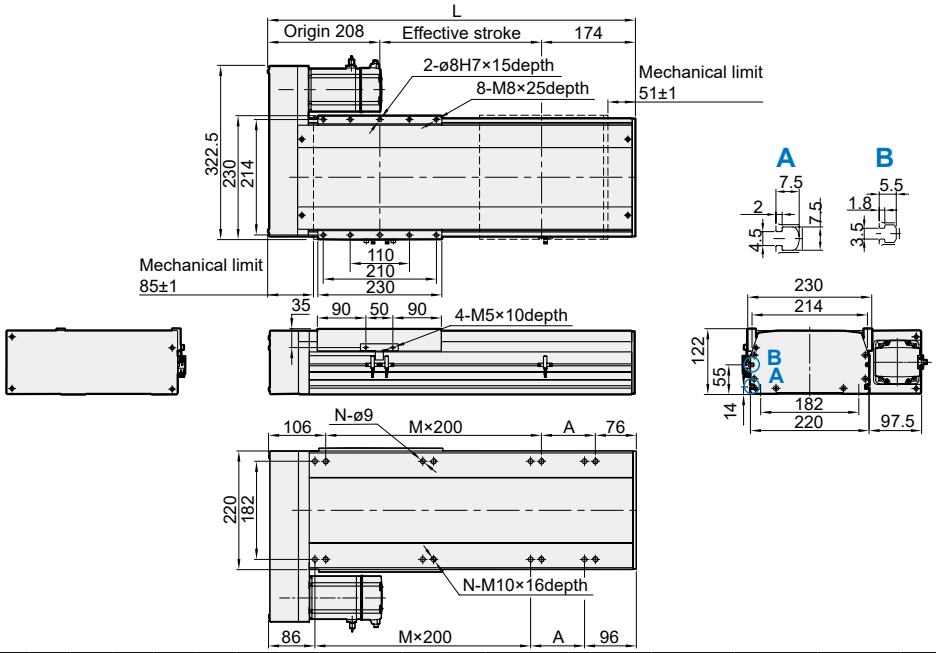


Unit: mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	432	482	532	582	632	682	732	782	832	882	932	982	1032	1082	1132	1182	1232	1282	1332	1382	1432	1482	1532	1582	1632	1682	1732	1782	1832	1882
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	24.2	25.66	27.12	28.58	30.04	31.5	32.96	34.42	35.88	37.34	38.8	40.26	41.72	43.18	44.64	46.1	47.56	49.02	50.48	51.94	53.4	54.86	56.32	57.78	59.24	60.7	62.16	63.62	65.08	66.54

BR

Motor on right side



Unit: mm

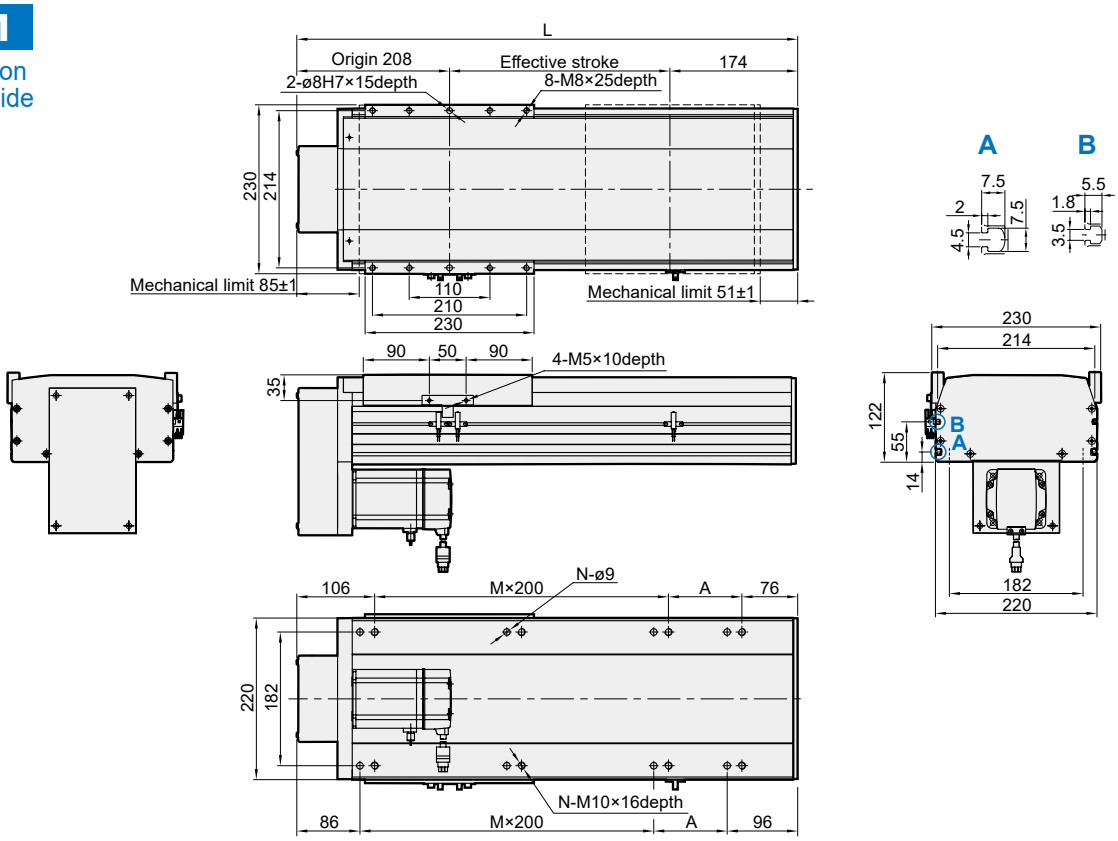
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	432	482	532	582	632	682	732	782	832	882	932	982	1032	1082	1132	1182	1232	1282	1332	1382	1432	1482	1532	1582	1632	1682	1732	1782	1832	1882
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	24.2	25.66	27.12	28.58	30.04	31.5	32.96	34.42	35.88	37.34	38.8	40.26	41.72	43.18	44.64	46.1	47.56	49.02	50.48	51.94	53.4	54.86	56.32	57.78	59.24	60.7	62.16	63.62	65.08	66.54

METS-22 Dimensions – Servo motor 750W

SLIDER ELECTRIC CYLINDER (WITHOUT MOTOR)

BM

Motor on lower side



Unit: mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	432	482	532	582	632	682	732	782	832	882	932	982	1032	1082	1132	1182	1232	1282	1332	1382	1432	1482	1532	1582	1632	1682	1732	1782	1832	1882
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	24.2	25.66	27.12	28.58	30.04	31.5	32.96	34.42	35.88	37.34	38.8	40.26	41.72	43.18	44.64	46.1	47.56	49.02	50.48	51.94	53.4	54.86	56.32	57.78	59.24	60.7	62.16	63.62	65.08	66.54