

MSDM100 Series

▶ Ball Screw Drive Actuators / Clean Room



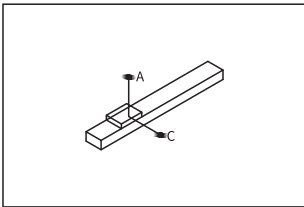
Ball Screw Drive Actuators / Clean Room

Product Catalog

Basic Specifications

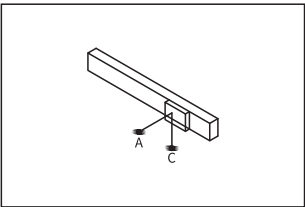
Performance	Position Repetition Precision		$\pm 0.01/\pm 0.02$			
	Ball Screw Lead		5	10	16	20
	Max. Speed		250	500	800	1000
	Max. Handling Weight	Horizontal Use	50	30	25	25
		Vertical Use	30	20	15	15
Components	Standard Stroke		100~1050mm / 50mm pitch			
	AC Servo Motor Capacity		400			
	Ball Screw Outer Diameter		C7 $\phi 16$			
	High-rigidity Linear Guide		12 $\times$ 7.5			
	Coupling		LK5-C34-1410WP			
	Home Sensor	External-mounted	FC-SPX307Z(NPN)			
			LU674-5NA(NPN)			

Allowable Load Moment Table



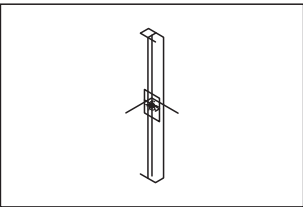
(Unit: mm)

Horizontal Mounting		A	C
Lead 5	10kg	900	500
	20kg	600	300
	30kg	500	250
Lead 10	15kg	900	450
	25kg	700	350
	30kg	500	250
Lead 16	10kg	800	400
	20kg	600	300
	25kg	500	250
Lead 20	10kg	800	400
	20kg	600	300
	25kg	500	250



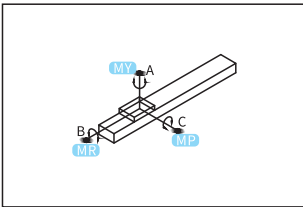
(Unit: mm)

Side Mounting		A	C
Lead 5	10kg	400	800
	20kg	300	600
	30kg	200	400
Lead 10	10kg	300	600
	20kg	200	400
	30kg	100	200
Lead 16	10kg	250	500
	20kg	150	300
	25kg	50	100
Lead 20	10kg	250	500
	20kg	150	300
	25kg	50	100



(Unit: mm)

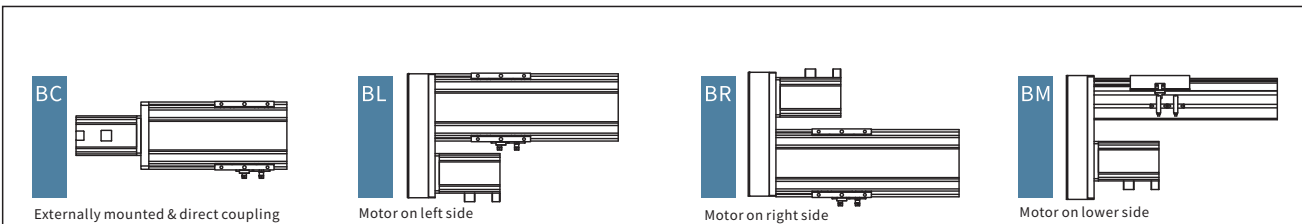
Vertical Mounting		A	C
Lead 5	10kg	400	300
	20kg	300	200
	30kg	200	150
Lead 10	10kg	300	200
	15kg	200	180
	25kg	150	100
Lead 16	10kg	300	200
	20kg	200	150
	-	-	-
Lead 20	10kg	300	200
	20kg	200	150
	-	-	-



Horizontal Operation (Unit: N.m)

MY	200(N.m)
MP	200(N.m)
MR	180(N.m)

List of Shaft Directions



Max. Stroke 1050mm

Max. Speed 1000mm/s

Motor Capacity 400W

Ball Screw $\phi 16\text{MM}$

LinearGuideRail 12*7.5-2 PCS

Model Number Designation System

MSDM100- P05 - S500 - M - C7 - 200W - BJ

Model

Stroke

100-1050mm
50mm pitch

Lead

P05	05mm
P10	10mm
P16	16mm
P20	20mm

Motor Position

M	Direct motor coupling
BC	Motor externally mounted
BM	Motor on lower side
BR	Motor on right side
BL	Motor on left side

Ball Screw Grade

C7	C7
C5	C5
C3	C3

Servo Motor

1	200W
2	400W
H	Stepper motor
B	With brake

Slide Block Length

BJ	Standard slide block
DJ	Customized slide block

Product Catalog

BC Motor Externally Mounted

Download CAD drawings at www.dgshihai.com

Effective Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	382	432	482	532	582	632	682	732	782	832	882	932	982	1032	1082	1132	1182	1232	1282	1332
C	80	130	80	130	80	130	80	130	80	130	80	130	80	130	80	130	80	130	80	130
N	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
Weight(KG)	8.5	8.8	9.2	9.6	10	10.4	10.8	11.2	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.2	14.6	15	15.4	15.8

Unit: MM

M Motor Direct Coupling

Download CAD drawings at www.dgshihai.com

Effective Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	482	532	582	632	682	732	782	832	882	932	982	1032	1082	1132	1182	1232	1282	1332	1382	1432
C	82	132	82	132	82	132	82	132	82	132	82	132	82	132	82	132	82	132	82	132
N	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12
Weight(KG)	7	7.43	7.85	8.27	8.7	9.12	9.54	9.96	10.39	10.81	11.23	11.66	12.08	12.5	12.93	13.35	13.77	14.19	14.62	15.04

Unit: MM

BL Motor on left side

Download CAD drawings at www.dgshihai.com

Effective Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	387	437	487	537	587	637	687	737	787	837	887	937	987	1037	1087	1137	1187	1237	1287	1337
C	152	102	152	102	152	102	152	102	152	102	152	102	152	102	152	102	152	102	152	102
N	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11
Weight(KG)	8.5	8.8	9.2	9.6	10	10.4	10.8	11.2	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.2	14.6	15	15.4	15.8

Unit: MM

BR Motor on left side

Download CAD drawings at www.dgshihai.com

Effective Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	387	437	487	537	587	637	687	737	787	837	887	937	987	1037	1087	1137	1187	1237	1287	1337
C	152	102	152	102	152	102	152	102	152	102	152	102	152	102	152	102	152	102	152	102
N	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11
Weight(KG)	8.5	8.8	9.2	9.6	10	10.4	10.8	11.2	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.2	14.6	15	15.4	15.8

Unit: MM