

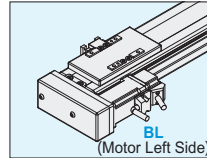
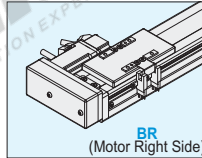
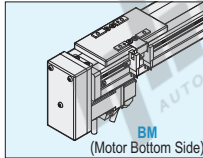
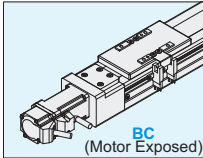
Single Axis Robots

YBSC6 Series

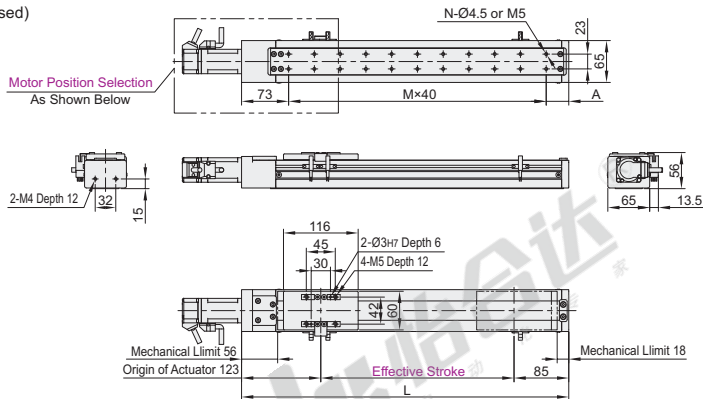
Ball Screw Drive, General Environment

Code	Base		Guide		Slider		Cover		Operating Ambient
	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	
YBSC6	Aluminum Alloy	Anodize	Iron	—	Aluminum Alloy	Anodize	Aluminum Alloy	Anodize	0~40°C 35~85%RH No Condensation

(I) This product does not include a motor, the motor must be purchased separately.



Motor Position :
BC (Motor Exposed)



(I) Motor Position Selection

BM (Motor Bottom Side)		BR (Motor Right Side)		BL (Motor Left Side)	
2-M4 Depth 12 32 15 50.5 65 13.5 145 116 45 30 2-Ø3H7 Depth 6 4-M5 Depth 12 42 60 Mechanical Limit 48 Origin of Actuator 115		65 15 2-M4 Depth 12 56 32 65 47 Origin of Actuator 115 Mechanical Limit 48 2-Ø3H7 Depth 6 4-M5 Depth 12 42 60 30 45 116		2-M4 Depth 12 15 50.5 65 13.5 47 32 65 116 45 30 2-Ø3H7 Depth 6 4-M5 Depth 12 42 60 Mechanical Limit 48 Origin of Actuator 115	

Part Number		Effective Stroke	Motor Position	Motor Brand	Motor Output	Brake	Home Sensor	Limit Sensor	Installation
Code	Ball Lead Screw	(50 mm Increment)	Selection						Method
YBSC6	5	100~800 Non-standard stroke can be customized	BC(Motor Exposed)	P(Panasonic)	10(100W Servo)	N(Without Brake) B(With Brake)	Out Side	Out Side	H (Install On Bottom) M (Install On Internal)
	10		BM(Motor Bottom Side) BR(Motor Right Side) BL(Motor Left Side)	Y(Yaskawa) M(Mitsubishi) T(Delta) H(Inovance) L(Leadshine)	57(57 Stepping) 57(57 Stepping) Only applicable to Leadshine brand.		C(Motor Side) D(OppoSite Motor Side) No Sensor E(No Sensor)	3(1 Pc) 4(2 Pcs) No Sensor 5(No Sensor)	

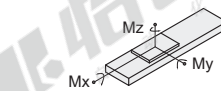
Specification

Recommended Motor Output			57 Stepping		100W Servo	
Spec	Positioning Repeatability		±0.01		±0.01	
	Ball Screw Lead		5	10	5	10
	Maximum Payload(kg)	Horizontal	30	15	30	15
		Vertical	10	5	10	5
	Rated Thrust (N)		340	170	340	170
Parts	Ball Screw Outer Diameter		12			
	Linear Guide Rail		4.2x9.5 Single Branch,Single Slide Block			
	Home Sensor	Out Side	EE-SX672(NPN)			
		In Side	—			

① Please contact us for OMRON Brand or PNP Sensor.

Allowable Moment Table

Mxd	75 N.m
Myd	80 N.m
Mzd	70 N.m

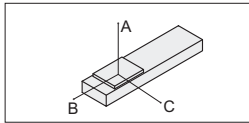


The torque value in the table is dynamic allowable torque based on the running life of sliding table of 10000km.
Torque conditions:
 $Mx/Mxd + My/Myd + Mz/Mzd \leq 1$
(Mx, My, Mz are the actual moments in each direction)

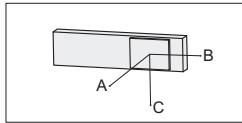
Explanation :

- The actual load shall meet the following conditions:
 - Meet the maximum load condition in the "Specification" table.
 - Satisfy the torque condition in the "allowable Moment Table" if beyond the conditions of use will greatly reduce the life of the slide table.
 - The data in the table is based on the rated life of 10000km.
 - The repeated positioning accuracy in the table is a unidirectional value.
 - The maximum speed of the lead screw drive slider is reached after a certain travel. Need to be reduced. In order to avoid the resonance of the sliding table, different travel corresponding please refer to the table below for the maximum speed.
 - Rated acceleration of the slide table is 0.3G, and the short-stroke slide table may not work reach top speed.
 - If the sliding table is used vertically, please choose the belt brake motor.

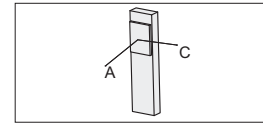
Load allowable moment table (unit: mm)



Horizontal installation		A	B	C
Lead 5	10kg	500	43	107
	30kg	125	10	24
Lead 10	3kg	790	145	310
	8kg	280	49	107
	15kg	135	23	50



Wall-mounted installation		A	B	C
Lead 5	15kg	63	25	304
	30kg	22	9	119
Lead 10	3kg	304	140	776
	8kg	104	48	273
	15kg	48	22	131



Vertical installation		A	C
Lead 5	2kg	250	250
	4kg	125	125
	10kg	50	50
Lead 10	1kg	446	446
	2kg	223	223
	5kg	89	89

Maximum Speed

Screw Outer Diameter	Motor Output	Lead	Stroke															
			100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
12	57 Stepping	5	41															
		10	83															
	100W Servo	5	250												225	220	175	150
		10	500												450	400	350	300

Dimension Table

Motor Position	Dimension	Stroke														
BC (Motor Exposed)	L	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
	A	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008
	M	35	45	55	65	75	85	95	105	115	125	135	145	155	165	175
	N	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	N	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
	Weight (kg)※	2.6	2.8	3	3.2	3.4	3.6	3.8	4	4.2	4.4	4.6	4.8	5	5.2	5.4
BM (Motor Bottom Side)	L	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
	A	35	45	55	65	75	85	95	105	115	125	135	145	155	165	175
	M	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	N	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
	N	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
	Weight (kg)※	2.6	2.8	3	3.2	3.4	3.6	3.8	4	4.2	4.4	4.6	4.8	5	5.2	5.4
BR (Motor Right Side)	L	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
	A	35	45	55	65	75	85	95	105	115	125	135	145	155	165	175
	M	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	N	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
	N	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
	Weight (kg)※	2.6	2.8	3	3.2	3.4	3.6	3.8	4	4.2	4.4	4.6	4.8	5	5.2	5.4
BL (Motor Left Side)	L	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
	A	35	45	55	65	75	85	95	105	115	125	135	145	155	165	175
	M	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	N	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
	N	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
	Weight (kg)※	2.6	2.8	3	3.2	3.4	3.6	3.8	4	4.2	4.4	4.6	4.8	5	5.2	5.4

※ Not include motor weight.

List of servo motor which should be matched

Brand	Motor Mark	Brake	Watt	Servo Motor Part Number	Driver Part Number
Panasonic	P	Without Brake(Horizontal)	100W	MSMF012L1U2M	MADLN05SE
		With Brake(Vertical)		MSMF012L1V2M	
Mitsubishi	M	Without Brake(Horizontal)	100W	HG-KN13J-S100	MR-JE-10A
		With Brake(Vertical)		HG-KN13BJ-S100	
Delta(B2)	T	Without Brake(Horizontal)	100W	ECMA-C20401GS	ASD-B2-0121-B
		With Brake(Vertical)		ECMA-C20401FS	

① The part number listed in the table are motor and driver part number sold on our official website. only modular mechanical parts are provided for standard single axis robot models , without motors and drivers. ② Please consult our staff for other types of motor .



Part Number Code	Effective Stroke (50 mm Increment)	Motor Position Selection	Motor Brand	Motor Output	Brake	Home Sensor	Limit Sensor	Installation Method
YBSC6	5	BC(Motor Exposed)	P(Panasonic)	100(100W Servo)	N(Without Brake)	C(Motor Side)	Out Side	H(Install On Bottom)
	10	BM(Motor Bottom Side)	Y(Yaskawa)	57(57 Stepping)	B(With Brake)	D(OppoSite Motor Side)	3(1 Pc)	M(Install On Internal)
		BR(Motor Right Side)	M(Mitsubishi)				4(2 Pcs)	

YBSC6 - 10 - 550 - BM - M - 10 - N - C - 4 - H



Discount price
Per Price 1~4 5~ Additional quotation



Delivery
11

① Quantity (1~4 Pcs)