

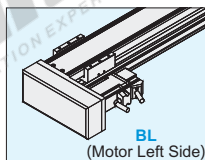
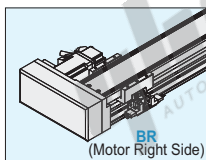
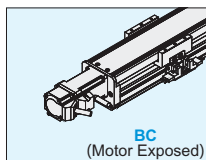
Single Axis Robots

YBSC6B Series

Ball Screw Drive, General Environment

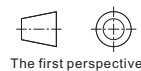
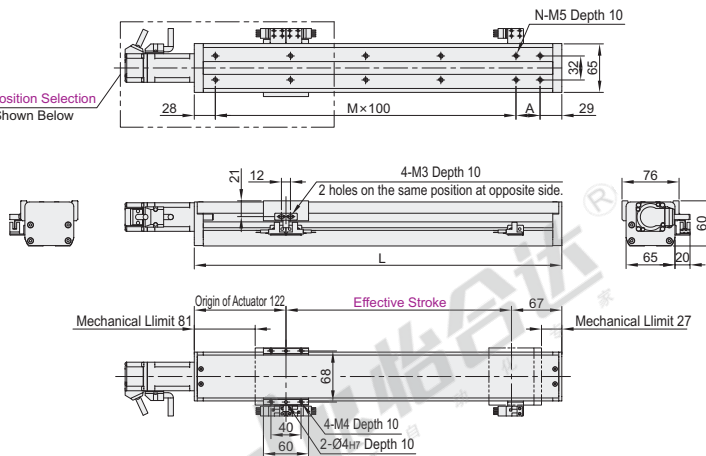
Code	Base		Guide		Slider		Cover		Operating Ambient
	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	
YBSC6B	Aluminum Alloy	Anodize	Iron	—	Aluminum Alloy	Anodize	Aluminum Alloy	Anodize	0~40°C 35~85%RH No Condensation

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



Motor Position :
BC(Motor Exposed)

Motor Position Selection
As Shown Below



(2) Motor Position Selection

BR(Motor Right Side)				BL(Motor Left Side)			

Part Number		Effective Stroke (50 mm Increment)	Motor Position Selection	Motor Brand	Motor Output	Brake	Home Sensor	Limit Sensor
Code	Ball Screw Lead							
YBSC6B	5	100~800 Non-standard stroke can be customized	BC(Motor Exposed) BR(Motor Right Side) BL(Motor Left Side)	P(Panasonic) Y(Yaskawa) M(Mitsubishi) T(Delta) H(Inovance) L(Leadshine)	10(100W Servo) 42(42 Stepping) 42 Stepping Only applicable to Leadshine brand.	N(Without Brake) B(With Brake)	Out Side C(Motor Side) D(OppoSite Motor Side) No Sensor E(No Sensor)	Out Side 3(1 Pc) 4(2 Pcs) No Sensor 5(No Sensor)
	10							

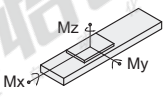
Specification

Recommended Motor Output			42 Stepping		100W Servo	
Spec	Positioning Repeatability		±0.01		±0.01	
	Ball Screw Lead		5	10	5	10
	Maximum Payload(kg)	Horizontal	14	10	14	10
		Vertical	8	5	8	5
	Rated Thrust (N)		340	170	340	170
Parts	Ball Screw Outer Diameter		12			
	Linear Guide Rail		24x8.5 Single Branch,Single Slide Block			
	Home Sensor	Out Side	EE-SX674 (NPN)			
		In Side	—			

① Please contact us for OMRON Brand or PNP Sensor.

Allowable Moment Table

Mxd	5.5 N.m
Myd	3 N.m
Mzd	3 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.

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	42 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															
		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
BC (Motor Exposed)	L	289	339	389	439	489	539	589	639	689	739	789	839	889	939	989	
	A	32	82	32	82	32	82	32	82	32	82	32	82	32	82	32	
	M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	
	N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	
	Weight (kg)※	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	
BR (Motor Right Side)	L	272	322	372	422	472	522	572	622	672	722	772	822	872	922	972	
	A	77	27	77	27	77	27	77	27	77	27	77	27	77	27	77	
	M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
	N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	
	Weight (kg)※	2.2	2.7	3.2	3.7	4.2	4.7	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.7	9.2	
BL (Motor Left Side)	L	272	322	372	422	472	522	572	622	672	722	772	822	872	922	972	
	A	77	27	77	27	77	27	77	27	77	27	77	27	77	27	77	
	M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
	N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	
	Weight (kg)※	2.2	2.7	3.2	3.7	4.2	4.7	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.7	9.2	

※ 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 Please consult our staff for other types of motor .

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.



Part Number		Effective Stroke (50 mm Increment)	Motor Position Selection	Motor Brand	Motor Output	Brake	Home Sensor	Limit Sensor
Code	Ball Screw Lead							
YBSC6B	5	100~800	BC(Motor Exposed) BR(Motor Right Side) BL(Motor Left Side)	P(Panasonic) Y(Yaskawa) M(Mitsubishi)	10(100W Servo) 42(42 Stepping)	N(Without Brake) B(With Brake)	Out Side C(Motor Side) D (Opposite Motor Side)	Out Side 3(1 Pc) 4(2 Pcs)
	10							

YBSC6B — 10 — 550 — BR — M — 10 — N — C — 4



Discount price

Per	1~4	5~
Price	100%	Additional quotation



Delivery

11

① Quantity (1~4 Pcs)