

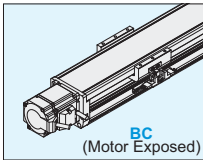
Single Axis Robots

YBSC8B Series

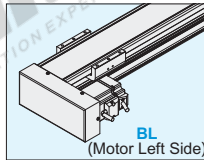
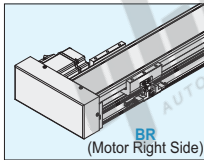
Ball Screw Drive, General Environment

Code	Base		Guide		Slider		Cover		Operating Ambient
	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	
YBSC8B	Aluminum Alloy	Anodize	Iron	—	Aluminum Alloy	Anodize	Aluminum Alloy	Anodize	0~40°C 35~85%RH No Condensation

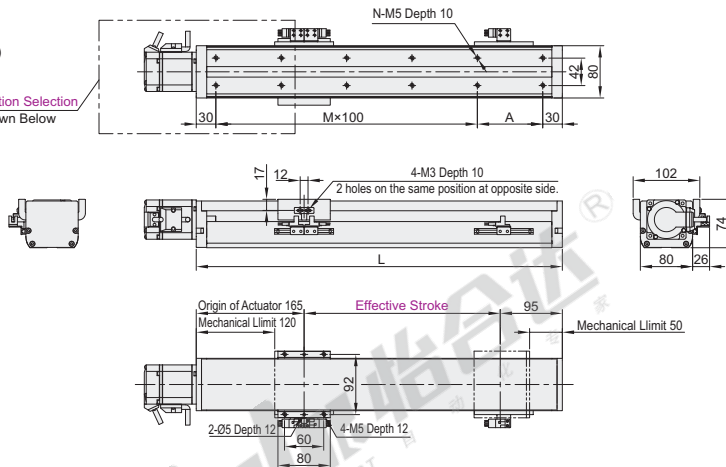
(i) This product does not include a motor, the motor must be purchased separately.



Motor Position :
BC (Motor Exposed)



Motor Position Selection
As Shown Below



The first perspective

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							
YBSC8B	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)	20 (200W Servo) 57 (57 Stepping) 57 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							
	16							
	20							

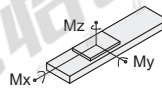
Specification

Recommended Motor Output		57 Stepping				200W Servo			
Spec	Positioning Repeatability	±0.01				±0.01			
	Ball Screw Lead	5	10	16	20	5	10	16	20
	Maximum Payload(kg)	30	25	18	15	30	25	18	15
	Vertical	17	12	10	8	17	12	10	8
	Rated Thrust (N)	340	170	106	85	680	340	212	170
Parts	Ball Screw Outer Diameter	16							
	Linear Guide Rail	42×9.5 Single Branch, Single Slide Block							
	Home Sensor	EE-SX674 (NPN)							
	Out Side	—							
	In Side	—							

① Please contact us for OMRON Brand or PNP Sensor.

Allowable Moment Table

Mxd	17 N.m
Myd	7 N.m
Mzd	7 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	
16	57 Stepping	5																
		10	41															
		16	83															
		20	133															
	200W Servo	20	166															
		5															250	225
		10															500	450
		16															800	720
	20															1000	900	

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	360	410	460	510	560	610	660	710	760	810	860	910	960	1010	1060	
	A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	
	M	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	
	N	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	
	Weight (kg)※	3.1	3.9	4.7	5.5	6.3	7.1	7.9	8.7	9.5	10.3	11.1	11.9	12.7	13.5	14.3	
BR (Motor Right Side)	L	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	
	A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	
	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)※	3.4	4.2	5	5.8	6.6	7.4	8.2	9	9.8	10.6	11.4	12.2	13	13.8	14.6	
BL (Motor Left Side)	L	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	
	A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	
	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)※	3.4	4.2	5	5.8	6.6	7.4	8.2	9	9.8	10.6	11.4	12.2	13	13.8	14.6	

※ 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)	200W	MSMF022L1U2M	MADLN15SE
		With Brake(Vertical)		MSMF022L1V2M	
Mitsubishi	M	Without Brake(Horizontal)	200W	HG-KN23J-S100	MR-JE-20A
		With Brake(Vertical)		HG-KN23BJ-S100	
Delta(B2)	T	Without Brake(Horizontal)	200W	ECMA-C20602RS	ASD-B2-0221-B
		With Brake(Vertical)		ECMA-C20602SS	

① Please consult our staff for other types of motor.

② 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	Motor Position	Motor	Motor Output	Brake	Home Sensor	Limit Sensor
Code	Ball Screw Lead	Selection	Brand				
YBSC8B	5	BC(Motor Exposed) BR(Motor Right Side) BL(Motor Left Side)	P(Panasonic) Y(Yaskawa) M(Mitsubishi)	20(200W Servo) 57(57 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						

YBSC8B - 10 - 550 - BR - M - 20 - N - C - 4



Discount price

Per	1~4	5~
Price	100%	Additional quotation



① Quantity (1~4 Pcs)