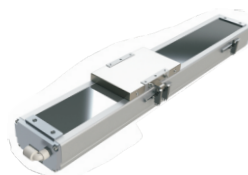


YCBSC10 Series

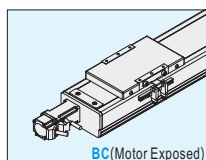
Ball Screw Drive,Clean Room Environment

Single Axis Robots

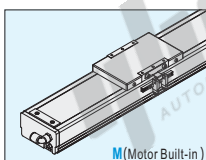


Code	Base		Guide		Slider		Cover		Operating Ambient
	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	
YCBSC10	Aluminum Alloy	Anodize	Iron	—	Aluminum Alloy	Anodize	Aluminum Alloy	Anodize	0~40℃ 35~85%RH No Condensation

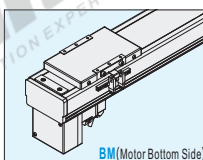
ⓘ This product does not contain a motor,the motor must be purchased separately.



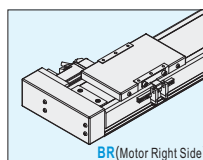
BC(Motor Exposed)



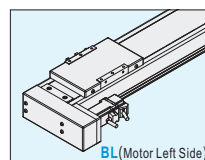
M(Motor Built-in)



BM(Motor Bottom Side)



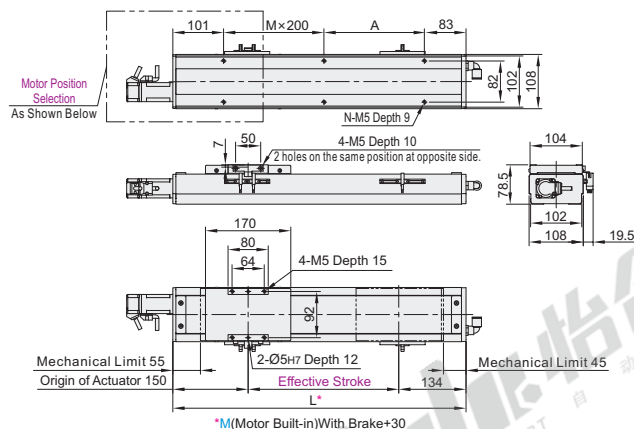
BR(Motor Right Side)



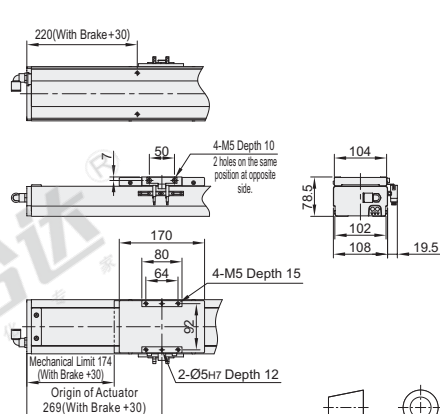
BL(Motor Left Side)

Motor Position :

BC(Motor Exposed)



M(Motor Built-in)



The first perspective

Motor Position Selection

BM(Motor Bottom Side)		BR(Motor Right Side)		BL(Motor Left Side)	
Dimensions: 85, 104, 78.5, 80, 102, 108, 19.5, 50, 4-M5 Depth 10, 2 holes on the same position at opposite side, Origin of Actuator 134, Mechanical Limit 39, 2-Ø5H7 Depth 12, 64, 80, 170, 4-M5 Depth 15.		Dimensions: 118, 104, 78.5, 102, 108, 71.5, 19.5, 50, 4-M5 Depth 10, 2 holes on the same position at opposite side, Mechanical Limit 72, Origin of Actuator 167, 170, 80, 64, 4-M5 Depth 15, 2-Ø5H7 Depth 12.		Dimensions: 118, 104, 78.5, 102, 108, 71.5, 19.5, 50, 4-M5 Depth 10, 2 holes on the same position at opposite side, Origin of Actuator 167, Mechanical Limit 72, 2-Ø5H7 Depth 12, 64, 80, 170, 4-M5 Depth 15.	

Part Number		Effective Stroke (50 mm Inc.)	Motor Position Selection	Motor Brand	Motor Output	Brake	Home Sensor	Limit Sensor
Code	Ball Screw Lead							
YCBSC10	5	100~1050 Non-standard stroke can be customized	M(Motor Built-in)* BC(Motor Exposed) BM(Motor Bottom Side) BR(Motor Right Side) BL(Motor Left Side) *M (Motor Built-in) Motor Output are not suitable for 57 stepper motors.	P(Panasonic) Y(Yaskawa) M(Mitsubishi) T(Delta) H(Inovance) L(Leadshine)	10(100W Servo) 57(57 Stepping) ⓘ 57 Stepping Only applicable to Leadshine brand. ⓘ If 57 series stepper motors are used, it is recommended to choose the model with the maximum static torque greater than 0.64 N.m.	N(Without Brake) B(With Brake)	In Side A (Motor Side) B (Opposite Motor Side) Out Side C (Motor Side) D (Opposite Motor Side) No Sensor E(No Sensor)	In Side 1(1 Pc) 2(2 Pcs) Out Side 3(1 Pc) 4(2 Pcs) No Sensor 5(No Sensor)
	10							
	16							
	20							

Single Axis Robots

YCBSC10 Series Ball Screw Drive, Clean Room Environment

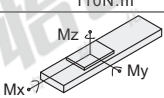
Specification

Recommended Motor Output		100W Servo			
Spec	Positioning Repeatability	±0.01			
	Ball Screw Lead	5	10	16	20
	Maximum Payload(kg)	Horizontal	50	30	22
		Vertical	12	8	5
	Rated Thrust (N)		340	170	106
Parts	Ball Screw Outer Diameter	16			
	Linear Guide Rail	20×17.5 Single Branch, Single Slide Block			
	Home Sensor	Out Side	EE-SX672(NPN)		
		In Side	EE-SX674(NPN)		

Please contact us for OMRON Brand or PNP Sensor.

Allowable Moment Table

Mxd	120N.m
Myd	110N.m
Mzd	110N.m



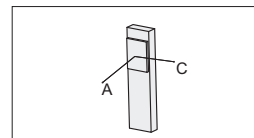
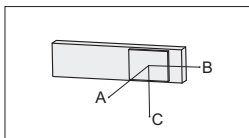
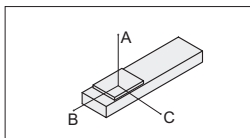
The torque value in the table is dynamic allowable torque based on the running life of sliding table of 10000km.

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:
 (a) Meet the maximum load condition in the "Specification" table.
 (b) 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	30kg	547	42	42
	40kg	391	29	29
	50kg	298	22	21
	15kg	521	84	80
Lead 10	25kg	298	47	44
	30kg	242	37	35
	5kg	937	282	259
Lead 16	10kg	487	121	116
	22kg	236	40	44
	5kg	675	224	193
Lead 20	10kg	330	107	93
	18kg	175	55	48

Wall-mounted installation		A	B	C
Lead 5	25kg	52	53	670
	35kg	35	35	455
	50kg	21	22	298
	10kg	124	131	770
Lead 10	20kg	58	61	382
	30kg	35	37	242
	5kg	116	58	605
Lead 16	10kg	24	26	253
	6kg	160	185	562
	12kg	76	88	272
Lead 20	18kg	48	55	175

Vertical installation		A	C
Lead 5	5kg	310	310
	8kg	192	192
	12kg	129	129
Lead 10	4kg	344	344
	8kg	172	172
Lead 16	2kg	580	580
	5kg	310	310
Lead 20	2kg	546	546
	3kg	364	364

Maximum Speed

Screw Outer Diameter	Motor Output	Lead	Stroke															
			100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850
16	100W Servo	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	850
M (Motor Built-in)	L	503	553	603	653	703	753	803	853	903	953	1003	1053	1103	1153	1203	1253
	A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
	M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
	N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12
	Weight(kg)※	8.5	8.9	9.3	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.5	12.9	13.3	13.7	14.1	14.5
BC (Motor Exposed)	L	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
	A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
	M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
	N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12
	Weight(kg)※	7.8	8.2	8.6	9	9.4	9.8	10.2	10.6	11	11.4	11.8	12.2	12.6	13	13.4	13.8
BM (Motor Bottom Side)	L	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118
	A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
	M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
	N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12
	Weight(kg)※	7.7	8.1	8.5	8.9	9.3	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.5	12.9	13.3	13.7
BR (Motor Right Side)	L	401	451	501	551	601	651	701	751	801	851	901	951	1001	1051	1101	1151
	A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
	M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
	N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12
	Weight(kg)※	7.7	8.1	8.5	8.9	9.3	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.5	12.9	13.3	13.7
BL (Motor Left Side)	L	401	451	501	551	601	651	701	751	801	851	901	951	1001	1051	1101	1151
	A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
	M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
	N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12
	Weight(kg)※	7.7	8.1	8.5	8.9	9.3	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.5	12.9	13.3	13.7

※ Not include motor weight.

YCBSC10 Series

Ball Screw Drive,Clean Room Environment

Single Axis Robots

☐ List of servo motor which should be matched

Brand	Motor Mark	Brake	Watt	Servo Motor Model	Driver Model
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	

☐ Please consult our staff for other types of motor .

☐ The models listed in the table are motor and driver models 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 Inc.)	Motor Position Selection	Motor Brand	Motor Output	Brake	Home Sensor	Limit Sensor
Code	Ball Screw Lead							
YCBSC10	5	100-1050	M(Motor Built-in) B(C Motor Exposed) S(U Motor Bottom Side) B(R Motor Right Side)	P(Panasonic) Y(Yaskawa) M(Mitsubishi)	10(100W Servo) 57(57 Stepping)	N(Without Brake) B(With Brake)	Out Side C(Motor Side) D(OppoSite Motor Side)	Out Side 3(M Pc) 4(2 Pcs)
	10							

YCBSC10—10—550—BM—M—10—N—D—3



● Discount price

Per	1~4	5~
Price	100%	Additional quotation



Delivery

13

☐ Quantity (1~4 Pcs)