

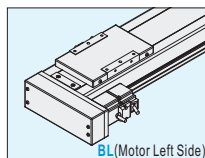
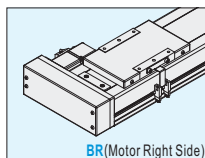
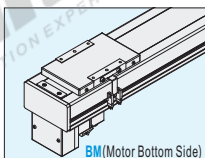
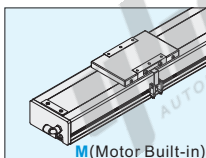
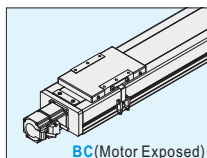
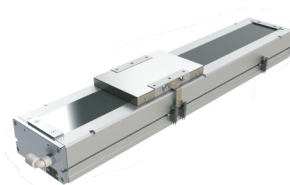
YCBSC14 Series

Ball Screw Drive, Clean Room Environment

Single Axis Robots

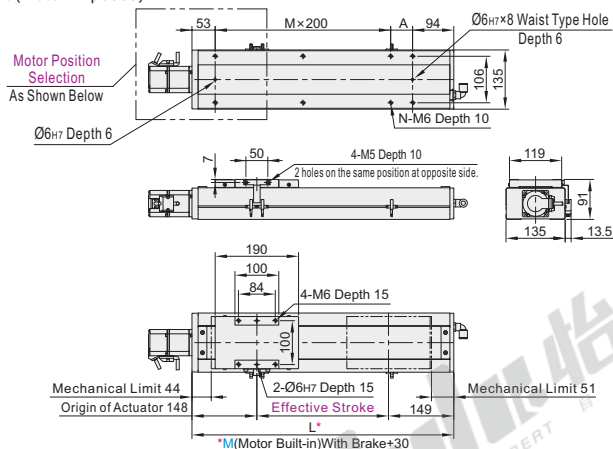
Code	Base		Guide		Slider		Cover		Operating Ambient
	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	
YCBSC14	Aluminum Alloy	Anodize	Iron	—	Aluminum Alloy	Anodize	Aluminum Alloy	Anodize	0~40°C 35~85%RH No Condensation

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

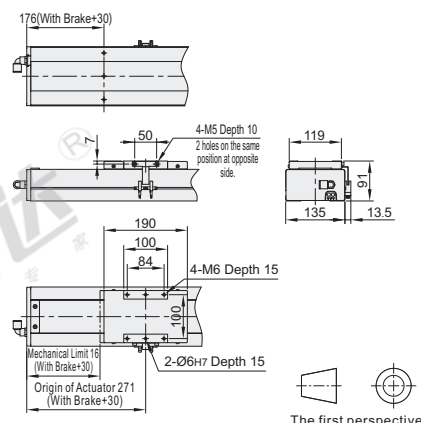


Motor Position:

BC (Motor Exposed)



M (Motor Built-in)



Motor Position Selection

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

Part Number	Effective Stroke	Motor Position	Motor Brand	Motor Output	Brake	Home Sensor	Limit Sensor
Code	Ball Screw Lead	(50 mm Inc.)	Selection				
YCBSC14	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)	P (Panasonic) Y (Yaskawa) M (Mitsubishi) T (Delta) H (Inovance) L (Leadshine)	20 (200W Servo) 40 (400W 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)
	10						
	16						
	20						
							In Side 1 (1 Pc) 2 (2 Pcs) Out Side 3 (1 Pc) 4 (2 Pcs) No Sensor 5 (No Sensor)

Single Axis Robots

YCBSC14 Series Ball Screw Drive, Clean Room Environment

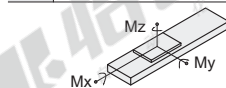
Specification

Recommended Motor Output		200W Servo				400W Servo			
Spec	Positioning Repeatability	±0.01				±0.01			
	Ball Screw Lead	5	10	16	20	5	10	16	20
	Maximum Payload(kg)	Horizontal	95	75	44	35	110	88	48
		Vertical	27	18	7	4	33	22	10
Parts	Rated Thrust (N)	680	340	212	170	1360	680	415	340
	Ball Screw Outer Diameter	16							
	Linear Guide Rail	15x12.5 Two Branch, Double Slide Blocks							
	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	485N.m
Myd	552N.m
Mzd	551N.m

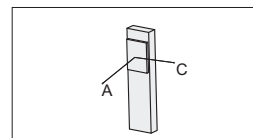
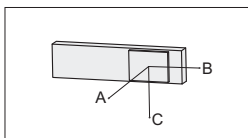
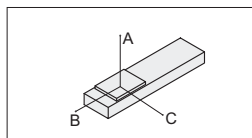


The torque value in the table is dynamic allowable torque based on the running life of sliding table of 10000km.
Torque conditions:
 $Mx/Mxd + My/Myd + Mz/Mzd \leq 1$
(Mx, My, Mz are the actual moments in each direction)

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	60kg	2512	242	232
	80kg	1811	172	164
	110kg	1284	114	108
Lead 10	30kg	2727	470	430
	50kg	1577	266	242
	88kg	854	134	122
Lead 16	10kg	2265	1674	961
	20kg	1402	855	537
	48kg	1047	445	324
Lead 20	10kg	2304	1222	1028
	22kg	1443	540	451
	40kg	860	277	233

Wall-mounted installation		A	B	C
Lead 5	55kg	257	269	2883
	75kg	178	186	2000
	110kg	108	114	1284
Lead 10	35kg	363	395	2368
	55kg	218	238	1445
	88kg	123	134	854
Lead 16	10kg	461	372	1410
	20kg	264	178	1027
	48kg	148	69	832
Lead 20	12kg	854	1019	2552
	20kg	500	596	1588
	40kg	233	277	860

Vertical installation		A	C
Lead 5	15kg	1118	1118
	22kg	770	770
	33kg	513	513
Lead 10	10kg	1500	1500
	14kg	1072	1072
	22kg	682	682
Lead 16	2kg	1067	1067
	4kg	997	997
	10kg	747	747
Lead 20	7kg	1700	1700
	10kg	1188	1188

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	200W 400W 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	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270
	A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
	M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	5
	N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	14
BC (Motor Exposed)	Weight(kg)※	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1
	L	397	447	497	547	597	647	697	747	797	847	897	947	997	1047	1097	1147
	A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
	M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	5
BM (Motor Bottom Side)	N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	14
	Weight(kg)※	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1
	L	389	439	489	539	589	639	689	739	789	839	889	939	989	1039	1089	1139
	A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
BR (Motor Right Side)	M	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	4
	N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	14
	Weight(kg)※	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3
	L	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134	1184
BL (Motor Left Side)	A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
	M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	5
	N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	14
	Weight(kg)※	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3

※ Not include motor weight.

④ List of servo motor which should be matched

Brand	Motor Mark	Brake	Watt	Servo Motor Model	Driver Model
Panasonic	P	Without Brake(Horizontal)	200W	MSMF022L1U2M	MADLN15SE
		With Brake(Vertical)		MSMF022L1V2M	
		Without Brake(Horizontal)	400W	MHMF042L1U2M	MBDLN25SE
		With Brake(Vertical)		MHMF042L1V2M	
Mitsubishi	M	Without Brake(Horizontal)	200W	HG-KN23J-S100	MR-JE-20A
		With Brake(Vertical)		HG-KN23BJ-S100	
		Without Brake(Horizontal)	400W	HG-KN43J-S100	MR-JE-40A
		With Brake(Vertical)		HG-KN43BJ-S100	
Delta(B2)	T	Without Brake(Horizontal)	200W	ECMA-C20602RS	ASD-B2-0221-B
		With Brake(Vertical)		ECMA-C20602SS	
		Without Brake(Horizontal)	400W	ECM-B3M-C20604RS1	ASD-B3-0421-L
		With Brake(Vertical)		ECM-B3M-C20604SS1	

④ Please consult our staff for other types of motor .

④ 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.



Please order as shown

Part Number		Effective Stroke (50 mm Inc.)	Motor Position Selection	Motor Brand	Motor Output	Brake	Home Sensor	Limit Sensor
Code	Ball Screw Lead							
YCBSC14	5	100-1050	BC(Motor Exposed) BM(Motor Bottom Side) BR(Motor Right Side)	P(Panasonic) Y(Yaskawa) M(Mitsubishi)	20(200W Servo) 40(400W Servo)	N(Without Brake) B(With Brake)	Out Side C(Motor Side) D(OppoSite Motor Side)	Out Side 3(1 Pc) 4(2 Pcs)
	10							

YCBSC14-10-550-BM-M-40-N-C-4



● Discount price

Per	1~4	5~
Price	100%	Additional quotation



Delivery

13

④ Quantity (1~4 Pcs)