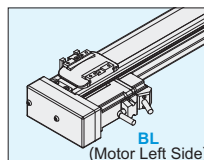
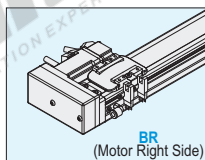
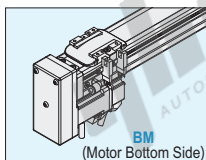


Ball Screw Drive, Clean Room Environment

BC
(Motor Exposed)



Motor Position Selection
As Shown Below

Depth 12

13

32

76

Mx40

N-M5 Depth 8.5

44

34

1.8

2-Ø3x7 Depth 6

Mechanical Limit 54.8

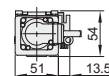
Origin of Actuator 100

Effective Stroke

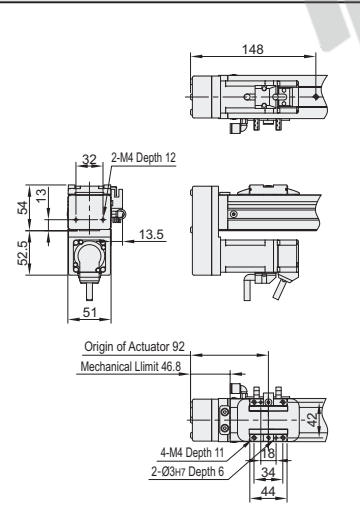
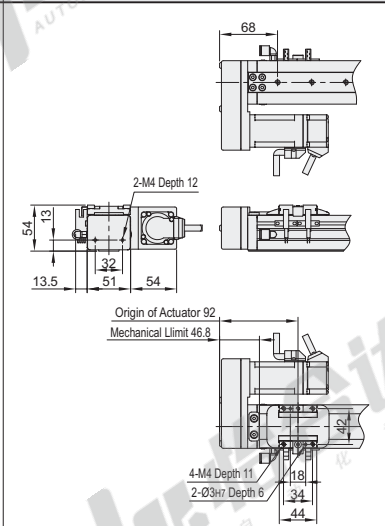
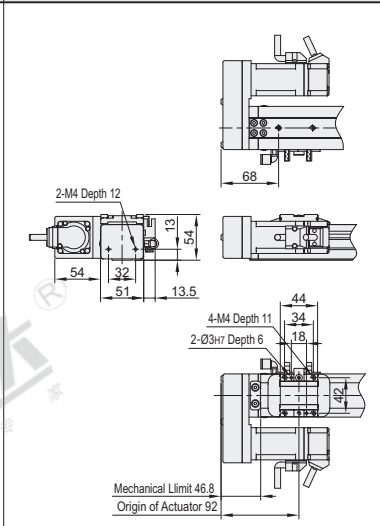
66

Mechanical Limit 20.8

L



The first perspective

BM (Motor Bottom Side)	BR (Motor Right Side)	BL (Motor Left Side)
 Technical drawings of the BM (Motor Bottom Side) showing top, side, and front views with dimensions: - Top view: 148 (width), 52.5 (height), 54 (height), 13 (height), 51 (width), 32 (width), 2-M4 Depth 12 (feature). - Side view: 13.5 (height), 51 (width), 32 (width), 2-M4 Depth 12 (feature). - Front view: 42 (height), 44 (width), 34 (width), 18 (width), 2-Ø3H7r Depth 6 (feature), 4-M4 Depth 11 (feature). - Origin of Actuator 92 - Mechanical Limit 46.8	 Technical drawings of the BR (Motor Right Side) showing top, side, and front views with dimensions: - Top view: 68 (width), 54 (height), 13 (height), 51 (width), 32 (width), 2-M4 Depth 12 (feature). - Side view: 13.5 (height), 51 (width), 32 (width), 2-M4 Depth 12 (feature). - Front view: 42 (height), 44 (width), 34 (width), 18 (width), 2-Ø3H7r Depth 6 (feature), 4-M4 Depth 11 (feature). - Origin of Actuator 92 - Mechanical Limit 46.8	 Technical drawings of the BL (Motor Left Side) showing top, side, and front views with dimensions: - Top view: 68 (width), 54 (height), 13 (height), 51 (width), 32 (width), 2-M4 Depth 12 (feature). - Side view: 13.5 (height), 51 (width), 32 (width), 2-M4 Depth 12 (feature). - Front view: 44 (height), 44 (width), 34 (width), 18 (width), 2-Ø3H7r Depth 6 (feature), 4-M4 Depth 11 (feature). - Mechanical Limit 46.8 - Origin of Actuator 92

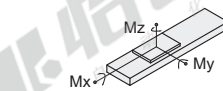
Specification

Recommended Motor Output		42 Stepping		100W Servo	
Spec	Positioning Repeatability	±0.01		±0.01	
	Ball Screw Lead	5	10	5	10
	Maximum Payload(kg)	10	5	10	5
	Vertical	3	1.5	3	1.5
	Rated Thrust (N)	340	170	340	170
Parts	Ball Screw Outer Diameter	12			
	Linear Guide Rail	24×8.5 Single Branch, Single Slide Block			
	Home Sensor	EE-SX672(NPN)			
	In Side	—			

① Please contact us for OMRON Brand or PNP Sensor.

Allowable Moment Table

Mxd	19 N.m
Myd	20 N.m
Mzd	16 N.m



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

Torque conditions:

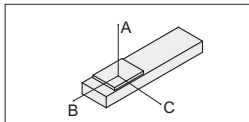
$$Mx/Mxd + My/Myd + Mz/Mzd \leq 1$$

(Mx, My, Mz are the actual moments in each direction)

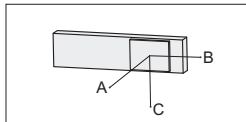
Explanation:

- The actual load shall meet the following conditions:
 - Meet the maximum load condition in the detailed parameters table
 - Satisfy the torque condition in the "permissible torque 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.

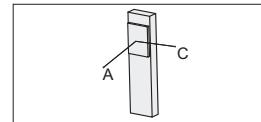
Load allowable moment table (unit: mm)



Horizontal installation		A	B	C
Lead5	5kg	280	24	55
	10kg	120	10	22
Lead10	3kg	245	40	78
	5kg	140	22	43



Wall-mounted installation		A	B	C
Lead5	5kg	51	30	300
	10kg	20	15	195
Lead10	3kg	74	37	231
	5kg	40	20	131



Vertical installation		A	C
Lead5	1kg	140	140
	3kg	47	47
Lead10	1kg	125	125
	1.5kg	83	83

Maximum Speed

Screw Outer Diameter	Motor Output	Lead	Stroke															
			50	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
		10	500													450	400	350

Dimension Table

Motor Position	Dimension	Stroke															
		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
BC (Motor Exposed)	L	216	266	316	366	416	466	516	566	616	666	716	766	816	866	916	966
	A	60	30	40	50	60	30	40	50	60	30	40	50	60	30	40	50
	M	2	4	5	6	7	9	10	11	12	14	15	16	17	19	20	21
	N	3	5	6	7	8	10	11	12	13	15	16	17	18	20	21	22
	Weight (kg)※	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6
BM (Motor Bottom Side)	L	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958
	A	60	30	40	50	60	30	40	50	60	30	40	50	60	30	40	50
	M	0	2	3	4	5	7	8	9	10	12	13	14	15	17	18	19
	N	1	3	4	5	6	8	9	10	11	13	14	15	16	18	19	20
	Weight (kg)※	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6
BR (Motor Right Side)	L	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958
	A	60	30	40	50	60	30	40	50	60	30	40	50	60	30	40	50
	M	2	4	5	6	7	9	10	11	12	14	15	16	17	19	20	21
	N	3	5	6	7	8	10	11	12	13	15	16	17	18	20	21	22
	Weight (kg)※	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6
BL (Motor Left Side)	L	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958
	A	60	30	40	50	60	30	40	50	60	30	40	50	60	30	40	50
	M	2	4	5	6	7	9	10	11	12	14	15	16	17	19	20	21
	N	3	5	6	7	8	10	11	12	13	15	16	17	18	20	21	22
	Weight (kg)※	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6

※ 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)	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.

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.



Please order as shown

Part Number	Effective Stroke	Motor Position	Motor Brand	Motor Output	Brake	Home Sensor	Limit Sensor
Code	Ball Screw Lead (50 mm increment)	Selection	Brand				
YCBSC5	5	BC (Motor Exposed)	P (Panasonic)	10 (100W Servo)	N (Without Brake)	Out Side	Out Side
	10	BM (Motor Bottom Side)	Y (Yaskawa)	42 (42 Stepping)	B (With Brake)	C (Motor Side)	3 (1 Pc)
	60~80	BR (Motor Right Side)	M (Mitsubishi)			D (Opposite Motor Side)	4 (2 Pcs)

YCBSC5-10-550-BM-M-10-N-C-4



Discount price

Per	1~4	5~
Price	100%	Additional quotation



Delivery

13

① Quantity (1~4 Pcs)