

Single Axis Robots



L (Motor Left Side)

LU (Motor Left Upper Side)

LD (Motor Left Lower Side)

R(Motor Right Side)

RU (Motor Right Upper Side)

RD (Motor Right Lower Side)

Technical drawing of the Mechanical Limit 148 assembly, showing front and side views with dimensions and callouts.

Dimensions:

- Overall width: 225
- Overall height: 200
- Mounting flange width: 138
- Mounting flange thickness: 11
- Mounting flange hole diameter: 50
- Actuator body width: 300
- Actuator body height: 200
- Actuator body mounting flange width: 180
- Actuator body mounting flange thickness: 92
- Actuator body mounting flange hole diameter: 180
- Actuator body mounting flange hole spacing: 8-M8 Depth 25
- Actuator body mounting flange hole diameter: 2-Ø8 Depth 15
- Actuator body mounting flange hole spacing: 101.5
- Actuator body mounting flange hole diameter: L+101.5

Callouts:

- 4-M5 Depth 10
- 2 holes on the same position at opposite side.

Mechanical Limit 148

Single Axis Robots

YCTB22 Series, Base Width 220 mm Timing Belt Series, Clean Room Environment

Motor Position Selection

RU(Motor Right Upper Side)		RD(Motor Right Lower Side)	

Part Number		Effective Stroke (50 mm Inc.)	Motor Position Selection	Motor Brand	Motor Output	Home Sensor	Limit Sensor
Code	Ball Screw Lead						
YCTB22	40	100 ~ 3050 Non-standard stroke can be customized	L(Motor Left Side) LU(Motor Left Upper Side) LD(Motor Left Lower Side) R(Motor Right Side) RU(Motor Right Upper Side) RD(Motor Right Lower Side)	P(Panasonic) Y(Yaskawa) M(Mitsubishi) T(Delta) H(Inovance) L(Leadshine)	75(750W Servo)	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)

Specification

Recommend Motor Output		750W Servo	
Spec	Positioning Repeatability(mm)	±0.04	
	Ball Screw Lead(mm)	40	
	Max Speed(mm/s)	2000	
	Maximum Payload(kg)	Horizontal	85
	Rated Thrust(N)	Vertical	—
	Effective Stroke(mm)	100~3050(50mm Pitch)	
Parts	Belt Width(mm)	50	
	Linear Guide Rail	23x18 Two Branch Double Slide Blocks	
	Home Sensor	Out Side	EE-SX672(NPN)
		In Side	—

Allowable Moment Table

Mxd	1810N.m
Myd	2052N.m
Mzd	2052N.m

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

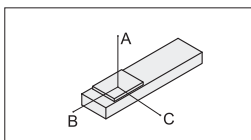
Torque conditions:
 $Mx/Mxd + My/Myd + Mz/Mzd \leq 1$
(Mx, My, Mz are the actual moments in each direction)

Explanation

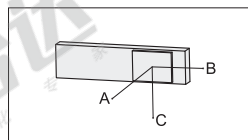
- The actual load shall meet the following conditions:
 - Meet the maximum load condition in the "Specification" table.
 - Satisfy the torque condition in the "allowable Moment Table" if beyond the conditions of use will greatly reduce the life of the slide table.
- The data in the table is based on the rated life of 10000km.
- The repeated positioning accuracy in the table is a unidirectional value.
- Rated acceleration of the slide table is 0.3G, and the short-stroke slide table may not work reach top speed.

ⓘ Please contact us for OMRON Brand or PNP Sensor.

Ⓢ Load allowable moment table (unit: mm)



Horizontal installation	A	B	C
45kg	1588	600	349
65kg	1052	328	285
85kg	768	281	206



Wall-mounted installation	A	B	C
40kg	500	685	1805
60kg	315	430	1152
85kg	206	281	768

YCTB22 Series, Base Width 220 mm

Timing Belt Series, Clean Room Environment

Single Axis Robots

Dimension Table

Dimension	Stroke																											
	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	
L	643	693	743	793	843	893	943	993	1043	1093	1143	1193	1243	1293	1343	1393	1443	1493	1543	1593	1643	1693	1743	1793	1843	1893	1943	
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	
M	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	
N	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	
Weight(kg)	13	13.8	14.6	15.4	16.1	16.9	17.7	18.5	19.2	20	20.8	21.6	22.3	23.1	23.9	24.7	25.4	26.2	27	27.8	28.6	29.4	30.2	31	31.8	32.6	33.4	

Dimension	Stroke																											
	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	
L	1993	2043	2093	2143	2193	2243	2293	2343	2393	2443	2493	2543	2593	2643	2693	2743	2793	2843	2893	2943	2993	3043	3093	3143	3193	3243	3293	
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	
M	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	4	14	
N	20	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	
Weight(kg)	34.2	35	35.8	36.6	37.4	38.2	39	39.8	40.6	41.4	42.2	43	43.8	44.6	45.4	46.2	47	47.8	48.6	49.4	50.2	51	51.8	52.6	53.4	54.2	55	

Dimension	Stroke					
	2800	2850	2900	2950	3000	3050
L	3343	3393	3443	3493	3543	3593
A	50	100	150	200	50	100
M	15	15	15	15	16	16
N	34	34	34	34	36	36
Weight(kg)	55.8	56.6	57.4	58.2	59	59.8

Not include motor weight.



Please order as shown

Part Number Code	Effective Stroke (50 mm Inc.)	Motor Position Selection	Motor Brand	Motor Output	Home Sensor	Limit Sensor
YCTB22	40	LU (Motor Left Side) LU (Motor Left Upper Side)	P (Panasonic) Y (Yaskawa) M (Mitsubishi)	15 (750W Servo)	Out Side (Motor side) In (Opposite Motor Side)	Out Side 3 (1 Pc) In (2 Pcs)

YCTB22-40-550-LU-M-75-C-4



Discount price

Per	1~4	5~
Price	100%	Additional quotation



Delivery

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