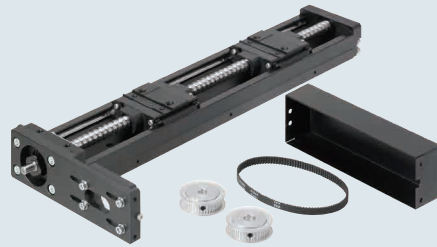


Single Axis Actuator LX30

Motor Wrap Type



Single Axis Actuator LX30 – Motor Wrap Type

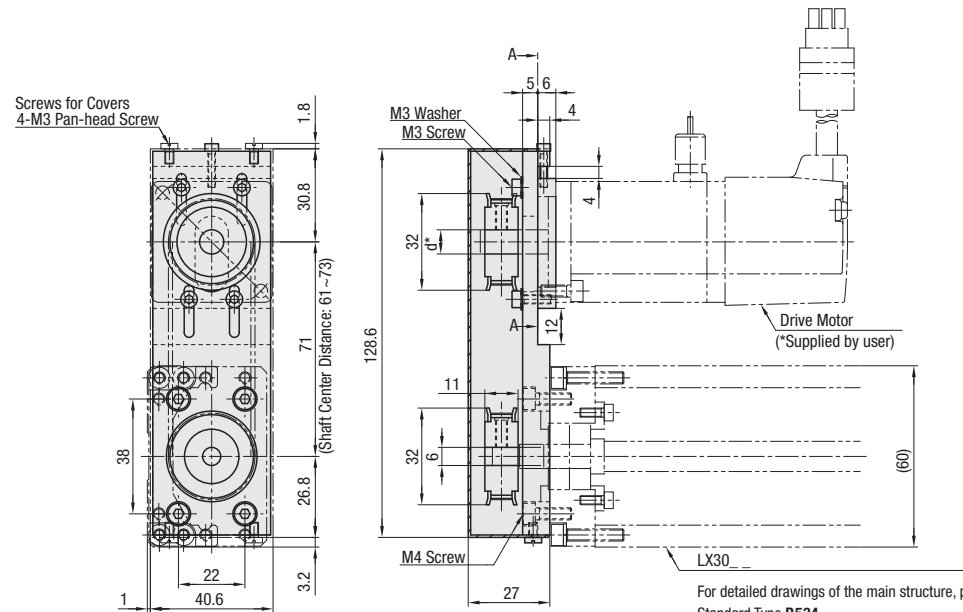


RoHS10

Specifications	
LX30	
Standard / Cover	
Screw Shaft Diameter (mm)	10
Lead (mm)	5, 10
Accuracy	High Grade
Accessories	
(1) Motor Adapter Plate Material: Steel Surface Treatment: Low Temperature Black Chrome Plating	
(2) Adapter Plate Screw 4 Pcs. Material: 302HQ Stainless Steel	
(3) High Torque Timing Pulley Part Number: HTPA44S2M060	
(4) High Torque Timing Belt Part Number: HTBN230S2M-60	

Part Number	Standard Grease		Lubrication Unit MX-Equipped (Standard Grease)	
	High Grade Standard	High Grade with Cover	High Grade Standard	High Grade with Cover
Lead 5	LXR3005	LXR3005C	LXR3005-MX	LXR3005C-MX
Lead 10	LXR3010	LXR3010C	LXR3010-MX	LXR3010C-MX

Components	Base (Rail)	Block	Motor Bracket	Support-Side Bearing with Housing	Cover	Stopper	Precision Ball Screw (Ground)
Material	Carbon Steel	SCM Material	5052 Aluminum Alloy	5052 Aluminum Alloy	6063 Aluminum Alloy	NBR Nitrile Rubber	SCM415 Alloy Steel (JIS)
Surface Treatment	Low Temperature Black Chrome Plating	Low Temperature Black Chrome Plating	Black Baked Paint Finish	Black Anodize	Black Anodize	—	—
Hardness	Induction Hardened 58-64 HRC	58-62 HRC	—	—	—	—	58-62 HRC

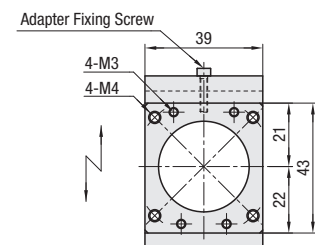


For detailed drawings of the main structure, please see each page.
Standard Type P.534.
Cover Type P.534.
* d is Pulley Inner Dia.
Ø8 for Servo Motor Type and Ø6 for Stepping Motor Type.
Selectable for No Adapter Plate Type

⊙ Recommended belt tension.
When the shaft center distance is 71 mm and the center of the belt is pressed with less than 1N, the deflection is 1.1 mm

Included High Torque Timing Pulley Model

Pulley Mounting Side	Model
Actuator Side Pulley	HTPA44S2M060-A-P6
Motor Side	RA3038
	RA3040
	RT3042
	No Adapter N5
	No Adapter N6
No Adapter N8	HTPA44S2M060-A-N8



Arrow View A-A
Motor Adapter Plate
* For Motor Adapter Plate dimensions, see the next page.

Single Axis Actuator LX30

Motor Wrap Type, continued



For Single Axis Actuator LX Series selections, please use our free 2D and 3D CAD data and Technical Calculation Software.
<http://www.misumiusa.com/lx-actuator/>

LX Related Information
Specifications.....P.518-523
Selection & Life Calculation Example.....P.3952-3955

Part Number	Block Qty.	Motor Adapter Plates	Base Overall Length (L)	Detailed Mounting Hole Dimensions. See P.534					
				A	P ₁	P ₂	B	No. of Pitches	Number of Holes (N)
High Grade Standard LXR3005 LXR3010	Long Blocks (1 Pc.) B1 (2 Pcs.) B2 ⊙ For B2 L≥300	Servo RA3038 RA3040 Stepping RT3042	125	12.5	—	100	12.5	1	4
			150	25	—	100	25	1	4
			200	50	—	100	50	1	4
			250	50	100	50	50	2	6
Lubrication Unit MX Standard LXR3005-MX LXR3010-MX	Short Blocks (1 Pc.) S1 (2 Pcs.) S2 *Lubrication Units MX-Equipped types are available in B1/S1 only.	*(No Adapter Plate) N5 (Pulley Inner Dia. Ø5) N6 (Pulley Inner Dia. Ø6) N8 (Pulley Inner Dia. Ø8)	350	50	100	50	50	3	8
			400	50	100	100	50	3	8
			450	50	100	50	50	4	10
			500	50	100	100	50	4	10
High Grade with Cover LXR3005C LXR3010C			550	50	100	50	50	5	12
			600	50	100	100	50	5	12

Effective Stroke / Mass

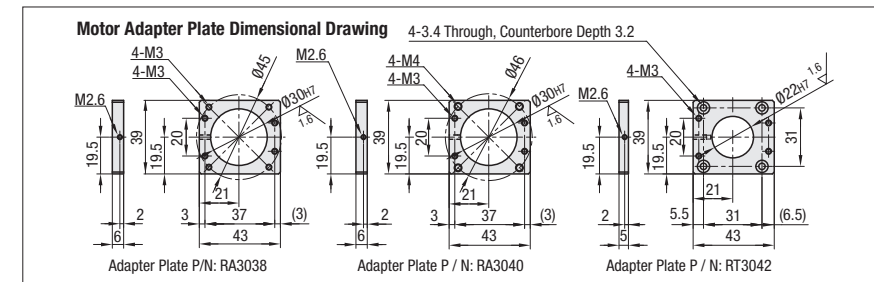
*Motor adapter plate and mounting screws are not included with No Adapter Plate Type.

Base Length (L)	* Effective Stroke						Total Mass (kg)								
	MX-Unequipped			MX-Equipped			LXR30_			LXR30_ C					
	B1	B2	S1	S2	B1	S1	B1	B2	S1	S2	B1	B2	S1	S2	
125	29	—	54.5	—	—	—	1.55	—	1.43	—	—	2.01	—	1.75	—
150	54	—	79.5	17	—	65.5	1.72	—	1.60	1.78	—	2.17	—	1.92	2.23
200	104	—	129.5	67	90	115.5	2.06	—	1.93	2.11	2.50	—	2.25	2.57	—
250	154	—	179.5	117	140	165.5	2.39	—	2.27	2.45	2.84	—	2.59	2.91	—
300	204	116	229.5	167	190	215.5	2.73	3.04	2.60	2.78	3.17	3.74	2.92	3.24	—
350	254	166	279.5	217	240	265.5	3.06	3.37	2.94	3.12	3.51	4.08	3.26	3.58	—
400	304	216	329.5	267	290	315.5	3.40	3.71	3.27	3.46	3.85	4.41	3.60	3.91	—
450	354	266	379.5	317	340	365.5	3.74	4.04	3.61	3.79	4.18	4.75	3.93	4.25	—
500	404	316	429.5	367	390	415.5	4.07	4.38	3.95	4.13	4.52	5.08	4.27	4.58	—
550	454	366	479.5	417	440	465.5	4.41	4.72	4.28	4.46	4.85	5.42	4.60	4.92	—
600	504	416	529.5	467	490	515.5	4.74	5.05	4.62	4.80	5.19	5.76	4.94	5.26	—

⊙ MX-Equipped types are +0.011 kg. *Effective stroke is indicated in dimensions with a margin of 2.5 mm each from the ends.

Part Number	Block Qty.	Motor Adapter Plates	Base Overall Length (L)
LXR3010C	B1	RA3040	600
LXR3005-MX	B1	RA3040	600

Part Number	Block Qty.	Motor Adapter Plates	Base Overall Length (L)	(NBP)
LXR3010C	B1	RA3040	600	NBP



Servo Motor Application Table

Part Number	Flange Size	Manufacturer	Product Number	Wattage	Applicable Motor Shaft Dia.
RA3038	38 Sq.	Panasonic	MSMD-5A	50W	Ø8
			MSMA-5A	50W	
			MSMA-01	100W	
			SGMJV-A5	50W	
RA3040	40 Sq.	Yasukawa Electric Corporation	SGMAH-01	100W	
			HC-MFS053	50W	
		Mitsubishi Electric Corporation	HC-MFS13	100W	
			Q1AA04005D	50W	
		Sanyo Denki Co., Ltd.	Q1AA04010D	100W	
			Omron Corporation	R88M-W10030	
Keyence Corporation		MV-M05	50W		
		SV-M005	50W		
		MV-M10	100W		
		SV-M010	100W		

Stepping Motor Application Table

Part Number	Flange Size	Manufacturer	Product Number	Type	Applicable Motor Shaft Dia.
RT3042	42 Sq.	Oriental Motor	PK24*	2-Phase	Ø6
			RKS54*	5-Phase	
			AS46	⊙ Step	

* When selecting the motor shaft diameter Ø5, please select the alteration NBP (No Belt / No Pulley) and purchase the pulley and belt separately.

LXR30_ _ -RT3040_ _ -NBP
High Torque Timing Pulley: HTPA44S2M060-A-P5
High Torque Timing Belt: HTBN230S2M-60

Alteration	Code	Spec.
No Belt / No Pulley	NBP	Excluded from the set

⊙ Sensor Set, P.537.

Accuracy Standards

Accuracy Standards	L=400 or Less	L=400 or More
	High Grade	High Grade
Positioning (mm)	0.06	0.1
Backlash (mm)	0.02	0.02
Positioning Repeatability (mm)	±0.005	±0.005
Running Parallelism (mm)	0.025	0.035
Starting Torque (N·cm)	4	

Allowable Static Load / Moment

Block Types	Block Qty.	Static Load Capacity (N)	Allowable Static Moment (N·m)		
			Ma	Mb	Mc
Long Block	B1	17218	126	126	387
	B2	34436	1515	1515	774
Short Block	S1	9271	63	63	208
	S2	18542	579	579	417

⊙ Reference values are for a static state. For life calculation, use our technical calculation software.
⊙ For description of allowable static moment, see P.520.

Maximum Velocity

Max. Velocity (mm/s)	L125-L450	L500	L550	L600
LXR3005_ _	410	370	300	250
LXR3010_ _	830	740	600	500

⊙ The Maximum Velocity speeds are reference values derived from Ball Screw critical speeds and DN values. They are not guaranteed values since motor conditions vary.