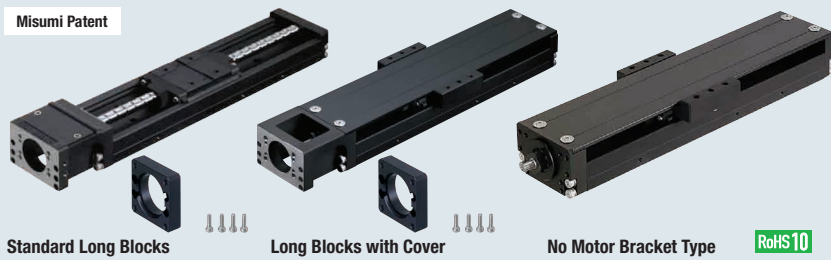


Single Axis Actuator LX30

Standard / Cover Type



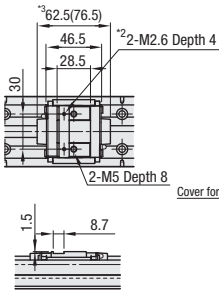
Specifications	
LX30	
Cover	
Screw Shaft Diameter (mm)	10
Lead (mm)	5, 10
Accuracy	High Grade / Precision Grade
Accessories	
(1) Motor Adapter Plate Material: 5052 Aluminum Alloy Surface Treatment: Black Anodize	
(2) Adapter Plate Screw 4 Pcs. Material: 302HQ Stainless Steel	
⊕ No accessory is included for No Motor Bracket Type.	

Part Number	Standard Grease		Low Particle Grease		Lubrication Unit MX-Equipped (Standard Grease)	
	High Grade	Precision Grade	High Grade	Precision Grade	High Grade	Precision Grade
Lead 5	LX3005 (C)	LX3005 (C) P	LX3005 (C) G	LX3005 (C) PG	LX3005 (C) -MX	LX3005 (C) P-MX
Lead 10	LX3010 (C)	LX3010 (C) P	LX3010 (C) G	LX3010 (C) PG	LX3010 (C) -MX	LX3010 (C) P-MX

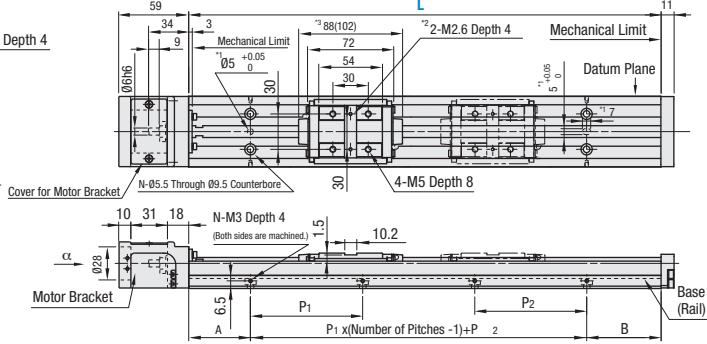
⊕ (C) is for Cover Type. ⊕ Low Dust Generation Grease Information P.523. ⊕ Lubrication Unit MX Information P.519.

Components	Base (Rail)	Block	Motor Bracket	Support-Side Bearing Housing	Cover	Stopper	Precision Ball Screw (Ground)
Material	Carbon Steel	SCM Material	ADC12	5052 Aluminum Alloy	6063 Aluminum Alloy	NBR	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

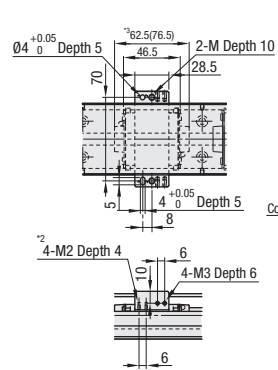
Standard Short Block Type



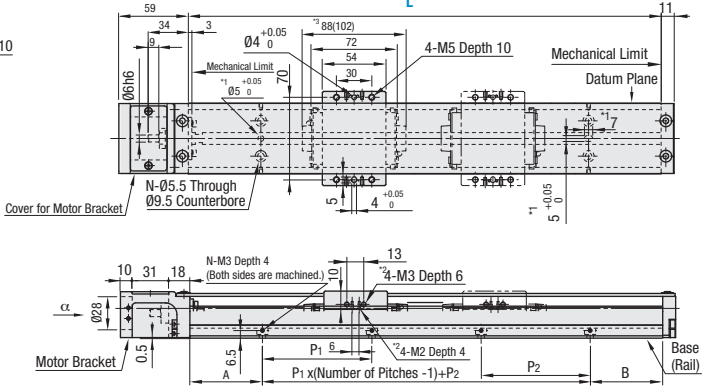
Standard Long Block Type



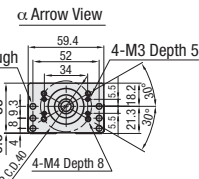
Short Blocks with Cover



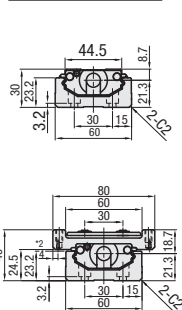
Long Blocks with Cover



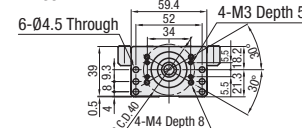
Standard Type



β-β Cross Section View



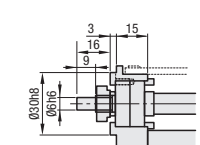
Cover Type



- *1: Dowel Holes for Base Positioning
- *2: Tapped Holes for Sensor Flag Mount
- *3: Value in () is for Lubrication Unit MX-Equipped Type.

- ⊕ Effective stroke is the value with 2.5 mm margin on each side from mechanical limits (i.e. 5 mm in total).
- ⊕ For Double Block Type, effective strokes are the values when two blocks come in contact with each other.
- ⊕ For Double Block Type, double-dashed lined blocks are not connected with the ball screw.

No Motor Bracket Type
*For mounting details, please see P.536.



Single Axis Actuator LX30

Standard / Cover 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.524-555
Selection & Life Calculation Example	P.3952-3955

Part Number	Block Qty.	Motor Adapter Plates	Base Overall Length (L)	Mounting Hole Dimensions						
				A	P ₁	P ₂	B	Number of Pitches	Number of Holes (N)	
Standard Grease LX3005 (C) LX3010 (C) Low Dust Generation Grease LX3005 (C) G LX3010 (C) G Lubrication Unit MX-Equipped, Standard Grease LX3005 (C) -MX LX3010 (C) -MX	Long Blocks 1 Pc. B1 2 Pcs. B2 ⊕ For B2, L≥300. Short Blocks 1 Pc. S1 2 Pcs. S2 * Lubrication Units MX-Equipped types are available in B1/S1 only	Servo A3038 A3040 E3040 Stepping T3042 T3056.4 T3060 * No Adapter Plate N * Without Motor Bracket F	125	12.5	—	—	12.5	1	4	
			150	25	—	100	25			
			200	50	100	50	50	2	6	
			250							50
			300							100
			350							50
			400							100
			450	50	100	50	50	4	10	
			500							100
			550							50
600	100	—	—	—	5	12				

* Precision Certificate is enclosed with precision grade products.
* Motor adapter plate and mounting screws are not included with No Adapter Plate Type.
* (C) is for Cover Type.

Effective Stroke / Total Mass

Base Length (L)	Effective Stroke						Total Mass (kg)			
	MX-Unequipped		MX-Equipped				B1	B2	S1	S2
	B1	B2	S1	S2	B1	S2				
125	29	—	54.5	—	—	—	1.75	—	1.50	—
150	54	—	79.5	17	—	65.5	1.92	—	1.67	1.98
200	104	—	129.5	67	90	115.5	2.25	—	2	2.32
250	154	—	179.5	117	140	165.5	2.59	—	2.34	2.66
300	204	116	229.5	167	190	215.5	2.92	3.49	2.67	2.99
350	254	166	279.5	217	240	265.5	3.26	3.83	3.01	3.33
400	304	216	329.5	267	290	315.5	3.60	4.16	3.35	3.66
450	354	266	379.5	317	340	365.5	3.93	4.5	3.68	4
500	404	316	429.5	367	390	415.5	4.27	4.83	4.02	4.33
550	454	366	479.5	417	440	465.5	4.6	5.17	4.35	4.67
600	504	416	529.5	467	490	515.5	4.94	5.51	4.69	5.01

Accuracy Standards

Accuracy Standards	Up to L=400		L=400 or More	
	High Grade	Precision Grade	High Grade	Precision Grade
Positioning (mm)	0.06	0.02	0.1	0.025
Backlash (mm)	0.02	0.003	0.02	0.003
Positioning Repeatability (mm)	±0.005	±0.003	±0.005	±0.003
Running Parallelism (mm)	0.025	0.01	0.035	0.015
Starting Torque (N·cm)	4			

- ⊕ See P.522 for Maximum Velocity.
- ⊕ See P.521 for Moment of Inertia.

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

Servo Motor Application Table

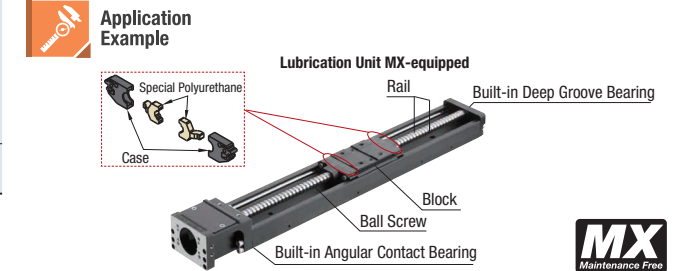
Part Number	Flange Size	Manufacturer	Product Number	Wattage	Recommended Coupling
A3038	38 sq.	Panasonic	MSMD-5A	50W	SCXW21 (P.1094) SCPW21 (P.1094) CPDW19 (P.1096)
			MSMA-3A	30W	
			MSMA-5A	50W	
			MSMA-01	100W	
A3040	40 sq.	Yasukawa Electric Corporation	SGMJV-A5	50W	
			SGMAH-A5	50W	
			SGMAH-01	100W	
			—	—	
		Mitsubishi Electric Corporation	HC-MFS053	50W	
			HC-MFS13	100W	
			Q1AA04003D	30W	
			Q1AA04005D	50W	
Sanyo Denki Co., Ltd.	Q1AA04010D	100W			
	—	—			
E3040	40 sq.	⊕ SIEMENS	R88M-W03030	30W	
			R88M-W05030	50W	
			R88M-W10030	100W	
			MV-M05/SV-M005	50W	
Keyence Corporation	MV-M10/SV-M010	100W			
	—	—			
—	—	—	1FK7011-5	50W	
			1FK7015-5	100W	

⊕ Shaft length in coupling will be 0.5mm shorter on each side when used with Siemens motor.

Stepping Motor Application Table

Part Number	Flange Size	Manufacturer	Product Number	Type	Recommended Coupling
T3042 (NEMA 17)	42 sq.	Oriental Motor	UMK24* / PK24*	2-phase	SCXW21 (P.1094) SCPW21 (P.1094) CPDW19 (P.1096)
			UPK54* / PK54*	5-phase	
			AS46, ASC46, AR46	αStep	
T3056.4 (NEMA 23)	56.4 sq.	Oriental Motor	UMK26* / PK26*	2-phase	
			UPK56* / PK56*	5-phase	
T3060	60 sq.	Oriental Motor	AS6*, ASC66, AR66	αStep	

Part Number Example	Part Number	Block Qty.	Motor Adapter Plates	Base Overall Length (L)
	LX3010C	B1	A3040	600
	LX3010-MX	B1	A3040	600



Provides long term maintenance-free operation. For details, P.519.



