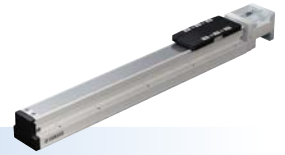


# LBAS05

Basic model

Motor-less Single Axis Actuator

Slider type



## Ordering method

<b>LBAS05</b>				
<b>Model</b>	<b>Lead</b>	<b>Shape</b>	<b>Motor specification</b>	<b>Stroke</b>
	20: 20 mm 10: 10 mm 5: 5 mm	S: Straight A: Bending	Y: Y specification (see below) P: P specification (see below) A: A specification (see below) S: S specification (see below) N: N specification (see below)	50 to 800 (50 mm pitch)

### [Caution]

This system is provided as mechanical actuator unit and not including any adapters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration or resonance from actuator will affect service life of actuator. The product performance may not be satisfied depending on the compatible motor. For special parts for motor installation, install and adjust on your side.

## Specifications

<b>Applicable motor</b>	100 W		
<b>Repeatability</b> <sup>Note 1</sup>	±0.01 mm		
<b>Deceleration mechanism</b>	Shifting position ball screw φ 12 (C7 class)		
<b>Stroke</b>	50 mm to 800 mm (50 mm pitch)		
<b>Maximum speed (or equivalent)</b> <sup>Note 2</sup>	1333 mm/sec	666 mm/sec	333 mm/sec
<b>Ball screw lead</b>	20 mm	10 mm	5 mm
<b>Maximum payload (or equivalent)</b> <sup>Note 3</sup>	<b>Horizontal</b>	12 kg	24 kg
	<b>Vertical</b>	3 kg	6 kg
<b>Rated thrust (or equivalent)</b> <sup>Note 3</sup>		84 N	169 N
<b>Maximum dimensions of cross section of main unit</b>	W 54 mm × H 60 mm		
<b>Overall length</b>	<b>Straight</b>	ST + 220.5 mm	
	<b>Bending</b>	ST + 200 mm	
<b>Using ambient temperature and humidity</b>	0 to 40 °C, 35 to 80 %RH (non-condensing)		

Note 1. Positioning repeatability in one direction.

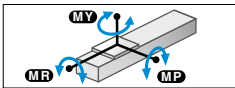
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 550 mm, the ball screw may resonate. (Critical speed)

At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.

Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.

Note. See P.107 for acceleration/deceleration and inertia moment.

## Static loading moment



	(Unit: N·m)		
	<b>MY</b>	<b>MP</b>	<b>MR</b>
	59	63	103

## Applicable motor

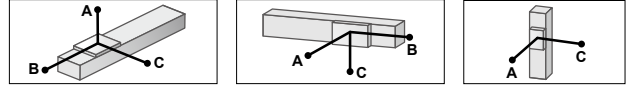
### Applicable servo motor

<b>Specification</b>	<b>Flange size</b>	<input type="checkbox"/> 40
	<b>Wattage</b>	100 W

Note. Motor models marked with \* may not be 100W, but can be installed.

Motor specification	Manufacturer	Model
Y	Yaskawa Electric Corp.	SGMJV-01
		SGMJJ-01
	Keyence Corp.	SV-□ 010
		SV2-□ 010
	Mitsubishi Electric Corp.	HF-KP13
		HG-KR13
		HK-KT13
	Omron Electronics	R88M-K10030
		R88M-1M10030
	Panasonic Corp.	MHMF01
	Sanyo Denki	R2 □ A04010
	Tamagawa Seiki	TSM3104
	Delta Electronics	ECMA-C10401
	Fanuc Corp.	β iS0.3/5000
	Kingservo	KSMA01LI □ S
		KSMA01LG
Siemens	1FK2102-1AG	
	1FL6024-2AF	
Schneider	BCH2MB013	
Beckhoff	AM3012C*	
Allen-Bradley	TLY-A130*	
P	Panasonic Corp.	MSMD01
		MSMF01

## Allowable overhang <sup>Note</sup>



### LBAS05-20

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
2kg	549	324	272	272	324	549	1kg	544	
8kg	155	73	65	65	73	155	2kg	276	
12kg	117	46	42	42	46	117	3kg	195	

### LBAS05-10

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
5kg	769	178	213	213	178	769	2kg	443	
15kg	314	53	64	64	53	314	4kg	218	
24kg	216	29	36	36	29	216	6kg	142	

### LBAS05-5

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
10kg	921	97	131	131	97	921	3kg	345	
25kg	459	33	45	45	33	459	8kg	124	
40kg	436	17	23	23	17	436	12kg	79	

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

Note. Service life is calculated for 500 mm stroke models.

### Applicable stepping motor

<b>Specification</b>	<b>Flange size</b>	<input type="checkbox"/> 42
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Motor specification	Manufacturer	Model
A	Oriental Motor	AZM46
		ARM46
		RKS54
S	Oriental Motor	AZM48
N	NEMA standard	NEMA17

Note. Be aware that the dimensions of the NEMA standard motor may vary depending on the manufacturer.

Note. For the motor specifications A, S, and N, the parts dedicated for bending cannot be used.

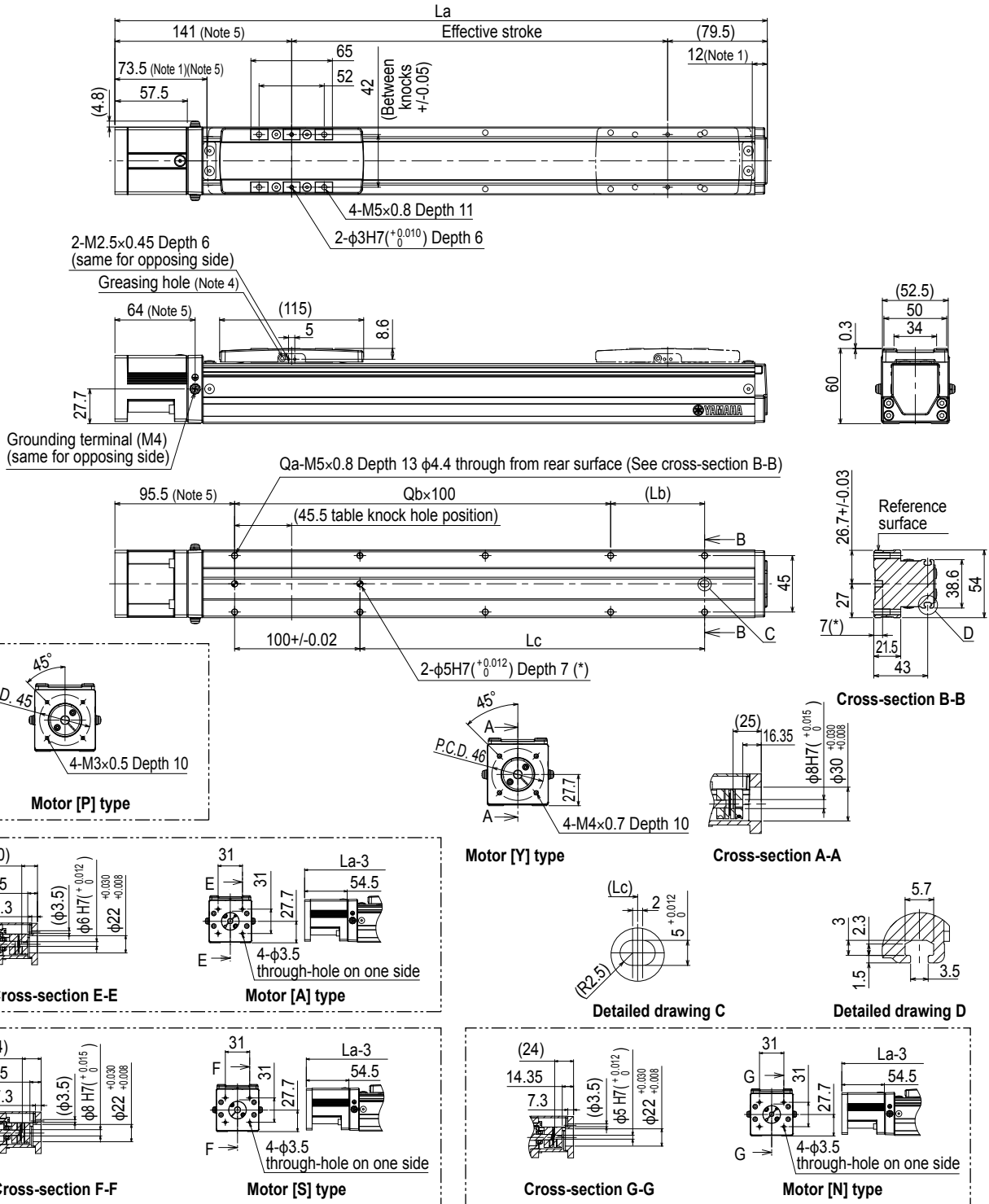
Access the website below.



▶ The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.16.

Features  
Motorless  
Slider type  
Basic model  
LBAS  
Advanced model  
Slider type  
Advanced model  
LGXS  
Basic model  
Rod type  
Basic model  
LBAR  
Slider type  
Basic model  
YAMAHA  
Slider type  
Basic model  
ABAS  
Advanced model  
YAMAHA  
Slider type  
Advanced model  
AGXS  
Basic model  
YAMAHA  
Rod type  
Basic model  
ABAR  
Acceleration/Deceleration  
Inertia Moment  
Option  
Single axis positioner  
EP-01

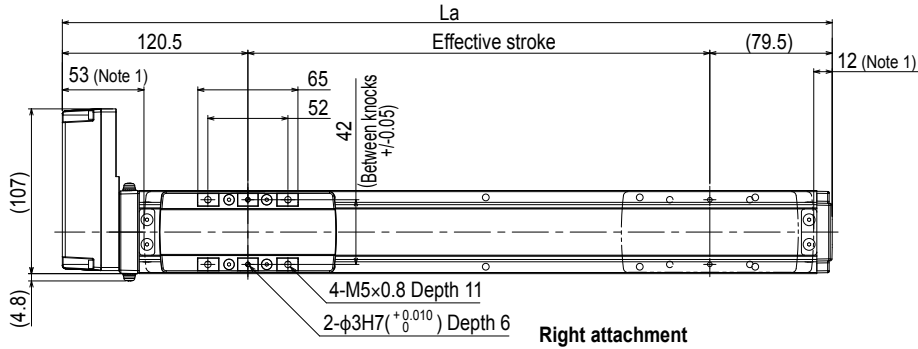
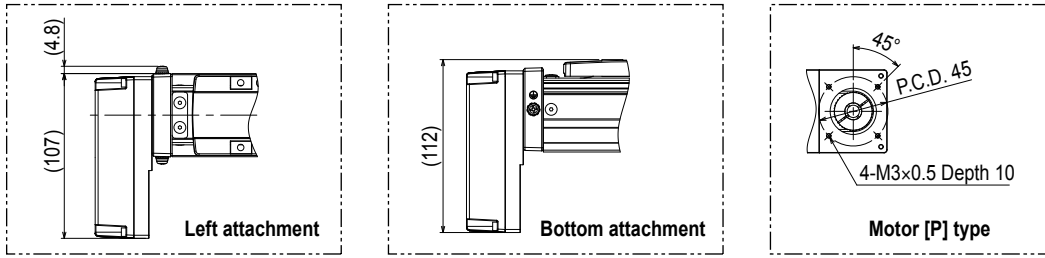
LBAS05 Straight type (S)



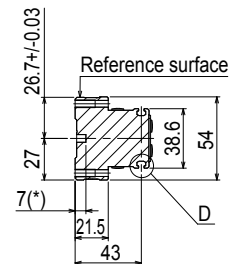
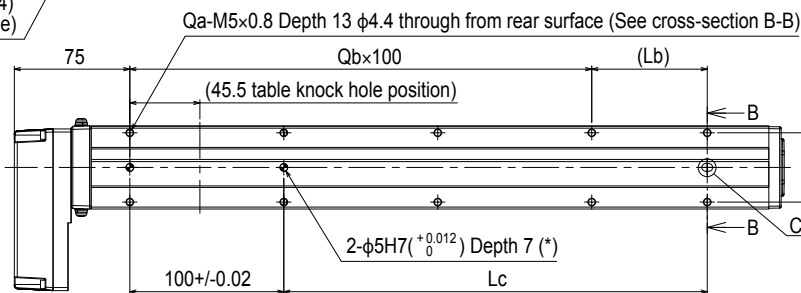
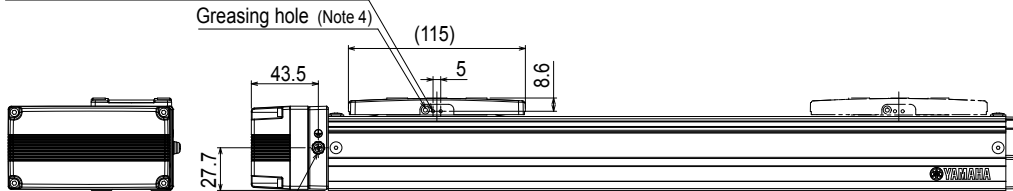
- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
- Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M4 x 0.7>. In the installation tap hole, the length under head << thickness of stand +10 mm or less >> is recommended for the hex socket head bolts <M5 x 0.8> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)  
Part number: KFU-M3861-00
- Note 5. For the motor specifications A, S, and N, the dimensions are that those stated in the table <<-3 mm>>.

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
La	270.5	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
Lb	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
Lc	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
Weight (kg)	1.6	1.8	1.9	2.1	2.4	2.5	2.5	2.7	2.8	2.9	3.1	3.3	3.4	3.6	3.7	4.1
Maximum speed (mm/sec)	Lead 20	1333										1133	933	799	666	599
	Lead 10	666										566	466	399	333	299
	Lead 5	333										283	233	199	166	149
	Speed setting	-										85%	70%	60%	50%	45%

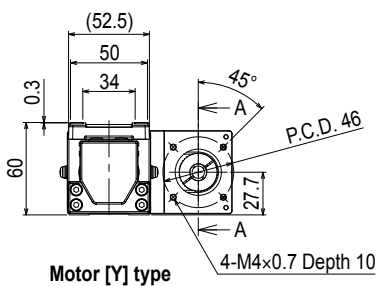
LBAS05 Bending type (A)



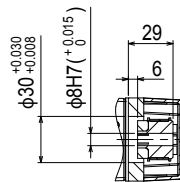
2-M2.5x0.45 Depth 6 (same for opposing side)



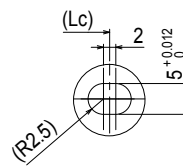
Cross-section B-B



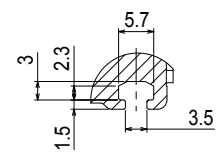
Motor [Y] type



Cross-section A-A



Detailed drawing C



Detailed drawing D

- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
  - Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
  - Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M4 x 0.7>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M5 x 0.8> used to install the main unit.
  - Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
- Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
La	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
Lb	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	
Lc	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
Weight (kg)	1.7	1.8	2	2.2	2.4	2.6	2.6	2.8	2.9	3	3.2	3.3	3.5	3.6	3.8	4.1	
Maximum speed (mm/sec)	Lead 20											1333	1133	933	799	666	599
	Lead 10											666	566	466	399	333	299
	Lead 5											333	283	233	199	166	149
	Speed setting											-	85%	70%	60%	50%	45%

Features

Motorless

Slider type

Basic model

LBAS

Motorless

Slider type

Advanced model

LGXS

Motorless

Rod type

Basic model

LBAR

Motorless

Slider type

Basic model

ABAS

Motorless

Slider type

Advanced model

AGXS

Motorless

Rod type

Basic model

ABAR

Acceleration/Deceleration

Inertia Moment

Option

Single axis force push/pull

EP01