

# LBAS08

Basic model

Motor-less Single Axis Actuator

Slider type



## Ordering method

### LBAS08

Model	Lead	Shape	Motor specification	Stroke
	20: 20 mm 10: 10 mm 5: 5 mm	S: Straight A: Bending	Y: Y specification (see below) P: P specification (see below) K: K specification (see below) A: A specification (see below) N: N specification (see below)	50 to 1100 (50 mm pitch)

### [Caution]

This system is provided as mechanical actuator unit and not including any adopters 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

Applicable motor	200 W		
Repeatability <sup>Note 1</sup>	±0.01 mm		
Deceleration mechanism	Shifting position ball screw φ 16 (C7 class)		
Stroke	50 mm to 1100 mm (50 mm pitch)		
Maximum speed <sup>Note 2</sup> (or equivalent)	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	20 mm	10 mm	5 mm
Maximum payload <sup>Note 3</sup> (or equivalent)	Horizontal	40 kg	80 kg
	Vertical	8 kg	20 kg
Rated thrust <sup>Note 3</sup> (or equivalent)		174 N	341 N
			683 N
Maximum dimensions of cross section of main unit	W 82 mm × H 78 mm		
Overall length	Straight	ST + 278 mm	
	Bending	ST + 264.5 mm	
Using ambient temperature and humidity	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.

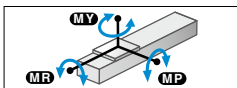
If the effective stroke exceeds 650 mm, the ball screw may resonate. (Critical speed)

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.109 for acceleration/deceleration and inertia moment.

## Static loading moment



	MY	MP	MR
(Unit: N·m)	221	309	343

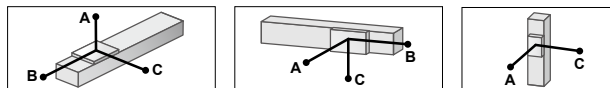
## Applicable motor

### Applicable servo motor

Specification	Flange size	<input type="checkbox"/> 60
	Wattage	200 W

Motor specification	Manufacturer	Model
Y	Yaskawa Electric Corp.	SGMJV-02
		SGM7J-02
	Keyence Corp.	SV-□ 020
		SV2-□ 020
	Mitsubishi Electric Corp.	HF-KP23
		HG-KR23
		HK-KT23
	Sanyo Denki	R2 □ A06020
	Tamagawa Seiki	TSM3202
	Delta Electronics	ECMA-C10602
Siemens	1FL6032-2AF	
Schneider	BCH2LD023	
P	Omron Electronics	R88M-K20030
		R88M-1M20030
	Panasonic Corp.	MSMD02
MSMF02		
K	Kingservo	KSMA02LI
		KSMA02LG

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



### LBAS08-20

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
15kg	356	131	146	15kg	146	131	356	3kg	634	634
25kg	278	73	86	25kg	86	73	278	6kg	321	321
40kg	517	54	76	40kg	76	54	517	8kg	240	240

### LBAS08-10

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	465	83	120	30kg	120	83	465	5kg	551	551
50kg	341	44	65	50kg	65	44	341	10kg	270	270
80kg	228	22	34	80kg	34	22	228	20kg	129	129

### LBAS08-5

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	1604	95	153	30kg	153	95	1604	10kg	312	312
50kg	1035	52	83	50kg	83	52	1035	20kg	149	149
80kg	719	27	44	80kg	44	27	719	30kg	95	95
100kg	608	19	31	100kg	31	19	608			

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 600 mm stroke models.

### Applicable stepping motor

Specification	Flange size	<input type="checkbox"/> 60
		<input type="checkbox"/> 56(NEMA)

Motor specification	Manufacturer	Model
A	Oriental Motor	AZM66
		AZM69
		ARM66
		ARM69
		RKS56
N	NEMA standard	NEMA23

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

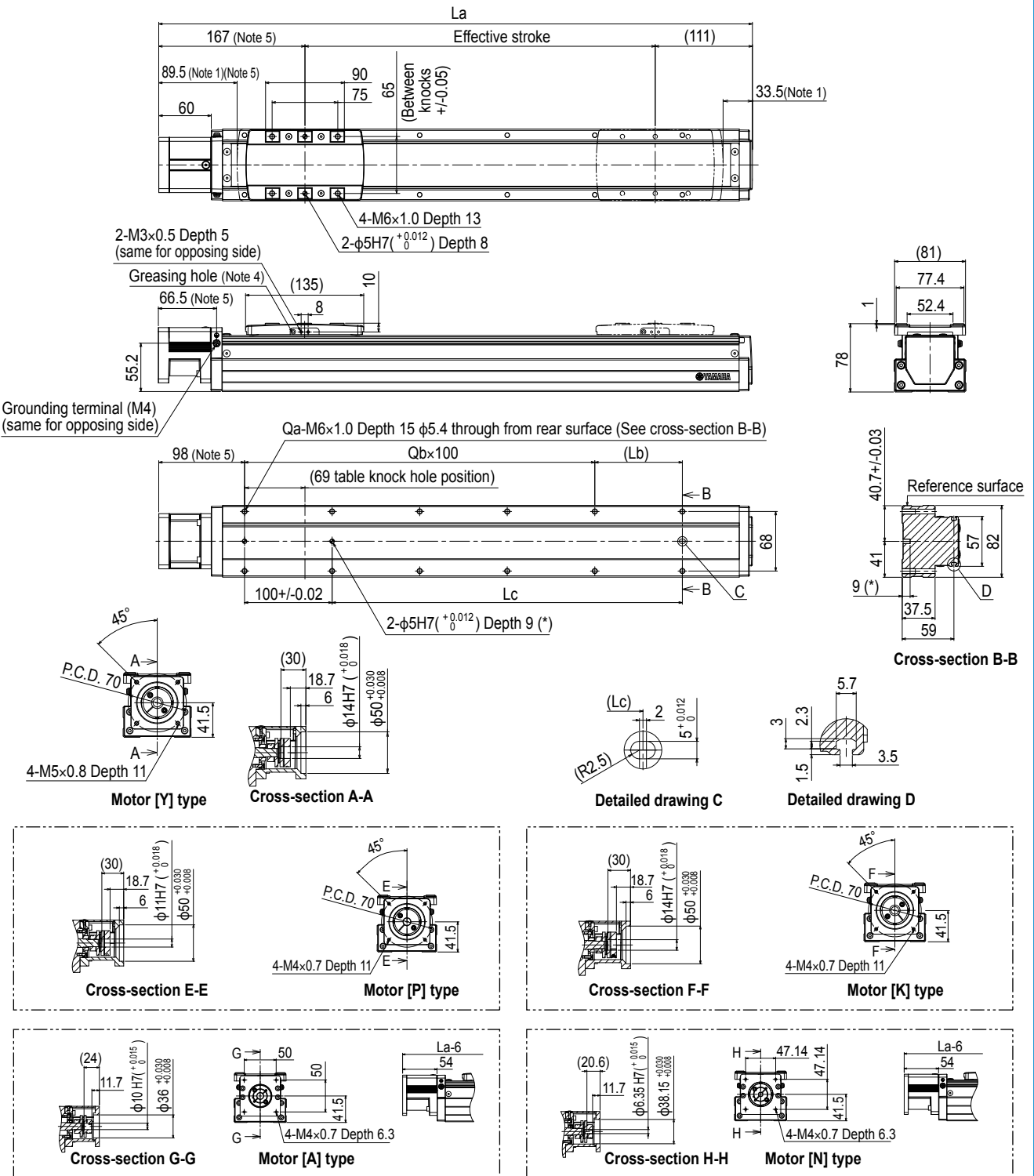
Note. For the motor specifications A and N, the parts dedicated for bending cannot be used.

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.

LBAS08 Straight type (S)

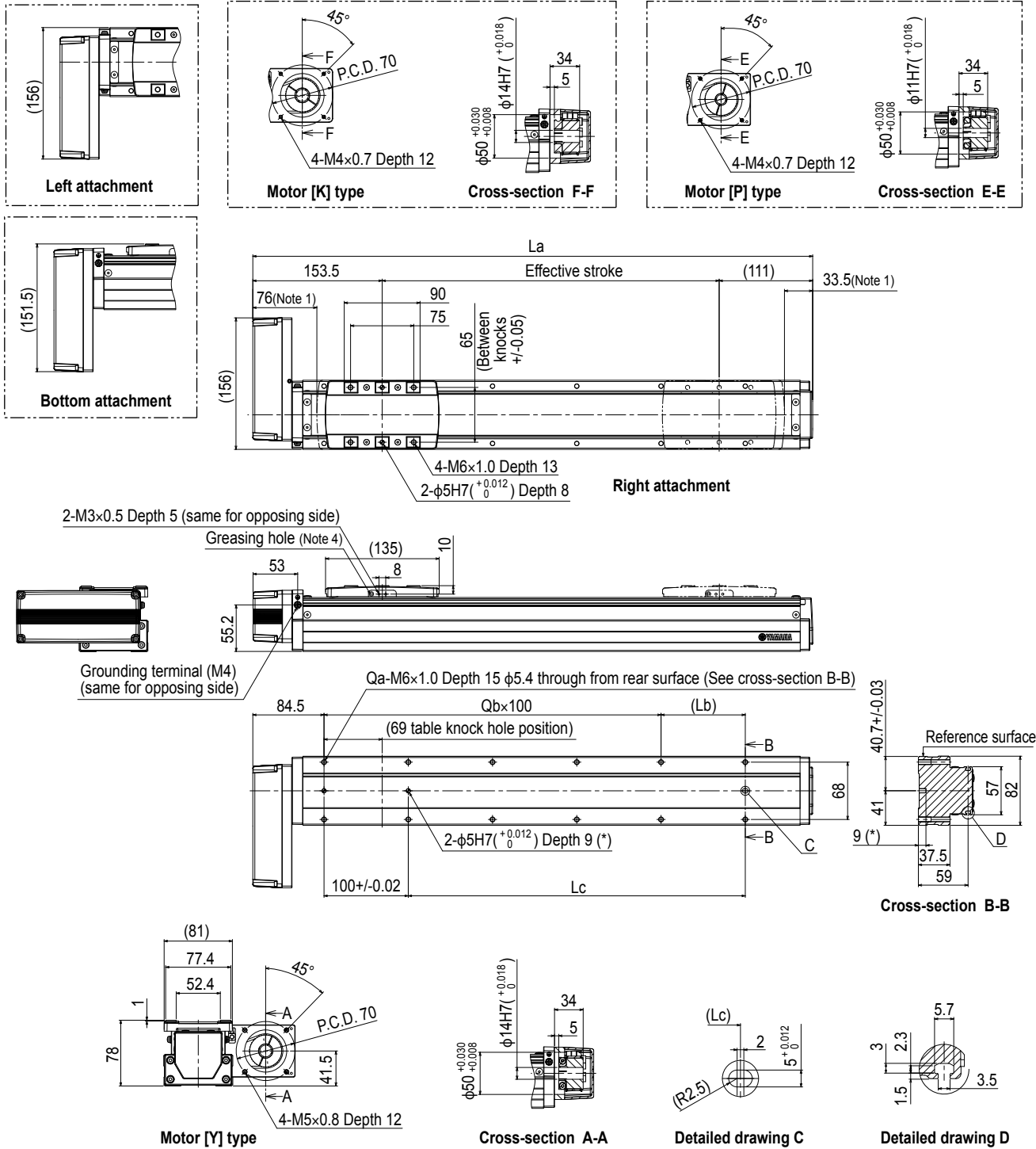


Note 1. Stop positions are determined by the mechanical stoppers at both ends.  
 Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.  
 Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M5 x 0.8>. In the installation tap hole, the length under head << thickness of stand + 15 mm or less >> is recommended for the hex socket head bolts <M6 x 1.0> 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 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	850	900	950	1000	1050	1100					
La	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378					
Lb	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100					
Lc	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100					
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26					
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11					
Weight (kg)	3.7	4.1	4.5	4.8	5.2	5.5	5.8	6.2	6.5	6.8	7.2	7.5	7.9	8.2	8.5	8.8	9.2	9.4	9.8	10.1	10.5	10.9					
Maximum speed (mm/sec)	Lead 20											1200															
	Lead 10											600															
	Lead 5											300															
	Speed setting											-															
Speed setting														1020	900	780	660	600	540	480	420	360					
														510	450	390	330	300	270	240	210	180					
														255	225	195	165	150	135	120	105	90					
														85%	75%	65%	55%	50%	45%	40%	35%	30%					

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  
 positioner  
 Ep01

LBAS08 Bending type (A)



- 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 << 45 mm or more >> is recommended for the hex socket head bolts <M5 × 0.8>. In the installation tap hole, the length under head << thickness of stand +15 mm or less >> is recommended for the hex socket head bolts <M6 × 1.0> 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	850	900	950	1000	1050	1100		
La	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5		
Lb	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100		
Lc	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100		
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26		
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11		
Weight (kg)	4.1	4.5	4.9	5.2	5.6	5.9	6.2	6.6	6.9	7.2	7.6	7.9	8.3	8.6	8.9	9.2	9.6	9.8	10.2	10.5	10.9	11.3		
Maximum speed (mm/sec)	Lead 20												1020	900	780	660	600	540	480	420	360			
	Lead 10												510	450	390	330	300	270	240	210	180			
	Lead 5												255	225	195	165	150	135	120	105	90			
Speed setting												85%	75%	65%	55%	50%	45%	40%	35%	30%				