

LBAS12

Basic model

● Motor-less Single Axis Actuator

● Slider type

● Slim type



Ordering method

LBAS12				
Model	Lead	Shape	Motor specification	Stroke
	32: 32 mm 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)	50 to 1250 (50 mm pitch)

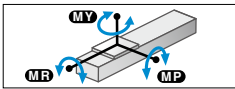
LBAS12 (200W)

Specifications

Applicable motor	200 W			
Repeatability <small>Note 1</small>	±0.01 mm			
Deceleration mechanism	Shifting position ball screw φ 16 (C7 class)			
Stroke	50 mm to 1250 mm (50 mm pitch)			
Maximum speed <small>Note 2</small> (or equivalent)	1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	32 mm	20 mm	10 mm	5 mm
Maximum payload <small>Note 3</small> (or equivalent)	Horizontal 20 kg	40 kg	80 kg	100 kg
	Vertical 3 kg	8 kg	20 kg	30 kg
Rated thrust <small>Note 3</small> (or equivalent)	105 N 170 N 341 N 683 N			
Maximum dimensions of cross section of main unit	W 120 mm × H 76 mm			
Overall length	Straight	ST + 294 mm		
	Bending	ST + 270.5 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 600 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.111 for acceleration/deceleration and inertia moment.

Static loading moment



	MY	MP	MR
(Unit: N·m)	573	606	606

LBAS12 (400W)

Specifications

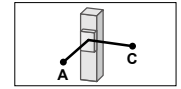
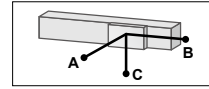
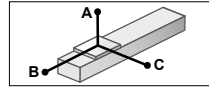
Applicable motor	400 W			
Ball screw lead	32 mm	20 mm	10 mm	5 mm
Maximum payload <small>Note 1</small> (or equivalent)	Horizontal 35 kg	50 kg	95 kg	115 kg
	Vertical 8 kg	15 kg	25 kg	40 kg
Rated thrust <small>Note 1</small> (or equivalent)	218 N 339 N 678 N 1360 N			

Note 1. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
 Note. See P.113 for acceleration/deceleration and inertia moment.
 Note. The specifications and static loading moment, etc. not described here are common to LBAS12 (200 W).

[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.

Allowable overhang Note



LBAS12-32 (200W)

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
5kg	2079	1694	1224	5kg	1224	1694	2079	1kg	6201	6201
10kg	1134	834	627	10kg	627	834	1134	3kg	2057	2057
20kg	843	422	362	20kg	362	422	843			

LBAS12-20 (200W)

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
15kg	946	548	445	15kg	445	548	946	3kg	2174	2174
25kg	591	321	266	25kg	266	321	591	5kg	1315	1315
40kg	442	206	182	40kg	182	206	442	8kg	833	833

LBAS12-10 (200W)

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	729	299	278	30kg	278	299	729	5kg	1934	1934
50kg	788	207	223	50kg	223	207	788	10kg	978	978
80kg	1325	157	200	80kg	200	157	1325	20kg	503	503

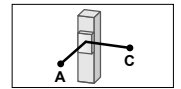
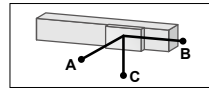
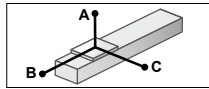
LBAS12-5 (200W)

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	2478	430	513	30kg	513	430	2478	10kg	1317	1317
50kg	1820	258	320	50kg	320	258	1820	20kg	670	670
80kg	1522	160	208	80kg	208	160	1522	30kg	456	456
100kg	1443	127	168	100kg	168	127	1443			

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.

Allowable overhang Note



LBAS12-32 (400W)

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
10kg	1134	834	627	10kg	627	834	1134	3kg	2057	2057
20kg	843	422	362	20kg	362	422	843	5kg	1228	1228
35kg	926	286	294	35kg	294	286	926	8kg	762	762

LBAS12-20 (400W)

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
15kg	826	548	427	15kg	427	548	826	5kg	1315	1315
30kg	485	263	218	30kg	218	263	485	10kg	672	672
50kg	433	172	162	50kg	162	172	433	15kg	522	522

LBAS12-10 (400W)

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	528	270	230	30kg	230	270	528	5kg	1934	1934
60kg	667	171	185	60kg	185	171	667	15kg	660	660
95kg	1350	132	173	95kg	173	132	1350	25kg	409	409

LBAS12-5 (400W)

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	2478	430	513	30kg	513	430	2478	15kg	885	885
60kg	1668	215	270	60kg	270	215	1668	25kg	541	541
90kg	1475	142	186	90kg	186	142	1475	40kg	350	350
115kg	1384	109	146	115kg	146	109	1384			

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.

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
 Rod type
 LGXS
 Basic model
 Rod type
 LBAR
 Basic model
 Slider type
 Basic model
 ABAS
 Advanced model
 Slider type
 Advanced model
 AGXS
 Basic model
 Rod type
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single axis positioner
 Ep-01

Features

Motorless
Slider type
Basic model

LBAS

Motorless
Slider type
Advanced model

LGXS

Motorless
Ind type
Basic model

LBAR

With motor
Slider type
Basic model

ABAS

With motor
Slider type
Advanced model

AGXS

With motor
Ind type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner

EP-01

■ Applicable motor (200W)

● 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- <input type="checkbox"/> 020
		SV2- <input type="checkbox"/> 020
	Mitsubishi Electric Corp.	HF-KP23
		HG-KR23
		HK-KT23
	Sanyo Denki	R2 <input type="checkbox"/> A06020
	Tamagawa Seiki	TSM3202
Delta Electronics	ECMA-C10602	
Siemens	1FL6032-2AF	
Schneider	BCH2LD023	
P	Omron Electronics	R88M-K20030
		R88M-1M20030
	Panasonic Corp.	MSMD02
		MSMF02
Kingservo	MHMF02	
K	Kingservo	KSMA02LI
		KSMA02LG

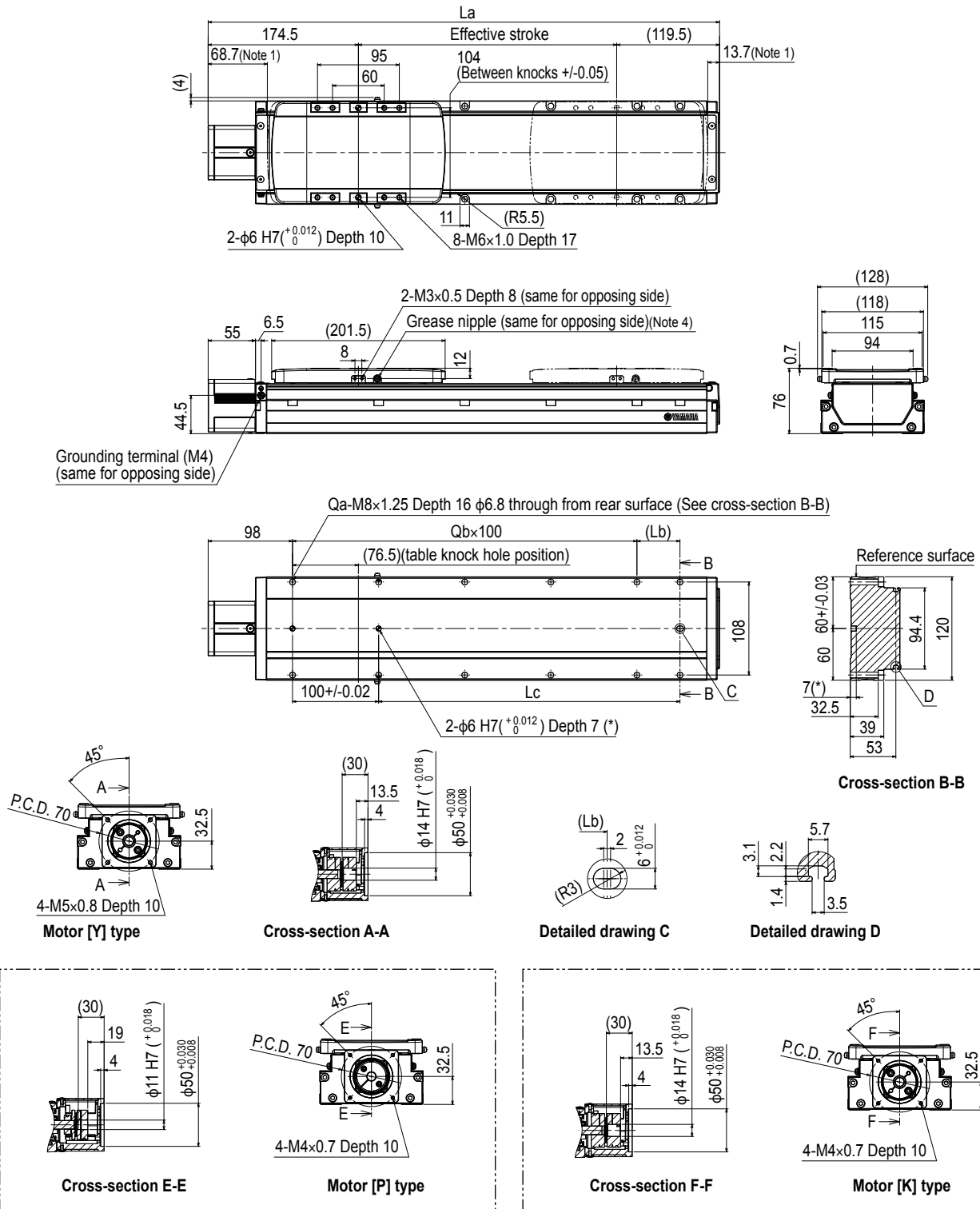
■ Applicable motor (400W)

● Applicable servo motor

Specification	Flange size	<input type="checkbox"/> 60
	Wattage	400 W
Motor specification	Manufacturer	Model
Y	Yaskawa Electric Corp.	SGMJV-04
		SGM7J-04
	Keyence Corp.	SV- <input type="checkbox"/> 040
		SV2- <input type="checkbox"/> 040
	Mitsubishi Electric Corp.	HF-KP43
		HG-KR43
		HK-KT43
	Sanyo Denki	R2 <input type="checkbox"/> A06040
	Tamagawa Seiki	TSM3204
Delta Electronics	ECMA-C10604	
Siemens	1FL6034-2AF	
Schneider	BCH2LD043	
K	Omron Electronics	R88M-K40030
		R88M-1M40030
	Panasonic Corp.	MSMD04
		MSMF04
Kingservo	Kingservo	MHMF04
		KSMA04LI
		KSMA04LG

LBAS12 Straight type (S)

Note. The external views of LBAS12 (200 W) and LBAS12 (400 W) are the same.



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 <M6 x 1.0>. In the installation tap hole, the length under head << thickness of stand + 16 mm or less >> is recommended for the hex socket head bolts <M8 x 1.25> used to install the main unit.

Note 4. Grease gun nozzle (recommended) (see P.143 for detail)

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250			
La	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094	1144	1194	1244	1294	1344	1394	1444	1494	1544			
Lb	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100			
Lc	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			
Qa	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30			
Qb	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13			
Weight (kg)	4.5	4.9	5.3	5.7	6.1	6.5	6.9	7.3	7.7	8.1	8.6	9	9.4	9.9	10.3	10.7	11.2	11.6	12.1	12.5	12.9	13.4	13.8	14.3	14.7			
Maximum speed (mm/sec)	Lead 32											1800																
	Lead 20											1200	1620	1440	1260	1080	990	810	720	630	540	450	360	360				
	Lead 10											600	1080	960	840	720	660	540	480	420	360	300	240	240				
	Lead 5											300	540	480	420	360	330	270	240	210	180	150	120	120				
Speed setting											-	90%	80%	70%	60%	55%	45%	40%	35%	35%	30%	25%	20%	20%				

Features

- Motorless
- Slider type
- Basic model

LBAS

Advanced model

- Motorless
- Slider type
- Basic model

LGXS

Basic model

- Motorless
- Ball type
- Basic model

LBAR

Basic model

- Motorless
- Slider type
- Basic model

ABAS

Advanced model

- Motorless
- Slider type
- Advanced model

AGXS

Basic model

- Motorless
- Ball type
- Basic model

ABAR

Acceleration/Deceleration

Inertia Moment

Option

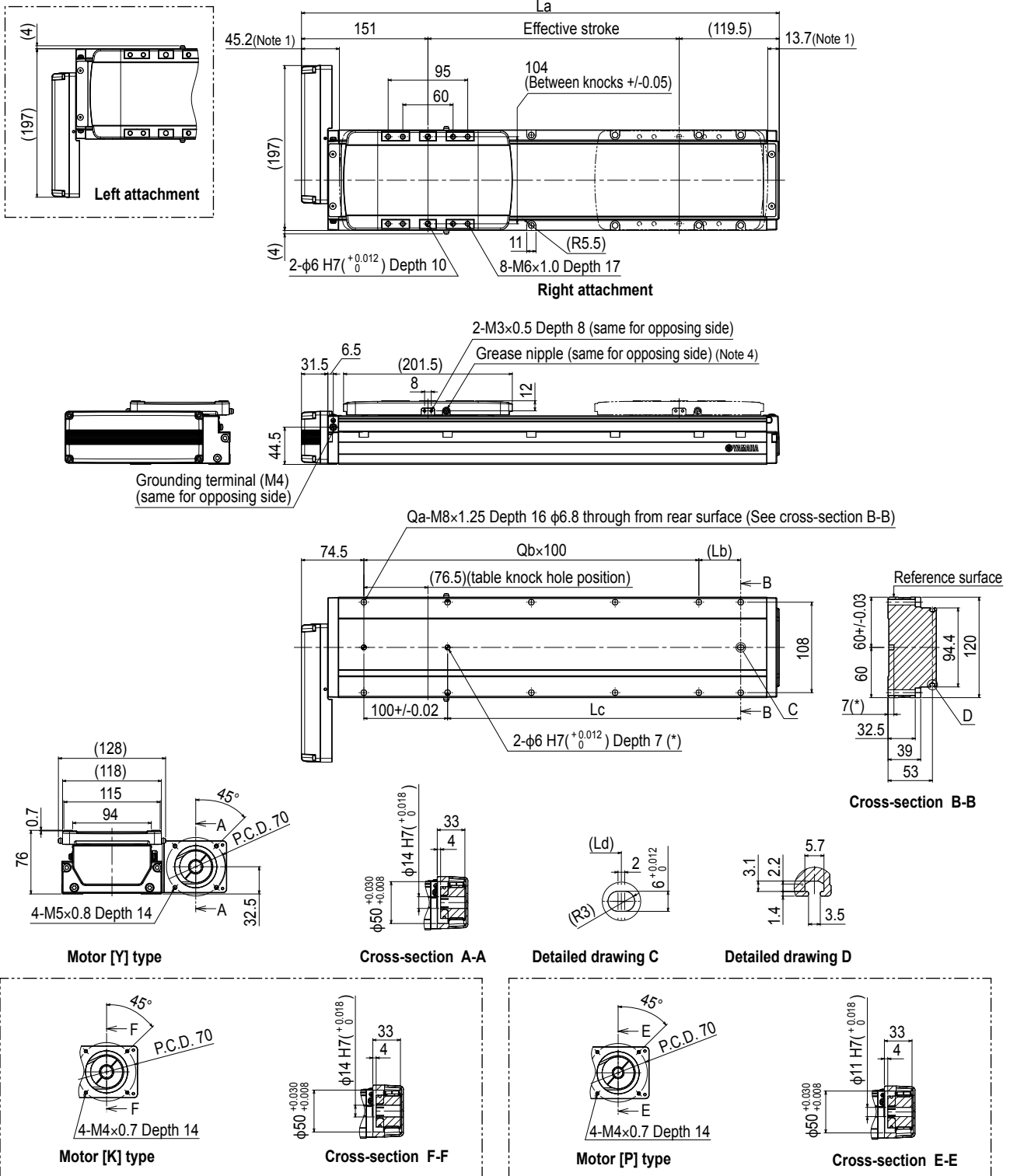
Single axis motion

positioner

EP01

LBAS12 Bending type (A)

Note. The external views of LBAS12 (200 W) and LBAS12 (400 W) are the same.



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 <M6 × 1.0>. In the installation tap hole, the length under head << thickness of stand + 16 mm or less >> is recommended for the hex socket head bolts <M8 × 1.25> used to install the main unit.

Note 4. Grease gun nozzle (recommended) (see P.143 for detail)

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	
La	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	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5	
Lb	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	
Lc	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	
Qa	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	
Qb	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	
Weight (kg)	4.5	4.9	5.3	5.7	6.1	6.5	6.9	7.3	7.7	8.2	8.6	9.1	9.5	9.9	10.4	10.8	11.2	11.7	12.1	12.6	13	13.4	13.9	14.3	14.8	
Maximum speed (mm/sec)	Lead 32	1800										1620	1440	1260	1080	990	810	720	630	630	540	450	360	360		
	Lead 20	1200										1080	960	840	720	660	540	480	420	420	360	300	240	240		
	Lead 10	600										540	480	420	360	330	270	240	210	210	180	150	120	120		
	Lead 5	300										270	240	210	180	165	135	120	105	105	90	75	60	60		
Speed setting	-										90%	80%	70%	60%	55%	45%	40%	35%	35%	30%	25%	20%	20%			