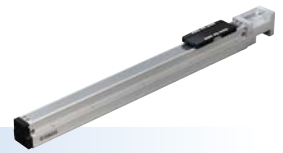


LBAS04

Basic model

Motor-less Single Axis Actuator

Slider type



Ordering method

LBAS04

Model	Lead	Shape	Motor specification	Stroke
	12: 12 mm 6: 6 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 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	50 W	
Repeatability ^{Note 1}	±0.01 mm	
Deceleration mechanism	Shifting position ball screw φ 10 (C7 class)	
Stroke	50 mm to 800 mm (50 mm pitch)	
Maximum speed ^{Note 2} (or equivalent)	800 mm/sec	400 mm/sec
Ball screw lead	12 mm	6 mm
Maximum payload ^{Note 3} (or equivalent)	Horizontal	12 kg
	Vertical	2 kg
Rated thrust ^{Note 3} (or equivalent)	Horizontal	12 kg
	Vertical	2 kg
Maximum dimensions of cross section of main unit	W 44 mm × H 52 mm	
Overall length	Straight	ST + 214 mm
	Bending	ST + 196 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.

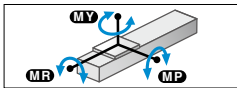
If the effective stroke exceeds 500 mm, the ball screw may resonate. (Critical speed)

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.106 for acceleration/deceleration and inertia moment.

Static loading moment



	MY	MP	MR
(Unit: N·m)	54	54	75

Applicable motor

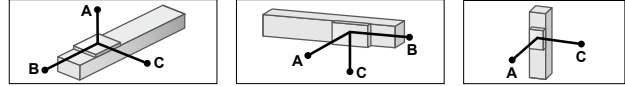
Applicable servo motor

Specification	Flange size	□ 40
	Wattage	50 W

Note. Motor models marked with * may not be 50W, but can be installed.

Motor specification	Manufacturer	Model
Y	Yaskawa Electric Corp.	SGMJV-A5
		SGM7J-A5
	Keyence Corp.	SV-□005
		SV2-□005
	Mitsubishi Electric Corp.	HF-KP053
		HG-KR053
		HK-KT053
	Omron Electronics	R88M-K05030
		R88M-1M05030
	Panasonic Corp.	MHMF5A
	Sanyo Denki	R2 □ A04005
	Tamagawa Seiki	TSM3102
	Delta Electronics	ECMA-C1040F
	Fanuc Corp.	β iS0.2/5000
Siemens	1FK2102-0AG	
	1FL6022-2AF	
Schneider	BCH2MBA53	
Beckhoff	AM3011B*	
Allen-Bradley	TLY-A120*	
P	Panasonic Corp.	MSMD5A
		MSMF5A

Allowable overhang^{Note}



LBAS04-12

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
2kg	1187	271	325	2kg	325	271	1187	1kg	534
8kg	473	62	77	8kg	77	62	473	2kg	265
12kg	431	41	53	12kg	53	41	431		

LBAS04-6

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
4kg	1808	155	217	4kg	217	155	1808	1kg	639
12kg	801	47	65	12kg	65	47	801	3kg	208
20kg	546	25	35	20kg	35	25	546	5kg	122

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

Specification	Flange size	□ 42
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.

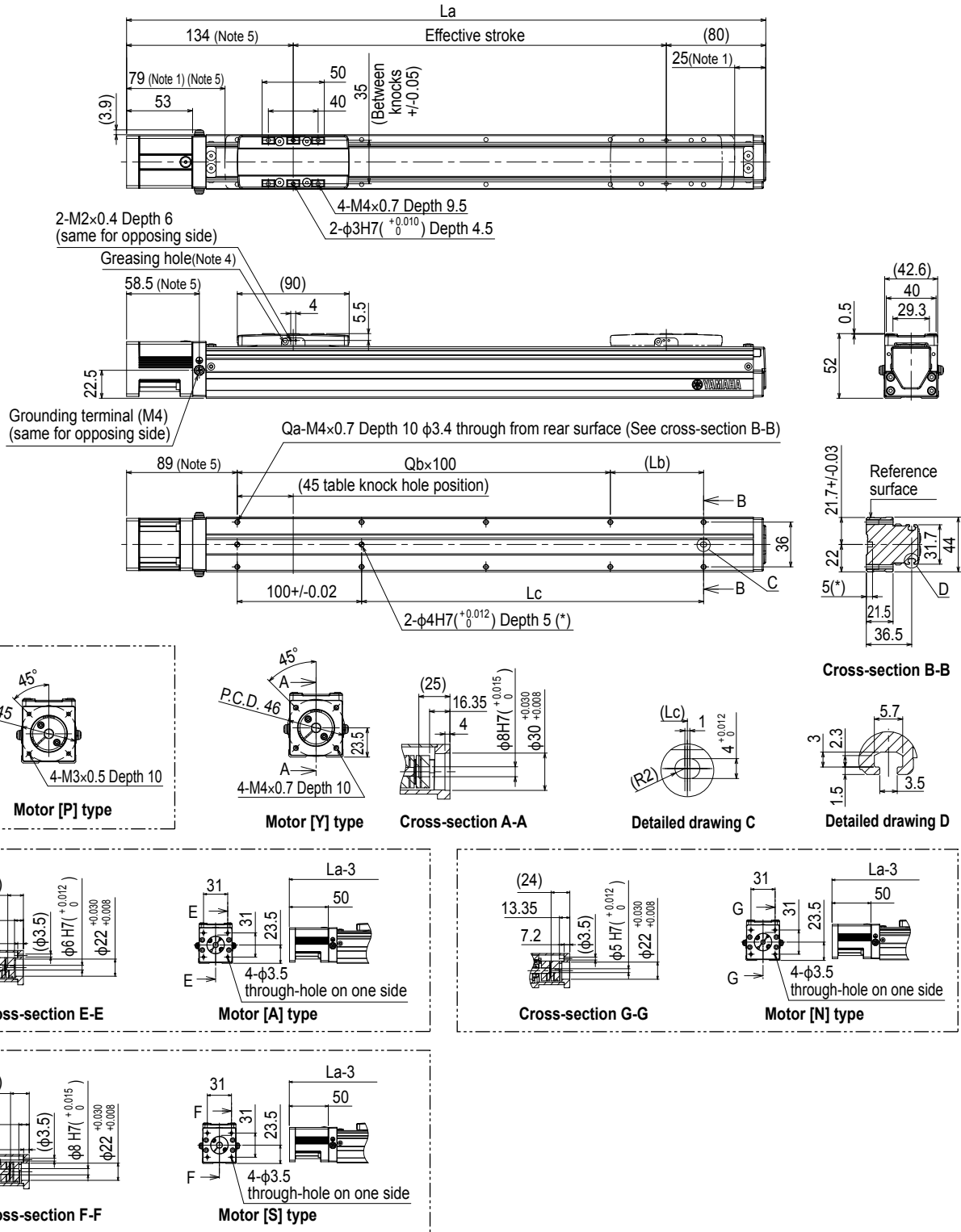
Note. For the motor specifications A, S, and N, the parts dedicated for bending cannot be used.

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.

LBAS04 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 <M3 × 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M4 × 0.7> 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	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014		
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)	0.9	1.1	1.3	1.5	1.6	1.8	2	2.2	2.4	2.5	2.7	2.9	3.1	3.3	3.4	3.6		
Maximum speed (mm/sec)	Lead 12	800										720	600	480	400	360	320	
	Lead 6	400										360	300	240	200	180	160	
	Speed setting	-										90%	75%	60%	50%	45%	40%	

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

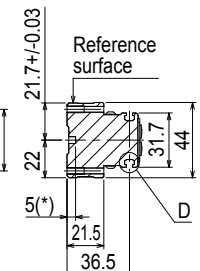
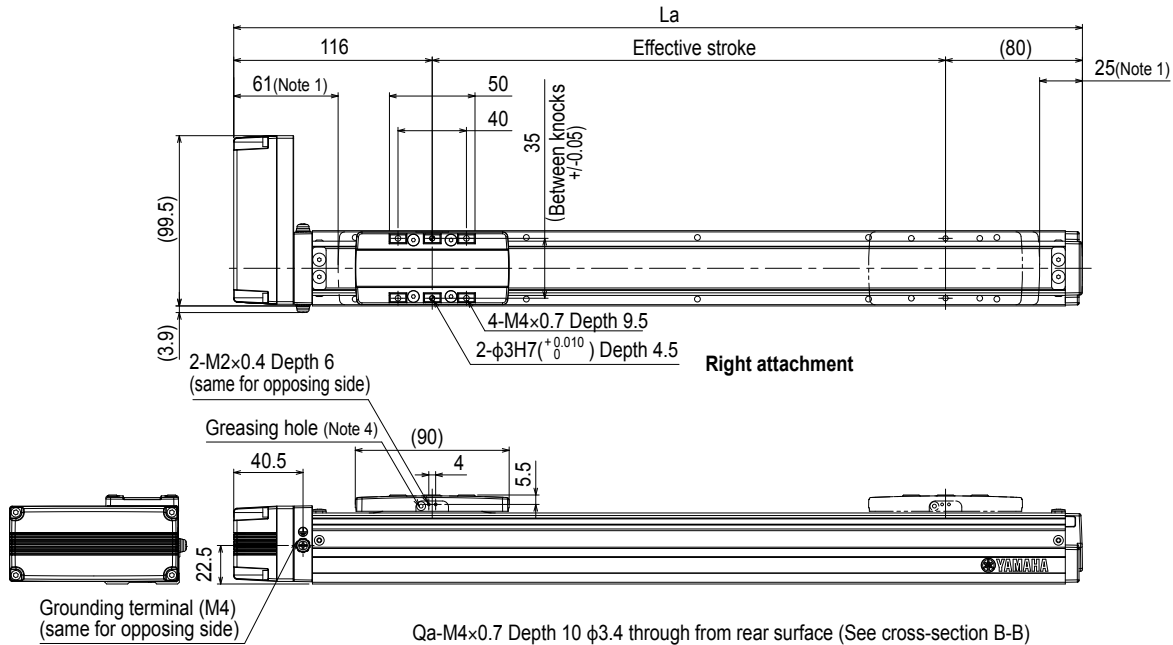
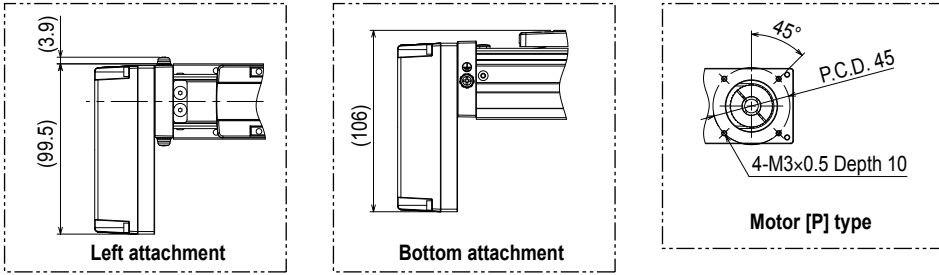
ABAR

Acceleration/Deceleration
Inertia Moment

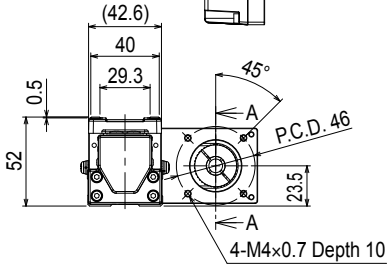
Option

Single axis motor positioner
EP-01

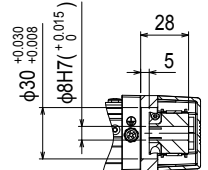
LBAS04 Bending type (A)



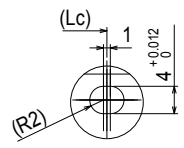
Cross-section B-B



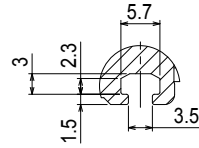
Motor [Y] type



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 <M3 × 0.5>. In the installation tap hole, the length under head << thickness of stand +10 mm or less >> is recommended for the hex socket head bolts <M4 × 0.7> 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	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996		
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)	1.1	1.2	1.4	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.8	3	3.2	3.4	3.6	3.7		
Maximum speed (mm/sec)	Lead 12											800						
	Lead 6											400						
	Speed setting											-						
												720	600	480	400	360	320	
												360	300	240	200	180	160	
												90%	75%	60%	50%	45%	40%	

LBAS05

Basic model

Motor-less Single Axis Actuator

Slider type



Ordering method

LBAS05				
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) 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

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

Note 1. Positioning repeatability in one direction.

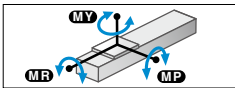
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 550 mm, the ball screw may resonate. (Critical speed)

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



	MY	MP	MR
(Unit: N·m)	59	63	103

Applicable motor

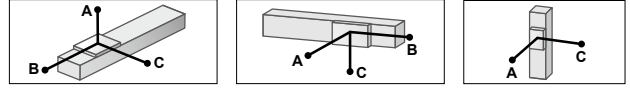
Applicable servo motor

Specification	Flange size	<input type="checkbox"/> 40
	Wattage	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 ^{Note}



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	544	544	
8kg	155	73	65	65	73	155	276	276	
12kg	117	46	42	42	46	117	195	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	443	443	
15kg	314	53	64	64	53	314	218	218	
24kg	216	29	36	36	29	216	142	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	345	345	
25kg	459	33	45	45	33	459	124	124	
40kg	436	17	23	23	17	436	79	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

Specification	Flange size	<input type="checkbox"/> 42
----------------------	--------------------	-----------------------------

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.

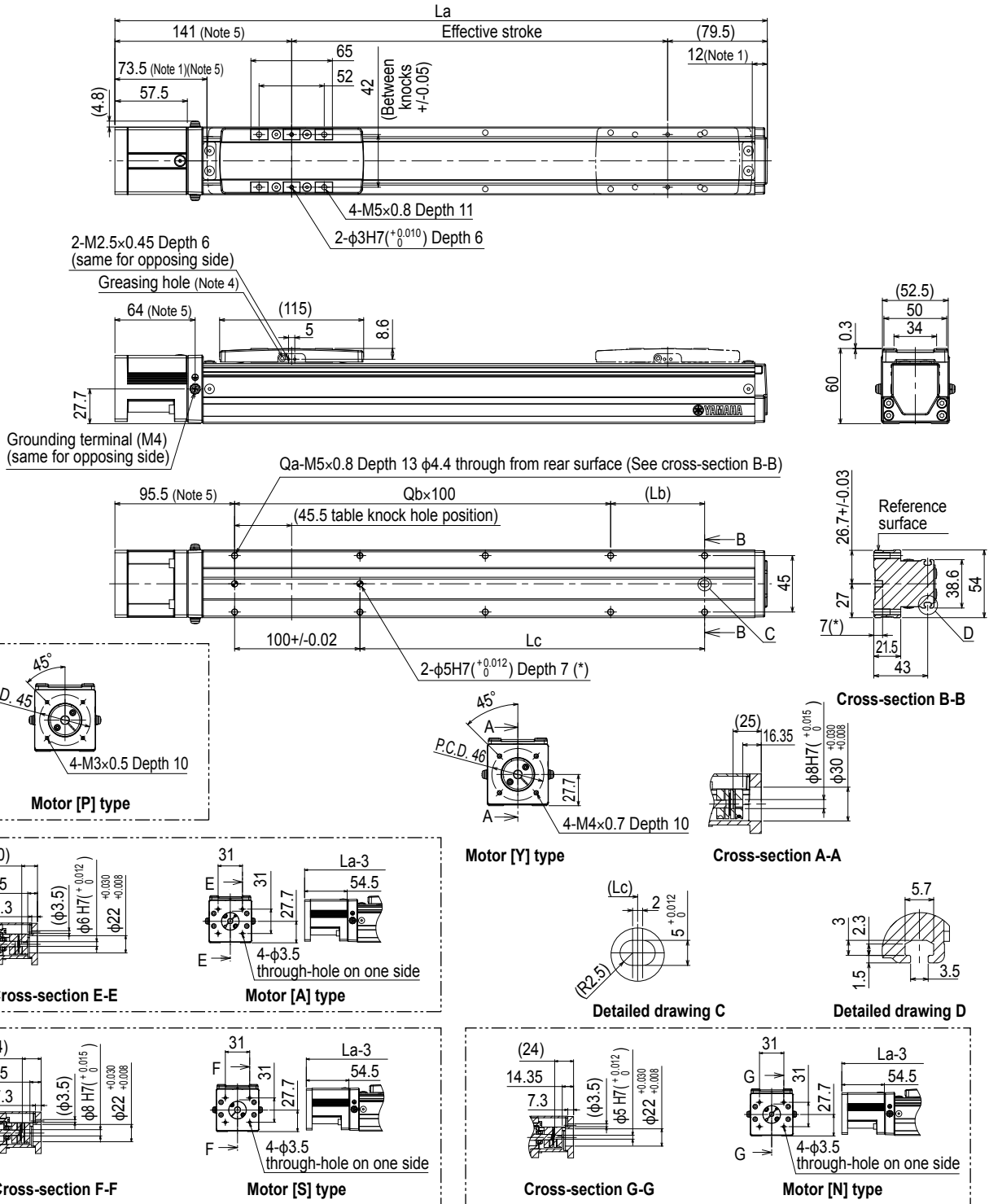
Access the website below.



▶ 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 motor
Slider type
Basic model
ABAS
Advanced model
YAMAHA motor
Slider type
Advanced model
AGXS
Basic model
Rod type
Basic model
ABAR
Acceleration/Deceleration
Inertia Moment
Option
Single axis positioner
EP-01

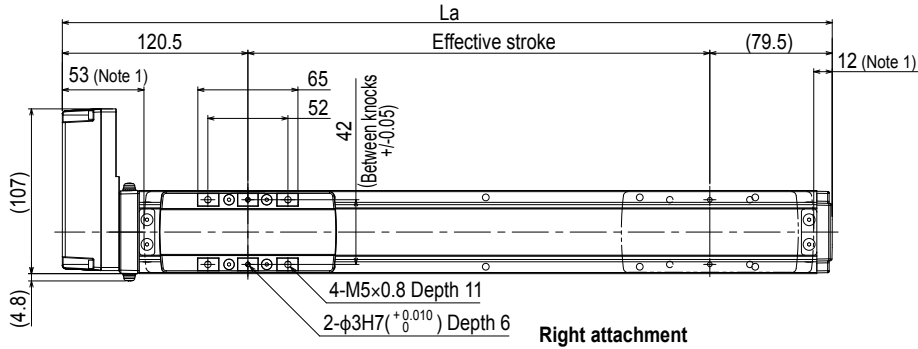
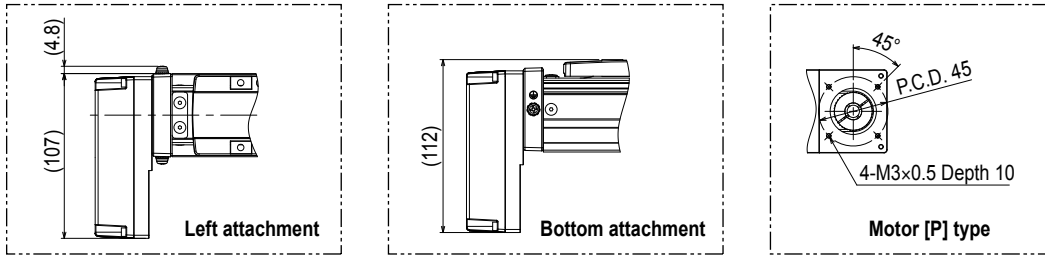
LBAS05 Straight type (S)



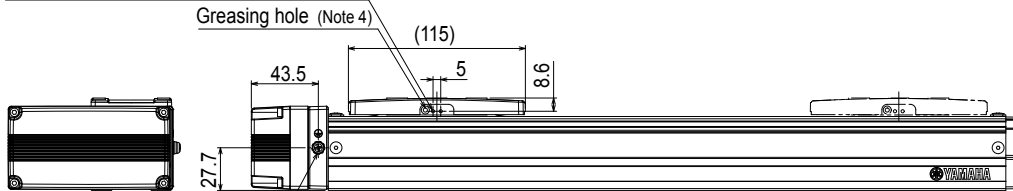
- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
- Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M4 × 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 × 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%

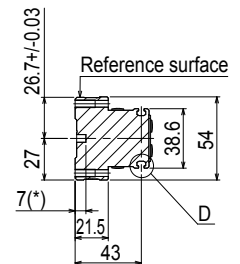
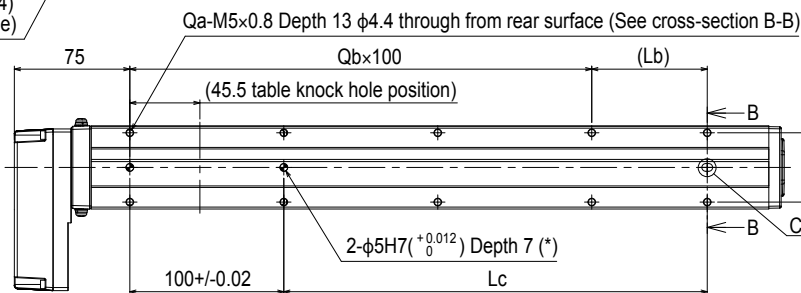
LBAS05 Bending type (A)



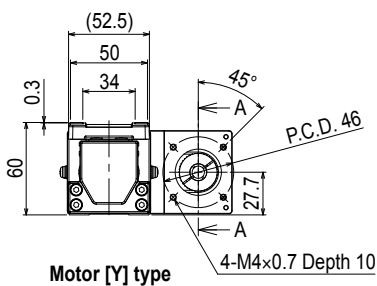
2-M2.5x0.45 Depth 6 (same for opposing side)



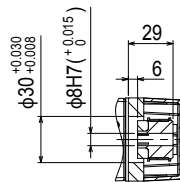
Grounding terminal (M4) (same for opposing side)



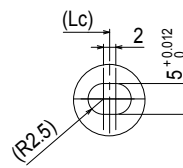
Cross-section B-B



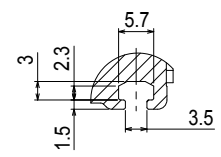
Motor [Y] type



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 robot push handle
EP-01

LBAS08

Basic model

Motor-less Single Axis Actuator

Slider type



Ordering method

LBAS08

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

[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 ^{Note 1}	±0.01 mm		
Deceleration mechanism	Shifting position ball screw φ 16 (C7 class)		
Stroke	50 mm to 1100 mm (50 mm pitch)		
Maximum speed ^{Note 2} (or equivalent)	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	20 mm	10 mm	5 mm
Maximum payload ^{Note 3} (or equivalent)	Horizontal	40 kg	80 kg
	Vertical	8 kg	20 kg
Rated thrust ^{Note 3} (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.

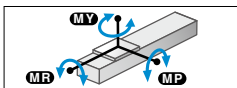
If the effective stroke exceeds 650 mm, the ball screw may resonate. (Critical speed)

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

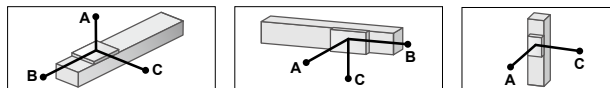
Applicable motor

• 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 ^{Note}



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
25kg	278	73	86	25kg	86	73	278	6kg	321
40kg	517	54	76	40kg	76	54	517	8kg	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
50kg	341	44	65	50kg	65	44	341	10kg	270
80kg	228	22	34	80kg	34	22	228	20kg	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
50kg	1035	52	83	50kg	83	52	1035	20kg	149
80kg	719	27	44	80kg	44	27	719	30kg	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.

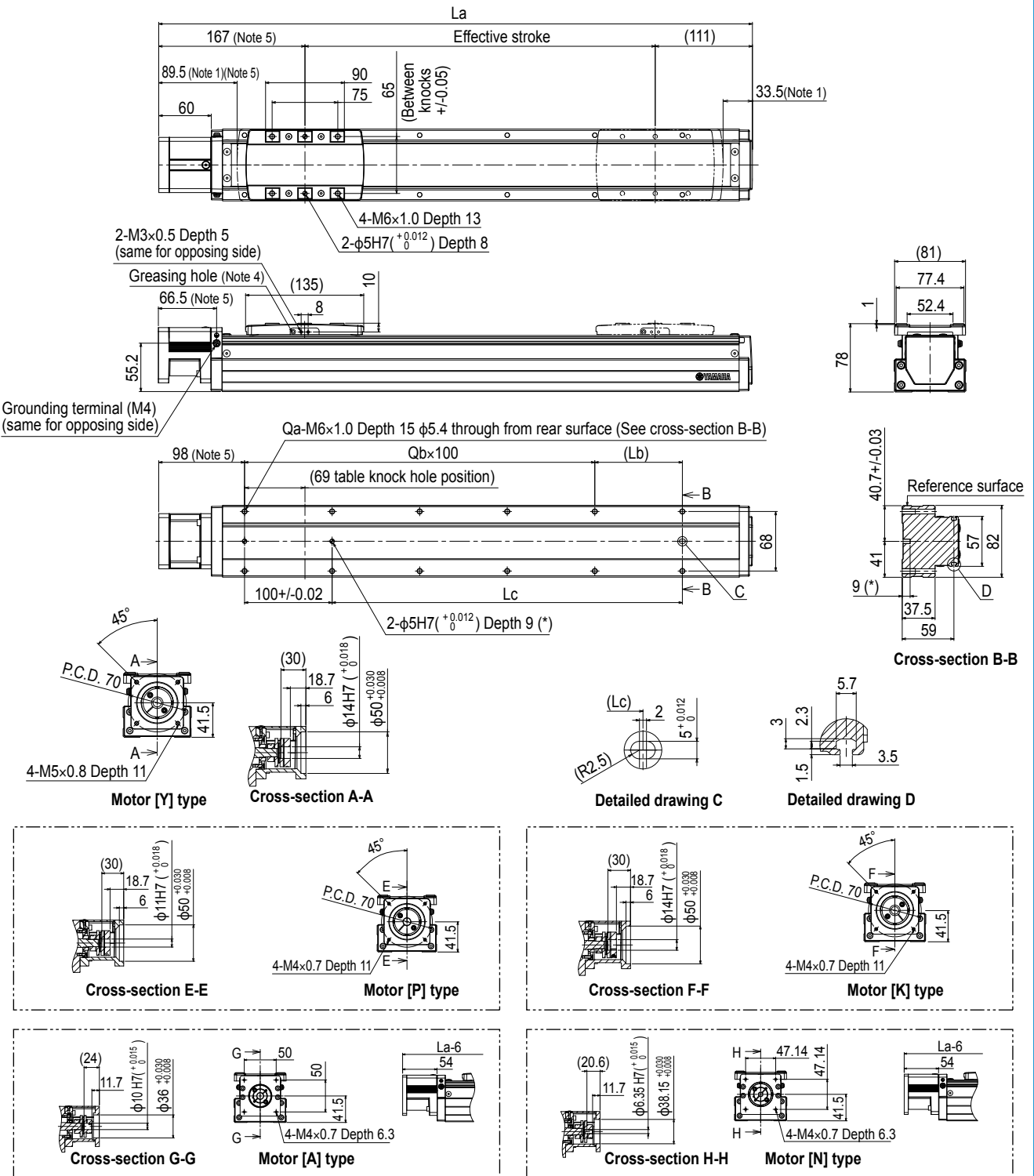
Note. For the motor specifications A and N, the parts dedicated for bending cannot be used.

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											-											
Acceleration/Deceleration (mm/sec ²)	Lead 20											1020											
	Lead 10											900											
	Lead 5											780											
	Speed setting											660											
Inertia Moment (kg·cm ²)	Lead 20											600											
	Lead 10											510											
	Lead 5											450											
	Speed setting											390											
Option	Lead 20											330											
	Lead 10											300											
	Lead 5											270											
	Speed setting											240											
Single axis speed (mm/sec)	Lead 20											110											
	Lead 10											105											
	Lead 5											90											
	Speed setting											85											

Features

- Motorless
- Sinter type
- Basic model
- LBAS
- Advanced model
- LGXS
- Basic model
- LBAR
- Basic model
- ABAS
- Advanced model
- AGXS
- Basic model
- ABAR
- Acceleration/Deceleration
- Inertia Moment
- Option
- Single axis speed
- Part number
- Ep01

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)

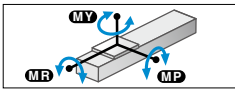
LBAS12 (200W)

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
	Vertical	3 kg	8 kg	20 kg
Rated thrust <small>Note 3</small> (or equivalent)	Horizontal	105 N	170 N	341 N
	Vertical	105 N	170 N	341 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

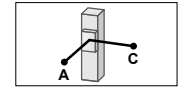
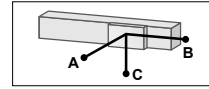
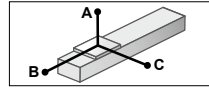
Applicable motor	400 W			
Ball screw lead	32 mm	20 mm	10 mm	5 mm
Maximum payload <small>Note 1</small> (or equivalent)	Horizontal	35 kg	50 kg	95 kg
	Vertical	8 kg	15 kg	25 kg
Rated thrust <small>Note 1</small> (or equivalent)	Horizontal	218 N	339 N	678 N
	Vertical	218 N	339 N	678 N

- 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)

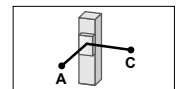
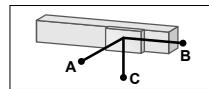
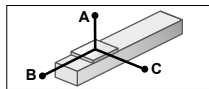
	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	729	299	278	30kg	278	299	729	5kg	1934	1934
50kg	788	207	223	50kg	223	207	788	10kg	978	978
80kg	1325	157	200	80kg	200	157	1325	20kg	503	503

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
 Slim type
 Basic model
 LBAS
 Advanced model
 Slim type
 Basic model
 LGXS
 Slim type
 Basic model
 LBAR
 Slim type
 Basic model
 ABAS
 Slim type
 Advanced model
 AGXS
 Slim type
 Basic model
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single axis motion
 Positioner
 Ep.01

Features

Motorless
Slider type
Basic model
LBAS

Motorless
Slider type
Advanced model
LGXS

Motorless
Rod type
Basic model
LBAR

With motor
Slider type
Basic model
ABAS

With motor
Slider type
Advanced model
AGXS

With motor
Rod 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	KSMA02LI	
	KSMA02LG	

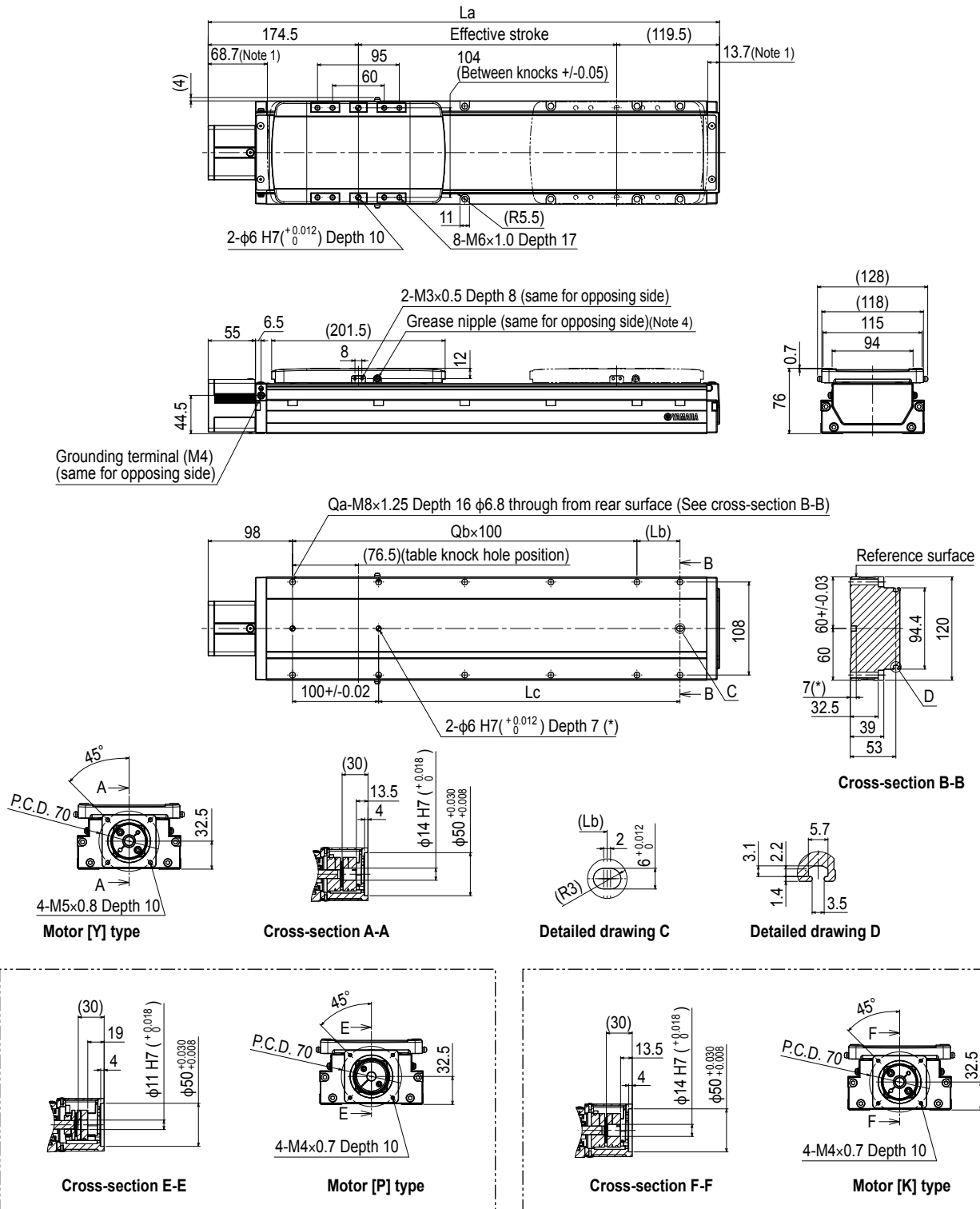
■ Applicable motor (400W)

● 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	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

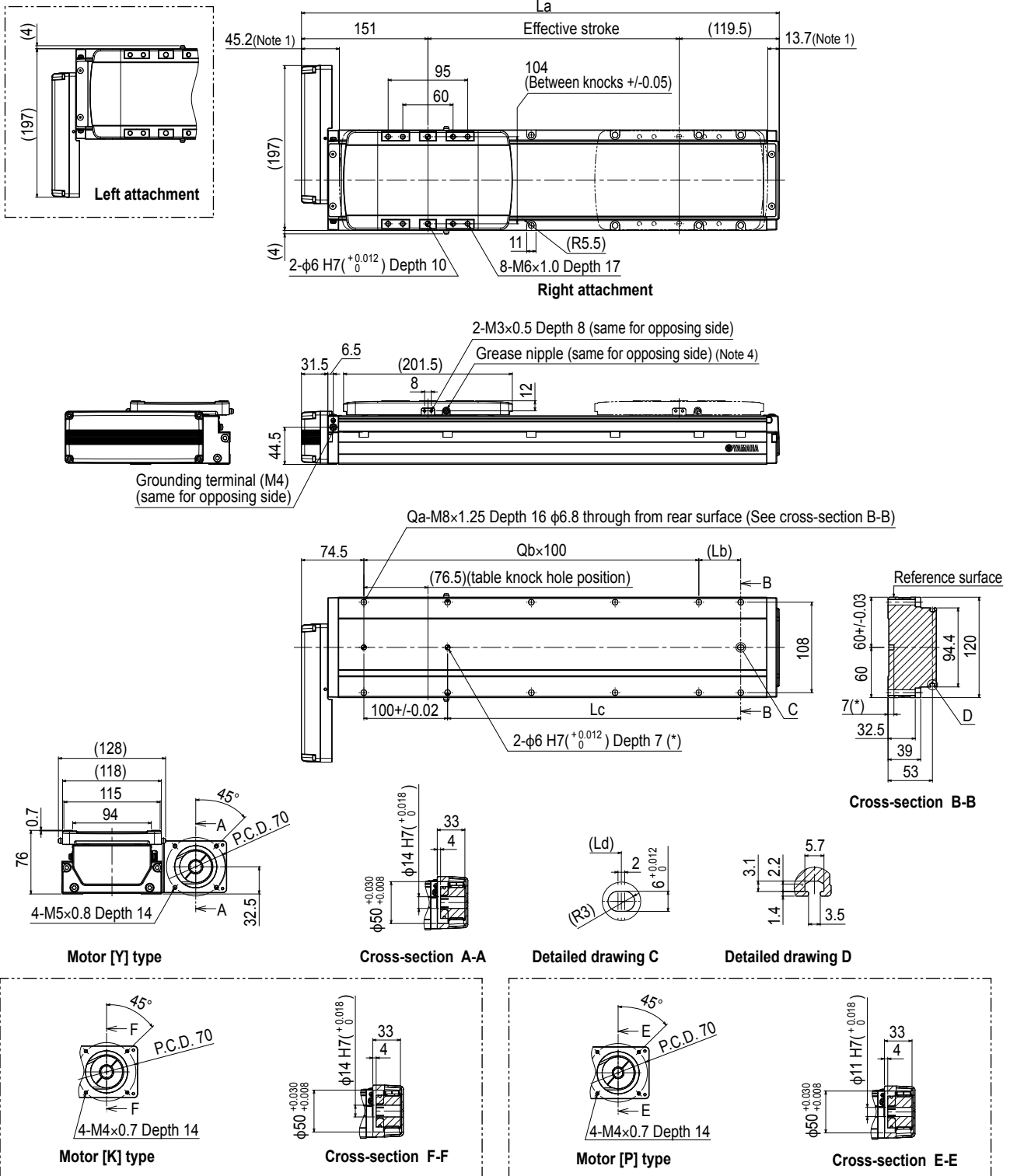
Single axis motion

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%			