YAMAHA
Revs Your Heart

New product information

Your choice of Motor and Driver System

Motor-less Single Axis Actuator

NEW

Robonity series

Wide selection of payload and speed requirements

Choice of ball screw leads

Wide selection stroke range

Choice of stroke range from 50 mm up to 1450 mm

(Advanced model LGXS only)

Basic model

LBAS

High Rigidity

Compact

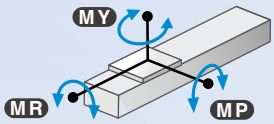
Low Cost

Maximum payload	**2 kg to 100 kg**
Maximum speed	**133 to 1,333 mm/sec**
Stroke	**50 to 1,100 mm**

Newly designed integrated guide rail/frame structure.
Improved moment load capacity in compact frame size.
Designed to accommodate motors from most leading manufacturers.

High Rigidity

Moment rigidity is increased approximately three times from current models.



NEW

	Existing product T6L	LBAS05
MY	35	59
MP	40	63
MR	50	103

(N · m)

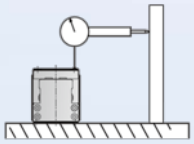
NEW

	Existing product T9H	LBAS08
MY	86	221
MP	133	309
MR	117	343

(N · m)

High Precision

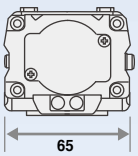
Straightness (running parallelism): +/-0.02/800 mm



Compact

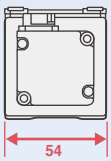
Frame width is reduced by approximately 20% from current models

Existing product T6L



NEW

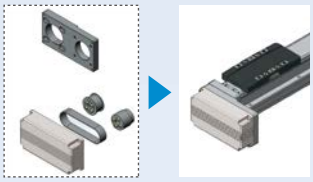
LBAS05



Motor attaching direction, Easily changeable with the special bending part

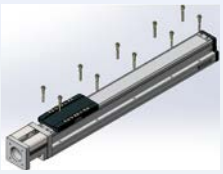
Straight type	Bending type		

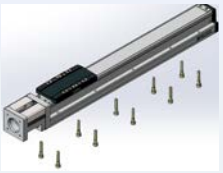
Standard Left Right Bottom

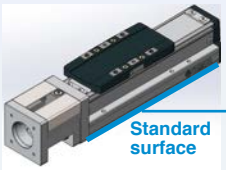


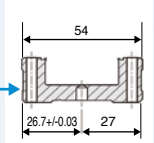
Installation process is simple and easy

1. Mounting holes are accessible from top or bottom without disassembling actuator unit.
2. Standard surface on the side and dowel pin holes on the bottom.



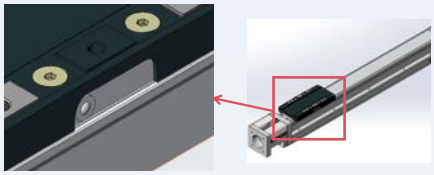






Easy Maintenance

Moving parts can be lubricated from outside without opening actuator



Grease nipple on the slider side surface

LGXS

High Precision Accuracy Class C5

High Durability

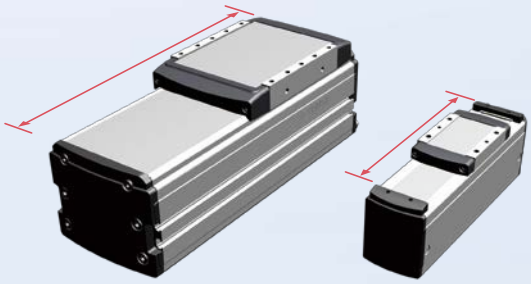
Clean specification as a standard feature

Maximum payload	**2 kg to 160 kg**
Maximum speed	**300 to 2,400 mm/sec**
Stroke	**50 to 1,450 mm**

Higher efficiency, accuracy, and reliability from ground ball screw.
Ideal for base axis of multi-axis configuration.

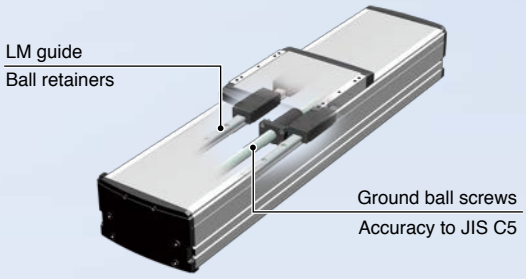
Shortest Overall Length

The industry' s shortest class is achieved for the total length in relation to the effective stroke.



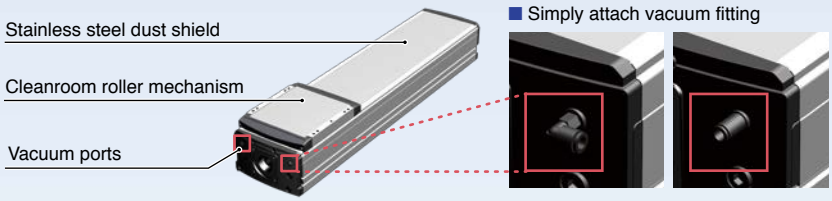
High Precision

- Adopted ground ball screws
  Ball screw Remove Accuracy: Accuracy class C5
- Positioning Remove Accuracy repeatability: +/-5 μm



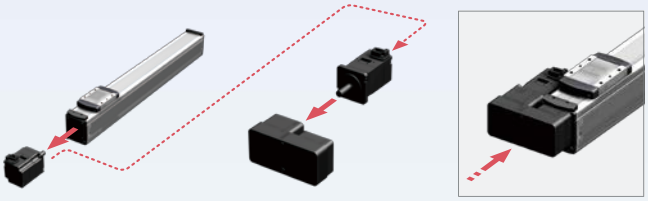
Cleanroom Ready Design

- Protective stainless dust shield
- Ports are ready for vacuum fittings



Motor orientation is changeable with optional conversion unit

Motor unit of standard straight type can be used for side-mount setup.



Standard + Conversion adapter ▶ Right attachment of bending

LBAS04 Basic model

Motor-less Single Axis Actuator

Ordering method

LBAS04 - [ ] [ ] [ ] - [ ]

Model	Lead designation	Shape	Motor specification	Stroke
	12: 12 mm 6: 6 mm	S: Straight A: Bending	Y: Y specification (see below) P: P specification (see below)	50 to 800 (50 mm pitch)

[Caution]

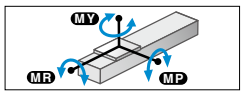
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are user's responsibility.
Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration 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

Adaptable 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	20 kg
	Vertical	2 kg	5 kg
Rated thrust Note 3 **(or equivalent)**		71 N	141 N
Maximum dimensions of cross section of main unit		W 44 mm × H 52 mm	
Overall length		ST + 214 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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note. See P.10 for acceleration/deceleration and inertia moment.

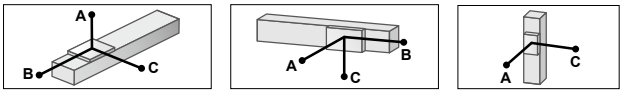
Static loading moment



(Unit: N·m)

MY	MP	MR
54	54	75

Allowable overhang Note



LBAS04-12

Horizontal installation (Unit: mm)

	A	B	C
2kg	1187	271	325
8kg	473	62	77
12kg	431	41	53

Wall installation (Unit: mm)

	A	B	C
2kg	325	271	1187
8kg	77	62	473
12kg	53	41	431

Vertical installation (Unit: mm)

	A	C
1kg	534	534
2kg	265	265

LBAS04-6

Horizontal installation (Unit: mm)

	A	B	C
4kg	1808	155	217
12kg	801	47	65
20kg	546	25	35

Wall installation (Unit: mm)

	A	B	C
4kg	217	155	1808
12kg	60	42	756
20kg	35	25	546

Vertical installation (Unit: mm)

	A	C
1kg	639	639
3kg	208	208
5kg	122	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.

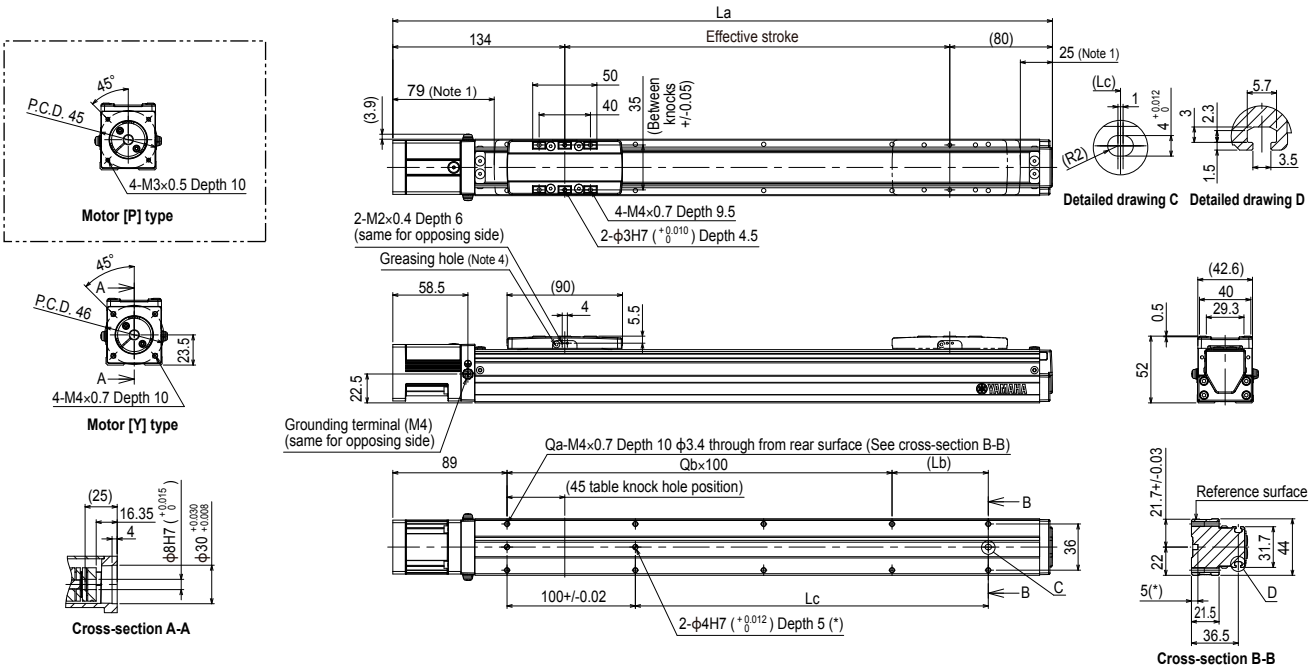
Adaptable Servo Motor

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	Yasukawa 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
	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

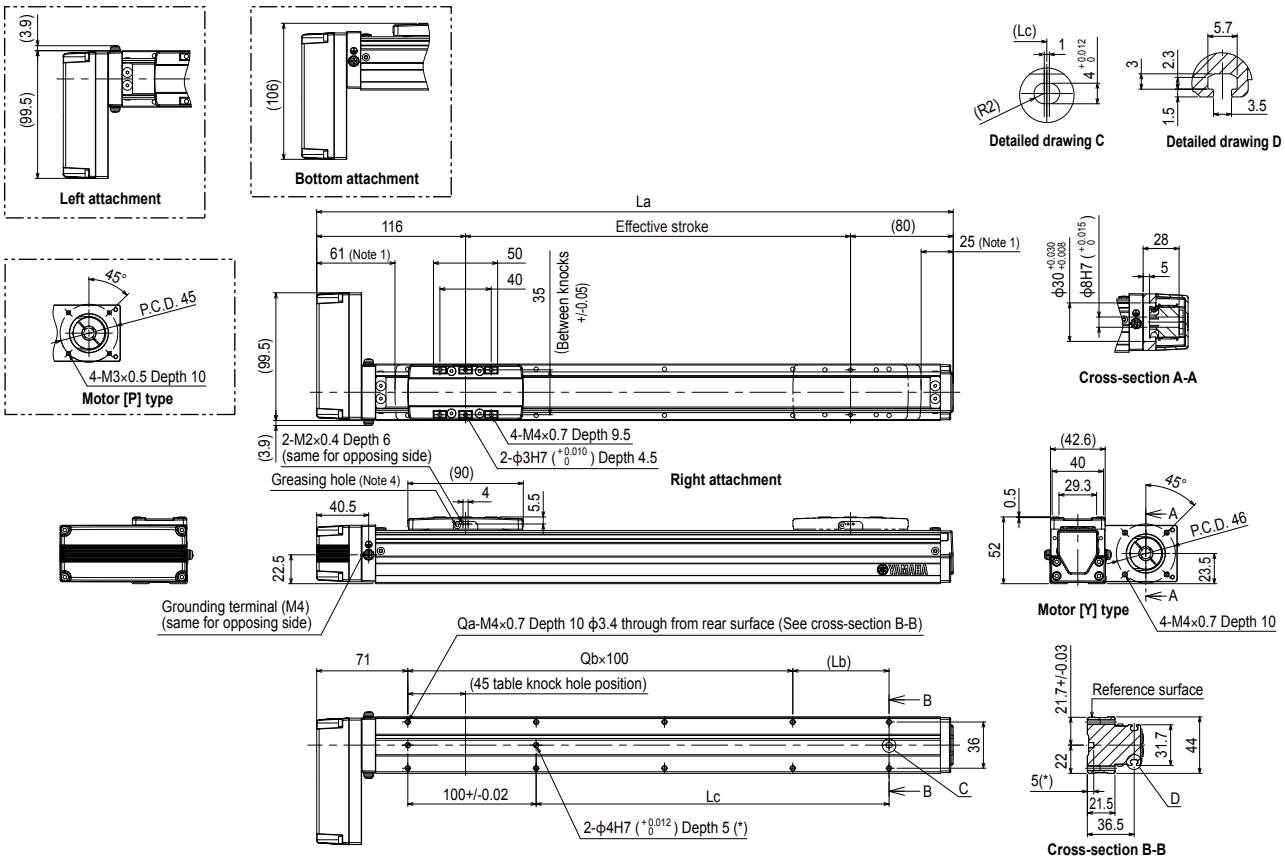
LBAS04 Straight type (S)



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%

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. Nozzle set for greasing (recommended) (see P.34 for detail)
Part number: KFU-M3861-00

LBAS04 Bending type (A)



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										720	600	480	400	360	320
	Lead 6	400										360	300	240	200	180	160
	Speed setting	–										90%	75%	60%	50%	45%	40%

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. Nozzle set for greasing (recommended) (see P.34 for detail)
Part number: KFU-M3861-00

LBAS05 Basic model

Motor-less Single Axis Actuator

Ordering method

LBAS05 - [ ] [ ] [ ] - [ ]

Model	Lead designation	Shape	Motor specification	Stroke
	20: 20 mm 10: 10 mm 5: 5 mm 2: 2 mm	S: Straight A: Bending	Y: Y specification (see below) P: P specification (see below)	50 to 800 (50 mm pitch)

[Caution]

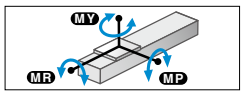
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are user's responsibility.
Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration 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

Adaptable 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 Note 2 **(or equivalent)**	1333 mm/sec	666 mm/sec	333 mm/sec	133 mm/sec
Ball screw lead	20 mm	10 mm	5 mm	2 mm
Maximum payload Note 3 **(or equivalent)** Horizontal	12 kg	24 kg	40 kg	45 kg
Maximum payload Note 3 **(or equivalent)** Vertical	3 kg	6 kg	12 kg	15 kg
Rated thrust Note 3 **(or equivalent)**	84 N	169 N	339 N	854 N
Maximum dimensions of cross section of main unit	W 54 mm × H 60 mm			
Overall length	ST + 220.5 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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note. See P.11 for acceleration/deceleration and inertia moment.

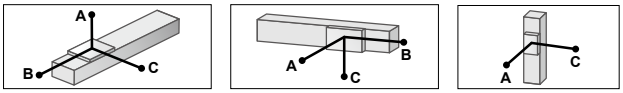
Static loading moment



(Unit: N·m)

MY	MP	MR
59	63	103

Allowable overhang Note



LBAS05-20

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

LBAS05-10

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

LBAS05-5

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

LBAS05-2

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
15kg	2685	78	109	**15kg**	109	78	2685	**5kg**	254	254
30kg	1833	34	47	**30kg**	47	34	1833	**10kg**	122	122
45kg	2621	19	27	**45kg**	27	19	2621	**15kg**	0	0

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.

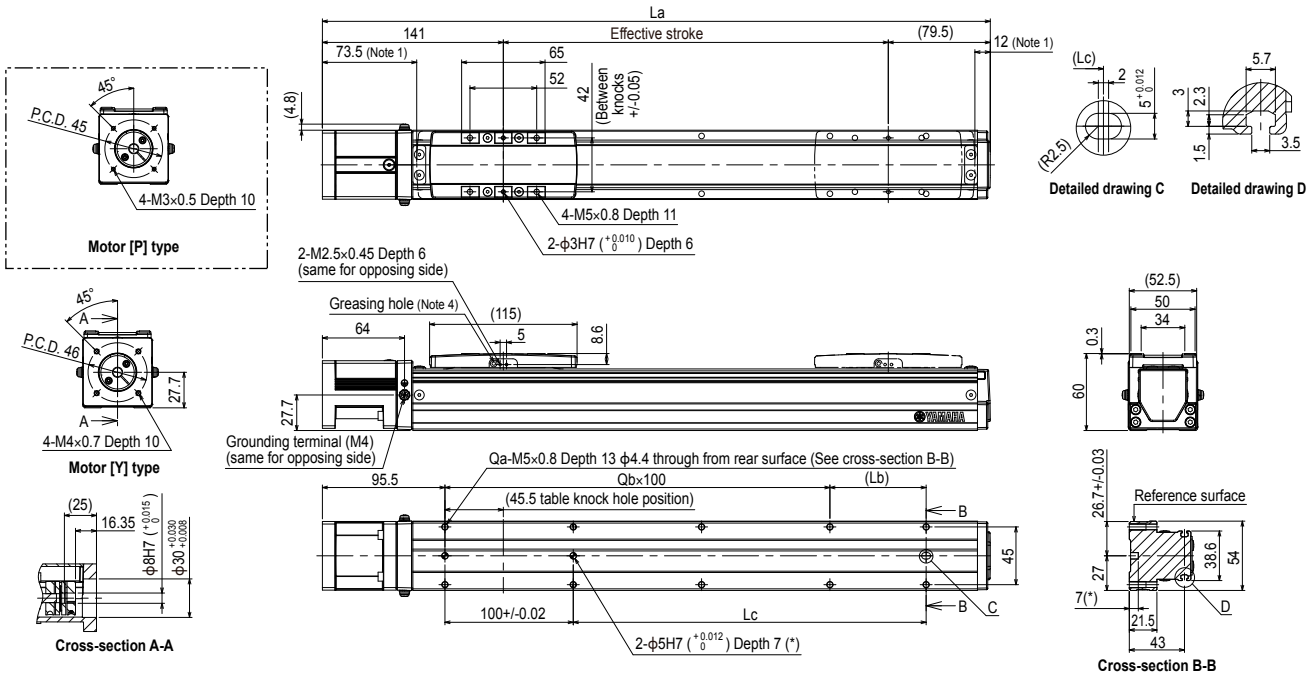
Adaptable Servo Motor

Specification		
Flange size	□40	
Wattage	100 W	

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

Motor specification	Manufacturer	Model
Y	Yasukawa Electric Corp.	SGMJV-01
		SGM7J-01
	Keyence Corp.	SV-□010
		SV2-□010
	Mitsubishi Electric Corp.	HF-KP13
		HG-KR13
		HK-KT13
	Omron Electronics	R88M-K10030
		R88M-1M10030
	Sanyo Denki	R2□A04010
	Tamagawa Seiki	TSM3104
	Delta Electronics	ECMA-C10401
	Fanuc Corp.	βiS0.3/5000
	Kingservo	KSMA01LI□S
		KSMA01LG
	Siemens	1FK2102-1AG
		1FL6024-2AF
	Schneider	BCH2MB013
	Beckhoff	AM3012C *
	Allen-Bradley	TLY-A130 *
P	Panasonic Corp.	MSMD01
		MSMF01

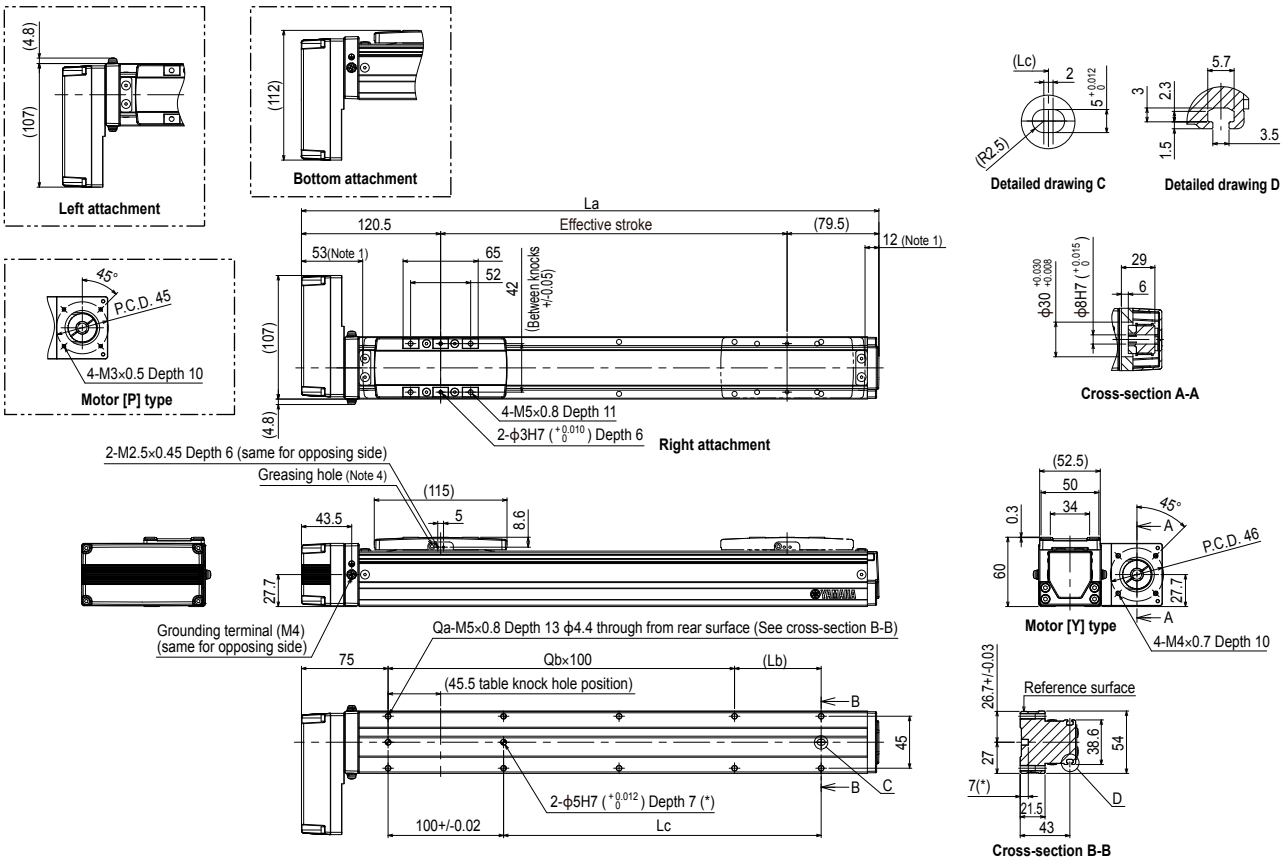
LBAS05 Straight type (S)



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
Lead 2	133											113	93	79	66	59
Speed setting	–											85%	70%	60%	50%	45%

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. Nozzle set for greasing (recommended) (see P.34 for detail)
Part number: KFU-M3861-00

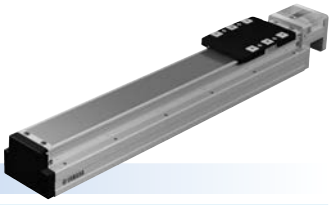
LBAS05 Bending type (A)



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
	Lead 2	133											113	93	79	66	59
	Speed setting	–											85%	70%	60%	50%	45%

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. Nozzle set for greasing (recommended) (see P.34 for detail)
Part number: KFU-M3861-00

LBAS08 Basic model



Motor-less Single Axis Actuator

Ordering method

LBAS08 - [ ] [ ] [ ] - [ ]

Model	Lead designation	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)	50 to 1100 (50 mm pitch)

[Caution]

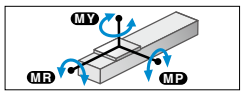
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are user's responsibility.
Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration 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

Adaptable 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	100 kg
Maximum payload Note 3 **(or equivalent)** Vertical	8 kg	20 kg	30 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	ST + 278 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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note. See P.13 for acceleration/deceleration and inertia moment.

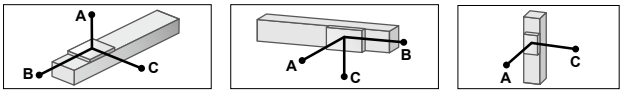
Static loading moment



(Unit: N·m)

MY	MP	MR
221	309	343

Allowable overhang Note



LBAS08-20

Horizontal installation (Unit: mm)

	A	B	C
15kg	356	131	146
25kg	278	73	86
40kg	255	41	53

Wall installation (Unit: mm)

	A	B	C
15kg	146	131	356
25kg	86	73	278
40kg	53	41	255

Vertical installation (Unit: mm)

	A	C
3kg	645	645
6kg	333	333
8kg	252	252

LBAS08-10

Horizontal installation (Unit: mm)

	A	B	C
30kg	466	83	120
50kg	342	44	65
80kg	228	22	34

Wall installation (Unit: mm)

	A	B	C
30kg	120	83	466
50kg	65	44	342
80kg	34	22	228

Vertical installation (Unit: mm)

	A	C
5kg	564	564
10kg	284	284
20kg	142	142

LBAS08-5

Horizontal installation (Unit: mm)

	A	B	C
30kg	1612	95	153
50kg	1041	52	83
80kg	719	27	44
100kg	608	19	31

Wall installation (Unit: mm)

	A	B	C
30kg	153	95	1612
50kg	83	52	1041
80kg	44	27	719
100kg	31	19	608

Vertical installation (Unit: mm)

	A	C
10kg	325	325
20kg	163	163
30kg	109	109

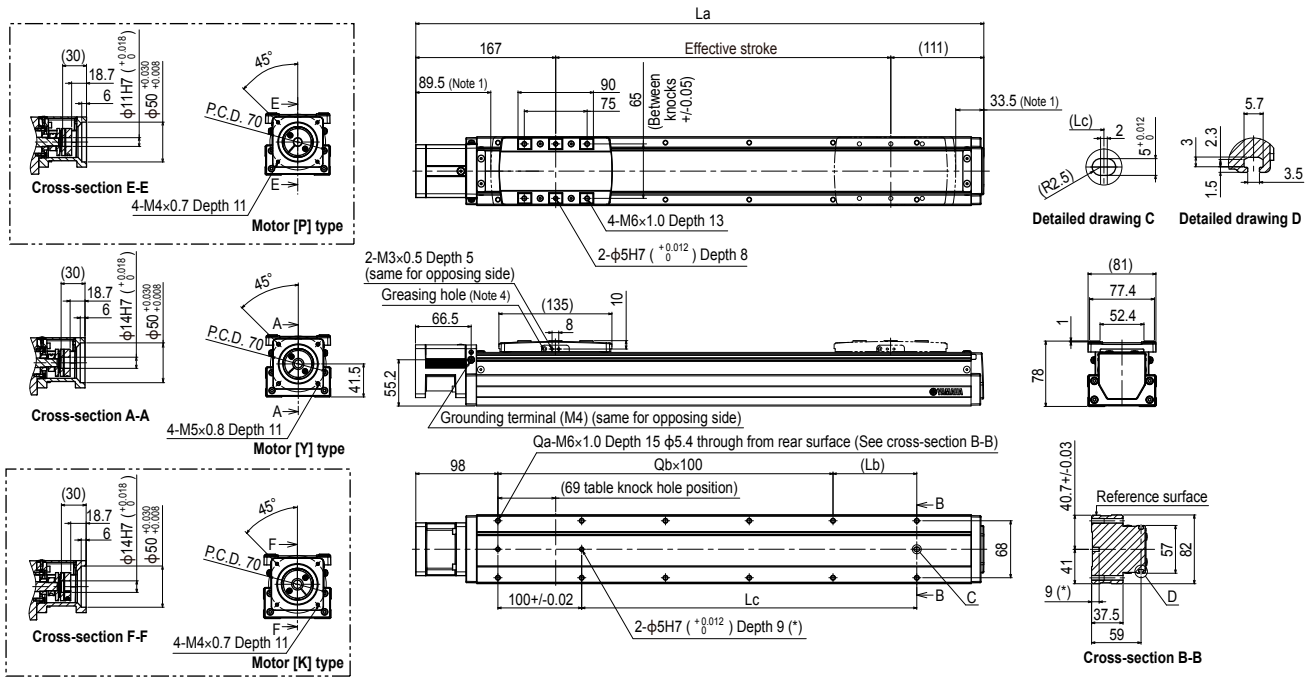
Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note. Service life is calculated for 600 mm stroke models.

Adaptable Servo Motor

Specification		
Flange size	□60	
Wattage	200 W	

Motor specification	Manufacturer	Model
Y	Yasukawa 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

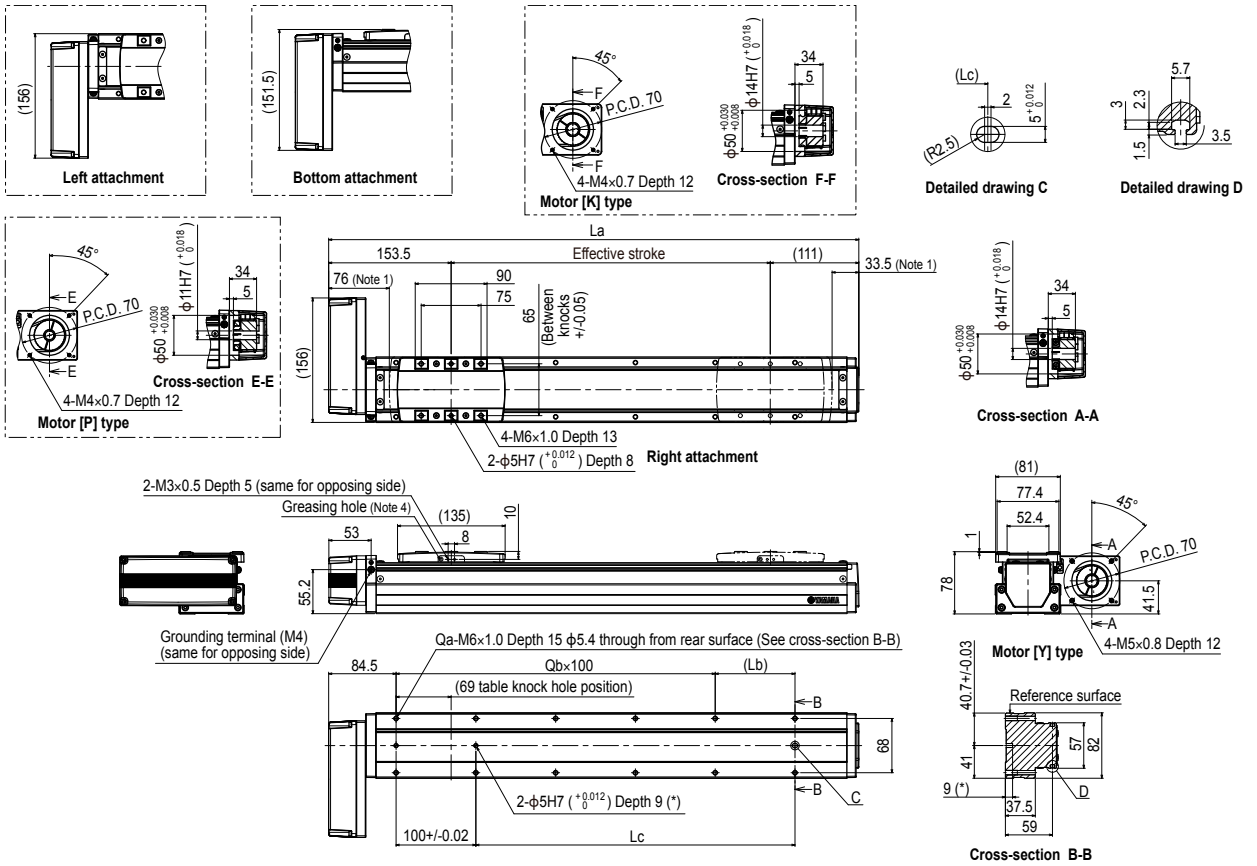
LBAS08 Straight type (S)



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													1020	900	780	660	600	540	480	420	360
Lead 10	600													510	450	390	330	300	270	240	210	180
Lead 5	300													255	225	195	165	150	135	120	105	90
Speed setting	–													85%	75%	65%	55%	50%	45%	40%	35%	30%

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. Nozzle set for greasing (recommended) (see P.34 for detail)
Part number: KFU-M3861-00

LBAS08 Bending type (A)



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	1200													1020	900	780	660	600	540	480	420	360
	Lead 10	600													510	450	390	330	300	270	240	210	180
	Lead 5	300													255	225	195	165	150	135	120	105	90
	Speed setting	–													85%	75%	65%	55%	50%	45%	40%	35%	30%

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. Nozzle set for greasing (recommended) (see P.34 for detail)
Part number: KFU-M3861-00

Acceleration/Deceleration

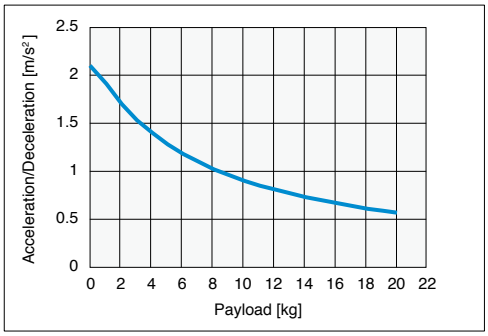
LBAS04

Model	LBAS04 -6 Horizontal/ Wall hanging	LBAS04 -6 Vertical	LBAS04 -12 Horizontal/ Wall hanging	LBAS04 -12 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
0	2.1	2.1	4.2	3.6
1	1.91	2.1	3.84	2.4
2	1.7	1.64	2.99	1.8
3	1.53	1.34	2.45	
4	1.4	1.14	2.07	
5	1.28	0.99	1.8	
6	1.18		1.58	
7	1.1		1.42	
8	1.02		1.28	
9	0.96		1.17	
10	0.9		1.08	
11	0.85		1	
12	0.81		0.93	
13	0.77			
14	0.73			
15	0.7			
16	0.67			
17	0.64			
18	0.61			
19	0.59			
20	0.57			

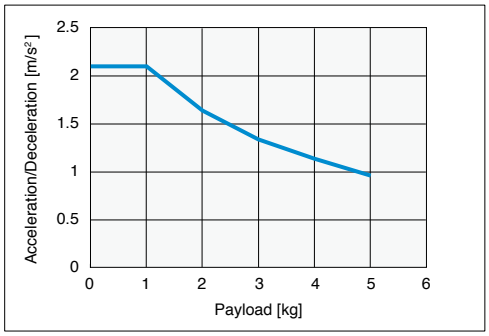
Payload – Acceleration/Deceleration Graph (Estimate)

LBAS04-6

Horizontal/ Wall hanging

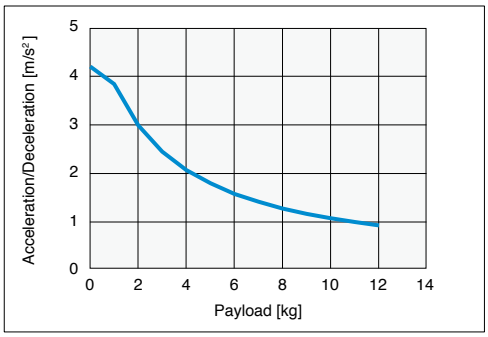


Vertical

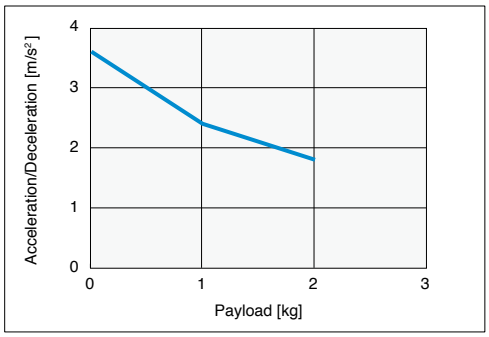


LBAS04-12

Horizontal/ Wall hanging



Vertical



Inertia Moment

LBAS04

[kg·m²×10⁻⁴]	Effective stroke [mm]															
Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
LBAS04-6	0.060	0.063	0.067	0.071	0.075	0.079	0.083	0.087	0.090	0.094	0.098	0.102	0.106	0.110	0.114	0.117
LBAS04-12	0.069	0.072	0.076	0.080	0.084	0.088	0.092	0.096	0.099	0.103	0.107	0.111	0.115	0.119	0.123	0.126

Acceleration/Deceleration

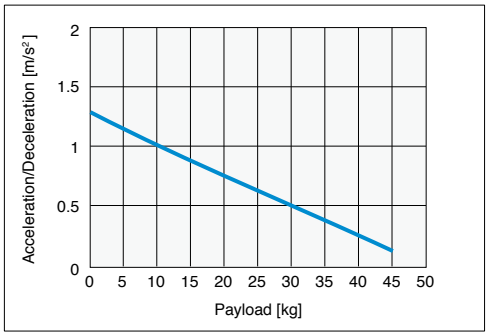
LBAS05

Model	LBAS05 -2 Horizontal/ Wall hanging	LBAS05 -2 Vertical	LBAS05 -5 Horizontal/ Wall hanging	LBAS05 -5 Vertical	LBAS05 -10 Horizontal/ Wall hanging	LBAS05 -10 Vertical	LBAS05 -20 Horizontal/ Wall hanging	LBAS05 -20 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
0	1.3	1	3.04	3.34	4.64	4.86	7.44	7.44
1	1.27	0.95	2.97	3.18	4.44	4.56	7.44	6.99
2	1.24	0.91	2.91	3.03	4.25	4.3	7.44	5.65
3	1.22	0.86	2.85	2.88	4.07	4.06	7.44	3.42
4	1.19	0.82	2.79	2.73	3.9	3.85	7.44	
5	1.17	0.77	2.73	2.58	3.73	3.66	7.44	
6	1.14	0.73	2.67	2.43	3.57	3.49	6.64	
7	1.11	0.68	2.61	2.28	3.41		6	
8	1.09	0.64	2.55	2.13	3.27		5.47	
9	1.06	0.59	2.49	1.98	3.12		5.02	
10	1.04	0.55	2.43	1.83	2.99		4.65	
11	1.01	0.5	2.37	1.68	2.86		4.32	
12	0.98	0.46	2.31	1.53	2.74		4.04	
13	0.96	0.41	2.24		2.62			
14	0.93	0.37	2.18		2.51			
15	0.91	0.32	2.12		2.41			
16	0.88		2.06		2.31			
17	0.85		2		2.22			
18	0.83		1.94		2.14			
19	0.8		1.88		2.06			
20	0.78		1.82		1.99			
21	0.75		1.76		1.93			
22	0.72		1.7		1.87			
23	0.7		1.64		1.82			
24	0.67		1.58		1.77			
25	0.65		1.52					
26	0.62		1.45					
27	0.59		1.39					
28	0.57		1.33					
29	0.54		1.27					
30	0.52		1.21					
31	0.49		1.15					
32	0.46		1.09					
33	0.44		1.03					
34	0.41		0.97					
35	0.39		0.91					
36	0.36		0.85					
37	0.33		0.79					
38	0.31		0.72					
39	0.28		0.66					
40	0.26		0.6					
41	0.23							
42	0.2							
43	0.18							
44	0.15							
45	0.13							

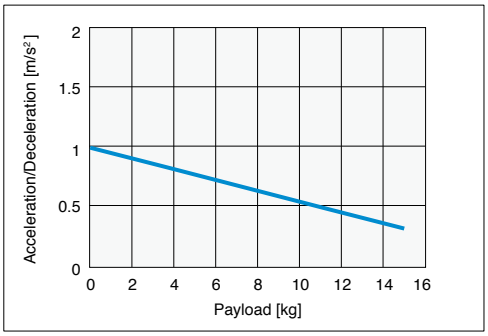
Payload – Acceleration/Deceleration Graph (Estimate)

LBAS05-2

Horizontal/ Wall hanging

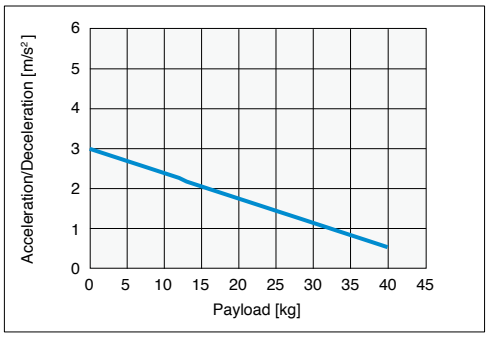


Vertical

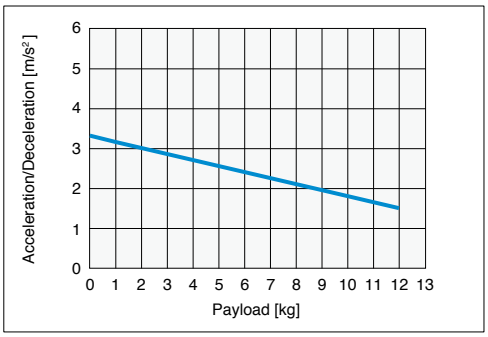


LBAS05-5

Horizontal/ Wall hanging



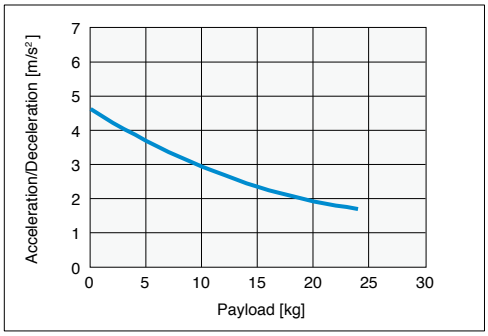
Vertical



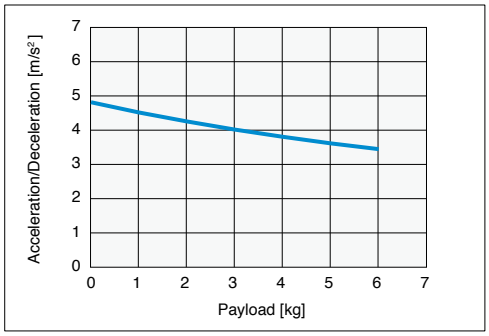
Payload – Acceleration/Deceleration Graph (Estimate)

LBAS05-10

Horizontal/
Wall hanging

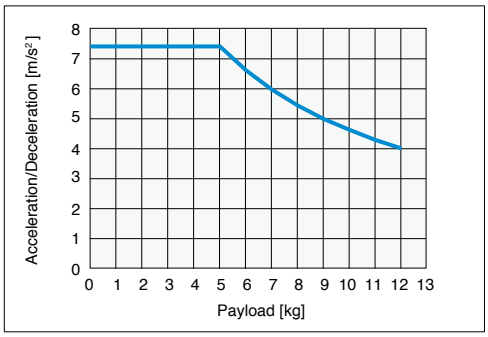


Vertical

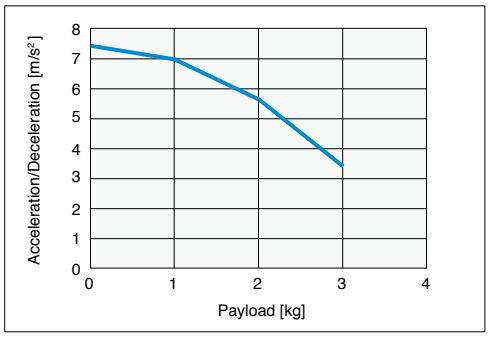


LBAS05-20

Horizontal/
Wall hanging



Vertical



Inertia Moment

LBAS05

[kg·m²×10⁻⁴]	Effective stroke [mm]															
Model	**50**	**100**	**150**	**200**	**250**	**300**	**350**	**400**	**450**	**500**	**550**	**600**	**650**	**700**	**750**	**800**
LBAS05-2	0.082	0.090	0.098	0.106	0.114	0.122	0.130	0.138	0.146	0.154	0.162	0.170	0.178	0.186	0.194	0.202
LBAS05-5	0.085	0.093	0.101	0.109	0.117	0.125	0.133	0.141	0.149	0.157	0.165	0.173	0.181	0.189	0.197	0.205
LBAS05-10	0.097	0.105	0.113	0.121	0.129	0.137	0.145	0.153	0.161	0.169	0.177	0.185	0.193	0.201	0.209	0.217
LBAS05-20	0.145	0.153	0.161	0.169	0.177	0.185	0.193	0.201	0.209	0.217	0.224	0.232	0.240	0.248	0.256	0.264

Acceleration/Deceleration

LBAS08

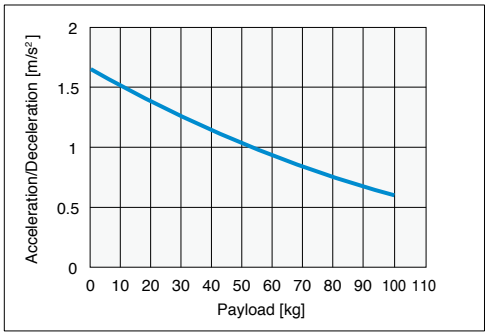
Model	LBAS08 -5 Horizontal/ Wall hanging	LBAS08 -5 Vertical	LBAS08 -10 Horizontal/ Wall hanging	LBAS08 -10 Vertical	LBAS08 -20 Horizontal/ Wall hanging	LBAS08 -20 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
0	1.65	1.65	6.09	4.79	8.51	8.5
1	1.63	1.62	5.97	4.54	8.2	7.39
2	1.62	1.59	5.86	4.31	7.9	6.42
3	1.6	1.57	5.74	4.09	7.61	5.59
4	1.59	1.54	5.63	3.88	7.33	4.89
5	1.58	1.51	5.52	3.68	7.05	4.33
6	1.56	1.49	5.42	3.5	6.77	3.91
7	1.55	1.46	5.31	3.32	6.51	3.62
8	1.54	1.44	5.21	3.16	6.24	3.46
9	1.52	1.41	5.1	3.01	5.99	
10	1.51	1.38	5	2.87	5.74	
11	1.5	1.36	4.9	2.74	5.5	
12	1.49	1.33	4.8	2.62	5.26	
13	1.47	1.3	4.7	2.52	5.03	
14	1.46	1.28	4.61	2.42	4.8	
15	1.45	1.25	4.51	2.34	4.58	
16	1.43	1.23	4.42	2.27	4.37	
17	1.42	1.2	4.33	2.21	4.16	
18	1.41	1.17	4.24	2.16	3.96	
19	1.4	1.15	4.15	2.13	3.76	
20	1.38	1.12	4.06	2.1	3.57	
21	1.37	1.09	3.98		3.38	
22	1.36	1.07	3.89		3.21	
23	1.35	1.04	3.81		3.03	
24	1.34	1.02	3.73		2.87	
25	1.32	0.99	3.65		2.71	
26	1.31	0.96	3.57		2.55	
27	1.3	0.94	3.49		2.4	
28	1.29	0.91	3.42		2.26	
29	1.28	0.88	3.34		2.13	
30	1.26	0.86	3.27		1.99	
31	1.25		3.2		1.87	
32	1.24		3.13		1.75	
33	1.23		3.06		1.64	
34	1.22		2.99		1.53	
35	1.21		2.93		1.43	
36	1.19		2.86		1.34	
37	1.18		2.8		1.25	
38	1.17		2.74		1.16	
39	1.16		2.68		1.09	
40	1.15		2.62		1.02	
41	1.14		2.57			
42	1.13		2.51			
43	1.12		2.46			
44	1.11		2.41			
45	1.09		2.36			
46	1.08		2.31			
47	1.07		2.26			
48	1.06		2.21			
49	1.05		2.17			
50	1.04		2.12			
51	1.03		2.08			
52	1.02		2.04			
53	1.01		2			
54	1		1.96			
55	0.99		1.93			
56	0.98		1.89			
57	0.97		1.86			
58	0.96		1.83			
59	0.95		1.8			
60	0.94		1.77			
61	0.93		1.74			
62	0.92		1.72			
63	0.91		1.69			
64	0.9		1.67			
65	0.89		1.65			
66	0.88		1.63			
67	0.87		1.61			
68	0.86		1.59			
69	0.85		1.57			
70	0.84		1.56			
71	0.84		1.55			
72	0.83		1.54			
73	0.82		1.53			
74	0.81		1.52			
75	0.8		1.51			
76	0.79		1.51			
77	0.78		1.5			
78	0.77		1.5			
79	0.76		1.5			
80	0.76		1.5			
81	0.75					
82	0.74					
83	0.73					
84	0.72					
85	0.71					
86	0.71					
87	0.7					
88	0.69					
89	0.68					

Model	LBAS08 -5 Horizontal/ Wall hanging	LBAS08 -5 Vertical	LBAS08 -10 Horizontal/ Wall hanging	LBAS08 -10 Vertical	LBAS08 -20 Horizontal/ Wall hanging	LBAS08 -20 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
90	0.67					
91	0.67					
92	0.66					
93	0.65					
94	0.64					
95	0.63					
96	0.63					
97	0.62					
98	0.61					
99	0.6					
100	0.6					

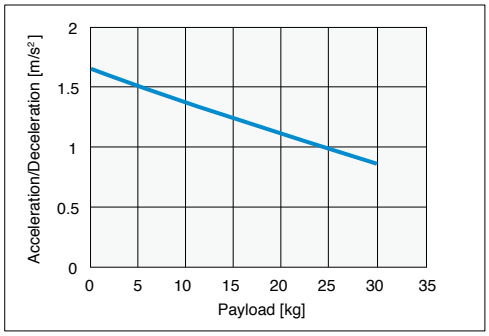
Payload – Acceleration/Deceleration Graph (Estimate)

LBAS08-5

Horizontal/
Wall hanging

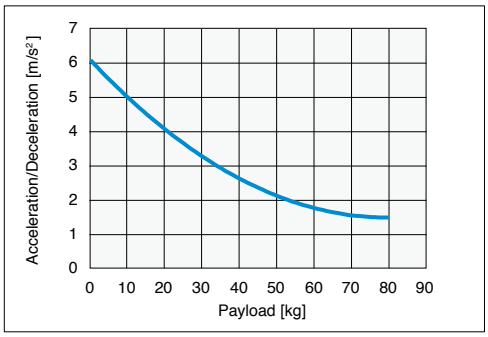


Vertical

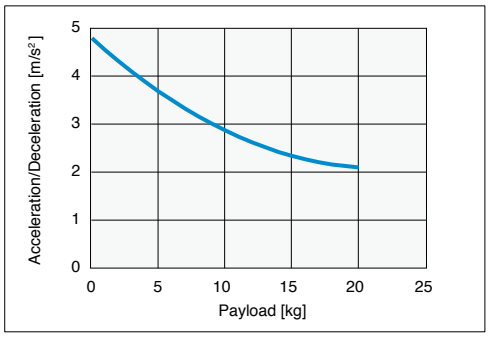


LBAS08-10

Horizontal/
Wall hanging

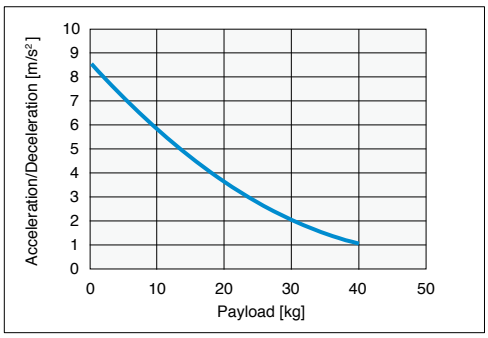


Vertical

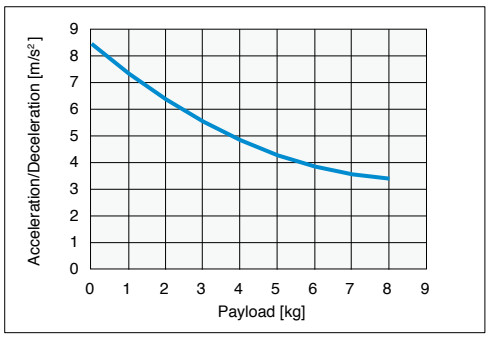


LBAS08-20

Horizontal/
Wall hanging



Vertical



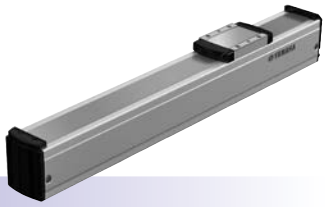
Inertia Moment

LBAS08

[kg·m²×10⁻⁴]	Effective stroke [mm]																					
Model	**50**	**100**	**150**	**200**	**250**	**300**	**350**	**400**	**450**	**500**	**550**	**600**	**650**	**700**	**750**	**800**	**850**	**900**	**950**	**1000**	**1050**	**1100**
LBAS08-5	0.160	0.168	0.176	0.184	0.192	0.200	0.208	0.216	0.224	0.232	0.240	0.248	0.256	0.263	0.271	0.279	0.287	0.295	0.303	0.311	0.319	0.327
LBAS08-10	0.190	0.198	0.206	0.214	0.222	0.230	0.238	0.246	0.254	0.261	0.269	0.277	0.285	0.293	0.301	0.309	0.317	0.325	0.333	0.341	0.349	0.357
LBAS08-20	0.309	0.317	0.325	0.333	0.341	0.349	0.357	0.365	0.373	0.381	0.389	0.397	0.405	0.413	0.421	0.429	0.437	0.445	0.453	0.461	0.469	0.477

LGXS05 Advanced model

Motor-less Single Axis Actuator



Ordering method

LGXS05 - [ ] - [ ]

Model	Lead designation	Stroke
	20: 20 mm 10: 10 mm 5: 5 mm	50 to 800 (50 mm pitch)

[Caution]

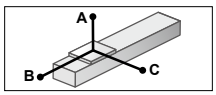
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are user's responsibility.
Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration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

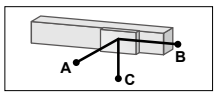
Specifications

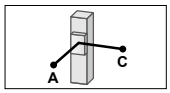
Adaptable motor	50 W		
Repeatability Note 1	+/-0.005 mm		
Deceleration mechanism	Ground ball screw ϕ 12 (C5 class)		
Stroke	50 mm to 800 mm (50 mm pitch)		
Maximum speed Note 2 **(or equivalent)**	1333 mm/sec	666 mm/sec	333 mm/sec
Ball screw lead	20 mm	10 mm	5 mm
Maximum payload Note 3 **(or equivalent)** Horizontal	5 kg	8 kg	13 kg
Maximum payload Note 3 **(or equivalent)** Vertical	2 kg	4 kg	8 kg
Rated thrust Note 3 **(or equivalent)**	41 N	69 N	138 N
Maximum dimensions of cross section of main unit	W 48 mm × H 65 mm		
Overall length	ST + 131.5 mm		
Degree of cleanliness Note 4	ISO CLASS 3 (ISO14644-1) or equivalent		
Intake air Note 5	30 Nℓ/min to 100 Nℓ/min		
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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note 4. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 5. The required suction amount will vary according to the operating conditions and operating environment.
Note. See P.22 for acceleration/deceleration and inertia moment.

Allowable overhang Note







LGXS05-20

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
2kg	900	270	351	**2kg**	324	234	812	**1kg**	454	454
5kg	583	112	159	**5kg**	119	76	427	**2kg**	218	218

LGXS05-10

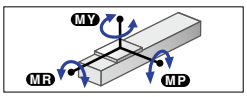
Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
2kg	2506	382	625	**2kg**	585	346	2387	**1kg**	732	732
5kg	1368	149	246	**5kg**	195	113	1165	**2kg**	351	351
8kg	1038	90	150	**8kg**	95	54	747	**4kg**	160	160

LGXS05-5

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
3kg	4635	281	497	**3kg**	439	245	4401	**4kg**	183	183
8kg	2211	101	179	**8kg**	117	65	1826	**6kg**	111	111
13kg	1599	59	105	**13kg**	42	24	1006	**8kg**	75	75

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.

Static loading moment



(Unit: N·m)

MY	MP	MR
24	27	23

Adaptable Servo Motor

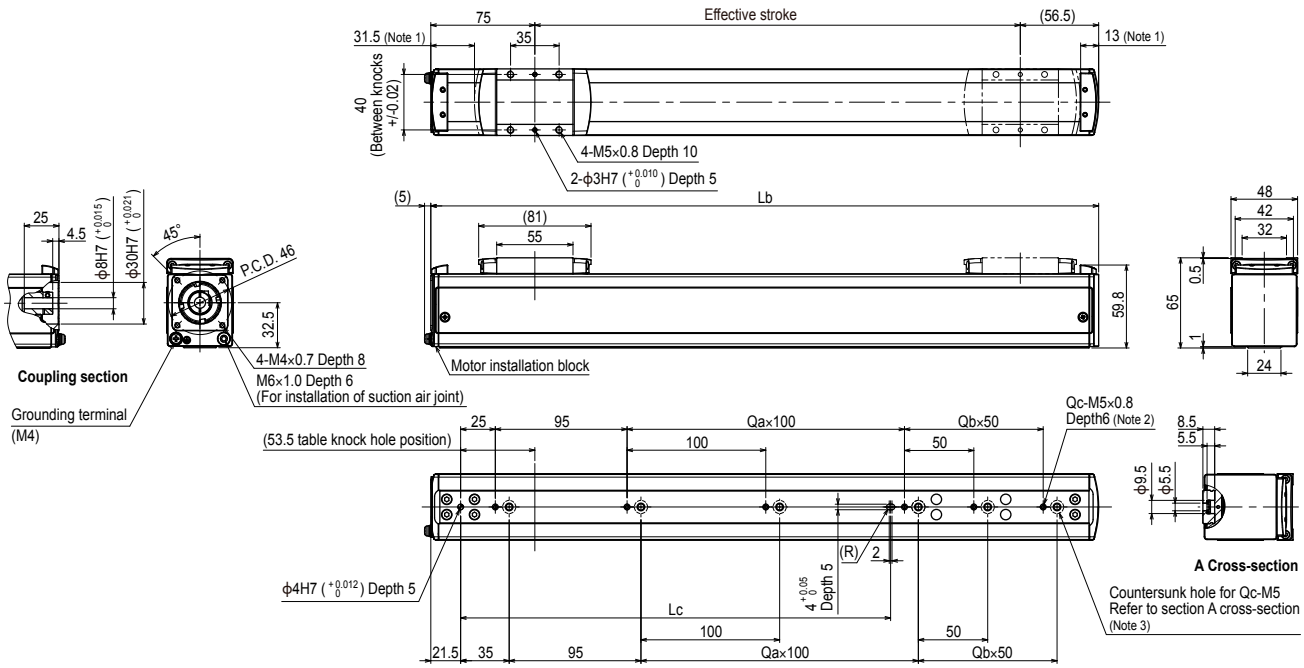
Specification		
	Flange size	□40
	Wattage	50 W

Manufacturer	Model
Yasukawa Electric Corp.	SGMJV-A5
	SGM7J-A5
Keyence Corp.	SV-□005
	SV2-□005
Mitsubishi Electric Corp.	HF-KP053 Note
	HG-KR053 Note

Note. To combine with the conversion adapter <GX-BEND-40>, the shim plate (t1) is necessary.

Conversion adapter product model	Shim plate part number
GX-BEND-40	KES-M2295-00

LGXS05

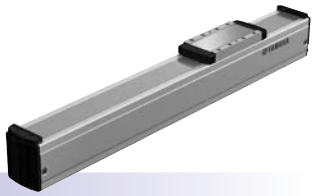


Effective stroke		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Lb		181.5	231.5	281.5	331.5	381.5	431.5	481.5	531.5	581.5	631.5	681.5	731.5	781.5	831.5	881.5	931.5
Lc		110	110	110	110	310	310	310	310	310	310	610	610	610	610	610	610
Qa		0	0	0	0	2	2	2	2	2	2	5	5	5	5	5	5
Qb		0	1	2	3	0	1	2	3	4	5	0	1	2	3	4	5
Qc		2	3	4	5	4	5	6	7	8	9	7	8	9	10	11	12
Weight (kg)		1.2	1.4	1.5	1.7	1.9	2.0	2.2	2.3	2.5	2.6	2.8	2.9	3.1	3.2	3.4	3.5
Maximum speed (mm/sec)	**Lead 20**	1333												1066	933	800	666
	Lead 10	666												532	466	400	333
	Lead 5	333												266	233	200	166
	Speed setting	–												80%	70%	60%	50%

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. When using the tap holes to mount the body, remove the set screws first.
Note 3. When using the countersunk holes (section A cross section) to mount the body, remove the cap from the inner side and then fix. The length under head of the hex socket head bolts (M5 × 0.8) used must be 15 mm or less.

LGXS05L Advanced model

Motor-less Single Axis Actuator



Ordering method

LGXS05L - [ ] - [ ]

Model	Lead designation	Stroke
	20: 20 mm 10: 10 mm 5: 5 mm	50 to 800 (50 mm pitch)

[Caution]

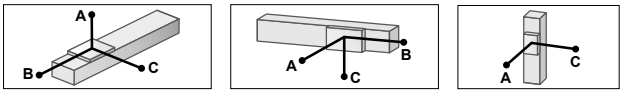
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are user's responsibility.
Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration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

Specifications

Adaptable motor	100 W		
Repeatability Note 1	+/-0.005 mm		
Deceleration mechanism	Ground ball screw ϕ 12 (C5 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	32 kg
Maximum payload (or equivalent) Note 3 — Vertical	3 kg	6 kg	12 kg
Rated thrust (or equivalent) Note 3	84 N	169 N	339 N
Maximum dimensions of cross section of main unit	W 48 mm × H 65 mm		
Overall length	ST + 161.5 mm		
Degree of cleanliness Note 4	ISO CLASS 3 (ISO14644-1) or equivalent		
Intake air Note 5	30 Nℓ/min to 100 Nℓ/min		
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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note 4. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 5. The required suction amount will vary according to the operating conditions and operating environment.
Note. See P.23 for acceleration/deceleration and inertia moment.

Allowable overhang Note



LGXS05L-20

Horizontal installation (Unit: mm)

	A	B	C
3kg	1760	560	427
8kg	739	201	154
12kg	611	134	105

Wall installation (Unit: mm)

	A	B	C
3kg	397	488	1599
8kg	107	128	528
12kg	52	61	331

Vertical installation (Unit: mm)

	A	C
1kg	1490	1490
2kg	732	732
3kg	480	480

LGXS05L-10

Horizontal installation (Unit: mm)

	A	B	C
6kg	2418	388	333
12kg	1400	187	161
24kg	875	86	74

Wall installation (Unit: mm)

	A	B	C
6kg	277	316	2194
12kg	101	115	1086
24kg	12	14	276

Vertical installation (Unit: mm)

	A	C
4kg	554	554
6kg	360	360

LGXS05L-5

Horizontal installation (Unit: mm)

	A	B	C
10kg	3144	254	225
20kg	1850	120	106
32kg	1560	70	62

Wall installation (Unit: mm)

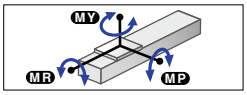
	A	B	C
10kg	162	181	2817
20kg	42	47	1282
32kg	0	0	0

Vertical installation (Unit: mm)

	A	C
5kg	501	501
10kg	235	235
12kg	190	190

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.

Static loading moment



(Unit: N·m)

MY	MP	MR
72	72	64

Adaptable Servo Motor

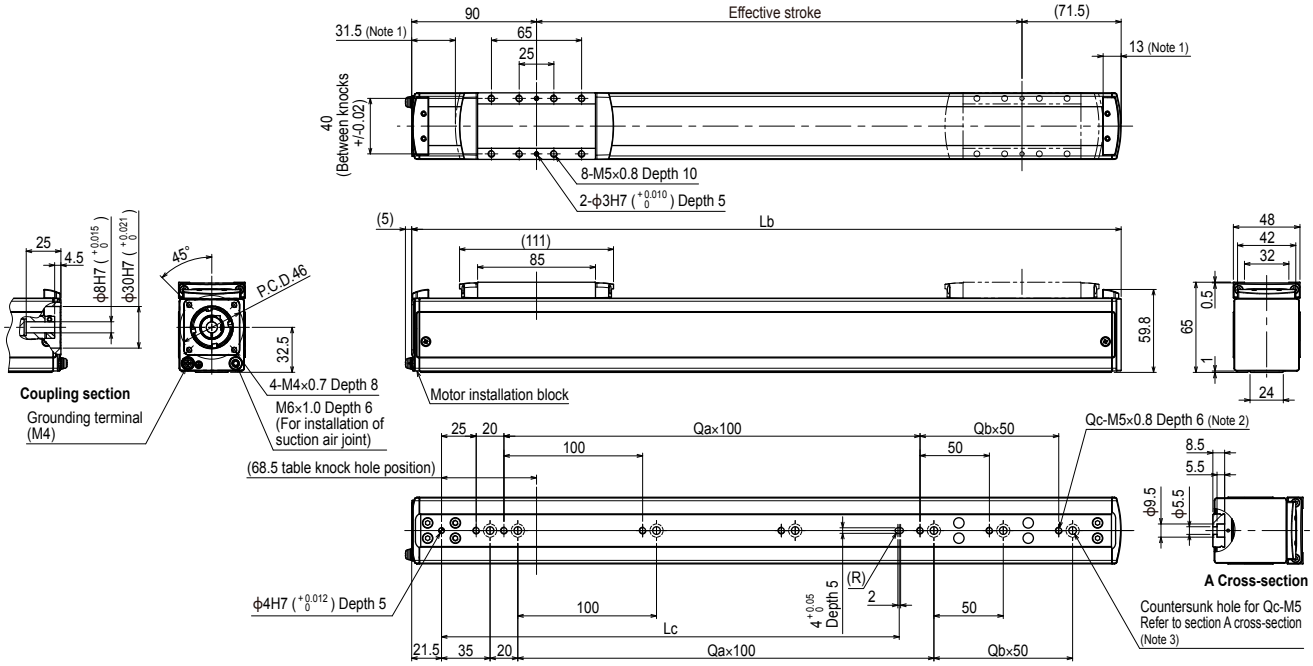
Specification	Flange size	□40
	Wattage	100 W

Manufacturer	Model
Yasukawa Electric Corp.	SGMJV-01
	SGM7J-01
Keyence Corp.	SV-□010
	SV2-□010
Mitsubishi Electric Corp.	HF-KP13 Note
	HG-KR13 Note

Note. To combine with the conversion adapter <GX-BEND-40>, the shim plate (t1) is necessary.

Conversion adapter product model	Shim plate part number
GX-BEND-40	KES-M2295-00

LGXS05L

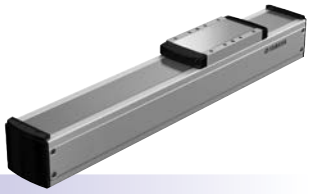


Effective stroke		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Lb		211.5	261.5	311.5	361.5	411.5	461.5	511.5	561.5	611.5	661.5	711.5	761.5	811.5	861.5	911.5	961.5
Lc		130	130	130	130	330	330	330	330	330	330	630	630	630	630	630	630
Qa		1	1	1	1	3	3	3	3	3	3	6	6	6	6	6	6
Qb		0	1	2	3	0	1	2	3	4	5	0	1	2	3	4	5
Qc		3	4	5	6	5	6	7	8	9	10	8	9	10	11	12	13
Weight (kg)		1.4	1.5	1.7	1.8	2.0	2.2	2.3	2.5	2.6	2.8	2.9	3.1	3.2	3.4	3.5	3.7
Maximum speed (mm/sec)	Lead 20	1333												1066	933	800	666
	Lead 10	666												532	466	400	333
	Lead 5	333												266	233	200	166
	Speed setting	–												80%	70%	60%	50%

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. When using the tap holes to mount the body, remove the set screws first.
Note 3. When using the countersunk holes (section A cross section) to mount the body, remove the cap from the inner side and then fix. The length under head of the hex socket head bolts (M5 × 0.8) used must be 15 mm or less.

LGXS07 Advanced model

Motor-less Single Axis Actuator



Ordering method

LGXS07 - [ ] - [ ]

Model	Lead designation	Stroke
	30: 30 mm 20: 20 mm 10: 10 mm 5: 5 mm	50 to 1100 (50 mm pitch)

[Caution]

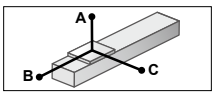
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are user's responsibility.
Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration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

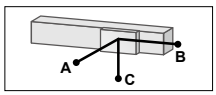
Specifications

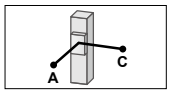
Adaptable motor	100 W			
Repeatability Note 1	+/-0.005 mm			
Deceleration mechanism	Ground ball screw ϕ 15 (C5 class)			
Stroke	50 mm to 1100 mm (50 mm pitch)			
Maximum speed (or equivalent) Note 2	1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	30 mm	20 mm	10 mm	5 mm
Maximum payload (or equivalent) Note 3 — Horizontal	10 kg	25 kg	45 kg	85 kg
Maximum payload (or equivalent) Note 3 — Vertical	2 kg	4 kg	8 kg	16 kg
Rated thrust (or equivalent) Note 3	56 N	84 N	169 N	339 N
Maximum dimensions of cross section of main unit	W 70 mm × H 76.5 mm			
Overall length	ST + 202 mm			
Degree of cleanliness Note 4	ISO CLASS 3 (ISO14644-1) or equivalent			
Intake air Note 5	30 Nℓ/min to 115 Nℓ/min			
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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note 4. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 5. The required suction amount will vary according to the operating conditions and operating environment.
Note. See P24 for acceleration/deceleration and inertia moment.

Allowable overhang Note







LGXS07-30

Horizontal installation (Unit: mm)

	A	B	C
2kg	3084	1512	1223
6kg	1191	502	418
10kg	957	318	282

Wall installation (Unit: mm)

	A	B	C
2kg	1240	1445	2981
6kg	393	435	1063
10kg	245	251	794

Vertical installation (Unit: mm)

	A	C
1kg	2340	2340
2kg	1160	1160

LGXS07-20

Horizontal installation (Unit: mm)

	A	B	C
10kg	1331	371	358
20kg	1144	187	189
25kg	1829	169	182

Wall installation (Unit: mm)

	A	B	C
10kg	314	305	1168
20kg	132	120	812
25kg	117	103	1249

Vertical installation (Unit: mm)

	A	C
1kg	3425	3425
2kg	1705	1705
4kg	843	843

LGXS07-10

Horizontal installation (Unit: mm)

	A	B	C
15kg	2431	339	373
30kg	1536	160	177
45kg	1188	101	112

Wall installation (Unit: mm)

	A	B	C
15kg	307	273	2203
30kg	107	94	1161
45kg	39	35	629

Vertical installation (Unit: mm)

	A	C
3kg	1693	1693
6kg	830	830
8kg	614	614

LGXS07-5

Horizontal installation (Unit: mm)

	A	B	C
30kg	2918	172	197
50kg	2543	96	110
85kg	2031	49	56

Wall installation (Unit: mm)

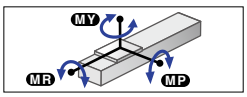
	A	B	C
30kg	122	106	2461
50kg	34	30	1480
85kg	0	0	0

Vertical installation (Unit: mm)

	A	C
6kg	907	907
9kg	591	591
16kg	315	315

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.

Static loading moment



(Unit: N·m)

MY	MP	MR
138	121	121

Adaptable Servo Motor

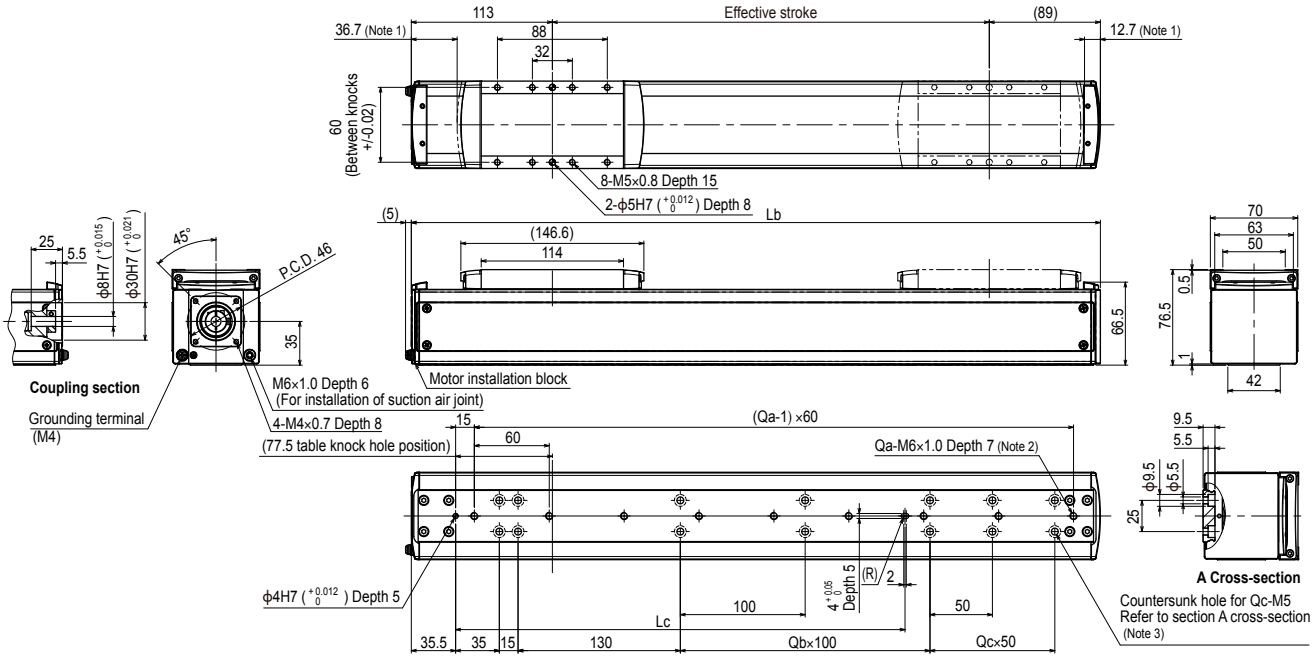
Specification	Flange size	□40
	Wattage	100 W

Manufacturer	Model
Yasukawa Electric Corp.	SGMJV-01
	SGM7J-01
Keyence Corp.	SV-□010
	SV2-□010
Mitsubishi Electric Corp.	HF-KP13 Note
	HG-KR13 Note

Note. To combine with the conversion adapter <GX-BEND-40>, the shim plate (t1) is necessary.

Conversion adapter product model	Shim plate part number
GX-BEND-40	KES-M2295-00

LGXS07

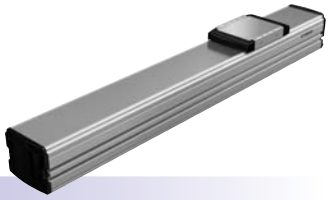


Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
Lb	252	302	352	402	452	502	552	602	652	702	752	802	852	902	952	1002	1052	1102	1152	1202	1252	1302
Lc	160	160	160	160	360	360	360	360	360	360	360	360	760	760	760	760	760	760	760	760	760	760
Qa	4	5	5	6	7	8	9	10	10	11	12	13	14	15	15	16	17	18	19	20	20	21
Qb	0	0	0	0	2	2	2	2	2	2	2	2	6	6	6	6	6	6	6	6	6	6
Qc	0	1	2	3	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	8	9
Qd	6	8	10	12	10	12	14	16	18	20	22	24	18	20	22	24	26	28	30	32	34	36
Weight (kg)	3.2	3.4	3.7	4.0	4.3	4.5	4.8	5.1	5.3	5.6	5.9	6.2	6.4	6.7	7.0	7.2	7.5	7.8	8.1	8.3	8.6	8.9
Maximum speed (mm/sec) **Lead 30**	1800														1530	1350	1170	990	900	810	720	630
Maximum speed (mm/sec) **Lead 20**	1200														1020	900	780	660	600	540	480	420
Maximum speed (mm/sec) **Lead 10**	600														510	450	390	330	300	270	240	210
Maximum speed (mm/sec) **Lead 5**	300														255	225	195	165	150	135	120	105
Maximum speed (mm/sec) **Speed setting**	–														85%	75%	65%	55%	50%	45%	40%	35%

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. When using the tap holes to mount the body, remove the set screws first.
Note 3. When using the countersunk holes (section A cross section) to mount the body, remove the cap from the inner side and then fix.

LGXS10 Advanced model

Motor-less Single Axis Actuator



Ordering method

LGXS10 - [ ] - [ ]

Model	Lead designation	Stroke
	30: 30 mm 20: 20 mm 10: 10 mm 5: 5 mm	100 to 1250 (50 mm pitch)

[Caution]

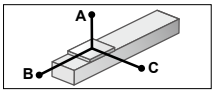
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are user's responsibility.
Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration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

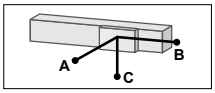
Specifications

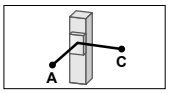
Adaptable motor	200 W			
Repeatability Note 1	+/-0.005 mm			
Deceleration mechanism	Ground ball screw ϕ 15 (C5 class)			
Stroke	100 mm to 1250 mm (50 mm pitch)			
Maximum speed Note 2 **(or equivalent)**	1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	30 mm	20 mm	10 mm	5 mm
Maximum payload Note 3 **(or equivalent)** Horizontal	25 kg	40 kg	80 kg	100 kg
Maximum payload Note 3 **(or equivalent)** Vertical	4 kg	8 kg	20 kg	30 kg
Rated thrust Note 3 **(or equivalent)**	113 N	170 N	341 N	683 N
Maximum dimensions of cross section of main unit	W 100 mm × H 99.5 mm			
Overall length	ST + 175.5 mm			
Degree of cleanliness Note 4	ISO CLASS 3 (ISO14644-1) or equivalent			
Intake air Note 5	30 Nℓ/min to 90 Nℓ/min			
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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note 4. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 5. The required suction amount will vary according to the operating conditions and operating environment.
Note. See P.26 for acceleration/deceleration and inertia moment.

Allowable overhang Note







LGXS10-30

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
10kg	880	538	292	**10kg**	272	474	805	**1kg**	4142	4142
20kg	607	256	146	**20kg**	118	192	480	**4kg**	987	987
25kg	608	211	124	**25kg**	93	147	454			

LGXS10-20

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
15kg	1272	452	282	**15kg**	253	388	1162	**3kg**	2067	2067
25kg	756	254	158	**25kg**	124	190	631	**6kg**	1015	1015
40kg	468	142	88	**40kg**	51	78	313	**8kg**	752	752

LGXS10-10

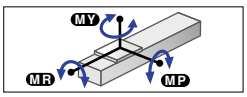
Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
30kg	1801	299	204	**30kg**	163	235	1630	**5kg**	1932	1932
50kg	1361	163	111	**50kg**	69	99	1064	**10kg**	934	934
80kg	1273	87	59	**80kg**	16	23	559	**20kg**	436	436

LGXS10-5

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
30kg	5603	321	225	**30kg**	181	258	5193	**10kg**	1018	1018
50kg	3691	177	124	**50kg**	79	113	3109	**20kg**	477	477
80kg	2614	95	67	**80kg**	22	31	1555	**30kg**	296	296
100kg	2218	68	48	**100kg**	0	0	0			

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.

Static loading moment



(Unit: N·m)

MY	MP	MR
274	274	241

Adaptable Servo Motor

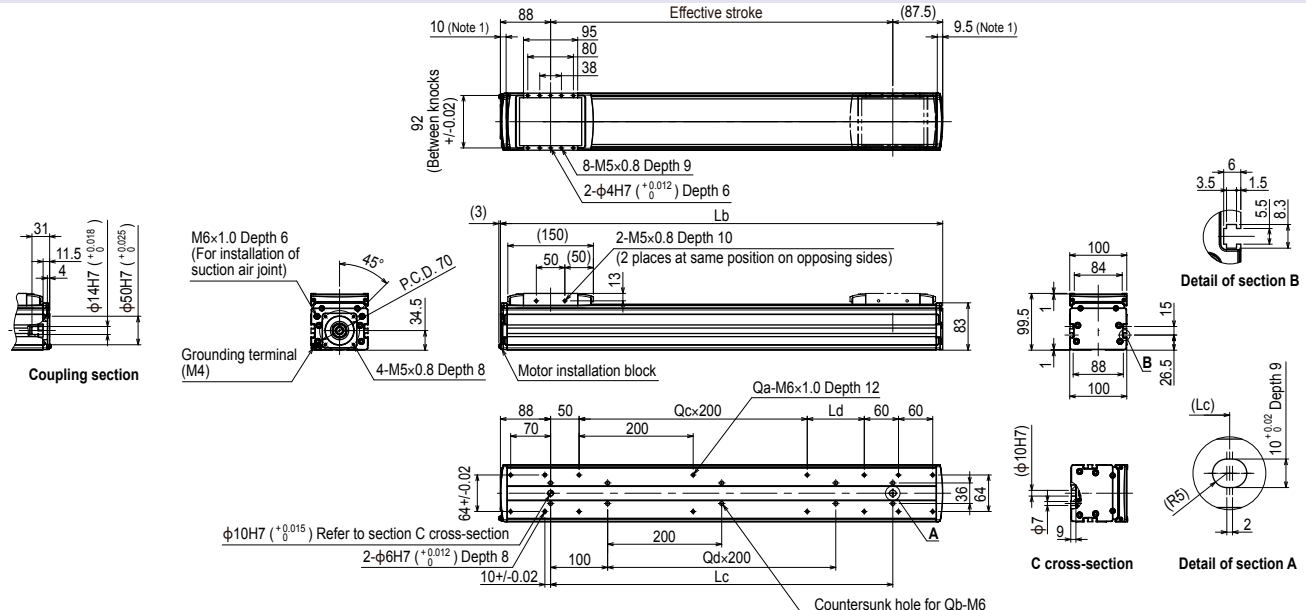
Specification	Flange size	□60
	Wattage	200 W

Manufacturer	Model
Yasukawa Electric Corp.	SGMJV-02
	SGM7J-02
Keyence Corp.	SV-□020
	SV2-□020
Mitsubishi Electric Corp.	HF-KP23
	HG-KR23 Note

Note. To combine with the conversion adapter <GX-BEND-60>, the shim plate (t1) is necessary.

Conversion adapter product model	Shim plate part number
GX-BEND-60	KEV-M2295-00

LGXS10

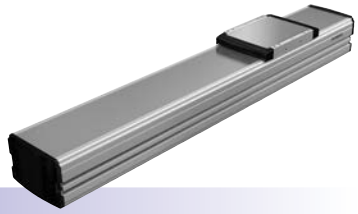


Effective stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
Lb	275.5	325.5	375.5	425.5	475.5	525.5	575.5	625.5	675.5	725.5	775.5	825.5	875.5	925.5	975.5	1025.5	1075.5	1125.5	1175.5	1225.5	1275.5	1325.5	1375.5	1425.5
Lc	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
Ld	0	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
Qb	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
Qc	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Qd	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Weight (kg)	4.6	5.1	5.6	6.1	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1
Maximum speed (mm/sec) **Lead 30**	1800													1530	1350	1170	990	900	810	720	630	540		450
Lead 20	1200													1020	900	780	660	600	540	480	420	360		300
Lead 10	600													510	450	390	330	300	270	240	210	180		150
Lead 5	300													255	225	195	165	150	135	120	105	90		75
Speed setting	–													85%	75%	65%	55%	50%	45%	40%	35%	30%		25%

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. The length under head of the hex socket head bolts <M6 × 1.0> used to mount the body with the mounting countersunk holes (section C cross-section) must be <<20 mm or more>>. The recommended length under head of the hex socket head bolts <M6 × 1.0> used to mount the body with the mounting tap hole specifications is <<frame thickness + 10 mm or less>>.
Note 3. When using the mounting countersunk holes (section C cross-section) to mount the body, remove the seal, and then fix.

LGXS12 Advanced model

Motor-less Single Axis Actuator



Ordering method

LGXS12 - [ ] - [ ]

Model	Lead designation	Stroke
	30: 30 mm 20: 20 mm 10: 10 mm 5: 5 mm	100 to 1250 (50 mm pitch)

[Caution]

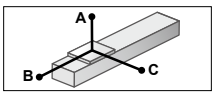
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are user's responsibility.
Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration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

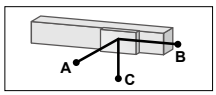
Specifications

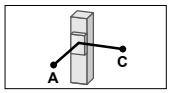
Adaptable motor	400 W			
Repeatability Note 1	+/-0.005 mm			
Deceleration mechanism	Ground ball screw ϕ 15 (C5 class)			
Stroke	100 mm to 1250 mm (50 mm pitch)			
Maximum speed Note 2 **(or equivalent)**	1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	30 mm	20 mm	10 mm	5 mm
Maximum payload Note 3 **(or equivalent)** Horizontal	35 kg	50 kg	95 kg	115 kg
Maximum payload Note 3 **(or equivalent)** Vertical	8 kg	15 kg	25 kg	45 kg
Rated thrust Note 3 **(or equivalent)**	225 N	339 N	678 N	1360 N
Maximum dimensions of cross section of main unit	W 125 mm × H 101 mm			
Overall length	ST + 211.5 mm			
Degree of cleanliness Note 4	ISO CLASS 3 (ISO14644-1) or equivalent			
Intake air Note 5	30 Nℓ/min to 90 Nℓ/min			
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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note 4. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 5. The required suction amount will vary according to the operating conditions and operating environment.
Note. See P28 for acceleration/deceleration and inertia moment.

Allowable overhang Note







LGXS12-30

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
10kg	1800	1076	638	**10kg**	632	1011	1724	**3kg**	2646	2646
20kg	1298	531	332	**20kg**	315	466	1169	**6kg**	1291	1291
35kg	1343	335	228	**35kg**	198	270	1133	**8kg**	952	952

LGXS12-20

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
15kg	2236	906	614	**15kg**	592	841	2146	**5kg**	2429	2429
30kg	1293	429	293	**30kg**	261	364	1171	**10kg**	1210	1210
50kg	884	238	164	**50kg**	126	173	713	**15kg**	805	805

LGXS12-10

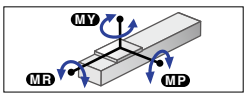
Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
30kg	3119	609	457	**30kg**	415	544	2988	**10kg**	1868	1868
50kg	2430	346	261	**50kg**	216	281	2217	**15kg**	1225	1225
80kg	2430	199	151	**80kg**	104	134	1939	**25kg**	711	711
95kg	2565	160	121	**95kg**	74	95	1838			

LGXS12-5

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
30kg	11075	653	504	**30kg**	456	588	10687	**15kg**	1332	1332
50kg	7428	373	288	**50kg**	239	308	6930	**30kg**	634	634
80kg	5449	215	166	**80kg**	117	150	4706	**45kg**	460	460
115kg	4354	136	105	**115kg**	55	71	3214			

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.

Static loading moment



(Unit: N·m)

MY	MP	MR
334	334	294

Adaptable Servo Motor

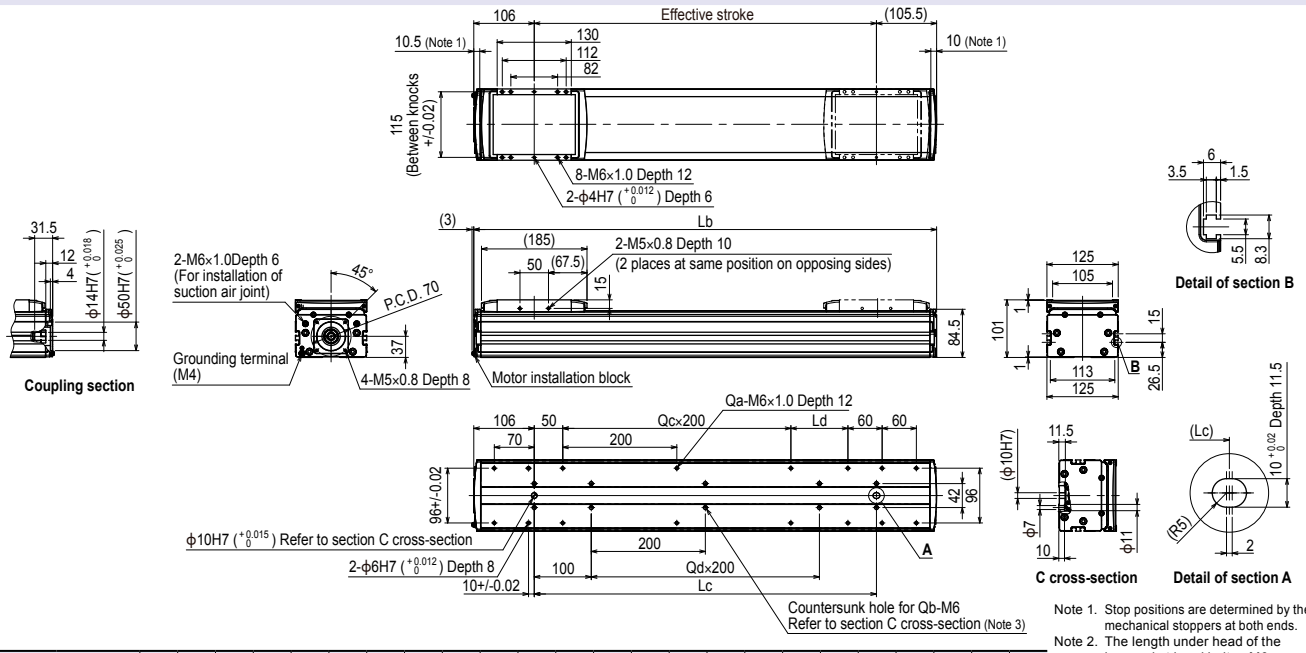
Specification		
	Flange size	□60
	Wattage	400 W

Manufacturer	Model
Yasukawa Electric Corp.	SGMJV-04
	SGM7J-04
Keyence Corp.	SV-□040
	SV2-□040
Mitsubishi Electric Corp.	HF-KP43
	HG-KR43 Note

Note. To combine with the conversion adapter <GX-BEND-60>, the shim plate (t1) is necessary.

Conversion adapter product model	Shim plate part number
GX-BEND-60	KEV-M2295-00

LGXS12



Effective stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
Lb	311.5	361.5	411.5	461.5	511.5	561.5	611.5	661.5	711.5	761.5	811.5	861.5	911.5	961.5	1011.5	1061.5	1111.5	1161.5	1211.5	1261.5	1311.5	1361.5	1411.5	1461.5
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
Ld	0	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
Qb	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
Qc	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Qd	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Weight (kg)	6.5	7.1	7.8	8.5	9.1	9.8	10.5	11.2	11.8	12.5	13.2	13.9	14.5	15.2	15.9	16.5	17.2	17.9	18.6	19.2	19.9	20.6	21.3	21.9
Maximum speed (mm/sec) **Lead 30**	1800													1530	1350	1170	990	900	810	720	630	540		450
Maximum speed (mm/sec) **Lead 20**	1200													1020	900	780	660	600	540	480	420	360		300
Maximum speed (mm/sec) **Lead 10**	600													510	450	390	330	300	270	240	210	180		150
Maximum speed (mm/sec) **Lead 5**	300													255	225	195	165	150	135	120	105	90		75
Maximum speed (mm/sec) **Speed setting**	–													85%	75%	65%	55%	50%	45%	40%	35%	30%		25%

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. The length under head of the hex socket head bolts <M6 × 1.0> used to mount the body with the mounting countersunk holes (section C cross-section) must be <<20 mm or more>>. The recommended length under head of the hex socket head bolts <M6 × 1.0> used to mount the body with the mounting tap hole specifications is <<frame thickness + 10 mm or less>>.
Note 3. When using the mounting countersunk holes (section C cross-section) to mount the body, remove the seal, and then fix.

LGXS16 Advanced model

Motor-less Single Axis Actuator

Ordering method

LGXS16 - [ ] - [ ]

Model	Lead designation	Stroke
	40: 40 mm 20: 20 mm 10: 10 mm	100 to 1450 (50 mm pitch)

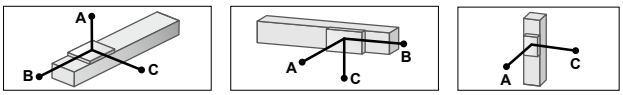
[Caution]
This system is provided as mechanical actuator unit and not including any adopters or electric components.
Motor, driver and other components required for installation are user's responsibility.
Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment.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

Specifications

Adaptable motor	750 W		
Repeatability Note 1	+/-0.005 mm		
Deceleration mechanism	Ground ball screw ϕ 20 (C5 class)		
Stroke	100 mm to 1450 mm (50 mm pitch)		
Maximum speed Note 2 **(or equivalent)**	2400 mm/sec	1200 mm/sec	600 mm/sec
Ball screw lead	40 mm	20 mm	10 mm
Maximum payload Note 3 **(or equivalent)** Horizontal	45 kg	95 kg	130 kg
Maximum payload Note 3 **(or equivalent)** Vertical	12 kg	28 kg	55 kg
Rated thrust Note 3 **(or equivalent)**	320 N	640 N	1280 N
Maximum dimensions of cross section of main unit	W 160 mm × H 130 mm		
Overall length	ST + 242.5 mm		
Degree of cleanliness Note 4	ISO CLASS 3 (ISO14644-1) or equivalent		
Intake air Note 5	30 Nℓ/min to 90 Nℓ/min		
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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note 4. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 5. The required suction amount will vary according to the operating conditions and operating environment.
Note. See P.30 for acceleration/deceleration and inertia moment.

Allowable overhang Note



LGXS16-40

Horizontal installation (Unit: mm)

	A	B	C
15kg	2876	1866	1253
30kg	3071	1062	869
45kg	3920	810	731

Wall installation (Unit: mm)

	A	B	C
15kg	1273	1801	2798
30kg	884	999	2925
45kg	728	747	3677

Vertical installation (Unit: mm)

	A	C
3kg	6604	6604
6kg	3834	3834
12kg	3466	3466

LGXS16-20

Horizontal installation (Unit: mm)

	A	B	C
30kg	3873	1258	1109
50kg	2573	735	653
80kg	1801	441	395
95kg	1584	363	326

Wall installation (Unit: mm)

	A	B	C
30kg	1105	1195	3753
50kg	632	672	2427
80kg	361	378	1615
95kg	289	301	1378

Vertical installation (Unit: mm)

	A	C
10kg	3411	3411
20kg	1744	1744
28kg	1566	1566

LGXS16-10

Horizontal installation (Unit: mm)

	A	B	C
50kg	6270	1030	1028
80kg	4459	625	626
100kg	3975	491	492
130kg	3792	366	368

Wall installation (Unit: mm)

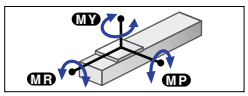
	A	B	C
50kg	984	967	6106
80kg	575	563	4252
100kg	439	428	3723
130kg	313	304	3429

Vertical installation (Unit: mm)

	A	C
15kg	3444	3444
30kg	1689	1689
55kg	891	891

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.

Static loading moment



(Unit: N·m)

MY	MP	MR
706	706	620

Adaptable Servo Motor

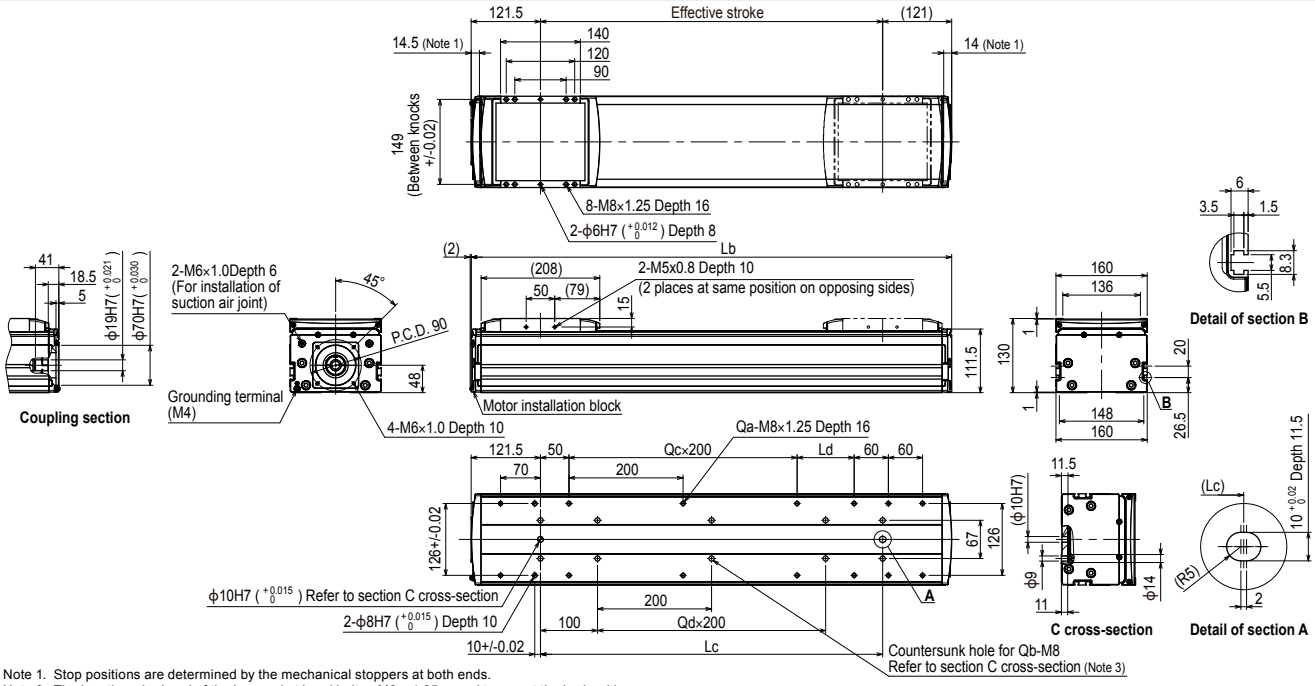
Specification	Flange size	□80
	Wattage	750 W

Manufacturer	Model
Yasukawa Electric Corp.	SGMJV-08
	SGM7J-08
Keyence Corp.	SV-□075
	SV2-□075
Mitsubishi Electric Corp.	HF-KP73
	HG-KR73 Note

Note. To combine with the conversion adapter <GX-BEND-80>, the shim plate (t1) is necessary.

Conversion adapter product model	Shim plate part number
GX-BEND-80	KEX-M2295-00

LGXS16

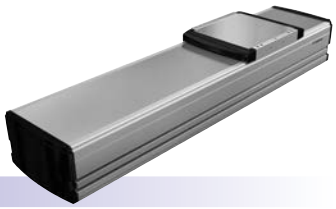


Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. The length under head of the hex socket head bolts <M8 × 1.25> used to mount the body with the mounting countersunk holes (section C cross-section) must be <<25 mm or more>>. The recommended length under head of the hex socket head bolts <M8 × 1.25> used to mount the body with the mounting tap hole specifications is <<frame thickness + 15 mm or less>>.
Note 3. When using the mounting countersunk holes (section C cross-section) to mount the body, remove the seal, and then fix.

Effective stroke	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	1350	1400	1450
Lb	342.5	392.5	442.5	492.5	542.5	592.5	642.5	692.5	742.5	792.5	842.5	892.5	942.5	992.5	1042.5	1092.5	1142.5	1192.5	1242.5	1292.5	1342.5	1392.5	1442.5	1492.5	1542.5	1592.5	1642.5	1692.5
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	1350	1400	1450
Ld	0	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22	22	22
Qb	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
Qc	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
Qd	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
Weight (kg)	11.7	12.7	13.7	14.7	15.7	16.6	17.6	18.6	19.6	20.6	21.5	22.5	23.5	24.5	25.5	26.5	27.4	28.4	29.4	30.4	31.4	32.4	33.3	34.3	35.3	36.3	37.3	38.2
Maximum speed (mm/sec) **Lead 40**	2400															2160	1920	1680	1440	1320	1200	1080	960		840	720		600
Maximum speed (mm/sec) **Lead 20**	1200															1080	960	840	720	660	600	540	480		420	360		300
Maximum speed (mm/sec) **Lead 10**	600															540	480	420	360	330	300	270	240		210	180		150
Maximum speed (mm/sec) **Speed setting**	–															90%	80%	70%	60%	55%	50%	45%	40%		35%	30%		25%

LGXS20 Advanced model

Motor-less Single Axis Actuator



Ordering method

LGXS20 - [ ] - [ ]

Model	Lead designation	Stroke
	40: 40 mm 20: 20 mm 10: 10 mm	100 to 1450 (50 mm pitch)

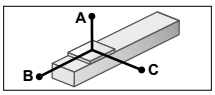
[Caution]
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are user's responsibility.
Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment.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

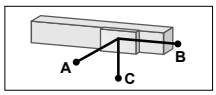
Specifications

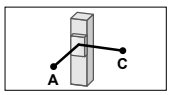
Adaptable motor	750 W		
Repeatability Note 1	+/-0.005 mm		
Deceleration mechanism	Ground ball screw ϕ 20 (C5 class)		
Stroke	100 mm to 1450 mm (50 mm pitch)		
Maximum speed (or equivalent) Note 2	2400 mm/sec	1200 mm/sec	600 mm/sec
Ball screw lead	40 mm	20 mm	10 mm
Maximum payload (or equivalent) Note 3 — Horizontal	65 kg	130 kg	160 kg
Maximum payload (or equivalent) Note 3 — Vertical	15 kg	35 kg	65 kg
Rated thrust (or equivalent) Note 3	320 N	640 N	1280 N
Maximum dimensions of cross section of main unit	W 200 mm × H 140 mm		
Overall length	ST + 288.5 mm		
Degree of cleanliness Note 4	ISO CLASS 3 (ISO14644-1) or equivalent		
Intake air Note 5	30 Nℓ/min to 90 Nℓ/min		
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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note 4. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 5. The required suction amount will vary according to the operating conditions and operating environment.
Note. See P.32 for acceleration/deceleration and inertia moment.

Allowable overhang Note







LGXS20-40

Horizontal installation (Unit: mm)

	A	B	C
20kg	5460	2838	2124
40kg	7494	1781	1626
65kg	10253	1282	1270

Wall installation (Unit: mm)

	A	B	C
20kg	2203	2768	5351
40kg	1690	1711	7259
65kg	1276	1212	9808

Vertical installation (Unit: mm)

	A	C
5kg	8187	8187
10kg	5885	5885
15kg	5971	5971

LGXS20-20

Horizontal installation (Unit: mm)

	A	B	C
50kg	5451	1497	1381
80kg	4429	913	856
100kg	4588	755	726
130kg	4351	597	585

Wall installation (Unit: mm)

	A	B	C
50kg	1394	1426	5279
80kg	851	843	4165
100kg	707	685	4249
130kg	551	526	3945

Vertical installation (Unit: mm)

	A	C
20kg	3443	3443
30kg	2603	2603
35kg	3174	3174

LGXS20-10

Horizontal installation (Unit: mm)

	A	B	C
40kg	22572	2615	2722
80kg	16750	1278	1336
120kg	14083	833	871
160kg	12387	610	639

Wall installation (Unit: mm)

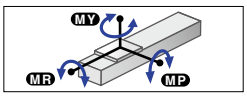
	A	B	C
40kg	2713	2545	22263
80kg	1297	1208	16175
120kg	821	763	13243
160kg	582	540	11284

Vertical installation (Unit: mm)

	A	C
20kg	5173	5173
40kg	2561	2561
65kg	1604	1604

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.

Static loading moment



(Unit: N·m)

MY	MP	MR
1423	1423	1251

Adaptable Servo Motor

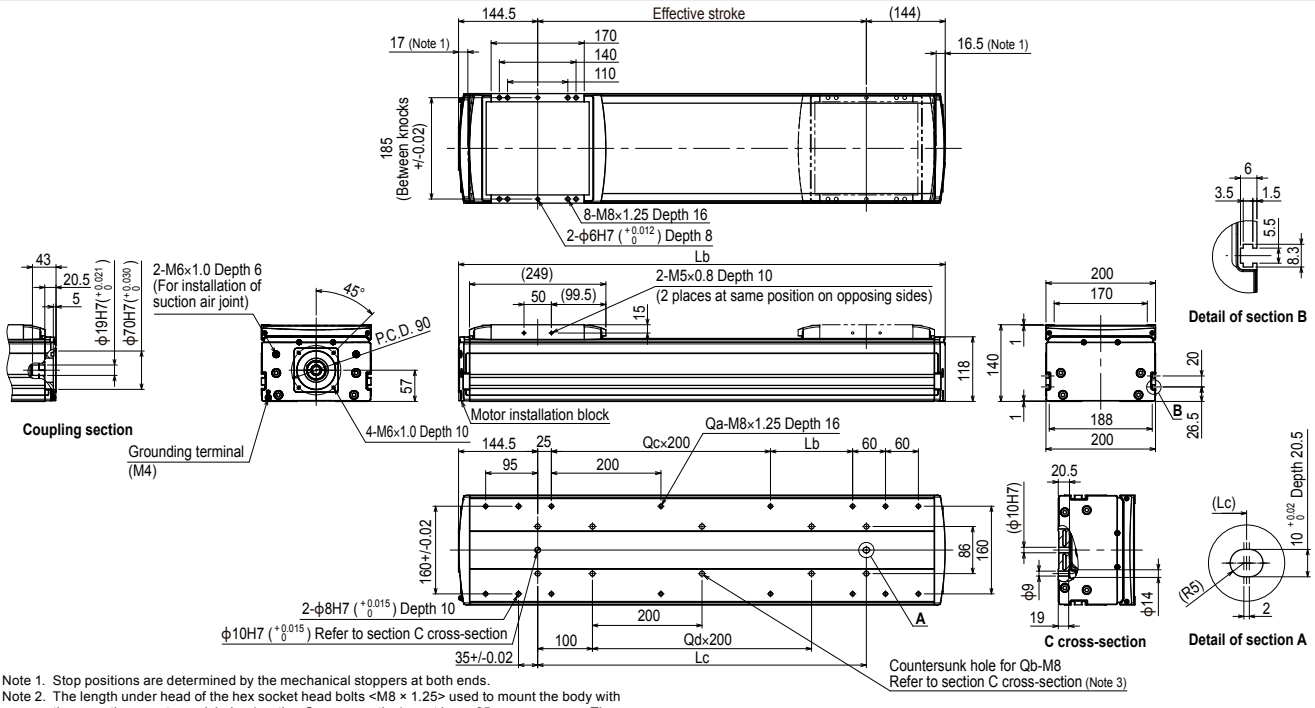
Specification		
	Flange size	□80
	Wattage	750 W

Manufacturer	Model
Yasukawa Electric Corp.	SGMJV-08
	SGM7J-08
Keyence Corp.	SV-□075
	SV2-□075
Mitsubishi Electric Corp.	HF-KP73
	HG-KR73 Note

Note. To combine with the conversion adapter <GX-BEND-80>, the shim plate (t1) is necessary.

Conversion adapter product model	Shim plate part number
GX-BEND-80	KEX-M2295-00

LGXS20



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. The length under head of the hex socket head bolts <M8 × 1.25> used to mount the body with the mounting countersunk holes (section C cross-section) must be <<25 mm or more>>. The recommended length under head of the hex socket head bolts <M8 × 1.25> used to mount the body with the mounting tap hole specifications is <<frame thickness + 15 mm or less>>.
Note 3. When using the mounting countersunk holes (section C cross-section) to mount the body, remove the seal, and then fix.

Effective stroke	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	1350	1400	1450
Lb	388.5	438.5	488.5	538.5	588.5	638.5	688.5	738.5	788.5	838.5	888.5	938.5	988.5	1038.5	1088.5	1138.5	1188.5	1238.5	1288.5	1338.5	1388.5	1438.5	1488.5	1538.5	1588.5	1638.5	1688.5	1738.5
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	1350	1400	1450
Ld	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
Qa	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22	22	22	22
Qb	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
Qc	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
Qd	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
Weight (kg)	17.2	18.5	19.8	21.1	22.4	23.7	25.0	26.3	27.6	28.8	30.1	31.4	32.7	34.0	35.3	36.6	37.9	39.2	40.4	41.7	43.0	44.3	45.6	46.9	48.2	49.5	50.8	52.0
Maximum speed (mm/sec) — **Lead 40**	2400															2160	1920	1680	1440	1320	1200	1080	960		840	720		600
Maximum speed (mm/sec) — **Lead 20**	1200															1080	960	840	720	660	600	540	480		420	360		300
Maximum speed (mm/sec) — **Lead 10**	600															540	480	420	360	330	300	270	240		210	180		150
Maximum speed (mm/sec) — **Speed setting**	–															90%	80%	70%	60%	55%	50%	45%	40%		35%	30%		25%

Acceleration/Deceleration

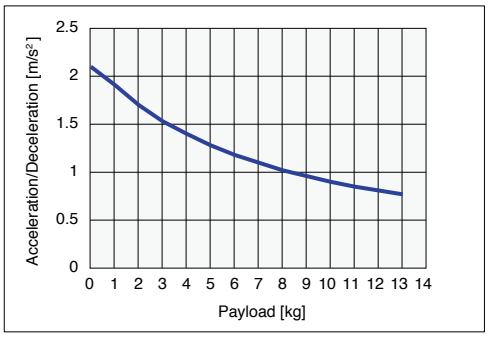
LGXS05

Model	LGXS05 -5 Horizontal/ Wall hanging	LGXS05 -5 Vertical	LGXS05 -10 Horizontal/ Wall hanging	LGXS05 -10 Vertical	LGXS05 -20 Horizontal/ Wall hanging	LGXS05 -20 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
0	2.1	2.1	4.2	3.6	5.3	5.3
1	1.91	2.1	3.84	2.4	5.3	5.3
2	1.7	1.64	2.99	1.8	3.98	3.98
3	1.53	1.34	2.45	1.44	3.19	
4	1.4	1.14	2.07	1.2	2.66	
5	1.28	0.99	1.8		2.28	
6	1.18	0.87	1.58			
7	1.1	0.78	1.42			
8	1.02	0.7	1.28			
9	0.96					
10	0.9					
11	0.85					
12	0.81					
13	0.77					

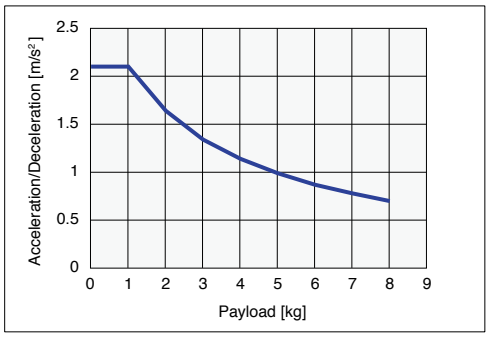
Payload – Acceleration/Deceleration Graph (Estimate)

LGXS05-5

Horizontal/ Wall hanging

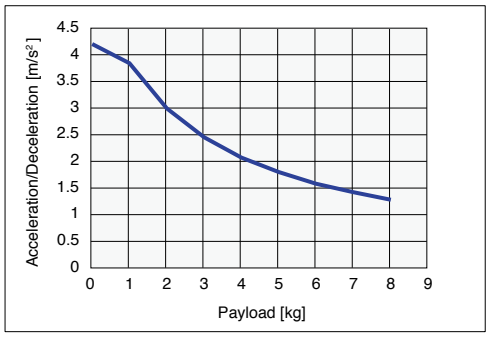


Vertical



LGXS05-10

Horizontal/ Wall hanging

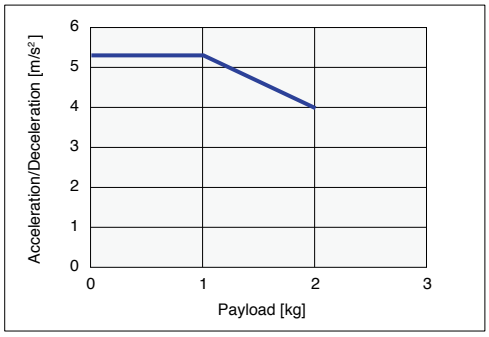


Vertical

LGXS05-20

Horizontal/ Wall hanging

Vertical



Inertia Moment

LGXS05

[kg·m²×10⁻⁴]	Effective stroke [mm]															
Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
LGXS05-5	0.139	0.147	0.155	0.163	0.171	0.179	0.187	0.195	0.203	0.211	0.219	0.227	0.235	0.243	0.251	0.259
LGXS05-10	0.146	0.154	0.162	0.170	0.178	0.186	0.194	0.202	0.210	0.218	0.226	0.234	0.242	0.250	0.258	0.266
LGXS05-20	0.177	0.185	0.193	0.201	0.209	0.217	0.225	0.233	0.241	0.249	0.257	0.265	0.273	0.281	0.289	0.297

Acceleration/Deceleration

LGXS05L

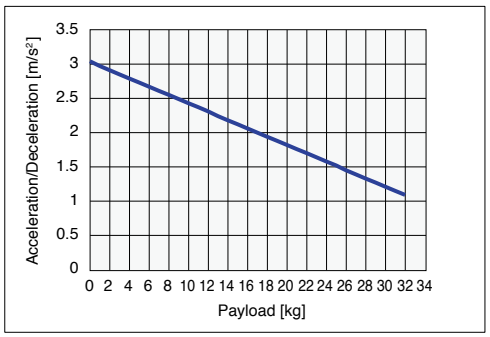
Model	LGXS05L -5 Horizontal/ Wall hanging	LGXS05L -5 Vertical	LGXS05L -10 Horizontal/ Wall hanging	LGXS05L -10 Vertical	LGXS05L -20 Horizontal/ Wall hanging	LGXS05L -20 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
0	3.04	3.34	4.26	4.86	5.07	5.07
1	2.97	3.18	4.08	4.56	4.86	4.86
2	2.91	3.03	3.9	4.3	4.66	4.66
3	2.85	2.88	3.74	4.06	4.46	4.46
4	2.79	2.73	3.58	3.85	4.25	
5	2.73	2.58	3.42	3.66	4.05	
6	2.67	2.43	3.28	3.49	3.85	
7	2.61	2.28	3.13		3.65	
8	2.55	2.13	3		3.44	
9	2.49	1.98	2.87		3.24	
10	2.43	1.83	2.74		3.04	
11	2.37	1.68	2.62		2.83	
12	2.31	1.53	2.51		2.63	
13	2.24		2.41			
14	2.18		2.3			
15	2.12		2.21			
16	2.06		2.12			
17	2		2.04			

Model	LGXS05L -5 Horizontal/ Wall hanging	LGXS05L -5 Vertical	LGXS05L -10 Horizontal/ Wall hanging	LGXS05L -10 Vertical	LGXS05L -20 Horizontal/ Wall hanging	LGXS05L -20 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
18	1.94		1.96			
19	1.88		1.89			
20	1.82		1.83			
21	1.76		1.77			
22	1.7		1.72			
23	1.64		1.67			
24	1.58		1.63			
25	1.52					
26	1.45					
27	1.39					
28	1.33					
29	1.27					
30	1.21					
31	1.15					
32	1.09					

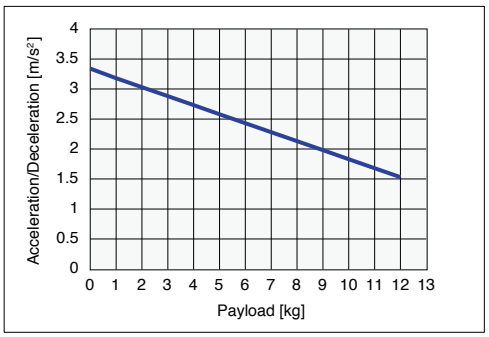
Payload – Acceleration/Deceleration Graph (Estimate)

LGXS05L-5

Horizontal/ Wall hanging



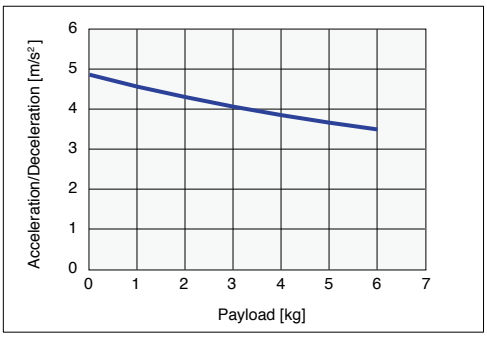
Vertical



LGXS05L-10

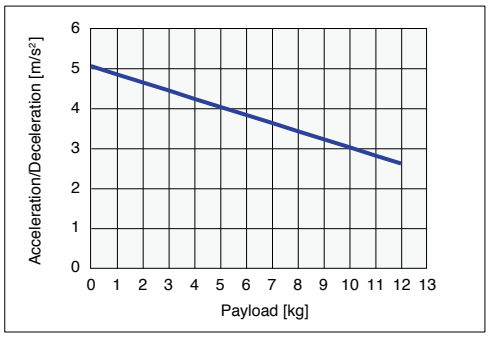
Horizontal/ Wall hanging

Vertical

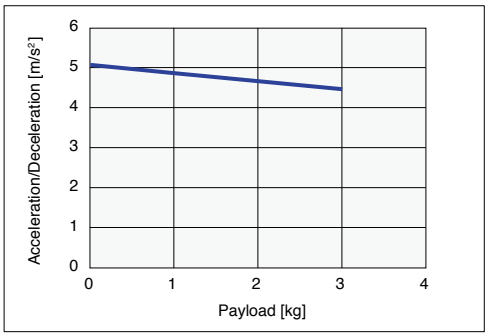


LGXS05L-20

Horizontal/ Wall hanging



Vertical



Inertia Moment

LGXS05L

[kg·m²×10⁻⁴]	Effective stroke [mm]															
Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
LGXS05L-5	0.144	0.152	0.160	0.168	0.176	0.184	0.192	0.200	0.208	0.216	0.224	0.232	0.240	0.248	0.256	0.264
LGXS05L-10	0.153	0.161	0.169	0.177	0.185	0.193	0.201	0.209	0.217	0.225	0.233	0.241	0.249	0.257	0.265	0.273
LGXS05L-20	0.192	0.200	0.208	0.216	0.224	0.232	0.240	0.248	0.256	0.264	0.271	0.279	0.287	0.295	0.303	0.311

Acceleration/Deceleration

LGXS07

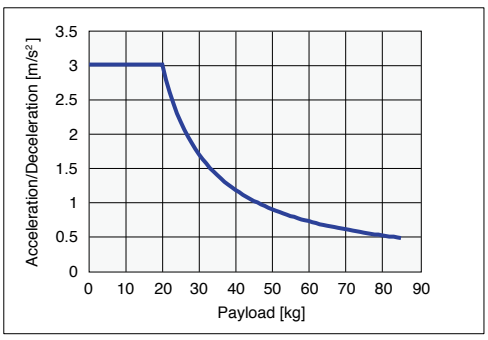
Model	LGXS07 -5 Horizontal/ Wall hanging	LGXS07 -5 Vertical	LGXS07 -10 Horizontal/ Wall hanging	LGXS07 -10 Vertical	LGXS07 -20 Horizontal/ Wall hanging	LGXS07 -20 Vertical	LGXS07 -30 Horizontal/ Wall hanging	LGXS07 -30 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
0	3.04	2.53	6.08	5.57	7.09	6.08	6.99	6.99
1	3.04	2.47	5.68	5.29	6.74	5.57	6.64	6.64
2	3.04	2.42	5.33	5.02	6.4	5.15	6.31	6.31
3	3.04	2.37	5.02	4.75	6.07	4.78	5.98	
4	3.04	2.32	4.75	4.5	5.75	4.47	5.67	
5	3.04	2.27	4.5	4.24	5.44		5.36	
6	3.04	2.22	4.28	3.99	5.14		5.06	
7	3.04	2.17	4.08	3.75	4.85		4.78	
8	3.04	2.12	3.89	3.52	4.57		4.5	
9	3.04	2.07	3.73		4.3		4.24	
10	3.04	2.02	3.57		4.04		3.98	
11	3.04	1.97	3.43		3.79			
12	3.04	1.92	3.3		3.55			
13	3.04	1.87	3.18		3.32			
14	3.04	1.82	3.07		3.09			
15	3.04	1.77	2.96		2.88			
16	3.04	1.72	2.86		2.68			
17	3.04		2.77		2.49			
18	3.04		2.69		2.31			
19	3.04		2.6		2.14			
20	3.04		2.53		1.98			
21	2.82		2.46		1.83			
22	2.64		2.39		1.69			
23	2.48		2.32		1.56			
24	2.33		2.26		1.44			
25	2.21		2.21		1.32			
26	2.09		2.15					
27	1.99		2.1					
28	1.9		2.05					
29	1.81		2					
30	1.73		1.96					
31	1.66		1.91					
32	1.6		1.87					
33	1.53		1.83					
34	1.48		1.79					
35	1.43		1.76					
36	1.38		1.72					
37	1.33		1.69					
38	1.29		1.66					
39	1.25		1.63					
40	1.21		1.6					
41	1.18		1.57					
42	1.14		1.54					
43	1.11		1.51					
44	1.08		1.49					
45	1.05		1.46					

Model	LGXS07 -5 Horizontal/ Wall hanging	LGXS07 -5 Vertical	LGXS07 -10 Horizontal/ Wall hanging	LGXS07 -10 Vertical	LGXS07 -20 Horizontal/ Wall hanging	LGXS07 -20 Vertical	LGXS07 -30 Horizontal/ Wall hanging	LGXS07 -30 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
46	1.03							
47	1							
48	0.98							
49	0.95							
50	0.93							
51	0.91							
52	0.89							
53	0.87							
54	0.85							
55	0.83							
56	0.82							
57	0.8							
58	0.78							
59	0.77							
60	0.76							
61	0.74							
62	0.73							
63	0.71							
64	0.7							
65	0.69							
66	0.68							
67	0.67							
68	0.66							
69	0.65							
70	0.64							
71	0.63							
72	0.62							
73	0.61							
74	0.6							
75	0.59							
76	0.58							
77	0.57							
78	0.56							
79	0.56							
80	0.55							
81	0.54							
82	0.53							
83	0.53							
84	0.52							
85	0.51							

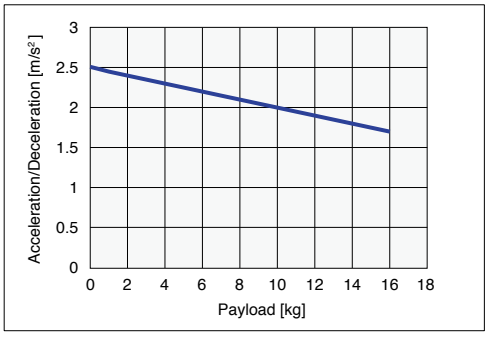
Payload – Acceleration/Deceleration Graph (Estimate)

LGXS07-5

Horizontal/ Wall hanging

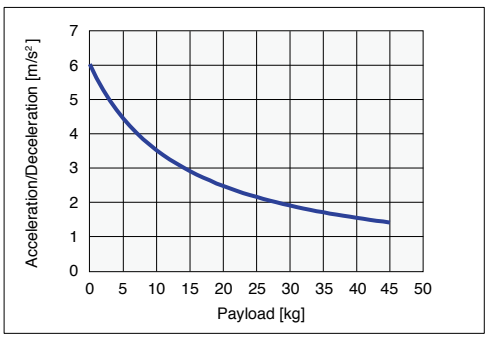


Vertical



LGXS07-10

Horizontal/ Wall hanging

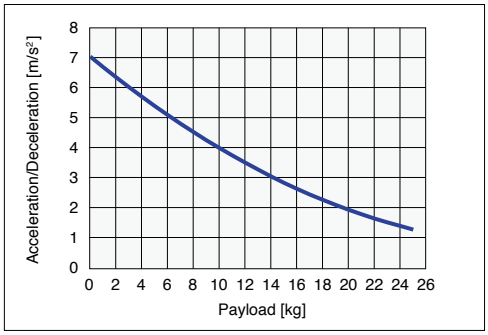


Vertical

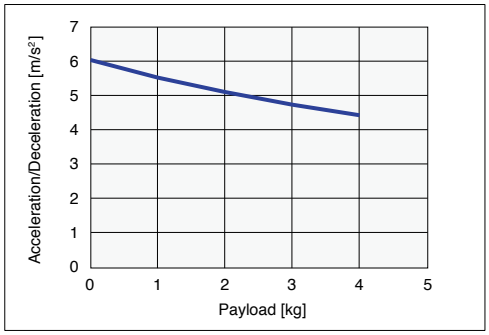
Payload – Acceleration/Deceleration Graph (Estimate)

LGXS07-20

Horizontal/
Wall hanging



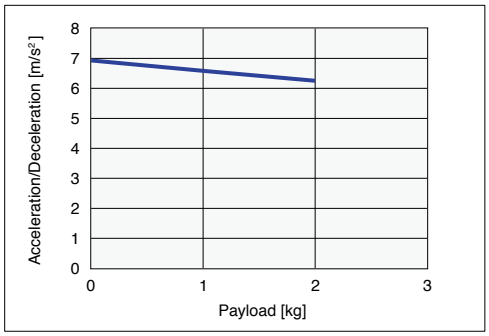
Vertical



LGXS07-30

Horizontal/
Wall hanging

Vertical



Inertia Moment

LGXS07

[kg·m²×10⁻⁴]	Effective stroke [mm]																					
Model	**50**	**100**	**150**	**200**	**250**	**300**	**350**	**400**	**450**	**500**	**550**	**600**	**650**	**700**	**750**	**800**	**850**	**900**	**950**	**1000**	**1050**	**1100**
LGXS07-5	0.623	0.643	0.662	0.682	0.701	0.721	0.740	0.760	0.779	0.799	0.818	0.838	0.857	0.877	0.896	0.916	0.935	0.955	0.974	0.994	1.013	1.033
LGXS07-10	0.644	0.663	0.683	0.702	0.722	0.741	0.761	0.780	0.800	0.819	0.839	0.858	0.878	0.897	0.917	0.936	0.956	0.975	0.995	1.014	1.034	1.053
LGXS07-20	0.728	0.747	0.767	0.787	0.806	0.826	0.845	0.865	0.884	0.904	0.923	0.943	0.962	0.982	1.001	1.021	1.040	1.060	1.079	1.099	1.118	1.138
LGXS07-30	0.885	0.905	0.924	0.944	0.963	0.983	1.002	1.022	1.041	1.061	1.080	1.100	1.119	1.139	1.158	1.178	1.197	1.217	1.236	1.256	1.275	1.295

Acceleration/Deceleration

LGXS10

Model	LGXS10 -5 Horizontal/ Wall hanging	LGXS10 -5 Vertical	LGXS10 -10 Horizontal/ Wall hanging	LGXS10 -10 Vertical	LGXS10 -20 Horizontal/ Wall hanging	LGXS10 -20 Vertical	LGXS10 -30 Horizontal/ Wall hanging	LGXS10 -30 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
0	2.27	1.9	6.89	3.29	6.59	8.11	9.75	9.75
1	2.25	1.87	6.78	3.27	6.54	7.86	9.75	9.75
2	2.23	1.85	6.67	3.24	6.49	7.6	9.75	9.75
3	2.21	1.82	6.56	3.22	6.44	7.35	9.75	9.75
4	2.19	1.8	6.46	3.2	6.39	7.09	9.75	9.75
5	2.17	1.77	6.35	3.17	6.34	6.84	9.75	
6	2.15	1.75	6.25	3.15	6.29	6.59	9.75	
7	2.13	1.72	6.14	3.13	6.24	6.33	9.75	
8	2.11	1.7	6.04	3.1	6.18	6.08	9.75	
9	2.09	1.67	5.94	3.08	6.13		9.01	
10	2.07	1.65	5.84	3.05	6.08		8.38	
11	2.05	1.62	5.74	3.03	6.03		7.83	
12	2.03	1.6	5.64	3	5.98		7.34	
13	2.01	1.57	5.54	2.97	5.93		6.91	
14	1.99	1.55	5.44	2.95	5.88		6.53	
15	1.97	1.52	5.34	2.92	5.83		6.19	
16	1.95	1.5	5.25	2.89	5.78		5.89	
17	1.93	1.47	5.16	2.87	5.73		5.61	
18	1.91	1.45	5.06	2.84	5.68		5.36	
19	1.9	1.42	4.97	2.81	5.63		5.13	
20	1.88	1.39	4.88	2.78	5.58		4.91	
21	1.86	1.37	4.79		5.53		4.72	
22	1.84	1.34	4.7		5.48		4.54	
23	1.82	1.32	4.61		5.42		4.37	
24	1.8	1.29	4.52		5.37		4.22	
25	1.79	1.27	4.44		5.32		4.07	
26	1.77	1.24	4.35		5.27			
27	1.75	1.22	4.27		5.22			
28	1.74	1.19	4.18		5.17			
29	1.72	1.17	4.1		5.12			
30	1.7	1.14	4.02		5.07			
31	1.68		3.94		5.02			
32	1.67		3.86		4.97			
33	1.65		3.78		4.92			
34	1.63		3.7		4.87			
35	1.62		3.62		4.82			
36	1.6		3.55		4.77			
37	1.59		3.47		4.71			
38	1.57		3.4		4.66			
39	1.55		3.32		4.61			
40	1.54		3.25		4.56			
41	1.52		3.18					
42	1.51		3.11					
43	1.49		3.04					
44	1.48		2.97					
45	1.46		2.91					
46	1.45		2.84					
47	1.43		2.77					
48	1.42		2.71					
49	1.41		2.65					
50	1.39		2.58					
51	1.38		2.52					
52	1.36		2.46					
53	1.35		2.4					
54	1.34		2.34					
55	1.32		2.29					
56	1.31		2.23					
57	1.3		2.17					
58	1.28		2.12					
59	1.27		2.06					
60	1.26		2.01					
61	1.25		1.96					
62	1.23		1.91					
63	1.22		1.86					
64	1.21		1.81					
65	1.2		1.76					
66	1.18		1.72					
67	1.17		1.67					
68	1.16		1.62					
69	1.15		1.58					
70	1.14		1.54					
71	1.13		1.49					
72	1.12		1.45					
73	1.11		1.41					
74	1.09		1.37					
75	1.08		1.33					
76	1.07		1.3					
77	1.06		1.26					
78	1.05		1.23					
79	1.04		1.19					
80	1.03		1.16					
81	1.02							
82	1.01							
83	1							
84	0.99							
85	0.99							
86	0.98							
87	0.97							
88	0.96							
89	0.95							

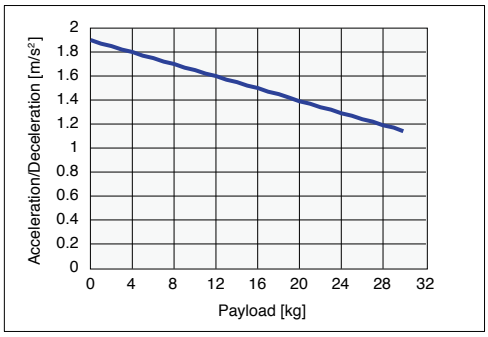
Model	LGXS10 -5 Horizontal/ Wall hanging	LGXS10 -5 Vertical	LGXS10 -10 Horizontal/ Wall hanging	LGXS10 -10 Vertical	LGXS10 -20 Horizontal/ Wall hanging	LGXS10 -20 Vertical	LGXS10 -30 Horizontal/ Wall hanging	LGXS10 -30 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
90	0.94							
91	0.93							
92	0.92							
93	0.92							
94	0.91							
95	0.9							
96	0.89							
97	0.89							
98	0.88							
99	0.87							
100	0.86							

Payload – Acceleration/Deceleration Graph (Estimate)

LGXS10-5

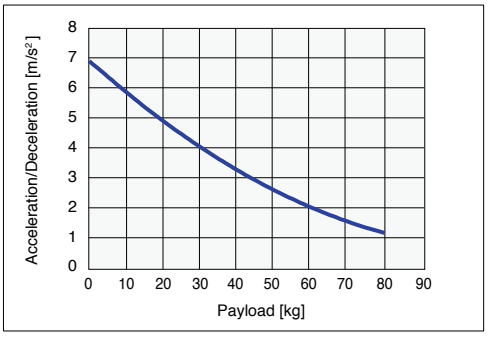
Horizontal/ Wall hanging

Vertical



LGXS10-10

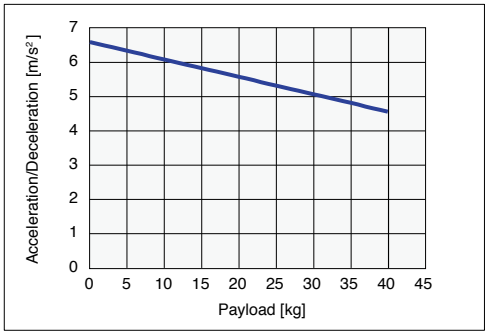
Horizontal/ Wall hanging



Vertical

LGXS10-20

Horizontal/ Wall hanging

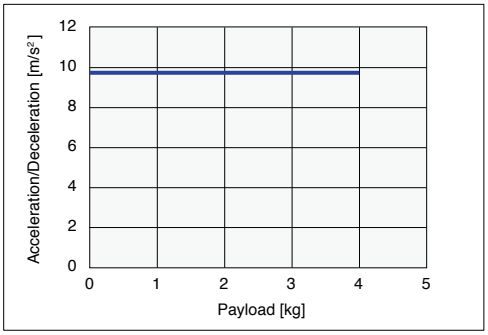


Vertical

LGXS10-30

Horizontal/ Wall hanging

Vertical



Inertia Moment

LGXS10

[kg·m²×10⁻⁴]	Effective stroke [mm]																							
Model	**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**
LGXS10-5	-	0.686	0.706	0.726	0.745	0.765	0.784	0.804	0.823	0.843	0.862	0.882	0.901	0.921	0.940	0.960	0.979	0.999	1.018	1.038	1.057	1.077	1.096	1.116	1.135
LGXS10-10	-	0.707	0.726	0.746	0.765	0.785	0.804	0.824	0.843	0.863	0.882	0.902	0.921	0.941	0.960	0.980	0.999	1.019	1.038	1.058	1.077	1.097	1.116	1.136	1.155
LGXS10-20	-	0.789	0.809	0.828	0.848	0.867	0.887	0.906	0.926	0.945	0.965	0.984	1.004	1.023	1.043	1.062	1.082	1.101	1.121	1.140	1.160	1.179	1.199	1.218	1.238
LGXS10-30	-	0.944	0.963	0.983	1.002	1.022	1.041	1.061	1.080	1.100	1.119	1.139	1.158	1.178	1.197	1.217	1.236	1.256	1.275	1.295	1.314	1.334	1.353	1.373	1.392

Acceleration/Deceleration

LGXS12

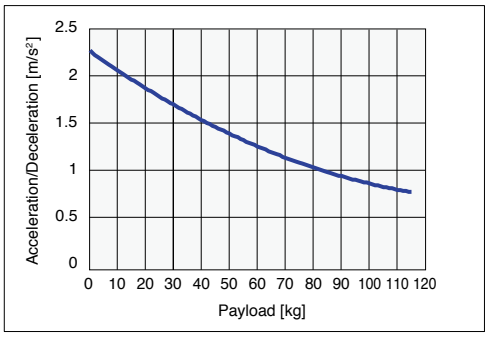
Model	LGXS12 -5 Horizontal/ Wall hanging	LGXS12 -5 Vertical	LGXS12 -10 Horizontal/ Wall hanging	LGXS12 -10 Vertical	LGXS12 -20 Horizontal/ Wall hanging	LGXS12 -20 Vertical	LGXS12 -30 Horizontal/ Wall hanging	LGXS12 -30 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
0	2.27	1.9	8.61	3.29	9.73	8.11	9.75	9.75
1	2.24	1.87	8.47	3.26	9.53	7.85	9.75	9.75
2	2.22	1.84	8.33	3.24	9.35	7.6	9.75	9.75
3	2.2	1.82	8.2	3.22	9.16	7.34	9.75	9.75
4	2.18	1.79	8.06	3.19	8.98	7.09	9.75	9.75
5	2.16	1.77	7.93	3.17	8.8	6.84	9.75	9.75
6	2.14	1.74	7.8	3.15	8.62	6.58	9.75	9.75
7	2.12	1.72	7.67	3.12	8.45	6.33	9.75	9.75
8	2.1	1.69	7.54	3.1	8.28	6.07	9.75	9.75
9	2.08	1.67	7.41	3.07	8.11	5.82	9.01	
10	2.06	1.64	7.29	3.05	7.95	5.57	8.37	
11	2.04	1.62	7.16	3.02	7.79	5.31	7.82	
12	2.02	1.59	7.04	3	7.63	5.06	7.34	
13	2	1.57	6.92	2.97	7.48	4.81	6.91	
14	1.98	1.54	6.79	2.94	7.33	4.55	6.53	
15	1.96	1.52	6.67	2.92	7.18	4.3	6.19	
16	1.95	1.49	6.56	2.89	7.03		5.88	
17	1.93	1.47	6.44	2.86	6.89		5.6	
18	1.91	1.44	6.32	2.83	6.75		5.35	
19	1.89	1.41	6.21	2.81	6.61		5.12	
20	1.87	1.39	6.09	2.78	6.48		4.91	
21	1.85	1.36	5.98	2.75	6.35		4.71	
22	1.84	1.34	5.87	2.72	6.22		4.53	
23	1.82	1.31	5.76	2.69	6.1		4.37	
24	1.8	1.29	5.65	2.66	5.98		4.21	
25	1.78	1.26	5.54	2.63	5.86		4.07	
26	1.76	1.24	5.43		5.74		3.93	
27	1.75	1.21	5.32		5.63		3.81	
28	1.73	1.19	5.22		5.52		3.69	
29	1.71	1.16	5.12		5.41		3.58	
30	1.7	1.14	5.01		5.31		3.47	
31	1.68	1.11	4.91		5.21		3.37	
32	1.66	1.09	4.81		5.11		3.28	
33	1.65	1.06	4.72		5.02		3.19	
34	1.63	1.04	4.62		4.93		3.11	
35	1.61	1.01	4.52		4.84		3.03	
36	1.6	0.99	4.43		4.76			
37	1.58	0.96	4.33		4.67			
38	1.57	0.93	4.24		4.6			
39	1.55	0.91	4.15		4.52			
40	1.53	0.88	4.06		4.45			
41	1.52	0.86	3.97		4.38			
42	1.5	0.83	3.88		4.31			
43	1.49	0.81	3.8		4.25			
44	1.47	0.78	3.71		4.19			
45	1.46	0.76	3.63		4.13			
46	1.44		3.54		4.07			
47	1.43		3.46		4.02			
48	1.42		3.38		3.97			
49	1.4		3.3		3.93			
50	1.39		3.22		3.89			
51	1.37		3.15					
52	1.36		3.07					
53	1.35		3					
54	1.33		2.92					
55	1.32		2.85					
56	1.3		2.78					
57	1.29		2.71					
58	1.28		2.64					
59	1.27		2.58					
60	1.25		2.51					
61	1.24		2.44					
62	1.23		2.38					
63	1.22		2.32					
64	1.2		2.26					
65	1.19		2.2					
66	1.18		2.14					
67	1.17		2.08					
68	1.16		2.02					
69	1.14		1.97					
70	1.13		1.92					
71	1.12		1.86					
72	1.11		1.81					
73	1.1		1.76					
74	1.09		1.71					
75	1.08		1.66					
76	1.07		1.62					
77	1.06		1.57					
78	1.05		1.53					
79	1.04		1.48					
80	1.03		1.44					
81	1.02		1.4					
82	1.01		1.36					
83	1		1.32					
84	0.99		1.29					
85	0.98		1.25					
86	0.97		1.22					
87	0.96		1.18					
88	0.95		1.15					
89	0.94		1.12					

Model	LGXS12 -5 Horizontal/ Wall hanging	LGXS12 -5 Vertical	LGXS12 -10 Horizontal/ Wall hanging	LGXS12 -10 Vertical	LGXS12 -20 Horizontal/ Wall hanging	LGXS12 -20 Vertical	LGXS12 -30 Horizontal/ Wall hanging	LGXS12 -30 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
90	0.94		1.09					
91	0.93		1.06					
92	0.92		1.03					
93	0.91		1.01					
94	0.9		0.98					
95	0.9		0.96					
96	0.89							
97	0.88							
98	0.87							
99	0.87							
100	0.86							
101	0.85							
102	0.84							
103	0.84							
104	0.83							
105	0.82							
106	0.82							
107	0.81							
108	0.81							
109	0.8							
110	0.79							
111	0.79							
112	0.78							
113	0.78							
114	0.77							
115	0.77							

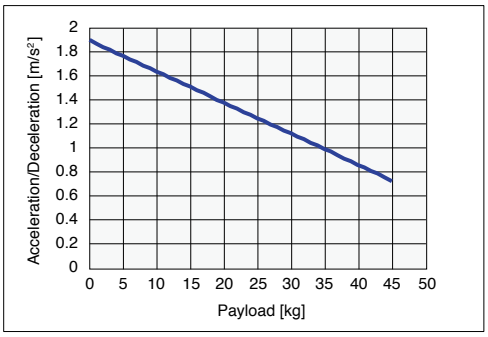
Payload – Acceleration/Deceleration Graph (Estimate)

LGXS12-5

Horizontal/ Wall hanging

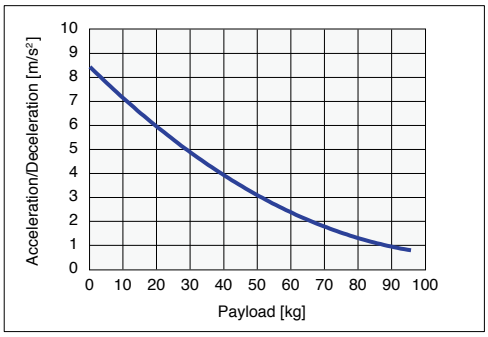


Vertical



LGXS12-10

Horizontal/ Wall hanging

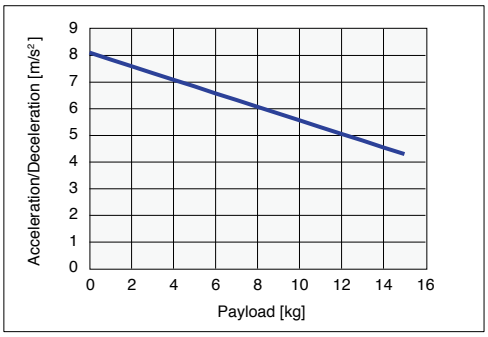


Vertical

LGXS12-20

Horizontal/ Wall hanging

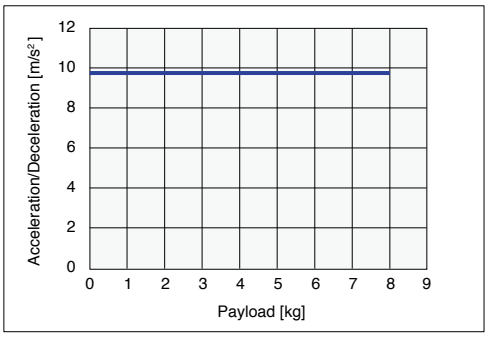
Vertical



LGXS12-30

Horizontal/ Wall hanging

Vertical



Inertia Moment

LGXS12

[kg·m²×10⁻⁴]	Effective stroke [mm]																								
Model	**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**
LGXS12-5	-	0.702	0.721	0.741	0.761	0.780	0.800	0.819	0.839	0.858	0.878	0.897	0.917	0.936	0.956	0.975	0.995	1.014	1.034	1.053	1.073	1.092	1.112	1.131	1.151
LGXS12-10	-	0.733	0.753	0.772	0.792	0.811	0.831	0.850	0.870	0.889	0.909	0.928	0.948	0.967	0.987	1.006	1.026	1.045	1.065	1.085	1.104	1.124	1.143	1.163	1.182
LGXS12-20	-	0.862	0.881	0.901	0.920	0.940	0.959	0.979	0.998	1.018	1.037	1.057	1.076	1.096	1.115	1.135	1.154	1.174	1.193	1.213	1.232	1.252	1.271	1.291	1.310
LGXS12-30	-	1.092	1.111	1.131	1.150	1.170	1.189	1.209	1.228	1.248	1.267	1.287	1.306	1.326	1.345	1.365	1.384	1.404	1.423	1.443	1.462	1.482	1.501	1.521	1.540

Acceleration/Deceleration

LGXS16

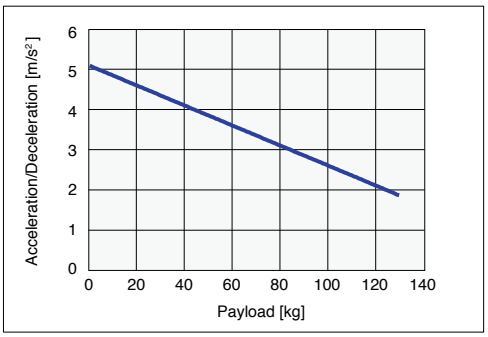
Model	LGXS16 -10 Horizontal/ Wall hanging	LGXS16 -10 Vertical	LGXS16 -20 Horizontal/ Wall hanging	LGXS16 -20 Vertical	LGXS16 -40 Horizontal/ Wall hanging	LGXS16 -40 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
0	5.07	3.8	7.6	7.99	9.6	9.6
1	5.04	3.74	7.48	7.73	9.6	9.02
2	5.01	3.69	7.36	7.47	9.6	8.45
3	4.99	3.64	7.25	7.22	9.6	7.87
4	4.96	3.59	7.14	6.97	9.6	7.3
5	4.94	3.54	7.03	6.72	9.6	6.74
6	4.91	3.49	6.93	6.47	9.6	6.17
7	4.89	3.44	6.83	6.22	9.6	5.61
8	4.86	3.39	6.73	5.97	9.6	5.04
9	4.84	3.34	6.64	5.73	9.6	4.48
10	4.81	3.29	6.55	5.48	9.6	3.92
11	4.79	3.24	6.46	5.24	9.18	3.36
12	4.76	3.19	6.37	5	8.8	2.81
13	4.74	3.14	6.29	4.76	8.45	
14	4.71	3.09	6.2	4.53	8.13	
15	4.68	3.04	6.12	4.29	7.83	
16	4.66	2.99	6.05	4.05	7.55	
17	4.63	2.94	5.97	3.82	7.3	
18	4.61	2.89	5.9	3.59	7.05	
19	4.58	2.83	5.82	3.36	6.83	
20	4.56	2.78	5.75	3.13	6.62	
21	4.53	2.73	5.68	2.9	6.42	
22	4.51	2.68	5.62	2.68	6.23	
23	4.48	2.63	5.55	2.45	6.05	
24	4.46	2.58	5.49	2.23	5.88	
25	4.43	2.53	5.42	2.01	5.73	
26	4.41	2.48	5.36	1.79	5.58	
27	4.38	2.43	5.3	1.57	5.43	
28	4.36	2.38	5.24	1.35	5.3	
29	4.33	2.33	5.19		5.17	
30	4.3	2.28	5.13		5.05	
31	4.28	2.23	5.08		4.93	
32	4.25	2.18	5.02		4.82	
33	4.23	2.13	4.97		4.71	
34	4.2	2.08	4.92		4.61	
35	4.18	2.03	4.87		4.51	
36	4.15	1.98	4.82		4.42	
37	4.13	1.93	4.77		4.33	
38	4.1	1.87	4.72		4.24	
39	4.08	1.82	4.67		4.16	
40	4.05	1.77	4.63		4.08	
41	4.03	1.72	4.58		4	
42	4	1.67	4.54		3.93	
43	3.97	1.62	4.5		3.86	
44	3.95	1.57	4.46		3.79	
45	3.92	1.52	4.41		3.72	
46	3.9	1.47	4.37			
47	3.87	1.42	4.33			
48	3.85	1.37	4.29			
49	3.82	1.32	4.26			
50	3.8	1.27	4.22			
51	3.77	1.22	4.18			
52	3.75	1.17	4.14			
53	3.72	1.12	4.11			
54	3.7	1.07	4.07			
55	3.67	1.02	4.04			
56	3.65		4			
57	3.62		3.97			
58	3.59		3.94			
59	3.57		3.9			
60	3.54		3.87			
61	3.52		3.84			
62	3.49		3.81			
63	3.47		3.78			
64	3.44		3.75			
65	3.42		3.72			
66	3.39		3.69			
67	3.37		3.66			
68	3.34		3.63			
69	3.32		3.61			
70	3.29		3.58			
71	3.27		3.55			
72	3.24		3.53			
73	3.21		3.5			
74	3.19		3.47			
75	3.16		3.45			
76	3.14		3.42			
77	3.11		3.4			
78	3.09		3.38			
79	3.06		3.35			
80	3.04		3.33			
81	3.01		3.31			
82	2.99		3.28			
83	2.96		3.26			
84	2.94		3.24			
85	2.91		3.22			
86	2.88		3.19			
87	2.86		3.17			
88	2.83		3.15			
89	2.81		3.13			

Model	LGXS16 -10 Horizontal/ Wall hanging	LGXS16 -10 Vertical	LGXS16 -20 Horizontal/ Wall hanging	LGXS16 -20 Vertical	LGXS16 -40 Horizontal/ Wall hanging	LGXS16 -40 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
90	2.78		3.11			
91	2.76		3.09			
92	2.73		3.07			
93	2.71		3.05			
94	2.68		3.03			
95	2.66		3.01			
96	2.63					
97	2.61					
98	2.58					
99	2.56					
100	2.53					
101	2.5					
102	2.48					
103	2.45					
104	2.43					
105	2.4					
106	2.38					
107	2.35					
108	2.33					
109	2.3					
110	2.28					
111	2.25					
112	2.23					
113	2.2					
114	2.18					
115	2.15					
116	2.12					
117	2.1					
118	2.07					
119	2.05					
120	2.02					
121	2					
122	1.97					
123	1.95					
124	1.92					
125	1.9					
126	1.87					
127	1.85					
128	1.82					
129	1.79					
130	1.77					

Payload – Acceleration/Deceleration Graph (Estimate)

LGXS16-10

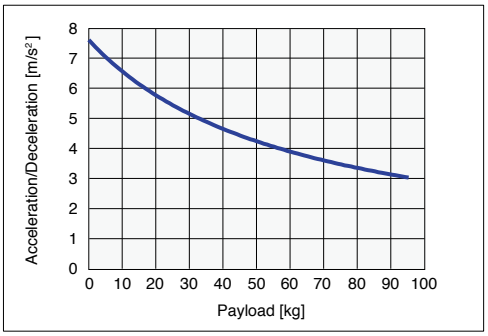
Horizontal/ Wall hanging



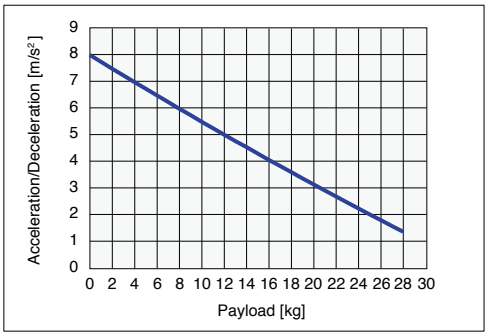
Vertical

LGXS16-20

Horizontal/ Wall hanging



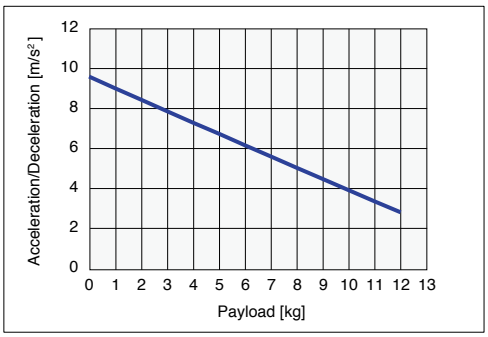
Vertical



LGXS16-40

Horizontal/ Wall hanging

Vertical



Inertia Moment

LGXS16

[kg·m²×10⁻⁴]	Effective stroke [mm]																												
Model	**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**	**1300**	**1350**	**1400**	**1450**
LGXS16-10	-	2.433	2.495	2.557	2.618	2.680	2.742	2.803	2.865	2.927	2.988	3.050	3.112	3.173	3.235	3.297	3.358	3.420	3.482	3.543	3.605	3.667	3.728	3.790	3.851	3.913	3.975	4.036	4.098
LGXS16-20	-	2.653	2.715	2.777	2.838	2.900	2.961	3.023	3.085	3.146	3.208	3.270	3.331	3.393	3.455	3.516	3.578	3.640	3.701	3.763	3.825	3.886	3.948	4.010	4.071	4.133	4.195	4.256	4.318
LGXS16-40	-	3.624	3.685	3.747	3.809	3.870	3.932	3.994	4.055	4.117	4.179	4.240	4.302	4.364	4.425	4.487	4.548	4.610	4.672	4.733	4.795	4.857	4.918	4.980	5.042	5.103	5.165	5.227	5.288

Acceleration/Deceleration

LGXS20

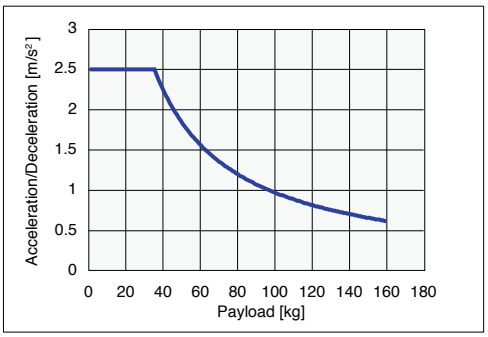
Model	LGXS20 -10 Horizontal/ Wall hanging	LGXS20 -10 Vertical	LGXS20 -20 Horizontal/ Wall hanging	LGXS20 -20 Vertical	LGXS20 -40 Horizontal/ Wall hanging	LGXS20 -40 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
0	2.5	3.8	7.8	9.95	9.61	9.61
1	2.5	3.74	7.7	9.67	9.61	9.12
2	2.5	3.69	7.61	9.4	9.61	8.64
3	2.5	3.64	7.52	9.13	9.61	8.16
4	2.5	3.59	7.43	8.86	9.61	7.68
5	2.5	3.54	7.34	8.59	9.61	7.2
6	2.5	3.49	7.25	8.32	9.61	6.72
7	2.5	3.44	7.16	8.05	9.61	6.24
8	2.5	3.39	7.07	7.78	9.61	5.76
9	2.5	3.34	6.98	7.51	9.61	5.28
10	2.5	3.29	6.89	7.24	9.2	4.8
11	2.5	3.24	6.81	6.97	8.83	4.32
12	2.5	3.19	6.72	6.7	8.48	3.84
13	2.5	3.14	6.64	6.43	8.17	3.36
14	2.5	3.09	6.55	6.16	7.87	2.88
15	2.5	3.04	6.47	5.89	7.6	2.4
16	2.5	2.99	6.39	5.62	7.34	
17	2.5	2.94	6.31	5.35	7.1	
18	2.5	2.89	6.23	5.08	6.88	
19	2.5	2.83	6.15	4.81	6.67	
20	2.5	2.78	6.07	4.54	6.47	
21	2.5	2.73	5.99	4.27	6.28	
22	2.5	2.68	5.91	4	6.11	
23	2.5	2.63	5.83	3.73	5.94	
24	2.5	2.58	5.76	3.46	5.78	
25	2.5	2.53	5.68	3.19	5.63	
26	2.5	2.48	5.6	2.92	5.49	
27	2.5	2.43	5.53	2.65	5.36	
28	2.5	2.38	5.46	2.38	5.23	
29	2.5	2.33	5.38	2.11	5.11	
30	2.5	2.28	5.31	1.84	4.99	
31	2.5	2.23	5.24	1.57	4.88	
32	2.5	2.18	5.17	1.3	4.77	
33	2.5	2.13	5.1	1.03	4.67	
34	2.5	2.08	5.03	0.76	4.57	
35	2.5	2.03	4.96	0.5	4.48	
36	2.44	1.98	4.89		4.39	
37	2.38	1.93	4.82		4.3	
38	2.33	1.87	4.76		4.22	
39	2.28	1.82	4.69		4.14	
40	2.23	1.77	4.63		4.06	
41	2.18	1.72	4.56		3.99	
42	2.14	1.67	4.5		3.91	
43	2.09	1.62	4.43		3.85	
44	2.05	1.57	4.37		3.78	
45	2.01	1.52	4.31		3.71	
46	1.97	1.47	4.25		3.65	
47	1.94	1.42	4.19		3.59	
48	1.9	1.37	4.13		3.53	
49	1.87	1.32	4.07		3.48	
50	1.83	1.27	4.01		3.42	
51	1.8	1.22	3.95		3.37	
52	1.77	1.17	3.9		3.32	
53	1.74	1.12	3.84		3.27	
54	1.71	1.07	3.79		3.22	
55	1.68	1.02	3.73		3.17	
56	1.66	0.96	3.68		3.13	
57	1.63	0.91	3.63		3.08	
58	1.61	0.86	3.57		3.04	
59	1.58	0.81	3.52		3	
60	1.56	0.76	3.47		2.96	
61	1.53	0.71	3.42		2.92	
62	1.51	0.66	3.37		2.88	
63	1.49	0.61	3.32		2.84	
64	1.47	0.56	3.27		2.8	
65	1.45	0.51	3.23		2.77	
66	1.43		3.18			
67	1.41		3.13			
68	1.39		3.09			
69	1.37		3.04			
70	1.35		3			
71	1.34		2.96			
72	1.32		2.92			
73	1.3		2.87			
74	1.29		2.83			
75	1.27		2.79			
76	1.26		2.75			
77	1.24		2.72			
78	1.23		2.68			
79	1.21		2.64			
80	1.2		2.6			
81	1.18		2.57			
82	1.17		2.53			
83	1.16		2.5			
84	1.14		2.46			
85	1.13		2.43			
86	1.12		2.4			
87	1.11		2.37			
88	1.1		2.34			
89	1.08		2.31			

Model	LGXS20 -10 Horizontal/ Wall hanging	LGXS20 -10 Vertical	LGXS20 -20 Horizontal/ Wall hanging	LGXS20 -20 Vertical	LGXS20 -40 Horizontal/ Wall hanging	LGXS20 -40 Vertical
Payload [kg]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]	Acceleration/ Deceleration [m/s²]
90	1.07		2.28			
91	1.06		2.25			
92	1.05		2.22			
93	1.04		2.19			
94	1.03		2.17			
95	1.02		2.14			
96	1.01		2.12			
97	1		2.09			
98	0.99		2.07			
99	0.98		2.05			
100	0.97		2.02			
101	0.96		2			
102	0.95		1.98			
103	0.94		1.96			
104	0.94		1.94			
105	0.93		1.92			
106	0.92		1.9			
107	0.91		1.89			
108	0.9		1.87			
109	0.9		1.86			
110	0.89		1.84			
111	0.88		1.83			
112	0.87		1.81			
113	0.87		1.8			
114	0.86		1.79			
115	0.85		1.78			
116	0.84		1.77			
117	0.84		1.76			
118	0.83		1.75			
119	0.82		1.74			
120	0.82		1.73			
121	0.81		1.72			
122	0.8		1.72			
123	0.8		1.71			
124	0.79		1.71			
125	0.79		1.7			
126	0.78		1.7			
127	0.77		1.69			
128	0.77		1.69			
129	0.76		1.69			
130	0.76		1.69			
131	0.75					
132	0.75					
133	0.74					
134	0.74					
135	0.73					
136	0.73					
137	0.72					
138	0.72					
139	0.71					
140	0.71					
141	0.7					
142	0.7					
143	0.69					
144	0.69					
145	0.68					
146	0.68					
147	0.67					
148	0.67					
149	0.66					
150	0.66					
151	0.66					
152	0.65					
153	0.65					
154	0.64					
155	0.64					
156	0.64					
157	0.63					
158	0.63					
159	0.62					
160	0.62					

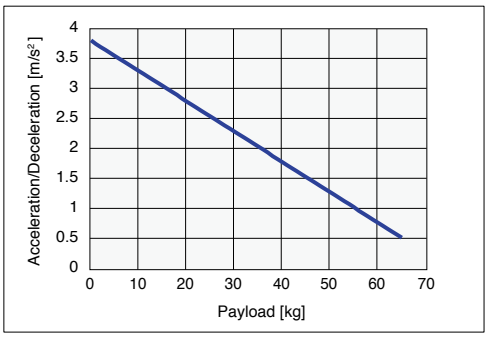
Payload – Acceleration/Deceleration Graph (Estimate)

LGXS20-10

Horizontal/
Wall hanging

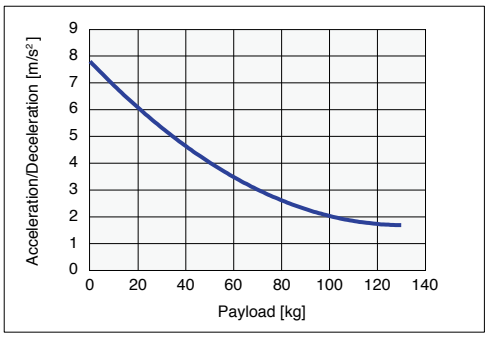


Vertical

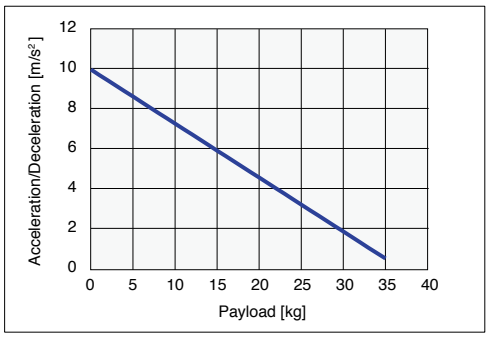


LGXS20-20

Horizontal/
Wall hanging

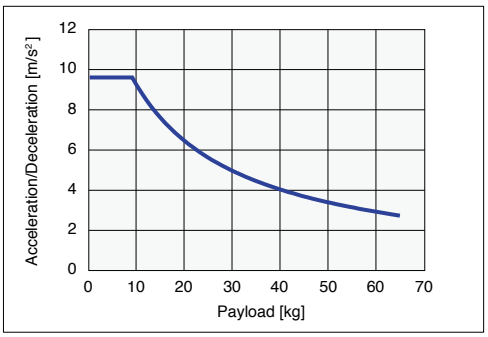


Vertical



LGXS20-40

Horizontal/
Wall hanging



Vertical

Inertia Moment

LGXS20

[kg·m²×10⁻⁴]	Effective stroke [mm]																													
Model	**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**	**1300**	**1350**	**1400**	**1450**
LGXS20-10	-	2.524	2.585	2.647	2.709	2.770	2.832	2.894	2.955	3.017	3.079	3.140	3.202	3.264	3.325	3.387	3.448	3.510	3.572	3.633	3.695	3.757	3.818	3.880	3.942	4.003	4.065	4.127	4.188
LGXS20-20	-	2.863	2.924	2.986	3.048	3.109	3.171	3.232	3.294	3.356	3.417	3.479	3.541	3.602	3.664	3.726	3.787	3.849	3.911	3.972	4.034	4.096	4.157	4.219	4.281	4.342	4.404	4.466	4.527
LGXS20-40	-	4.309	4.371	4.433	4.494	4.556	4.618	4.679	4.741	4.803	4.864	4.926	4.988	5.049	5.111	5.173	5.234	5.296	5.357	5.419	5.481	5.542	5.604	5.666	5.727	5.789	5.851	5.912	5.974

Robonity series External Sensor Installation Guide (Left side shown)

Sensor Spec

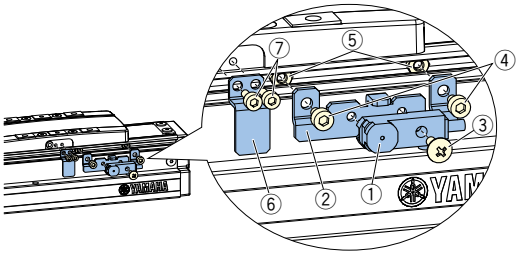
Item	Specification
Manufacturer	Panasonic Industrial Device SUNX, Co., Ltd.
Model	GX-F8B
Output method	NPN type
Output action	ON released
Power voltage	DC12 to 24V
Load current	100 mA or less
Consumption current	15 mA or less

Item	Specification
Display lamp	Orange LED (ON when output ON)
Ambient environment and humidity	-25 to +75 °C, 35 to 85 %RH
Protection structure	IP68
Cable length	5 m

[Caution]

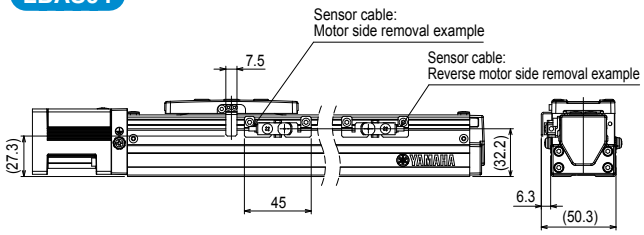
- Bracket screw tightening torque: 0.5 N·m
- The detection surface of the sensor and sensor plate clearance is approx. 1 mm.

Note 1. Installation is users' responsibility
Note 2. Mounting hardware included
Note 3. Sensor cable is 5 m. Adjust as needed.
Note 4. Sensor cable outlet can be either motor end or no motor end of actuator



① Proximity sensor
② Sensor Bracket
③ Bracket screw
④ Bracket bolt
⑤ Bracket nut
⑥ Switch target plate
⑦ Target plate bolt

LBAS04



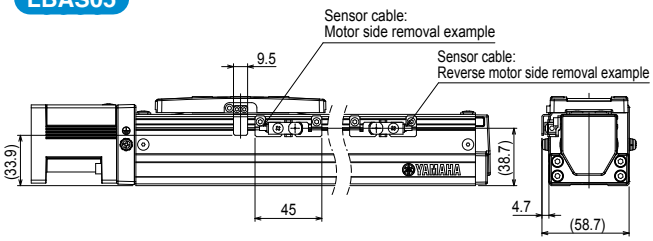
Proximity sensor option (No. KFU-M2205-00)

No.	Name	Number	Qty	Remarks
①	Proximity sensor	KP6-M4855-01	1	
②	Sensor Bracket	KFU-M22FF-00	1	
③	Bracket screw	90990-66J004	1	M3 × 0.5 Length 8
④	Bracket bolt	91312-03005	2	M3 × 0.5 Length 5
⑤	Bracket nut	95302-03700	2	M3

Target plate option (No. KFT-M2206-00)

No.	Name	Number	Qty	Remarks
⑥	Switch target plate	KFT-M22G5-00	1	
⑦	Target plate bolt	90112-02J005	2	M2 × 0.4 Length 5

LBAS05



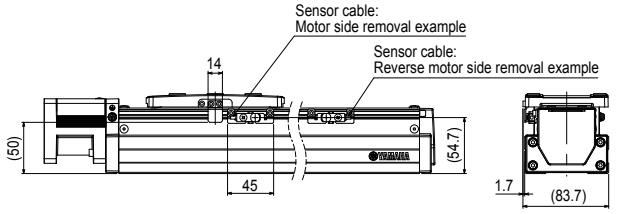
Proximity sensor option (No. KFU-M2205-00)

No.	Name	Number	Qty	Remarks
①	Proximity sensor	KP6-M4855-01	1	
②	Sensor Bracket	KFU-M22FF-00	1	
③	Bracket screw	90990-66J004	1	M3 × 0.5 Length 8
④	Bracket bolt	91312-03005	2	M3 × 0.5 Length 5
⑤	Bracket nut	95302-03700	2	M3

Target plate option (No. KFU-M2206-00)

No.	Name	Number	Qty	Remarks
⑥	Switch target plate	KFU-M22G5-00	1	
⑦	Target plate bolt	90112-2AJ005	2	M2.5 × 0.4 Length 5

LBAS08



Proximity sensor option (No. KFU-M2205-00)

No.	Name	Number	Qty	Remarks
①	Proximity sensor	KP6-M4855-01	1	
②	Sensor Bracket	KFU-M22FF-00	1	
③	Bracket screw	90990-66J004	1	M3 × 0.5 Length 8
④	Bracket bolt	91312-03005	2	M3 × 0.5 Length 5
⑤	Bracket nut	95302-03700	2	M3

Target plate option (No. KFV-M2206-00)

No.	Name	Number	Qty	Remarks
⑥	Switch target plate	KFV-M22G5-00	1	
⑦	Target plate bolt	91312-03005	2	M3 × 0.5 Length 5

Grease Gun Nozzle (LBAS Model)

Specially designed for LBAS model for lubrication on ball screw and linear guide.

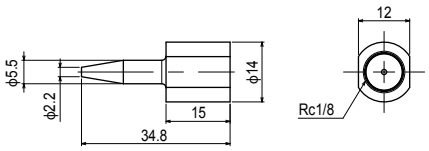
* It can be used by attaching to a commercially available general grease gun.

Lubrication Kit

Grease nozzle and nozzle tip

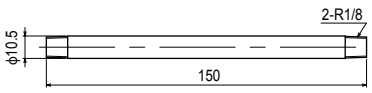
Part number	KFU-M3861-00

Nozzle tip



Part number	KFU-M2941-00

Grease nozzle



Part number	KFU-M2942-00

Robonity series External Sensor Installation Guide (Left side shown)

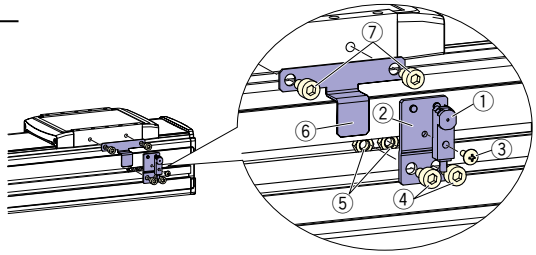
Sensor Spec

Item	Specification
Manufacturer	Panasonic Industrial Device SUNX, Co., Ltd.
Model	GX-F8B
Output method	NPN type
Output action	ON released
Power voltage	DC12 to 24V
Load current	100 mA or less
Consumption current	15 mA or less

Item	Specification
Display lamp	Orange LED (ON when output ON)
Ambient environment and humidity	-25 to +75 °C, 35 to 85 %RH
Protection structure	IP68
Cable length	5 m

[Caution]

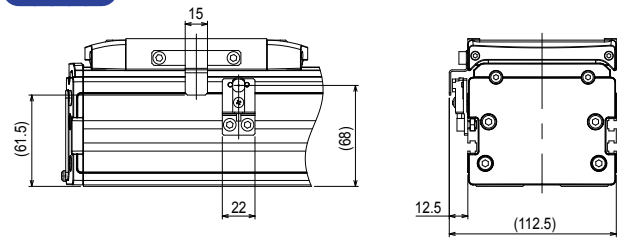
- Bracket screw tightening torque: 0.5 N·m
- The detection surface of the sensor and sensor plate clearance is approx. 1 mm.



① Proximity sensor
② Sensor Bracket
③ Bracket screw
④ Bracket bolt
⑤ Bracket nut
⑥ Switch target plate
⑦ Target plate bolt

Note 1. Installation is users' responsibility
Note 2. Mounting hardware included
Note 3. Sensor cable is 5 m. Adjust as needed.

LGXS10



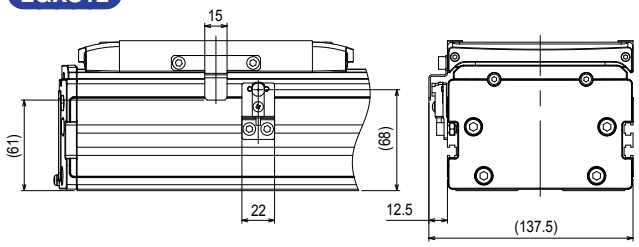
Proximity sensor option (No. KEV-M2205-00)

No.	Name	Number	Qty	Remarks
①	Proximity sensor	KP6-M4855-01	1	
②	Sensor Bracket	KEV-M22FF-00	1	
③	Bracket screw	90990-66J004	1	M3 × 0.5 Length 8
④	Bracket bolt	91312-05008	2	M5 × 0.8 Length 8
⑤	Bracket nut	95302-05700	2	M5

Target plate option (No. KEV-M2206-00)

No.	Name	Number	Qty	Remarks
⑥	Switch target plate	KEV-M22G5-00	1	
⑦	Target plate bolt	91312-05008	2	M5 × 0.8 Length 8

LGXS12



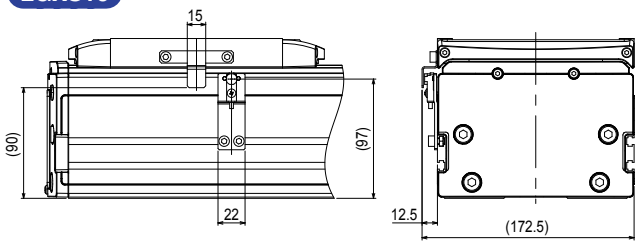
Proximity sensor option (No. KEV-M2205-00)

No.	Name	Number	Qty	Remarks
①	Proximity sensor	KP6-M4855-01	1	
②	Sensor Bracket	KEV-M22FF-00	1	
③	Bracket screw	90990-66J004	1	M3 × 0.5 Length 8
④	Bracket bolt	91312-05008	2	M5 × 0.8 Length 8
⑤	Bracket nut	95302-05700	2	M5

Target plate option (No. KEV-M2206-00)

No.	Name	Number	Qty	Remarks
⑥	Switch target plate	KEV-M22G5-00	1	
⑦	Target plate bolt	91312-05008	2	M5 × 0.8 Length 8

LGXS16



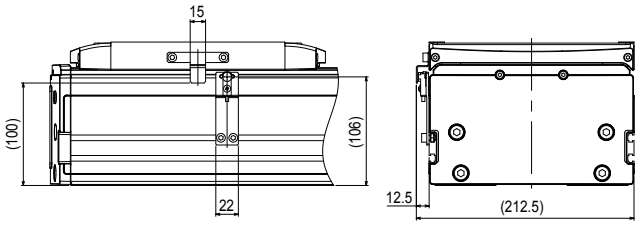
Proximity sensor option (No. KEX-M2205-00)

No.	Name	Number	Qty	Remarks
①	Proximity sensor	KP6-M4855-01	1	
②	Sensor Bracket	KEX-M22FF-00	1	
③	Bracket screw	90990-66J004	1	M3 × 0.5 Length 8
④	Bracket bolt	91312-05008	2	M5 × 0.8 Length 8
⑤	Bracket nut	95302-05700	2	M5

Target plate option (No. KEV-M2206-00)

No.	Name	Number	Qty	Remarks
⑥	Switch target plate	KEV-M22G5-00	1	
⑦	Target plate bolt	91312-05008	2	M5 × 0.8 Length 8

LGXS20



Proximity sensor option (No. KEY-M2205-00)

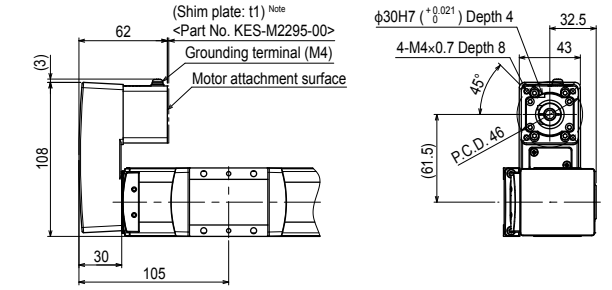
No.	Name	Number	Qty	Remarks
①	Proximity sensor	KP6-M4855-01	1	
②	Sensor Bracket	KEY-M22FF-00	1	
③	Bracket screw	90990-66J004	1	M3 × 0.5 Length 8
④	Bracket bolt	91312-05008	2	M5 × 0.8 Length 8
⑤	Bracket nut	95302-05700	2	M5

Target plate option (No. KEV-M2206-00)

No.	Name	Number	Qty	Remarks
⑥	Switch target plate	KEV-M22G5-00	1	
⑦	Target plate bolt	91312-05008	2	M5 × 0.8 Length 8

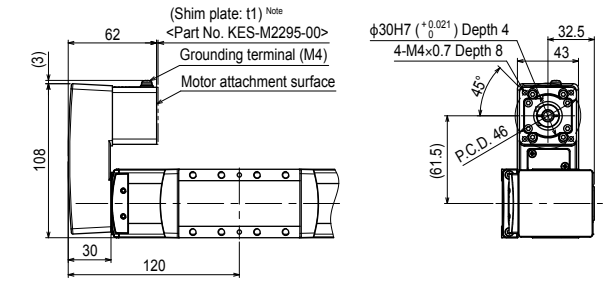
Robonity series Reference guide for right angle motor mount (right side shown)

LGXS05



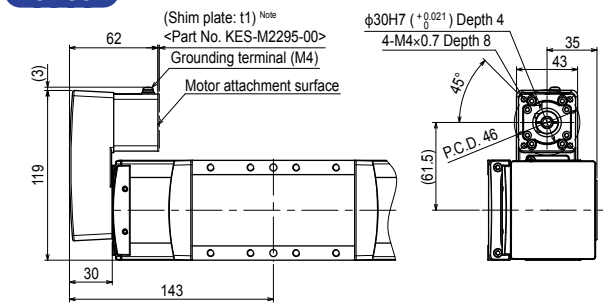
Note. For the availability of shim plate, see the adaptable servo motor table (P.15).

LGXS05L



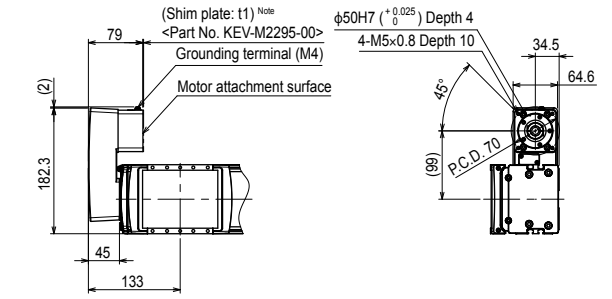
Note. For the availability of shim plate, see the adaptable servo motor table (P.16).

LGXS07



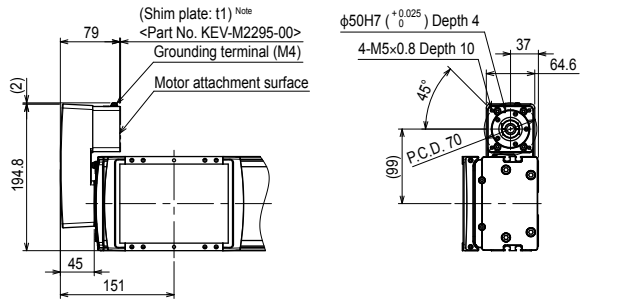
Note. For the availability of shim plate, see the adaptable servo motor table (P.17).

LGXS10



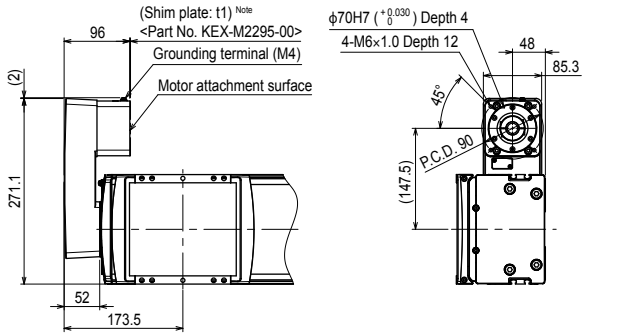
Note. For the availability of shim plate, see the adaptable servo motor table (P.18).

LGXS12



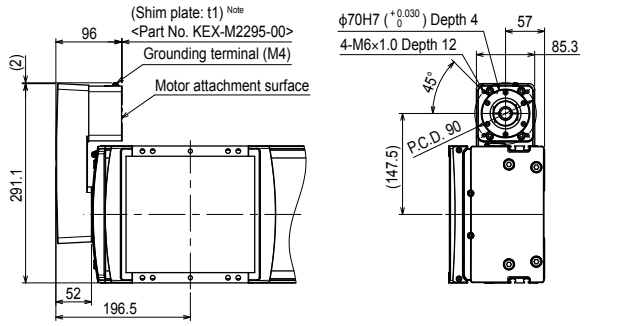
Note. For the availability of shim plate, see the adaptable servo motor table (P.19).

LGXS16



Note. For the availability of shim plate, see the adaptable servo motor table (P.20).

LGXS20



Note. For the availability of shim plate, see the adaptable servo motor table (P.21).

Note 1. Use by attaching the conversion adapter to the main unit. Refer to the manual for the attachment method.

Note 2. A motor is not included in the conversion adapter. Remove a motor from the main unit, and install the conversion adapter.

Note 3. Right installation and left installation are possible.

Model	Product model	Part No.	Weight
LGXS05, LGXS05L, LGXS07	GX-BEND-40	KES-M221M-00	0.4 kg
LGXS10, LGXS12	GX-BEND-60	KEV-M221M-00	1.2 kg
LGXS16, LGXS20	GX-BEND-80	KEX-M221M-00	2.7 kg

MEMO

MEMO

MEMO

Basic Specifications List

A motor is not attached to this product.
For a motor and driver, prepare, attach, and adjust by the customer.

Basic model LBAS

Model		LBAS04		LBAS05				LBAS08		
Adaptable motor		50 W		100 W				200 W		
Repeatability Note 1		+/-0.01 mm		+/-0.01 mm				+/-0.01 mm		
Deceleration mechanism		Shifting position ball screw ϕ 10 (C7 class)		Shifting position ball screw ϕ 12 (C7 class)				Shifting position ball screw ϕ 16 (C7 class)		
Stroke		50 mm to 800 mm (50 mm pitch)		50 mm to 800 mm (50 mm pitch)				50 mm to 1100 mm (50 mm pitch)		
Maximum speed Note 2 (or equivalent)		800 mm/sec	400 mm/sec	1333 mm/sec	666 mm/sec	333 mm/sec	133 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead		12 mm	6 mm	20 mm	10 mm	5 mm	2 mm	20 mm	10 mm	5 mm
Maximum payload Note 3 (or equivalent)	Horizontal	12 kg	20 kg	12 kg	24 kg	40 kg	45 kg	40 kg	80 kg	100 kg
	Vertical	2 kg	5 kg	3 kg	6 kg	12 kg	15 kg	8 kg	20 kg	30 kg
Rated thrust Note 3 (or equivalent)		71 N	141 N	84 N	169 N	339 N	854 N	174 N	341 N	683 N
Maximum dimensions of cross section of main unit		W 44 mm × H 52 mm		W 54 mm × H 60 mm				W 82 mm × H 78 mm		
Overall length		ST + 214 mm		ST + 220.5 mm				ST + 278 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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.

Advanced model LGXS

Model		LGXS05			LGXS05L			LGXS07			
Adaptable motor		50 W			100 W			100 W			
Repeatability Note 1		+/-0.005 mm			+/-0.005 mm			+/-0.005 mm			
Deceleration mechanism		Ground ball screw ϕ 12 (C5 class)			Ground ball screw ϕ 12 (C5 class)			Ground ball screw ϕ 15 (C5 class)			
Stroke		50 mm to 800 mm (50 mm pitch)			50 mm to 800 mm (50 mm pitch)			50 mm to 1100 mm (50 mm pitch)			
Maximum speed Note 2 (or equivalent)		1333 mm/sec	666 mm/sec	333 mm/sec	1333 mm/sec	666 mm/sec	333 mm/sec	1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead		20 mm	10 mm	5 mm	20 mm	10 mm	5 mm	30 mm	20 mm	10 mm	5 mm
Maximum payload Note 3 (or equivalent)	Horizontal	5 kg	8 kg	13 kg	12 kg	24 kg	32 kg	10 kg	25 kg	45 kg	85 kg
	Vertical	2 kg	4 kg	8 kg	3 kg	6 kg	12 kg	2 kg	4 kg	8 kg	16 kg
Rated thrust Note 3 (or equivalent)		41 N	69 N	138 N	84 N	169 N	339 N	56 N	84 N	169 N	339 N
Maximum dimensions of cross section of main unit		W 48 mm × H 65 mm			W 48 mm × H 65 mm			W 70 mm × H 76.5 mm			
Overall length		ST + 131.5 mm			ST + 161.5 mm			ST + 202 mm			
Degree of cleanliness Note 4		ISO CLASS 3 (ISO14644-1) or equivalent									
Intake air Note 5		30 Nℓ/min to 100 Nℓ/min			30 Nℓ/min to 100 Nℓ/min			30 Nℓ/min to 115 Nℓ/min			
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.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note 4. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 5. The required suction amount will vary according to the operating conditions and operating environment.

Model		LGXS10				LGXS12				LGXS16			LGXS20		
Adaptable motor		200 W				400 W				750 W			750 W		
Repeatability Note 1		+/-0.005 mm				+/-0.005 mm				+/-0.005 mm			+/-0.005 mm		
Deceleration mechanism		Ground ball screw ϕ 15 (C5 class)				Ground ball screw ϕ 15 (C5 class)				Ground ball screw ϕ 20 (C5 class)			Ground ball screw ϕ 20 (C5 class)		
Stroke		100 mm to 1250 mm (50 mm pitch)				100 mm to 1250 mm (50 mm pitch)				100 mm to 1450 mm (50 mm pitch)			100 mm to 1450 mm (50 mm pitch)		
Maximum speed Note 2 (or equivalent)		1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec	1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec	2400 mm/sec	1200 mm/sec	600 mm/sec	2400 mm/sec	1200 mm/sec	600 mm/sec
Ball screw lead		30 mm	20 mm	10 mm	5 mm	30 mm	20 mm	10 mm	5 mm	40 mm	20 mm	10 mm	40 mm	20 mm	10 mm
Maximum payload Note 3 (or equivalent)	Horizontal	25 kg	40 kg	80 kg	100 kg	35 kg	50 kg	95 kg	115 kg	45 kg	95 kg	130 kg	65 kg	130 kg	160 kg
	Vertical	4 kg	8 kg	20 kg	30 kg	8 kg	15 kg	25 kg	45 kg	12 kg	28 kg	55 kg	15 kg	35 kg	65 kg
Rated thrust Note 3 (or equivalent)		113 N	170 N	341 N	683 N	225 N	339 N	678 N	1360 N	320 N	640 N	1280 N	320 N	640 N	1280 N
Maximum dimensions of cross section of main unit		W 100 mm × H 99.5 mm				W 125 mm × H 101 mm				W 160 mm × H 130 mm			W 200 mm × H 140 mm		
Overall length		ST + 175.5 mm				ST + 211.5 mm				ST + 242.5 mm			ST + 288.5 mm		
Degree of cleanliness Note 4		ISO CLASS 3 (ISO14644-1) or equivalent													
Intake air Note 5		30 Nℓ/min to 90 Nℓ/min													
Using ambient temperature and humidity		0 to 40 °C, 35 to 80 %RH (non-condensing)													

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●Specifications and appearance are subject to change without prior notice.

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