

LGXS05

Advanced model

Motor-less Single Axis Actuator

Slider type



Ordering method

LGXS05

Model	Lead	Side cover	Stroke
	20: 20 mm 10: 10 mm 5: 5 mm	No entry: Standard W: With T-groove (both sides) R: With T-groove (right side) L: With T-groove (left side)	50 to 800 (50 mm pitch)

[Caution]

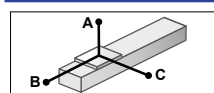
This system is provided as mechanical actuator unit and not including any adapters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment.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

Specifications

Applicable 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 (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 5 kg Vertical 2 kg	8 kg 4 kg	13 kg 8 kg
Rated thrust (or equivalent) ^{Note 3}	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 N ℓ /min to 100 N ℓ /min		
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)		

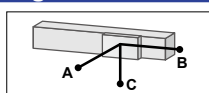
- Note 1. Positioning repeatability in one direction.
 Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 600 mm, the ball screw may resonate. (Critical speed)
 At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
 Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
 Note 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.115 for acceleration/deceleration and inertia moment.

Allowable overhang ^{Note}

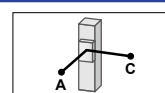


LGXS05-20

Horizontal installation (Unit: mm)	A	B	C
2kg	898	269	350
5kg	583	112	159



Wall installation (Unit: mm)	A	B	C
2kg	323	234	809
5kg	119	76	427



Vertical installation (Unit: mm)	A	C
1kg	452	452
2kg	217	217

LGXS05-10

Horizontal installation (Unit: mm)	A	B	C
2kg	2505	382	625
5kg	1366	149	246
8kg	1036	90	150

Wall installation (Unit: mm)	A	B	C
2kg	585	346	2386
5kg	195	113	1164
8kg	95	54	745

Vertical installation (Unit: mm)	A	C
1kg	732	732
2kg	351	351
4kg	160	160

LGXS05-5

Horizontal installation (Unit: mm)	A	B	C
3kg	4604	281	497
8kg	2197	101	179
13kg	1593	59	105

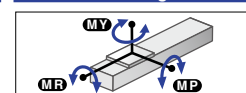
Wall installation (Unit: mm)	A	B	C
3kg	439	245	4371
8kg	117	65	1812
13kg	42	24	1000

Vertical installation (Unit: mm)	A	C
4kg	183	183
6kg	111	111
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	Wattage
	$\square$ 40	50 W
Manufacturer	Model	
Yaskawa Electric Corp.	SGMJV-A5 SGM7J-A5	
Keyence Corp.	SV- $\square$ 005 SV2- $\square$ 005	
Mitsubishi Electric Corp.	HF-KP053 ^{Note} HG-KR053 ^{Note} HK-KT053	
Omron Electronics	R88M-K05030 R88M-1M05030 ^{Note}	
Panasonic Corp.	MHMF5A	
Conversion adapter product model	Shim plate part number	
GX-BEND-40	KES-M2295-00	

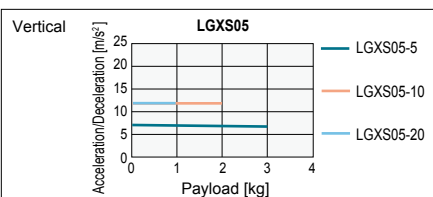
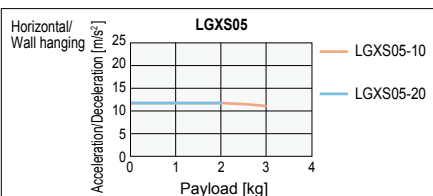
Note. To combine with the conversion adapter <GX-BEND-40>, the shim plate (t1) is necessary.

When used with high acceleration or deceleration (High agility mode)

Specifications

Stroke	50 mm to 550 mm (50 mm pitch)		
Ball screw lead	20 mm	10 mm	5 mm
Maximum payload	2 kg	3 kg	-
Maximum acceleration	Horizontal 11.77 m/s ² (1.2 G)	11.77 m/s ² (1.2 G)	-
Maximum payload	1 kg	2 kg	3 kg
Maximum acceleration	Vertical 11.77 m/s ² (1.2 G)	11.77 m/s ² (1.2 G)	7.17 m/s ² (0.7 G)

Payload - Acceleration / Deceleration Graph (Estimate)



Allowable overhang ^{Note}

LGXS05-20

Horizontal installation (Unit: mm)	A	B	C
1kg	498	324	323
2kg	230	157	150

Wall installation (Unit: mm)	A	B	C
1kg	297	288	468
2kg	123	120	199

Vertical installation (Unit: mm)	A	C
1kg	223	223

LGXS05-10

Horizontal installation (Unit: mm)	A	B	C
1kg	1159	460	645
3kg	381	148	206

Wall installation (Unit: mm)	A	B	C
1kg	606	424	1129
3kg	163	112	346

Vertical installation (Unit: mm)	A	C
1kg	396	396
2kg	182	182

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 550 mm stroke models.

LGXS05-5

Vertical installation (Unit: mm)	A	C
1kg	478	478
3kg	138	138

Effective stroke and maximum speed during high acceleration or deceleration

Effective stroke	50	100	150	200	250	300	350	400	450	500	550
Maximum speed (mm/sec)	Lead 20	1333									
	Lead 10	666									
	Lead 5	333									

Note. The bending unit cannot be used for the high agility mode.

Note. The high agility mode is used in an effective stroke range of 50 to 550 (50 mm pitch).

Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.

The speed may not reach the maximum speed if the movement distance is short or depending on the operating conditions.

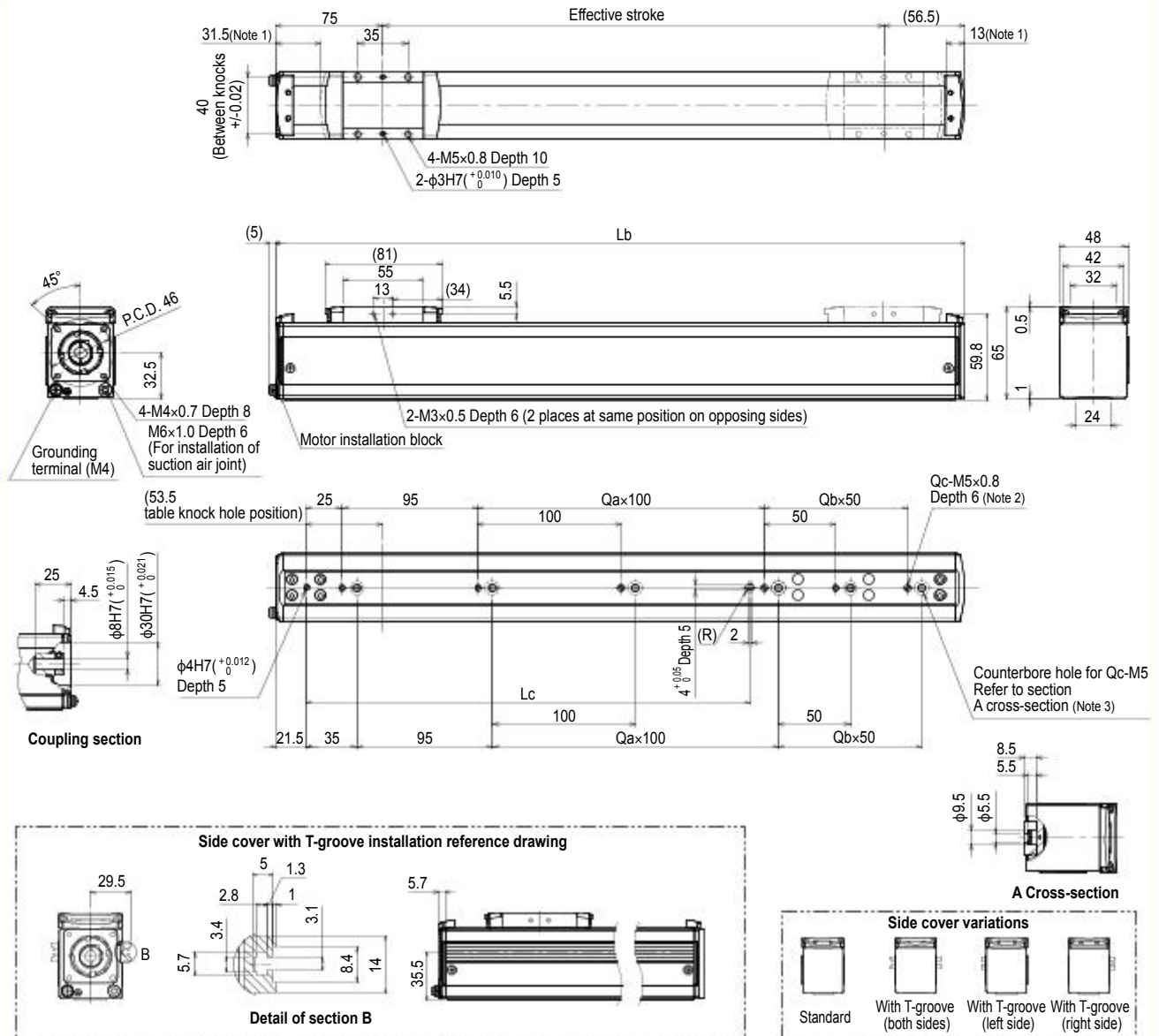
Note. See P.116 for acceleration/deceleration and inertia moment.

Access the website below.



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

LGXS05



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 counterbore 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.

Note 4. Side cover with T-groove is used to install the sensor.

Note 5. Grease gun nozzle (recommended) (see P.143 for detail)

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
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%

LGXS05L

Advanced model

Motor-less Single Axis Actuator

Slider type



Ordering method

LGXS05L

Model	Lead	Side cover	Stroke
	20: 20 mm 10: 10 mm 5: 5 mm	No entry: Standard W: With T-groove (both sides) R: With T-groove (right side) L: With T-groove (left side)	50 to 800 (50 mm pitch)

[Caution]

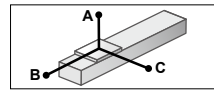
This system is provided as mechanical actuator unit and not including any adapters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment.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

Specifications

Applicable 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 6 kg 3 kg 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 $\times$ 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 N ℓ /min to 100 N ℓ /min
Using ambient temperature and humidity	0 to 40 $^{\circ}$ C, 35 to 80 %RH (non-condensing)

Note 1. Positioning repeatability in one direction.
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
If the effective stroke exceeds 600 mm, the ball screw may resonate. (Critical speed)
At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note 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.117 for acceleration/deceleration and inertia moment.

Allowable overhang ^{Note}



LGXS05L-20

Horizontal installation (Unit: mm)	A	B	C
3kg	1755	559	426
8kg	737	200	153
12kg	608	133	104

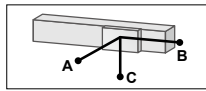
LGXS05L-10

Horizontal installation (Unit: mm)	A	B	C
6kg	2416	389	333
12kg	1397	187	161
24kg	875	87	74

LGXS05L-5

Horizontal installation (Unit: mm)	A	B	C
10kg	3127	254	225
20kg	1841	120	106
32kg	1554	70	62

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.



Wall installation (Unit: mm)

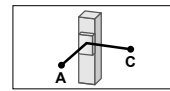
A	B	C
3kg	396	486
8kg	106	128
12kg	52	61

Wall installation (Unit: mm)

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

Wall installation (Unit: mm)

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



Vertical installation (Unit: mm)

A	C
1kg	1486
2kg	730
3kg	478

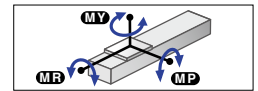
Vertical installation (Unit: mm)

A	C
4kg	555
6kg	360

Vertical installation (Unit: mm)

A	C
5kg	501
10kg	235
12kg	190

Static loading moment



(Unit: N·m)	MY	MP	MR
72	72	64	

Adaptable Servo Motor

Specification	Flange size	Wattage
	$\square$ 40	100 W
Manufacturer	Model	
Yaskawa Electric Corp.	SGMJV-01 SGM7J-01	
Keyence Corp.	SV- $\square$ 010 SV2- $\square$ 010	
Mitsubishi Electric Corp.	HF-KP13 ^{Note} HG-KR13 ^{Note} HK-KT13 ^{Note}	
Omron Electronics	R88M-K10030 R88M-1M10030 ^{Note}	
Panasonic Corp.	MHMF01	

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

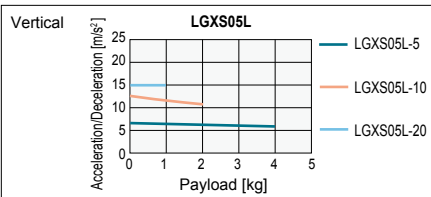
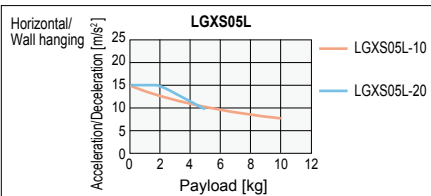
Note. To combine with the conversion adapter <GX-BEND-40>, the shim plate (t1) is necessary.

When used with high acceleration or deceleration (High agility mode)

Specifications

Stroke	50 mm to 550 mm (50 mm pitch)
Ball screw lead	20 mm 10 mm 5 mm
Maximum payload	5 kg 10 kg -
Maximum acceleration	Horizontal 14.72 m/s ² (1.5 G) 14.72 m/s ² (1.5 G) -
Maximum payload	Vertical 1 kg 2 kg 4 kg
Maximum acceleration	Vertical 14.72 m/s ² (1.5 G) 12.68 m/s ² (1.3 G) 6.65 m/s ² (0.7 G)

Payload - Acceleration / Deceleration Graph (Estimate)



Allowable overhang ^{Note}

LGXS05L-20

Horizontal installation (Unit: mm)	A	B	C
2kg	675	501	332
5kg	330	191	131

LGXS05L-10

Horizontal installation (Unit: mm)	A	B	C
3kg	1208	469	385
6kg	665	227	188
10kg	441	130	108

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 550 mm stroke models.

Wall installation (Unit: mm)

A	B	C
2kg	294	428
5kg	87	118

Wall installation (Unit: mm)

A	B	C
3kg	331	396
6kg	131	155
10kg	49	58

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 550 mm stroke models.

Vertical installation (Unit: mm)

A	C
1kg	728

Vertical installation (Unit: mm)

A	C
1kg	1298
2kg	636

LGXS05L-5

Vertical installation (Unit: mm)	A	C
1kg	1555	1555
2kg	762	762
4kg	365	365

Effective stroke and maximum speed during high acceleration or deceleration

Effective stroke	50	100	150	200	250	300	350	400	450	500	550
Maximum speed (mm/sec)	Lead 20					1333					
	Lead 10					666					
	Lead 5					333					

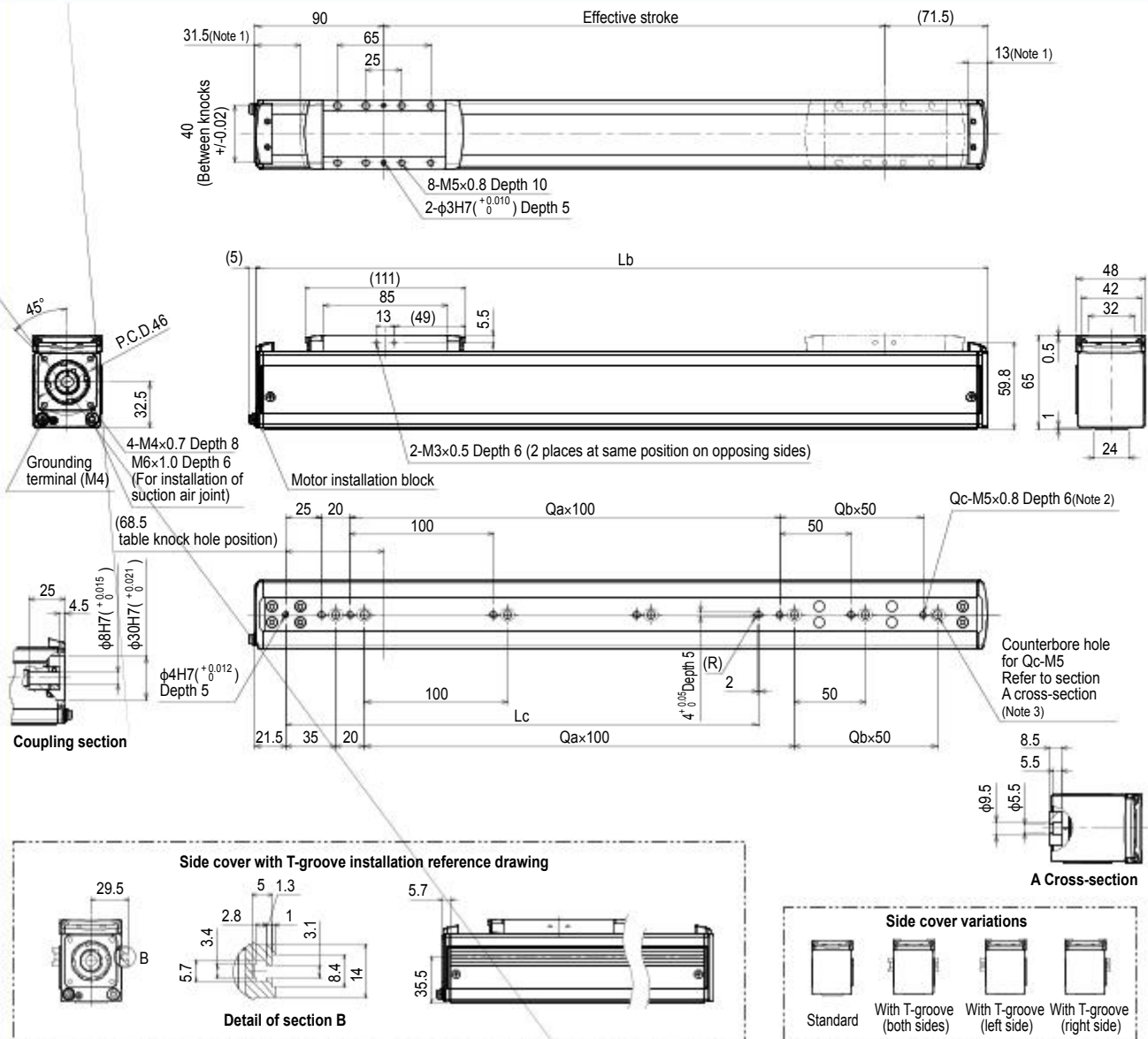
Note. The bending unit cannot be used for the high agility mode.
Note. The high agility mode is used in an effective stroke range of 50 to 550 (50 mm pitch).
Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
The speed may not reach the maximum speed if the movement distance is short or depending on the operating conditions.
Note. See P.118 for acceleration/deceleration and inertia moment.

Access the website below.



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

LGXS05L



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 counterbore 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.

Note 4. Side cover with T-groove is used to install the sensor.

Note 5. Grease gun nozzle (recommended) (see P.143 for detail)

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
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												1066	933	800	666
	Lead 10												532	466	400	333
	Lead 5												266	233	200	166
	Speed setting												80%	70%	60%	50%

LGXS07

Advanced model

Motor-less Single Axis Actuator

Slider type



Ordering method

LGXS07

Model	Lead	Side cover	Stroke
	30: 30 mm 20: 20 mm 10: 10 mm 5: 5 mm	No entry: Standard W: With T-groove (both sides) R: With T-groove (right side) L: With T-groove (left side)	50 to 1100 (50 mm pitch)

[Caution]

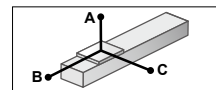
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment.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

Specifications

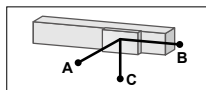
Applicable motor	100 W
Repeatability ^{Note 1}	+/-0.005 mm
Deceleration mechanism	Ground ball screw ϕ 15 (C5 class)
Stroke	50 mm to 1100 mm (50 mm pitch)
Maximum speed (or equivalent) ^{Note 2}	1800 mm/sec 1200 mm/sec 600 mm/sec 300 mm/sec
Ball screw lead	30 mm 20 mm 10 mm 5 mm
Maximum payload (or equivalent) ^{Note 3}	Horizontal 10 kg 25 kg 45 kg 85 kg 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 $\times$ 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 N ℓ /min to 115 N ℓ /min
Using ambient temperature and humidity	0 to 40 $^{\circ}$ C, 35 to 80 %RH (non-condensing)

Note 1. Positioning repeatability in one direction.
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
If the effective stroke exceeds 700 mm, the ball screw may resonate. (Critical speed)
At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
Note 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.119 for acceleration/deceleration and inertia moment.

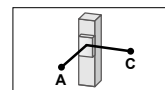
Allowable overhang ^{Note}



LGXS07-30	Horizontal installation (Unit: mm)
	A B C
2kg	3078 1509 1221
6kg	1191 501 418
10kg	957 317 282

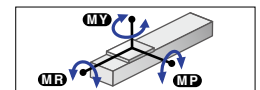


Wall installation (Unit: mm)
A B C
2kg 1237 1442 2975
6kg 393 435 1062
10kg 244 251 793



Vertical installation (Unit: mm)
A C
1kg 2335 2335
2kg 1158 1158

Static loading moment



(Unit: N·m)
MY MP MR
138 121 121

Adaptable Servo Motor

Specification	Flange size	Wattage
	$\square$ 40	100 W
Manufacturer	Model	
Yaskawa Electric Corp.	SGMJV-01 SGM7J-01	
Keyence Corp.	SV- $\square$ 010 SV2- $\square$ 010	
Mitsubishi Electric Corp.	HF-KP13 ^{Note} HG-KR13 ^{Note} HK-KT13 ^{Note}	
Omron Electronics	R88M-K10030 R88M-1M10030 ^{Note}	
Panasonic Corp.	MHMF01	
Conversion adapter product model	Shim plate part number	
GX-BEND-40	KES-M2295-00	

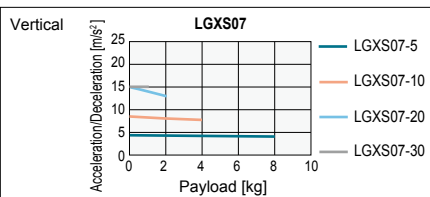
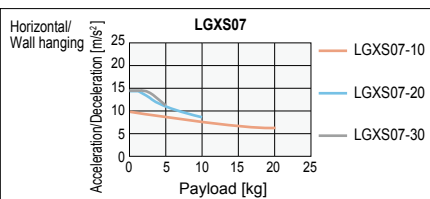
Note. To combine with the conversion adapter <GX-BEND-40>, the shim plate (t1) is necessary.

When used with high acceleration or deceleration (High agility mode)

Specifications

Stroke	50 mm to 650 mm (50 mm pitch)
Ball screw lead	30 mm 20 mm 10 mm 5 mm
Maximum payload	5 kg 10 kg 20 kg -
Maximum acceleration	Horizontal 14.72 m/s ² (1.5 G) 14.72 m/s ² (1.5 G) 9.64 m/s ² (1 G) - Vertical 1 kg 2 kg 4 kg 8 kg 14.72 m/s ² (1.5 G) 14.72 m/s ² (1.5 G) 8.44 m/s ² (0.9 G) 4.32 m/s ² (0.4 G)

Payload - Acceleration / Deceleration Graph (Estimate)



Allowable overhang ^{Note}

LGXS07-30	Horizontal installation (Unit: mm)
	A B C
2kg	1020 897 608
5kg	461 346 245

Wall installation (Unit: mm)
A B C
2kg 579 830 976
5kg 208 279 401

Vertical installation (Unit: mm)
A C
1kg 1165 1165

LGXS07-20	Horizontal installation (Unit: mm)
	A B C
3kg	1224 758 640
6kg	684 369 321
10kg	459 214 190

Wall installation (Unit: mm)
A B C
3kg 600 692 1175
6kg 274 303 621
10kg 138 147 376

Vertical installation (Unit: mm)
A C
1kg 1793 1793
2kg 891 891

LGXS07-10	Horizontal installation (Unit: mm)
	A B C
5kg	2208 622 665
12kg	991 249 266
20kg	637 142 152

Wall installation (Unit: mm)
A B C
5kg 603 556 2129
12kg 200 182 890
20kg 83 75 497

Vertical installation (Unit: mm)
A C
1kg 3012 3012
2kg 1487 1487
4kg 725 725

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.

Effective stroke and maximum speed during high acceleration or deceleration

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650
Maximum speed (mm/sec)	Lead 30												
	Lead 20												
	Lead 10												
	Lead 5												

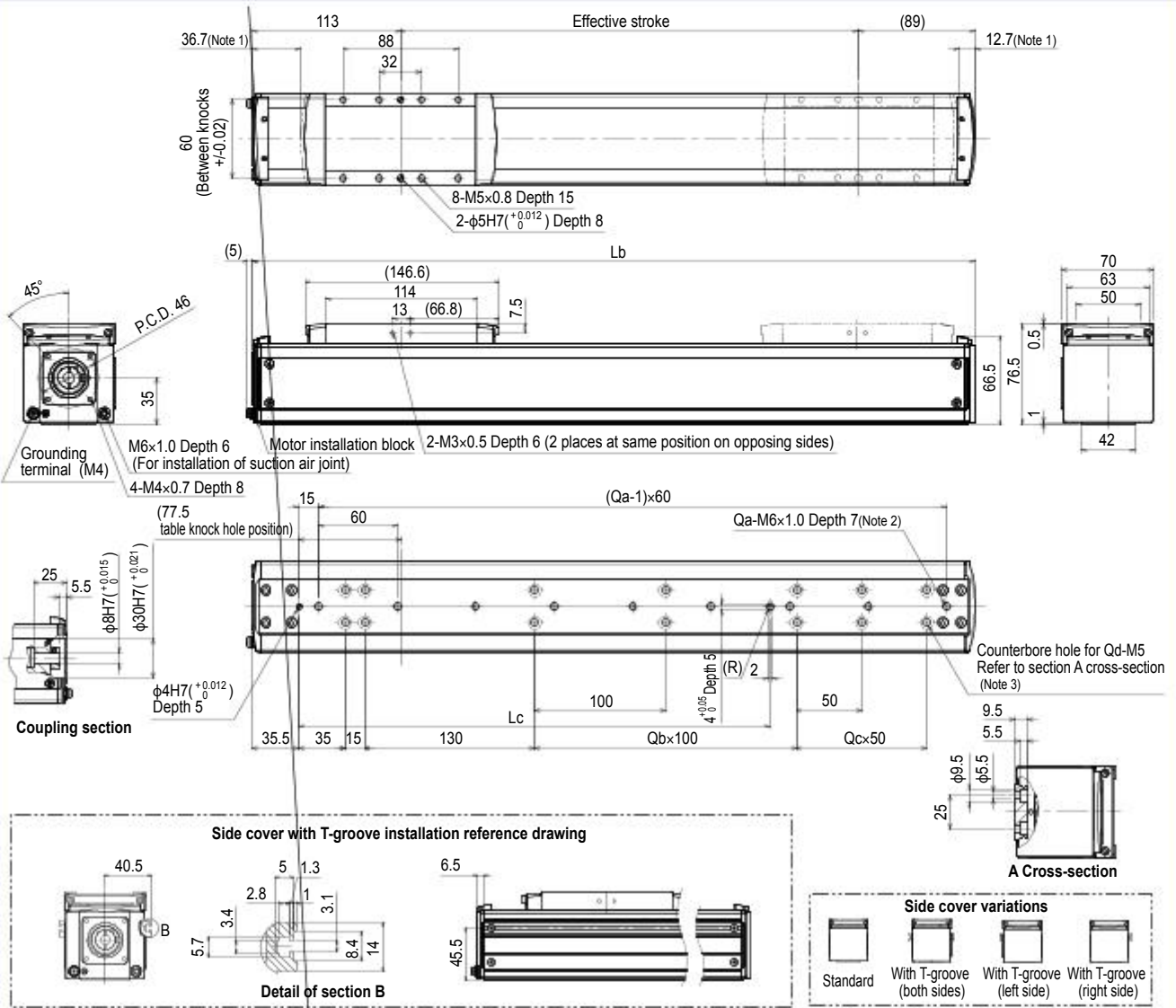
Note. The bending unit cannot be used for the high agility mode.
Note. The high agility mode is used in an effective stroke range of 50 to 650 (50 mm pitch).
Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
The speed may not reach the maximum speed if the movement distance is short or depending on the operating conditions.
Note. See P.121 for acceleration/deceleration and inertia moment.

Access the website below.



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

LGXS07



Note 1. Stop positions are determined by the mechanical stoppers at both ends.

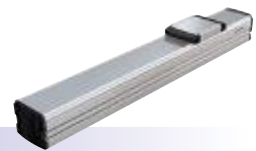
Note 2. When using the tap holes to mount the body, remove the set screws first.

Note 3. When using the counterbore holes (section A cross section) to mount the body, remove the cap from the inner side and then fix.

Note 4. Side cover with T-groove is used to install the sensor.

Note 5. Grease gun nozzle (recommended) (see P.143 for detail)

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
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
	Lead 20							1200							1020	900	780	660	600	540	480	420
	Lead 10							600							510	450	390	330	300	270	240	210
	Lead 5							300							255	225	195	165	150	135	120	105
Speed setting								-							85%	75%	65%	55%	50%	45%	40%	35%



Ordering method

LGXS10

Model	Lead	Motor specification	Stroke
	30: 30 mm 20: 20 mm 10: 10 mm 5: 5 mm	No entry: Standard P: P specification (see below)	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 the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration or resonance from actuator will affect service life of actuator. The product performance may not be satisfied depending on the compatible motor. The bending unit cannot be used for the high agility mode.

Specifications

Applicable 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 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 $\times$ 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 N ℓ /min to 90 N ℓ /min
Using ambient temperature and humidity	0 to 40 $^{\circ}$ C, 35 to 80 %RH (non-condensing)

Note 1. Positioning repeatability in one direction.

Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.

If the effective stroke exceeds 700 mm, the ball screw may resonate. (Critical speed)
At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.

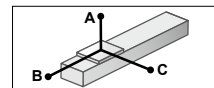
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.

Note 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.

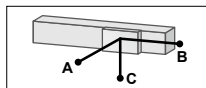
Note 5. The required suction amount will vary according to the operating conditions and operating environment.

Note. See P.122 for acceleration/deceleration and inertia moment.

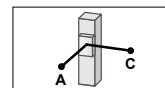
Allowable overhang ^{Note}



LGXS10-30	Horizontal installation (Unit: mm)
	A B C
10kg	878 537 292
20kg	609 256 146
25kg	608 211 124

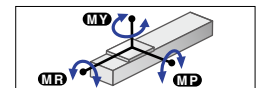


Wall installation		(Unit: mm)	
	A	B	C
10kg	271	473	803
20kg	118	192	481
25kg	93	147	454



Vertical installation (Unit: mm)		
	A	C
1kg	4135	4135
4kg	985	985

Static loading moment



(Unit: N·m)
MY MP MR
274 274 241

Adaptable Servo Motor

Specification	Flange size	Wattage
	☐ 60	200 W
Motor specification	Manufacturer	Model
No entry	Yaskawa Electric Corp.	SGMJV-02 SGMJJ-02
	Keyence Corp.	SV- ☐ 020 SV2- ☐ 020
	Mitsubishi Electric Corp.	HF-KP23 HG-KR23 ^{Note 1} HK-KT23 ^{Note 1}
	Omron Electronics	R88M-K20030 R88M-1M20030
	Panasonic Corp.	MSMD02 MSMF02 MHMF02
Conversion adapter product model	Shim plate part number	
GX-BEND-60 ^{Note 2}	KEV-M2295-00	

Note 1. To combine with the conversion adapter <GX-BEND-60>, the shim plate (t1) is necessary.

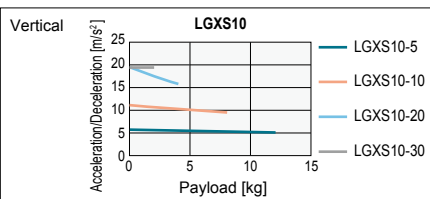
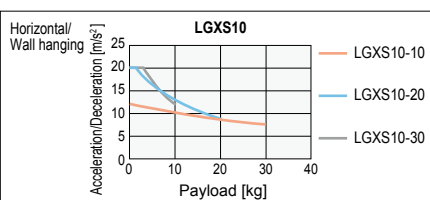
Note 2. For the specifications P, the bending unit cannot be used.

When used with high acceleration or deceleration (High agility mode)

Specifications

Stroke	100 mm to 650 mm (50 mm pitch)
Ball screw lead	30 mm 20 mm 10 mm 5 mm
Maximum payload	10 kg 20 kg 30 kg -
Maximum acceleration	Horizontal 19.62 m/s ² (2 G) 19.62 m/s ² (2 G) 11.71 m/s ² (1.2 G) -
Maximum payload	Vertical 2 kg 4 kg 8 kg 12 kg
Maximum acceleration	Vertical 19.62 m/s ² (2 G) 19.62 m/s ² (2 G) 10.84 m/s ² (1.1 G) 5.53 m/s ² (0.6 G)

Payload - Acceleration / Deceleration Graph (Estimate)



Allowable overhang ^{Note}

LGXS10-30	Horizontal installation (Unit: mm)
	A B C
3kg	1041 1117 541
6kg	581 534 266
10kg	384 300 153

Wall installation (Unit: mm)			
	A	B	C
3kg	521	1046	1009
6kg	241	466	539
10kg	125	235	327

Vertical installation (Unit: mm)		
	A	C
1kg	2054	2054
2kg	994	994

LGXS10-5	Vertical installation (Unit: mm)
	A C
4kg	1550 1550
8kg	743 743
12kg	474 474

LGXS10-20	Horizontal installation (Unit: mm)
	A B C
5kg	1218 844 493
12kg	575 326 193
20kg	375 177 106

Wall installation (Unit: mm)			
	A	B	C
5kg	464	778	1177
12kg	159	261	516
20kg	70	113	290

Vertical installation (Unit: mm)		
	A	C
2kg	1602	1602
4kg	788	788

LGXS10-10	Horizontal installation (Unit: mm)
	A B C
10kg	1851 568 383
20kg	973 263 177
30kg	671 162 109

Wall installation (Unit: mm)			
	A	B	C
10kg	343	504	1784
20kg	136	199	885
30kg	67	98	552

Vertical installation (Unit: mm)		
	A	C
3kg	1849	1849
5kg	1086	1086
8kg	656	656

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.

Effective stroke and maximum speed during high acceleration or deceleration

Effective stroke	100	150	200	250	300	350	400	450	500	550	600	650
Maximum speed (mm/sec)	Lead 30	1800										
	Lead 20	1200										
	Lead 10	600										
	Lead 5	300										

Note. The bending unit cannot be used for the high agility mode.

Note. The high agility mode is used in an effective stroke range of 100 to 650 (50 mm pitch).

Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.

The speed may not reach the maximum speed if the movement distance is short or depending on the operating conditions.

Note. See P.124 for acceleration/deceleration and inertia moment.

Access the website below.



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



Ordering method

LGXS12

Model	Lead	Motor specification	Stroke
	30: 30 mm 20: 20 mm 10: 10 mm 5: 5 mm	No entry: Standard P: P specification (see below)	100 to 1250 (50 mm pitch)

[Caution]

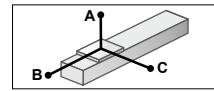
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment.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

Specifications

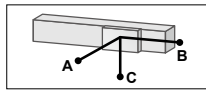
Applicable motor	400 W
Repeatability ^{Note 1}	+/-0.005 mm
Deceleration mechanism	Ground ball screw ϕ 15 (C5 class)
Stroke	100 mm to 1250 mm (50 mm pitch)
Maximum speed ^{Note 2} (or equivalent)	1800 mm/sec 1200 mm/sec 600 mm/sec 300 mm/sec
Ball screw lead	30 mm 20 mm 10 mm 5 mm
Maximum payload ^{Note 3} (or equivalent)	Horizontal 35 kg 50 kg 95 kg 115 kg 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 $\times$ 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 N ℓ /min to 90 N ℓ /min
Using ambient temperature and humidity	0 to 40 $^{\circ}$ C, 35 to 80 %RH (non-condensing)

- Note 1. Positioning repeatability in one direction.
 Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
 If the effective stroke exceeds 700 mm, the ball screw may resonate. (Critical speed)
 At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
 Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
 Note 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.126 for acceleration/deceleration and inertia moment.

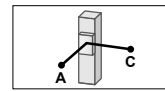
Allowable overhang ^{Note}



LGXS12-30	Horizontal installation (Unit: mm)
	A B C
10kg	1796 1074 637
20kg	1300 531 332
35kg	1341 334 227

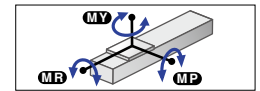


Wall installation (Unit: mm)
A B C
10kg 631 1009 1720
20kg 316 466 1171
35kg 197 269 1130



Vertical installation (Unit: mm)
A C
3kg 2642 2642
6kg 1289 1289
8kg 951 951

Static loading moment



(Unit: N·m)
MY MP MR
334 334 294

Adaptable Servo Motor

Specification	Flange size	☐ 60
	Wattage	400 W
Motor specification	Manufacturer	Model
No entry	Yaskawa Electric Corp.	SGMJV-04 SGMJ7-04
	Keyence Corp.	SV- ☐ 040 SV2- ☐ 040
	Mitsubishi Electric Corp.	HF-KP43 HG-KR43 ^{Note 1} HK-KT43 ^{Note 1}
	Omron Electronics	R88M-K40030 R88M-1M40030
P	Panasonic Corp.	MSMD04 MSMS04 MHMF04
Conversion adapter product model		Shim plate part number
GX-BEND-60 ^{Note 2}		KEV-M2295-00

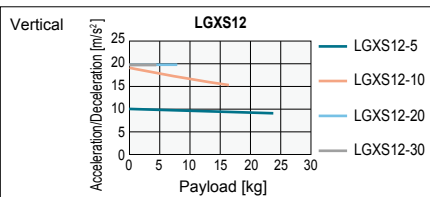
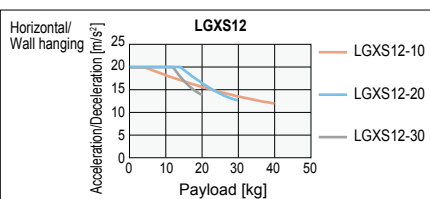
- Note 1. To combine with the conversion adapter <GX-BEND-60>, the shim plate (t1) is necessary.
 Note 2. For the specifications P, the bending unit cannot be used.

When used with high acceleration or deceleration (High agility mode)

Specifications

Stroke	100 mm to 650 mm (50 mm pitch)
Ball screw lead	30 mm 20 mm 10 mm 5 mm
Maximum payload	Horizontal 20 kg 30 kg 40 kg -
Maximum acceleration	Horizontal 19.62 m/s ² (2 G) 19.62 m/s ² (2 G) 19.62 m/s ² (2 G) -
Maximum payload	Vertical 4 kg 8 kg 16 kg 24 kg
Maximum acceleration	Vertical 19.62 m/s ² (2 G) 19.62 m/s ² (2 G) 19.62 m/s ² (2 G) 9.85 m/s ² (1 G)

Payload - Acceleration / Deceleration Graph (Estimate)



Allowable overhang ^{Note}

LGXS12-30	Horizontal installation (Unit: mm)
	A B C
5kg	1216 1297 669
12kg	461 506 252
20kg	316 280 147

Wall installation (Unit: mm)
A B C
5kg 648 1224 1183
12kg 226 436 427
20kg 117 213 266

Vertical installation (Unit: mm)
A C
2kg 1984 1984
4kg 960 960

LGXS12-5	Vertical installation (Unit: mm)
	A C
8kg	1487 1487
16kg	712 712
24kg	454 454

LGXS12-20	Horizontal installation (Unit: mm)
	A B C
10kg	999 807 489
20kg	521 378 231
30kg	382 234 146

Wall installation (Unit: mm)
A B C
10kg 458 740 966
20kg 196 311 479
30kg 109 168 325

Vertical installation (Unit: mm)
A C
3kg 2031 2031
5kg 1193 1193
8kg 722 722

LGXS12-10	Horizontal installation (Unit: mm)
	A B C
15kg	1668 737 535
25kg	1060 423 308
40kg	709 246 180

Wall installation (Unit: mm)
A B C
15kg 491 672 1628
25kg 263 358 1012
40kg 134 181 644

Vertical installation (Unit: mm)
A C
5kg 2071 2071
10kg 1011 1011
16kg 612 612

- 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.

Effective stroke and maximum speed during high acceleration or deceleration

Effective stroke	100	150	200	250	300	350	400	450	500	550	600	650
Maximum speed (mm/sec)	Lead 30						1800					
	Lead 20						1200					
	Lead 10						600					
	Lead 5						300					

- Note. The bending unit cannot be used for the high agility mode.
 Note. The high agility mode is used in an effective stroke range of 100 to 650 (50 mm pitch).
 Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
 The speed may not reach the maximum speed if the movement distance is short or depending on the operating conditions.
 Note. See P.128 for acceleration/deceleration and inertia moment.

Access the website below.



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

LGXS16

Advanced model

Motor-less Single Axis Actuator

Slider type



Ordering method

LGXS16

Model	Lead	Motor specification	Stroke
	40: 40 mm 20: 20 mm 10: 10 mm	No entry: Standard P: P specification (see below)	100 to 1450 (50 mm pitch)

[Caution]

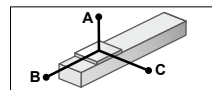
This system is provided as mechanical actuator unit and not including any adapters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment.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

Specifications

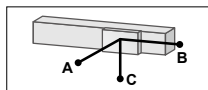
Applicable motor	750 W		
Repeatability ^{Note 1}	+/-0.005 mm		
Deceleration mechanism	Ground ball screw ϕ 20 (C5 class)		
Stroke	100 mm to 1450 mm (50 mm pitch)		
Maximum speed (or equivalent)	2400 mm/sec	1200 mm/sec	600 mm/sec
Ball screw lead	40 mm	20 mm	10 mm
Maximum payload (or equivalent)	Horizontal 45 kg	95 kg	130 kg
	Vertical 12 kg	28 kg	55 kg
Rated thrust (or equivalent)	320 N	640 N	1280 N
Maximum dimensions of cross section of main unit	W 160 mm $\times$ 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 N ℓ /min to 90 N ℓ /min		
Using ambient temperature and humidity	0 to 40 $^{\circ}$ C, 35 to 80 %RH (non-condensing)		

- Note 1. Positioning repeatability in one direction.
 Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
 If the effective stroke exceeds 800 mm, the ball screw may resonate. (Critical speed)
 At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
 Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.
 Note 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.130 for acceleration/deceleration and inertia moment.

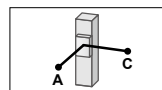
Allowable overhang ^{Note}



LGXS16-40	Horizontal installation (Unit: mm)		
	A	B	C
15kg	2876	1866	1253
30kg	2385	997	776
45kg	2339	720	604



LGXS16-40	Wall installation (Unit: mm)		
	A	B	C
15kg	1273	1802	2797
30kg	782	935	2263
45kg	598	658	2174



LGXS16-40	Vertical installation (Unit: mm)	
	A	C
3kg	6605	6605
6kg	3699	3699
12kg	2827	2827

LGXS16-20	Horizontal installation (Unit: mm)		
	A	B	C
30kg	3862	1255	1106
50kg	2568	733	652
80kg	1798	440	394
95kg	1579	362	325

LGXS16-20	Wall installation (Unit: mm)		
	A	B	C
30kg	1102	1192	3742
50kg	630	671	2422
80kg	360	377	1612
95kg	288	300	1373

LGXS16-20	Vertical installation (Unit: mm)	
	A	C
10kg	3404	3404
20kg	1740	1740
28kg	1504	1504

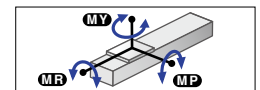
LGXS16-10	Horizontal installation (Unit: mm)		
	A	B	C
50kg	6253	1026	1024
80kg	4447	623	624
100kg	3957	489	490
130kg	3786	365	367

LGXS16-10	Wall installation (Unit: mm)		
	A	B	C
50kg	980	964	6089
80kg	573	561	4240
100kg	437	426	3706
130kg	312	302	3422

LGXS16-10	Vertical installation (Unit: mm)	
	A	C
15kg	3434	3434
30kg	1684	1684
55kg	889	889

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	Wattage
	☐ 80	750 W
Motor specification	Manufacturer	Model
No entry	Yaskawa Electric Corp.	SGMJV-08
	Yaskawa Electric Corp.	SGM7J-08
	Keyence Corp.	SV- ☐ 075
	Keyence Corp.	SV2- ☐ 075
P	Mitsubishi Electric Corp.	HF-KP73
	Mitsubishi Electric Corp.	HG-KR73 ^{Note 1}
	Mitsubishi Electric Corp.	HK-KT7M3 ^{Note 1}
	Omron Electronics	R88M-K75030
P	Omron Electronics	R88M-1M75030
	Panasonic Corp.	MSMD08
	Panasonic Corp.	MSMF08
	Conversion adapter product model	Shim plate part number
	GX-BEND-80 ^{Note 2}	KEX-M2295-00

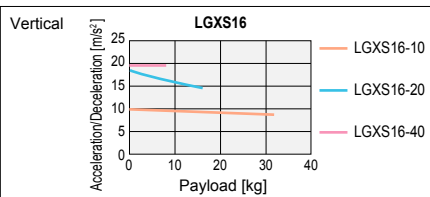
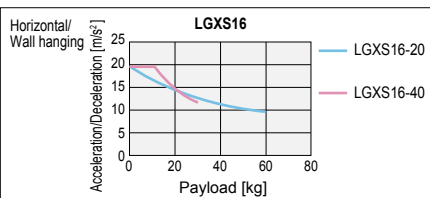
- Note 1. To combine with the conversion adapter <GX-BEND-80>, the shim plate (t1) is necessary.
 Note 2. For the specifications P, the bending unit cannot be used.

When used with high acceleration or deceleration (High agility mode)

Specifications

Stroke	100 mm to 800 mm (50 mm pitch)		
Ball screw lead	40 mm	20 mm	10 mm
Maximum payload	Horizontal 30 kg	60 kg	-
Maximum acceleration	Horizontal 19.62 m/s ² (2 G)	19.84 m/s ² (2 G)	-
Maximum payload	Vertical 8 kg	16 kg	32 kg
Maximum acceleration	Vertical 19.62 m/s ² (2 G)	18.43 m/s ² (1.9 G)	11.17 m/s ² (1.1 G)

Payload - Acceleration / Deceleration Graph (Estimate)



Allowable overhang ^{Note}

LGXS16-40	Horizontal installation (Unit: mm)		
	A	B	C
10kg	1271	1669	836
20kg	725	803	429
30kg	534	514	287

LGXS16-40	Wall installation (Unit: mm)		
	A	B	C
10kg	816	1585	1240
20kg	404	725	683
30kg	259	441	480

LGXS16-40	Vertical installation (Unit: mm)	
	A	C
3kg	2904	2904
5kg	1710	1710
8kg	1038	1038

LGXS16-20	Horizontal installation (Unit: mm)		
	A	B	C
20kg	1722	1123	875
40kg	952	535	428
60kg	682	339	276

LGXS16-20	Wall installation (Unit: mm)		
	A	B	C
20kg	842	1056	1679
40kg	388	470	895
60kg	232	275	611

LGXS16-20	Vertical installation (Unit: mm)	
	A	C
5kg	3473	3473
10kg	1723	1723
16kg	1064	1064

LGXS16-10	Vertical installation (Unit: mm)	
	A	C
10kg	2951	2951
20kg	1438	1438
32kg	870	870

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.

Effective stroke and maximum speed during high acceleration or deceleration

Effective stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Maximum speed (mm/sec)	Lead 40	2400													
	Lead 20	1200													
	Lead 10	600													

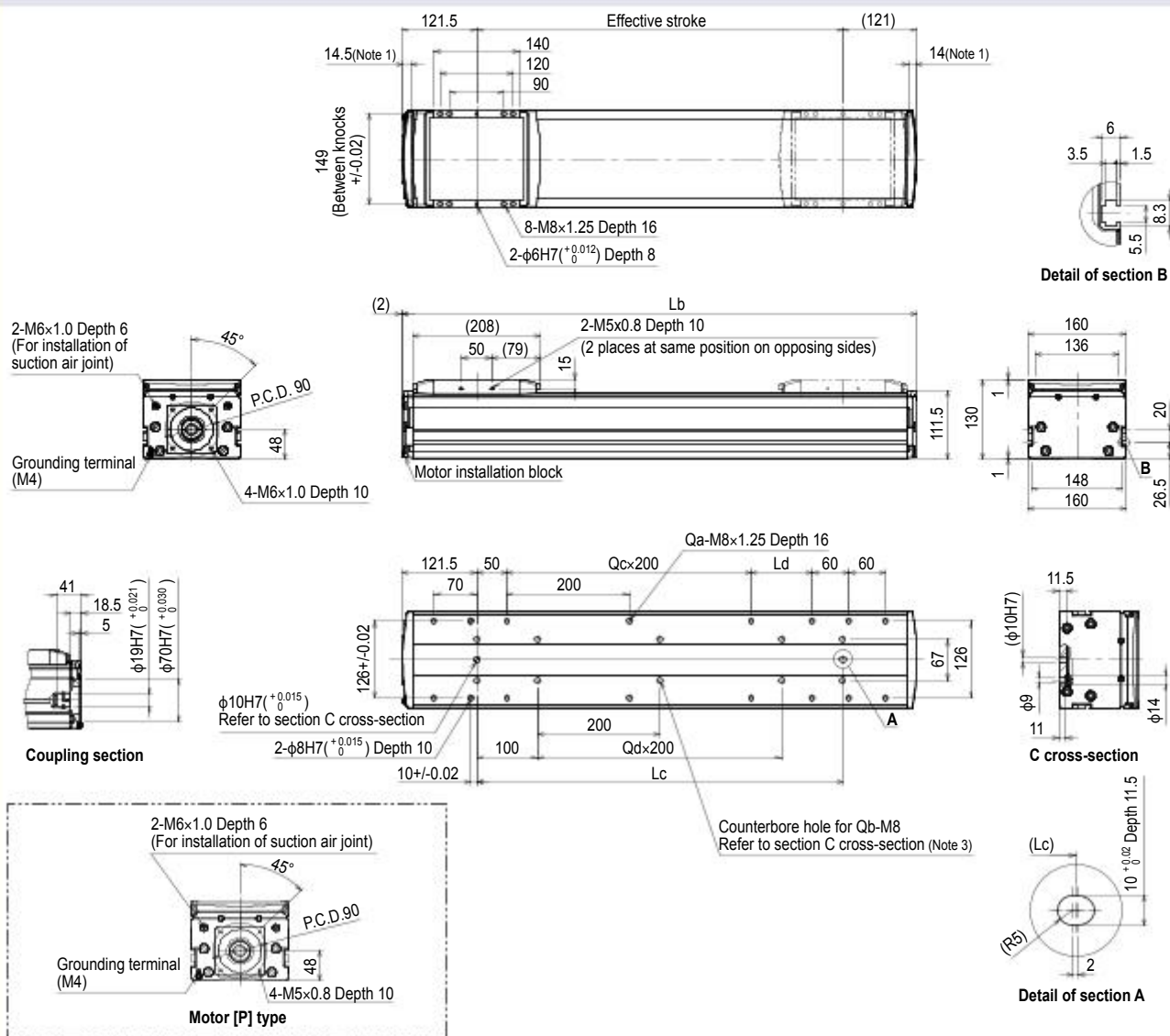
- Note. The bending unit cannot be used for the high agility mode.
 Note. The high agility mode is used in an effective stroke range of 100 to 800 (50 mm pitch).
 Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
 The speed may not reach the maximum speed if the movement distance is short or depending on the operating conditions.
 Note. See P.132 for acceleration/deceleration and inertia moment.

Access the website below.



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

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 $<M8 \times 1.25>$ used to mount the body with the mounting counterbore holes (section C cross-section) must be $<<25 \text{ mm or more}>>$.

The recommended length under head of the hex socket head bolts <M8 x 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 counterbore holes (section C cross-section) to mount the body, remove the seal, and then fix.

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

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
	Lead 20	1200														1080				960	840	720	660	600	540	480		420	360		300
	Lead 10	600														540				480	420	360	330	300	270	240		210	180		150
	Speed setting	—														90%				80%	70%	60%	55%	50%	45%	40%		35%	30%		25%



Ordering method

LGXS20

Model	Lead	Motor specification	Stroke
	40: 40 mm 20: 20 mm 10: 10 mm	No entry: Standard P: P specification (see below)	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 the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration or resonance from actuator will affect service life of actuator. The product performance may not be satisfied depending on the compatible motor.

Specifications

Applicable 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	65 kg	130 kg
	Vertical	15 kg	35 kg
Rated thrust ^{Note 3} (or equivalent)		320 N	640 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.

If the effective stroke exceeds 800 mm, the ball screw may resonate. (Critical speed)

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

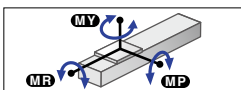
Note 3. The rated thrust and maximum transferable weight are values assuming the attached motor outputs the rated torque.

Note 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.133 for acceleration/deceleration and inertia moment.

Static loading moment



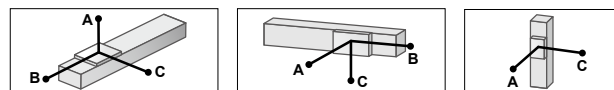
MY	MP	MR
1423	1423	1251

(Unit: N·m)

Adaptable Servo Motor

Specification	Flange size	80
	Wattage	750 W
Motor specification	Manufacturer	Model
No entry	Yaskawa Electric Corp.	SGMJV-08
		SGMJ7-08
	Keyence Corp.	SV-□ 075
		SV2-□ 075
	Mitsubishi Electric Corp.	HF-KP73
		HG-KR73 ^{Note 1}
P	Omron Electronics	HK-KT7M3 ^{Note 1}
		R88M-K75030
		R88M-1M75030
	Panasonic Corp.	MSMD08
		MSMF08
		MHMF08

Allowable overhang ^{Note}



LGXS20-40

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
20kg	5318	2821	2096	20kg	2171	2751	5211	5kg	8187	8187
40kg	4836	1609	1369	40kg	1417	1539	4667	10kg	5203	5203
65kg	4824	1088	1001	65kg	1013	1018	4575	15kg	4810	4810

LGXS20-20

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
50kg	5436	1493	1377	50kg	1390	1423	5265	20kg	3436	3436
80kg	4417	911	854	80kg	849	841	4153	30kg	2600	2600
100kg	4592	756	727	100kg	708	686	4253	35kg	3073	3073
130kg	4338	596	584	130kg	550	526	3933			

LGXS20-10

Horizontal installation (Unit: mm)	A	B	C	Wall installation (Unit: mm)	A	B	C	Vertical installation (Unit: mm)	A	C
40kg	22519	2607	2713	40kg	2704	2537	22210	20kg	5157	5157
80kg	16716	1274	1331	80kg	1293	1204	16141	40kg	2553	2553
120kg	14066	830	868	120kg	818	760	13223	65kg	1600	1600
160kg	12284	608	637	160kg	580	538	11190			

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

Note. Service life is calculated for 600 mm stroke models.

Access the website below.



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

