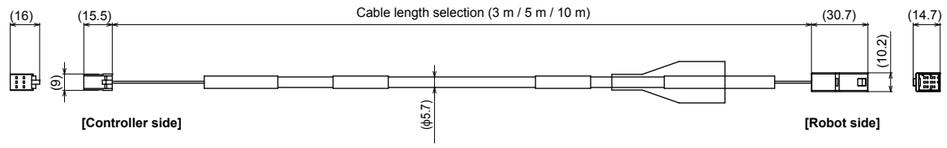
YLEseries Robot cable

* All cables are bending cables.

Flexible encoder cable + Power cable

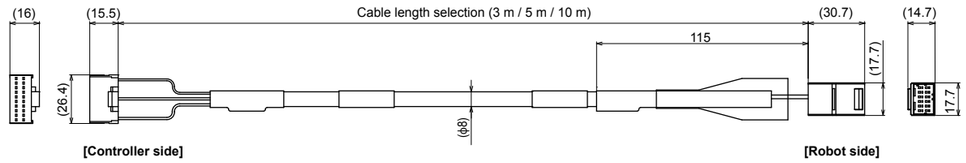
Common for YLE series



Cable length	Product model	Part No.
3m	YLECC-PE-R3	KFB-M4751-31
5m	YLECC-PE-R5	KFB-M4751-51
10m	YLECC-PE-R10	KFB-M4751-A1

Flexible brake cable + Sensor cable

Brake specification Sensor specification



Cable length	Product model	Part No.
3m	YLECC-BS-R3	KFB-M4752-30
5m	YLECC-BS-R5	KFB-M4752-50
10m	YLECC-BS-R10	KFB-M4752-A0

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

201708-AE

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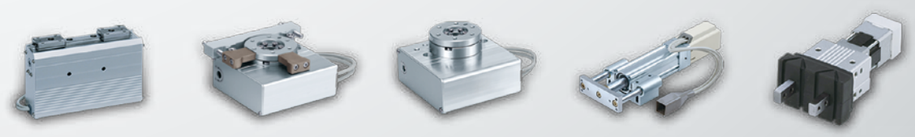
ENGLISH

Single-axis AC servo motor robots

Stepping motor single-axis robots

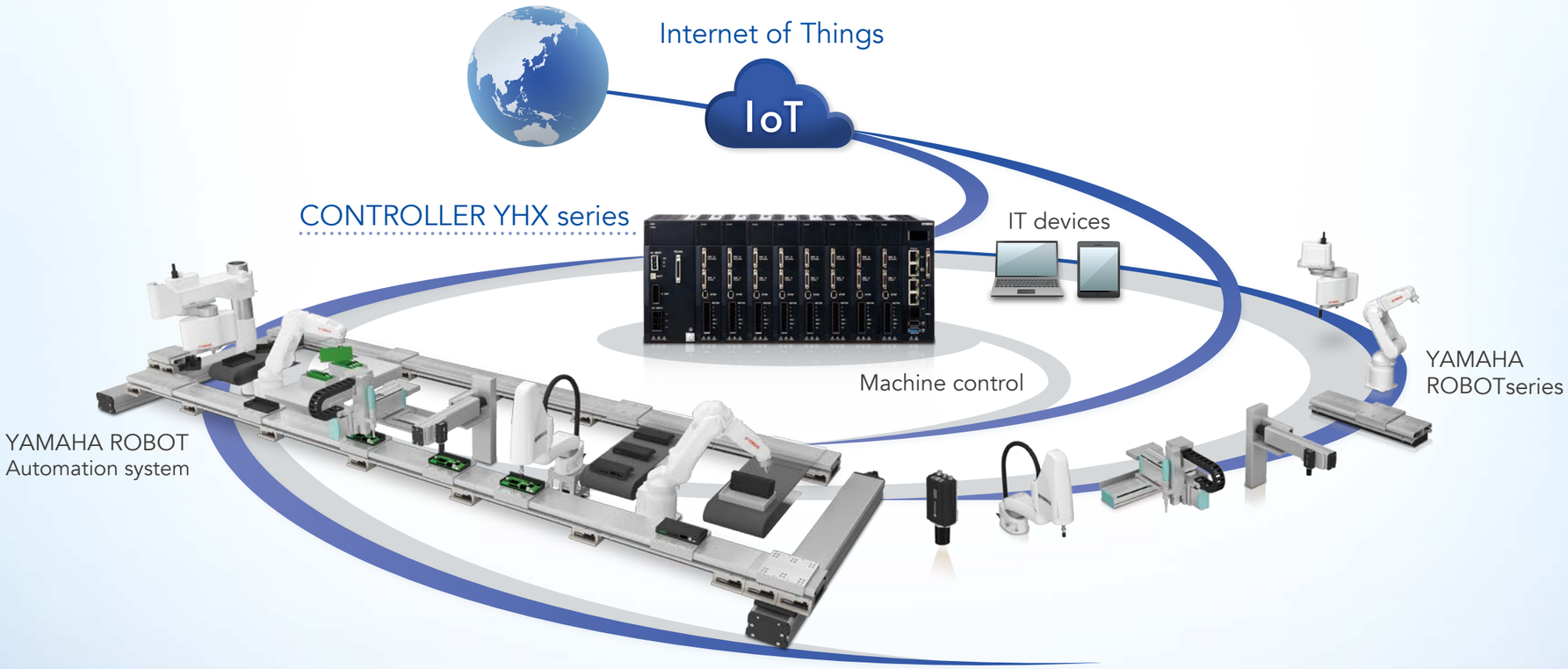
GX | YLE

series



Yamaha's own unique univerersal robot control concept offers Total Optimization of your production line.

Helps building fully automated production line efficiently at lower cost in a short period of time. YAMAHA's Advanced Robotics Automation Platform in the product lineup is a good match with IoT.
Full range of robotic products used for various automated processes including transport, handling, assembly, and image recognition have been completely renewed. The newly released Universal Controller YHX series enables cooperative and synchronous control of the Yamaha robotic products. In addition, the linear conveyor module LCM-X series, new SCARA robot YKX series, single-axis robot GX and YLE series, and robot vision system YFAEYE are being released.
Yamaha is proud to offer this new product lineup providing solutions to the challenges in today's manufacturing scenes, and dramatically accelerate automated production to maximize your return of investment.



Advanced Robotics Automation Platform

The new universal control robot system that sharpens your competitive edge

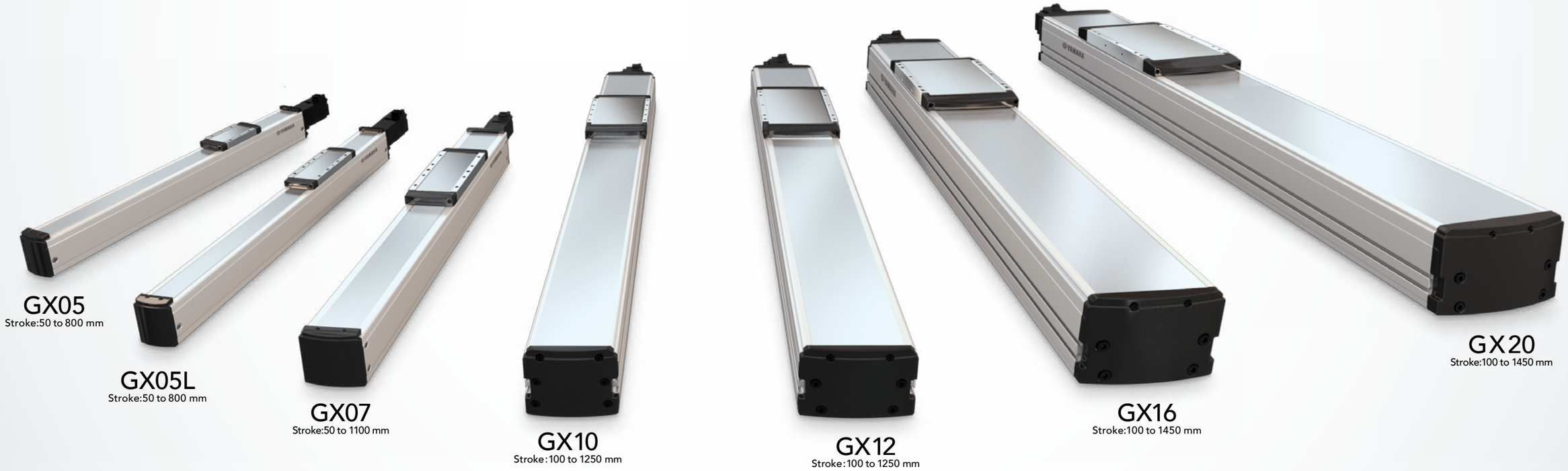
GX series

Single-axis AC servo motor robot

Highly efficient, highly accurate ground ball screws are now standard feature for all types and models.

The high precision models with reliability and durability

All models to accuracy class C5



Specification

Type	Model	Motor output AC (W)	Repeat-ability (mm)	Ballscrew diameter [Class C5]	Size (mm) Note 1	Overall length (mm) Horizontal	Overall length (mm) Vertical	Lead (mm)	Maximum payload (kg) Horizontal	Maximum payload (kg) Vertical	Rated thrust (N)	Maximum speed (mm/se) Note 2	Stroke (mm) [50 increment]
Small type	GX05	50	+/-0.005	ϕ 12	W48 × H65	ST +188	ST +228.5	20	5	2	41	1333	50 to 800
								10	8	4	69	666	
								5	13	8	138	333	
	GX05L	100		ϕ 12	W48 × H65	ST +230	ST +270.5	20	12	3	84	1333	
								10	24	6	169	666	
								5	32	12	339	333	
	GX07	100		ϕ 15	W70 × H76.5	ST +270.5	ST +311	30	10	2	56	1800	50 to 1100
								20	25	4	84	1200	
								10	45	8	169	600	
								5	85	16	339	300	

Note 1. The size shows approximate maximum cross sectional size.

Type	Model	Motor output AC (W)	Repeat-ability (mm)	Ballscrew diameter [Class C5]	Size (mm) Note 1	Overall length (mm) Horizontal	Overall length (mm) Vertical	Lead (mm)	Maximum payload (kg) Horizontal	Maximum payload (kg) Vertical	Rated thrust (N)	Maximum speed (mm/se) Note 2	Stroke (mm) [50 increment]
Medium type	GX10	200	+/-0.005	ϕ 15	W100 × H99.5	ST +245	ST +285.5	30	25	4	113	1800	100 to 1250
								20	40	8	170	1200	
								10	80	20	341	600	
								5	100	30	683	300	
	GX12	400			W125 × H101	ST +297	ST +337.5	30	35	8	225	1800	100 to 1250
								20	50	15	339	1200	
								10	95	25	678	600	
								5	115	45	1360	300	
Large type	GX16	750		ϕ 20	W160 × H130	ST +339.5	ST +386.5	40	45	12	320	2400	100 to 1450
								20	95	28	640	1200	
								10	130	55	1280	600	
	GX20				W200 × H140	ST +385.5	ST +432.5	40	65	15	415	2400	100 to 1450
								20	130	35	640	1200	
								10	160	65	1280	600	

Note 2. The maximum speed will vary according to the stroke length. Refer to the descriptions of each model (pages 08 to 14) for details.

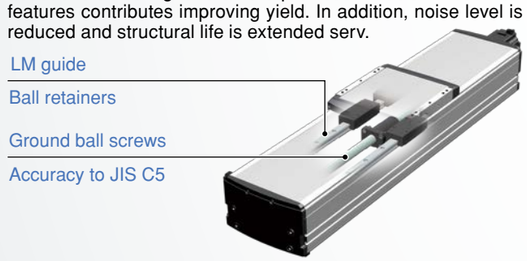
GX series

Single-axis AC servo motor robot

+/-5 µm positioning repeatability ensured for all models
Made to the clean specification as a standard feature

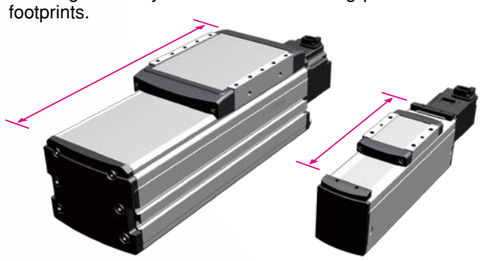
■ High precision, high rigidity, high durability Reliability

All product models employ highly efficient, highly accurate ground ball screws as the standard features. The lead accuracy complies with JIS accuracy class C5 that brings about the positioning accuracy repeatability of +/-5 µm. The accuracy is about two times higher than the previous models. These new features contributes improving yield. In addition, noise level is reduced and structural life is extended serv.



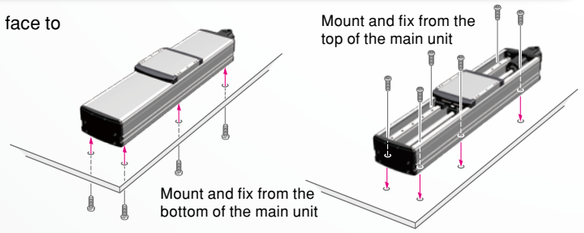
■ Shortest overall length in the industry Save space

The industry's shortest class is achieved for the total length in relation to the operation stroke.
This significantly contributes to saving production facility footprints.



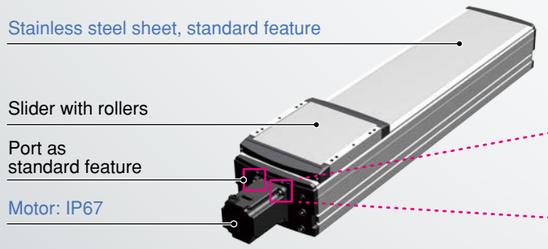
■ All models can be mounted (fixed) from the top surface or bottom surface Usability Save space

The main unit can be fixed from ether the bottom face or top face to respond to the system's densification and space saving.

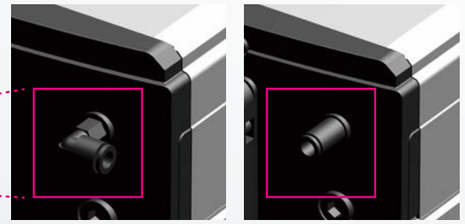


■ Clean specification as a standard feature Environment resistance

Dust-proof structure...Upper surface of main frame of all models is protected with durable stainless steel dust shield. This structure helps reducing foreign particle contamination from outside. By applying negative air pressure from suction port it can be used in a clean environment.



■Simply install suction joint



■ Battery-less absolute system / No origin process needed Usability

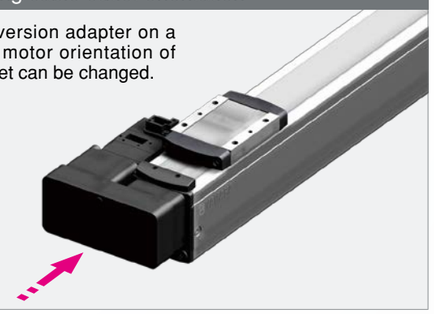
The complete absolute method is adopted so there is no need to perform return-to-origin when restart and initial start up process.
The battery-less absorber is also supported.

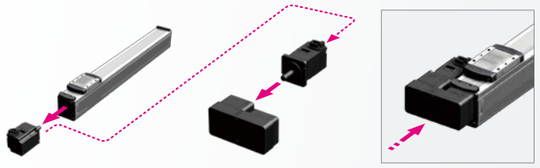
■ Easy to alter specifications Usability Save space

Options available for retrofit

Converting cable outlet orientation

With conversion adapter on a standard motor orientation of cable outlet can be changed.





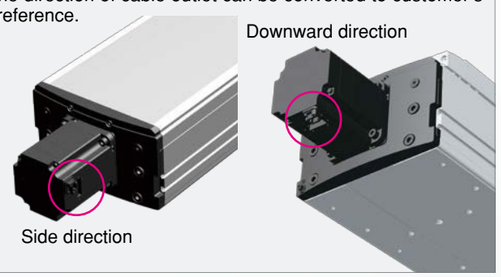
Standard model + Conversion adapter ▶ Motor folded type

Simply remove the motor from the robot body, set it onto the conversion adapter, and then mount onto the body again.

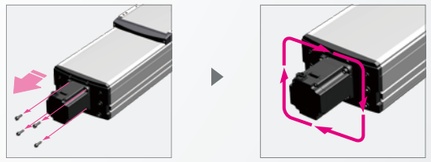
* The mounting reference drawing (outline dimensions) of the bending unit is provided on page 15.

Changing the location of robot cable outlet

The direction of cable outlet can be converted to customer's preference.

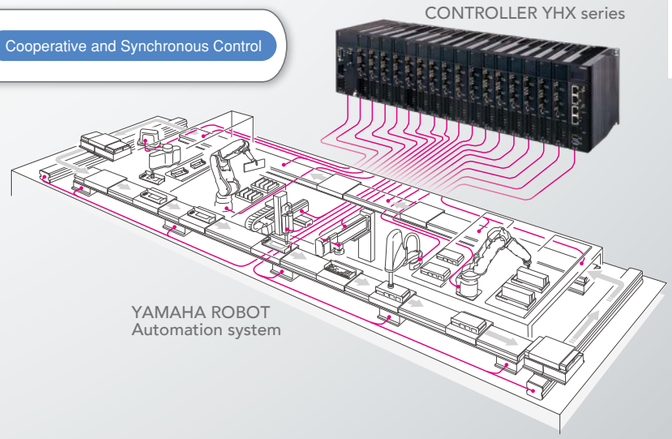


Unscrew motor fixing bolts ▶ Reposition the motor



■ Total system control by Universal Controller YHX series Cooperative and Synchronous Control

Synchronously control all robots in production line by Universal Controller YHX series.



GX05

Single-axis AC servo motor robot

Ordering method

GX05 – [ ] – [ ] – [ ] – [ ] – [ ]

Model	Lead	Motor specification	Stroke	Robot cable length	Robot cable entry location
	20: 20mm 10: 10mm 5: 5mm	S40: Standard / With no brake BK40: Standard / With brake BL40: Battery-less absorber / With no brake BKBL40: Battery-less absorber / With brake	50 to 800 (50mm pitch)	R3: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor

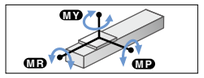
Note. The robot cable dimensions drawing is provided on page 16.
Note. All robot cables are flexible cables.

Specifications

AC servo motor output		50 W	
Repeatability Note 1		+/-0.005	
Deceleration mechanism		Ground ball screw ϕ 12 (Class C5)	
Stroke		50 mm to 800 mm (50mm pitch)	
Maximum speed Note 2		1333 mm/sec	666 mm/sec	333 mm/sec
Ball screw lead		20 mm	10 mm	5 mm
Maximum payload	Horizontal	5 kg	8 kg	13 kg
	Vertical	2 kg	4 kg	8 kg
Rated thrust		41 N	69 N	138 N
Maximum dimensions of cross section of main unit		W 48 mm × H 65 mm	
Overall length (Horizontal)		ST + 188 mm	
Overall length (Vertical)		ST + 228.5 mm	
Degree of cleanliness Note 3		ISO CLASS 3 (ISO14644-1) or equivalent	
Intake air Note 4		30 Nℓ/min to 100 Nℓ/min	
Controller		YHX series	

Note 1. Positioning repeatability in one direction.
Note 2. The maximum speed may not be reached if the travel distance is short or because of other operation conditions.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanness is the cleanliness when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.

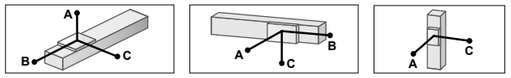
Static loading moment



(Unit: N·m)

MP	MY	MR
27	24	23

Allowable overhang Note



GX05-20

Horizontal installation (Unit: mm)

	A	B	C
2kg	900	270	351
5kg	583	112	159

Wall installation (Unit: mm)

	A	B	C
2kg	324	234	812
5kg	119	76	427

Vertical installation (Unit: mm)

	A	C
1kg	454	454
2kg	218	218

GX05-10

Horizontal installation (Unit: mm)

	A	B	C
2kg	2506	382	625
5kg	1368	149	246
8kg	1038	90	150

Wall installation (Unit: mm)

	A	B	C
2kg	585	346	2387
5kg	195	113	1165
8kg	95	54	747

Vertical installation (Unit: mm)

	A	C
1kg	732	732
2kg	351	351
4kg	160	160

GX05-5

Horizontal installation (Unit: mm)

	A	B	C
3kg	4635	281	497
8kg	2211	101	179
13kg	1599	59	105

Wall installation (Unit: mm)

	A	B	C
3kg	439	245	4401
8kg	117	65	1826
13kg	42	24	1006

Vertical installation (Unit: mm)

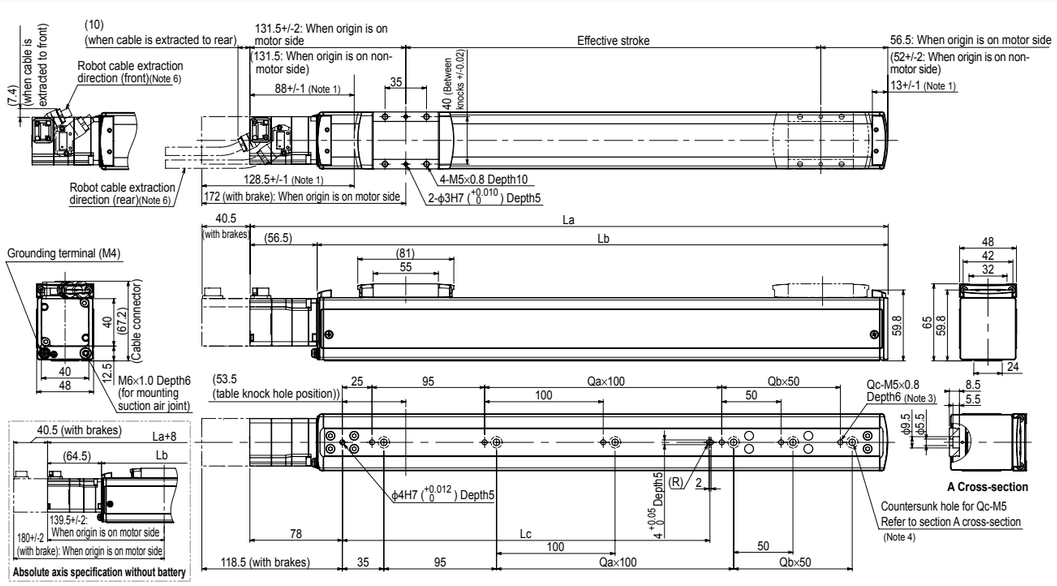
	A	C
4kg	183	183
6kg	111	111
8kg	75	75

Note. Distance from center of slider upper surface to carrier center-of-gravity at a guide service life of 10,000 km.
Note. Service life is calculated for 600mm stroke models.

Robot cable Product model

R3R (3 m/extracted to rear)	
Encoder cable	GXCC-ENC-R3R
Power cable	GXCC-UVW40-R3R
R5R (5 m/extracted to rear)	
Encoder cable	GXCC-ENC-R5R
Power cable	GXCC-UVW40-R5R
R10R (10 m/extracted to rear)	
Encoder cable	GXCC-ENC-R10R
Power cable	GXCC-UVW40-R10R
R3F (3 m/extracted to front)	
Encoder cable	GXCC-ENC-R3F
Power cable	GXCC-UVW40-R3F
R5F (5 m/extracted to front)	
Encoder cable	GXCC-ENC-R5F
Power cable	GXCC-UVW40-R5F
R10F (10 m/extracted to front)	
Encoder cable	GXCC-ENC-R10F
Power cable	GXCC-UVW40-R10F

GX05



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Adjustments are required when changing the return-to-origin direction. (The standard origin is on the motor side.)
Note 3. When using the tap holes to mount the body, remove the set screws first.

Effective stroke		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
La		238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988
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) Note 5		1.5	1.7	1.8	2	2.1	2.3	2.5	2.6	2.8	2.9	3.1	3.2	3.4	3.5	3.7	3.8
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 4. 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 x 0.8) used must be 15mm or less.
Note 5. This is the weight without brakes. When brakes are mounted, the weight will be 0.2 kg heavier than the body weight given in the table.
Note 6. The specifications of the robot cable will vary according to the extraction direction.
Note 7. When secured in place, the minimum bending radius of the robot cable is R30.

GX05L

Single-axis AC servo motor robot

Ordering method

GX05L – [ ] – [ ] – [ ] – [ ] – [ ]

Model	Lead	Motor specification	Stroke	Robot cable length	Robot cable entry location
	20: 20mm 10: 10mm 5: 5mm	S40: Standard / With no brake BK40: Standard / With brake BL40: Battery-less absorber / With no brake BKBL40: Battery-less absorber / With brake	50 to 800 (50mm pitch)	R3: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor

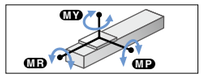
Note. The robot cable dimensions drawing is provided on page 16.
Note. All robot cables are flexible cables.

Specifications

AC servo motor output		100 W	
Repeatability Note 1		+/-0.005	
Deceleration mechanism		Ground ball screw ϕ 12 (Class C5)	
Stroke		50 mm to 800 mm (50mm pitch)	
Maximum speed Note 2		1333 mm/sec	666 mm/sec	333 mm/sec
Ball screw lead		20 mm	10 mm	5 mm
Maximum payload	Horizontal	12 kg	24 kg	32 kg
	Vertical	3 kg	6 kg	12 kg
Rated thrust		84 N	169 N	339 N
Maximum dimensions of cross section of main unit		W 48 mm × H 65 mm	
Overall length (Horizontal)		ST + 230 mm	
Overall length (Vertical)		ST + 270.5 mm	
Degree of cleanliness Note 3		ISO CLASS 3 (ISO14644-1) or equivalent	
Intake air Note 4		30 Nℓ/min to 100 Nℓ/min	
Controller		YHX series	

Note 1. Positioning repeatability in one direction.
Note 2. The maximum speed may not be reached if the travel distance is short or because of other operation conditions.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanness is the cleanliness when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.

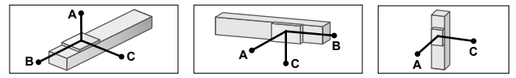
Static loading moment



(Unit: N·m)

MP	MY	MR
72	72	64

Allowable overhang Note



GX05L-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

GX05L-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

GX05L-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)

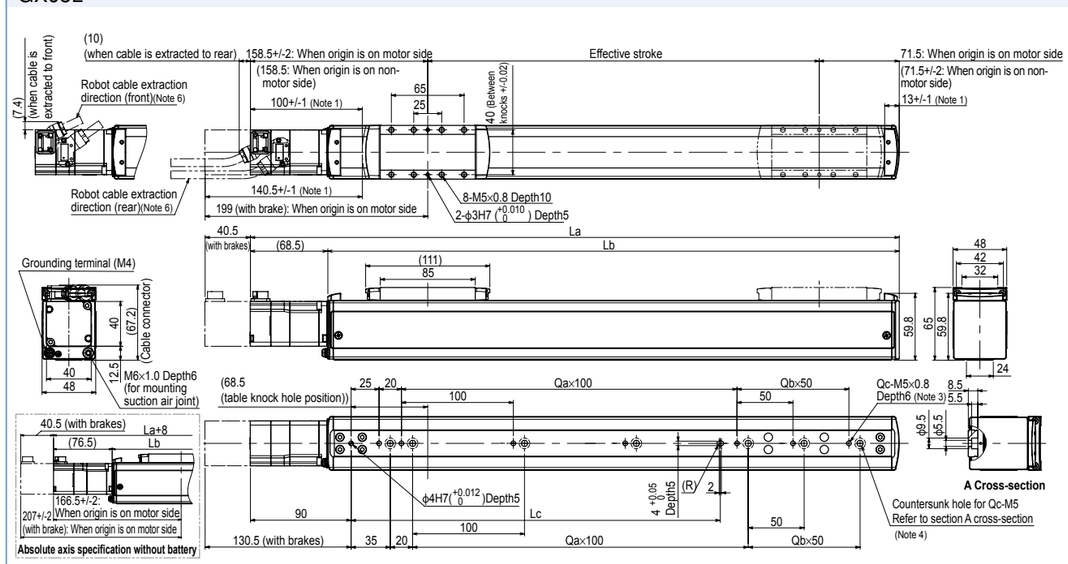
	A	C
5kg	501	501
10kg	235	235
12kg	190	190

Note. Distance from center of slider upper surface to carrier center-of-gravity at a guide service life of 10,000 km.
Note. Service life is calculated for 600mm stroke models.

Robot cable Product model

R3R (3 m/extracted to rear)	
Encoder cable	GXCC-ENC-R3R
Power cable	GXCC-UVW40-R3R
R5R (5 m/extracted to rear)	
Encoder cable	GXCC-ENC-R5R
Power cable	GXCC-UVW40-R5R
R10R (10 m/extracted to rear)	
Encoder cable	GXCC-ENC-R10R
Power cable	GXCC-UVW40-R10R
R3F (3 m/extracted to front)	
Encoder cable	GXCC-ENC-R3F
Power cable	GXCC-UVW40-R3F
R5F (5 m/extracted to front)	
Encoder cable	GXCC-ENC-R5F
Power cable	GXCC-UVW40-R5F
R10F (10 m/extracted to front)	
Encoder cable	GXCC-ENC-R10F
Power cable	GXCC-UVW40-R10F

GX05L



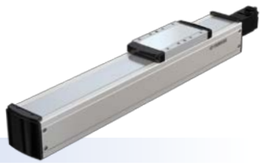
Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Adjustments are required when changing the return-to-origin direction. (The standard origin is on the motor side.)
Note 3. When using the tap holes to mount the body, remove the set screws first.
Note 4. When using 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 x 0.8) used must be 15mm or less.

Effective stroke		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
La		280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030
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) Note 5		1.8	1.9	2.1	2.2	2.4	2.6	2.7	2.9	3	3.2	3.3	3.5	3.6	3.8	3.9	4.1
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 5. This is the weight without brakes. When brakes are mounted, the weight will be 0.2 kg heavier than the body weight given in the table.
Note 6. The specifications of the robot cable will vary according to the extraction direction.
Note 7. When secured in place, the minimum bending radius of the robot cable is R30.

GX07

Single-axis AC servo motor robot



Ordering method

GX07 - [ ] - [ ] - [ ] - [ ] - [ ]

Model	Lead	Motor specification	Stroke	Robot cable length	Robot cable entry location
	30: 30mm 20: 20mm 10: 10mm 5: 5mm	S40: Standard / With no brake BK40: Standard / With brake BL40: Battery-less absorber / With no brake BKBL40: Battery-less absorber / With brake	50 to 1100 (50mm pitch)	R3: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor

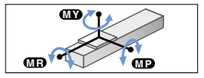
Note. The robot cable dimensions drawing is provided on page 16.
Note. All robot cables are flexible cables.

Specifications

AC servo motor output	100 W			
Repeatability Note 1	+/-0.005			
Deceleration mechanism	Ground ball screw ϕ 15 (Class C5)			
Stroke	50 mm to 1100 mm (50mm pitch)			
Maximum speed 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 Horizontal	10 kg	25 kg	45 kg	85 kg
Maximum payload Vertical	2 kg	4 kg	8 kg	16 kg
Rated thrust	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 (Horizontal)	ST + 270.5 mm			
Overall length (Vertical)	ST + 311 mm			
Degree of cleanliness Note 3	ISO CLASS 3 (ISO14644-1) or equivalent			
Intake air Note 4	30 Nℓ/min to 115 Nℓ/min			
Controller	YHX series			

Note 1. Positioning repeatability in one direction.
Note 2. The maximum speed may not be reached if the travel distance is short or because of other operation conditions.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.

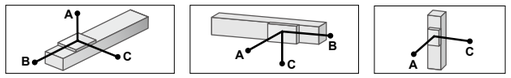
Static loading moment



(Unit: N·m)

MP	MY	MR
121	138	121

Allowable overhang Note



GX07-30

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

GX07-20

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

GX07-10

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

GX07-5

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 upper surface to carrier center-of-gravity at a guide service life of 10,000 km.
Note. Service life is calculated for 600mm stroke models.

Robot cable Product model

R3R (3 m/extracted to rear)	
Encoder cable	GXCC-ENC-R3R
Power cable	GXCC-UVW40-R3R

R5R (5 m/extracted to rear)	
Encoder cable	GXCC-ENC-R5R
Power cable	GXCC-UVW40-R5R

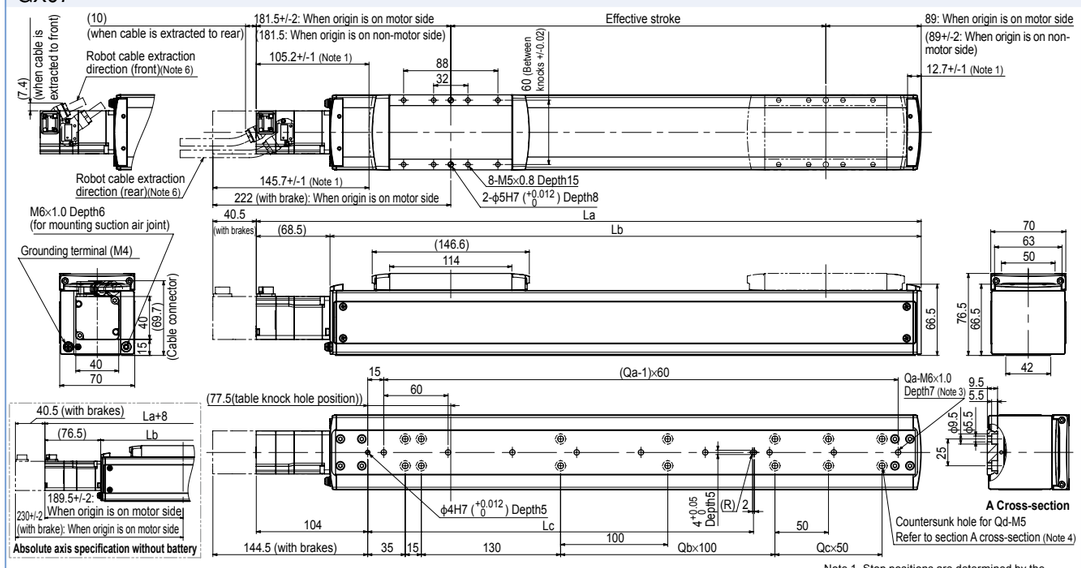
R10R (10 m/extracted to rear)	
Encoder cable	GXCC-ENC-R10R
Power cable	GXCC-UVW40-R10R

R3F (3 m/extracted to front)	
Encoder cable	GXCC-ENC-R3F
Power cable	GXCC-UVW40-R3F

R5F (5 m/extracted to front)	
Encoder cable	GXCC-ENC-R5F
Power cable	GXCC-UVW40-R5F

R10F (10 m/extracted to front)	
Encoder cable	GXCC-ENC-R10F
Power cable	GXCC-UVW40-R10F

GX07



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	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5
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) Note 5	3.6	3.8	4.1	4.4	4.7	4.9	5.2	5.5	5.7	6	6.3	6.6	6.8	7.1	7.4	7.6	7.9	8.2	8.5	8.7	9	9.3
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. Adjustments are required when changing the return-to-origin direction. (The standard origin is on the motor side.)
Note 3. When using the tap holes to mount the body, remove the set screws first.
Note 4. When using the countersunk holes (section A cross-section) to mount the body, remove the cap from the inner side and then fix.
Note 5. This is the weight without brakes. When brakes are mounted, the weight will be 0.2 kg heavier than the body weight given in the table.
Note 6. The specifications of the robot cable will vary according to the extraction direction.
Note 7. When secured in place, the minimum bending radius of the robot cable is R30.

GX10

Single-axis AC servo motor robot

Ordering method

GX10 - [ ] - [ ] - [ ] - [ ] - [ ]

Model	Lead	Motor specification	Stroke	Robot cable length	Robot cable entry location
	30: 30mm 20: 20mm 10: 10mm 5: 5mm	S60: Standard / With no brake BK60: Standard / With brake BL60: Battery-less absorber / With no brake BKBL60: Battery-less absorber / With brake	100 to 1250 (50mm pitch)	R3: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor

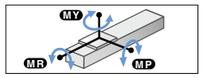
Note. The robot cable dimensions drawing is provided on page 17.
Note. All robot cables are flexible cables.

Specifications

AC servo motor output	200 W			
Repeatability Note 1	+/-0.005			
Deceleration mechanism	Ground ball screw ϕ 15 (Class C5)			
Stroke	100 mm to 1250 mm (50mm pitch)			
Maximum speed 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 Horizontal	25 kg	40 kg	80 kg	100 kg
Maximum payload Vertical	4 kg	8 kg	20 kg	30 kg
Rated thrust	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 (Horizontal)	ST + 245 mm			
Overall length (Vertical)	ST + 285.5 mm			
Degree of cleanliness Note 3	ISO CLASS 3 (ISO14644-1) or equivalent			
Intake air Note 4	30 Nℓ/min to 90 Nℓ/min			
Controller	YHX series			

Note 1. Positioning repeatability in one direction.
Note 2. The maximum speed may not be reached if the travel distance is short or because of other operation conditions.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanness is the cleanliness when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.

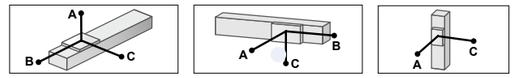
Static loading moment



(Unit: N·m)

MP	MY	MR
274	274	241

Allowable overhang Note



GX10-30

Horizontal installation (Unit: mm)

	A	B	C
10kg	2015	854	491
20kg	2407	509	324
25kg	2853	437	286

Wall installation (Unit: mm)

	A	B	C
10kg	449	775	1317
20kg	216	347	868
25kg	179	279	851

Vertical installation (Unit: mm)

	A	C
1kg	6310	6310
4kg	1529	1529

GX10-20

Horizontal installation (Unit: mm)

	A	B	C
15kg	3014	707	452
25kg	2079	408	261
40kg	1838	263	173

Wall installation (Unit: mm)

	A	B	C
15kg	434	643	2815
25kg	234	344	1817
40kg	137	199	1481

Vertical installation (Unit: mm)

	A	C
3kg	3267	3267
6kg	1646	1646
8kg	1233	1233

GX10-10

Horizontal installation (Unit: mm)

	A	B	C
30kg	3187	474	324
50kg	2190	268	183
80kg	1561	152	104

Wall installation (Unit: mm)

	A	B	C
30kg	285	410	2992
50kg	142	204	1922
80kg	61	88	1164

Vertical installation (Unit: mm)

	A	C
5kg	2965	2965
10kg	1456	1456
20kg	699	699

GX10-5

Horizontal installation (Unit: mm)

	A	B	C
30kg	10500	508	355
50kg	6974	289	202
80kg	5138	165	116
100kg	4618	124	87

Wall installation (Unit: mm)

	A	B	C
30kg	312	444	9984
50kg	158	225	6309
80kg	71	101	4113
100kg	42	60	3217

Vertical installation (Unit: mm)

	A	C
10kg	1577	1577
20kg	756	756
30kg	483	483

Note. Distance from center of slider upper surface to carrier center-of-gravity at a guide service life of 10,000 km.
Note. Service life is calculated for 600mm stroke models.

Robot cable Product model

R3R (3 m/extracted to rear)	
Encoder cable	GXCC-ENC-R3R
Power cable	GXCC-UVW60-R3R

R5R (5 m/extracted to rear)	
Encoder cable	GXCC-ENC-R5R
Power cable	GXCC-UVW60-R5R

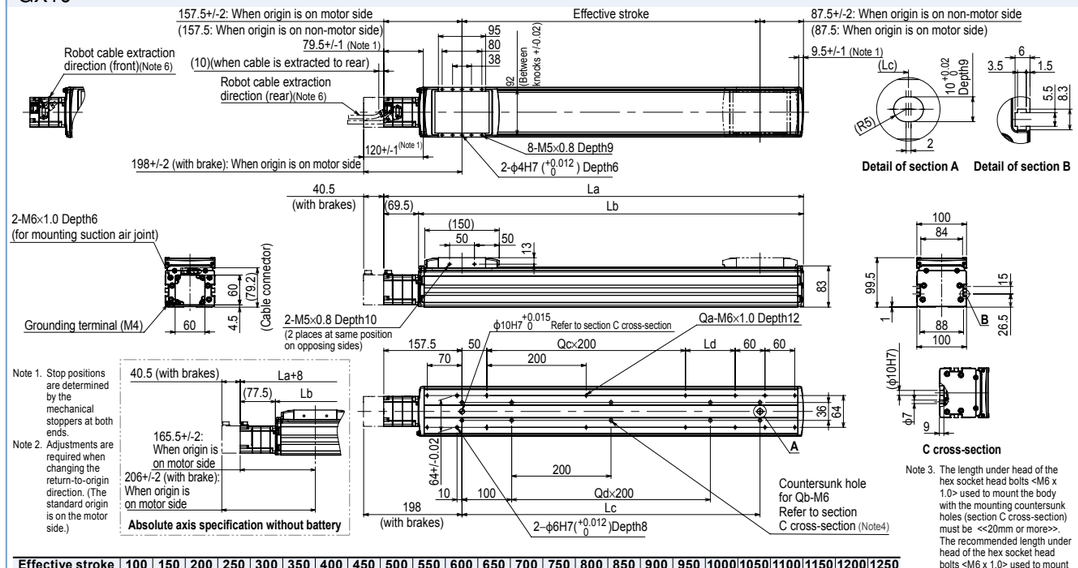
R10R (10 m/extracted to rear)	
Encoder cable	GXCC-ENC-R10R
Power cable	GXCC-UVW60-R10R

R3F (3 m/extracted to front)	
Encoder cable	GXCC-ENC-R3F
Power cable	GXCC-UVW60-R3F

R5F (5 m/extracted to front)	
Encoder cable	GXCC-ENC-R5F
Power cable	GXCC-UVW60-R5F

R10F (10 m/extracted to front)	
Encoder cable	GXCC-ENC-R10F
Power cable	GXCC-UVW60-R10F

GX10



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Adjustments are required when changing the return-to-origin direction. (The standard origin is on the motor side.)

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
La	345	395	445	495	545	595	645	695	745	795	845	895	945	995	1045	1095	1145	1195	1245	1295	1345	1395	1445	1495
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) Note 5	5.4	5.9	6.4	6.9	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9
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 3. The length under head of the hex socket head bolts <M6 x 1.0> used to mount the body with the mounting countersunk holes (section C cross-section) must be <<20mm or more>>. The recommended length under head of the hex socket head bolts <M6 x 1.0> used to mount the body with the mounting tap hole specifications is <<frame thickness + 10 mm or less>>.
Note 4. When using the mounting countersunk holes (section C cross-section) to mount the body, remove the seal, and then fix.
Note 5. This is the weight without brakes. When brakes are mounted, the weight will be 0.5 kg heavier than the body weight given in the table.
Note 6. The specifications of the robot cable will vary according to the extraction direction.
Note 7. When secured in place, the minimum bending radius of the robot cable is R30.

GX12

Single-axis AC servo motor robot

Ordering method

GX12 – [ ] – [ ] – [ ] – [ ] – [ ]

Model	Lead	Motor specification	Stroke	Robot cable length	Robot cable entry location
	30: 30mm 20: 20mm 10: 10mm 5: 5mm	S60: Standard / With no brake BK60: Standard / With brake BL60: Battery-less absorber / With no brake BKBL60: Battery-less absorber / With brake	100 to 1250 (50mm pitch)	R3: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor

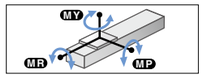
Note. The robot cable dimensions drawing is provided on page 17.
Note. All robot cables are flexible cables.

Specifications

AC servo motor output	400 W				
Repeatability Note 1	+/-0.005				
Deceleration mechanism	Ground ball screw ϕ 15 (Class C5)				
Stroke	100 mm to 1250 mm (50mm pitch)				
Maximum speed 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 Horizontal	35 kg	50 kg	95 kg	115 kg	
Maximum payload Vertical	8 kg	15 kg	25 kg	45 kg	
Rated thrust	225 N	339 N	678 N	1360 N	
Maximum dimensions of cross section of main unit	W 125 mm × H 101 mm				
Overall length (Horizontal)	ST + 297 mm				
Overall length (Vertical)	ST + 337.5 mm				
Degree of cleanliness Note 3	ISO CLASS 3 (ISO14644-1) or equivalent				
Intake air Note 4	30 Nℓ/min to 90 Nℓ/min				
Controller	YHX series				

Note 1. Positioning repeatability in one direction.
Note 2. The maximum speed may not be reached if the travel distance is short or because of other operation conditions.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanness is the cleanliness when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.

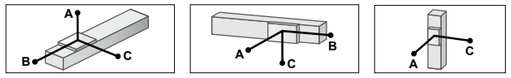
Static loading moment



(Unit: N·m)

MP	MY	MR
334	334	294

Allowable overhang Note



GX12-30

Horizontal installation (Unit: mm)

	A	B	C
10kg	2787	1655	986
20kg	2047	829	521
35kg	2591	556	387

Wall installation (Unit: mm)

	A	B	C
10kg	998	1590	2711
20kg	520	764	1918
35kg	366	491	2349

Vertical installation (Unit: mm)

	A	C
3kg	4041	4041
6kg	1988	1988
8kg	1475	1475

GX12-20

Horizontal installation (Unit: mm)

	A	B	C
15kg	3452	1397	950
30kg	2037	675	464
50kg	1433	386	267

Wall installation (Unit: mm)

	A	B	C
15kg	940	1333	3363
30kg	439	610	1916
50kg	235	321	1266

Vertical installation (Unit: mm)

	A	C
5kg	3712	3712
10kg	1865	1865
15kg	1252	1252

GX12-10

Horizontal installation (Unit: mm)

	A	B	C
30kg	4805	946	712
50kg	3787	549	414
80kg	3880	326	247
95kg	4168	267	202

Wall installation (Unit: mm)

	A	B	C
30kg	673	881	4676
50kg	372	484	3584
80kg	202	261	3419
95kg	156	202	3479

Vertical installation (Unit: mm)

	A	C
10kg	2861	2861
15kg	1888	1888
25kg	1109	1109

GX12-5

Horizontal installation (Unit: mm)

	A	B	C
30kg	16945	1013	783
50kg	11457	589	455
80kg	8525	350	271
115kg	6958	229	177

Wall installation (Unit: mm)

	A	B	C
30kg	736	948	16566
50kg	407	524	10982
80kg	222	286	7855
115kg	128	165	6004

Vertical installation (Unit: mm)

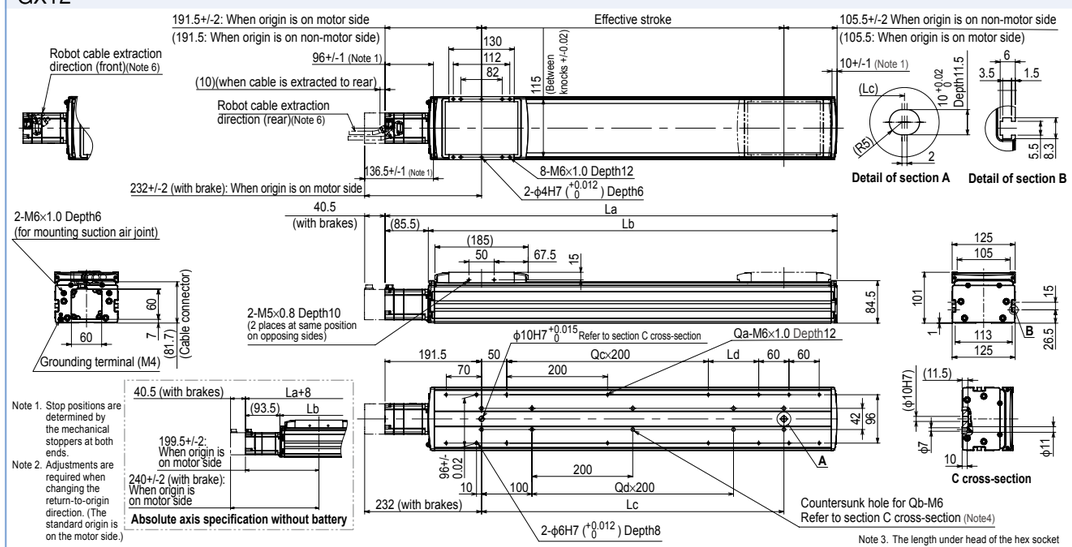
	A	C
15kg	2050	2050
30kg	994	994
45kg	642	642

Note. Distance from center of slider upper surface to carrier center-of-gravity at a guide service life of 10,000 km.
Note. Service life is calculated for 600mm stroke models.

Robot cable Product model

R3R (3 m/extracted to rear)	
Encoder cable	GXCC-ENC-R3R
Encoder cable	GXCC-UVW60-R3R
R5R (5 m/extracted to rear)	
Encoder cable	GXCC-ENC-R5R
Encoder cable	GXCC-UVW60-R5R
R10R (10 m/extracted to rear)	
Encoder cable	GXCC-ENC-R10R
Encoder cable	GXCC-UVW60-R10R
R3F (3 m/extracted to front)	
Encoder cable	GXCC-ENC-R3F
Encoder cable	GXCC-UVW60-R3F
R5F (5 m/extracted to front)	
Encoder cable	GXCC-ENC-R5F
Encoder cable	GXCC-UVW60-R5F
R10F (10 m/extracted to front)	
Encoder cable	GXCC-ENC-R10F
Encoder cable	GXCC-UVW60-R10F

GX12



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Adjustments are required when changing the return-to-origin direction. (The standard origin is on the motor side.)

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
La	397	447	497	547	597	647	697	747	797	847	897	947	997	1047	1097	1147	1197	1247	1297	1347	1397	1447	1497	1547
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) Note 5	7.6	8.2	8.9	9.6	10.2	10.9	11.6	12.3	12.9	13.6	14.3	15	15.6	16.3	17	17.6	18.3	19	19.7	20.3	21	21.7	22.4	23
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
Speed setting	–													85%	75%	65%	55%	50%	45%	40%	35%	30%		25%

Note 3. The length under head of the hex socket head bolts <M6 x 1.0> used to mount the body with the mounting countersunk holes (section C cross-section) must be <<20mm or more>>. The recommended length under head of the hex socket head bolts <M6 x 1.0> used to mount the body with the mounting tap hole specifications is <<frame thickness + 10 mm or less>>.
Note 4. When using the mounting countersunk holes (section C cross-section) to mount the body, remove the seal, and then fix.
Note 5. This is the weight without brakes. When brakes are mounted, the weight will be 0.5 kg heavier than the body weight given in the table.
Note 6. The specifications of the robot cable will vary according to the extraction direction.
Note 7. When secured in place, the minimum bending radius of the robot cable is R30.

GX16

Single-axis AC servo motor robot

Ordering method

GX16 – [ ] – [ ] – [ ] – [ ] – [ ]

Model	Lead	Motor specification	Stroke	Robot cable length	Robot cable entry location
	40: 40mm 20: 20mm 10: 10mm	S80: Standard / With no brake BK80: Standard / With brake BL80: Battery-less absorber / With no brake BKBL80: Battery-less absorber / With brake	100 to 1450 (50mm pitch)	R3: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor

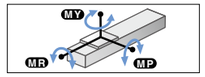
Note. The robot cable dimensions drawing is provided on page 17.
Note. All robot cables are flexible cables.

Specifications

AC servo motor output	750 W			
Repeatability Note 1	+/-0.005			
Deceleration mechanism	Ground ball screw ϕ 20 (Class C5)			
Stroke	100 mm to 1450 mm (50mm pitch)			
Maximum speed Note 2	2400 mm/sec	1200 mm/sec	600 mm/sec	
Ball screw lead	40 mm	20 mm	10 mm	
Maximum payload Horizontal	45 kg	95 kg	130 kg	
Maximum payload Vertical	12 kg	28 kg	55 kg	
Rated thrust	320 N	640 N	1280 N	
Maximum dimensions of cross section of main unit	W 160 mm × H 130 mm			
Overall length (Horizontal)	ST + 339.5 mm			
Overall length (Vertical)	ST + 386.5 mm			
Degree of cleanliness Note 3	ISO CLASS 3 (ISO14644-1) or equivalent.			
Intake air Note 4	30 Nℓ/min to 90 Nℓ/min			
Controller	YHX series			

Note 1. Positioning repeatability in one direction.
Note 2. The maximum speed may not be reached if the travel distance is short or because of other operation conditions.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanness is the cleanliness when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.

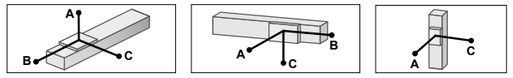
Static loading moment



(Unit: N·m)

MP	MY	MR
706	706	621

Allowable overhang Note



GX16-40

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

GX16-20

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

GX16-10

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)

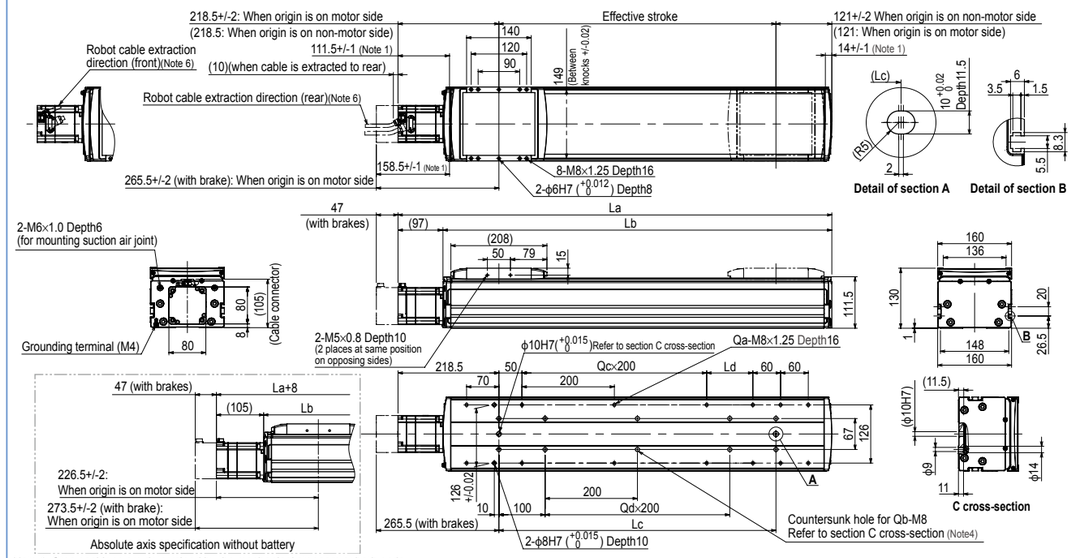
	A	C
15kg	3444	3444
30kg	1689	1689
55kg	891	891

Note. Distance from center of slider upper surface to carrier center-of-gravity at a guide service life of 10,000 km.
Note. Service life is calculated for 600mm stroke models.

Robot cable Product model

R3R (3 m/extracted to rear)	
Encoder cable	GXCC-ENC-R3R
Power cable	GXCC-UVW80-R3R
R5R (5 m/extracted to rear)	
Encoder cable	GXCC-ENC-R5R
Power cable	GXCC-UVW80-R5R
R10R (10 m/extracted to rear)	
Encoder cable	GXCC-ENC-R10R
Power cable	GXCC-UVW80-R10R
R3F (3 m/extracted to front)	
Encoder cable	GXCC-ENC-R3F
Power cable	GXCC-UVW80-R3F
R5F (5 m/extracted to front)	
Encoder cable	GXCC-ENC-R5F
Power cable	GXCC-UVW80-R5F
R10F (10 m/extracted to front)	
Encoder cable	GXCC-ENC-R10F
Power cable	GXCC-UVW80-R10F

GX16



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Adjustments are required when changing the return-to-origin direction. (The standard origin is on the motor side.)
Note 3. The length under head of the hex socket head bolts <M8 x 1.25> used to mount the body with the mounting countersunk holes (section C cross-section) must be <<25mm 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 4. When using the mounting countersunk holes (section C cross-section) to mount the body, remove the seal, and then fix.
Note 5. This is the weight without brakes. When brakes are mounted, the weight will be 1.1 kg heavier than the body weight given in the table.
Note 6. The specifications of the robot cable will vary according to the extraction direction.
Note 7. When secured in place, the minimum bending radius of the robot cable is R30.

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
La	439.5	489.5	539.5	589.5	639.5	689.5	739.5	789.5	839.5	889.5	939.5	989.5	1039.5	1089.5	1139.5	1189.5	1239.5	1289.5	1339.5	1389.5	1439.5	1489.5	1539.5	1589.5	1639.5	1689.5	1739.5	1789.5
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) Note 5	13.9	14.9	15.9	16.9	17.9	18.8	19.8	20.8	21.8	22.8	23.7	24.7	25.7	26.7	27.7	28.7	29.6	30.6	31.6	32.6	33.6	34.6	35.5	36.5	37.5	38.5	39.5	40.4
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%

GX20

Single-axis AC servo motor robot

Ordering method

GX20 – [ ] [ ] – [ ] – [ ] [ ]

Model	Lead	Motor specification	Stroke	Robot cable length	Robot cable entry location
	40: 40mm 20: 20mm 10: 10mm	S80: Standard / With no brake BK800: Standard / With brake BL80: Battery-less absorber / With no brake BKBL80: Battery-less absorber / With brake	100 to 1450 (50mm pitch)	R3: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor

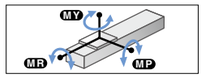
Note. The robot cable dimensions drawing is provided on page 17.
Note. All robot cables are flexible cables.

Specifications

AC servo motor output		750 W		
Repeatability Note 1		+/-0.005		
Deceleration mechanism		Ground ball screw ϕ20 (Class C5)		
Stroke		100 mm to 1450 mm (50mm pitch)		
Maximum speed Note 2		2400 mm/sec	1200 mm/sec	600 mm/sec
Ball screw lead		40 mm	20 mm	10 mm
Maximum payload	Horizontal	65 kg	130 kg	160 kg
	Vertical	15 kg	35 kg	65 kg
Rated thrust		320 N	640 N	1280 N
Maximum dimensions of cross section of main unit		W 200 mm × H 140 mm		
Overall length (Horizontal)		ST + 385.5 mm		
Overall length (Vertical)		ST + 432.5 mm		
Degree of cleanliness Note 3		ISO CLASS 3 (ISO14644-1) or equivalent		
Intake air Note 4		30 NØ/min to 90 NØ/min		
Controller		YHX series		

Note 1. Positioning repeatability in one direction.
Note 2. The maximum speed may not be reached if the travel distance is short or because of other operation conditions.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanness is the cleanliness when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.

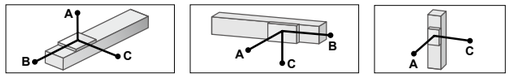
Static loading moment



(Unit: N·m)

MP	MY	MR
1424	1423	1251

Allowable overhang Note



GX20-40

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

GX20-20

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

GX20-10

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)

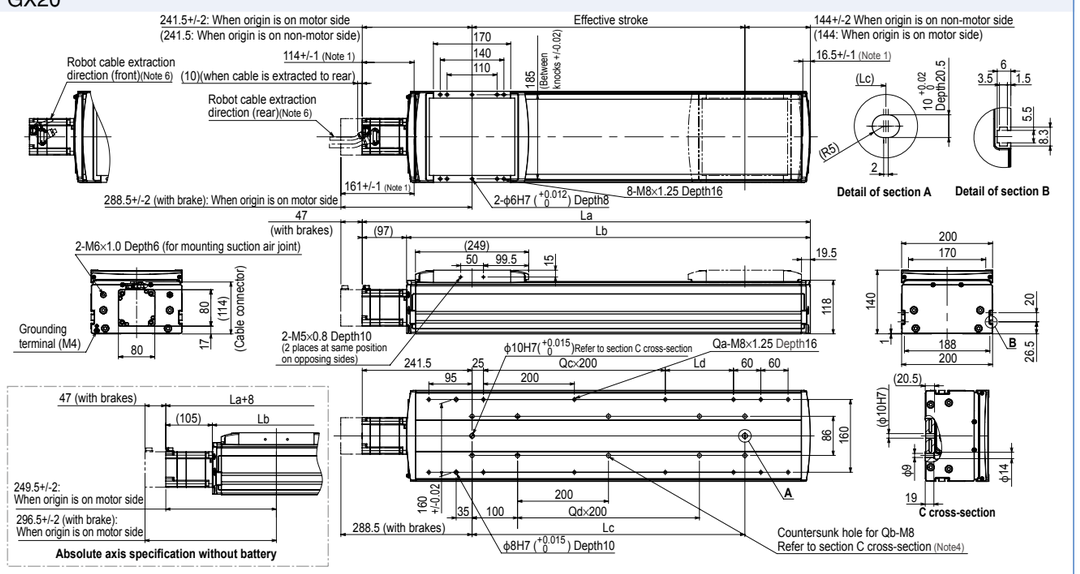
	A	C
20kg	5173	5173
40kg	2561	2561
65kg	1604	1604

Note. Distance from center of slider upper surface to carrier center-of-gravity at a guide service life of 10,000 km.
Note. Service life is calculated for 600mm stroke models.

Robot cable Product model

R3R (3 m/extracted to rear)	
Encoder cable	GXCC-ENC-R3R
Power cable	GXCC-UVW80-R3R
R5R (5 m/extracted to rear)	
Encoder cable	GXCC-ENC-R5R
Power cable	GXCC-UVW80-R5R
R10R (10 m/extracted to rear)	
Encoder cable	GXCC-ENC-R10R
Power cable	GXCC-UVW80-R10R
R3F (3 m/extracted to front)	
Encoder cable	GXCC-ENC-R3F
Power cable	GXCC-UVW80-R3F
R5F (5 m/extracted to front)	
Encoder cable	GXCC-ENC-R5F
Power cable	GXCC-UVW80-R5F
R10F (10 m/extracted to front)	
Encoder cable	GXCC-ENC-R10F
Power cable	GXCC-UVW80-R10F

GX20

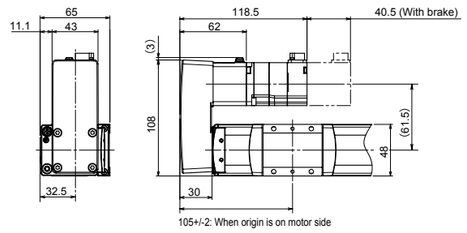


Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Adjustments are required when changing the return-to-origin direction. (The standard origin is on the motor side.)
Note 3. The length under head of the hex socket head bolts <M8 x 1.25> used to mount the body with the mounting countersunk holes (section C cross-section) must be <<25mm 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 4. When using the mounting countersunk holes (section C cross-section) to mount the body, remove the seal, and then fix.
Note 5. This is the weight without brakes. When brakes are mounted, the weight will be 1.1 kg heavier than the body weight given in the table.
Note 6. The specifications of the robot cable will vary according to the extraction direction.
Note 7. When secured in place, the minimum bending radius of the robot cable is R30.

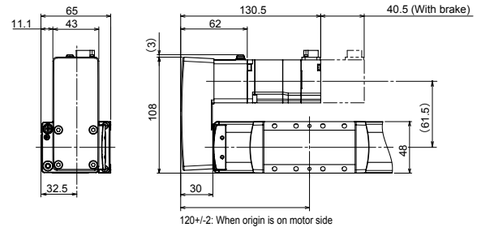
Effective stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450
La	485.5	535.5	585.5	635.5	685.5	735.5	785.5	835.5	885.5	935.5	985.5	1035.5	1085.5	1135.5	1185.5	1235.5	1285.5	1335.5	1385.5	1435.5	1485.5	1535.5	1585.5	1635.5	1685.5	1735.5	1785.5	1835.5
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) Note 5	19.4	20.7	22	23.3	24.6	25.9	27.2	28.5	29.8	31	32.3	33.6	34.9	36.2	37.5	38.8	40.1	41.4	42.6	43.9	45.2	46.5	47.8	49.1	50.4	51.7	53	54.2
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%

GX series Reference drawing for mounting bending unit (example of right side mounting)

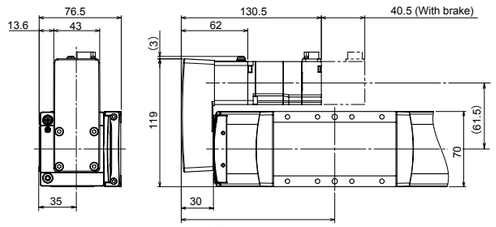
GX05



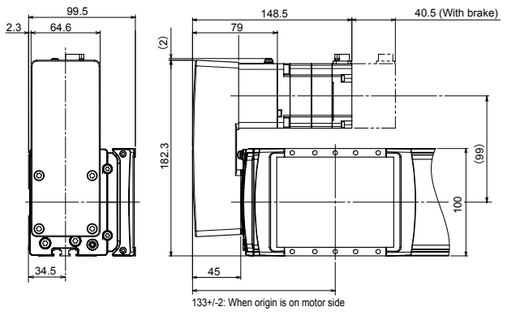
GX05L



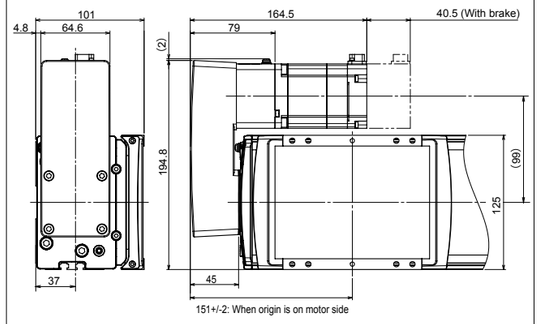
GX07



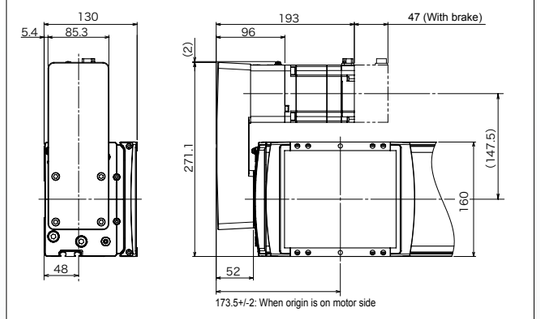
GX10



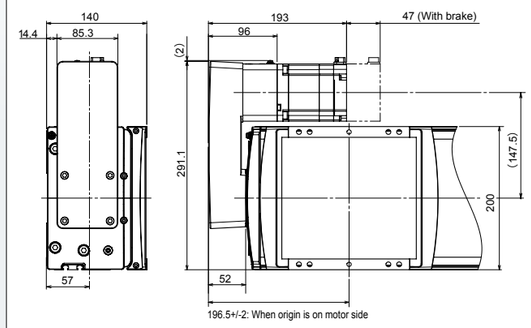
GX12



GX16



GX20

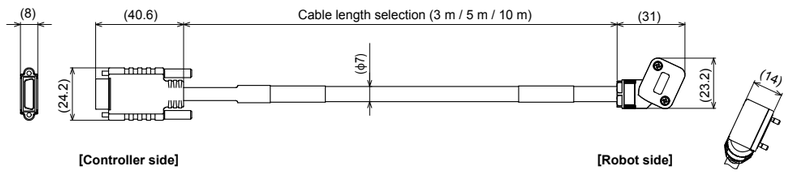


*1. Mount the bending unit onto the body. Refer to the user's Manual for details on mounting.
*2. The motor is not enclosed with the bending unit. Remove the motor from the robot body, and mount the bending unit.
*3. The bending unit can be mounted on the right or left sides.

Model	Product model	Part No.
GX05, GX05L, GX07	GX-BEND-40	KES-M221M-00
GX10, GX12	GX-BEND-60	KEV-M221M-00
GX16, GX20	GX-BEND-80	KEX-M221M-00

Encoder cable

Common for GX series



Rear Extraction specifications

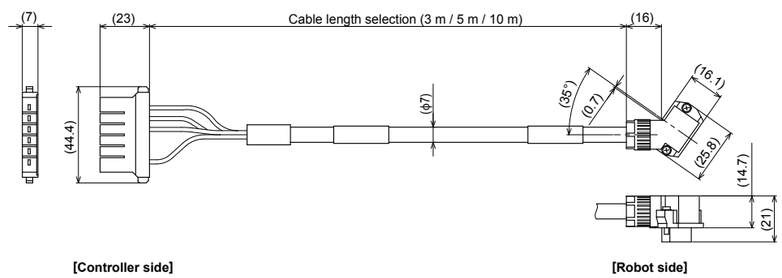
Cable length	Product model	Part No.
3 m	GXCC-ENC-R3R	KES-M4751-30
5 m	GXCC-ENC-R5R	KES-M4751-50
10 m	GXCC-ENC-R10R	KES-M4751-A0

Front Extraction specifications

Cable length	Product model	Part No.
3 m	GXCC-ENC-R3F	KES-M4755-30
5 m	GXCC-ENC-R5F	KES-M4755-50
10 m	GXCC-ENC-R10F	KES-M4755-A0

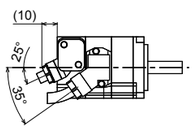
Power cable

GX05 / GX05L / GX07



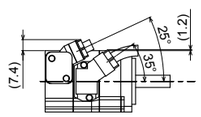
Rear Extraction specifications

Cable length	Product model	Part No.
3 m	GXCC-UVW40-R3R	KES-M4752-30
5 m	GXCC-UVW40-R5R	KES-M4752-50
10 m	GXCC-UVW40-R10R	KES-M4752-A0



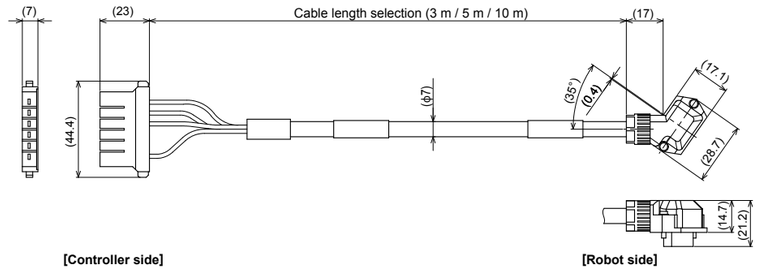
Front Extraction specifications

Cable length	Product model	Part No.
3 m	GXCC-UVW40-R3F	KES-M4756-30
5 m	GXCC-UVW40-R5F	KES-M4756-50
10 m	GXCC-UVW40-R10F	KES-M4756-A0



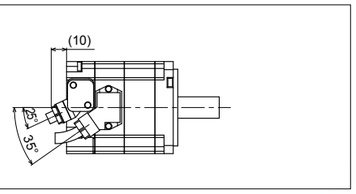
Power cable

GX10 / GX12



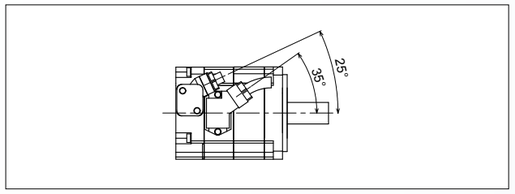
Rear Extraction specifications

Cable length	Product model	Part No.
3 m	GXCC-UVW60-R3R	KES-M4753-30
5 m	GXCC-UVW60-R5R	KES-M4753-50
10 m	GXCC-UVW60-R10R	KES-M4753-A0



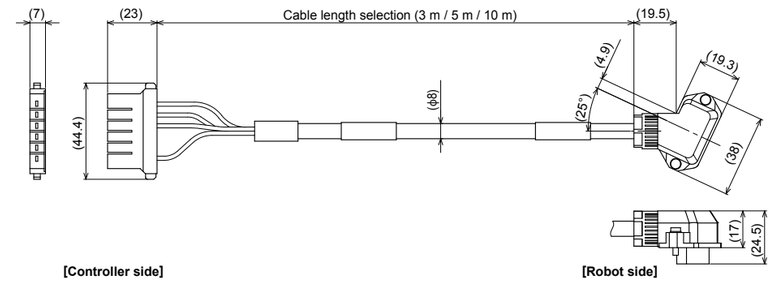
Front Extraction specifications

Cable length	Product model	Part No.
3 m	GXCC-UVW60-R3F	KES-M4757-30
5 m	GXCC-UVW60-R5F	KES-M4757-50
10 m	GXCC-UVW60-R10F	KES-M4757-A0



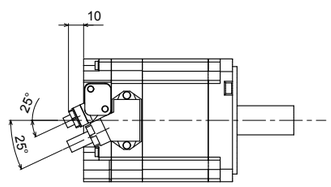
Power cable

GX16 / GX20



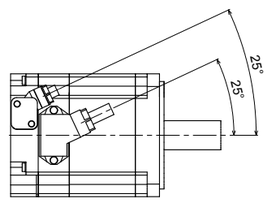
Rear Extraction specifications

Cable length	Product model	Part No.
3 m	GXCC-UVW80-R3R	KES-M4754-30
5 m	GXCC-UVW80-R5R	KES-M4754-50
10 m	GXCC-UVW80-R10R	KES-M4754-A0



Front Extraction specifications

Cable length	Product model	Part No.
3 m	GXCC-UVW80-R3F	KES-M4758-30
5 m	GXCC-UVW80-R5F	KES-M4758-50
10 m	GXCC-UVW80-R10F	KES-M4758-A0



YLE series

Closed loop stepping motor electric actuator

Mix-and-match from wide selections

Refer to the YAMAHA website for details on the specifications and outline drawings, etc.

TYPE	CATEGORY	VARIATION
6	69	180

■ YLEF Slider Type — 11 types

YLEFS Ball Screw Drive

■ Basic Type
■ High Precision Type

YLEFS16 YLEFS25 YLEFS32 YLEFS40

Motor mounting position: In-line

Motor mounting position: Parallel [Right] [Left]

Size	Stroke (mm)
16	50 to 500
25	50 to 800
32	50 to 1000
40	150 to 2000

YLEFB Belt Drive

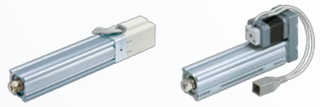
YLEFB16 YLEFB25 YLEFB32

Size	Stroke (mm)
16	300 to 1000
25	300 to 2000
32	300 to 2000

■ YLEY Rod Type — 16 types

YLEY Rod Type

YLEY16 YLEY25 YLEY32 YLEY40



Motor mounting position: In-line

Motor mounting position: Top/Parallel

Size	Stroke (mm)
16	30 to 300
25	30 to 400
32	30 to 500
40	30 to 500

YLEYG Guide Rod Type

YLEYG16 YLEYG25 YLEYG32 YLEYG40

Motor mounting position: In-line

Motor mounting position: Top mounting

Size	Stroke (mm)
16	30 to 200
25	30 to 300
32	30 to 300
40	30 to 300

■ YLES Slide Table Type — 12 types

YLES Compact

YLES8 YLES16 YLES25

Symmetrical type (L type)

Basic type (R type)

In-line motor type (D type)

Size	Stroke (mm)
8	30 to 75
16	30 to 100
25	30 to 150

YLESH High Rigidity

YLESH8 YLESH16 YLESH25

Symmetrical type (L type)

Basic type (R type)

In-line motor type (D type)

Size	Stroke (mm)
8	50, 75
16	50, 100
25	50,100,150

■ YLEP Miniature Type — 4 types

YLEPY Miniature Rod Type

YLEPY6 YLEPY10

Size	Stroke (mm)
6	20, 50, 75
10	

YLEPS Miniature Slide Table Type

YLEPS6 YLEPS10

Size	Stroke (mm)
6	25, 50
10	

■ YLER Rotary Table Type — 6 types

YLER Basic Type

YLER10 YLER30 YLER50

■ Standard Specifications	320° / 310° / 180° / 90°
■ Continuous Rotation Specifications	360°

YLERH High Precision Type

YLERH10 YLERH30 YLERH50

■ Standard Specifications	320° / 310° / 180° / 90°
■ Continuous Rotation Specifications	360°

■ YLEH Electric Gripper Type — 20 types

YLEHZ 2-Finger

Size	Open and close stroke (mm)
10	4
16	6
20	10
25	14
32	22
40	30

YLEHZJ 2-Finger With Dust Cover

Size	Open and close stroke (mm)
10	4
16	6
20	10
25	14

YLEHF 2-Finger Long Stroke

Size	Open and close stroke (mm)
10	16 (32)
20	24 (48)
32	32 (64)
40	40 (80)

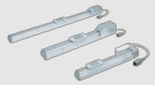
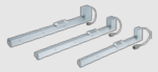
YLEHS 3-Finger

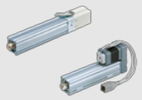
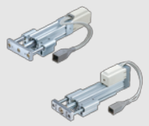
Size	Open and close stroke (mm)
10	4
20	6
32	8
40	12

Stepping motor electric actuator

Specification

Refer to the YAMAHA website for details on the specifications and outline drawings, etc.

Type		Model	Lead (mm)	Repeatability (mm) Basic type	Repeatability (mm) High-precision type	Maximum payload (kg) Horizontal	Maximum payload (kg) Vertical	Maximum speed (mm/sec)	Stroke (mm)
Slider Type YLEF	YLEFS Ball Screw Drive 	YLEFS16	10	+/-0.02	+/-0.015 (HLead: +/-0.02	14	2	700	50 to 500
			5			15	4		
		YLEFS25	20			12	0.5	1100	50 to 800
			12			25	7.5		
			6			30	15		
		YLEFS32	24			20	4	1200	50 to 1000
			16			45	10		
			8			50	20		
		YLEFS40	30			25	2	1200	150 to 1200
			20			55	2		
			10			65	23		
	YLEFB Belt Drive 	YLEFB16	48	+/-0.08		1	–	1100	300, 500, 600, 700, 800, 900, 1000
		YLEFB25	48			10	–	1400	300, 500, 600, 700, 800, 900, 1000, 1200, 1500, 1800, 2000
		YLEFB32	48			19	–	1500	300, 500, 600, 700, 800, 900, 1000, 1200, 1500, 1800, 2000

Type		Model	Lead (mm)	Repeatability (mm)	Maximum payload (kg) Horizontal	Maximum payload (kg) Vertical	Maximum speed (mm/sec)	Stroke (mm)
Rod Type YLEY	YLEY Rod Type 	YLEY16	10	+/-0.02	10	2	500	30, 50, 100, 150, 200, 250, 300
			5		23	4	250	
			2.5		35	8	125	
		YLEY25	12		30	8	500	30, 50, 100, 150, 200, 250, 300, 350, 400
			6		55	16	250	
			3		70	30	125	
		YLEY32	16		40	11	500	30, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500
			8		60	22	300	
			4		80	43	150	
		YLEY40	16		60	13	500	30, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500
			8		70	27	350	
			4		90	53	175	
	YLEYG Guide Rod Type 	YLEYG16	10	+/-0.02	10	1.5	500	30, 50, 100, 150, 200
			5		23	3.5	250	
			2.5		35	7.5	125	
		YLEYG25	12		30	7	500	30, 50, 100, 150, 200, 250, 300
			6		55	15	250	
			3		70	29	125	
		YLEYG32	16		40	9	500	30, 50, 100, 150, 200, 250, 300
			8		60	20	300	
			4		80	41	150	
		YLEYG40	16		60	11	500	30, 50, 100, 150, 200, 250, 300
			8		70	25	350	
			4		90	51	175	

Type		Model	Lead (mm)	Repeatability (mm)	Maximum payload (kg) Horizontal	Maximum payload (kg) Vertical	Maximum speed (mm/sec)	Stroke (mm)
Slide Table Type YLES	YLES Compact	YLES8	4	+/-0.05	1	0.5	200	30, 50, 75
			8			0.25	400	
		YLES16	5		3	3	200	30, 50, 75, 100
			10			1.5	400	
		YLES25	8		5	5	200	30, 50, 75, 100, 125, 150
			16			2.5	400	
	YLESH High Rigidity	YLESH8	4	+/-0.05	2	0.5	200	50, 75
			8		1	0.25	400	
		YLESH16	5		8	2	200	50, 100
			10		5	1	400	
		YLESH25	8		12	4	150	50, 100, 150
			16		8	2	400	

Type		Model	Lead (mm)	Maximum payload (kg) Horizontal Basic	Horizontal Compact	Vertical Basic	Vertical Compact	Maximum speed (mm/sec) Horizontal Basic	Horizontal Compact	Vertical Basic	Vertical Compact	Stroke (mm)
Miniature Type YLEP	YLEPY Miniature Rod Type	YLEPY6	4	2	–	0.5	–	150	–	150	–	20, 50, 75
			8	1	–	0.25	–	300	–	300	–	
		YLEPY10	5	6	4	1.5	1.5	200	200	150	150	
			10	3	2	1.0	1.0	350	350	300	300	
	YLEPS Miniature Slide Table Type	YLEPS6	4	1.0	–	0.5	–	150	–	150	–	25, 50
			8	0.75	–	0.25	–	300	–	300	–	
		YLEPS10	5	2.0	2.0	1.5	1.5	200	200	150	150	
			10	1.5	1.5	1.0	1.0	350	350	300	300	

Type		Model	Oscillating angle (°)	Repeatability (°) Basic type	Repeatability (°) High-precision type	Torque type	Max. rotating torque (N•m)	Max. pushing torque (N•m)	Maximum speed (°/sec)
Rotary Table Type YLER	Standard Specifications	YLER10	310 External stopper: 180/90	+/-0.05		Basic (J)	0.22	0.11	420
						High torque (K)	0.32	0.16	280
		YLER30	320 External stopper: 180/90	+/-0.05	+/-0.03	Basic(J)	0.8	0.40	420
						High torque (K)	1.2	0.60	280
		YLER50	320 External stopper: 180/90	+/-0.05	+/-0.03	Basic (J)	6.6	3.3	420
						High torque (K)	10	5.0	280
	Continuous Rotation Specifications	YLER10	360	+/-0.05		Basic (J)	0.22	0.11	420
						High torque (K)	0.32	0.16	280
		YLER30	360	+/-0.05	+/-0.03	Basic (J)	0.8	0.40	420
						High torque (K)	1.2	0.60	280
		YLER50	360	+/-0.05	+/-0.03	Basic (J)	6.6	3.3	420
						High torque (K)	10	5.0	280

Type		Model	Open and close stroke (mm)	Gripping force (N) Basic	Gripping force (N) Compact	Open/close speed / Maximum pressing speed (mm/sec)	Repeatability (mm)	Main body weight (g) Basic	Main body weight (g) Compact
Electric Gripper Type YLEH	YLEHZ 2-Finger type	YLEHZ10	4	6 to 14	2 to 6	80/50	+/-0.02	165	135
		YLEHZ16	6	6 to 14	3 to 8	80/50		220	190
		YLEHZ20	10	16 to 40	11 to 28	100/50		430	365
		YLEHZ25	14	16 to 40	11 to 28	100/50		585	520
		YLEHZ32	22	52 to 130	–	120/50		1120	–
		YLEHZ40	30	84 to 210	–	120/50		1760	–
	YLEHZJ 2-Finger With Dust Cover	YLEHZJ10	4	6 to 14	3 to 6	80/50	+/-0.02	170	140
		YLEHZJ16	6	6 to 14	4 to 8	80/50		230	200
		YLEHZJ20	10	16 to 40	11 to 28	100/50		440	375
		YLEHZJ25	14	16 to 40	11 to 28	100/50		610	545
	YLEHF 2-Finger Long Stroke	YLEHF10	Basic 16 / Long stroke 32	3 to 7		80/20	+/-0.05	Basic 340	Long stroke 370
		YLEHF20	Basic 24 / Long stroke 48	11 to 28		100/30		Basic 610	Long stroke 750
		YLEHF32	Basic 32 / Long stroke 64	48 to 120				Basic 1625	Long stroke 1970
		YLEHF40	Basic 40 / Long stroke 80	72 to 180				Basic 1980	Long stroke 2500
	YLEHS 3-Finger	YLEHS10	4	2.2 to 5.5	1.4 to 3.5	70/50	+/-0.02	185	150
		YLEHS20	6	9 to 22	7 to 17	80/50		410	345
		YLEHS32	8	36 to 90	–	100/50		975	–
		YLEHS40	12	52 to 130	–	120/50		1265	–

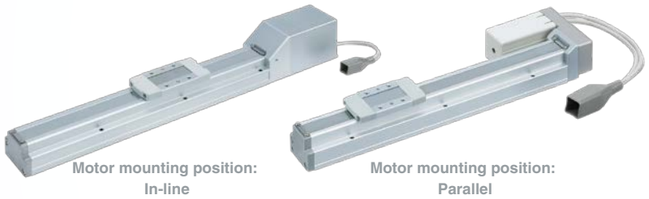
Refer to the YAMAHA website for details on the specifications and outline drawings, etc.

YLEF Slider Type

■ Ball Screw Drive YLEFS

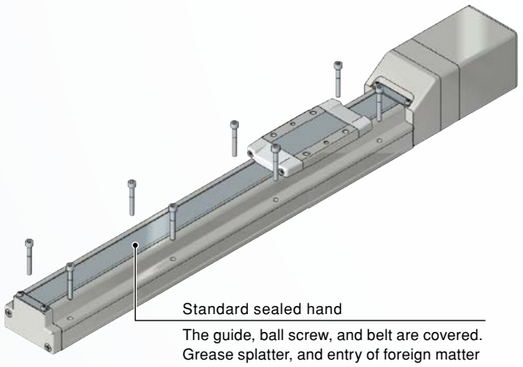
SIZE: 16, 25, 32, 40

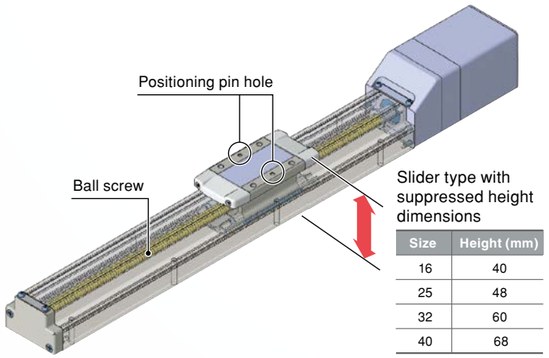
Maximum payload: 65 kg
Maximum speed: 1200 mm/s
Repeatability: +/-0.02 mm
(**High precision:** +/-0.015 mm)



Reduce installation man-hours with the standard sealed hand

The body can be installed without removing exterior parts such as the cover.





Size	Height (mm)
16	40
25	48
32	60
40	68

■ Belt Drive YLEFB

SIZE: 16, 25, 32

Maximum stroke: 2000 mm **supported**
Maximum speed: 2000 mm/s

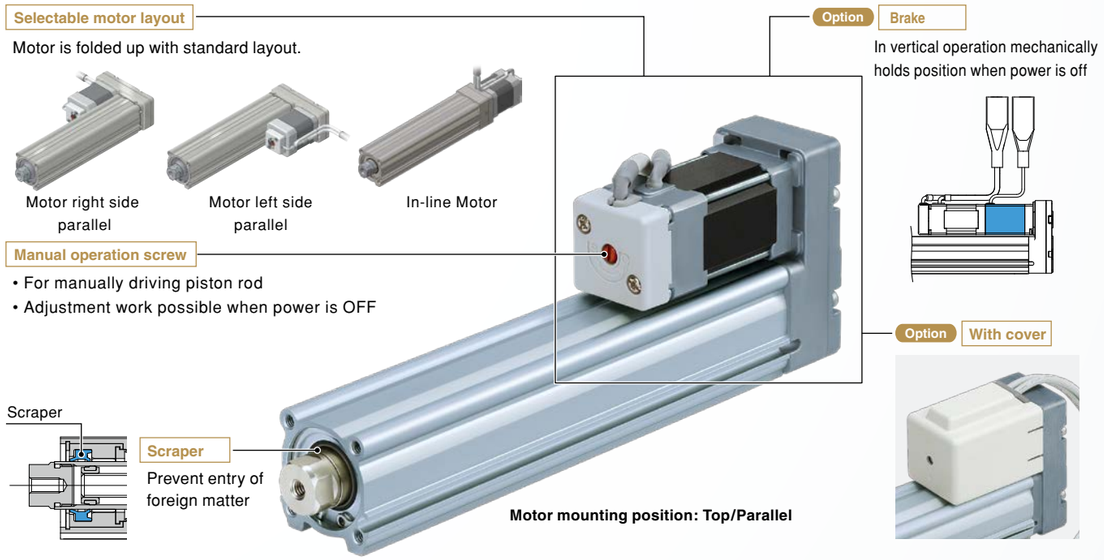
Refer to the YAMAHA website for details on the specifications and outline drawings, etc.

YLEY Rod Type

■ Rod Type YLEY

SIZE: 16, 25, 32, 40

Long stroke support: Max. 500 mm **(YLEY32, 40)**
High precision and repeatability ensured with ball screw: +/-0.02 mm

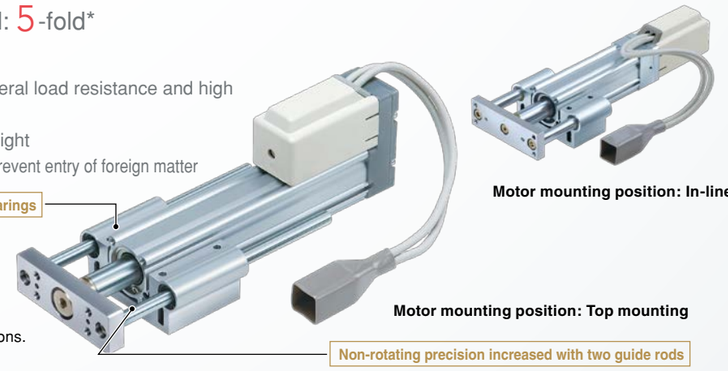


■ Guide Rod Type YLEG

SIZE: 16, 25, 32, 40

Increased rigidity Tip lateral load: 5-fold*

- Ball screw increases prevention
- Compact integrated guide rod enables lateral load resistance and high precision turn prevention
- Selectable motor layout: upward fold, straight
- Improved non-rotating precision
- Scraper to prevent entry of foreign matter



Compatible with sliding bearings and ball bushing bearings

Sliding bearing
Suitable for resisting lateral loads caused by impact of stopper, etc.

Ball bushing bearing
Suitable for pushers and lifters with smooth operations.

Non-rotating precision increased with two guide rods

Tube inside diameter (mm)	16	25	32
Sliding bearing	+/-0.06°	+/-0.05°	
Ball bushing bearing	+/-0.05°	+/-0.04°	

Non-rotating precision when pulling in cylinder (initial value), with no-load, and excluding guide rod deflection should be less than the value given in the table.

* Comparison with rod type YLEY25, 100 stroke

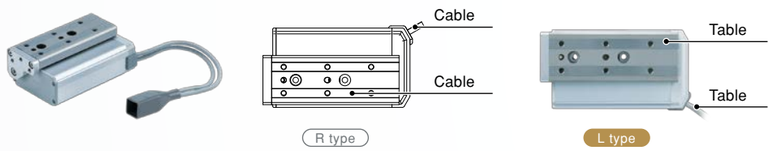
Refer to the YAMAHA website for details on the specifications and outline drawings, etc.

YLES Slide Table Type

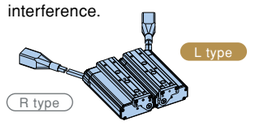
Choose from Symmetrical type / L type, In-line motor type / D type

Symmetrical type / L type

The table and cable outlet positions are the opposite of the R type for user's convenience.

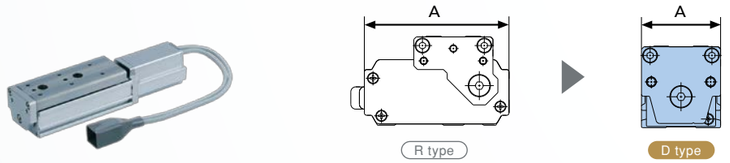


When installed in a row, space can be saved without cable interference.



In-line motor type / D type

Smaller dimension width: maximum 45% reduction



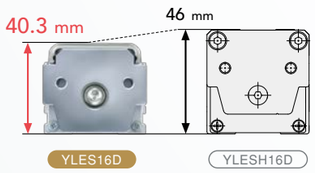
A dimensions (mm)

Size	D type	R/L type
8	32	58.5
16	45	72.5
25	61	106

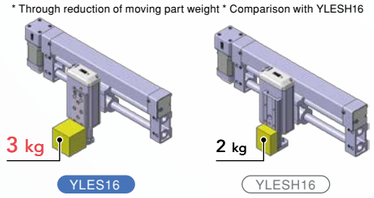
■ Compact YLES

SIZE: 8, 16, 25

Compact:
Max. 12% reduction
* Workpiece mounting height * Comparison with YLESH16D



Increased vertical payload:
Max. 50% increase
* Through reduction of moving part weight * Comparison with YLESH16



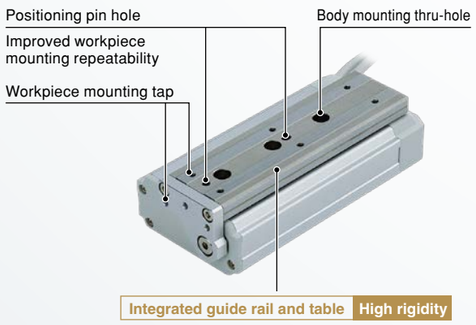
Light weight:
Max. 29% reduction

Model	Weight (kg)	Reduced amount
YLES16D-100	1.20	-0.50 kg
YLESH16D-100	1.70	

■ High rigidity YLESH

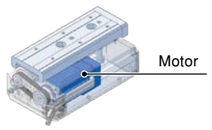
SIZE: 8, 16, 25

Deflection amount: 0.016 mm*
* YLESH16-50 with 25 N load

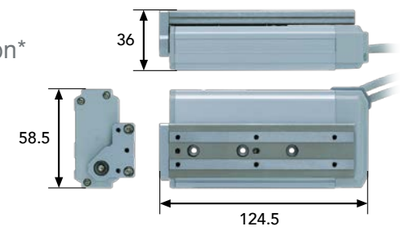


Compact and space saving

Motor built into body



Volume ratio:
61% reduction*
* Compared with YLESH16-50
* For R/L type



For YLESH8 R/L 50 m stroke

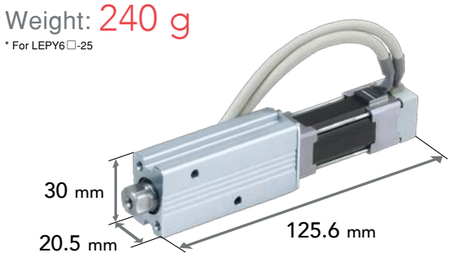
Refer to the YAMAHA website for details on the specifications and outline drawings, etc.

YLEP Miniature Type

■ Miniature Rod YLEPY

SIZE: 6, 10

Weight: 240 g
* For LEPY6□-25



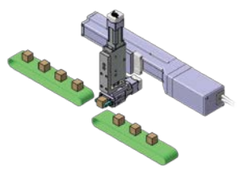
■ Miniature Slide Table YLEPS

SIZE: 6, 10

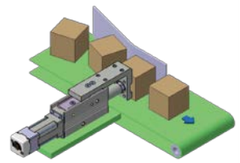
Weight: 290 g
* For LEPS6□-25

Example of applications

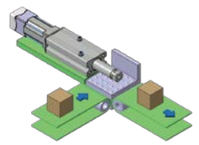
Pick & Place
Repeatability: +/-0.02 mm



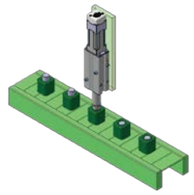
Positioning



Unloading



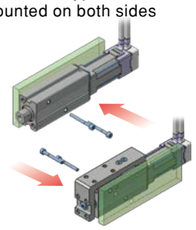
Press fit
Maximum pressing thrust: 50 N



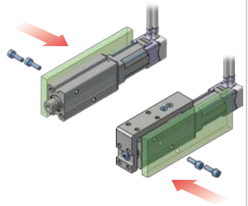
Mounting method

Multiple methods to choose from

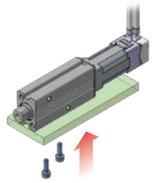
Horizontal mounting [Body through hole]
Slide table type can be mounted on both sides



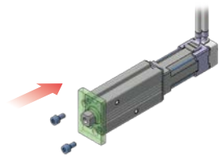
Horizontal mounting [Body tap]
Slide table type has body taps on both sides



Vertical mounting [Body tap]



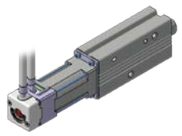
Axial direction mounting
* Only rod type [Body tap]



Motor cable outlet orientation

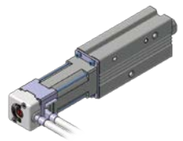
Choose from four directions

Exit to top [Basic style]

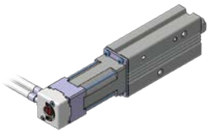


Exit to bottom [When U is selected]

Exit to right [When R is selected]



Exit to left [When L is selected]

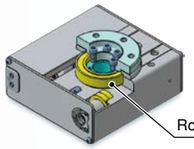


Refer to the YAMAHA website for details on the specifications and outline drawings, etc.

YLER Rotary Table Type

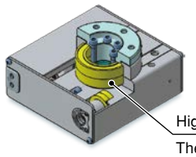
■ Basic type YLER | High precision type YLERH

Basic type YLER



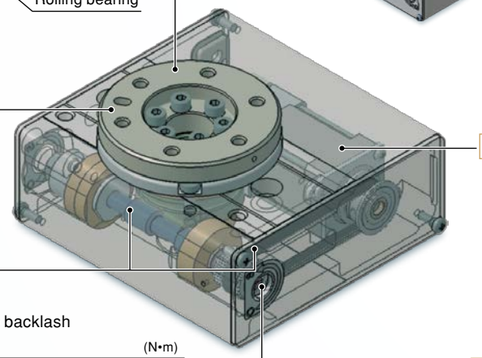
Rolling bearing

High precision type YLERH



High-precision bearing

The table's displacement to the radial and thrust directions is reduced by adopting highly rigid bearings.



Oscillating angle

360°, 320° (310°)*, 180°, 90°
* LER10 only

Built-in stepping motor (servo 24 VDC)

Compact type

High torque

Gear ratio 30-fold
Special worm gears that reduce backlash

Two torque value to choose from
Two reduction rates

(N•m)

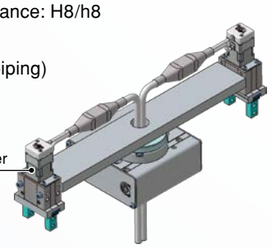
Model	Basic	High torque
YLER10	0.22	0.32
YLER30	0.8	1.2
YLER50	6.6	10.0

Manual operation screw / both sides

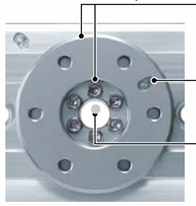
The table can be manually rotated even when the power is OFF

Easily installation of tooling

- Table inside diameter/outer diameter tolerance: H8/h8
- Positioning pin hole
- Hollow hole (store workpiece wiring and piping)



Electric gripper
YLEH Series



Workpiece and axis of rotation center

Positioning pin hole

For positioning direction of rotation

Hollow hole

Size	10	30	50
Diameter of inside space	ϕ8	ϕ17	ϕ20

Compact type

H

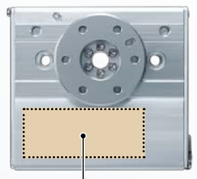
Basic type (mm)

Model	H
YLER10	42
YLER30	53
YLER50	68

High precision type (mm)

Model	H
YLERH10	49
YLERH30	62
YLERH50	78

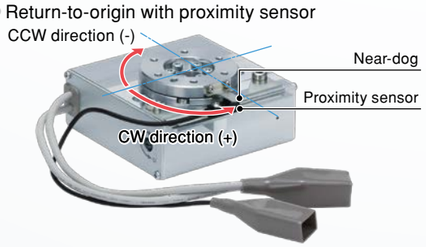
Space saving



Built-in motor
Space saving

Continuous Rotation Specifications

- Oscillating angle: 360°
- Return-to-origin with proximity sensor



Refer to the YAMAHA website for details on the specifications and outline drawings, etc.

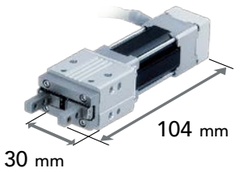
YLEH Electric Gripper Type

■ 2-Finger YLEHZ

Compact | Light weight

SIZE: 10, 16, 20, 25, 32, 40

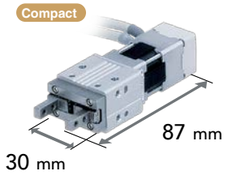
Weight: 165 g
* For YLEHZ10



104 mm
30 mm

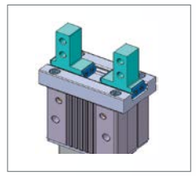
Weight: 135 g
* For YLEHZ10L

Compact

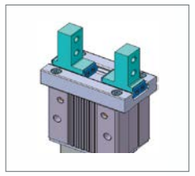


87 mm
30 mm

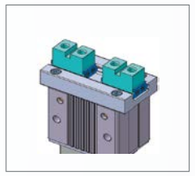
Finger option



Side tap mounting method



Open/close direction through-hole method



Flat type finger method

■ 2-Finger With Dust Cover YLEHZJ

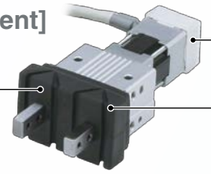
SIZE: 10, 16, 20, 25

With sealed structure dust cover [IP50 or equivalent]

- Prevent cutting chips and dust, etc., from entering
- Prevent grease from splattering, etc.

Three types of cover matters (only finger section)

Chloroprene rubber: Black	Standard
Fluororubber: Black	Option
Silicone rubber: Ivory	Option



Encoder dust cover

Projection-free cover shape

The cover does not create projections when opening or closing.
The structure folds inward to prevent interface with other devices.

■ 2-Finger Long Stroke YLEHF

SIZE: 10, 20, 32, 40

Long stroke supports various workpieces

Stroke: 40 mm

Stroke: 80 mm

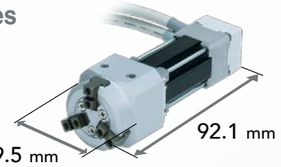
Long stroke

■ 3-Finger YLEHS

SIZE: 10, 20, 32, 40

For round workpieces

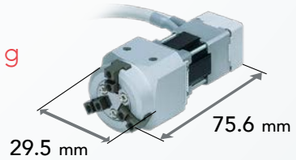
Weight: 185 g
* For YLEHS10



29.5 mm
92.1 mm

Weight: 150 g
* For YLEHS10L

Compact



29.5 mm
75.6 mm

Drop prevention function (self-locking function)

- Maintains gripping force when stopped and restarting
- Energy saving with lower power consumption
- Workpiece can be released with manual operations

Selectable motor cable exit direction

Diverse mounting variations