

New product information

NEW

Rod type / Slider type [Slim type]

High agility mode

Maximum acceleration **2G!**

Intuitive

Durability

Economy

Motor-less single axis actuator



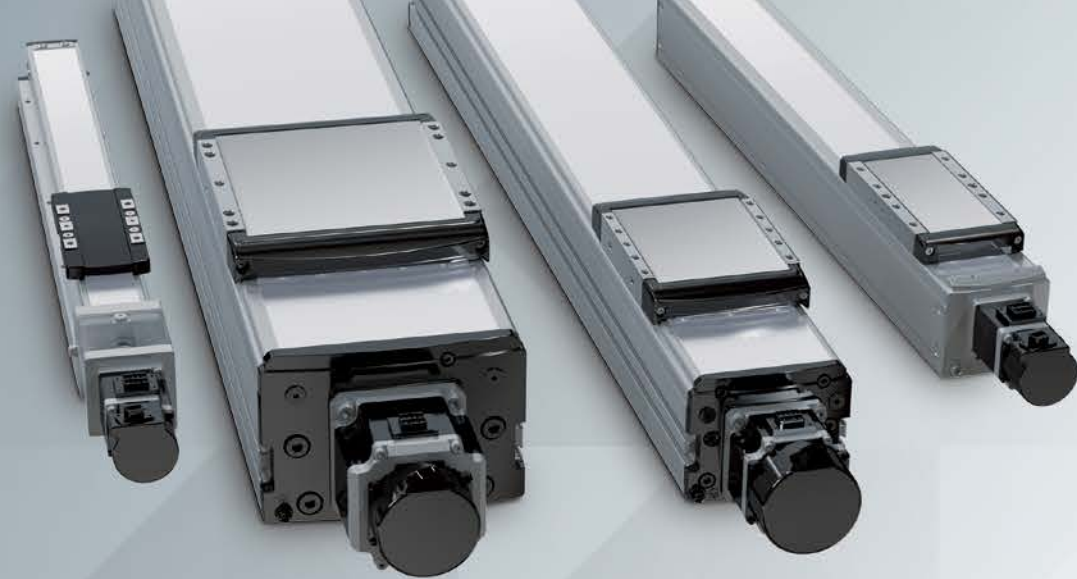
Single-axis robots

Robot positioner



Motor-less single axis actuator / Single-axis robots

Robonity series



Intuitive
Durability
Economy

Robonity



Rod type

NEW

NEW

Slider type / Slim type

Single-axis robots



ABAS

AGXS

ABAR

Both can

Usability is pursuit.

Robot positioner EP-01 series

- Same price as parallel I/O and industrial Ethernet
- Absolute battery function
- Support software is provided free of charge.
- Industry-leading compactness



EP-01-A10



EP-01-A30



Intuitively usable

Reliability unique to YAMAHA

Excellent cost performance

series

Motor-less single axis actuator

LBAS



LGXS



LBAR

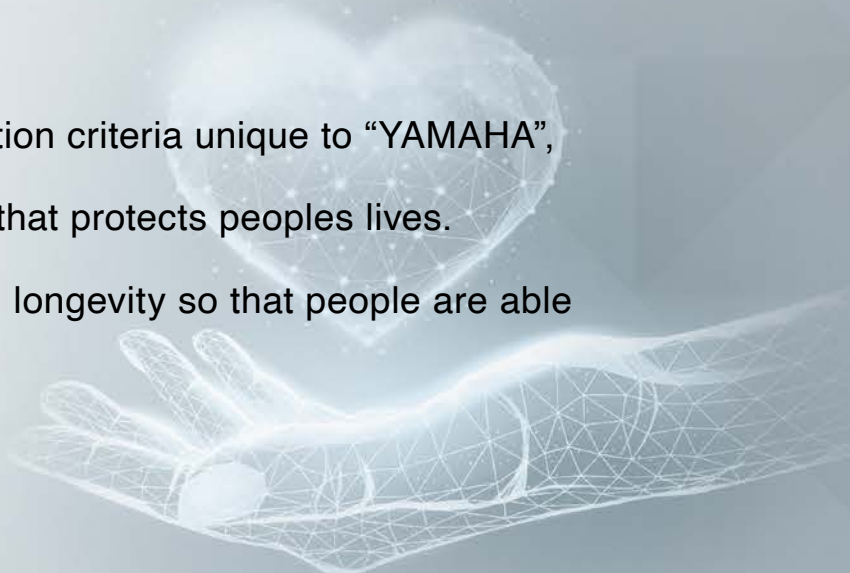


be selected.



Products have passed strict evaluation criteria unique to “YAMAHA”, a vehicle equipment manufacturer, that protects peoples lives.

Yamaha designs products with high longevity so that people are able to use them for a long time.



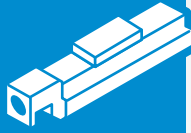
Slider type

Basic model

Integrated guide rail and frame design.
High moment rigidity in a compact design.

Motor-less single axis actuator

LBAS



Single-axis robots

ABAS



Maximum payload ~ 115kg
Maximum speed 300 ~ 1,800mm/sec
Stroke 50 ~ 1,250mm

High Rigidity

Compact

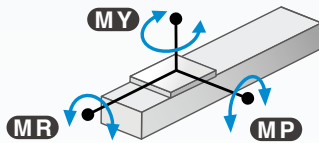
Low Cost

Compact and high rigidity

Even though the product is more compact than the conventional product, it achieves a higher rigidity.

	Conventional product T6L	LBAS05/ABAS05
MY	35	59
MP	40	63
MR	50	103
		(N · m)

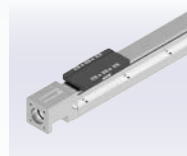
	Conventional product T9H	LBAS08/ABAS08
MY	86	221
MP	133	309
MR	117	343
		(N · m)



Overall length can be shortened by motor bending specifications.

Motor bending specifications can also be selected, expanding the range of design.

Straight type

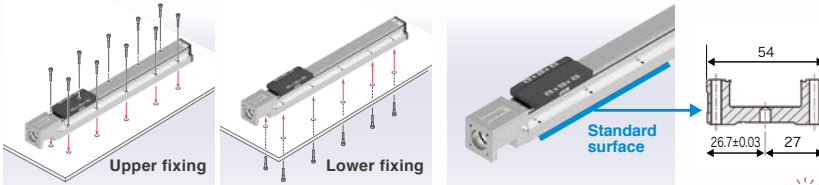


Bending type



First-class usability even at a low cost.

Reference surfaces are provided on the sides of the main body and knock holes are provided on the bottom to reduce design and assembly man-hours.

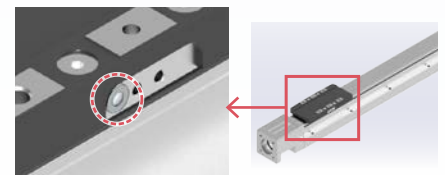


Installation is possible from either the top or bottom without removing any exterior parts.



Easy Maintenance

Greasing work that tends to be troublesome, such as opening the covers, can be performed easily.

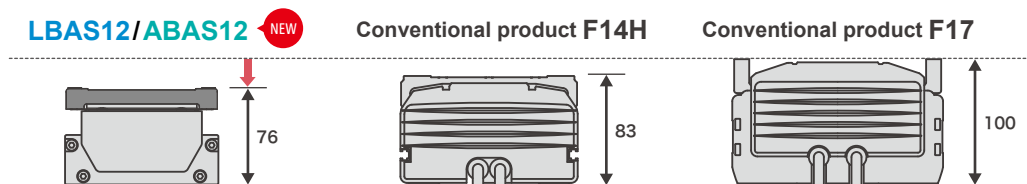


Grease nipple on the slider side surface

NEW

Suitable for the X-axis of Cartesian robots! Slim type "LBAS12/ABAS12" is added to the lineup.

The slim type structure achieves a low center of gravity, making it suitable for the X-axis of Cartesian robots. The overall height can be suppressed, contributing to equipment downsizing.



With the same frame width, the product can be used for both 200W and 400W motors, making it suitable for a wide range of situations.



Advanced model

Ground ball screw is standard.
High precision model with high reliability and durability.

Motor-less single axis actuator

LGXS



Single-axis robots

AGXS



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

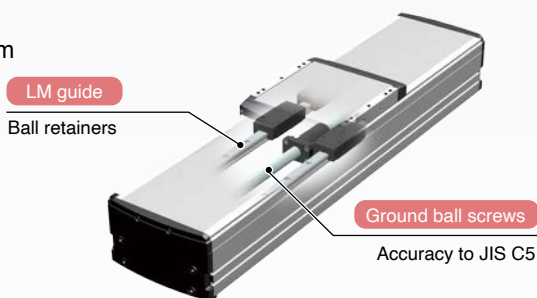
High Precision Accuracy
Class C5

High Durability

Clean room specification as
a standard feature

High quality model with high accuracy.

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

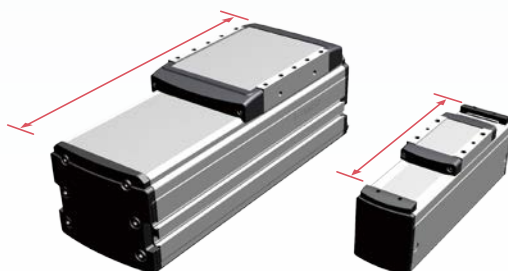


There are other advantages besides high accuracy. For details, see the next page!



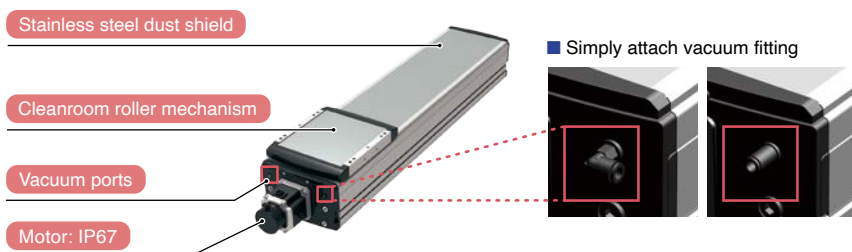
Overall length for effective stroke is the shortest class in the industry.

Overall length for the effective stroke is the shortest in class for the industry.



This product can be used in a wide range of situations.

Dust-proof stainless steel sheet is used on the top surface of the main body. Products can be used in a clean environment by attaching a pipe joint and suctioning. Air purging can also be used as anti-contamination measures. Of course, the product can be used as it is without attaching any joint.



One standard product can be used in a wide range of applications.



Slider type

LGXS AGXS
Motor-less With motor

Maximum acceleration **2G!**

YAMAHA quality makes it possible.

With the recent improvements in KAIZEN awareness, we have received many requests from manufacturing sites. "We need a faster single-axis robot to further improve productivity! Of course, we want to use this robot for an extended period of time with confidence."

To respond to such a request, "High agility mode" has been added to the Advanced model lineup of the Robonity series.



Why does faster acceleration/deceleration benefit the customer?

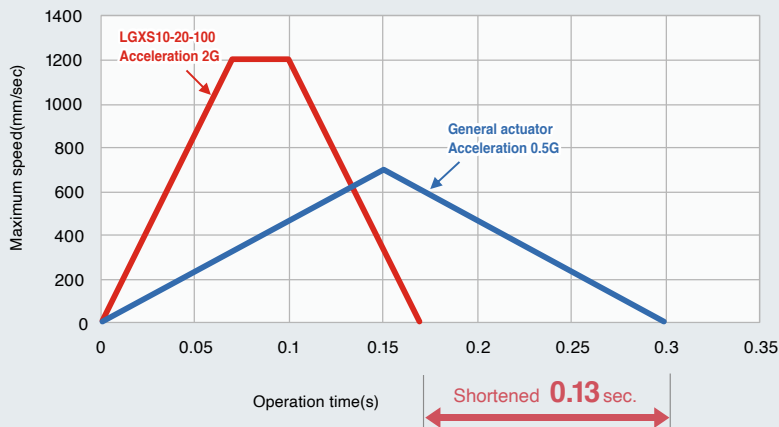
- 1 The robot operation time can be shortened.
- 2 Therefore, the product manufacturing time can be shortened.
- 3 That is, the daily production quantity can be increased and more production can be performed in the same time.

» Large difference! Effect of acceleration/deceleration!

Comparison of movement time when the payload is 1kg.

For LGXS10-20-100

Comparison of high acceleration/deceleration operation tact time



Production volume is increased only by increasing the acceleration/deceleration of the single-axis robot!



Improvement effect

< Example > Movement stroke is 100 mm. Payload is 1 kg. Robot operates 8 times per cycle. Daily operation hours are 8 hours. Robot operates for 20 days every month. Operating ratio is 100%. The estimation is made under the above conditions.

	Work time	Robot operation time	Total time	Production volume per hour	Production volume per day	Production volume per month
0.5G	8 sec.	0.3 sec.	10.4 sec.	346 pcs.	2768 pcs.	55360 pcs.
2.0G	8 sec.	0.17 sec.	9.36 sec.	384 pcs.	3072 pcs.	61440 pcs.

As a result, there is a difference of **about 6,000 pcs. (about 10%)** in one month under exactly the same operating conditions.



Even with single-axis robots, Productivity is improved with confidence.



Why is this improvement achieved!? YAMAHA's Advanced model

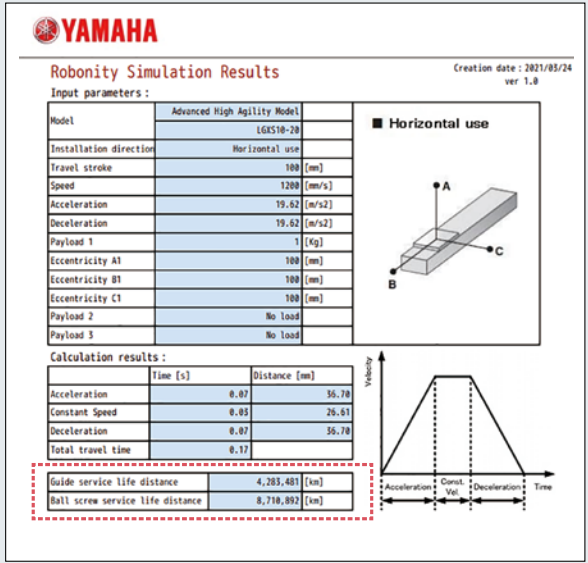
Advanced model uses a ground ball screw (C5 class) as standard. So, this model can be used at high acceleration/deceleration for an extended period of time with confidence.

Simulation results of 1 kg transfer

For LGXS10-20-100

< Example >

Overhang amount
 A:100mm B:100mm C:100mm



Safety and long service life even during high acceleration and deceleration!



Developer's voice



Yamaha's single-axis robots have excellent durability and long product service life. The "Robonity" series has been evolved further. By utilizing our accumulated know-how and the features of each component to the maximum extent, the products confidently meet various needs of our customers, such as low cost, productivity, space saving, and quality improvement. Please try the excellent product performance of the "Robonity" series.

NEW

Rod type

Basic model

High rigidity structure that follows the slider type.
Compatible with a long stroke of up to 800 mm.

Motor-less single axis actuator

LBAR



Single-axis robots

ABAR



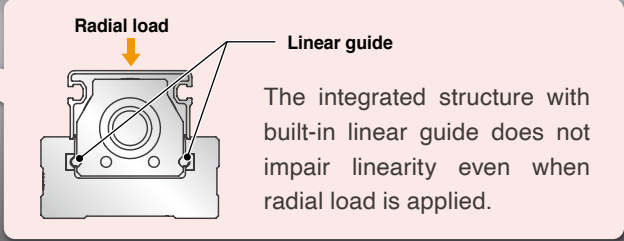
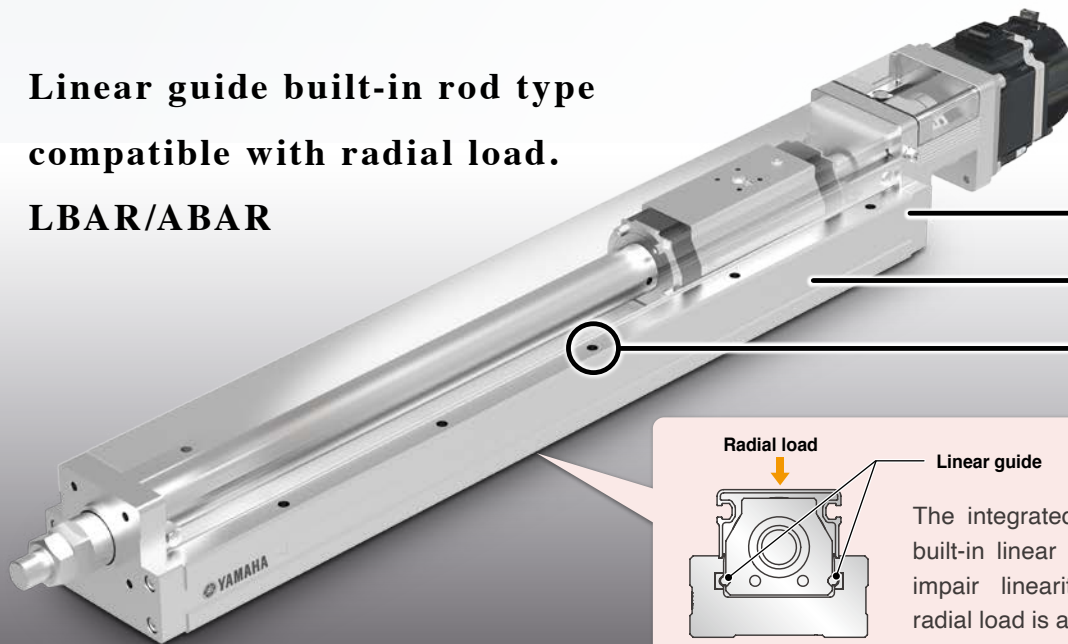
Maximum payload	~ 80kg
Maximum speed	~ 1200mm/sec
Stroke	50 ~ 800mm

High Rigidity

Compact

Long stroke

**Linear guide built-in rod type
compatible with radial load.
LBAR/ABAR**



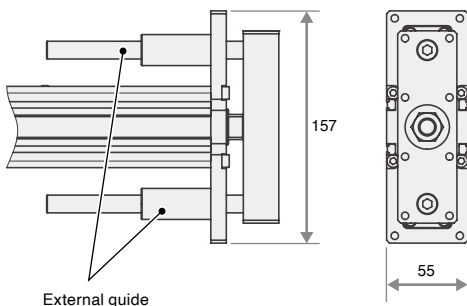
No external guide is needed.

External guide is not needed since the linear guide is built-in.

* An external guide may be recommended when a certain stroke is exceeded.

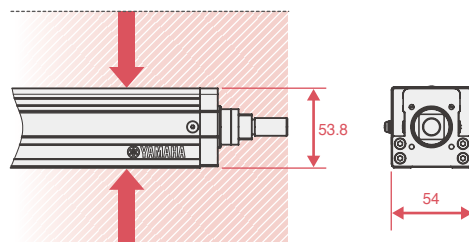
Conventional product
TRANSERVO series
SRD05

External guide is needed.



NEW
Robonity series
LBAR05/ABAR05

Linear guide is built-in.



Width size
Reduced approx.
65%
when compared to
conventional products.

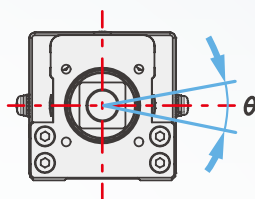
Contributes to equipment downsizing!



Rod non-rotation accuracy $\pm 0^\circ$

The built-in linear guide suppresses rattling in the rotation direction.
The working accuracy of the tool attached to the tip of the rod is maintained.

Conventional product SRD05	LBAR05/ABAR05
$\pm 0.05^\circ$	$\pm 0^\circ$



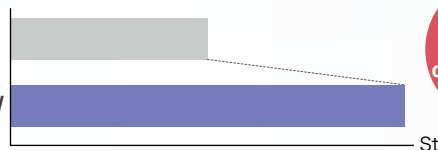
Compatible with a long stroke.

Compatible with a long stroke of up to 800 mm.
The corresponding stroke has doubled when compared to the conventional product with the same size.
This product can be used in a wide range of situations.

Conventional product SRD05	LBAR05/ABAR05
300st	600st

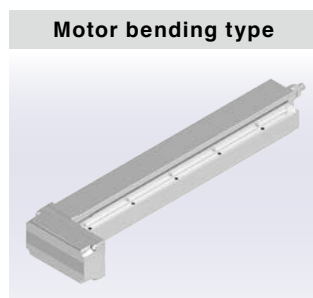
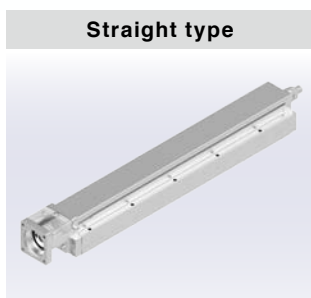
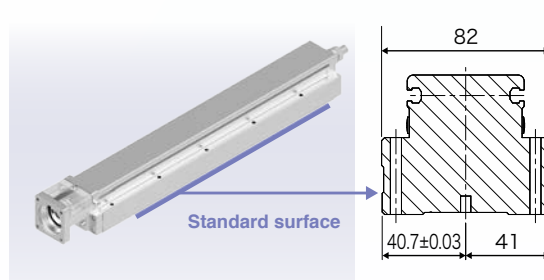
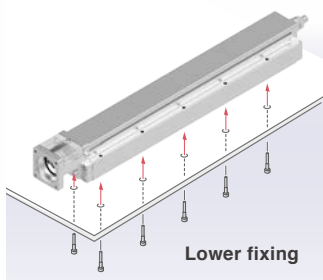
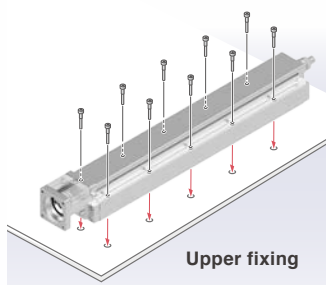
Conventional product **SRD05**

NEW LBAR05/ABAR05



Twice as much as conventional

Easy installation and specification change



Ease of use is also inherited from the slider type!



Single-axis robots

Slider type

ABAS
With motor

AGXS
With motor

NEW

Rod type

ABAR
With motor

Robot positioner EP-01



EP-01-A10

EP-01-A30



ABAS04
▶P.58

ABAS05
▶P.61

ABAS08
▶P.64

ABAS12
▶P.67

LINEUP
NEW

YAMAHA single-axis robot featuring ease of use and long service life. New single-axis robots "Robonity series ABAS/AGXS" have been developed as more affordable single-axis robots by revising the controller design for more affordable system with reliability.



Low cost high performance line-up

»» Easy operation and affordable system with Industrial Ethernet

Robot positioner "EP-01" is a newly designed positioner for a better Ethernet platform and the cost performance. As a result the price of Ethernet is now offered at the same price level as parallel I/O (NPN). While achieving a lower cost design, "EP-01" positioner has expanded features such as standard Ethernet, feedback pulse output, direct value control function, and real-time output.

[Supported field networks]

EtherNet/IP™

PROFINET®

EtherCAT®

Parallel I/O and industrial Ethernet are the same price!



High reliability that YAMAHA is proud of.

»» For safe and long-term use

We design our products for long-term use even at a low price.

The customer can use the product safely for a long time since it is evaluated according to YAMAHA's own strict evaluation criteria.

Developer's
voice



As the single-axis controller is a "simple" function, we manufactured it with "persistence and care". To achieve both low price and easy-to-use, we have fundamentally reviewed the design and thoroughly evaluated the product until it is broken so that our customers can use the product safely for a long time. Additionally, the design has been redesigned to make it more compact, while the intuitive interface has been adopted to improve the workability for customers.

Intuitive Single-axis robot with controller in pursuit of ultimate ease of use

Durability YAMAHA quality cultivated with more than 40 years of experience

Economy Industrial Ethernet at the same price as the parallel I/O



POINT 3

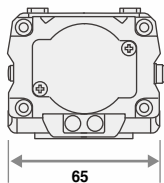
Space efficient compact design.

»» Industry-leading compact design

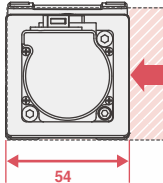
Compact design for machine size reduction.

Basic model (ABAS)

Conventional model
T6L



ABAS05 **NEW**

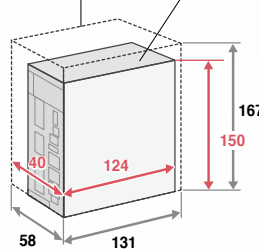


Width

Reduced approx. 17% compared to the conventional model.

Robot positioner EP-01

Conventional model
TS-X



EP-01 **NEW**

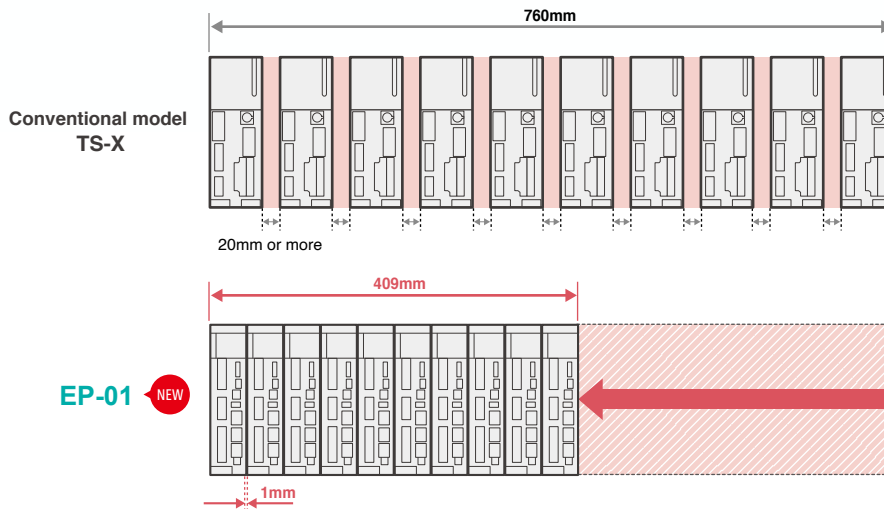
Capacity

Reduced approx. 37% compared to the conventional model.

Installation space comparison

Saves spaces inside a control panel

* For details about the installation conditions, see P.149.



Installation area

Reduced approx. 47% compared to the conventional model.

Significant downsizing is possible by shortening to the installation width!



Features

Robotics
Basic model

LBAS

Robotics
Advanced model

LGXS

Robotics
Basic model

LBAR

Yield motor
Basic model

ABAS

Yield motor
Advanced model

AGXS

Yield motor
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single axis robot positioner

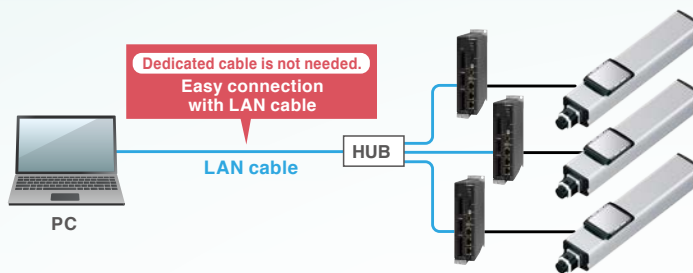
EP-01

POINT
4

User friendly setup

» The hassle of startup is reduced.

Ethernet port is standard on a controller and dedicated PC programming cable is no longer required. Startup procedure is reduced and simplified.



POINT
5

Easy model selection

» Simple cycle time and service life calculation.

The service life and cycle time can be calculated at the same time by simply entering the required information at the website.

The result can be conveniently saved as PDF file.



Entry screen

Results

PDF

POINT
6

For stable and constant operation

» Contribution to early recovery from line stop

Battery-less absolute method

Because the single-axis controller supports the battery-less absolute method, the battery replacement is not needed.

Calendar function

The controller has clock function internally and histories like alarm are recorded chronologically. Such information is retained for over one year without power and no need for resetting at system startup after long holidays.

Absolute battery is installed on the cable section.

Position data will be retained even when replacing a absolute controller.

The cause that took a long time to recover can be solved.



POINT
7

Industrial Ethernet achieves higher-grade equipment.

Robot status monitoring with real-time output function

It is useful to check the conditions of the robot and as a guide for maintenance timing.

- Current position
- Current speed
- Motor current
- Alarm code when an alarm occurs.
- Overload integration ratio (Overload occurs at 100%.)
- Movement distance (When the servo is ON.)
- Movement time (When the servo is ON.)
- Motor load factor

EtherNet/IP™

PROFINET®

EtherCAT®

POINT
8

To meet a wide range of needs

Used for a wider range of applications with expanded functions and new functions.

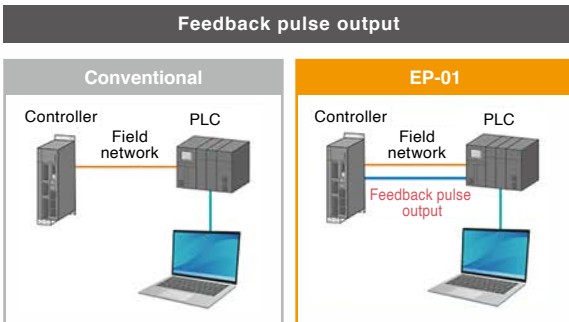
Acceleration and deceleration designation type was added to the positioning operation command from the PLC.

Direct value position designation	Position data	Speed	Acceleration	Deceleration
Data designation type 1	○			
Data designation type 2	○	○		
Data designation type 3	○	○	○	○

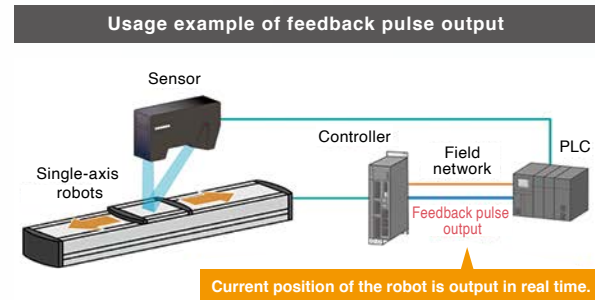
When the custom setting is selected, the speed and acceleration can be designated to (mm/s) and (m/s²) from the PLC!



Feedback pulse function has been added to enable use in conjunction with external devices.

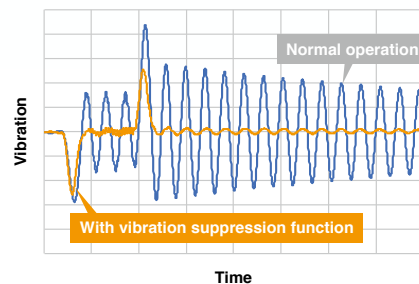
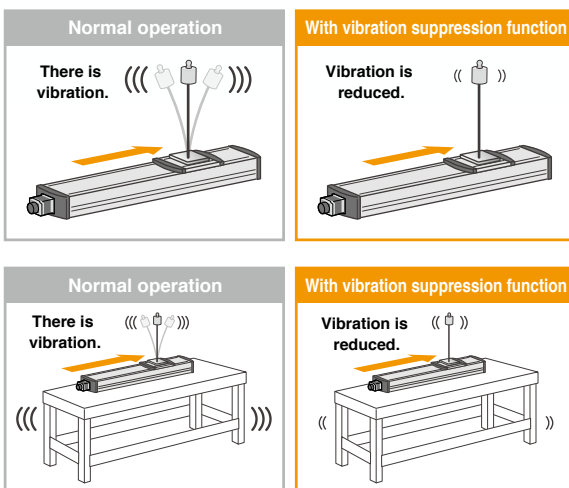


Exact current location is understood without communication delay



Speed ripple can be corrected.

New vibration suppression function has been added to achieve vibration suppression!



It can be adjusted according to the number of vibrations that need to be suppressed, such as tool vibrations and installation base vibrations!



PC Programming software "EP-Manager"

Support software "EP-Manager" that allows you to perform "Setting" → "Pre-check" → "Debug" → "Maintenance" in a single step is provided free of charge.
Easy edit for robot operation, positioning, timing, or monitoring motor load.



Download from website (member site)

Main window



What you can do with EP-Manager.

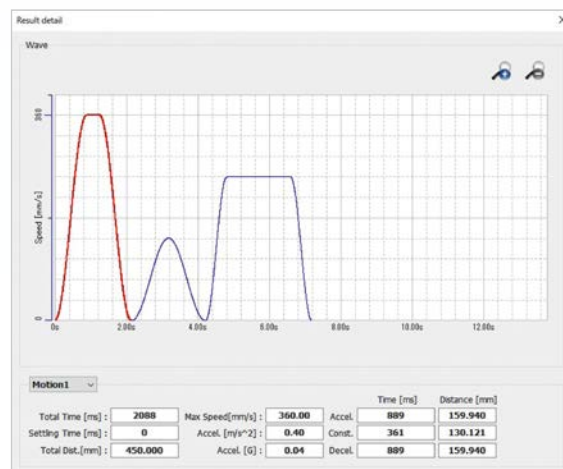
- Parameter setting**
- Point setting**
- Robot operation**
- Operation simulation**
- Debug (Real-time trace)**
- Maintenance (Alarm history check)**

Pre-check

Operation simulator

Operation simulator function is included to enable offline simulation.

Run Type	Pos. [mm]	Speed [%]	Accel. [%]	Decel. [%]	Flag
P1	0.000	70	30	300	0
P2	450.000	100	30	100	0
P3	600.000	50	30	100	0
P4					
P5					



Offline pre-check and examination with actual teaching data is also possible!



Debug

Real-time trace

This function traces the current position, speed, load percentage, current, and voltage at real-time. Additionally, once trigger conditions are set, data can be automatically obtained when these conditions are met. Furthermore, by specifying a zone from the monitor results, the maximum value, minimum value, and average value can be calculated. These values are handy for trouble shooting.



Items that can be traced in real time

Instructed position	Current speed	load percentage	Input information	Word input information
Current position	Command current	Voltage	Output information	Word output information
Command speed	Present current	CPU temperature	Option information	Always output information

Information necessary for debugging can be checked!



Maintenance

Alarm history check

In addition to the position, speed, operation status, current value, and voltage value in case of an alarm, the I/O status of the input/output is displayed.

This contributes to analysis of the status.

Alarm History (Dec 22, 2021 12:39:30)																				
No.	Factor	Contents	Time	Position [mm]	Speed [mm/s]	Run Status	Input Source	Robot Status	Run Point	Current Val.	Voltage [V]	Input	Input Wor...	Input Wor...	Input Wor...	Input Wor...	Input Wor...	Input Wor...		
1	C1	EMERGENCY STOP	2021-12-22 12:33:18	0.031	0.07	Hold	8	1232392	0	0	286.5	00000000	0000	0000	0000	0000	0000	0000	0000	
2	C1	EMERGENCY STOP	2021-12-22 12:33:14	0.030	-0.07	Hold	8	1232392	0	0	286.0	00000000	0000	0000	0000	0000	0000	0000	0000	0000
3	C1	EMERGENCY STOP	2021-12-22 12:33:09	0.029	-0.07	Hold	8	1232392	0	0	288.1	00000000	0000	0000	0000	0000	0000	0000	0000	0000
4	BE	ETHER LINK ERR.	2021-12-22 12:23:48	-0.001	0.07	Hold	6	1215496	0	0	287.7	00000000	0000	0000	0000	0000	0000	0000	0000	0000
5	44	SOFTLIMIT OVER	2021-12-22 12:23:48	-0.001	-0.07	Hold	7	1214728	0	0	287.2	00000000	0000	0000	0000	0000	0000	0000	0000	0000
6	BE	ETHER LINK ERR.	2021-12-22 12:23:14	115.550	0.00	Hold	6	1222152	2	0	287.7	00000000	0000	0000	0000	0000	0000	0000	0000	0000
7	BE	ETHER LINK ERR.	2021-12-22 12:23:14	115.550	0.00	Hold	6	1222152	2	0	287.7	00000000	0000	0000	0000	0000	0000	0000	0000	0000
8	86	OVER LOAD	2021-12-22 12:22:33	62.180	1293.33	Running (ABS)	7	1215756	2	87	266.4	00000000	0000	0000	0000	0000	0000	0000	0000	0000
9	86	OVER LOAD	2021-12-22 12:22:24	40.163	1019.05	Running (ABS)	7	1215756	2	-120	286.2	00000000	0000	0000	0000	0000	0000	0000	0000	0000
10	86	OVER LOAD	2021-12-22 12:22:13	8.019	385.66	Running (ABS)	7	1215756	2	53	318.2	00000000	0000	0000	0000	0000	0000	0000	0000	0000

Even if the alarm is the same, the cause may be different if the occurrence location, operating conditions, and operating status are different.

Details can be checked when an error occurs, which is useful for recovery and corrective action.



Motor-less single axis actuator

Slider type

NEW

Rod type

LBAS

Motor-less

LGXS

Motor-less

LBAR

Motor-less

Wide range of selection for transfer and positioning application

Wide variety of ball screw lead and stroke length to choose from



POINT
1

Supports major brands and standards

Build a system with motor/driver of your choice

In addition to the conventional servomotors, stepping motors are also newly supported and actuators can be used in accordance with customers' needs. * For the compatible models and capacities, see the detailed page of each model in this catalog.

LBAS | Compatible motor manufacturers and standards

[Servo motor]

Yasukawa Electric	Mitsubishi Electric	KEYENCE
OMRON	SANYO DENKI	TAMAGAWA SEIKI
DELTA ELECTRONICS	Panasonic	FANUC
Siemens AG	Rockwell Automation, Inc.	
Schneider Electric SA	KINGSERVO Hoof automation CO., LTD.	
Beckhoff Automation GmbH & Co. KG		

[Stepping motor]

Oriental Motor

[NEMA standards]

NEMA17
NEMA23

LGXS | Compatible motor manufacturers

[Servo motor]

Yasukawa Electric
Mitsubishi Electric
KEYENCE
OMRON
Panasonic

POINT
2

Easy selection

Easy simulation of cycle time and service life of motorless single axis actuator.

Simulator on web site will provide cycle time and service life of ball screw or guide.

Selection of most suitable model with confidence.

Just enter simple parameters ...

Easy Automatic calculation

- Acceleration/deceleration time
- Uniform velocity time
- Total movement time
- Uniform velocity distance
- Life distance of guide
- Life distance of ball screw

Access the website below.



https://robot.yamaha-motor.co.jp/robot/member/motorless_eng/motorless.php

* These contents are not available on smartphones.

Features

Motorless
Slider type
Basic model
LBAS

Motorless
Slider type
Advanced model
LGXS

Motorless
Rod type
Basic model
LBAR

VITH motor
Slider type
Basic model
ABAS

VITH motor
Slider type
Advanced model
AGXS

VITH motor
Rod type
Basic model
ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner
EP-01

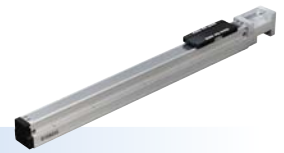
MEMO

LBAS04

Basic model

Motor-less Single Axis Actuator

Slider type



Ordering method

LBAS04

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

[Caution]

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

Specifications

Applicable motor	50 W	
Repeatability ^{Note 1}	±0.01 mm	
Deceleration mechanism	Shifting position ball screw φ 10 (C7 class)	
Stroke	50 mm to 800 mm (50 mm pitch)	
Maximum speed ^{Note 2} (or equivalent)	800 mm/sec	400 mm/sec
Ball screw lead	12 mm	6 mm
Maximum payload ^{Note 3} (or equivalent)	Horizontal	12 kg
	Vertical	2 kg
Rated thrust ^{Note 3} (or equivalent)	Horizontal	12 kg
	Vertical	2 kg
Maximum dimensions of cross section of main unit	W 44 mm × H 52 mm	
Overall length	Straight	ST + 214 mm
	Bending	ST + 196 mm
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)	

Note 1. Positioning repeatability in one direction.

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

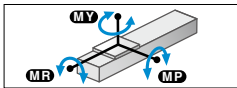
If the effective stroke exceeds 500 mm, the ball screw may resonate. (Critical speed)

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

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

Note. See P.106 for acceleration/deceleration and inertia moment.

Static loading moment



	MY	MP	MR
(Unit: N·m)	54	54	75

Applicable motor

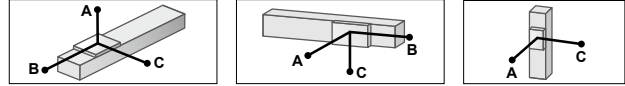
• Applicable servo motor

Specification	Flange size	□ 40
	Wattage	50 W

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

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

Allowable overhang^{Note}



LBAS04-12

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

LBAS04-6

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

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

Note. Service life is calculated for 500 mm stroke models.

• Applicable stepping motor

Specification	Flange size	□ 42
Motor specification	Manufacturer	Model
A	Oriental Motor	AZM46
		ARM46
		RKS54
S	Oriental Motor	AZM48
N	NEMA standard	NEMA17

Note. Be aware that the dimensions of the NEMA standard motor may vary depending on the manufacturer.

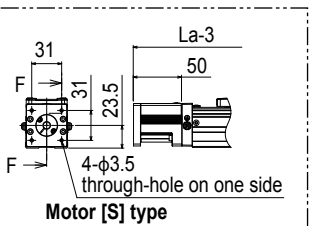
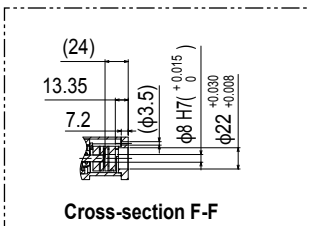
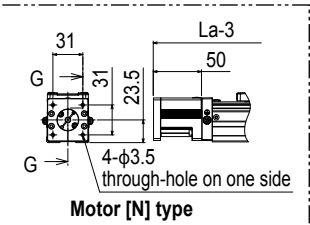
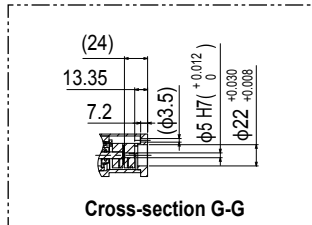
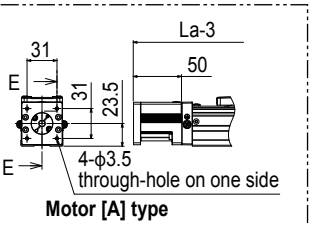
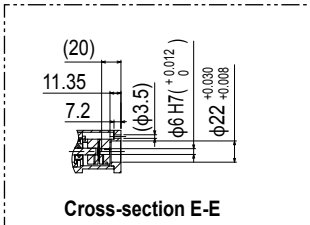
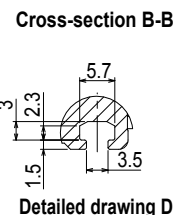
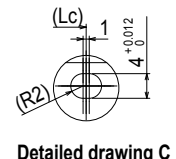
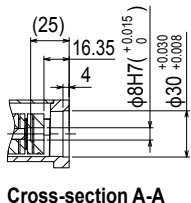
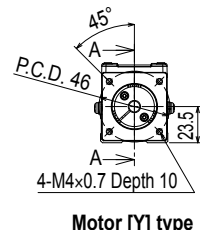
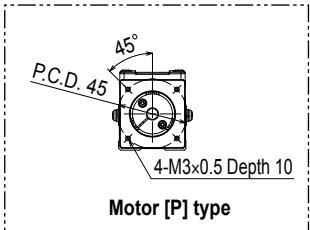
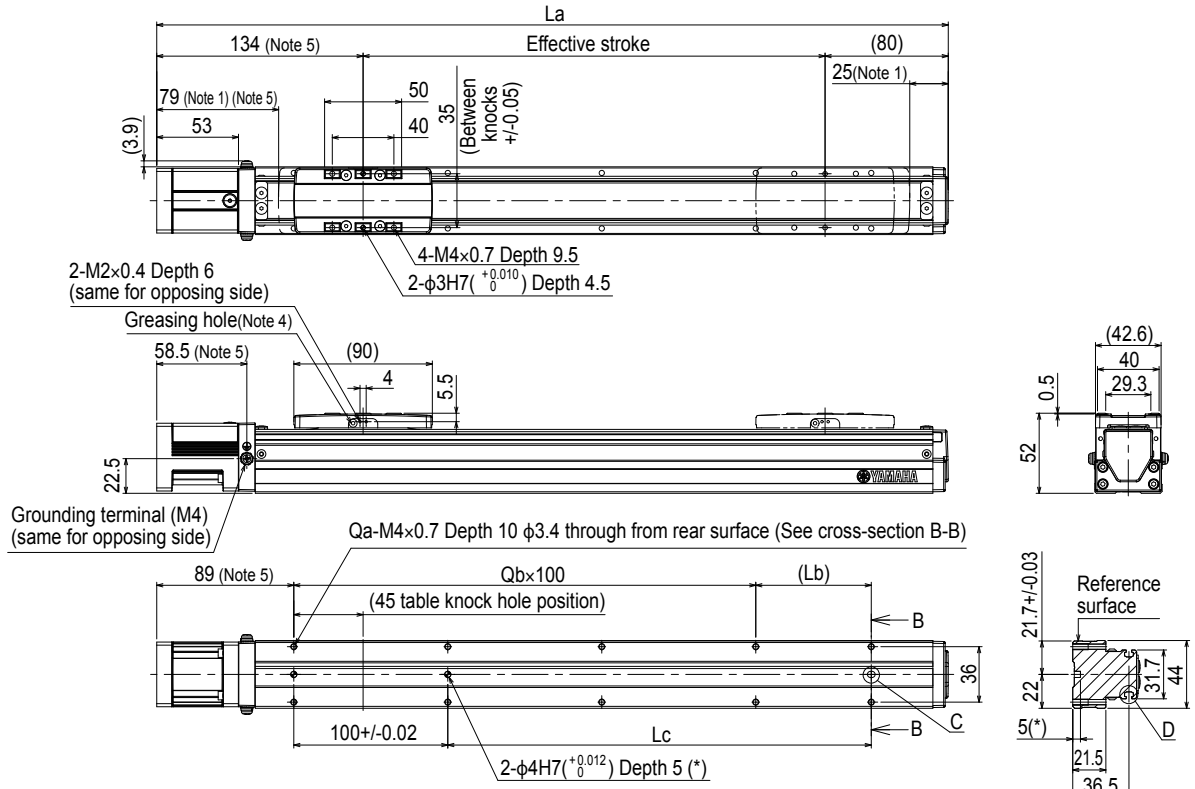
Note. For the motor specifications A, S, and N, the parts dedicated for bending cannot be used.

Access the website below.



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

LBAS04 Straight type (S)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
- Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M3 × 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M4 × 0.7> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
Part number: KFU-M3861-00
- Note 5. For the motor specifications A, S, and N, the dimensions are that those stated in the table << 3 mm >>.

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
La	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014	
Lb	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	
Lc	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
Weight (kg)	0.9	1.1	1.3	1.5	1.6	1.8	2	2.2	2.4	2.5	2.7	2.9	3.1	3.3	3.4	3.6	
Maximum speed (mm/sec)	Lead 12	800										720	600	480	400	360	320
	Lead 6	400										360	300	240	200	180	160
	Speed setting	-										90%	75%	60%	50%	45%	40%

Features

Motorless

Sinter type

Basic model

LBAS

Advanced model

LGXS

Basic model

LBAR

Basic model

ABAS

Advanced model

AGXS

Basic model

ABAR

Acceleration/Deceleration

Inertia Moment

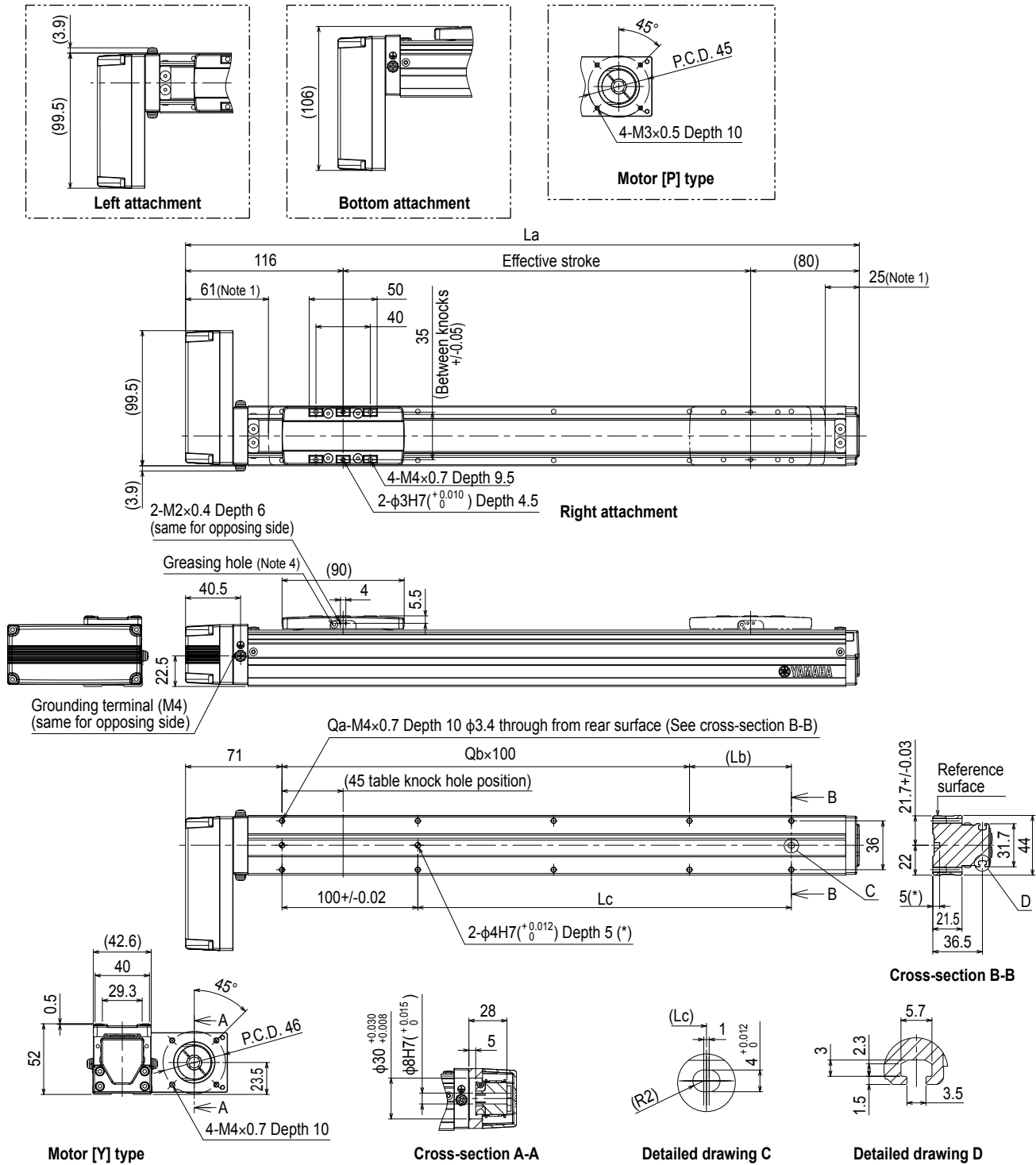
Option

Single axis motor

positioner

EP-01

LBAS04 Bending type (A)



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

Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.

Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M3 x 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M4 x 0.7> used to install the main unit.

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

Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
La	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996	
Lb	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	
Lc	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
Weight (kg)	1.1	1.2	1.4	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.8	3	3.2	3.4	3.6	3.7	
Maximum speed (mm/sec)	Lead 12	800									720	600	480	400	360	320	
	Lead 6	400									360	300	240	200	180	160	
	Speed setting	-									90%	75%	60%	50%	45%	40%	

LBAS05

Basic model

Motor-less Single Axis Actuator

Slider type



Ordering method

LBAS05				
Model	Lead	Shape	Motor specification	Stroke
	20: 20 mm 10: 10 mm 5: 5 mm	S: Straight A: Bending	Y: Y specification (see below) P: P specification (see below) A: A specification (see below) S: S specification (see below) N: N specification (see below)	50 to 800 (50 mm pitch)

[Caution]

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

Specifications

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

Note 1. Positioning repeatability in one direction.

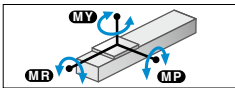
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 550 mm, the ball screw may resonate. (Critical speed)

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

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

Note. See P.107 for acceleration/deceleration and inertia moment.

Static loading moment



	(Unit: N·m)		
	MY	MP	MR
	59	63	103

Applicable motor

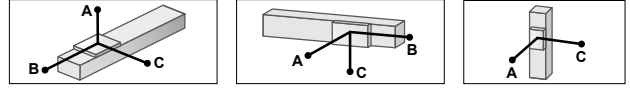
Applicable servo motor

Specification	Flange size	<input type="checkbox"/> 40
	Wattage	100 W

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

Motor specification	Manufacturer	Model
Y	Yaskawa Electric Corp.	SGMJV-01
		SGMJJ-01
	Keyence Corp.	SV-□ 010
		SV2-□ 010
	Mitsubishi Electric Corp.	HF-KP13
		HG-KR13
		HK-KT13
	Omron Electronics	R88M-K10030
		R88M-1M10030
	Panasonic Corp.	MHMF01
	Sanyo Denki	R2 □ A04010
	Tamagawa Seiki	TSM3104
	Delta Electronics	ECMA-C10401
	Fanuc Corp.	β iS0.3/5000
	Kingservo	KSMA01LI □ S
		KSMA01LG
Siemens	1FK2102-1AG	
	1FL6024-2AF	
Schneider	BCH2MB013	
Beckhoff	AM3012C*	
Allen-Bradley	TLY-A130*	
P	Panasonic Corp.	MSMD01
		MSMF01

Allowable overhang ^{Note}



LBAS05-20

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

LBAS05-10

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

LBAS05-5

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

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

Note. Service life is calculated for 500 mm stroke models.

Applicable stepping motor

Specification	Flange size	<input type="checkbox"/> 42
Motor specification	Manufacturer	Model
A	Oriental Motor	AZM46
		ARM46
		RKS54
S	Oriental Motor	AZM48
N	NEMA standard	NEMA17

Note. Be aware that the dimensions of the NEMA standard motor may vary depending on the manufacturer.

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

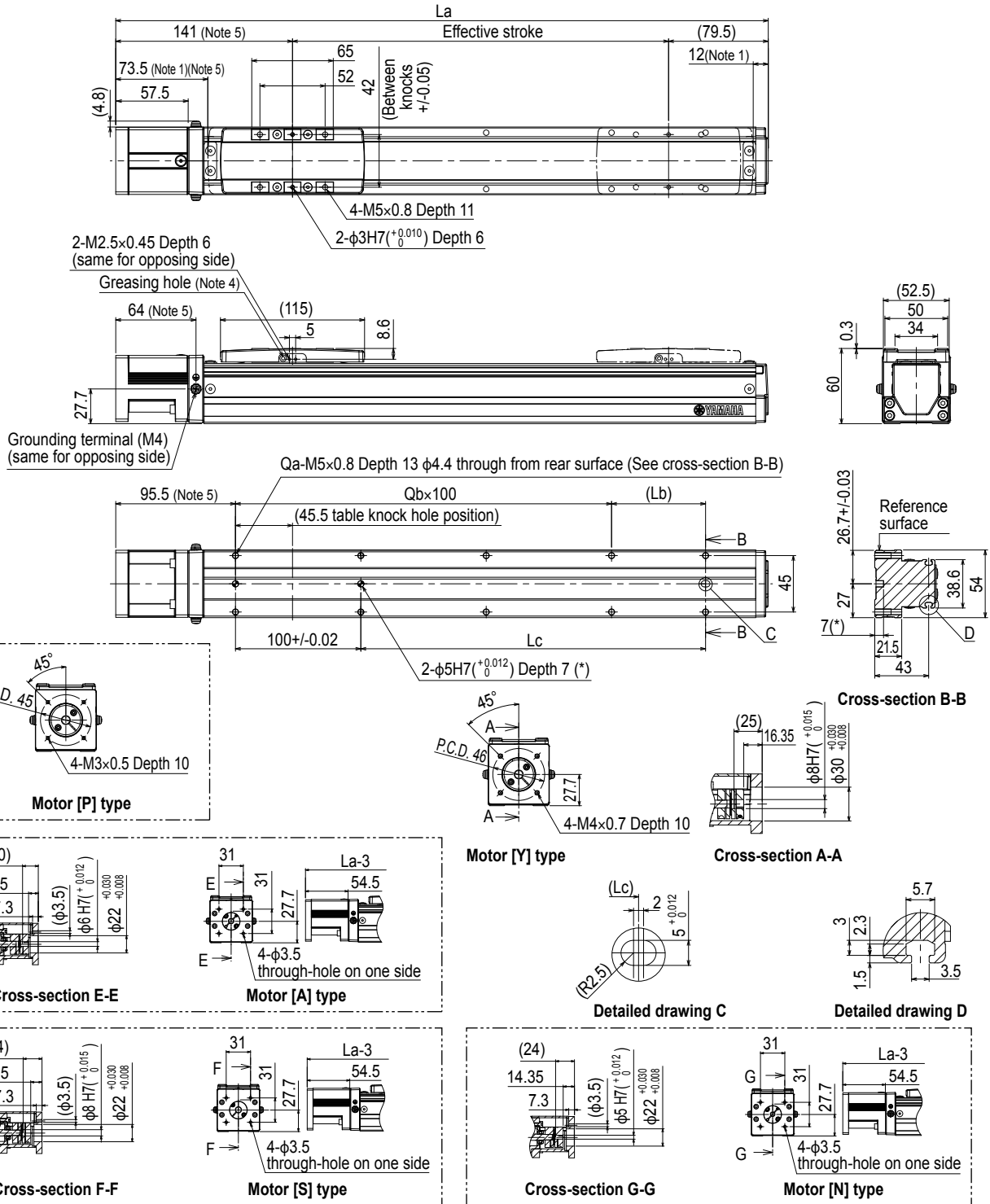
Access the website below.



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

Features
Motorless
Slider type
Basic model
LBAS
Advanced model
Slider type
Advanced model
LGXS
Basic model
Rod type
Basic model
LBAR
Slider type
Basic model
YAMAHA
Slider type
Basic model
ABAS
Advanced model
YAMAHA
Slider type
Advanced model
AGXS
Basic model
YAMAHA
Rod type
Basic model
ABAR
Acceleration/Deceleration
Inertia Moment
Option
Single axis positioner
EP-01

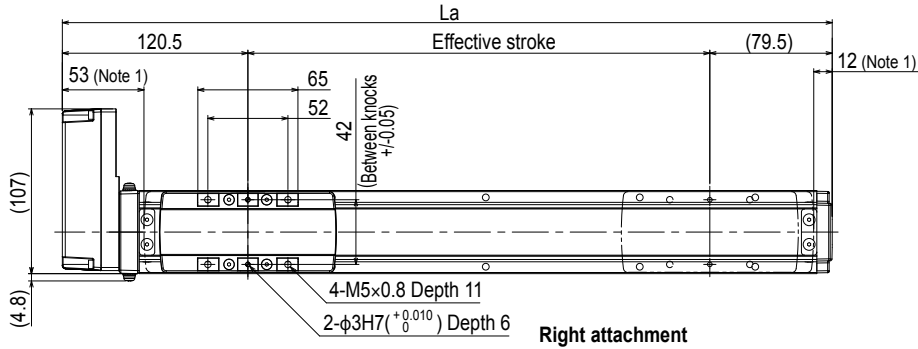
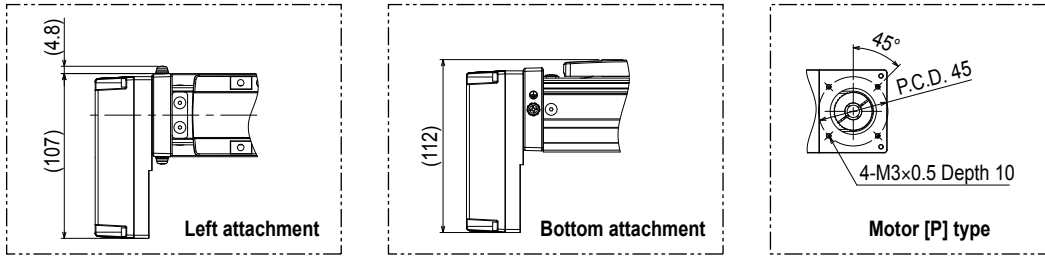
LBAS05 Straight type (S)



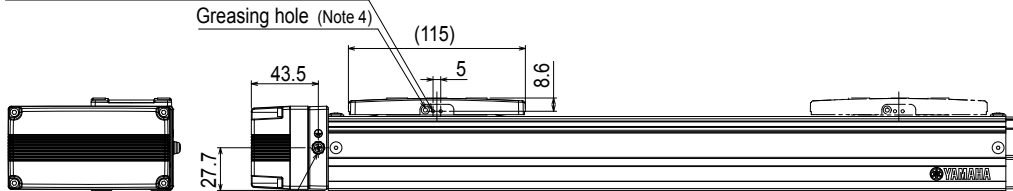
- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
- Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M4 × 0.7>. In the installation tap hole, the length under head << thickness of stand +10 mm or less >> is recommended for the hex socket head bolts <M5 × 0.8> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
Part number: KFU-M3861-00
- Note 5. For the motor specifications A, S, and N, the dimensions are that those stated in the table <<-3 mm>>.

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
La	270.5	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
Lb	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
Lc	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
Weight (kg)	1.6	1.8	1.9	2.1	2.4	2.5	2.5	2.7	2.8	2.9	3.1	3.3	3.4	3.6	3.7	4.1
Maximum speed (mm/sec)	Lead 20	1333										1133	933	799	666	599
	Lead 10	666										566	466	399	333	299
	Lead 5	333										283	233	199	166	149
	Speed setting	-										85%	70%	60%	50%	45%

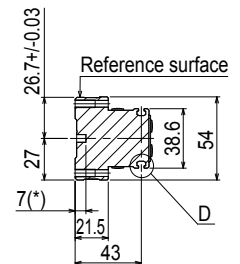
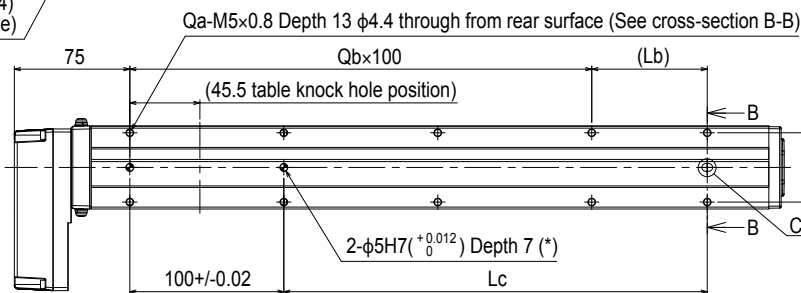
LBAS05 Bending type (A)



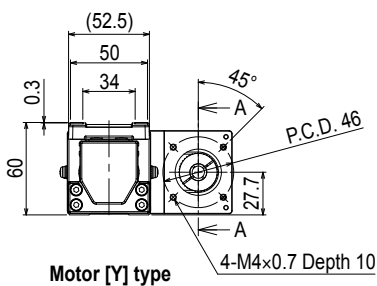
2-M2.5x0.45 Depth 6 (same for opposing side)



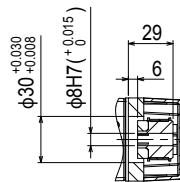
Grounding terminal (M4) (same for opposing side)



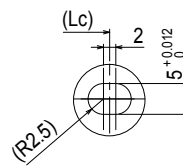
Cross-section B-B



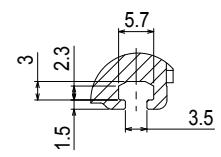
Motor [Y] type



Cross-section A-A



Detailed drawing C



Detailed drawing D

- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 - Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
 - Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M4 x 0.7>. In the installation tap hole, the length under head << thickness of stand +10 mm or less >> is recommended for the hex socket head bolts <M5 x 0.8> used to install the main unit.
 - Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
- Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
La	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
Lb	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	
Lc	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
Weight (kg)	1.7	1.8	2	2.2	2.4	2.6	2.6	2.8	2.9	3	3.2	3.3	3.5	3.6	3.8	4.1	
Maximum speed (mm/sec)	Lead 20											1333	1133	933	799	666	599
	Lead 10											666	566	466	399	333	299
	Lead 5											333	283	233	199	166	149
	Speed setting											-	85%	70%	60%	50%	45%

Features

Motorless
Slider type
Basic model

LBAS

Motorless
Slider type
Advanced model

LGXS

Motorless
Rod type
Basic model

LBAR

Motorless
Slider type
Basic model

ABAS

Motorless
Slider type
Advanced model

AGXS

Motorless
Rod type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single axis sensor push-in type

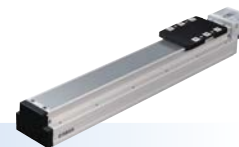
EP-01

LBAS08

Basic model

Motor-less Single Axis Actuator

Slider type



Ordering method

LBAS08

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

[Caution]

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

Specifications

Applicable motor	200 W		
Repeatability ^{Note 1}	±0.01 mm		
Deceleration mechanism	Shifting position ball screw φ 16 (C7 class)		
Stroke	50 mm to 1100 mm (50 mm pitch)		
Maximum speed ^{Note 2} (or equivalent)	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	20 mm	10 mm	5 mm
Maximum payload ^{Note 3} (or equivalent)	Horizontal	40 kg	80 kg
	Vertical	8 kg	20 kg
Rated thrust ^{Note 3} (or equivalent)		174 N	341 N
			683 N
Maximum dimensions of cross section of main unit	W 82 mm × H 78 mm		
Overall length	Straight	ST + 278 mm	
	Bending	ST + 264.5 mm	
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)		

Note 1. Positioning repeatability in one direction.

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

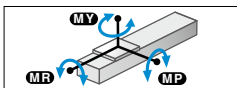
If the effective stroke exceeds 650 mm, the ball screw may resonate. (Critical speed)

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

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

Note. See P.109 for acceleration/deceleration and inertia moment.

Static loading moment



	MY	MP	MR
(Unit: N·m)	221	309	343

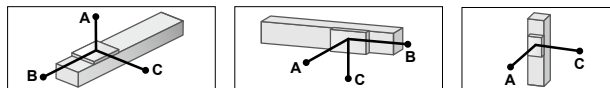
Applicable motor

Applicable servo motor

Specification	Flange size	<input type="checkbox"/> 60
	Wattage	200 W

Motor specification	Manufacturer	Model
Y	Yaskawa Electric Corp.	SGMJV-02
		SGM7J-02
	Keyence Corp.	SV-□ 020
		SV2-□ 020
	Mitsubishi Electric Corp.	HF-KP23
		HG-KR23
		HK-KT23
	Sanyo Denki	R2 □ A06020
	Tamagawa Seiki	TSM3202
	Delta Electronics	ECMA-C10602
Siemens	1FL6032-2AF	
Schneider	BCH2LD023	
P	Omron Electronics	R88M-K20030
		R88M-1M20030
	Panasonic Corp.	MSMD02
MSMF02		
K	Kingservo	KSMA02LI
		KSMA02LG

Allowable overhang ^{Note}



LBAS08-20

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
15kg	356	131	146	15kg	146	131	356	3kg	634	634
25kg	278	73	86	25kg	86	73	278	6kg	321	321
40kg	517	54	76	40kg	76	54	517	8kg	240	240

LBAS08-10

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	465	83	120	30kg	120	83	465	5kg	551	551
50kg	341	44	65	50kg	65	44	341	10kg	270	270
80kg	228	22	34	80kg	34	22	228	20kg	129	129

LBAS08-5

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	1604	95	153	30kg	153	95	1604	10kg	312	312
50kg	1035	52	83	50kg	83	52	1035	20kg	149	149
80kg	719	27	44	80kg	44	27	719	30kg	95	95
100kg	608	19	31	100kg	31	19	608			

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

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

Applicable stepping motor

Specification	Flange size	<input type="checkbox"/> 60
		<input type="checkbox"/> 56(NEMA)

Motor specification	Manufacturer	Model
A	Oriental Motor	AZM66
		AZM69
		ARM66
		ARM69
		RKS56
N	NEMA standard	NEMA23

Note. Be aware that the dimensions of the NEMA standard motor may vary depending on the manufacturer.

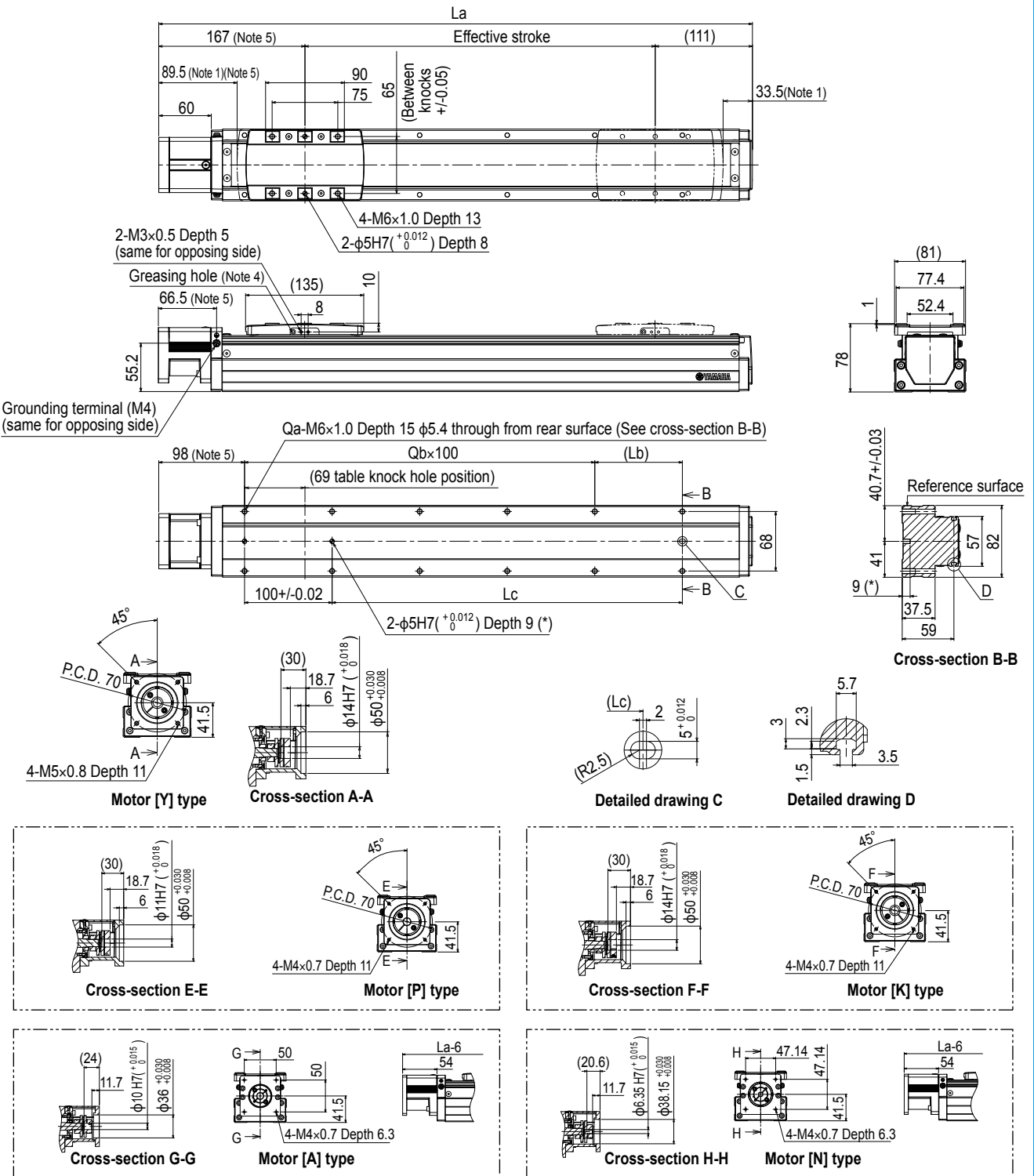
Note. For the motor specifications A and N, the parts dedicated for bending cannot be used.

Access the website below.



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

LBAS08 Straight type (S)



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
 Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M5 x 0.8>. In the installation tap hole, the length under head << thickness of stand + 15 mm or less >> is recommended for the hex socket head bolts <M6 x 1.0> used to install the main unit.
 Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
 Part number: KFU-M3861-00
 Note 5. For the motor specifications A and N the dimensions are that those stated in the table <<-3 mm>>.

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100		
La	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378		
Lb	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100		
Lc	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100		
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26		
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11		
Weight (kg)	3.7	4.1	4.5	4.8	5.2	5.5	5.8	6.2	6.5	6.8	7.2	7.5	7.9	8.2	8.5	8.8	9.2	9.4	9.8	10.1	10.5	10.9		
Maximum speed (mm/sec)	Lead 20											1200												
	Lead 10											600												
	Lead 5											300												
	Speed setting											-												
Speed setting											1020	900	780	660	600	540	480	420	360					
											510	450	390	330	300	270	240	210	180					
											255	225	195	165	150	135	120	105	90					
											85%	75%	65%	55%	50%	45%	40%	35%	30%					

Features
 Motorless
 Slider type
 Basic model
 LBAS
 Motorless
 Slider type
 Advanced model
 LGXS
 Motorless
 Rod type
 Basic model
 LBAR
 Motorless
 Slider type
 Basic model
 ABAS
 Motorless
 Slider type
 Advanced model
 AGXS
 Motorless
 Rod type
 Basic model
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single axis
 positioner
 Ep01

Features

Motorless
Slider type
Basic model
LBAS

Motorless
Slider type
Advanced model
LGXS

Motorless
Ind type
Basic model
LBAR

With motor
Slider type
Basic model
ABAS

With motor
Slider type
Advanced model
AGXS

With motor
Ind type
Basic model
ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner
EP-01

■ Applicable motor (200W)

● Applicable servo motor

Specification	Flange size	<input type="checkbox"/> 60
	Wattage	200 W
Motor specification	Manufacturer	Model
Y	Yaskawa Electric Corp.	SGMJV-02
		SGMJJ-02
	Keyence Corp.	SV- <input type="checkbox"/> 020
		SV2- <input type="checkbox"/> 020
	Mitsubishi Electric Corp.	HF-KP23
		HG-KR23
		HK-KT23
	Sanyo Denki	R2 <input type="checkbox"/> A06020
	Tamagawa Seiki	TSM3202
	Delta Electronics	ECMA-C10602
Siemens	1FL6032-2AF	
Schneider	BCH2LD023	
P	Omron Electronics	R88M-K20030
		R88M-1M20030
	Panasonic Corp.	MSMD02
		MSMF02
Kingservo	KSMA02LI	
	KSMA02LG	

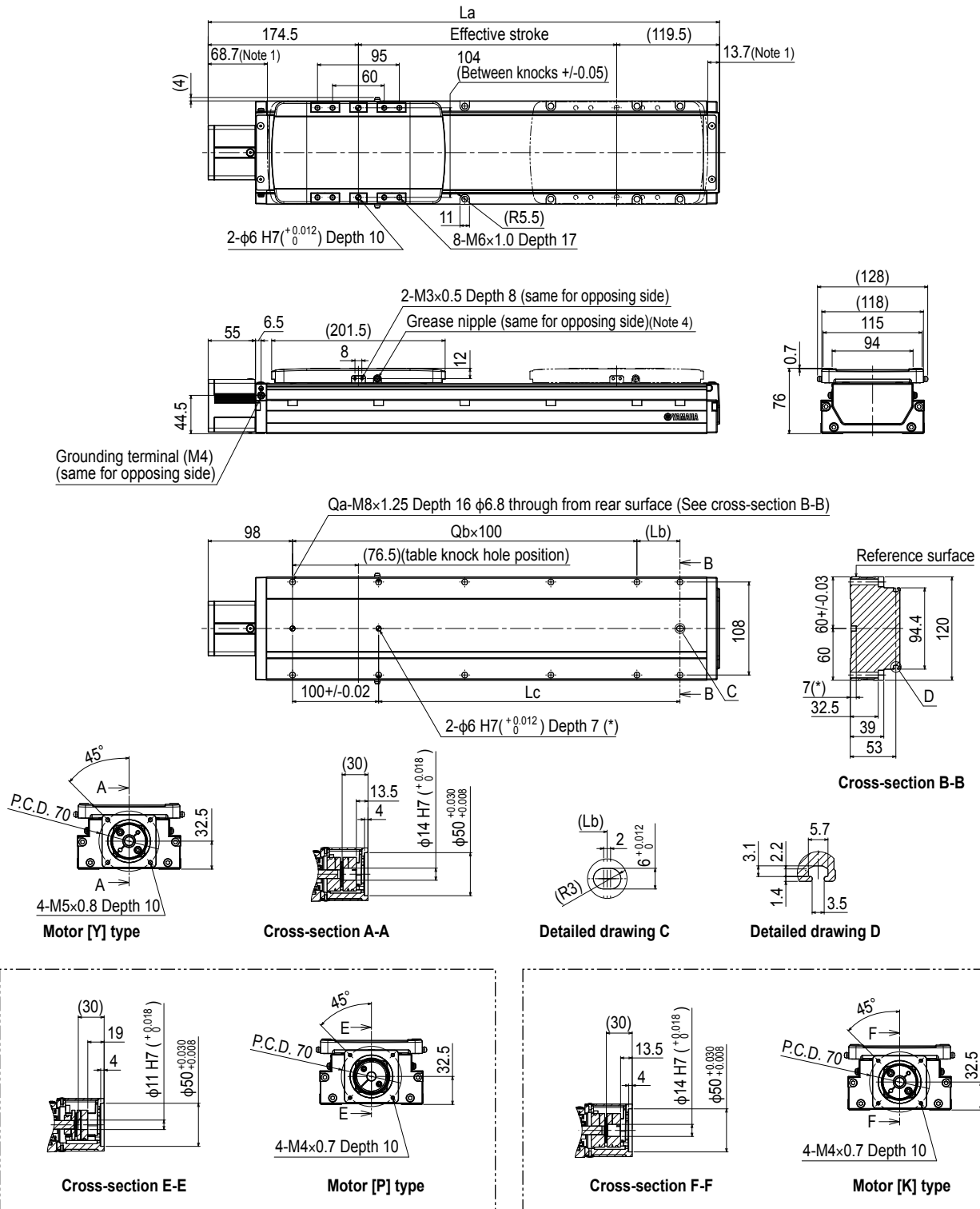
■ Applicable motor (400W)

● Applicable servo motor

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

LBAS12 Straight type (S)

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



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

Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.

Note 3. For the installation through hole, the length under head <<45 mm or more>> is recommended for the hex socket head bolts <M6 × 1.0>. In the installation tap hole, the length under head <<thickness of stand +16 mm or less>> is recommended for the hex socket head bolts <M8 × 1.25> used to install the main unit.

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

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250				
La	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094	1144	1194	1244	1294	1344	1394	1444	1494	1544				
Lb	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100				
Lc	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300				
Qa	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30				
Qb	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13				
Weight (kg)	4.5	4.9	5.3	5.7	6.1	6.5	6.9	7.3	7.7	8.1	8.6	9	9.4	9.9	10.3	10.7	11.2	11.6	12.1	12.5	12.9	13.4	13.8	14.3	14.7				
Maximum speed (mm/sec)	Lead 32												1800																
	Lead 20												1200	1620	1440	1260	1080	990	810	720	630	540	450	360	360				
	Lead 10												600	1080	960	840	720	660	540	480	420	360	300	240	240				
	Lead 5												300	540	480	420	360	330	270	240	210	180	150	120	120				
Speed setting												-	90%	80%	70%	60%	55%	45%	40%	35%	35%	30%	25%	20%	20%				

Features

- Motorless
- Slider type
- Basic model

LBAS

Advanced model

- Motorless
- Slider type
- Basic model

LGXS

Basic model

- Motorless
- Slider type
- Basic model

LBAR

Basic model

- Motorless
- Slider type
- Basic model

ABAS

Advanced model

- Motorless
- Slider type
- Advanced model

AGXS

Basic model

- Motorless
- Slider type
- Basic model

ABAR

Acceleration/Deceleration

Inertia Moment

Option

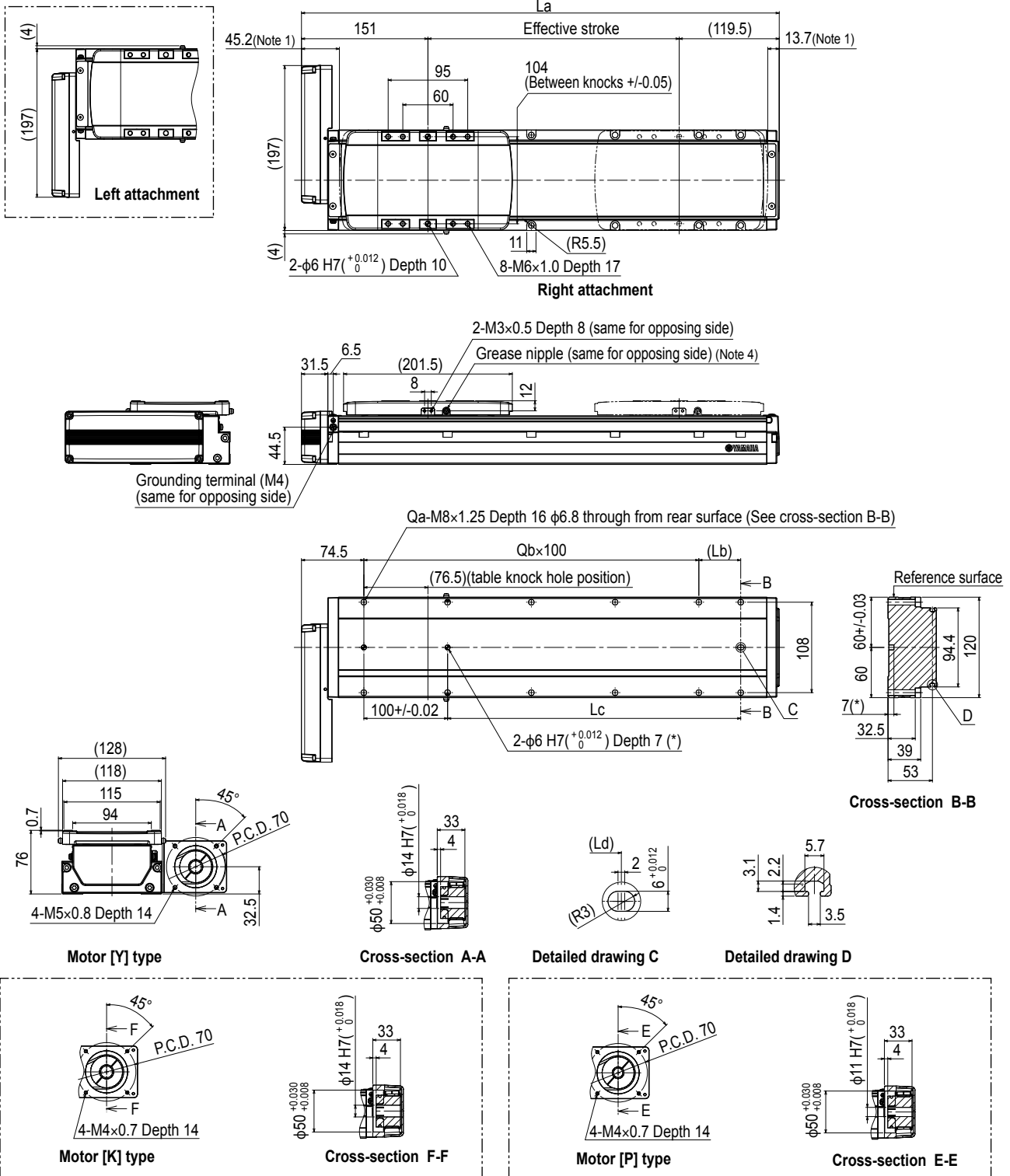
Single axis motion

positioner

EP01

LBAS12 Bending type (A)

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



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
- Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M6 × 1.0>. In the installation tap hole, the length under head << thickness of stand + 16 mm or less >> is recommended for the hex socket head bolts <M8 × 1.25> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250		
La	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5		
Lb	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100		
Lc	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300		
Qa	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30		
Qb	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13		
Weight (kg)	4.5	4.9	5.3	5.7	6.1	6.5	6.9	7.3	7.7	8.2	8.6	9.1	9.5	9.9	10.4	10.8	11.2	11.7	12.1	12.6	13	13.4	13.9	14.3	14.8		
Maximum speed (mm/sec)	Lead 32	1800										1620	1440	1260	1080	990	810	720	630	630	540	450	360	360			
	Lead 20	1200										1080	960	840	720	660	540	480	420	420	360	300	240	240			
	Lead 10	600										540	480	420	360	330	270	240	210	210	180	150	120	120			
	Lead 5	300										270	240	210	180	165	135	120	105	105	90	75	60	60			
Speed setting	-										90%	80%	70%	60%	55%	45%	40%	35%	35%	30%	25%	20%	20%				

Features	Motorless Slider type Basic model	LBAS	Motorless Slider type Advanced model	LGXS	Motorless Rod type Basic model	LBAR	VITH motor Slider type Basic model	ABAS	VITH motor Slider type Advanced model	AGXS	VITH motor Rod type Basic model	ABAR	Acceleration/Deceleration Inertia Moment	Option	Single axis robot positioner EP-01
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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]

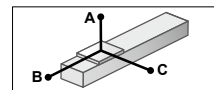
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. 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	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)	1333 mm/sec	666 mm/sec	333 mm/sec
	20 mm	10 mm	5 mm
	Ball screw lead		
Maximum payload (or equivalent)	Horizontal	5 kg	8 kg
	Vertical	2 kg	4 kg
Rated thrust (or equivalent)	41 N	69 N	138 N
	Maximum dimensions of cross section of main unit	W 48 mm x 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)		

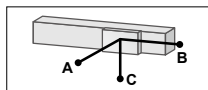
- Note 1. Positioning repeatability in one direction.
 Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 600 mm, the ball screw may resonate. (Critical speed)
 At this time, make the adjustment to decrease 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}



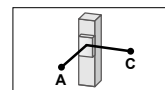
LGXS05-20

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)

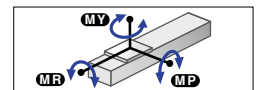
A B C			
3kg	439	245	4371
8kg	117	65	1812
13kg	42	24	1000

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 <input type="checkbox"/> 40
	Wattage 50 W

Manufacturer	Model
Yaskawa Electric Corp.	SGMJV-A5 SGM7J-A5
Keyence Corp.	SV- <input type="checkbox"/> 005 SV2- <input type="checkbox"/> 005
Mitsubishi Electric Corp.	HF-KP053 ^{Note} HG-KR053 ^{Note} HK-KT053 ^{Note}
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	Horizontal	2 kg	3 kg
	Vertical	1 kg	2 kg
Maximum acceleration	Horizontal	11.77 m/s ² (1.2 G)	11.77 m/s ² (1.2 G)
	Vertical	11.77 m/s ² (1.2 G)	7.17 m/s ² (0.7 G)

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)

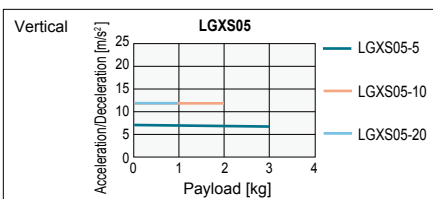
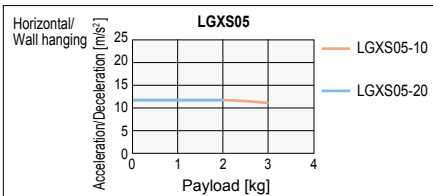
A C	
1kg	396 396
2kg	182 182

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

Payload - Acceleration / Deceleration Graph (Estimate)



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.

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]

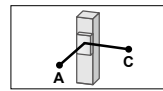
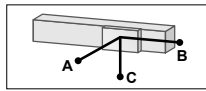
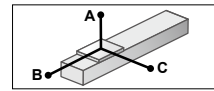
This system is provided as mechanical actuator unit and not including any adapters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. 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 ^{Note 2} (or equivalent)	1333 mm/sec 666 mm/sec 333 mm/sec	
Ball screw lead	20 mm 10 mm 5 mm	
Maximum payload ^{Note 3} (or equivalent)	Horizontal	12 kg 24 kg 32 kg
	Vertical	3 kg 6 kg 12 kg
Rated thrust ^{Note 3} (or equivalent)	Horizontal	84 N 169 N 339 N
	Vertical	339 N 678 N 1356 N
Maximum dimensions of cross section of main unit	W 48 mm x 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 °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
8kg	737	200	153
12kg	608	133	104

Wall installation (Unit: mm)	A B C		
	3kg	396	486
8kg	106	128	525
12kg	52	61	329

Vertical installation (Unit: mm)	A C	
	1kg	1486
2kg	730	730
3kg	478	478

LGXS05L-10

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

Wall installation (Unit: mm)	A B C		
	6kg	277	316
12kg	101	115	1084
24kg	12	14	276

Vertical installation (Unit: mm)	A C	
	4kg	555
6kg	360	360

LGXS05L-5

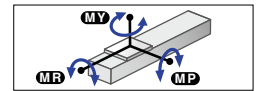
Horizontal installation (Unit: mm)	A B C		
	10kg	3127	254
20kg	1841	120	106
32kg	1554	70	62

Wall installation (Unit: mm)	A B C		
	10kg	162	181
20kg	42	47	1273
32kg	0	0	0

Vertical installation (Unit: mm)	A C	
	5kg	501
10kg	235	235
12kg	190	190

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

Static loading moment



(Unit: N·m)		
MY	MP	MR
72	72	64

Adaptable Servo Motor

Specification	Flange size	<input type="checkbox"/> 40
	Wattage	100 W
Manufacturer	Model	
Yaskawa Electric Corp.	SGMJV-01 SGM7J-01	
Keyence Corp.	SV- <input type="checkbox"/> 010	
	SV2- <input type="checkbox"/> 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	Horizontal	5 kg	10 kg
	Vertical	1 kg	2 kg
Maximum acceleration	Horizontal	14.72 m/s ² (1.5 G)	14.72 m/s ² (1.5 G)
	Vertical	14.72 m/s ² (1.5 G)	6.65 m/s ² (0.7 G)

Allowable overhang ^{Note}

LGXS05L-20

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

Wall installation (Unit: mm)	A B C		
	2kg	294	428
5kg	87	118	251

Vertical installation (Unit: mm)	A C	
	1kg	728

LGXS05L-10

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

Wall installation (Unit: mm)	A B C		
	3kg	331	396
6kg	131	155	580
10kg	49	58	315

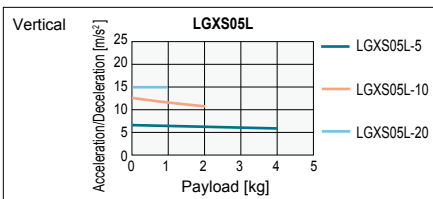
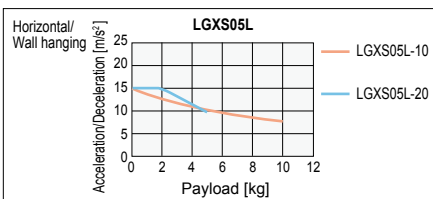
Vertical installation (Unit: mm)	A C	
	1kg	1298
2kg	636	636

LGXS05L-5

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

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.

Payload - Acceleration / Deceleration Graph (Estimate)



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										
	666										
	333										

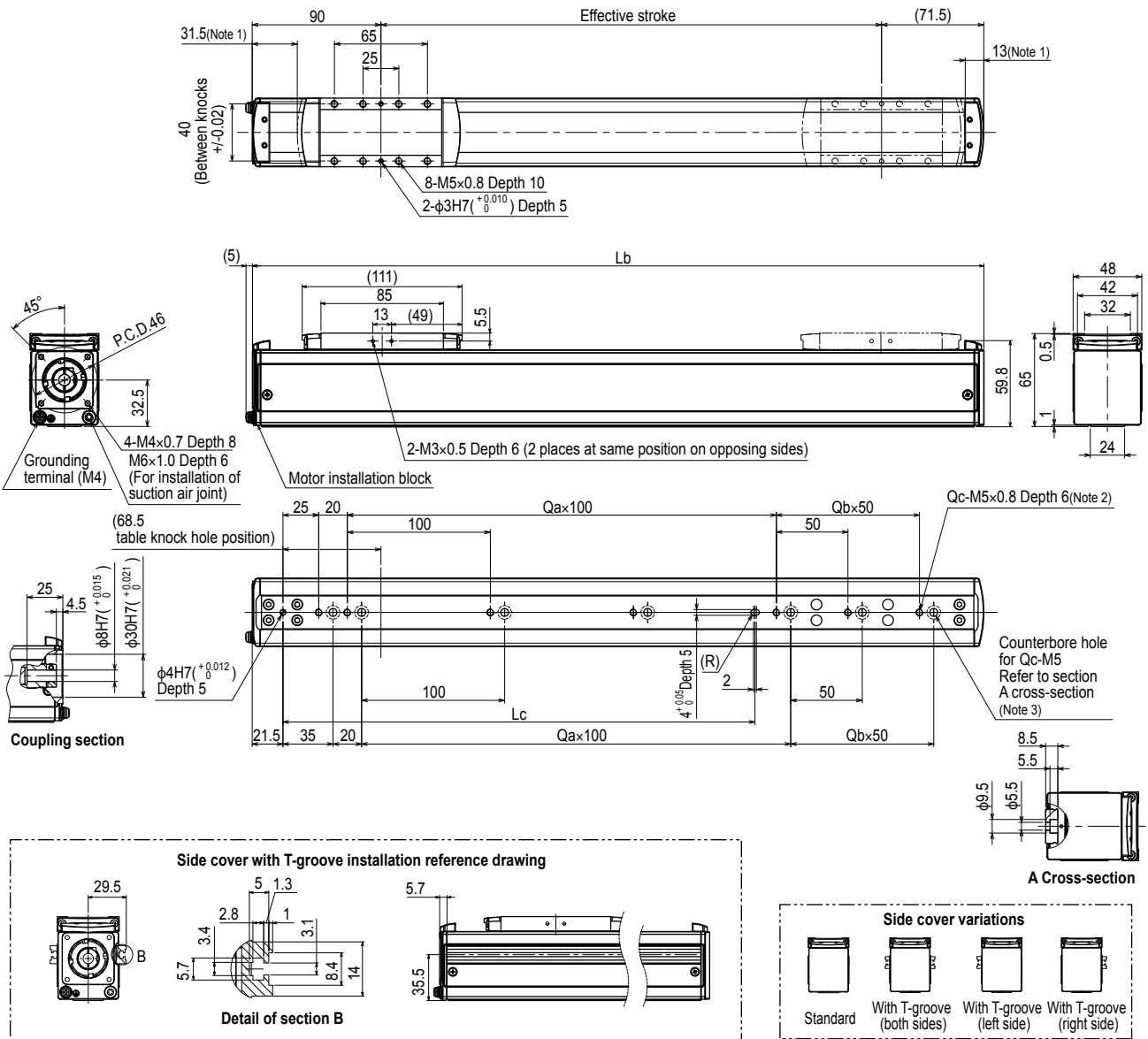
Note. The bending unit cannot be used for the high agility mode.
 Note. The high agility mode is used in an effective stroke range of 50 to 550 (50 mm pitch).
 Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
 The speed may not reach the maximum speed if 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 x 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											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%

Features

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Acceleration/Deceleration

Inertia Moment

Option

Single axis force positioner

EP-01

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]

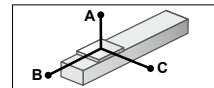
This system is provided as mechanical actuator unit and not including any adopters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment.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

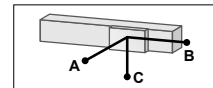
Applicable motor	100 W	
Repeatability ^{Note 1}	+/-0.005 mm	
Deceleration mechanism	Ground ball screw ϕ 15 (C5 class)	
Stroke	50 mm to 1100 mm (50 mm pitch)	
Maximum speed ^{Note 2} (or equivalent)	1800 mm/sec 1200 mm/sec 600 mm/sec 300 mm/sec	
Ball screw lead	30 mm 20 mm 10 mm 5 mm	
Maximum payload ^{Note 3} (or equivalent)	Horizontal	10 kg 25 kg 45 kg 85 kg
	Vertical	2 kg 4 kg 8 kg 16 kg
Rated thrust ^{Note 3} (or equivalent)	Horizontal	56 N 84 N 169 N 339 N
	Vertical	56 N 84 N 169 N 339 N
Maximum dimensions of cross section of main unit	W 70 mm x 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 °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.

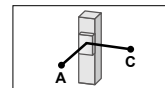
Allowable overhang ^{Note}



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

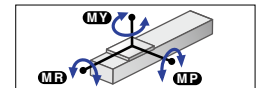


LGXS07-30			
Wall installation (Unit: mm)			
	A	B	C
2kg	1237	1442	2975
6kg	393	435	1062
10kg	244	251	793



LGXS07-30		
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	<input type="checkbox"/> 40
	Wattage	100 W
Manufacturer	Model	
Yaskawa Electric Corp.	SGMJV-01 SGM7J-01	
Keyence Corp.	SV- <input type="checkbox"/> 010	
	SV2- <input type="checkbox"/> 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	Horizontal	5 kg	10 kg	20 kg
	Vertical	1 kg	2 kg	4 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	14.72 m/s ² (1.5 G)	14.72 m/s ² (1.5 G)	8.44 m/s ² (0.9 G)

Allowable overhang ^{Note}

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

LGXS07-30			
Wall installation (Unit: mm)			
	A	B	C
2kg	579	830	976
5kg	208	279	401

LGXS07-30		
Vertical installation (Unit: mm)		
	A	C
1kg	1165	1165

LGXS07-5		
Vertical installation (Unit: mm)		
	A	C
3kg	1093	1093
5kg	639	639
8kg	384	384

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

LGXS07-20			
Wall installation (Unit: mm)			
	A	B	C
3kg	600	692	1175
6kg	274	303	621
10kg	138	147	376

LGXS07-20		
Vertical installation (Unit: mm)		
	A	C
1kg	1793	1793
2kg	891	891

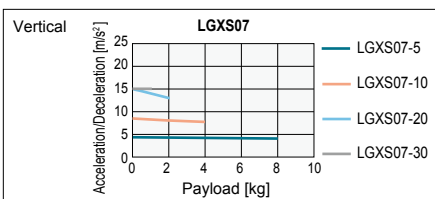
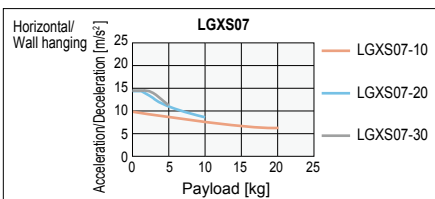
LGXS07-10			
Horizontal installation (Unit: mm)			
	A	B	C
5kg	2208	622	665
12kg	991	249	266
20kg	637	142	152

LGXS07-10			
Wall installation (Unit: mm)			
	A	B	C
5kg	603	556	2129
12kg	200	182	890
20kg	83	75	497

LGXS07-10		
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.

Payload - Acceleration / Deceleration Graph (Estimate)



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											
	Lead 30	1800										
Maximum speed (mm/sec)	Lead 20	1200										
	Lead 10	600										
	Lead 5	300										

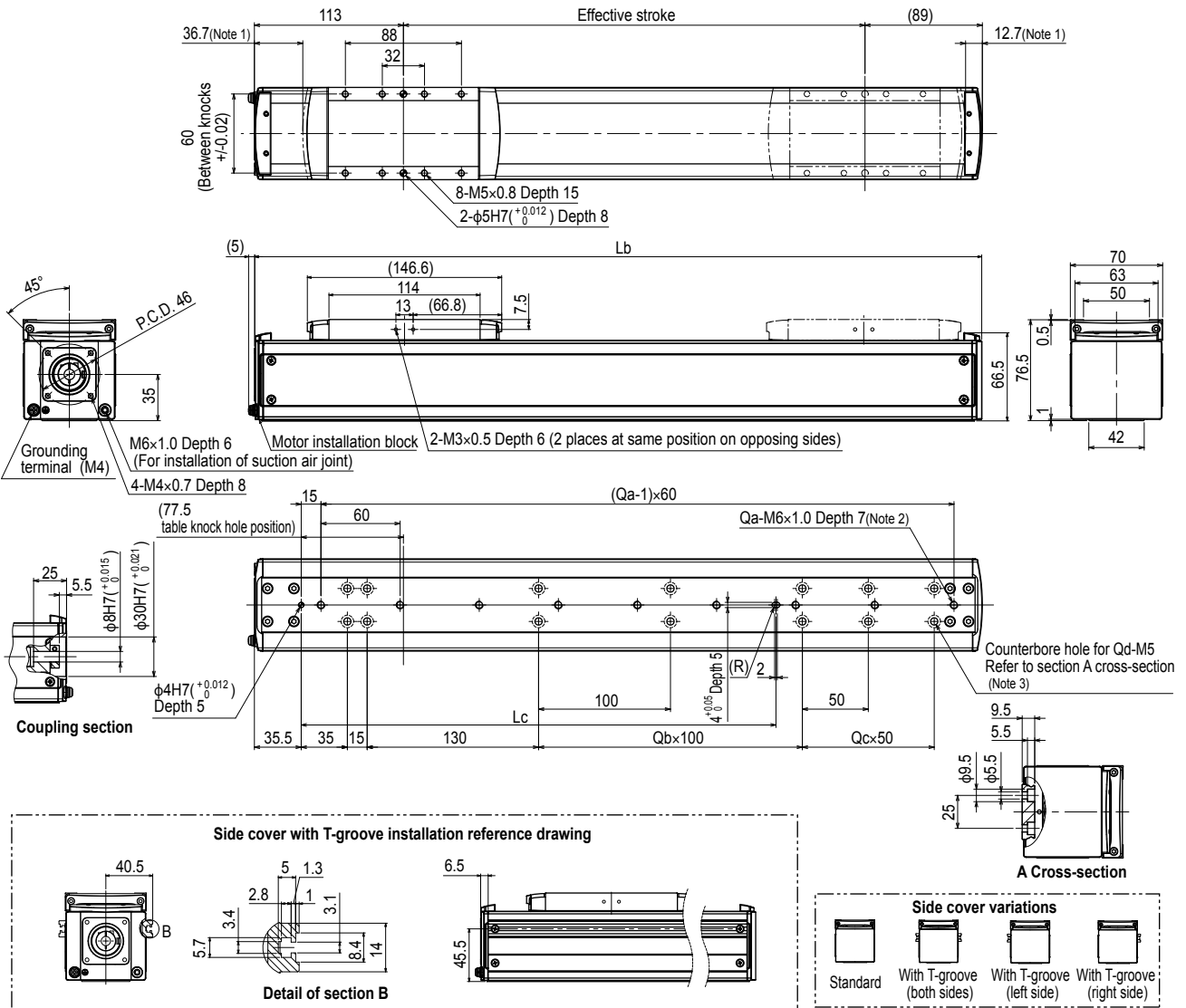
Note. The bending unit cannot be used for the high agility mode.
 Note. The high agility mode is used in an effective stroke range of 50 to 650 (50 mm pitch).
 Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
 The speed may not reach the maximum speed if 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														1530	1350	1170	990	900	810	720	630				
	Lead 20														1020	900	780	660	600	540	480	420				
	Lead 10														510	450	390	330	300	270	240	210				
	Lead 5														255	225	195	165	150	135	120	105				
Speed setting														85%	75%	65%	55%	50%	45%	40%	35%					

Features

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Acceleration/Deceleration Inertia Moment

Option

Single axis sensor positioner

EP-01

LGXS10

Advanced model

Motor-less Single Axis Actuator

Slider type



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 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	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
	Vertical	4 kg	8 kg	20 kg
Rated thrust ^{Note 3} (or equivalent)	113 N	170 N	341 N	683 N
Maximum dimensions of cross section of main unit	W 100 mm × H 99.5 mm			
Overall length	ST + 175.5 mm			
Degree of cleanliness ^{Note 4}	ISO CLASS 3 (ISO14644-1) or equivalent			
Intake air ^{Note 5}	30 Nℓ/min to 90 Nℓ/min			
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)			

- Note 1. Positioning repeatability in one direction.
 Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
 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)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
10kg	878	537	292	271	473	803	1kg	4135	4135
20kg	609	256	146	118	192	481	4kg	985	985
25kg	608	211	124	93	147	454			
LGXS10-20	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
15kg	1269	451	282	252	387	1159	3kg	2062	2062
25kg	754	253	158	123	189	629	6kg	1012	1012
40kg	466	142	88	51	78	311	8kg	750	750
LGXS10-10	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
30kg	1794	298	203	162	234	1623	5kg	1926	1926
50kg	1358	162	111	68	98	1060	10kg	931	931
80kg	1266	86	59	16	22	552	20kg	434	434
LGXS10-5	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
30kg	5605	321	225	181	258	5195	10kg	1018	1018
50kg	3694	177	124	79	113	3111	20kg	477	477
80kg	2619	95	67	22	31	1557	30kg	296	296
100kg	2224	68	48	0	0	0			

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

Static loading moment

	(Unit: N·m)		
MY	MP	MR	
274	274	241	

Adaptable Servo Motor

Specification	Flange size	□60
	Wattage	200 W
Motor specification	Manufacturer	Model
No entry	Yaskawa Electric Corp.	SGMJV-02 SGMJ-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
P	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

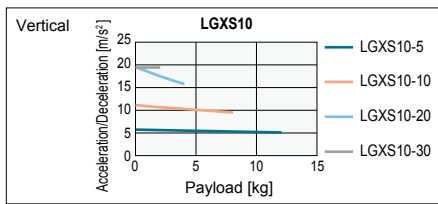
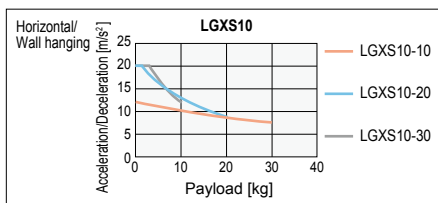
Stroke	100 mm to 650 mm (50 mm pitch)			
Ball screw lead	30 mm	20 mm	10 mm	5 mm
Maximum payload	10 kg	20 kg	30 kg	-
Maximum acceleration	Horizontal	19.62 m/s ² (2 G)	19.62 m/s ² (2 G)	11.71 m/s ² (1.2 G)
	Vertical	2 kg	4 kg	8 kg
Maximum acceleration	Horizontal	19.62 m/s ² (2 G)	19.62 m/s ² (2 G)	10.84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

Allowable overhang ^{Note}

LGXS10-30	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
3kg	1041	1117	541	521	1046	1009	1kg	2054	2054
6kg	581	534	266	241	466	539	2kg	994	994
10kg	384	300	153	125	235	327			
LGXS10-20	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
5kg	1218	844	493	464	778	1177	2kg	1602	1602
12kg	575	326	193	159	261	516	4kg	788	788
20kg	375	177	106	70	113	290			
LGXS10-10	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
10kg	1851	568	383	343	504	1784	3kg	1849	1849
20kg	973	263	177	136	199	885	5kg	1086	1086
30kg	671	162	109	67	98	552	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.

Payload - Acceleration / Deceleration Graph (Estimate)



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.



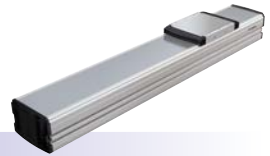
▶ The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.16.

LGXS12

Advanced model

Motor-less Single Axis Actuator

Slider type



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]

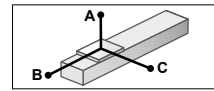
This system is provided as mechanical actuator unit and not including any adapters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. 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	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 x 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 °C, 35 to 80 %RH (non-condensing)

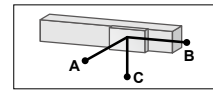
- Note 1. Positioning repeatability in one direction.
 Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
 If the effective stroke exceeds 700 mm, the ball screw may resonate. (Critical speed)
 At this time, make the adjustment to decrease 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}



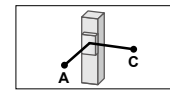
LGXS12-30

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



Wall installation (Unit: mm)

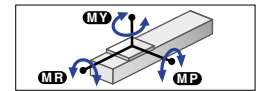
	A	B	C
10kg	631	1009	1720
20kg	316	466	1171
35kg	197	269	1130



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	<input type="checkbox"/> 60
	Wattage	400 W
Motor specification	Manufacturer	Model
	Yaskawa Electric Corp.	SGMJV-04 SGMJJ-04
	Keyence Corp.	SV- <input type="checkbox"/> 040 SV2- <input type="checkbox"/> 040
	Mitsubishi Electric Corp.	HF-KP43 HG-KR43 ^{Note 1} HK-KT43 ^{Note 1}
No entry	Omron Electronics	R88M-K40030 R88M-1M40030
	Panasonic Corp.	MSMD04 MSMS04 MHMF04
	Conversion adapter product model	Shim plate part number
GX-BEND-60 ^{Note 2}	KEV-M2295-00	

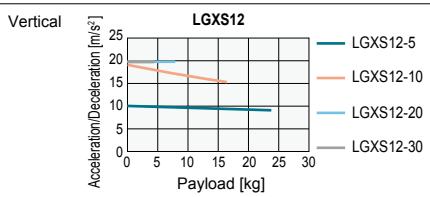
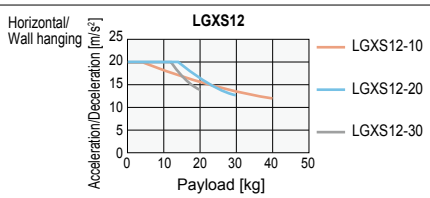
- Note 1. To combine with the conversion adapter <GX-BEND-60>, the shim plate (t1) is necessary.
 Note 2. For the specifications P, the bending unit cannot be used.

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	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	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										

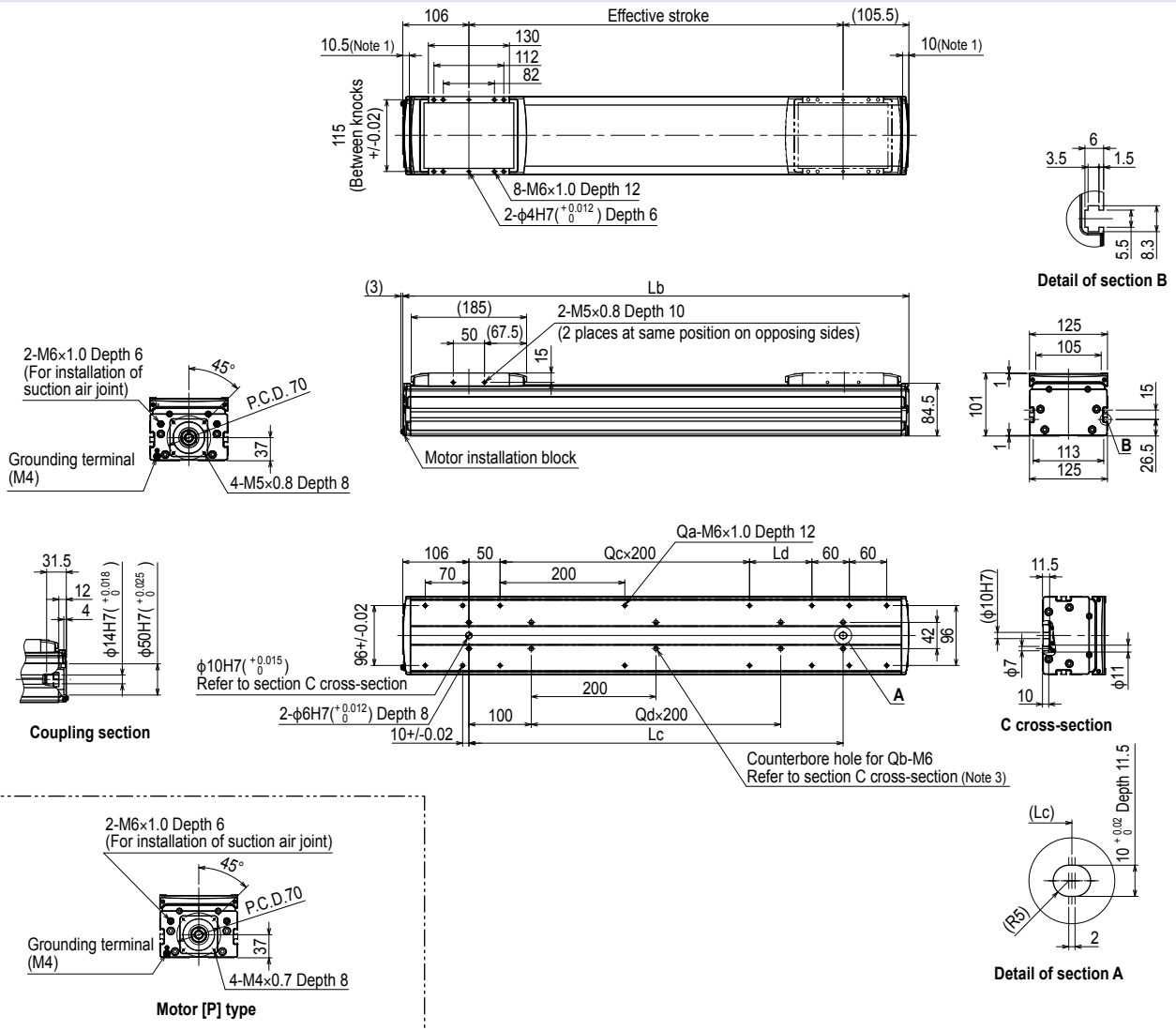
- Note. The bending unit cannot be used for the high agility mode.
 Note. The high agility mode is used in an effective stroke range of 100 to 650 (50 mm pitch).
 Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
 The speed may not reach the maximum speed 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.

LGXS12



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. The length under head of the hex socket head bolts <M6 × 1.0> used to mount the body with the mounting counterbore holes (section C cross-section) must be <<20 mm or more>>. The recommended length under head of the hex socket head bolts <M6 × 1.0> used to mount the body with the mounting tap hole specifications is <<frame thickness + 10 mm or less>>.
- Note 3. When using the mounting 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	
Lb	311.5	361.5	411.5	461.5	511.5	561.5	611.5	661.5	711.5	761.5	811.5	861.5	911.5	961.5	1011.5	1061.5	1111.5	1161.5	1211.5	1261.5	1311.5	1361.5	1411.5	1461.5	
Lc	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	
Ld	0	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	
Qa	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	
Qb	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	
Qc	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	
Qd	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	
Weight (kg)	6.5	7.1	7.8	8.5	9.1	9.8	10.5	11.2	11.8	12.5	13.2	13.9	14.5	15.2	15.9	16.5	17.2	17.9	18.6	19.2	19.9	20.6	21.3	21.9	
Maximum speed (mm/sec)	Lead 30	1800											1530	1350	1170	990	900	810	720	630	540	450			
	Lead 20	1200											1020	900	780	660	600	540	480	420	360	300			
	Lead 10	600											510	450	390	330	300	270	240	210	180	150			
	Lead 5	300											255	225	195	165	150	135	120	105	90	75			
Speed setting	-											85%	75%	65%	55%	50%	45%	40%	35%	30%	25%				

Features

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Acceleration/Deceleration

Inertia Moment

Option

Single axis robot positioner

EP-01

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]

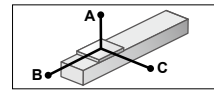
This system is provided as mechanical actuator unit and not including any adapters or electric components. Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. 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) ^{Note 2}	2400 mm/sec	1200 mm/sec	600 mm/sec
Ball screw lead	40 mm	20 mm	10 mm
Maximum payload (or equivalent) ^{Note 3}	Horizontal	45 kg	95 kg
	Vertical	12 kg	28 kg
Rated thrust (or equivalent) ^{Note 3}		320 N	640 N
		640 N	1280 N
		1280 N	
Maximum dimensions of cross section of main unit	W 160 mm × H 130 mm		
Overall length	ST + 242.5 mm		
Degree of cleanliness ^{Note 4}	ISO CLASS 3 (ISO14644-1) or equivalent		
Intake air ^{Note 5}	30 Nℓ/min to 90 Nℓ/min		
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)		

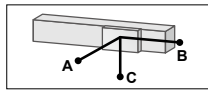
- Note 1. Positioning repeatability in one direction.
 Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 800 mm, the ball screw may resonate. (Critical speed)
 At this time, make the adjustment to decrease 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}



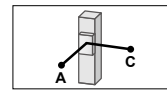
LGXS16-40

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



Wall installation (Unit: mm)

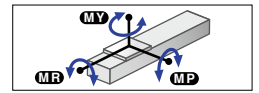
A	B	C
15kg	1273	1802
30kg	782	935
45kg	598	658



Vertical installation (Unit: mm)

A	C
3kg	6605
6kg	3699
12kg	2827

Static loading moment



(Unit: N·m)

MY	MP	MR
706	706	620

Adaptable Servo Motor

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

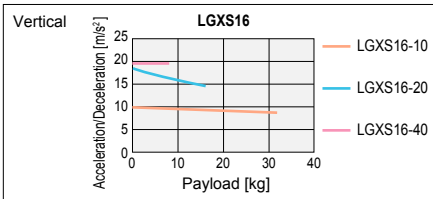
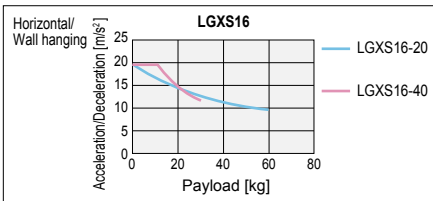
- Note 1. To combine with the conversion adapter <GX-BEND-80>, the shim plate (t1) is necessary.
 Note 2. For the specifications P, the bending unit cannot be used.

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
	Vertical	-	-
Maximum acceleration	Horizontal	19.62 m/s ² (2 G)	19.84 m/s ² (2 G)
	Vertical	-	-
Maximum payload	Horizontal	8 kg	16 kg
	Vertical	32 kg	-
Maximum acceleration	Horizontal	19.62 m/s ² (2 G)	18.43 m/s ² (1.9 G)
	Vertical	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

Wall installation (Unit: mm)

A	B	C
10kg	816	1585
20kg	404	725
30kg	259	441

Vertical installation (Unit: mm)

A	C
3kg	2904
5kg	1710
8kg	1038

LGXS16-10

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

LGXS16-20

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

Wall installation (Unit: mm)

A	B	C
20kg	842	1056
40kg	388	470
60kg	232	275

Vertical installation (Unit: mm)

A	C
5kg	3473
10kg	1723
16kg	1064

- Note. Distance from center of slider top to center of gravity of object being carried at 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															
	Lead 40	2400														
Maximum speed (mm/sec)	Lead 20	1200														
	Lead 10	600														

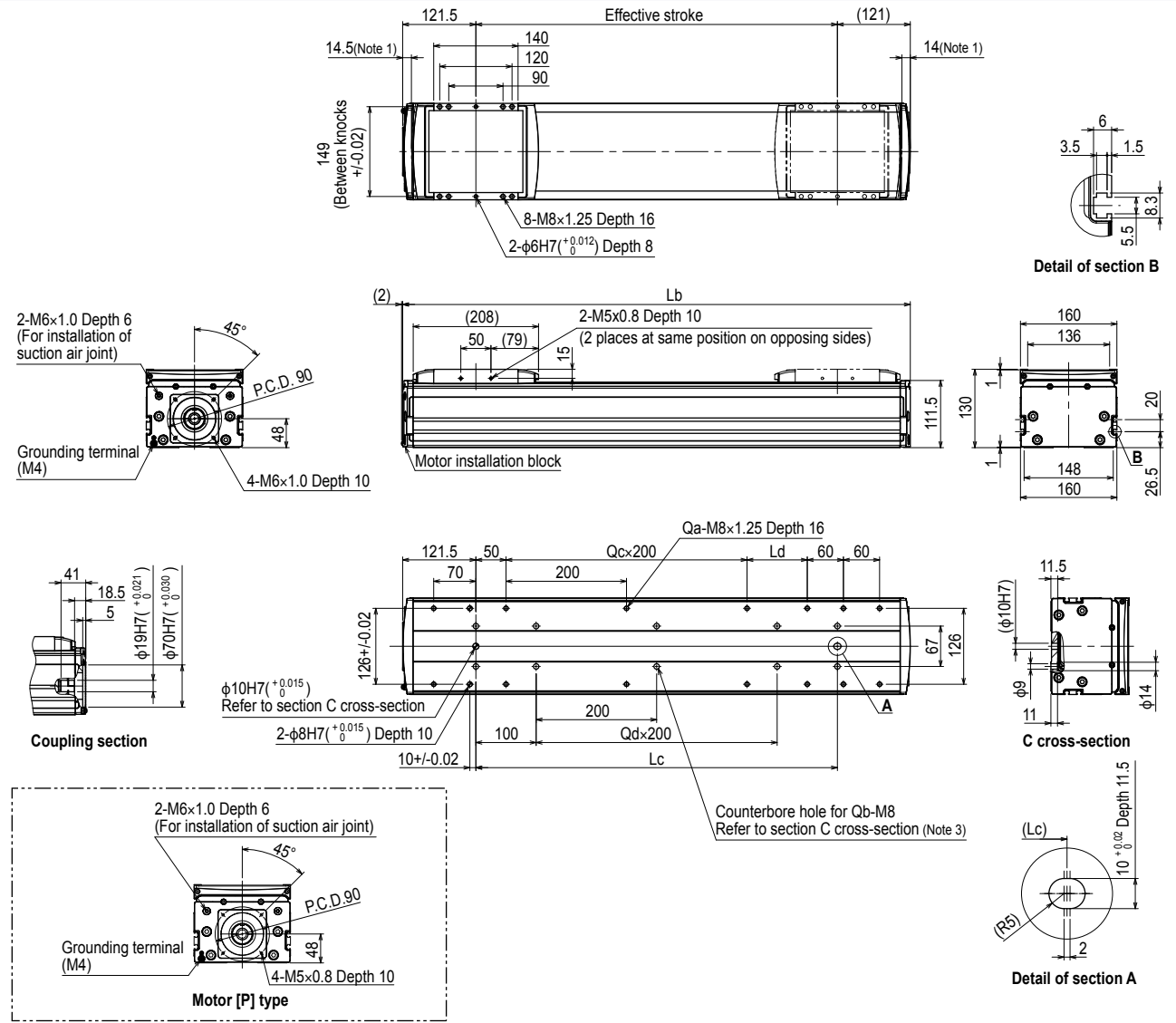
- Note. The bending unit cannot be used for the high agility mode.
 Note. The high agility mode is used in an effective stroke range of 100 to 800 (50 mm pitch).
 Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
 The speed may not reach the maximum speed 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 <math>M8 \times 1.25>> used to mount the body with the mounting counterbore holes (section C cross-section) must be <<25 mm or more>>.
- The recommended length under head of the hex socket head bolts <math>M8 \times 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					300					270					240					210					180					150									
	Speed setting																-					90%					80%					70%					60%					55%					50%					45%					40%					35%					30%					25%				

Features

Basic model

Advanced model

Basic model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Acceleration/Deceleration

Inertia Moment

Option

Single axis motion

EP-01

LGXS20

Advanced model

Motor-less Single Axis Actuator

Slider type



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 adapters or electric components.

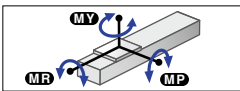
Motor, driver and other components required for installation are the user's responsibility. Refer to user's manual for installation details. Refer to your motor manual for tuning or adjustment. Vibration or resonance from actuator will affect service life of actuator. The product performance may not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

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
	40 mm	20 mm	10 mm
	Ball screw lead		
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	1280 N
	Maximum dimensions of cross section of main unit		
	W 200 mm × H 140 mm		
Overall length	ST + 288.5 mm		
Degree of cleanliness ^{Note 4}	ISO CLASS 3 (ISO14644-1) or equivalent		
Intake air ^{Note 5}	30 Nℓ/min to 90 Nℓ/min		
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)		

- Note 1. Positioning repeatability in one direction.
 Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
 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

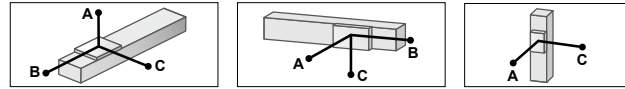


	(Unit: N·m)		
MY	MP	MR	
1423	1423	1251	

Adaptable Servo Motor

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

Allowable overhang ^{Note}



LGXS20-40	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)				
		A	B	C		A	B	C		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)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)				
		A	B	C		A	B	C		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)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)				
		A	B	C		A	B	C		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.

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.

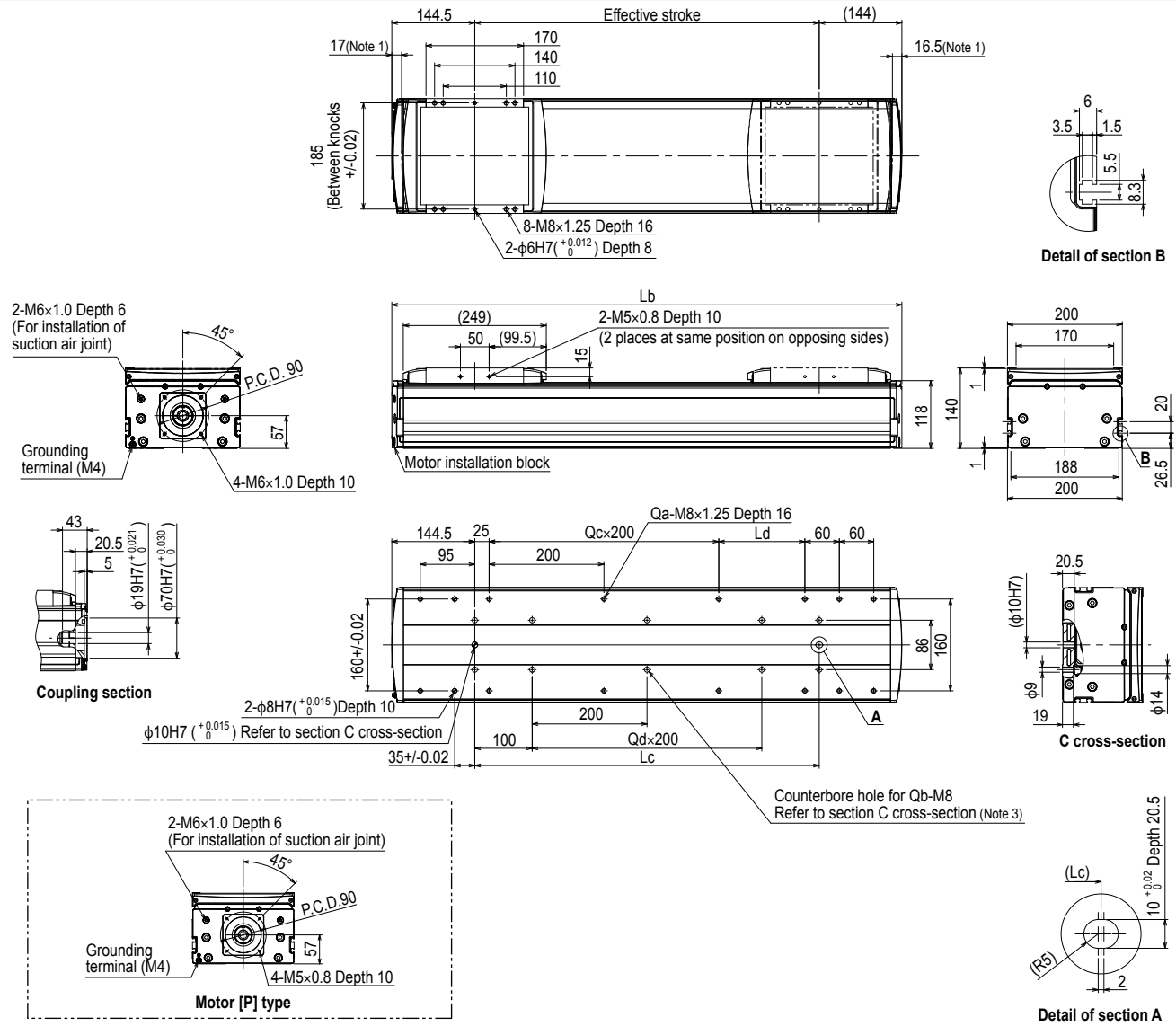
Note 2. For the specifications P, the bending unit cannot be used.

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.

LGXS20



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. The length under head of the hex socket head bolts $M8 \times 1.25$ used to mount the body with the mounting counterbore holes (section C cross-section) must be <math>< 25 \text{ mm or more}>></math>. The recommended length under head of the hex socket head bolts $M8 \times 1.25$ used to mount the body with the mounting tap hole specifications is <math>< \text{frame thickness} + 15 \text{ mm or less}>></math>.
- 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	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	18	18	18	18	20	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	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
Weight (kg)	17.2	18.5	19.8	21.1	22.4	23.7	25.0	26.3	27.6	28.8	30.1	31.4	32.7	34.0	35.3	36.6	37.9	39.2	40.4	41.7	43.0	44.3	45.6	46.9	48.2	49.5	50.8	52.0
Maximum speed (mm/sec)	Lead 40															2160		1920	1680	1440	1320	1200	1080	960	840	720	600	
	Lead 20															1080		960	840	720	660	600	540	480	420	360	300	
	Lead 10															540		480	420	360	330	300	270	240	210	180	150	
	Speed setting															90%		80%	70%	60%	55%	50%	45%	40%	35%	30%	25%	

Features

Basic model

Advanced model

Basic model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Acceleration/Deceleration Inertia Moment

Option

Single axis positioner

LBAR04

Basic model

Motor-less Single Axis Actuator

Rod type



Ordering method

LBAR04

Model	Lead	Shape	Motor specification	Stroke
	12: 12 mm 6: 6 mm	S: Straight A: Bending	Y: Y specification (see below) P: P specification (see below) A: A specification (see below) S: S specification (see below) N: N specification (see below)	50 to 500 (50 mm pitch)

[Caution]

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

Specifications

Applicable motor	50 W	
Repeatability ^{Note 1}	+/-0.01 mm	
Deceleration mechanism	Shifting position ball screw φ 10 (C7 class)	
Stroke	50 mm to 500 mm (50 mm pitch)	
Maximum speed ^{Note 2 Note 3}	720 mm/sec	360 mm/sec
Ball screw lead	12 mm	6 mm
Maximum payload ^{Note 3}	Horizontal	15 kg
	Vertical	3 kg
Max. pressing force ^{Note 3}		83 N
		167 N
Rotating backlash	+/-0 °	
Maximum dimensions of cross section of main unit	W 44 mm × H 46 mm	
Overall length	Straight	ST + 263 mm
	Bending	ST + 245 mm
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)	

Note 1. Positioning repeatability in one direction.

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

If the effective stroke exceeds 300 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 described specifications may not be satisfied depending on the installed motor.

Note. See P.135 for acceleration/deceleration and inertia moment.

Applicable motor

Applicable servo motor

Specification	Flange size	□ 40
	Wattage	50 W

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

Motor specification	Manufacturer	Model
Y	Yaskawa Electric Corp.	SGMJV-A5
		SGM7J-A5
	Keyence Corp.	SV-□005
		SV2-□005
	Mitsubishi Electric Corp.	HF-KP053
		HG-KR053
		HK-KT053
	Omron Electronics	R88M-K05030
		R88M-1M05030
	Panasonic Corp.	MHMF5A
	Sanyo Denki	R2 □ A04005
	Tamagawa Seiki	TSM3102
	Delta Electronics	ECMA-C1040F
	Fanuc Corp.	βiS0.2/5000
Siemens	1FK2102-0AG	
Schneider	BCH2MBA53	
Beckhoff	AM3011B*	
Allen-Bradley	TLY-A120*	
P	Panasonic Corp.	MSMD5A MSMF5A

Applicable stepping motor

Specification	Flange size	□ 42
----------------------	--------------------	------

Motor specification	Manufacturer	Model
A	Oriental Motor	AZM46
		ARM46
		RKS54
S	Oriental Motor	AZM48
N	NEMA standard	NEMA17

Note. Be aware that the dimensions of the NEMA standard motor may vary depending on the manufacturer.

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

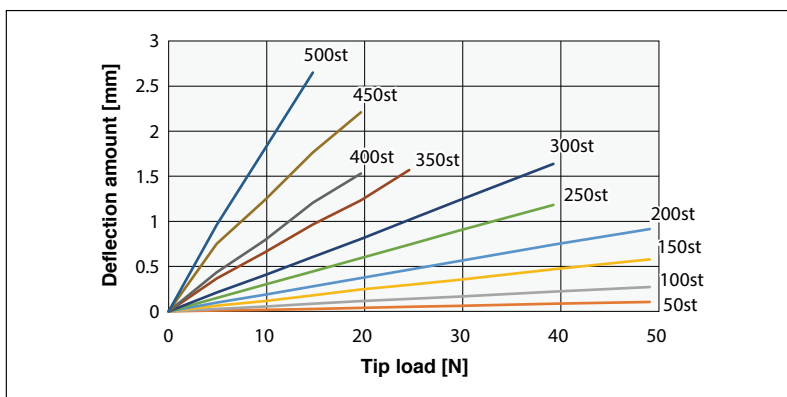
Access the website below.



▶ The cycle time simulation can be performed easily from our member site. For details, see P.16.

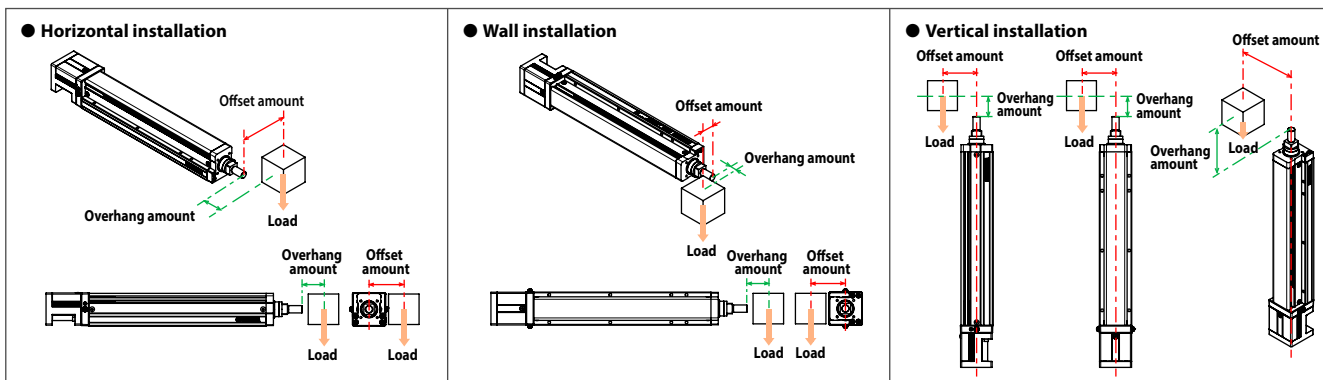
■ Rod deflection amount (reference value)

For the deflection amount per stroke, see the graph below.

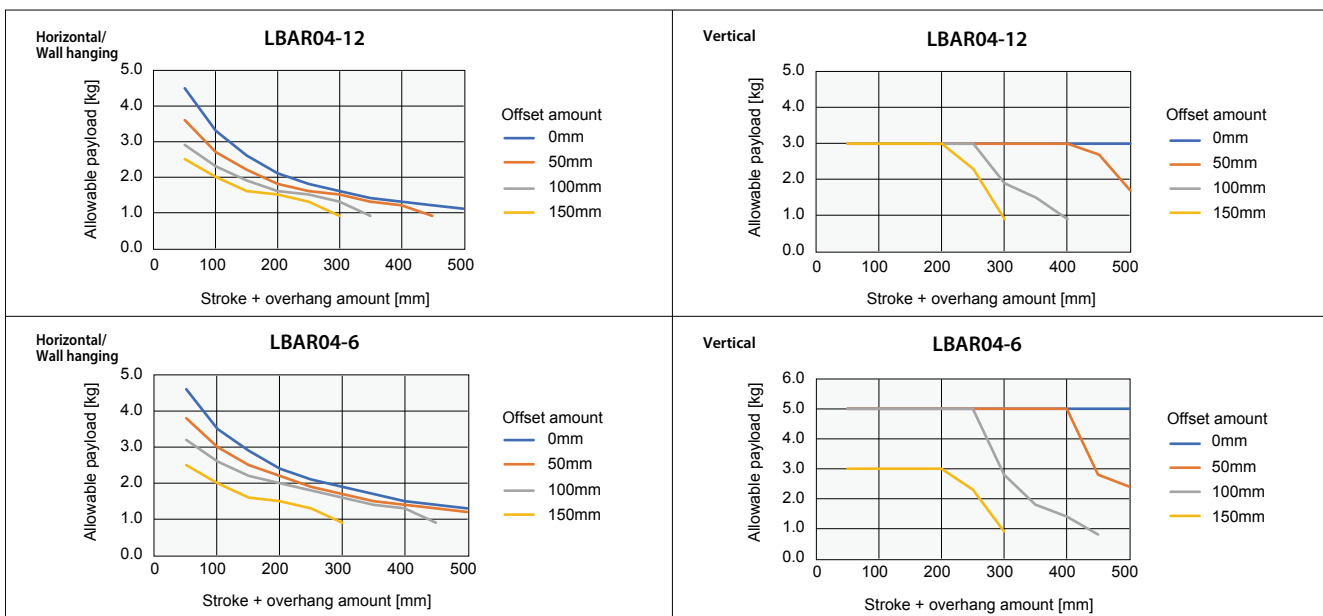


■ Allowable payload

For the allowable payload per offset amount, see the graph below.

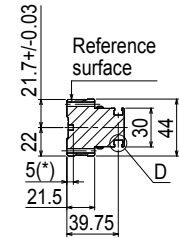
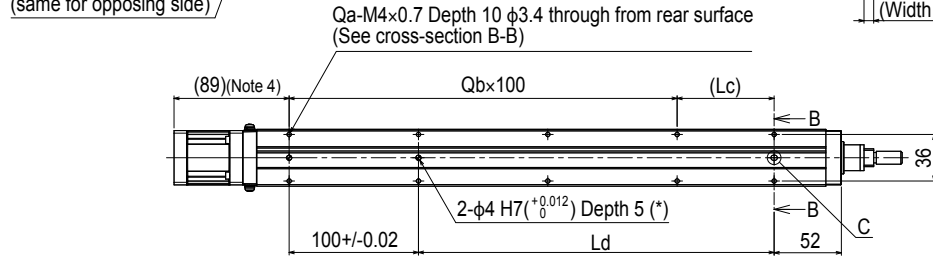
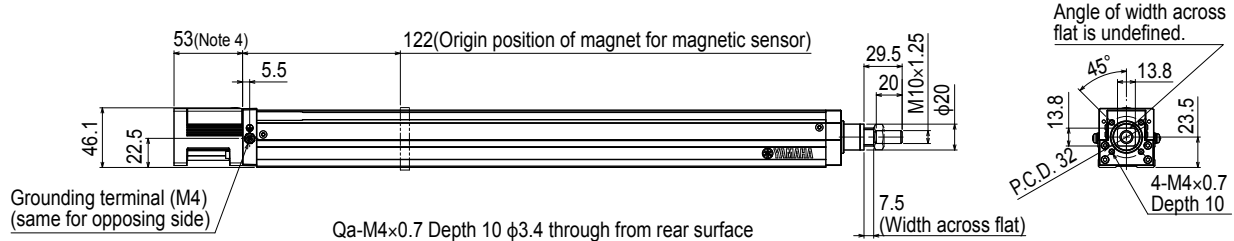
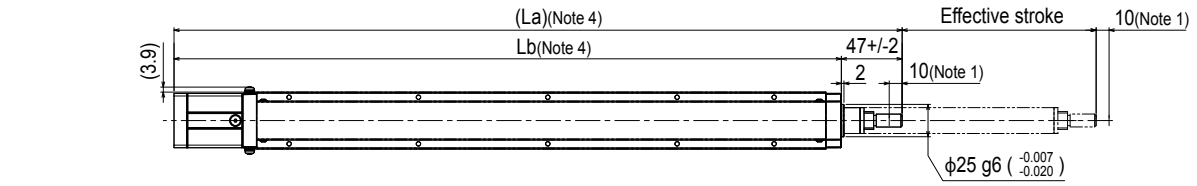


Note 1. When transferring an object with a weight exceeding the following, use an external support guide. Install the support guide flexibly so that no unnecessary load is applied to the rod.
 Note 2. The values are when the service life of the guide is 5000 km.

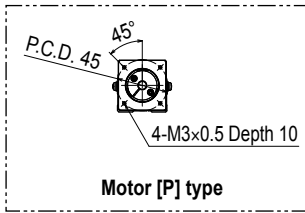


Features
 Motorless
 Side type
 Basic model
 LBAS
 Motorless
 Side type
 Advanced model
 LGXS
 Motorless
 Rod type
 Basic model
 LBAR
 With motor
 Side type
 Basic model
 ABAS
 With motor
 Side type
 Advanced model
 AGXS
 With motor
 Rod type
 Basic model
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single axis robot positioner
 EP-01

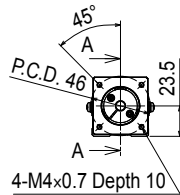
LBAR04 Straight type (S)



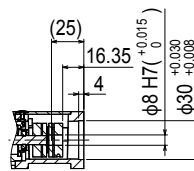
Cross-section B-B



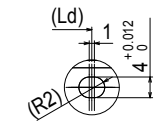
Motor [P] type



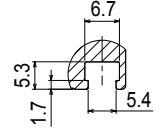
Motor [Y] type



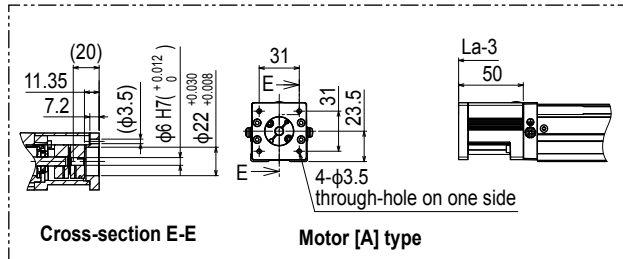
Cross-section A-A



Detailed drawing C

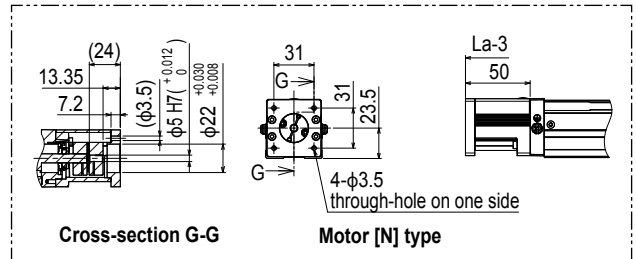


Detailed drawing D



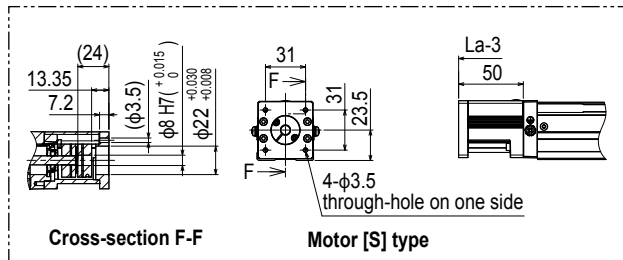
Cross-section E-E

Motor [A] type



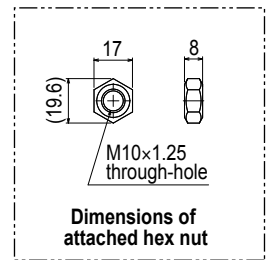
Cross-section G-G

Motor [N] type



Cross-section F-F

Motor [S] type



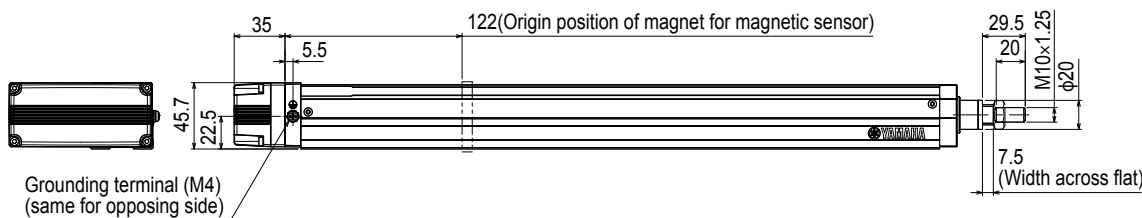
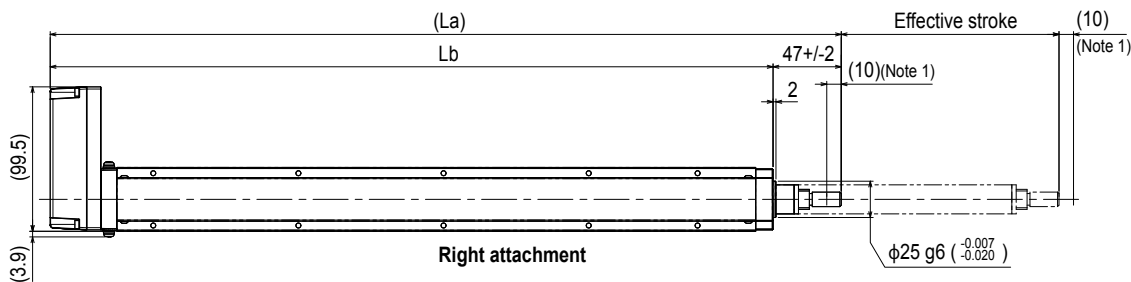
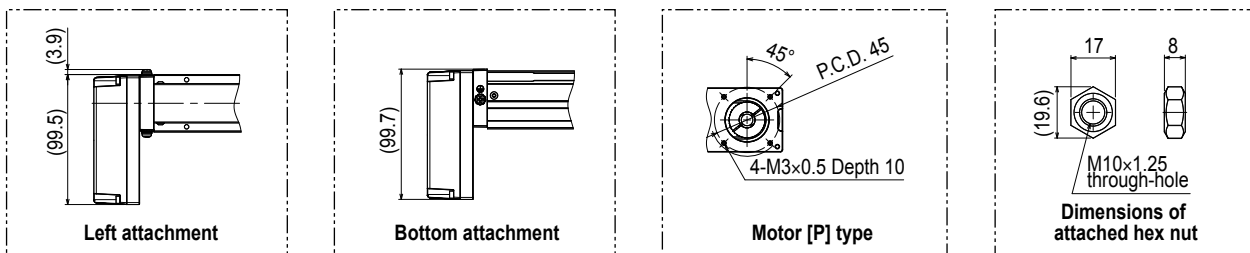
Dimensions of attached hex nut

- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
- Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M3 x 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M4 x 0.7> used to install the main unit.
- Note 4. For the motor specifications A, S, and N, the dimensions are that those stated in the table << 3 mm >>.
- Note 5. Grease gun nozzle (recommended) (see P.143 for detail)

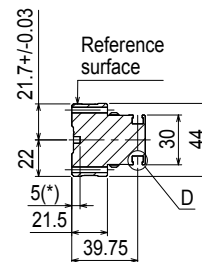
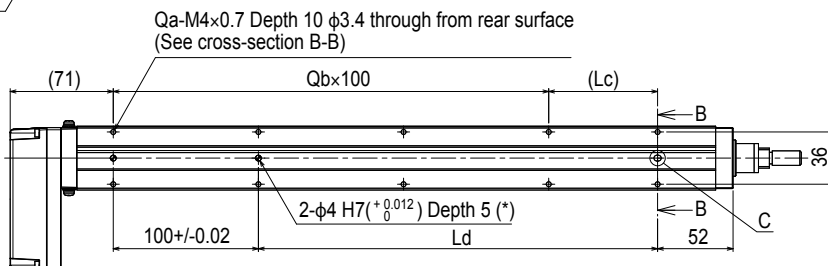
Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	
La	313	363	413	463	513	563	613	663	713	763	
Lb	266	316	366	416	466	516	566	616	666	716	
Lc	25	75	25	75	25	75	25	75	25	75	
Ld	25	75	125	175	225	275	325	375	425	475	
Qa	6	6	8	8	10	10	12	12	14	14	
Qb	1	1	2	2	3	3	4	4	5	5	
Weight (kg)	0.9	1	1.2	1.4	1.6	1.7	1.9	2.1	2.3	2.5	
Maximum speed (mm/sec)	Lead 12						720	648	504	396	324
	Lead 6						360	324	252	198	162
Speed setting						-	90%	70%	55%	45%	

LBAR04 Bending type (A)

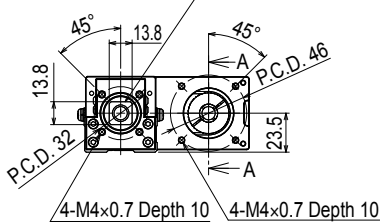


Grounding terminal (M4) (same for opposing side)

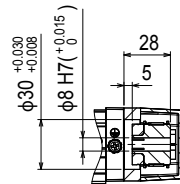


Cross-section B-B

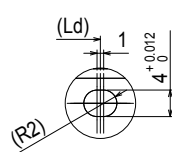
Angle of width across flat is undefined.



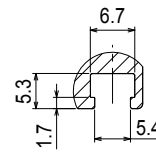
Motor [Y] type



Cross-section A-A



Detailed drawing C



Detailed drawing D

- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
- Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M3 x 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M4 x 0.7> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)

Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	
La	295	345	395	445	495	545	595	645	695	745	
Lb	248	298	348	398	448	498	548	598	648	698	
Lc	25	75	25	75	25	75	25	75	25	75	
Ld	25	75	125	175	225	275	325	375	425	475	
Qa	6	6	8	8	10	10	12	12	14	14	
Qb	1	1	2	2	3	3	4	4	5	5	
Weight (kg)	1	1.1	1.3	1.5	1.7	1.9	2	2.2	2.4	2.6	
Maximum speed (mm/sec)	Lead 12	720					648				
	Lead 6	360					324				
	Speed setting	-					90%				

Features

- LBAS: Silver type, Basic model
- LGXS: Silver type, Advanced model
- LBAR: Motorless, Basic model
- ABAS: Silver type, Basic model
- AGXS: Silver type, Advanced model
- ABAR: Motorless, Basic model

Acceleration/Deceleration: Inertia Moment

Option: Single axis sensor pushdown

Ep01

LBAR05

Basic model

Motor-less Single Axis Actuator

Rod type



Ordering method

LBAR05

Model	Lead	Shape	Motor specification	Stroke
	20: 20 mm 10: 10 mm 5: 5 mm	S: Straight A: Bending	Y: Y specification (see below) P: P specification (see below) A: A specification (see below) S: S specification (see below) N: N specification (see below)	50 to 600 (50 mm pitch)

[Caution]

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

Specifications

Applicable motor	100 W		
Repeatability ^{Note 1}	+/-0.01 mm		
Deceleration mechanism	Shifting position ball screw φ 12 (C7 class)		
Stroke	50 mm to 600 mm (50 mm pitch)		
Maximum speed ^{Note 2 Note 3}	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	20 mm	10 mm	5 mm
Maximum payload ^{Note 3}	Horizontal	15 kg	25 kg
	Vertical	4 kg	8 kg
Max. pressing force ^{Note 3}	100 N	200 N	400 N
Rotating backlash	+/-0 °		
Maximum dimensions of cross section of main unit	W 54 mm × H 54.7 mm		
Overall length	Straight	ST + 269.5 mm	
	Bending	ST + 249 mm	
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)		

Note 1. Positioning repeatability in one direction.

Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 350 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 described specifications may not be satisfied depending on the installed motor.

Note. See P.136 for acceleration/deceleration and inertia moment.

Applicable motor

Applicable servo motor

Specification	Flange size	□ 40
	Wattage	100 W

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

Motor specification	Manufacturer	Model
Y	Yaskawa Electric Corp.	SGMJV-01
		SGMJ7-01
	Keyence Corp.	SV- □ 010
		SV2- □ 010
	Mitsubishi Electric Corp.	HF-KP13
		HG-KR13
		HK-KT13
	Omron Electronics	R88M-K10030
		R88M-1M10030
	Panasonic Corp.	MHMF01
	Sanyo Denki	R2 □ A04010
	Tamagawa Seiki	TSM3104
	Delta Electronics	ECMA-C10401
	Fanuc Corp.	βIS0.3/5000
Kingservo	KSMA01LI □ S	
	KSMA01LG	
Siemens	1FK2102-1AG 1FL6024-2AF	
Schneider	BCH2MB013	
Beckhoff	AM3012C*	
Allen-Bradley	TLY-A130*	
P	Panasonic Corp.	MSMD01
		MSMF01

Applicable stepping motor

Specification	Flange size	□ 42
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Motor specification	Manufacturer	Model
A	Oriental Motor	AZM46
		ARM46
		RKS54
S	Oriental Motor	AZM48
N	NEMA standard	NEMA17

Note. Be aware that the dimensions of the NEMA standard motor may vary depending on the manufacturer.

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

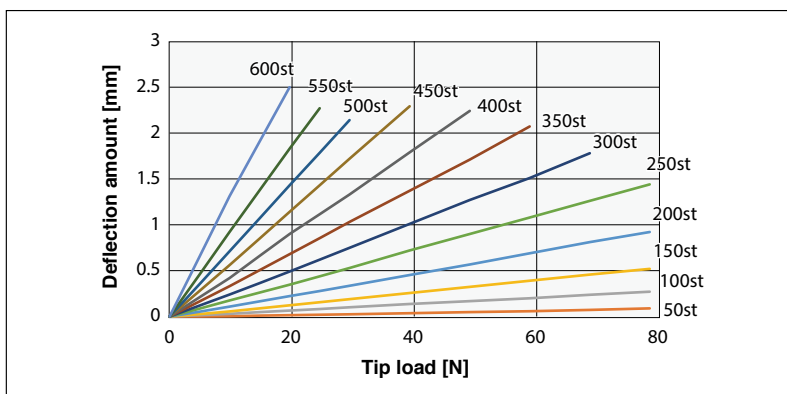
Access the website below.



▶ The cycle time simulation can be performed easily from our member site. For details, see P.16.

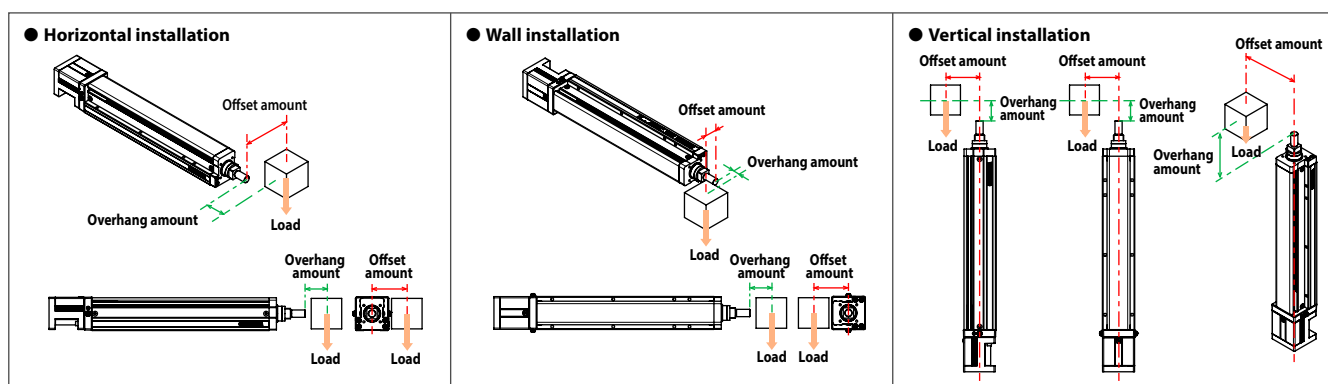
■ Rod deflection amount (reference value)

For the deflection amount per stroke, see the graph below.

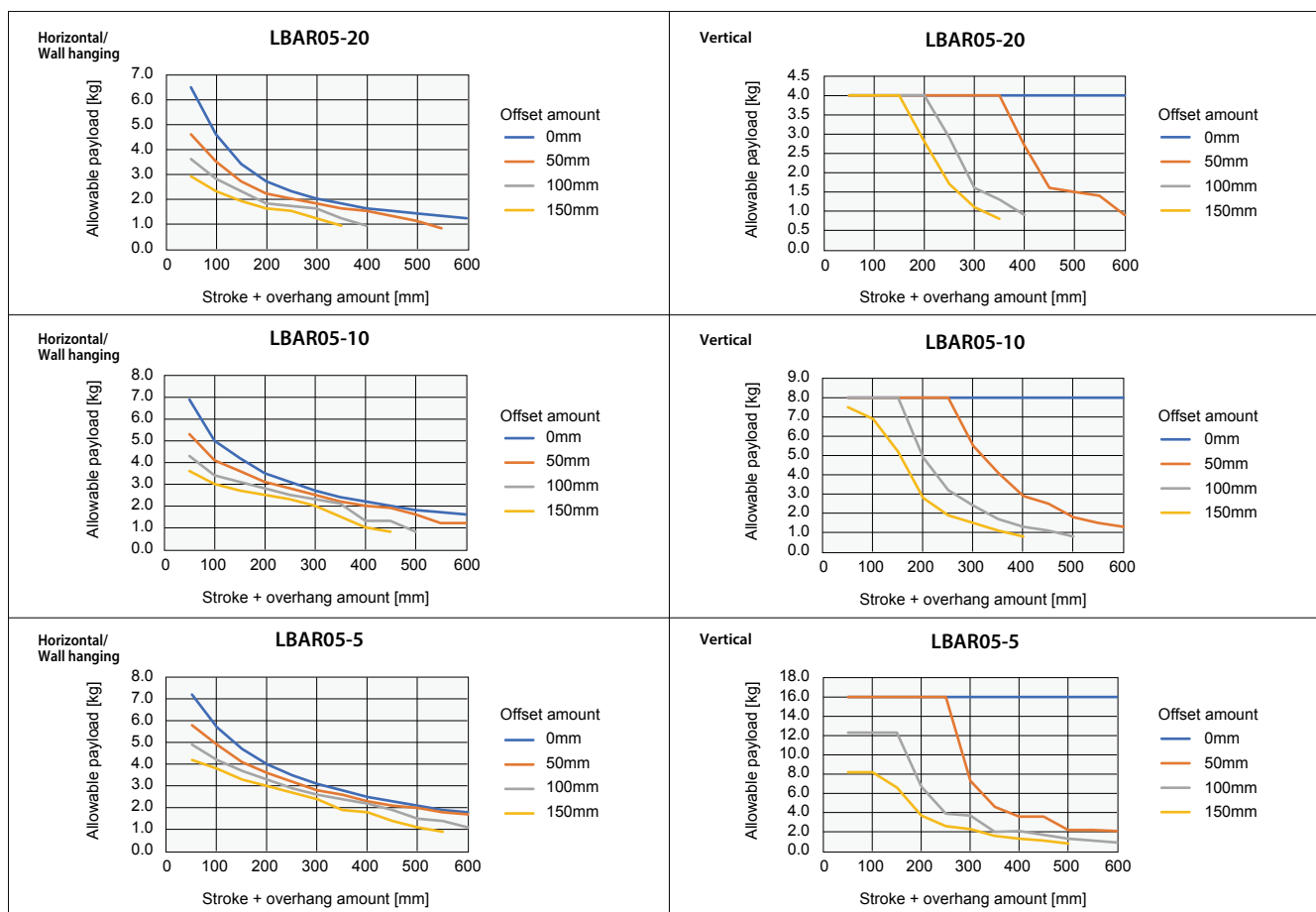


■ Allowable payload

For the allowable payload per offset amount, see the graph below.

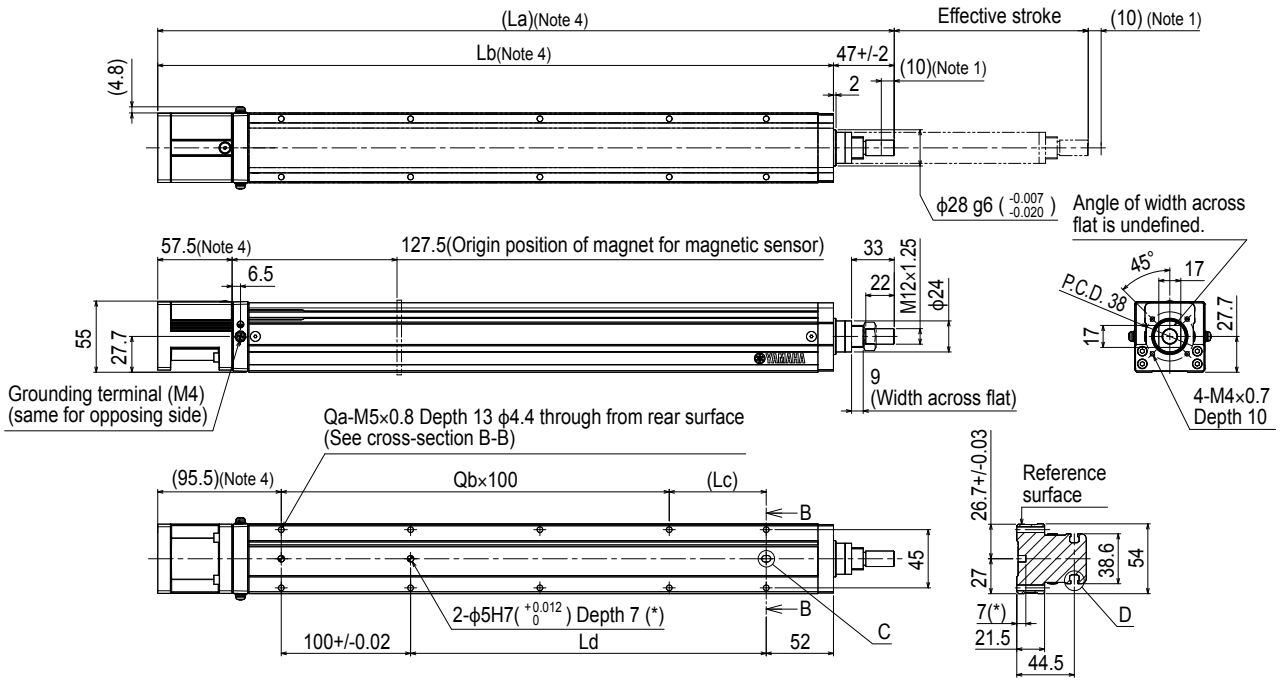


Note 1. When transferring an object with a weight exceeding the following, use an external support guide. Install the support guide flexibly so that no unnecessary load is applied to the rod.
 Note 2. The values are when the service life of the guide is 5000 km.

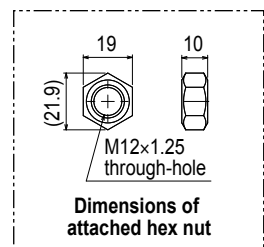
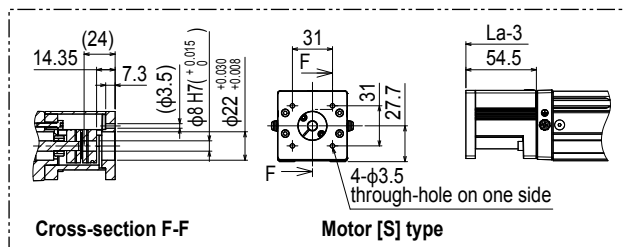
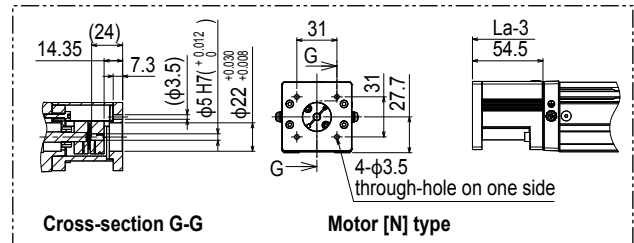
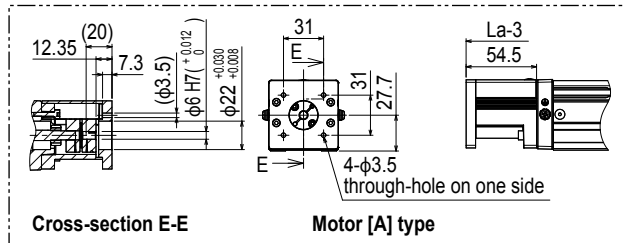
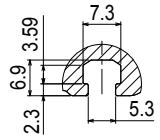
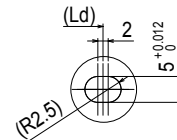
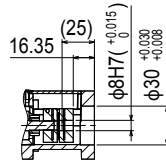
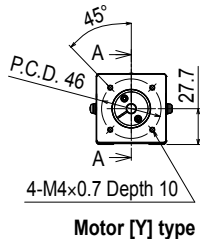
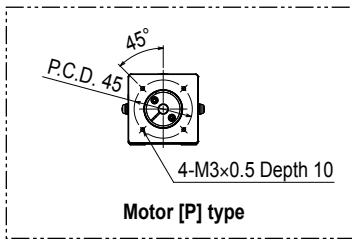


Features
 Motorless
 Silver type
 Basic model
 LBAS
 Motorless
 Silver type
 Advanced model
 LGXS
 Motorless
 Rod type
 Basic model
 LBAR
 Motorless
 Silver type
 Basic model
 ABAS
 Motorless
 Silver type
 Advanced model
 AGXS
 Motorless
 Rod type
 Basic model
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single
 axis
 positioner
 EP01

LBAR05 Straight type (S)



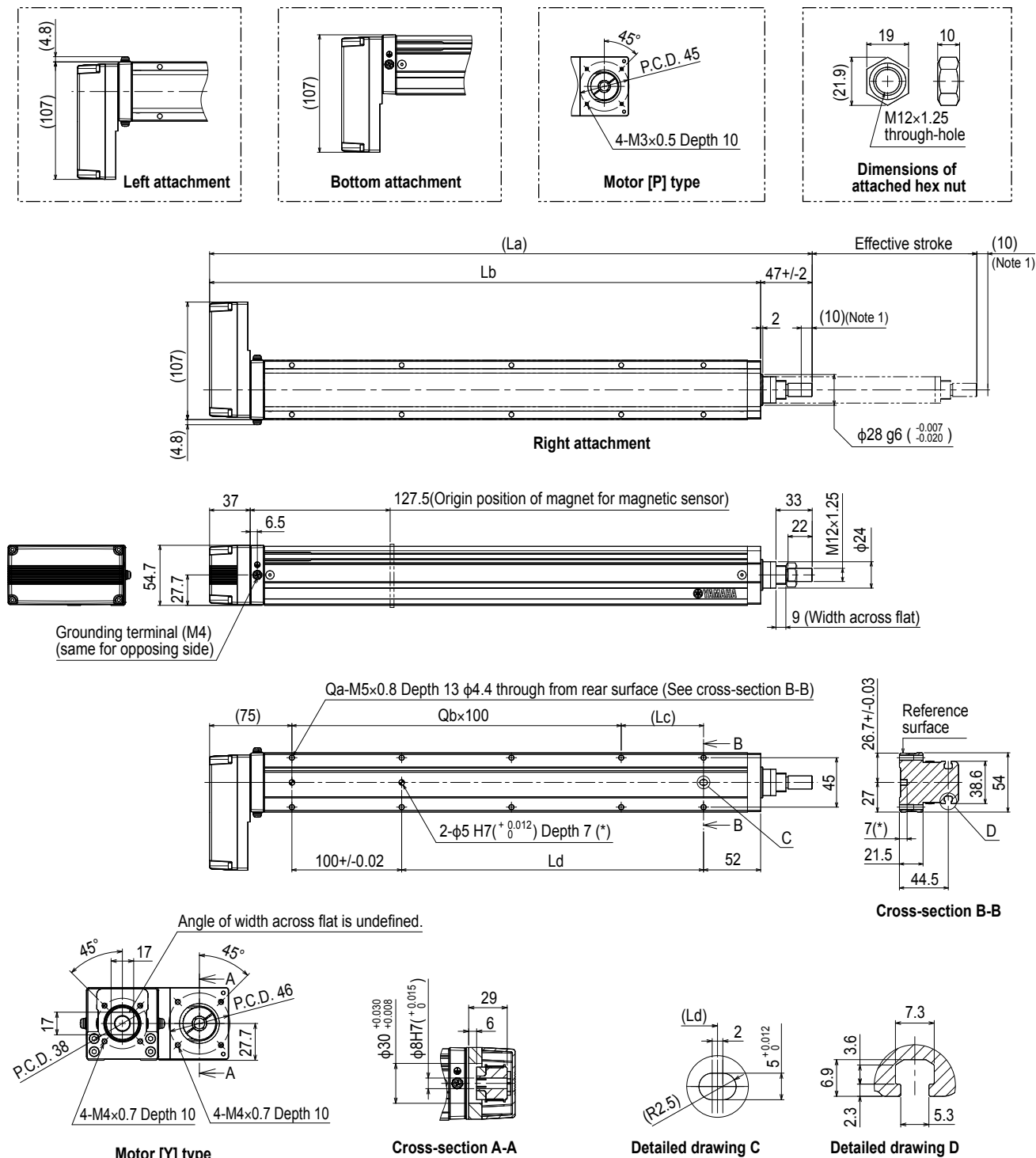
Cross-section B-B



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
- Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M4 × 0.7>. In the installation tap hole, the length under head << thickness of stand +10 mm or less >> is recommended for the hex socket head bolts <M5 × 0.8> used to install the main unit.
- Note 4. For the motor specifications A, S, and N, the dimensions are that those stated in the table << -3 mm >>.
- Note 5. Grease gun nozzle (recommended) (see P.143 for detail)
 Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600
La	319.5	369.5	419.5	469.5	519.5	569.5	619.5	669.5	719.5	769.5	819.5	869.5
Lb	272.5	322.5	372.5	422.5	472.5	522.5	572.5	622.5	672.5	722.5	772.5	822.5
Lc	25	75	25	75	25	75	25	75	25	75	25	75
Ld	25	75	125	175	225	275	325	375	425	475	525	575
Qa	6	6	8	8	10	10	12	12	14	14	16	16
Qb	1	1	2	2	3	3	4	4	5	5	6	6
Weight (kg)	1.7	1.9	2	2.2	2.4	2.6	2.7	2.8	2.9	3	3.2	3.4
Maximum speed (mm/sec)	Lead 20	1200						960	780	600	480	420
	Lead 10	600						480	390	300	240	210
	Lead 5	300						240	195	150	120	105
Speed setting	-						80%	65%	50%	40%	35%	

LBAR05 Bending type (A)



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
 Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M4 × 0.7>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M5 × 0.8> used to install the main unit.
 Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
 Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	
La	299	349	399	449	499	549	599	649	699	749	799	849	
Lb	252	302	352	402	452	502	552	602	652	702	752	802	
Lc	25	75	25	75	25	75	25	75	25	75	25	75	
Ld	25	75	125	175	225	275	325	375	425	475	525	575	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	
Weight (kg)	1.8	1.9	2.1	2.3	2.5	2.7	2.8	2.9	3	3.1	3.3	3.4	
Maximum speed (mm/sec)	Lead 20	1200						960	780	600	480	420	
	Lead 10	600						480	390	300	240	210	
	Lead 5	300						240	195	150	120	105	
	Speed setting	-						80%	65%	50%	40%	35%	

Features

- Motorless
- Basic model
- LBAS
- Advanced model
- LGXS
- Basic model
- LBAR
- Basic model
- ABAS
- Advanced model
- AGXS
- Basic model
- ABAR
- Acceleration/Deceleration
- Inertia Moment
- Option
- Single axis motion
- push/torque
- EP-01

LBAR08

Basic model

Motor-less Single Axis Actuator

Rod type



Ordering method

LBAR08

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

[Caution]

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

Specifications

Applicable motor	200 W		
Repeatability ^{Note 1}	±0.01 mm		
Deceleration mechanism	Shifting position ball screw φ 16 (C7 class)		
Stroke	50 mm to 800 mm (50 mm pitch)		
Maximum speed ^{Note 2 Note 3}	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	20 mm	10 mm	5 mm
Maximum payload ^{Note 3}	Horizontal	30 kg	60 kg
	Vertical	8 kg	30 kg
Max. pressing force ^{Note 3}	201 N	402 N	804 N
Rotating backlash	±0°		
Maximum dimensions of cross section of main unit	W 82 mm × H 73.5 mm		
Overall length	Straight	ST + 326 mm	
	Bending	ST + 312.5 mm	
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)		

Note 1. Positioning repeatability in one direction.

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

If the effective stroke exceeds 400 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 described specifications may not be satisfied depending on the installed motor.

Note. See P.138 for acceleration/deceleration and inertia moment.

Applicable motor

Applicable servo motor

Specification	Flange size	<input type="checkbox"/> 60
	Wattage	200 W

Motor specification	Manufacturer	Model
Y	Yaskawa Electric Corp.	SGMJV-02
		SGM7J-02
	Keyence Corp.	SV- □ 020
		SV2- □ 020
	Mitsubishi Electric Corp.	HF-KP23
		HG-KR23
		HK-KT23
	Sanyo Denki	R2 □ A06020
	Tamagawa Seiki	TSM3202
	Delta Electronics	ECMA-C10602
Siemens	1FL6032-2AF	
Schneider	BCH2LD023	
P	Omron Electronics	R88M-K20030
		R88M-1M20030
	Panasonic Corp.	MSMD02
MMSF02		
MHMF02		
K	Kingservo	KSMA02LI
		KSMA02LG

Applicable stepping motor

Specification	Flange size	<input type="checkbox"/> 60 <input type="checkbox"/> 56 (NEMA)
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Motor specification	Manufacturer	Model
A	Oriental Motor	AZM66
		AZM69
		ARM66
		ARM69
		RKS56
N	NEMA standard	NEMA23

Note. Be aware that the dimensions of the NEMA standard motor may vary depending on the manufacturer.

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

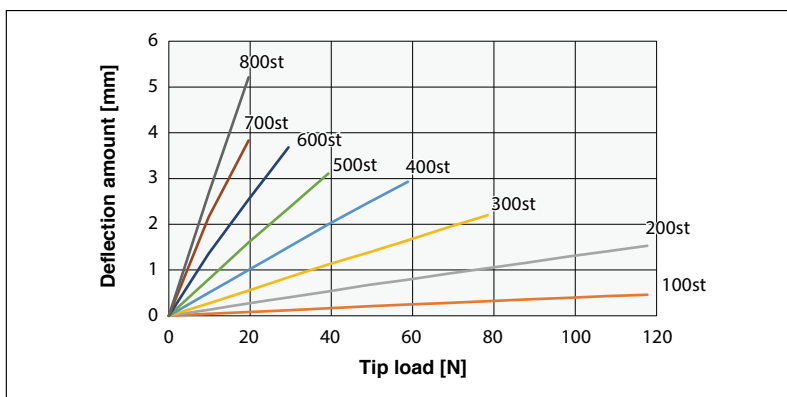
Access the website below.



▶ The cycle time simulation can be performed easily from our member site. For details, see P.16.

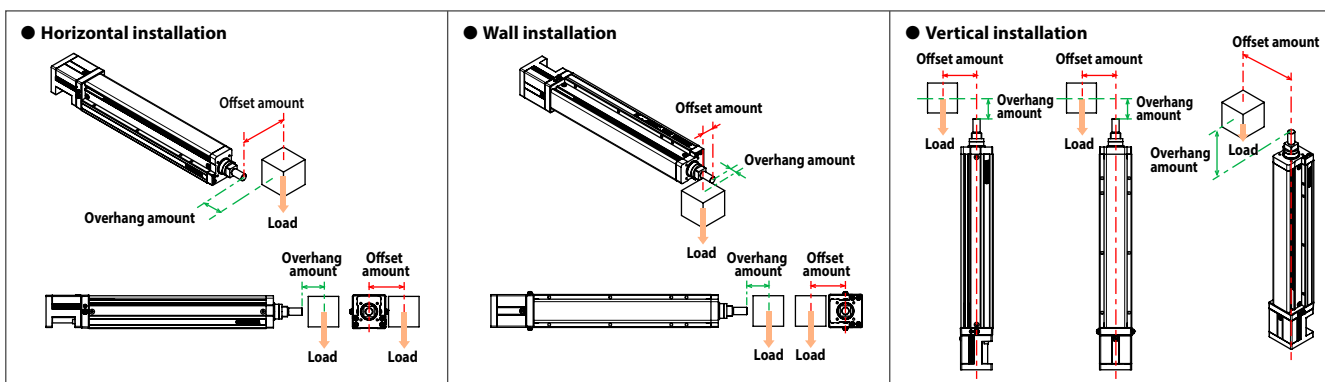
■ Rod deflection amount (reference value)

For the deflection amount per stroke, see the graph below.

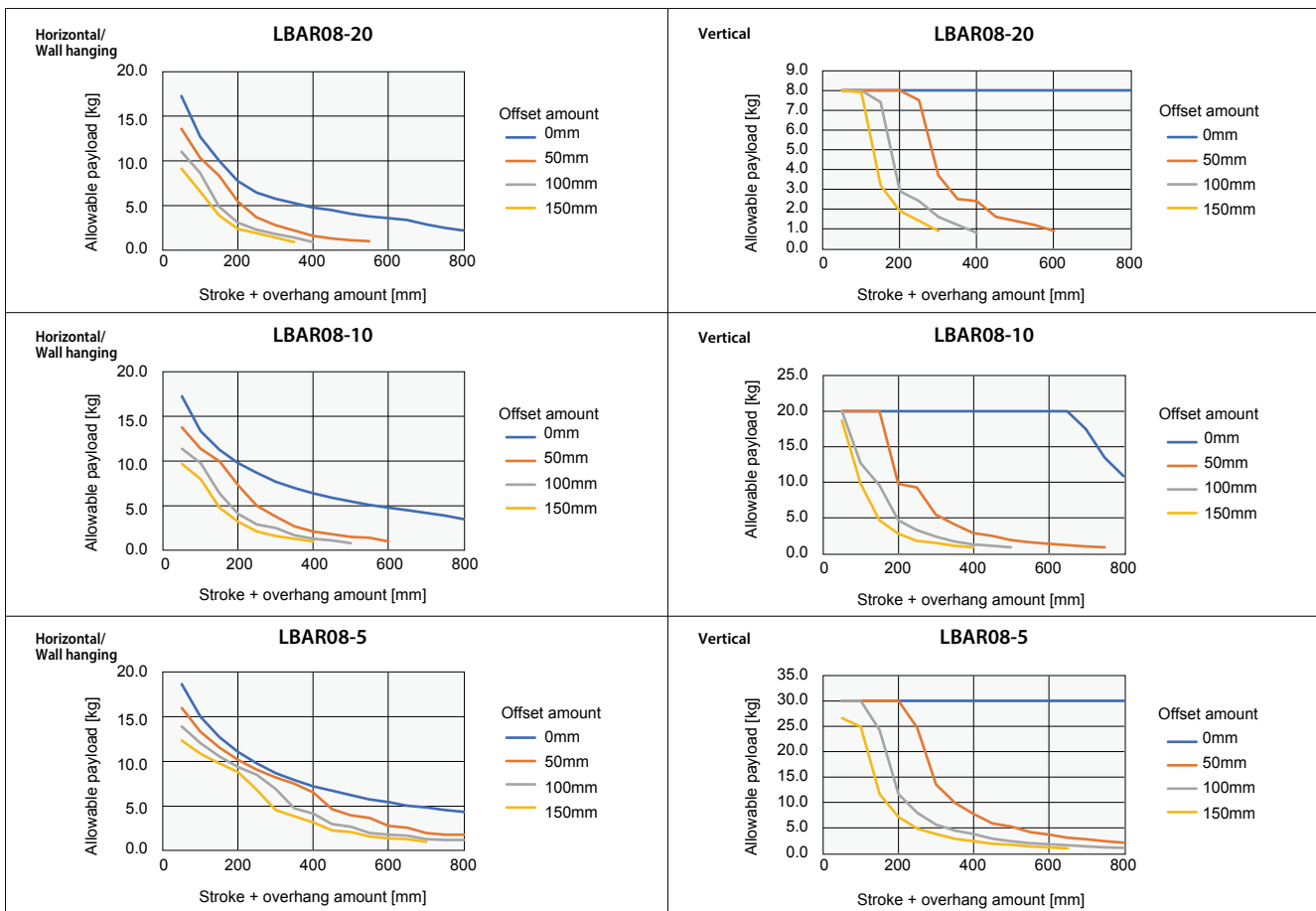


■ Allowable payload

For the allowable payload per offset amount, see the graph below.

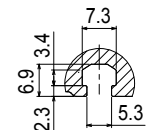
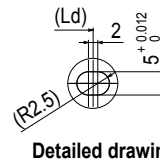
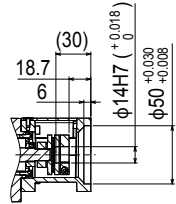
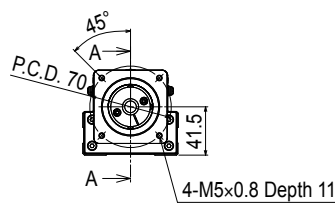
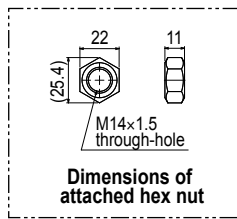
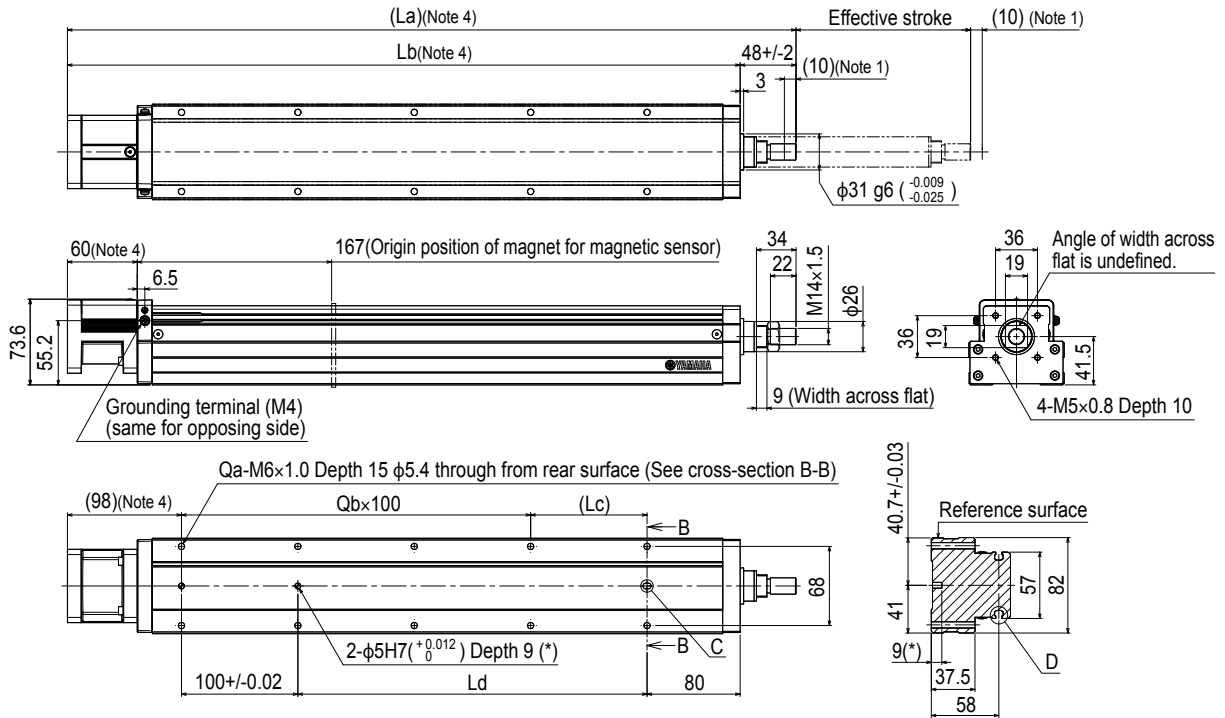


Note 1. When transferring an object with a weight exceeding the following, use an external support guide. Install the support guide flexibly so that no unnecessary load is applied to the rod.
 Note 2. The values are when the service life of the guide is 5000 km.

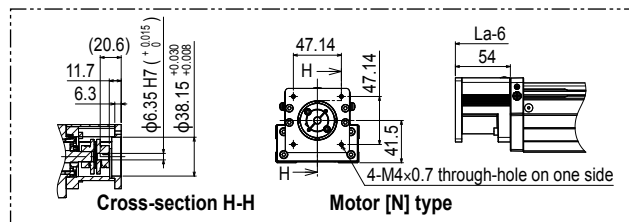
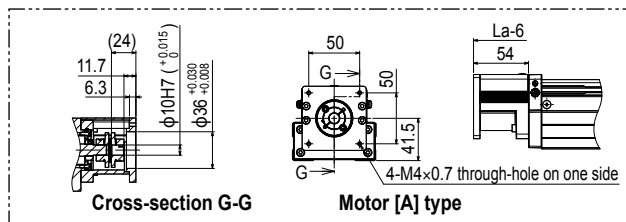
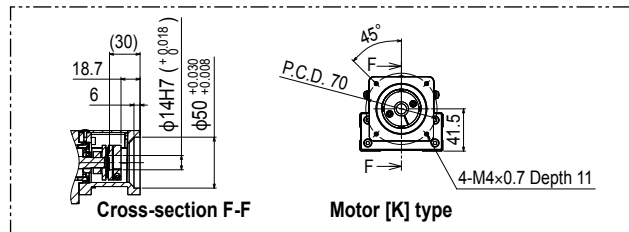
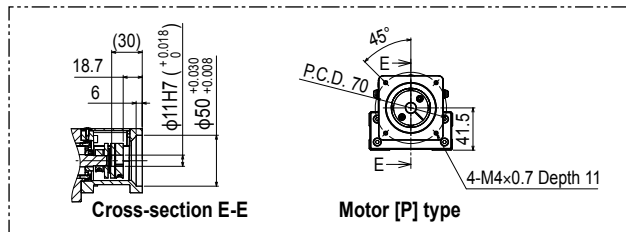


Features
 Motorless
 Basic model
 LBAS
 Motorless
 Advanced model
 LGXS
 Motorless
 Rod type
 Basic model
 LBAR
 Motorless
 Slider type
 Basic model
 ABAS
 Motorless
 Slider type
 Advanced model
 AGXS
 Motorless
 Rod type
 Basic model
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single
 axis
 positioner
 EP01

LBAR08 Straight type (S)



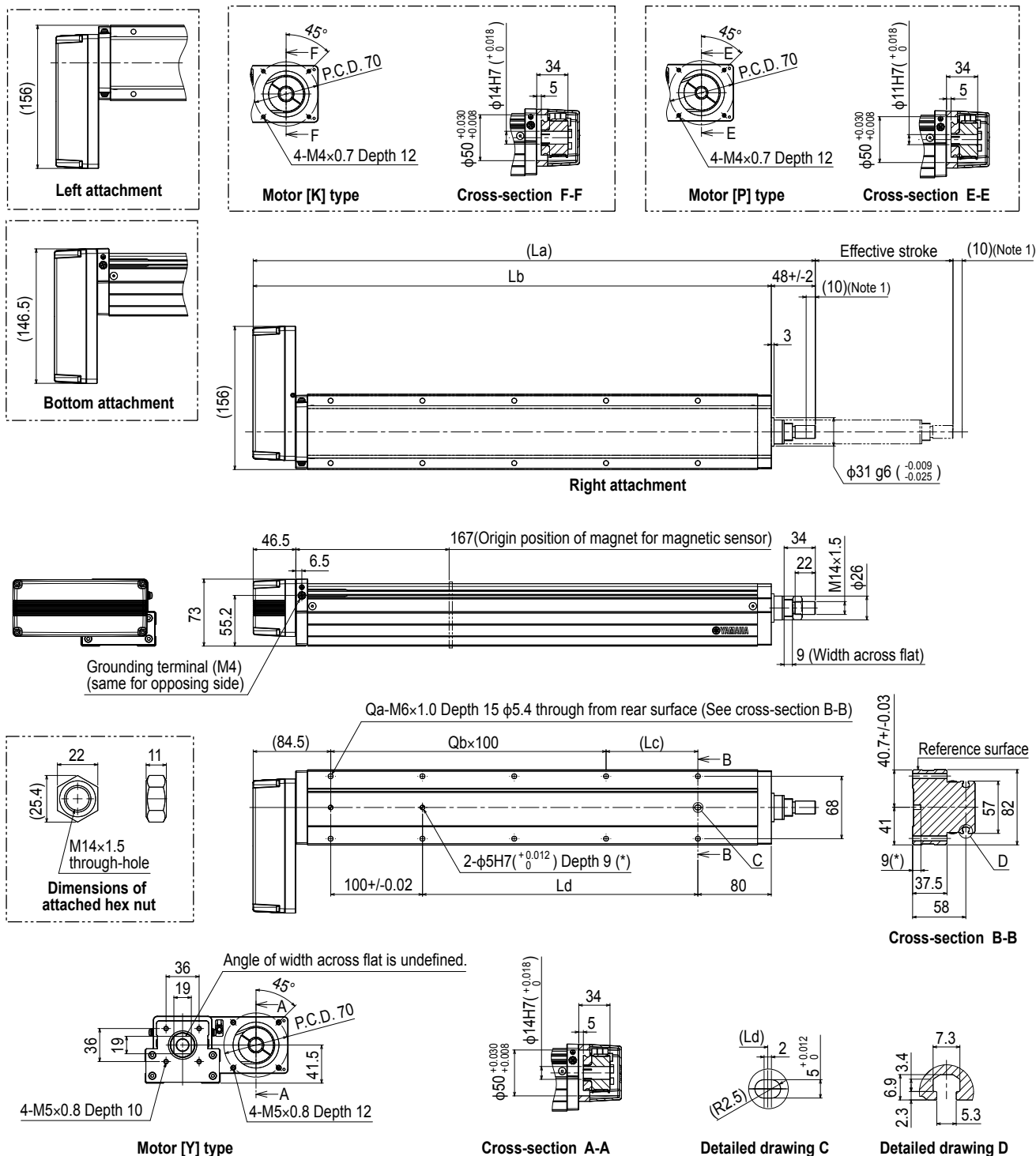
Cross-section B-B



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
- Note 3. For the installation through hole, the length under head <<thickness of stand +15 mm or less>> is recommended for the hex socket head bolts <M5 × 0.8>. In the installation tap hole, the length under head <<thickness of stand +15 mm or less>> is recommended for the hex socket head bolts <M6 × 1.0> used to install the main unit.
- Note 4. For the motor specifications A and N the dimensions are that those stated in the table <<-6 mm>>.
- Note 5. Grease gun nozzle (recommended) (see P.143 for detail)
Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800						
La	376	426	476	526	576	626	676	726	776	826	876	926	976	1026	1076	1126						
Lb	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078						
Lc	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100						
Ld	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800						
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20						
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8						
Weight (kg)	3.9	4.3	4.7	5	5.3	5.7	6	6.3	6.6	7	7.4	7.7	8.1	8.4	8.6	8.9						
Maximum speed (mm/sec)	Lead 20							1200							900	720	600	480	420	360	300	240
	Lead 10							600							450	360	300	240	210	180	150	120
	Lead 5							300							225	180	150	120	105	90	75	60
Speed setting							-							75%	60%	50%	40%	35%	30%	25%	20%	

LBAR08 Bending type (A)



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Please perform installation and adjustment on the special parts for motor installation by the customer. For detail, refer to the manual.
 Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M5 x 0.8>. In the installation tap hole, the length under head << thickness of stand + 15 mm or less >> is recommended for the hex socket head bolts <M6 x 1.0> used to install the main unit.
 Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
 Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
La	362.5	412.5	462.5	512.5	562.5	612.5	662.5	712.5	762.5	812.5	862.5	912.5	962.5	1012.5	1062.5	1112.5	
Lb	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	
Lc	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	
Ld	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
Weight (kg)	4.3	4.7	5.1	5.4	5.7	6.1	6.4	6.7	7	7.4	7.8	8.1	8.5	8.8	9	9.3	
Maximum speed (mm/sec)	Lead 20	1200								900	720	600	480	420	360	300	240
	Lead 10	600								450	360	300	240	210	180	150	120
	Lead 5	300								225	180	150	120	105	90	75	60
	Speed setting	-								75%	60%	50%	40%	35%	30%	25%	20%

ABAS04

Basic model

Single-axis robots

Slider type



Ordering method

ABAS04							EP-01			
Model	Lead	Shape	Motor specification	Stroke	Cable length	Cable entry location	Robot positioner	Driver: Power capacity	I/O	Battery
	12: 12 mm 6: 6 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	50 to 800 (50mm pitch)	Note 1 R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	Note 2 B: With battery N: None

Note 1. The robot cable is flexible and resists bending.

Note 2. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	50 W	
Repeatability ^{Note 1}	±0.01 mm	
Deceleration mechanism	Shifting position ball screw φ 10 (C7 class)	
Stroke	50 mm to 800 mm (50mm pitch)	
Maximum speed ^{Note 2}	800 mm/sec	400 mm/sec
Ball screw lead	12 mm / 6 mm	
Maximum payload	Horizontal	12 kg / 20 kg
	Vertical	2 kg / 5 kg
Rated thrust	71 N	141 N
Maximum dimensions of cross section of main unit	W 44 mm × H 52 mm	
Overall length	Straight	ST + 277.5 mm
	Bending	ST + 196 mm
Position detector	Absolute encoder Battery-less absolute encoder	
Resolution	23 bits	
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)	

Note 1. Positioning repeatability in one direction.

Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
If the effective stroke exceeds 500 mm, the ball screw may resonate. (Critical speed)

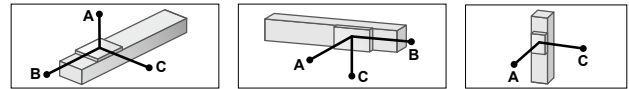
At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.

Note. See P.106 for acceleration/deceleration.

Controller

Controller	Operation method
EP-01	I/O point trace/Remote command

Allowable overhang ^{Note}



ABAS04-12

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

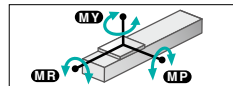
ABAS04-6

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

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 500mm stroke models.

Static loading moment



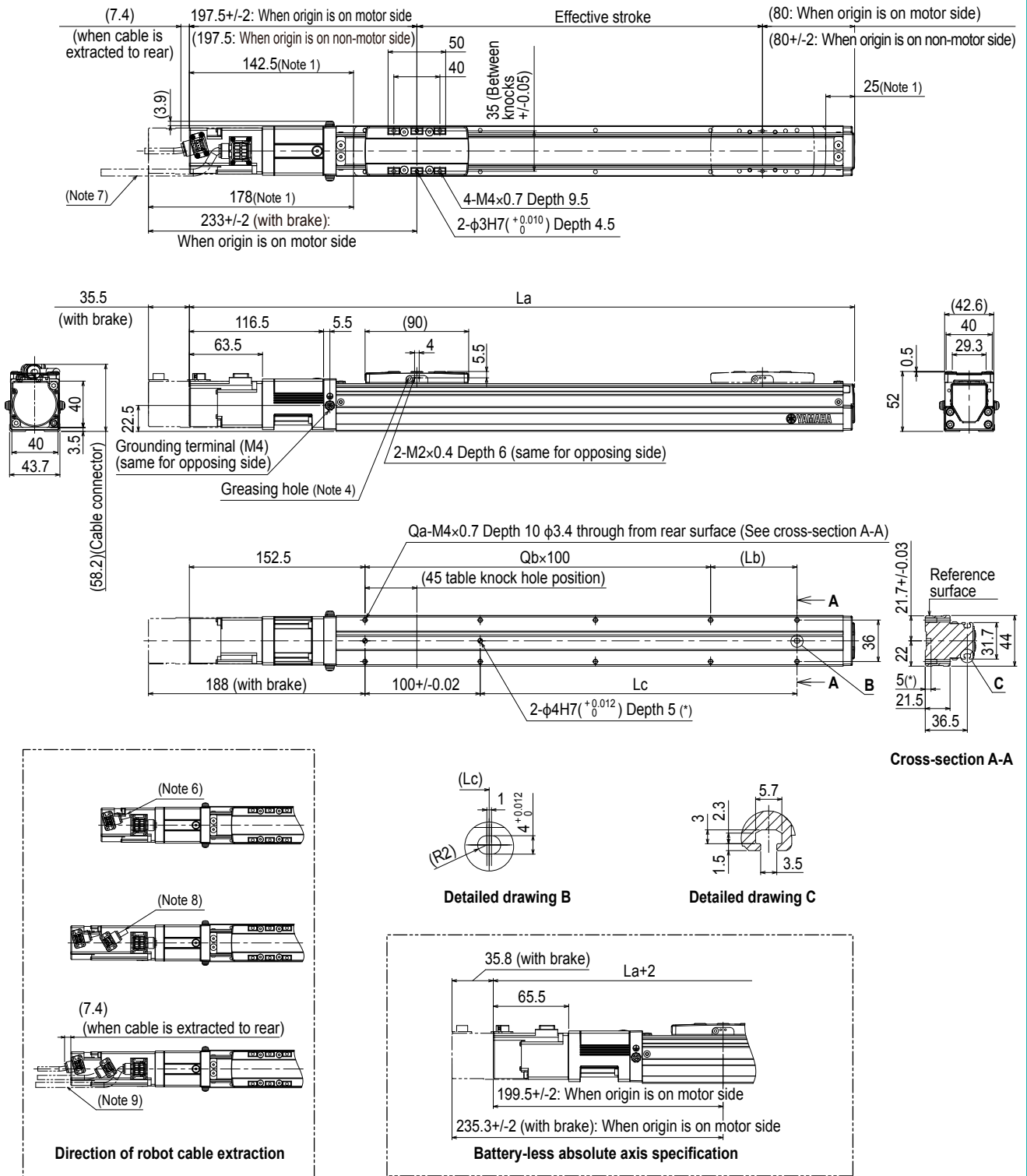
(Unit: N·m)		
MY	MP	MR
54	54	75

Access the website below.



▶ The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

ABAS04 Straight type (S)



Cross-section A-A

Detailed drawing B

Detailed drawing C

Direction of robot cable extraction

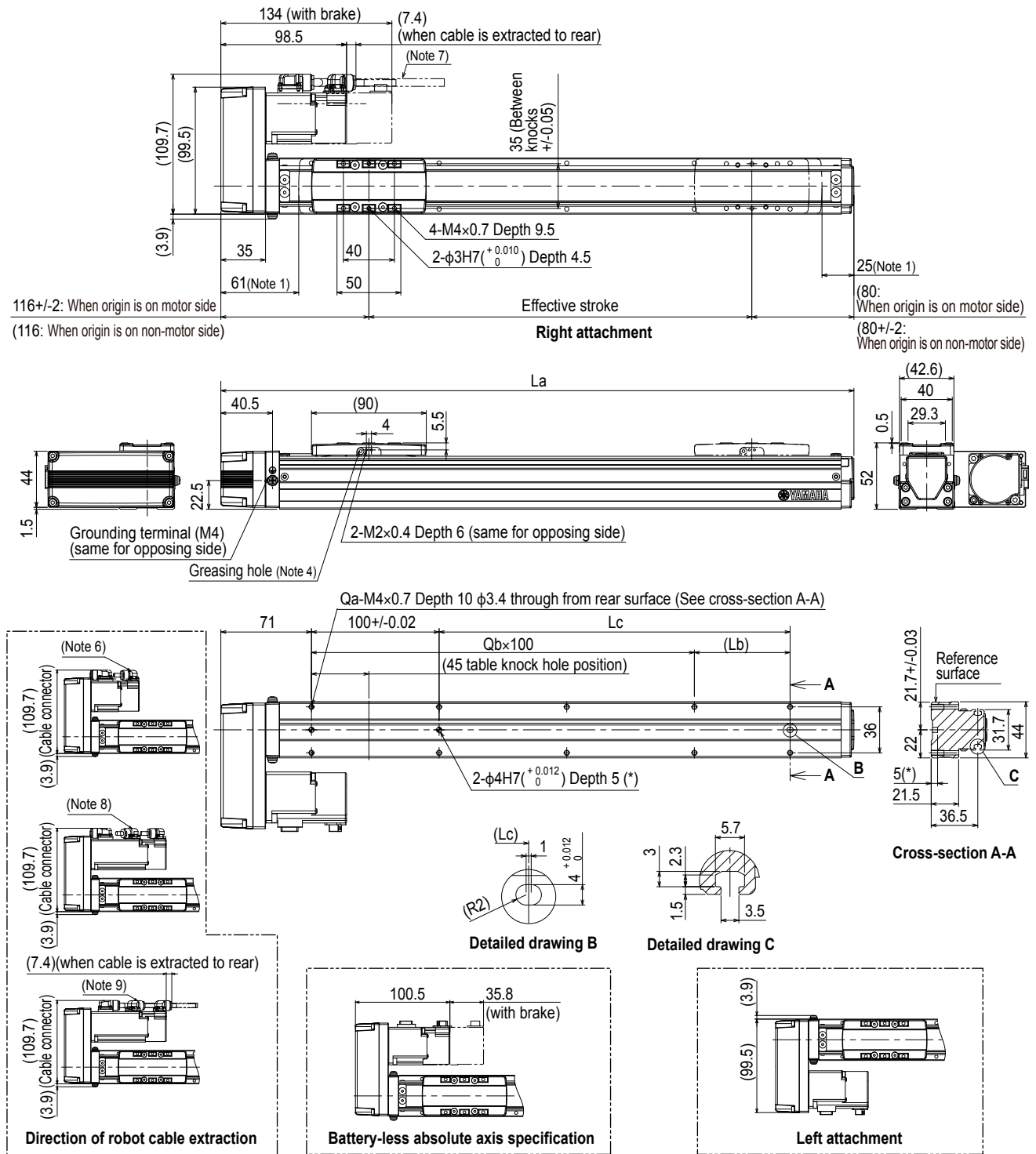
Battery-less absolute axis specification

- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M3 × 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M4 × 0.7> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
Part number: KFU-M3861-00

- Note 5. Weight without brake. The weight with the brake is 0.2 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30.
When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
La	327.5	377.5	427.5	477.5	527.5	577.5	627.5	677.5	727.5	777.5	827.5	877.5	927.5	977.5	1027.5	1077.5	
Lb	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75	
Lc	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
Weight (kg) ^{Note 5}	1.2	1.4	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.8	3	3.2	3.4	3.6	3.7	3.9	
Maximum speed (mm/sec)	Lead 12																
	Lead 6																
	Speed setting																
												720	600	480	400	360	320
												360	300	240	200	180	160
												90%	75%	60%	50%	45%	40%

ABAS04 Bending type (R/L)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 30 mm or more>> is recommended for the hex socket head bolts <M3 × 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less>> is recommended for the hex socket head bolts <M4 × 0.7> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
Part number: KFU-M3861-00

- Note 5. Weight without brake. The weight with the brake is 0.2 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30.
When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800		
La	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996		
Lb	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75		
Lc	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775		
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20		
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8		
Weight (kg) Note 5	1.4	1.5	1.7	1.9	2.1	2.2	2.4	2.6	2.8	3	3.1	3.3	3.5	3.7	3.9	4		
Maximum speed (mm/sec)	Lead 12											720	600	480	400	360	320	
	Lead 6											360	300	240	200	180	160	
	Speed setting											90%	75%	60%	50%	45%	40%	

ABAS05

Basic model

Single-axis robots

Slider type



Ordering method

ABAS05							EP-01				
Model	Lead	Shape	Motor specification	Stroke	Cable length	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit	I/O	Battery
	20: 20 mm 10: 10 mm 5: 5 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	50 to 800 (50mm pitch)	Note 1 R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less	Note 2 No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	Note 3 B: With battery N: None

Note 1. The robot cable is flexible and resists bending.

Note 2. When the actuator is used vertically, lead 5 or 10 is selected, and the stroke is 650 mm or more, the regenerative unit is needed.

Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	100 W		
Repeatability ^{Note 1}	+/-0.01 mm		
Deceleration mechanism	Shifting position ball screw φ 12 (C7 class)		
Stroke	50 mm to 800 mm (50 mm pitch)		
Maximum speed ^{Note 2}	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
	Vertical	3 kg	6 kg
Rated thrust	84 N	169 N	339 N
Maximum dimensions of cross section of main unit	W 54 mm × H 60 mm		
Overall length	Straight	ST + 295 mm	
	Bending	ST + 200 mm	
Position detector	Absolute encoder Battery-less absolute encoder		
Resolution	23 bits		
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)		

Note 1. Positioning repeatability in one direction.

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

If the effective stroke exceeds 550 mm, the ball screw may resonate. (Critical speed)

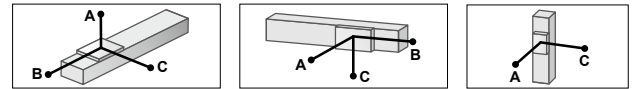
At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.

Note. See P.107 for acceleration/deceleration.

Controller

Controller	Operation method
EP-01	I/O point trace/Remote command

Allowable overhang ^{Note}



ABAS05-20	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
2kg	549	324	272	2kg	272	324	549	1kg	544
8kg	155	73	65	8kg	65	73	155	2kg	276
12kg	117	46	42	12kg	42	46	117	3kg	195

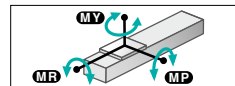
ABAS05-10	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
5kg	769	178	213	5kg	213	178	769	2kg	443
15kg	314	53	64	15kg	64	53	314	4kg	218
24kg	216	29	36	24kg	36	29	216	6kg	142

ABAS05-5	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
10kg	921	97	131	10kg	131	97	921	3kg	345
25kg	459	33	45	25kg	45	33	459	8kg	124
40kg	436	17	23	40kg	23	17	436	12kg	79

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 500mm stroke models.

Static loading moment



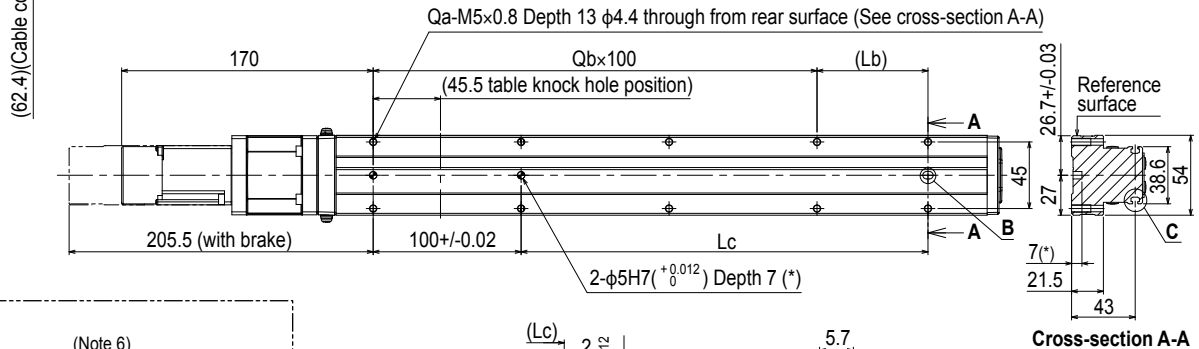
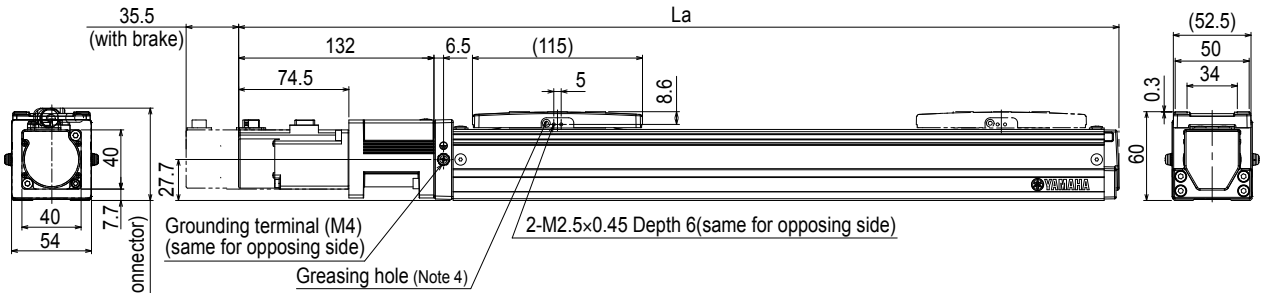
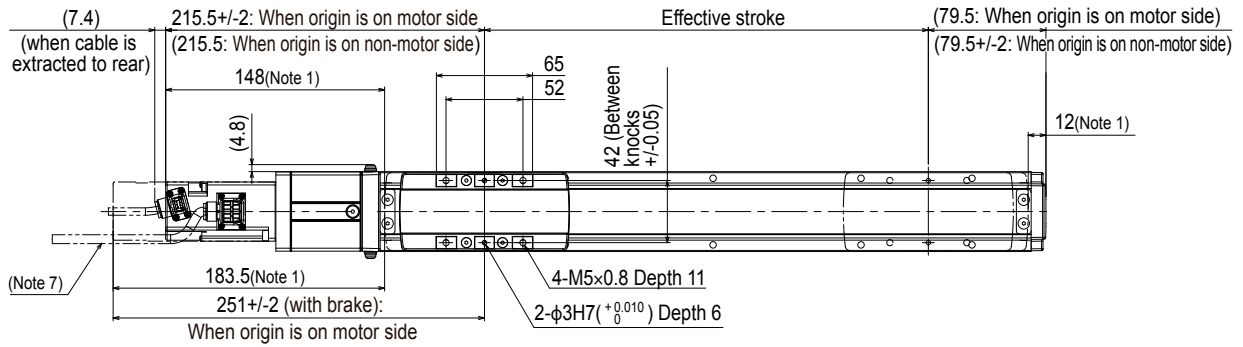
(Unit: N·m)		
MY	MP	MR
59	63	103

Access the website below.

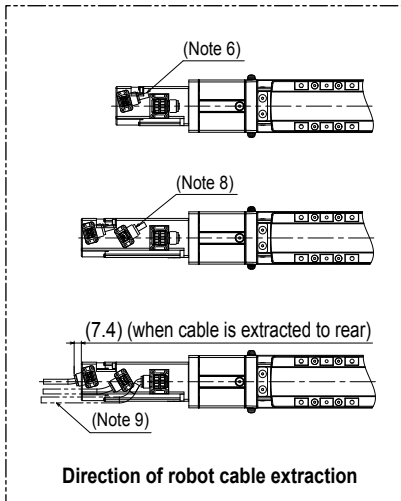


▶ The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

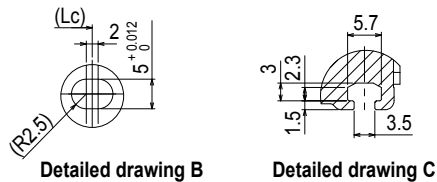
ABAS05 Straight type (S)



Cross-section A-A

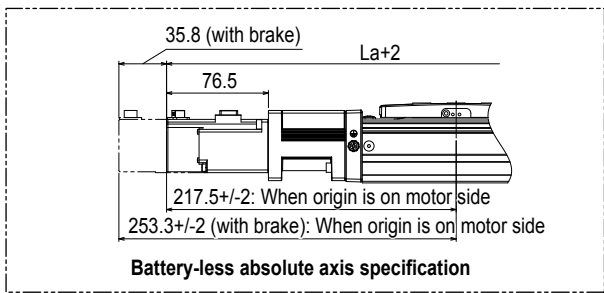


Direction of robot cable extraction



Detailed drawing B

Detailed drawing C



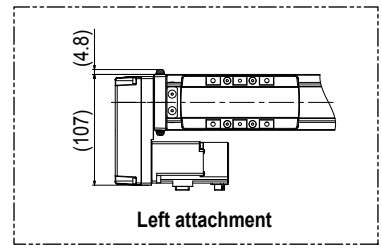
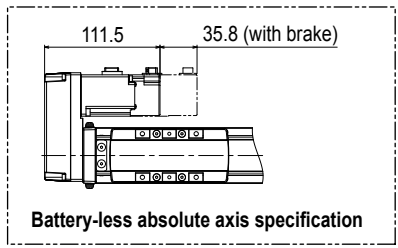
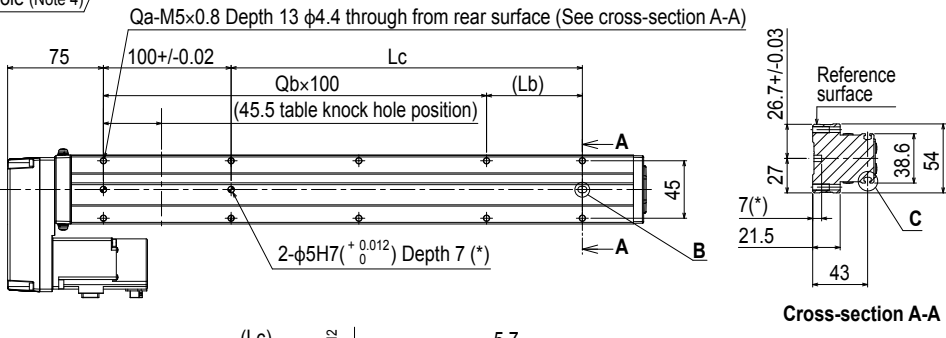
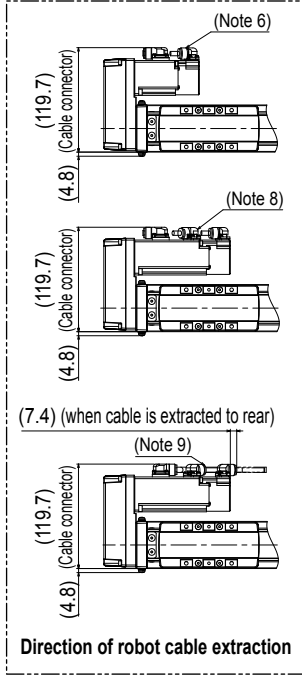
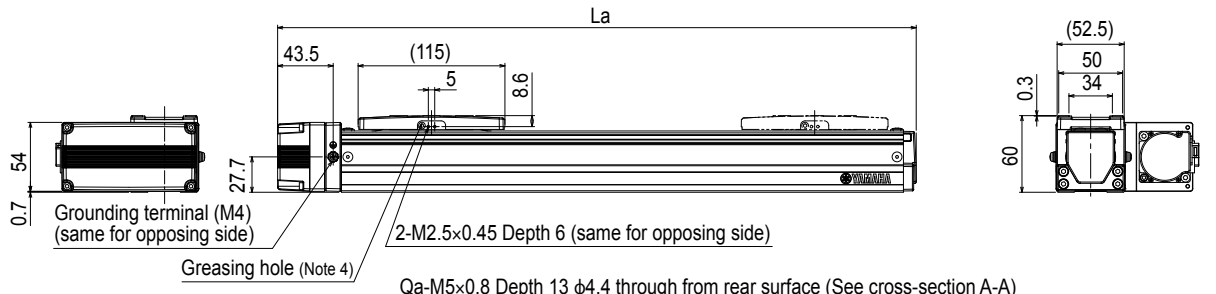
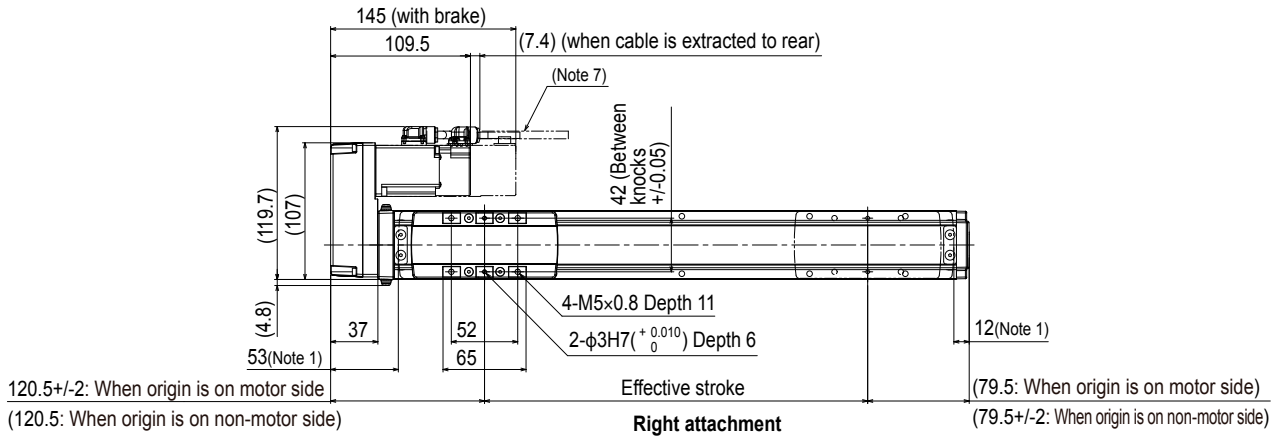
Battery-less absolute axis specification

- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 30 mm or more>> is recommended for the hex socket head bolts <M4 x 0.7>. In the installation tap hole, the length under head << thickness of stand +10 mm or less>> is recommended for the hex socket head bolts <M5 x 0.8> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
Part number: KFU-M3861-00

- Note 5. Weight without brake. The weight with the brake is 0.2 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30.
When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
La	345	395	445	495	545	595	645	695	745	795	845	895	945	995	1045	1095
Lb	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
Lc	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
Weight (kg) Note 5	2	2.2	2.3	2.5	2.8	2.9	2.9	3.1	3.2	3.3	3.5	3.7	3.8	4	4.1	4.5
Maximum speed (mm/sec)	Lead 20	1333														
	Lead 10	666														
	Lead 5	333														
Speed setting	-															
												85%	70%	60%	50%	45%

ABAS05 Bending type (R/L)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M3 x 0.5>. In the installation tap hole, the length under head << thickness of stand +10 mm or less >> is recommended for the hex socket head bolts <M4 x 0.7> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
Part number: KFU-M3861-00
- Note 5. Weight without brake. The weight with the brake is 0.2 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30.
When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800		
La	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000		
Lb	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75		
Lc	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775		
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20		
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8		
Weight (kg) Note 5	2.1	2.2	2.4	2.6	2.8	3	3	3.2	3.3	3.4	3.6	3.7	3.9	4	4.2	4.5		
Maximum speed (mm/sec)	Lead 20											1333						
	Lead 10											666						
	Lead 5											333						
	Speed setting											-						
												1133	933	799	666	599		
												566	466	399	333	299		
												283	233	199	166	149		
												85%	70%	60%	50%	45%		

ABAS08

Basic model

Single-axis robots

Slider type



Ordering method

ABAS08								EP-01				
Model	Lead	Shape	Motor specification	Stroke	Cable length <small>Note 1</small>	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit <small>Note 2</small>	I/O	Battery <small>Note 3</small>	
	20: 20 mm 10: 10 mm 5: 5 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	50 to 1100 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None	

Note 1. The robot cable is flexible and resists bending.

Note 2. When the actuator is used vertically and the stroke of lead 5 or 20 is 450 mm or more or the stroke of lead 10 is 150 mm or more, the regenerative unit is needed.

When the actuator is used horizontally and the stroke of lead 20 is 250 to 750 mm, the regenerative unit is needed.

Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	200 W		
Repeatability <small>Note 1</small>	±0.01 mm		
Deceleration mechanism	Shifting position ball screw φ 16 (C7 class)		
Stroke	50 mm to 1100 mm (50 mm pitch)		
Maximum speed <small>Note 2</small>	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	20 mm	10 mm	5 mm
Maximum payload	Horizontal	40 kg	80 kg
	Vertical	8 kg	20 kg
Rated thrust	174 N	341 N	683 N
Maximum dimensions of cross section of main unit	W 82 mm × H 78 mm		
Overall length	Straight	ST + 353 mm	
	Bending	ST + 264.5 mm	
Position detector	Absolute encoder Battery-less absolute encoder		
Resolution	23 bits		
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)		

Note 1. Positioning repeatability in one direction.

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

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

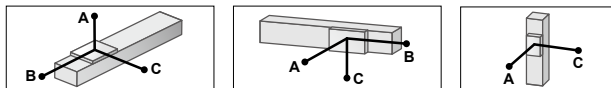
At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.

Note. See P.109 for acceleration/deceleration.

Controller

Controller	Operation method
EP-01	I/O point trace/Remote command

Allowable overhang



ABAS08-20

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
15kg	356	131	146	15kg	146	131	356	3kg	634	634
25kg	278	73	86	25kg	86	73	278	6kg	321	321
40kg	517	54	76	40kg	76	54	517	8kg	240	240

ABAS08-10

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	465	83	120	30kg	120	83	465	5kg	551	551
50kg	341	44	65	50kg	65	44	341	10kg	270	270
80kg	228	22	34	80kg	34	22	228	20kg	129	129

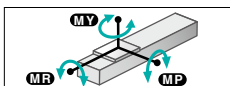
ABAS08-5

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
30kg	1604	95	153	30kg	153	95	1604	10kg	312	312
50kg	1035	52	83	50kg	83	52	1035	20kg	149	149
80kg	719	27	44	80kg	44	27	719	30kg	95	95
100kg	608	19	31	100kg	31	19	608			

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.

Static loading moment



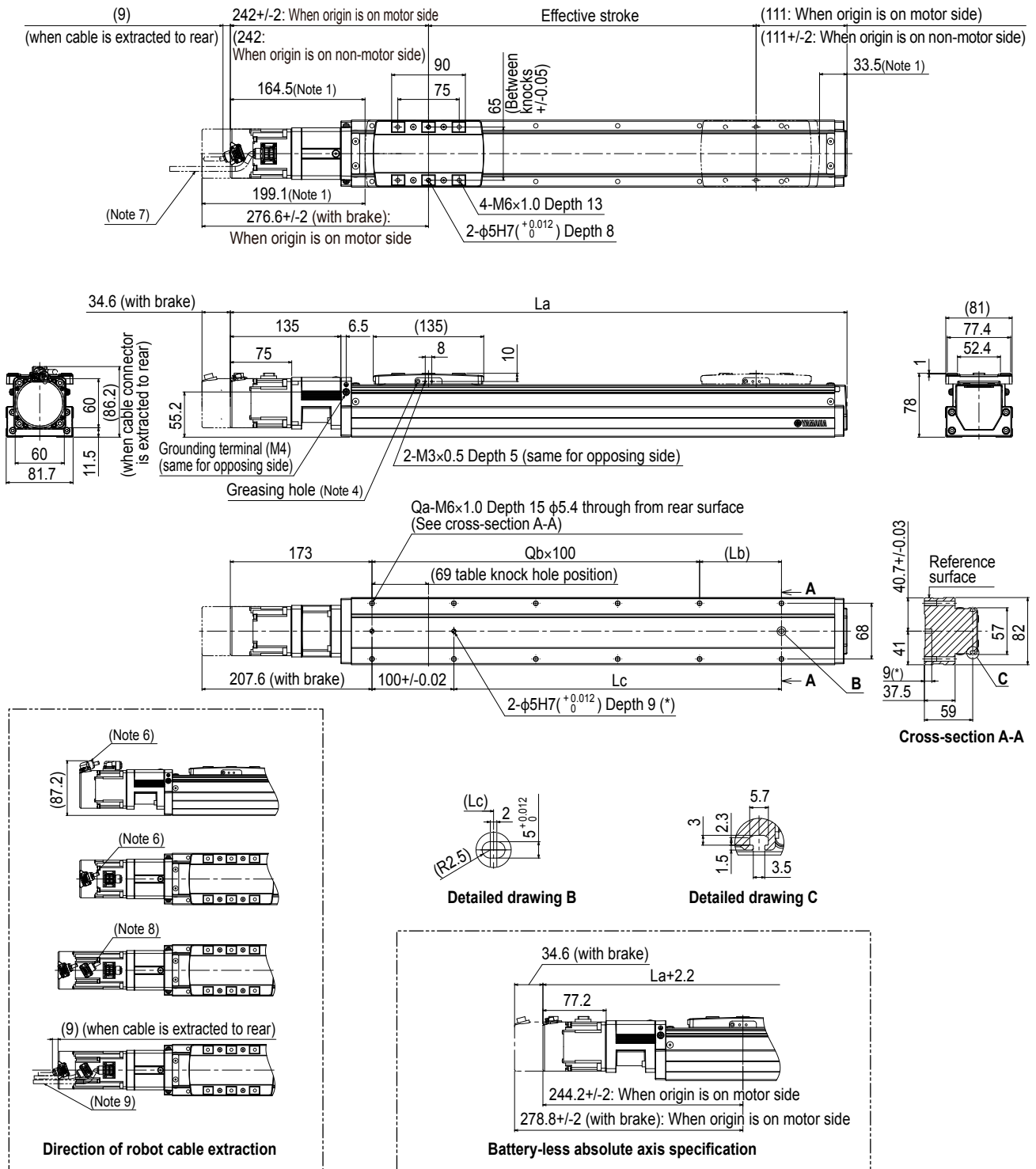
(Unit: N-m)		
MY	MP	MR
221	309	343

Access the website below.



► The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

ABAS08 Straight type (S)

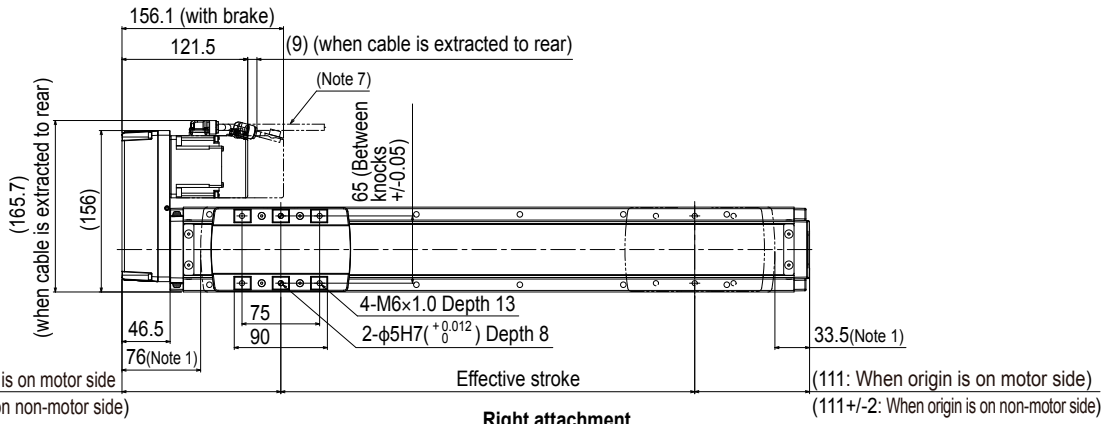


- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M5 × 0.8>. In the installation tap hole, the length under head << thickness of stand + 15 mm or less >> is recommended for the hex socket head bolts <M6 × 1.0> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
Part number: KFU-M3861-00

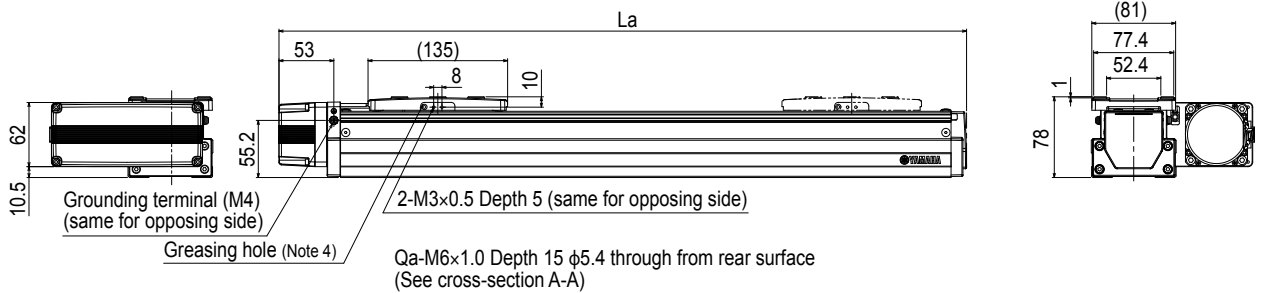
- Note 5. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30.
When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.

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	403	453	503	553	603	653	703	753	803	853	903	953	1003	1053	1103	1153	1203	1253	1303	1353	1403	1453	
Lb	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	
Lc	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	
Weight (kg) Note 5	4.5	4.9	5.3	5.6	6	6.3	6.6	7	7.3	7.6	8	8.3	8.7	9	9.3	9.6	10	10.2	10.6	10.9	11.3	11.7	
Maximum speed (mm/sec)	Lead 20	1200											1020	900	780	660	600	540	480	420	360		
	Lead 10	600											510	450	390	330	300	270	240	210	180		
	Lead 5	300											255	225	195	165	150	135	120	105	90		
Speed setting	-											85%	75%	65%	55%	50%	45%	40%	35%	30%			

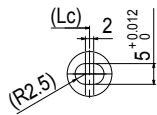
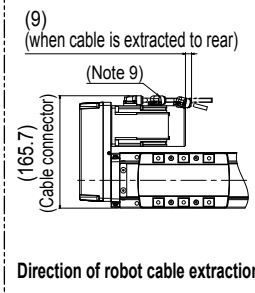
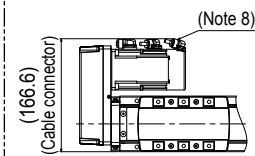
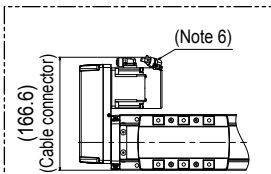
ABAS08 Bending type (R/L)



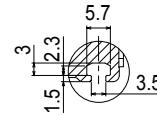
Right attachment



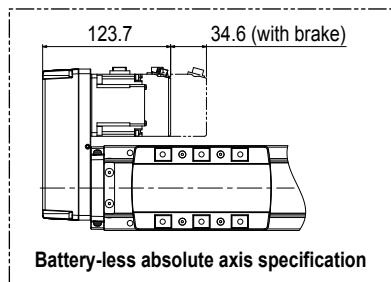
Cross-section A-A



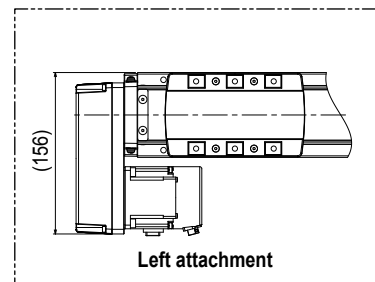
Detailed drawing B



Detailed drawing C



Battery-less absolute axis specification



Left attachment

- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M5 × 0.8>. In the installation tap hole, the length under head << thickness of stand +15 mm or less >> is recommended for the hex socket head bolts <M6 × 1.0> used to install the main unit.
- Note 4. Grease gun nozzle (recommended) (see P.143 for detail)
Part number: KFU-M3861-00

- Note 5. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30.
When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	
La	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5	
Lb	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	
Lc	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	
Weight (kg) ^{Note 5}	4.9	5.3	5.7	6	6.4	6.7	7	7.4	7.7	8	8.4	8.7	9.1	9.4	9.7	10	10.4	10.6	11	11.3	11.7	12.1	
Maximum speed (mm/sec)	Lead 20	1200										1020	900	780	660	600	540	480	420	360			
	Lead 10	600										510	450	390	330	300	270	240	210	180			
	Lead 5	300										255	225	195	165	150	135	120	105	90			
Speed setting	-										85%	75%	65%	55%	50%	45%	40%	35%	30%				

ABAS12/ABAS12H

Basic model ● Single-axis robots

● Slider type ● Slim type



Ordering method

EP-01											
Model	Lead	Shape	Motor specification	Stroke	Cable length	Cable location	Robot positioner	Driver: Power capacity	Regenerative unit	I/O	Battery
ABAS12: 200W ABAS12H: 400W	32: 32 mm 20: 20 mm 10: 10 mm 5: 5 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	50 to 1250 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less A30: 400W/750W	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None

Note 1. The robot cable is flexible and resists bending.

Note 2. [For ABAS12]

When the actuator is used vertically and the stroke of lead 5, 10, or 20 is 150 mm or more or the stroke of lead 32 is 300 to 750 mm, the regenerative unit is needed. When the actuator is used horizontally and the stroke of lead 10 or 20 is 250 to 750 mm or the stroke of lead 32 is 400 to 750 mm, the regenerative unit is needed.

[For ABAS12H]

When the actuator is used vertically and the stroke of lead 5, 10, or 20 is 300 mm or more or the stroke of lead 32 is 300 to 750 mm, the regenerative unit is needed.

Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

ABAS12 (200W)

Specifications

AC servo motor output	200 W			
Repeatability ^{Note 1}	±0.01 mm			
Deceleration mechanism	Shifting position ball screw φ 16 (C7 class)			
Stroke	50 mm to 1250 mm (50 mm pitch)			
Maximum speed ^{Note 2}	1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	32 mm	20 mm	10 mm	5 mm
Maximum payload	Horizontal	20 kg	40 kg	80 kg
	Vertical	3 kg	8 kg	20 kg
Rated thrust	105 N	170 N	341 N	683 N
Maximum dimensions of cross section of main unit	W 120 mm × H 76 mm			
Overall length	Straight	ST + 369 mm		
	Bending	ST + 270.5 mm		
Position detector	Absolute encoder Battery-less absolute encoder			
Resolution	23 bits			
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)			

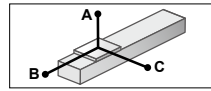
Note 1. Positioning repeatability in one direction.

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

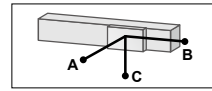
If the effective stroke exceeds 600 mm, the ball screw may resonate. (Critical speed)
At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.

Note. See P.111 for acceleration/deceleration.

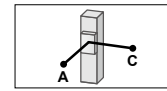
Allowable overhang^{Note}



ABAS12-32 Horizontal installation (Unit: mm)	A	B	C
	5kg	2079	1694
	10kg	1135	834
	20kg	842	422

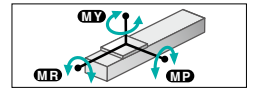


ABAS12-32 Wall installation (Unit: mm)	A	B	C
	5kg	1224	1694
	10kg	627	834
	20kg	362	422



ABAS12-32 Vertical installation (Unit: mm)	A	C
	1kg	6201
	3kg	2057
	20kg	2057

Static loading moment



(Unit: N·m)		
MY	MP	MR
573	606	606

Controller

Controller	Operation method
EP-01	I/O point trace/ Remote command

ABAS12H (400W)

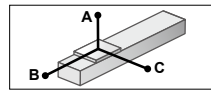
Specifications

AC servo motor output	400 W			
Ball screw lead	32 mm	20 mm	10 mm	5 mm
Maximum payload	Horizontal	35 kg	50 kg	95 kg
	Vertical	8 kg	15 kg	25 kg
Rated thrust	218 N	339 N	678 N	1360 N
Overall length	Straight	ST + 385 mm		
	Bending	ST + 270.5 mm		

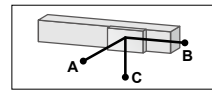
Note. See P.113 for acceleration/deceleration.

Note. The specifications and static loading moment, etc. not described here are common to ABAS12.

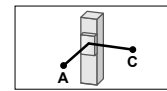
Allowable overhang^{Note}



ABAS12H-32 Horizontal installation (Unit: mm)	A	B	C
	10kg	1135	834
	20kg	842	422
	35kg	925	286



ABAS12H-32 Wall installation (Unit: mm)	A	B	C
	10kg	627	834
	20kg	362	422
	35kg	294	286



ABAS12H-32 Vertical installation (Unit: mm)	A	C
	3kg	2057
	5kg	1228
	8kg	762

ABAS12H-20 Horizontal installation (Unit: mm)	A	B	C
	15kg	826	548
	30kg	485	263
	50kg	433	172

ABAS12H-20 Wall installation (Unit: mm)	A	B	C
	15kg	427	548
	30kg	218	263
	50kg	162	172

ABAS12H-20 Vertical installation (Unit: mm)	A	C
	5kg	1315
	10kg	672
	15kg	522

ABAS12H-10 Horizontal installation (Unit: mm)	A	B	C
	30kg	528	270
	60kg	665	171
	95kg	1347	132

ABAS12H-10 Wall installation (Unit: mm)	A	B	C
	30kg	230	270
	60kg	185	171
	95kg	173	132

ABAS12H-10 Vertical installation (Unit: mm)	A	C
	5kg	1933
	15kg	660
	25kg	409

ABAS12H-5 Horizontal installation (Unit: mm)	A	B	C
	30kg	2476	430
	60kg	1672	215
	90kg	1474	141
	115kg	1378	109

ABAS12H-5 Wall installation (Unit: mm)	A	B	C
	30kg	513	430
	60kg	270	215
	90kg	186	141
	115kg	146	109

ABAS12H-5 Vertical installation (Unit: mm)	A	C
	15kg	885
	25kg	541
	40kg	350
	350	350

Note. Distance from center of slider upper surface to carrier center-of-gravity at a guide service life of 10,000 km.

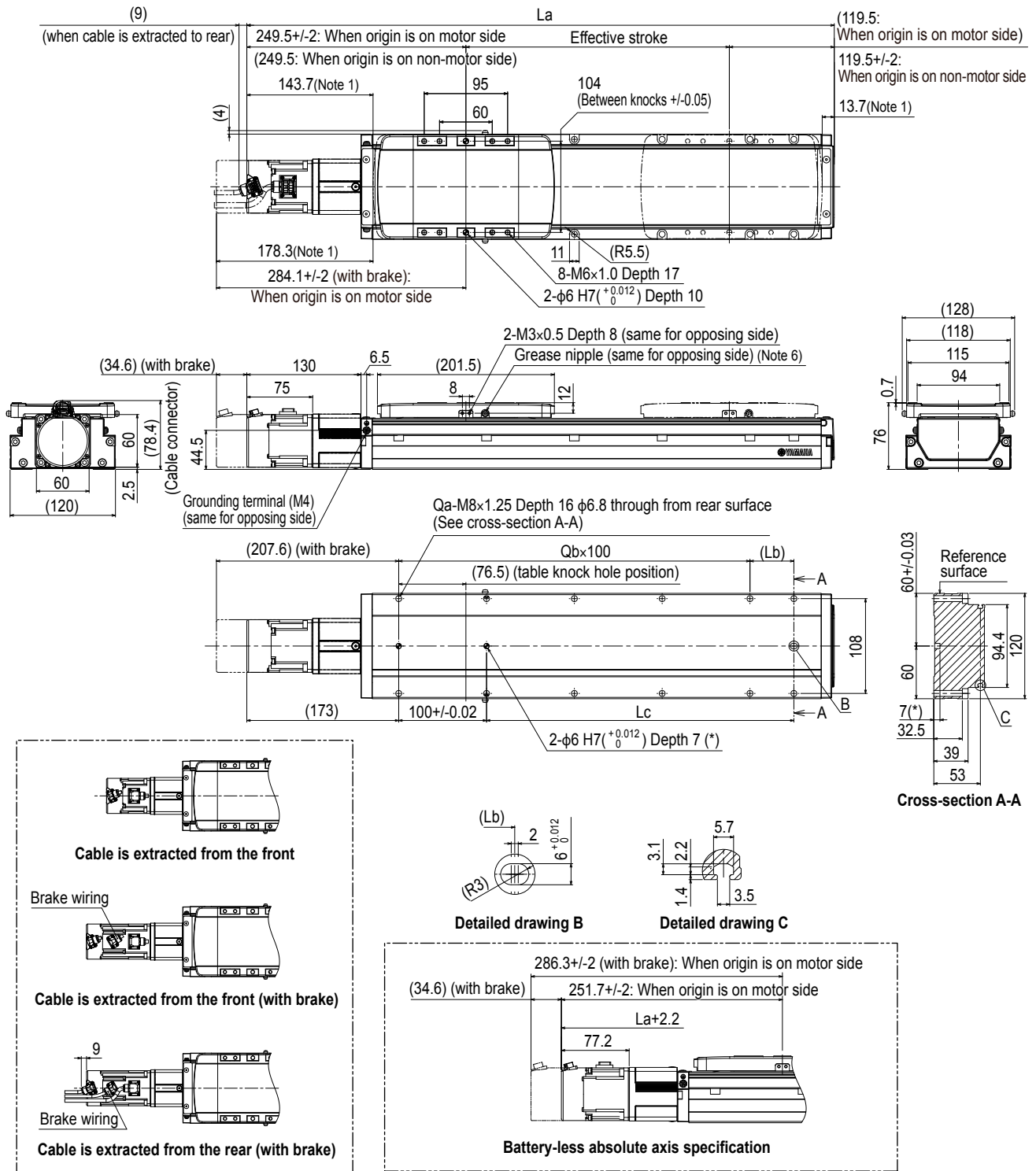
Note. Service life is calculated for 600mm stroke models.

Access the website below.



▶ The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

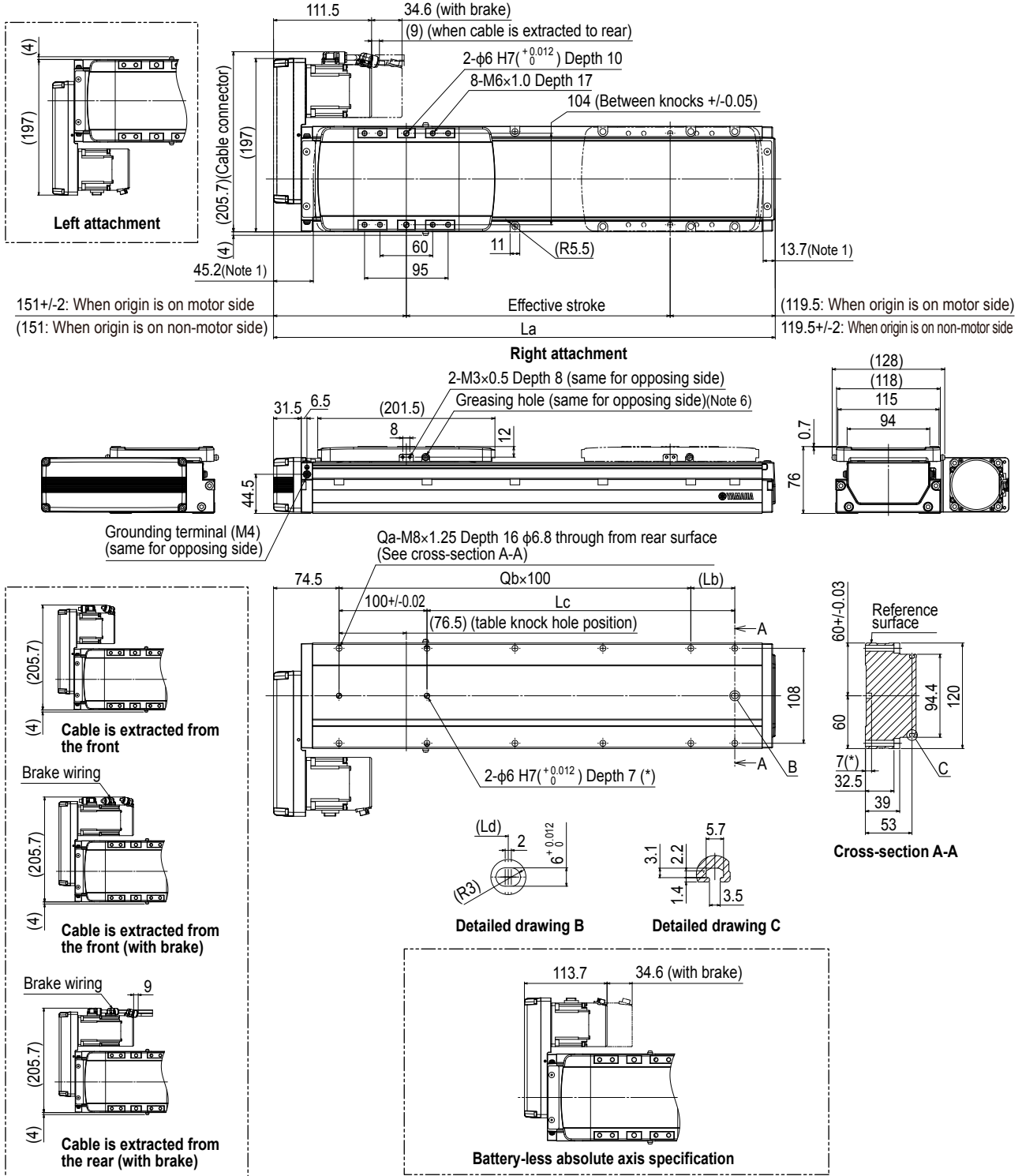
ABAS12 Straight type (S)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M6 x 1.0>. In the installation tap hole, the length under head << thickness of stand +16 mm or less >> is recommended for the hex socket head bolts <M8 x 1.25> used to install the main unit.
- Note 4. The weight with the brake is 0.4 kg heavier than the value in the weight column.
- Note 5. The minimum bending radius of the robot cable is R30 on the fixed side or R50 on the movable side. The cable extraction direction may vary depending on the specifications.
- Note 6. Grease gun nozzle (recommended) (see P.143 for detail)

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
La	419	469	519	569	619	669	719	769	819	869	919	969	1019	1069	1119	1169	1219	1269	1319	1369	1419	1469	1519	1569	1619
Lb	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
Lc	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
Qa	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
Qb	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
Weight (kg) Note 4	5.3	5.7	6.1	6.5	6.9	7.3	7.7	8.1	8.5	8.9	9.4	9.8	10.2	10.7	11.1	11.5	12	12.4	12.9	13.3	13.7	14.2	14.6	15.1	15.5
Maximum speed (mm/sec)	Lead 32	1800																							
	Lead 20	1200																							
	Lead 10	600																							
	Lead 5	300																							
Speed setting	-																								

ABAS12 Bending type (R/L)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M6 × 1.0>. In the installation tap hole, the length under head << thickness of stand + 16 mm or less >> is recommended for the hex socket head bolts <M8 × 1.25> used to install the main unit.
- Note 4. The weight with the brake is 0.4 kg heavier than the value in the weight column.
- Note 5. The minimum bending radius of the robot cable is R30 on the fixed side or R50 on the movable side. The cable extraction direction may vary depending on the specifications.
- Note 6. Grease gun nozzle (recommended) (see P.143 for detail)

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	
La	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5	
Lb	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	
Lc	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	
Qa	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	
Qb	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	
Weight (kg)	Note 4																									
	5.3	5.7	6.1	6.5	6.9	7.3	7.7	8.1	8.5	9	9.4	9.9	10.3	10.7	11.2	11.6	12	12.5	12.9	13.4	13.8	14.2	14.7	15.1	15.6	
Maximum speed (mm/sec)	Lead 32							1800						1620	1440	1260	1080	990	810	720	630	630	540	450	360	360
	Lead 20							1200						1080	960	840	720	660	540	480	420	420	360	300	240	240
	Lead 10							600						540	480	420	360	330	270	240	210	210	180	150	120	120
	Lead 5							300						270	240	210	180	165	135	120	105	105	90	75	60	60
	Speed setting														90%	80%	70%	60%	55%	45%	40%	35%	35%	30%	25%	20%

Features

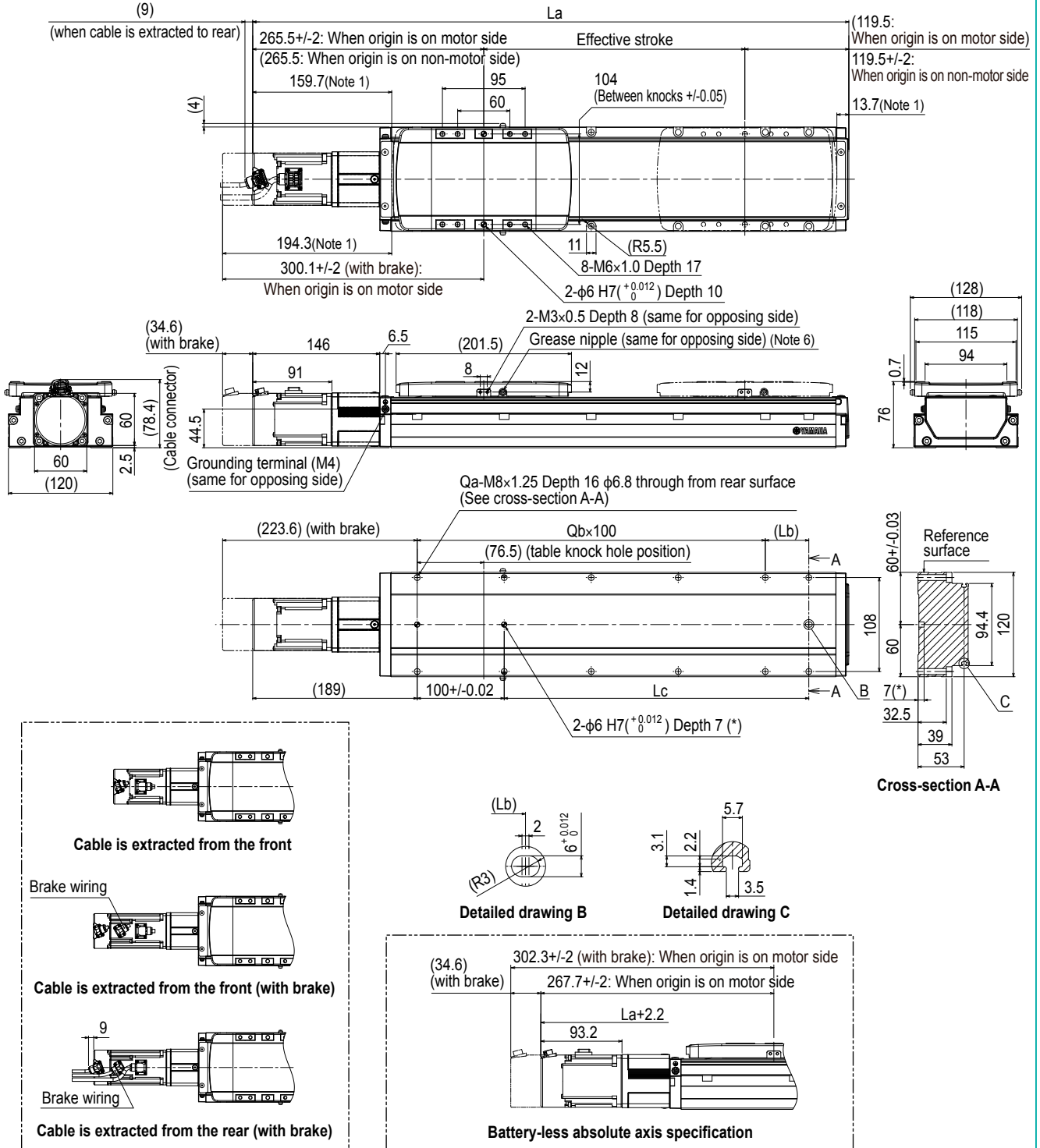
- Basic model: LBAS
- Advanced model: LGXS
- Basic model: LBAR
- Basic model: ABAS
- Advanced model: AGXS
- Basic model: ABAR

Acceleration/Deceleration Inertia Moment

Option

Single axis robot postdrive EP-01

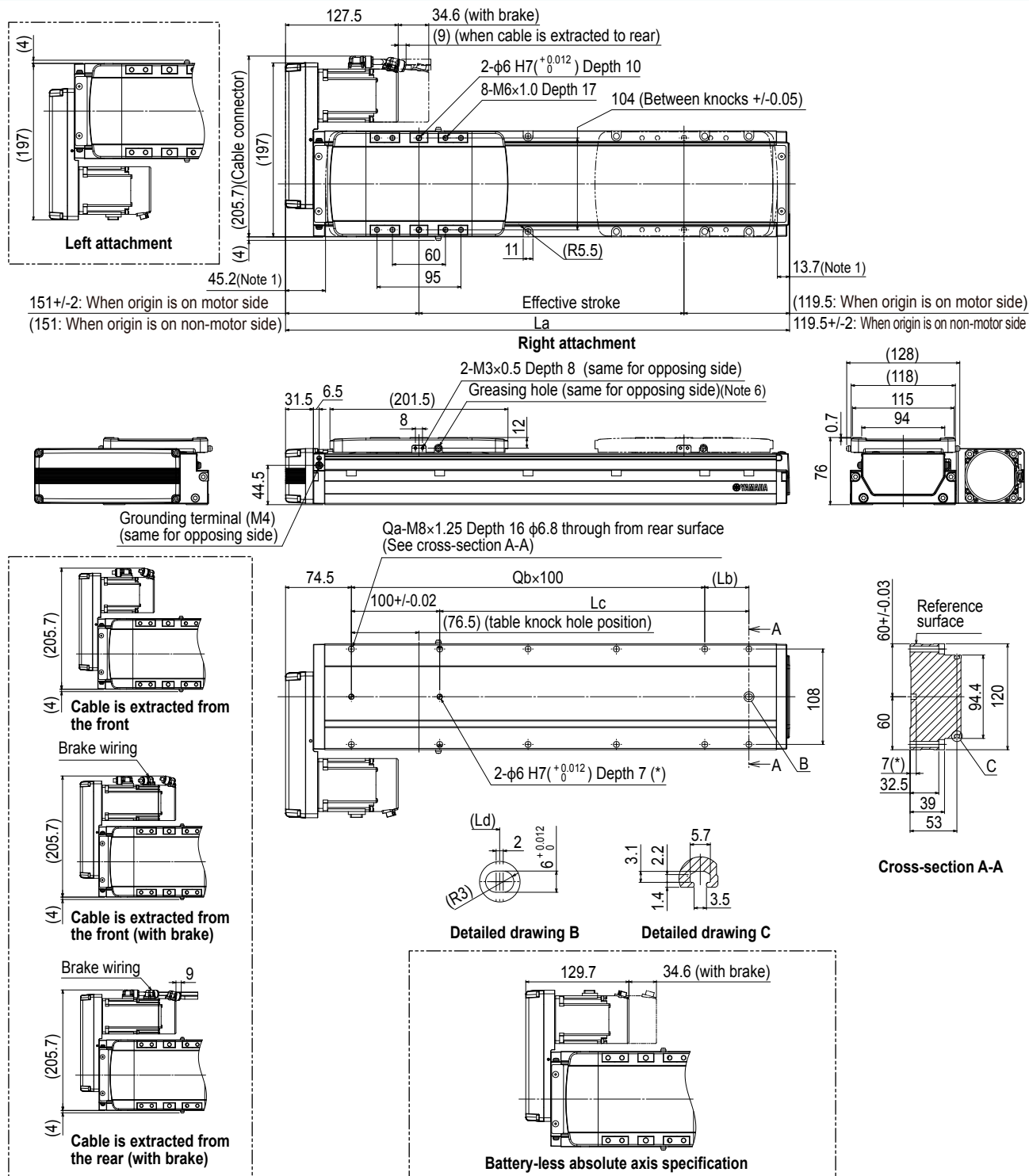
ABAS12H Straight type (S)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M6 × 1.0>. In the installation tap hole, the length under head << thickness of stand +16 mm or less >> is recommended for the hex socket head bolts <M8 × 1.25> used to install the main unit.
- Note 4. The weight with the brake is 0.4 kg heavier than the value in the weight column.
- Note 5. The minimum bending radius of the robot cable is R30 on the fixed side or R50 on the movable side. The cable extraction direction may vary depending on the specifications.
- Note 6. Grease gun nozzle (recommended) (see P.143 for detail)

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
La	435	485	535	585	635	685	735	785	835	885	935	985	1035	1085	1135	1185	1235	1285	1335	1385	1435	1485	1535	1585	1635
Lb	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
Lc	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
Qa	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
Qb	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
Weight (kg) Note 4	5.6	6	6.4	6.8	7.2	7.6	8	8.4	8.8	9.2	9.7	10.1	10.5	11	11.4	11.8	12.3	12.7	13.2	13.6	14	14.5	14.9	15.4	15.8
Maximum speed (mm/sec)	Lead 32	1800											1620	1440	1260	1080	990	810	720	630	630	540	450	360	360
	Lead 20	1200											1080	960	840	720	660	540	480	420	360	360	300	240	240
	Lead 10	600											540	480	420	360	330	270	240	210	210	180	150	120	120
	Lead 5	300											270	240	210	180	165	135	120	105	90	75	60	60	
Speed setting	-											90%	80%	70%	60%	55%	45%	40%	35%	35%	30%	25%	20%	20%	

ABAS12H Bending type (R/L)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M6 × 1.0>. In the installation tap hole, the length under head << thickness of stand +16 mm or less >> is recommended for the hex socket head bolts <M8 × 1.25> used to install the main unit.
- Note 4. The weight with the brake is 0.4 kg heavier than the value in the weight column.
- Note 5. The minimum bending radius of the robot cable is R30 on the fixed side or R50 on the movable side. The cable extraction direction may vary depending on the specifications.
- Note 6. Grease gun nozzle (recommended) (see P.143 for detail)

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
La	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
Lb	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
Lc	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
Qa	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
Qb	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
Weight (kg) Note 4	5.6	6	6.4	6.8	7.2	7.6	8	8.4	8.8	9.3	9.7	10.2	10.6	11	11.5	11.9	12.3	12.8	13.2	13.7	14.1	14.5	15	15.4	15.9
Maximum speed (mm/sec)	Lead 32	1800											1620	1440	1260	1080	990	810	720	630	630	540	450	360	360
	Lead 20	1200											1080	960	840	720	660	540	480	420	420	360	300	240	240
	Lead 10	600											540	480	420	360	330	270	240	210	210	180	150	120	120
	Lead 5	300											270	240	210	180	165	135	120	105	105	90	75	60	60
	Speed setting	-											90%	80%	70%	60%	55%	45%	40%	35%	35%	30%	25%	20%	20%

AGXS05

Advanced model

Single-axis robots

Slider type



Ordering method

AGXS05										EP-01			
Model	Acceleration/deceleration specifications	Lead	Shape ^{Note 1}	Motor specification	Side cover	Stroke ^{Note 2}	Cable length ^{Note 3}	Cable entry location	Robot positioner	Driver: Power capacity	I/O	Battery ^{Note 4}	
	No entry: Standard H: High agility	20: 20 mm 10: 10 mm 5: 5 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	No entry: Standard W: With T-groove (both sides) R: With T-groove (right side) L: With T-groove (left side)	50 to 800 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None	

Note 1. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.
Note 2. For the high acceleration/deceleration specifications, the stroke is 50 to 550 mm (50 mm pitch).

Note 3. The robot cable is flexible and resists bending.
Note 4. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	50 W		
Repeatability ^{Note 1}	+/-0.005 mm		
Deceleration mechanism	Ground ball screw ϕ 12 (C5 class)		
Stroke	50 mm to 800 mm (50 mm pitch)		
Maximum speed ^{Note 2}	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
	Vertical	2 kg	4 kg
Rated thrust		41 N	69 N
Maximum dimensions of cross section of main unit	W 48 mm x H 65 mm		
Overall length	Straight	ST + 195 mm	
	Bending	ST + 161.5 mm	
Degree of cleanliness ^{Note 3}	ISO CLASS 3 (ISO14644-1) or equivalent		
Intake air ^{Note 4}	30 N ℓ /min to 100 N ℓ /min		
Position detector	Absolute encoder Battery-less absolute encoder		
Resolution	23 bits		
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. 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 4. The required suction amount will vary according to the operating conditions and operating environment.
Note. See P.115 for acceleration/deceleration.

Allowable overhang ^{Note}

AGXS05-20	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
2kg	898	269	350	2kg	323	234	809	1kg	452	452
5kg	583	112	159	5kg	119	76	427	2kg	217	217

AGXS05-10	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
2kg	2505	382	625	2kg	585	346	2386	1kg	732	732
5kg	1366	149	246	5kg	195	113	1164	2kg	351	351
8kg	1036	90	150	8kg	95	54	745	4kg	160	160

AGXS05-5	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
3kg	4604	281	497	3kg	439	245	4371	4kg	183	183
8kg	2197	101	179	8kg	117	65	1812	6kg	111	111
13kg	1593	59	105	13kg	42	24	1000	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.

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)
	Vertical	1 kg	2 kg
Maximum acceleration	Horizontal	11.77 m/s ² (1.2 G)	11.77 m/s ² (1.2 G)
	Vertical	7.17 m/s ² (0.7 G)	3 kg

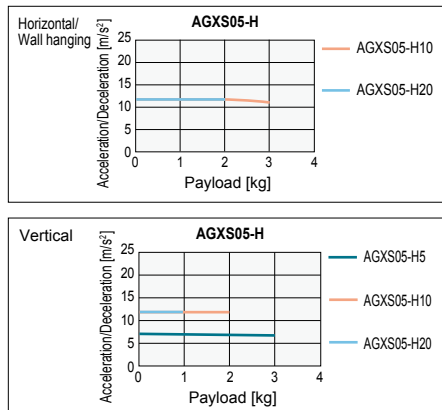
Allowable overhang ^{Note}

AGXS05-H20	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
1kg	498	324	323	1kg	297	288	468	1kg	223	223
2kg	230	157	150	2kg	123	120	199			

AGXS05-H10	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	C		
1kg	1159	460	645	1kg	606	424	1129	1kg	396	396
3kg	381	148	206	3kg	163	112	346	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.

Payload - Acceleration / Deceleration Graph (Estimate)



Effective stroke and maximum speed during high acceleration or deceleration

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

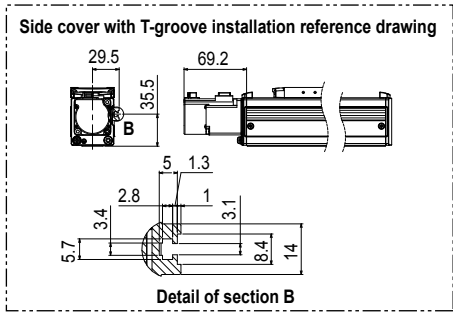
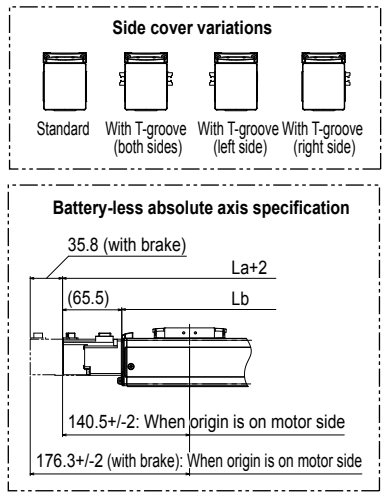
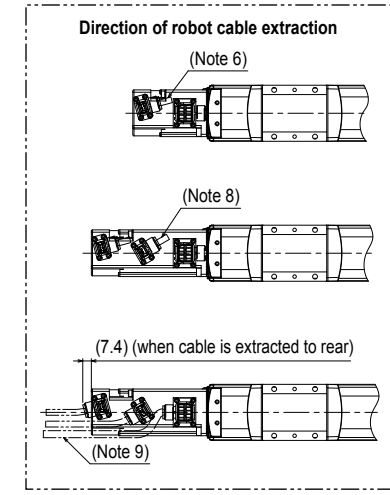
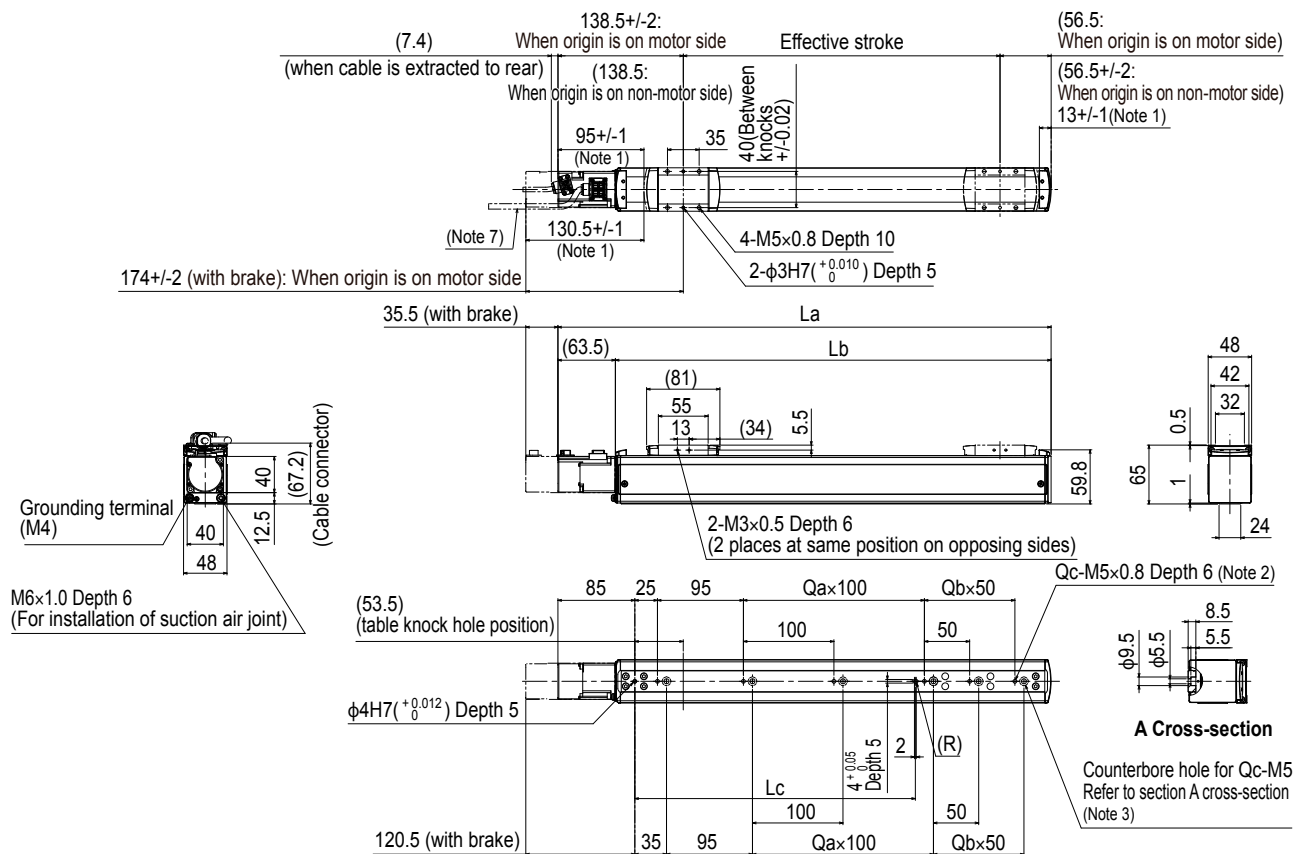
Note. The bending unit cannot be used for the high agility mode.
Note. The high agility mode is used in an effective stroke range of 50 to 550 (50 mm pitch).
Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
The speed may not reach the maximum speed if the movement distance is short or depending on the operating conditions.
Note. When the actuator is used with the high acceleration/deceleration specifications, the operation duty and motor load factor need to be considered. (See P.93.)
Note. See P.116 for acceleration/deceleration.

Access the website below.



► The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

AGXS05 Straight type (S)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located 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 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 5. Weight without brake. The weight with the brake is 0.2 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. Side cover with T-groove is used to install the sensor.
- Note 12. 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
La	245	295	345	395	445	495	545	595	645	695	745	795	845	895	945	995
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	2.0	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														
	Lead 10	666														
	Lead 5	333														
	Speed setting	-														
Acceleration/Deceleration (mm/sec²)	Lead 20	1066														
	Lead 10	933														
	Lead 5	532														
	Speed setting	266														
Inertia Moment (kg·m²)	Lead 20	800														
	Lead 10	400														
	Lead 5	200														
	Speed setting	166														
Option	Lead 20	80%														
	Lead 10	70%														
	Lead 5	60%														
	Speed setting	50%														

Features

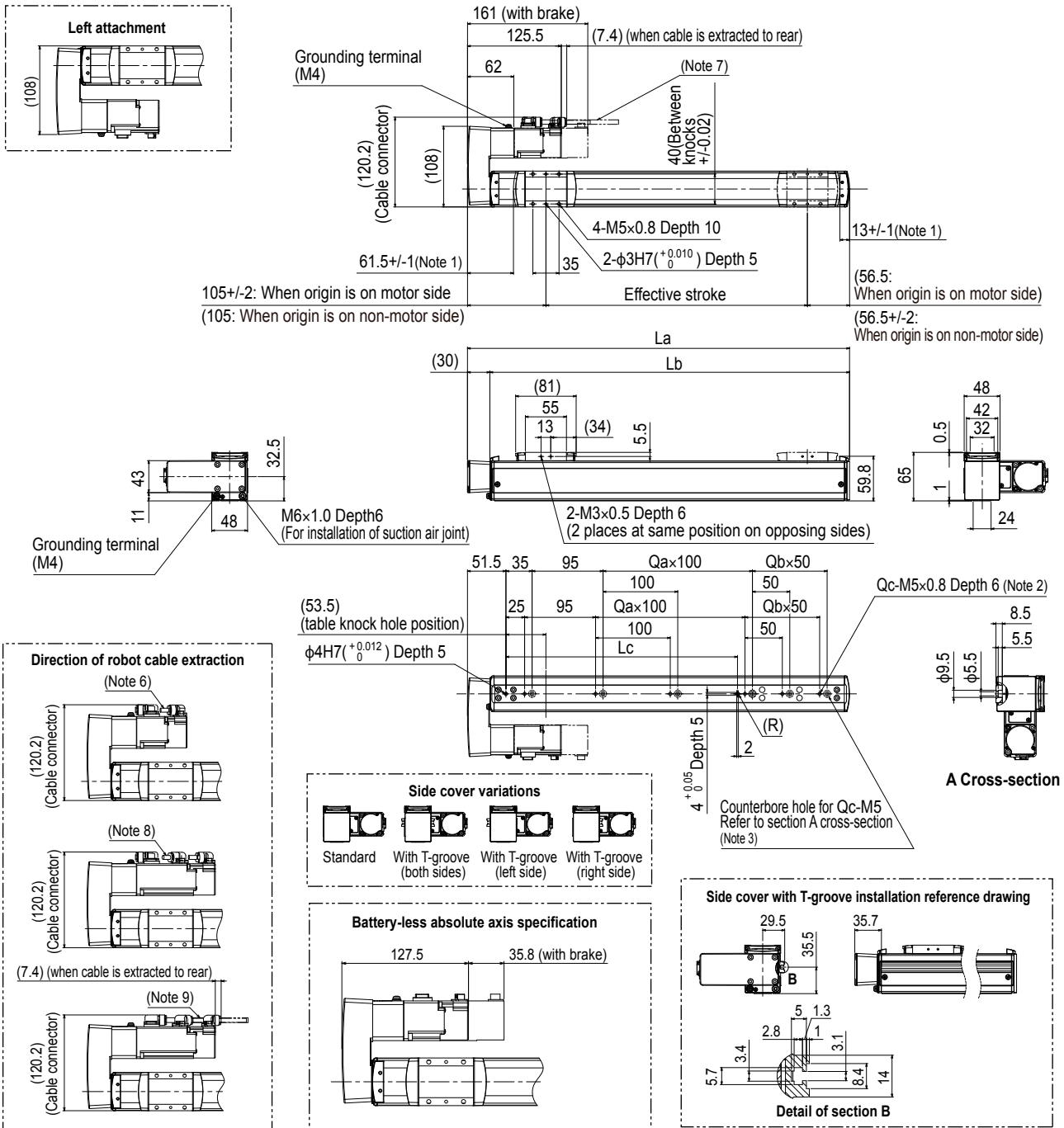
- Basic model: LBAS
- Advanced model: LGXS
- Basic model: LBAR
- Basic model: ABAS
- Advanced model: AGXS
- Basic model: ABAR

Acceleration/Deceleration Inertia Moment

Option

Single axis sensor positioner EP-01

AGXS05 Bending type (R/L)



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located 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 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 5. Weight without brake. The weight with the brake is 0.2 kg heavier than the value in the weight column.
 Note 6. The robot cable is extracted from the front.
 Note 7. The robot cable is extracted from the rear.

Note 8. The robot cable (with brake) is extracted from the front.
 Note 9. The robot cable (with brake) is extracted from the rear.
 Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
 Note 11. Side cover with T-groove is used to install the sensor.
 Note 12. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.
 Note 13. 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	
La	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	
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	1.9	2.1	2.2	2.4	2.5	2.7	2.9	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	
Maximum speed (mm/sec)	Lead 20	1333															
	Lead 10	666															
	Lead 5	333															
	Speed setting	-															
														1066	933	800	666
														532	466	400	333
														266	233	200	166
														80%	70%	60%	50%

AGXS05L

Advanced model

Single-axis robots

Slider type



Ordering method

AGXS05L									EP-01				
Model	Acceleration/ deceleration specifications	Lead	Shape ^{Note 1}	Motor specification	Side cover	Stroke ^{Note 2}	Cable length ^{Note 3}	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit ^{Note 4}	I/O	Battery ^{Note 5}
	No entry: Standard H: High agility	20: 20 mm 10: 10 mm 5: 5 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/ With no brake BKBL: Battery-less absolute/ With brake	No entry: Standard W: With T-groove (both sides) R: With T-groove (right side) L: With T-groove (left side)	50 to 800 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None

Note 1. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.

Note 2. For the high acceleration/deceleration specifications, the stroke is 50 to 550 mm (50 mm pitch).

Note 3. The robot cable is flexible and resists bending.

Note 4. When the actuator is used vertically and the stroke is 500 mm or more, the regenerative unit is needed.

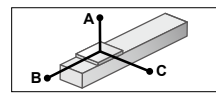
Note 5. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	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 ^{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, 8 kg, 3 kg Vertical: 24 kg, 12 kg, 6 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	Straight: ST + 236 mm Bending: ST + 191.5 mm
Degree of cleanliness ^{Note 3}	ISO CLASS 3 (ISO14644-1) or equivalent
Intake air ^{Note 4}	30 Nℓ/min to 100 Nℓ/min
Position detector	Absolute encoder Battery-less absolute encoder
Resolution	23 bits
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)

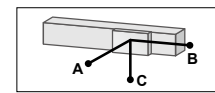
Note 1. Positioning repeatability in one direction.
 Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 600 mm, the ball screw may resonate. (Critical speed)
 At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
 Note 3. 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 4. The required suction amount will vary according to the operating conditions and operating environment.
 Note. See P.117 for acceleration/deceleration.

Allowable overhang ^{Note}



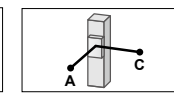
AGXS05L-20

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



Wall installation (Unit: mm)

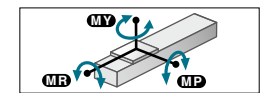
A	B	C
3kg	396	486
8kg	106	128
12kg	52	61



Vertical installation (Unit: mm)

A	C
1kg	1486
2kg	730
3kg	478

Static loading moment



MY	MP	MR
72	72	64

AGXS05L-10

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

Wall installation (Unit: mm)

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

Vertical installation (Unit: mm)

A	C
4kg	555
6kg	360

AGXS05L-5

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

Wall installation (Unit: mm)

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

Vertical installation (Unit: mm)

A	C
5kg	501
10kg	235
12kg	190

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

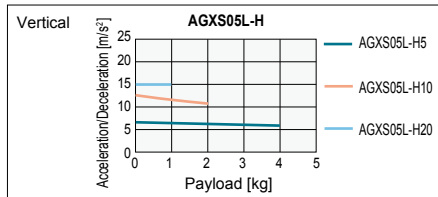
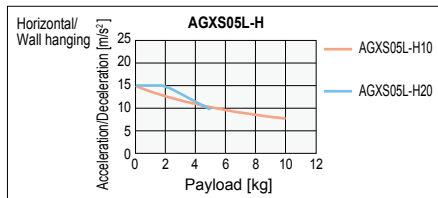
Note. Service life is calculated for 600 mm stroke models.

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	14.72 m/s ² (1.5 G)	14.72 m/s ² (1.5 G)	-
Maximum payload	1 kg	2 kg	4 kg
Maximum acceleration	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}

AGXS05L-H20

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

Wall installation (Unit: mm)

A	B	C
2kg	294	428
5kg	87	118

Vertical installation (Unit: mm)

A	C
1kg	728
2kg	728

AGXS05L-H10

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

Wall installation (Unit: mm)

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

Vertical installation (Unit: mm)

A	C
1kg	1298
2kg	636

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.

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. When the actuator is used with the high acceleration/deceleration specifications, the operation duty and motor load factor need to be considered. (See P.93.)

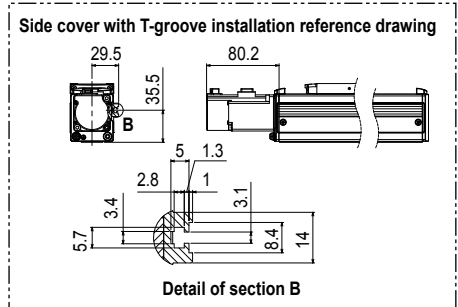
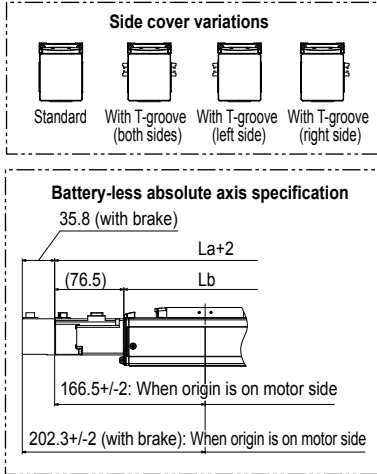
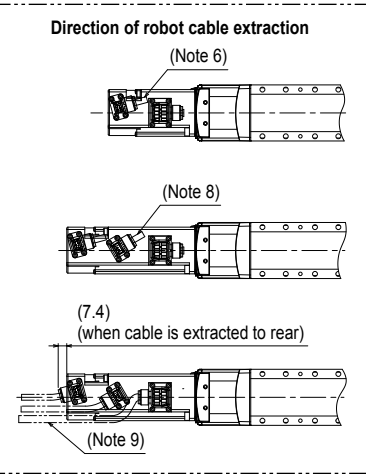
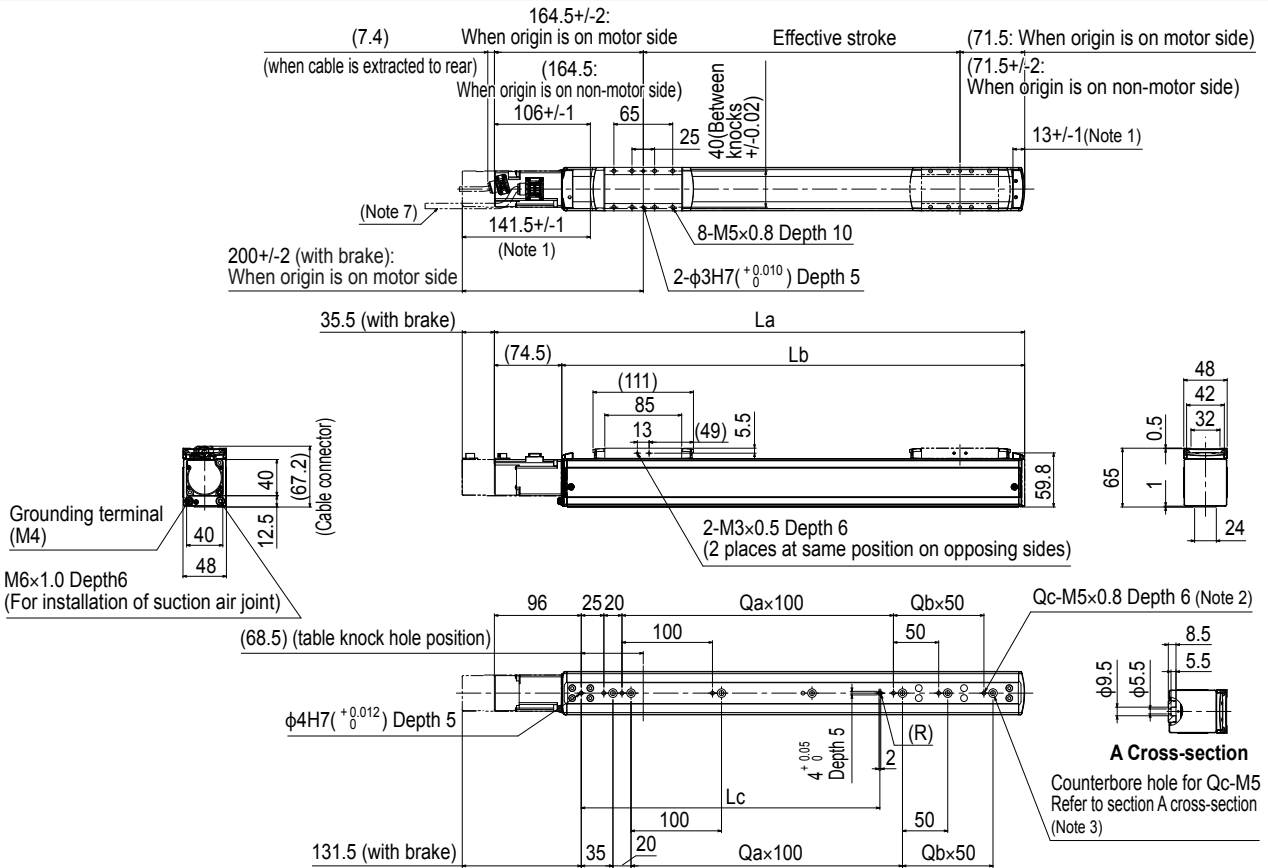
Note. See P.118 for acceleration/deceleration.

Access the website below.



▶ The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

AGXS05L Straight type (S)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located 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 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 x 0.8) used must be 15 mm or less.
- Note 5. Weight without brake. The weight with the brake is 0.2 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. Side cover with T-groove is used to install the sensor.
- Note 12. 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
La	286	336	386	436	486	536	586	636	686	736	786	836	886	936	986	1036
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	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1
Maximum speed (mm/sec)	Lead 20	1333														
	Lead 10	666														
	Lead 5	333														
	Speed setting	-														
Speed setting													1066	933	800	666
													532	466	400	333
													266	233	200	166
													80%	70%	60%	50%

AGXS07

Advanced model

Single-axis robots

Slider type



Ordering method

AGXS07									EP-01					
Model	Acceleration/deceleration specifications	Lead	Shape <small>Note 1</small>	Motor specification	Side cover	Stroke <small>Note 2</small>	Cable length <small>Note 3</small>	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit <small>Note 4</small>	I/O	Battery <small>Note 5</small>	
	No entry: Standard H: High agility	30: 30 mm 20: 20 mm 10: 10 mm 5: 5 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	No entry: Standard W: With T-groove (both sides) R: With T-groove (right side) L: With T-groove (left side)	50 to 1100 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None	

Note 1. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.

Note 2. For the high acceleration/deceleration specifications, the stroke is 50 to 650 mm (50 mm pitch).

Note 3. The robot cable is flexible and resists bending.

Note 4. When the actuator is used vertically and the stroke is 500 mm or more, the regenerative unit is needed.

Note 5. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	100 W
Repeatability <small>Note 1</small>	+/-0.005 mm
Deceleration mechanism	Ground ball screw ϕ 15 (C5 class)
Stroke	50 mm to 1100 mm (50 mm pitch)
Maximum speed <small>Note 2</small>	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 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 x H 76.5 mm
Overall length	Straight ST + 276.5 mm Bending ST + 232 mm
Degree of cleanliness <small>Note 3</small>	ISO CLASS 3 (ISO14644-1) or equivalent
Intake air <small>Note 4</small>	30 N ℓ /min to 115 N ℓ /min
Position detector	Absolute encoder Battery-less absolute encoder
Resolution	23 bits
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 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. 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 4. The required suction amount will vary according to the operating conditions and operating environment.
 Note. See P.119 for acceleration/deceleration.

Allowable overhang Note

AGXS07-30	AGXS07-20	AGXS07-10	AGXS07-5
Horizontal installation (Unit: mm)	Horizontal installation (Unit: mm)	Horizontal installation (Unit: mm)	Horizontal installation (Unit: mm)
A B C	A B C	A B C	A B C
2kg 3078 1509 1221 6kg 1191 501 418 10kg 957 317 282	10kg 1327 370 358 20kg 1136 186 188 25kg 1509 163 173	15kg 2420 338 372 30kg 1531 160 176 45kg 1181 101 111	30kg 2915 172 197 50kg 2535 96 110 85kg 2024 49 56
Wall installation (Unit: mm)	Wall installation (Unit: mm)	Wall installation (Unit: mm)	Wall installation (Unit: mm)
A B C	A B C	A B C	A B C
2kg 1237 1442 2975 6kg 393 435 1062 10kg 244 251 793	10kg 313 304 1164 20kg 131 119 804 25kg 109 97 1010	15kg 306 271 2192 30kg 106 94 1155 45kg 39 34 623	30kg 122 106 2458 50kg 34 30 1476 85kg 0 0 0
Vertical installation (Unit: mm)	Vertical installation (Unit: mm)	Vertical installation (Unit: mm)	Vertical installation (Unit: mm)
A C	A C	A C	A C
1kg 2335 2335 2kg 1158 1158	1kg 3416 3416 2kg 1701 1701 4kg 841 841	3kg 1688 1688 6kg 827 827 8kg 612 612	6kg 907 907 9kg 591 591 16kg 314 314

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

Static loading moment (Unit: N·m)		
MY	MP	MR
138	121	121

Controller

Controller	Operation method
EP-01	I/O point trace/ Remote command

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

Specifications

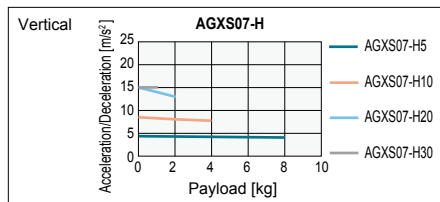
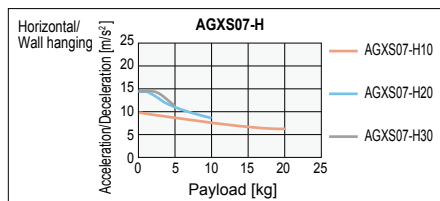
Stroke	50 mm to 650 mm (50 mm pitch)			
Ball screw lead	30 mm	20 mm	10 mm	5 mm
Maximum payload	5 kg	10 kg	20 kg	-
Maximum acceleration	Horizontal 14.72 m/s ² (1.5 G)	14.72 m/s ² (1.5 G)	9.64 m/s ² (1 G)	-
Maximum payload	1 kg	2 kg	4 kg	8 kg
Maximum acceleration	Vertical 14.72 m/s ² (1.5 G)	14.72 m/s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

Allowable overhang Note

AGXS07-H30	AGXS07-H20	AGXS07-H10	AGXS07-H5
Horizontal installation (Unit: mm)	Horizontal installation (Unit: mm)	Horizontal installation (Unit: mm)	Vertical installation (Unit: mm)
A B C	A B C	A B C	A C
2kg 1020 897 608 5kg 461 346 245	3kg 1224 758 640 6kg 684 369 321 10kg 459 214 190	5kg 603 556 2129 12kg 200 182 890 20kg 83 75 497	1kg 1165 1165 3kg 1093 1093 5kg 639 639 8kg 384 384
Wall installation (Unit: mm)	Wall installation (Unit: mm)	Wall installation (Unit: mm)	Wall installation (Unit: mm)
A B C	A B C	A B C	A C
2kg 579 830 976 5kg 208 279 401	3kg 600 692 1175 6kg 274 303 621 10kg 138 147 376	5kg 603 556 2129 12kg 200 182 890 20kg 83 75 497	1kg 1165 1165 3kg 1093 1093 5kg 639 639 8kg 384 384
Vertical installation (Unit: mm)	Vertical installation (Unit: mm)	Vertical installation (Unit: mm)	Vertical installation (Unit: mm)
A C	A C	A C	A C
1kg 1165 1165 2kg 591 591 4kg 296 296	1kg 1793 1793 2kg 891 891	1kg 3012 3012 2kg 1487 1487 4kg 725 725	1kg 1165 1165 3kg 1093 1093 5kg 639 639 8kg 384 384

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.

Payload - Acceleration / Deceleration Graph (Estimate)



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	1800											
	Lead 20	1200											
	Lead 10	600											
	Lead 5	300											

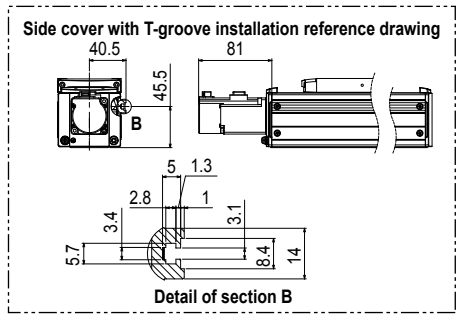
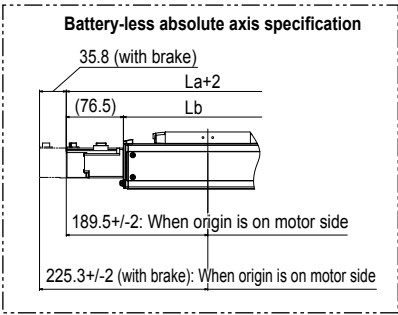
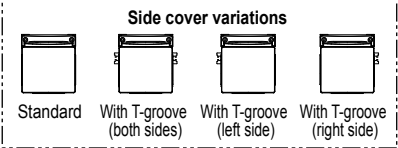
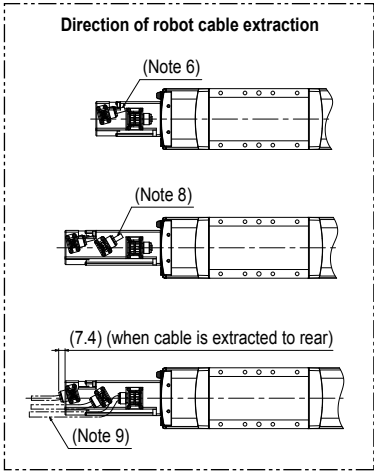
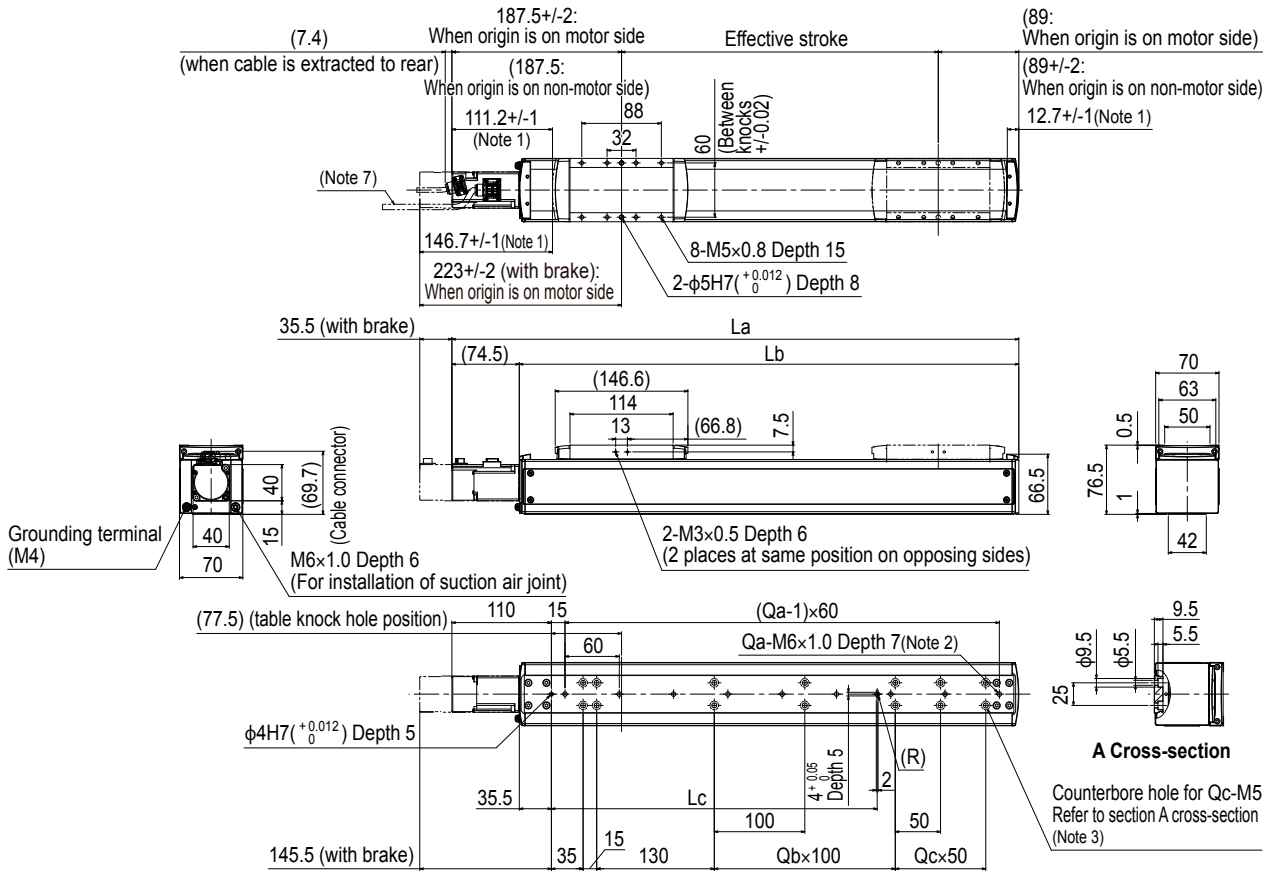
Note. The bending unit cannot be used for the high agility mode.
 Note. The high agility mode is used in an effective stroke range of 50 to 650 (50 mm pitch).
 Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
 The speed may not reach the maximum speed if the movement distance is short or depending on the operating conditions.
 Note. When the actuator is used with the high acceleration/deceleration specifications, the operation duty and motor load factor need to be considered. (See P.93.)
 Note. See P.121 for acceleration/deceleration.

Access the website below.



► The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

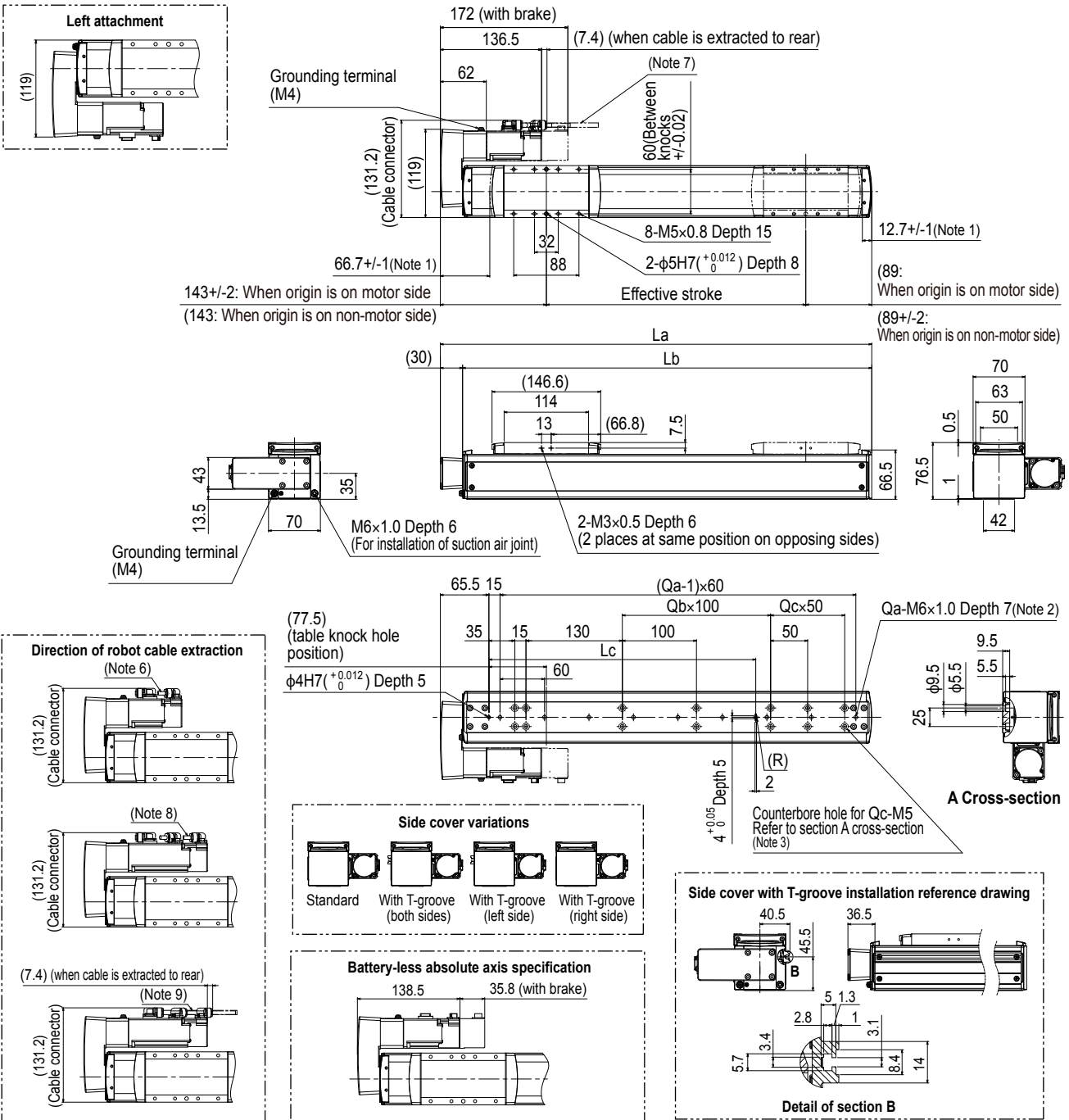
AGXS07 Straight type (S)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located 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 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 5. Weight without brake. The weight with the brake is 0.2 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. Side cover with T-groove is used to install the sensor.
- Note 12. 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	
La	326.5	376.5	426.5	476.5	526.5	576.5	626.5	676.5	726.5	776.5	826.5	876.5	926.5	976.5	1026.5	1076.5	1126.5	1176.5	1226.5	1276.5	1326.5	1376.5	
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	360	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	2	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	6.0	6.3	6.6	6.8	7.1	7.4	7.6	7.9	8.2	8.5	8.7	9.0	9.3	
Maximum speed (mm/sec)	Lead 30											1800											
	Lead 20											1200											
	Lead 10											600											
	Lead 5											300											
Speed setting											-												

AGXS07 Bending type (R/L)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located 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 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 5. Weight without brake. The weight with the brake is 0.2 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.

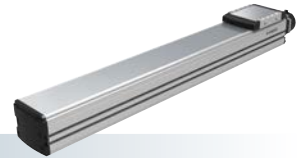
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. Side cover with T-groove is used to install the sensor.
- Note 12. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.
- Note 13. 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						
La	282	332	382	432	482	532	582	632	682	732	782	832	882	932	982	1032	1082	1132	1182	1232	1282	3321						
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	360	360	360	360	360	360	360	360	360	360						
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	2	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	4.0	4.2	4.5	4.8	5.1	5.3	5.6	5.9	6.1	6.4	6.7	7.0	7.2	7.5	7.8	8.0	8.3	8.6	8.9	9.1	9.4	9.7						
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%	

AGXS10

Advanced model Single-axis robots

Slider type



Ordering method

AGXS10									EP-01					
Model	Acceleration/deceleration specifications	Lead	Shape <small>Note 1</small>	Motor specification	Stroke <small>Note 2</small>	Cable length <small>Note 3</small>	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit	I/O	Battery <small>Note 5</small>		
	No entry: Standard H: High agility	30: 30 mm 20: 20 mm 10: 10 mm 5: 5 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	100 to 1250 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200 W or less	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None		

Note 1. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.
Note 2. For the high acceleration/deceleration specifications, the stroke is 100 to 650 mm (50 mm pitch).

Note 3. The robot cable is flexible and resists bending.
Note 4. When the actuator is used vertically, the regenerative unit is needed. When the actuator is used horizontally and the stroke of lead 10, 20, or 30 is 100 to 800 mm, the regenerative unit is needed.
Note 5. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	200 W
Repeatability <small>Note 1</small>	+/-0.005 mm
Deceleration mechanism	Ground ball screw φ 15 (C5 class)
Stroke	100 mm to 1250 mm(50 mm pitch)
Maximum speed <small>Note 2</small>	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 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	Straight: ST + 250.5 mm Bending: ST + 220.5 mm
Degree of cleanliness <small>Note 3</small>	ISO CLASS 3 (ISO14644-1) or equivalent
Intake air <small>Note 4</small>	30 Nℓ/min to 90 Nℓ/min
Position detector	Battery-less absolute encoder
Resolution	23 bits
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 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. 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 4. The required suction amount will vary according to the operating conditions and operating environment.
Note. See P.122 for acceleration/deceleration.

Allowable overhang

AGXS10-30	Horizontal installation (Unit: mm)	Wall installation (Unit: mm)	Vertical installation (Unit: mm)
	A B C	A B C	A C
10kg	878 537 292	10kg 271 473 803	1kg 4135 4135
20kg	609 256 146	20kg 118 192 481	4kg 985 985
25kg	608 211 124	25kg 93 147 454	
AGXS10-20	Horizontal installation (Unit: mm)	Wall installation (Unit: mm)	Vertical installation (Unit: mm)
	A B C	A B C	A C
15kg	1269 451 282	15kg 252 387 1159	3kg 2062 2062
25kg	754 253 158	25kg 123 189 629	6kg 1012 1012
40kg	466 142 88	40kg 51 78 311	8kg 750 750
AGXS10-16	Horizontal installation (Unit: mm)	Wall installation (Unit: mm)	Vertical installation (Unit: mm)
	A B C	A B C	A C
30kg	1794 298 203	30kg 162 234 1623	5kg 1926 1926
50kg	1358 162 111	50kg 68 98 1060	10kg 931 931
80kg	1266 86 59	80kg 16 22 552	20kg 434 434
AGXS10-5	Horizontal installation (Unit: mm)	Wall installation (Unit: mm)	Vertical installation (Unit: mm)
	A B C	A B C	A C
30kg	5605 321 225	30kg 181 258 5195	10kg 1018 1018
50kg	3694 177 124	50kg 79 113 3111	20kg 477 477
80kg	2619 95 67	80kg 22 31 1557	30kg 296 296
100kg	2224 68 48	100kg 0 0 0	

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

Static loading moment

	MY	MP	MR
	274	274	241

Controller

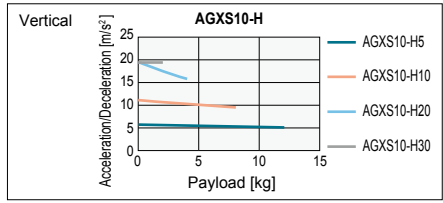
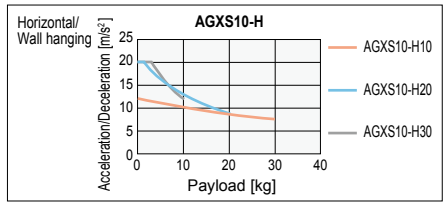
Controller	Operation method
EP-01	I/O point trace/ Remote command

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	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

AGXS10-H30	Horizontal installation (Unit: mm)	Wall installation (Unit: mm)	Vertical installation (Unit: mm)	AGXS10-H5	Vertical installation (Unit: mm)
	A B C	A B C	A C		A C
3kg	1041 1117 541	3kg 521 1046 1009	1kg 2054 2054	4kg	1550 1550
6kg	581 534 266	6kg 241 466 539	2kg 994 994	8kg	743 743
10kg	384 300 153	10kg 125 235 327		12kg	474 474
AGXS10-H20	Horizontal installation (Unit: mm)	Wall installation (Unit: mm)	Vertical installation (Unit: mm)		
	A B C	A B C	A C		
5kg	1218 844 493	5kg 464 778 1177	2kg 1602 1602		
12kg	575 326 193	12kg 159 261 516	4kg 788 788		
20kg	375 177 106	20kg 70 113 290			
AGXS10-H10	Horizontal installation (Unit: mm)	Wall installation (Unit: mm)	Vertical installation (Unit: mm)		
	A B C	A B C	A C		
10kg	1851 568 383	10kg 343 504 1784	3kg 1849 1849		
20kg	973 263 177	20kg 136 199 885	5kg 1086 1086		
30kg	671 162 109	30kg 67 98 552	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. When the actuator is used with the high acceleration/deceleration specifications, the operation duty and motor load factor need to be considered. (See P.93.)
Note. See P.124 for acceleration/deceleration.

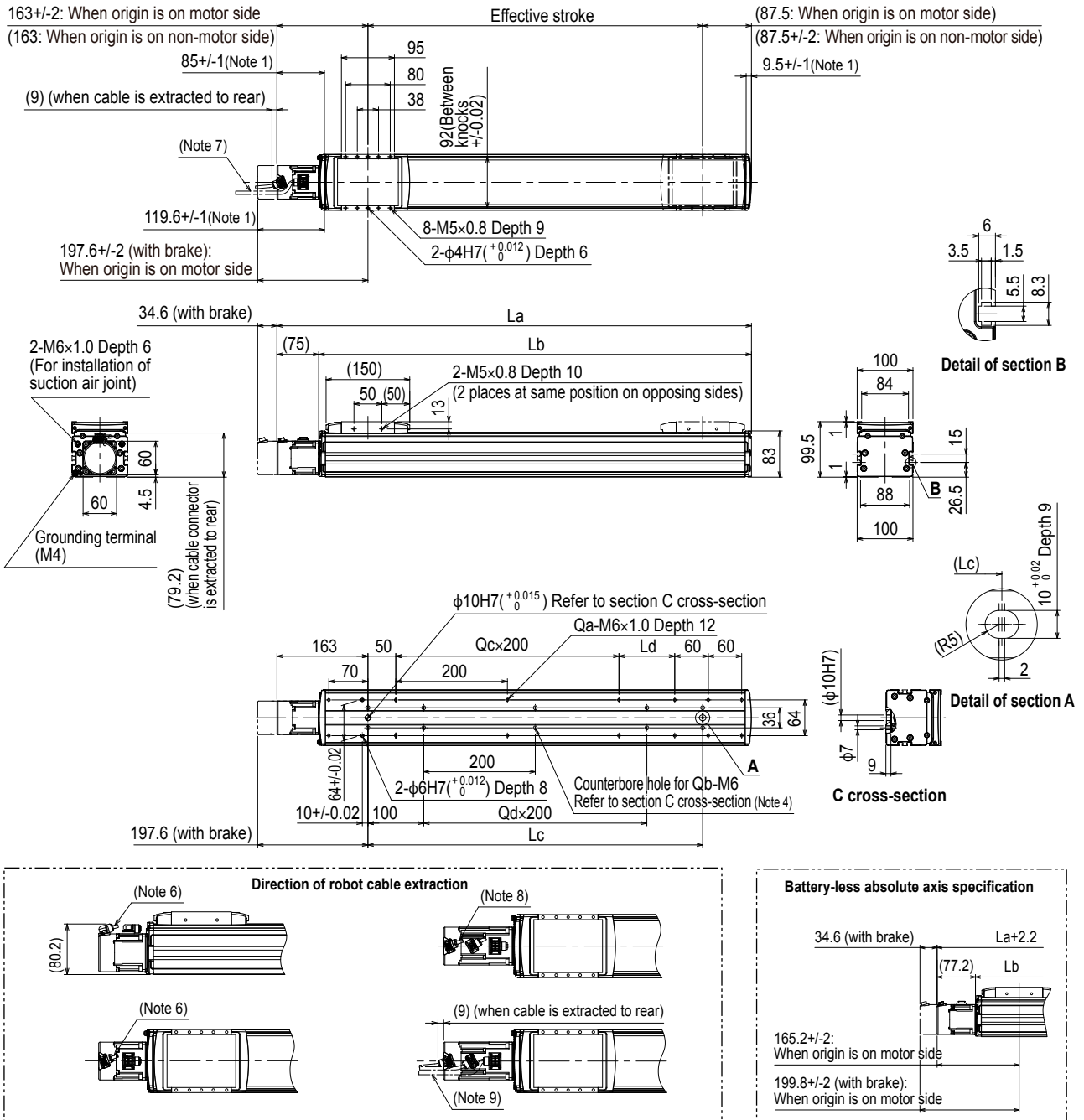
Access the website below.



▶ The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

Features
 Basic model
 LBAS
 Advanced model
 LGXS
 Basic model
 LBAR
 Basic model
 ABAS
 Advanced model
 AGXS
 Basic model
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single axis robot positioner
 EP-01

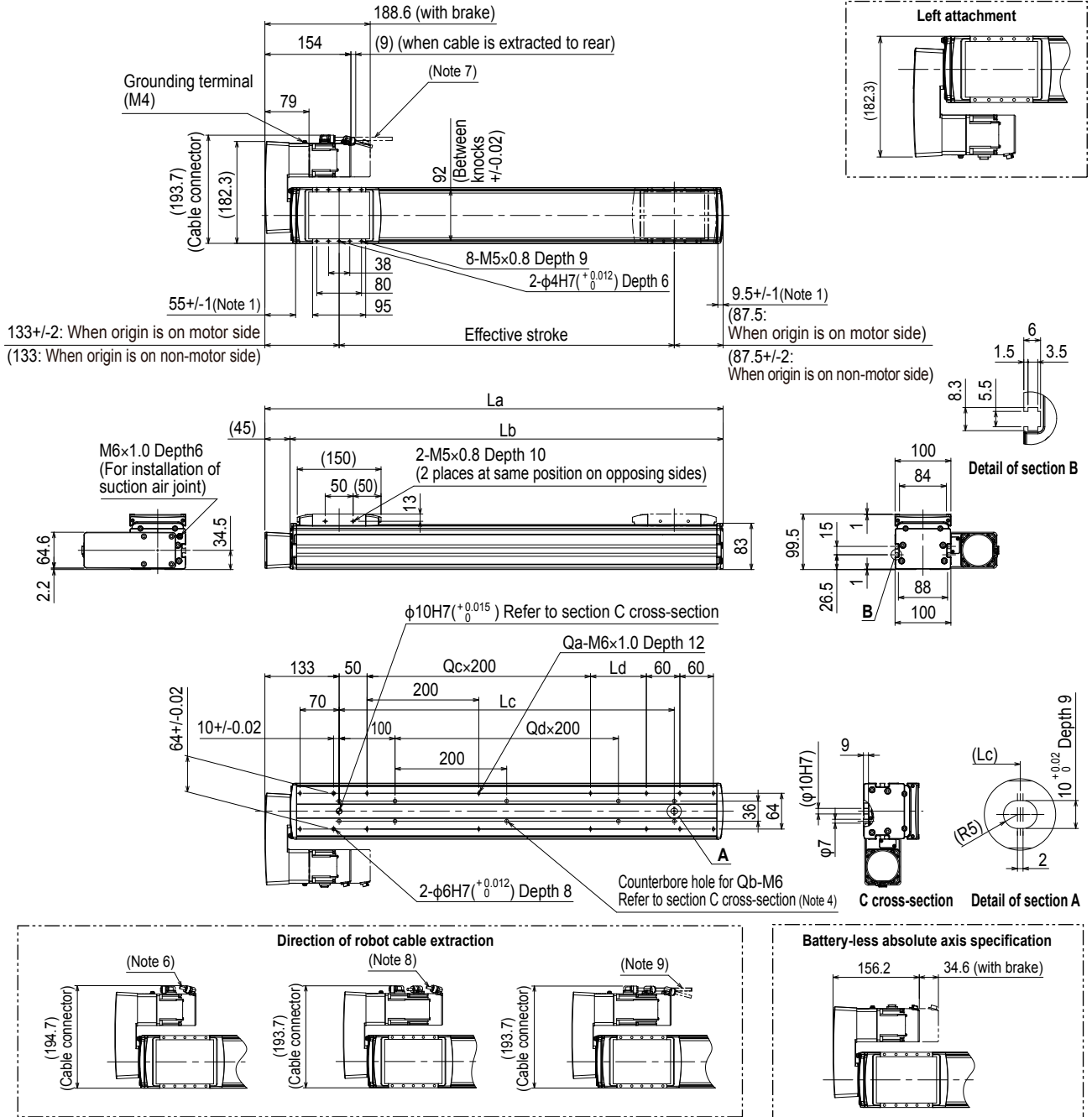
AGXS10 Straight type (S)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. The length under head of the hex socket head bolts <M6 x 1.0> used to mount the body with the mounting counterbore holes (section C cross-section) must be <<20 mm 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 counterbore holes (section C cross-section) to mount the body, remove the seal, and then fix.
- Note 5. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. 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	
La	350.5	400.5	450.5	500.5	550.5	600.5	650.5	700.5	750.5	800.5	850.5	900.5	950.5	1000.5	1050.5	1100.5	1150.5	1200.5	1250.5	1300.5	1350.5	1400.5	1450.5	1500.5	
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	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	
Qb	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	14	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			
	Lead 20	1200											1020	900	780	660	600	540	480	420	360	300			
	Lead 10	600											510	450	390	330	300	270	240	210	180	150			
	Lead 5	300											255	225	195	165	150	135	120	105	90	75			
Speed setting	-											85%	75%	65%	55%	50%	45%	40%	35%	30%	25%				

AGXS10 Bending type (R/L)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. The length under head of the hex socket head bolts $\lt; M6 \times 1.0 >$ used to mount the body with the mounting counterbore holes (section C cross-section) must be $\ll 20 \text{ mm or more} >$. The recommended length under head of the hex socket head bolts $\lt; M6 \times 1.0 >$ used to mount the body with the mounting tap hole specifications is $\ll \text{frame thickness} + 10 \text{ mm or less} >$.
- Note 4. When using the mounting counterbore holes (section C cross-section) to mount the body, remove the seal, and then fix.
- Note 5. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.
- Note 12. 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		
La	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5		
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	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150		
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	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1		
Maximum speed (mm/sec)	Lead 30												1530	1350	1170	990	900	810	720	630	540	450	360	300	250	
	Lead 20												1020	900	780	660	600	540	480	420	360	300	250	210	180	150
	Lead 10												510	450	390	330	300	270	240	210	180	150	120	100	90	75
	Lead 5												255	225	195	165	150	135	120	105	90	75	60	50	40	35
Speed setting												85%	75%	65%	55%	50%	45%	40%	35%	30%	25%					

AGXS12

Advanced model

Single-axis robots

Slider type



Ordering method

AGXS12

Model	Acceleration/deceleration specifications	Lead	Shape	Motor specification	Stroke	Cable length	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit	I/O	Battery
	No entry: Standard H: High agility	30: 30 mm 20: 20 mm 10: 10 mm 5: 5 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	100 to 1250 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A30: 400W/750W	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None

Note 1. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.

Note 2. For the high acceleration/deceleration specifications, the stroke is 100 to 650 mm (50 mm pitch).

Note 3. The robot cable is flexible and resists bending.

Note 4. When the actuator is used vertically or horizontally and the stroke is 400 mm or more, the regenerative unit is needed.

Note 5. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	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	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 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	Straight: ST + 302.5 mm Bending: ST + 256.5 mm
Degree of cleanliness Note 3	ISO CLASS 3 (ISO14644-1) or equivalent
Intake air Note 4	30 Nℓ/min to 90 Nℓ/min
Position detector	Absolute encoder Battery-less absolute encoder
Resolution	23 bits
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 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. 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 4. The required suction amount will vary according to the operating conditions and operating environment.
Note. See P.126 for acceleration/deceleration.

Allowable overhang

AGXS12-30			
Horizontal installation (Unit: mm)			
	A	B	C
10kg	1796	1074	637
20kg	1300	531	332
35kg	1341	334	227
AGXS12-20			
Horizontal installation (Unit: mm)			
	A	B	C
15kg	2231	904	613
30kg	1290	428	293
50kg	882	237	164
AGXS12-10			
Horizontal installation (Unit: mm)			
	A	B	C
30kg	3109	607	456
50kg	2421	345	260
80kg	2417	198	150
95kg	2559	159	121

AGXS12-30			
Wall installation (Unit: mm)			
	A	B	C
10kg	631	1009	1720
20kg	316	466	1171
35kg	197	269	1130
AGXS12-20			
Wall installation (Unit: mm)			
	A	B	C
15kg	591	839	2141
30kg	260	363	1167
50kg	126	172	710
AGXS12-10			
Wall installation (Unit: mm)			
	A	B	C
30kg	413	542	2978
50kg	215	280	2208
80kg	103	133	1927
95kg	73	95	1830

AGXS12-30		
Vertical installation (Unit: mm)		
	A	C
3kg	2642	2642
6kg	1289	1289
8kg	951	951
AGXS12-20		
Vertical installation (Unit: mm)		
	A	C
5kg	2424	2424
10kg	1207	1207
15kg	803	803
AGXS12-10		
Vertical installation (Unit: mm)		
	A	C
10kg	1862	1862
15kg	1221	1221
25kg	708	708

Static loading moment

(Unit: N·m)		
MY	MP	MR
334	334	294

Controller

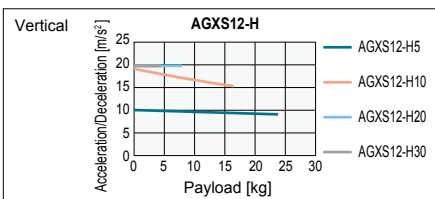
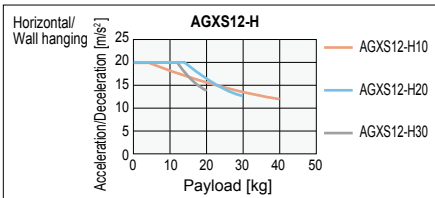
Controller	Operation method
EP-01	I/O point trace/ Remote command

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	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	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

AGXS12-H30			
Horizontal installation (Unit: mm)			
	A	B	C
5kg	1216	1297	669
12kg	461	506	252
20kg	316	280	147
AGXS12-H20			
Horizontal installation (Unit: mm)			
	A	B	C
10kg	999	807	489
20kg	521	378	231
30kg	382	234	146

AGXS12-H30			
Wall installation (Unit: mm)			
	A	B	C
5kg	648	1224	1183
12kg	226	436	427
20kg	117	213	266
AGXS12-H20			
Wall installation (Unit: mm)			
	A	B	C
10kg	458	740	966
20kg	196	311	479
30kg	109	168	325

AGXS12-H30		
Vertical installation (Unit: mm)		
	A	C
2kg	1984	1984
4kg	960	960
AGXS12-H20		
Vertical installation (Unit: mm)		
	A	C
3kg	2031	2031
5kg	1193	1193
8kg	722	722

AGXS12-H5		
Vertical installation (Unit: mm)		
	A	C
8kg	1487	1487
16kg	712	712
24kg	454	454

AGXS12-H10			
Horizontal installation (Unit: mm)			
	A	B	C
15kg	1668	737	535
25kg	1060	423	308
40kg	709	246	180
AGXS12-H10			
Wall installation (Unit: mm)			
	A	B	C
15kg	491	672	1628
25kg	263	358	1012
40kg	134	181	644

AGXS12-H10		
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

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

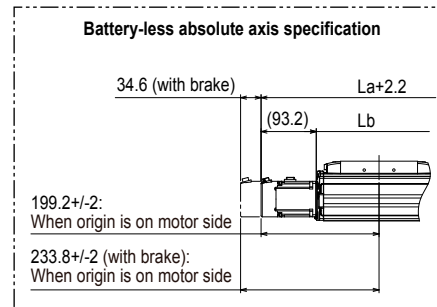
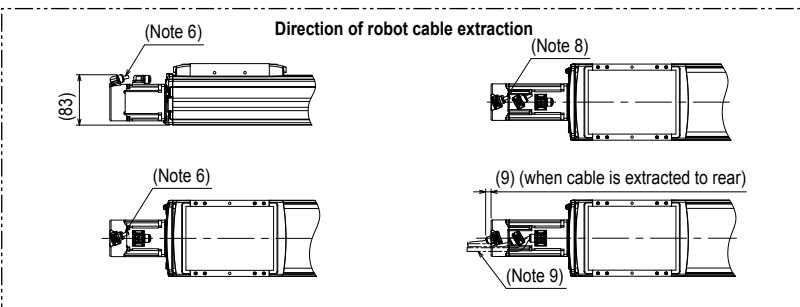
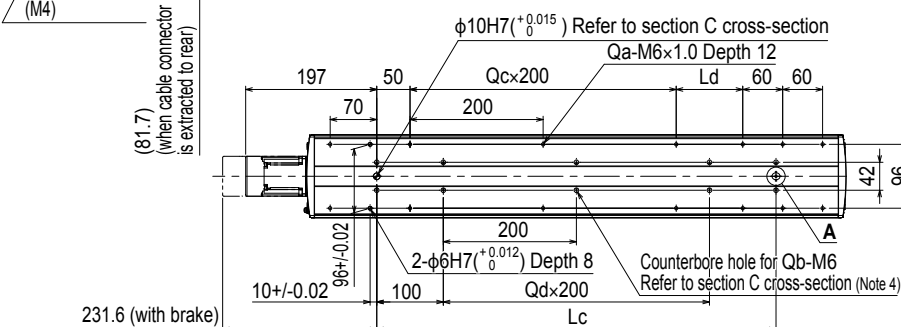
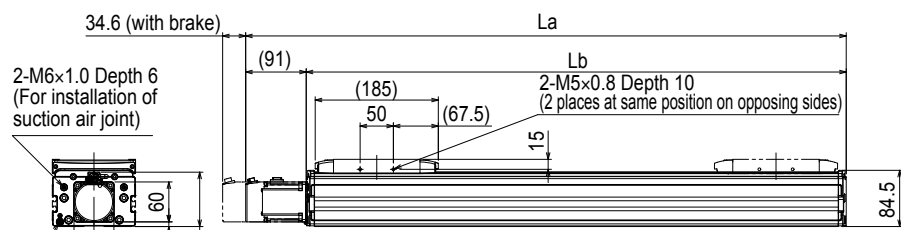
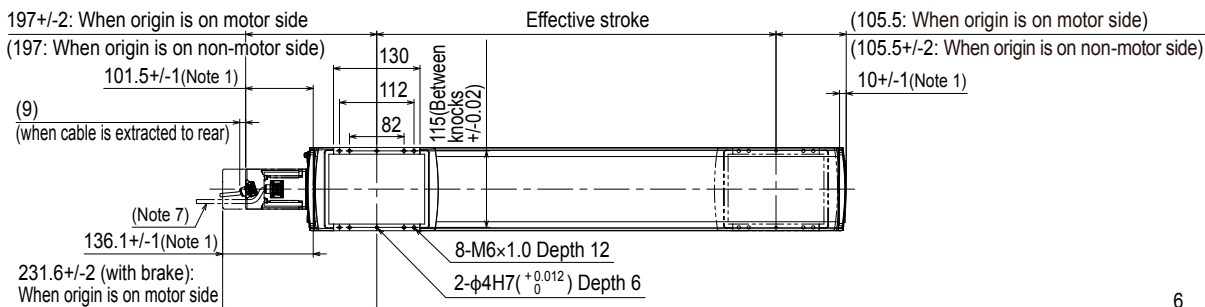
Note. The bending unit cannot be used for the high agility mode.
Note. The high agility mode is used in an effective stroke range of 100 to 650 (50 mm pitch).
Note. There is no critical speed setting. The maximum speed can be set for a selectable stroke.
The speed may not reach the maximum speed if the movement distance is short or depending on the operating conditions.
Note. When the actuator is used with the high acceleration/deceleration specifications, the operation duty and motor load factor need to be considered. (See P.93.)
Note. See P.128 for acceleration/deceleration.

Access the website below.



► The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

AGXS12 Straight type (S)



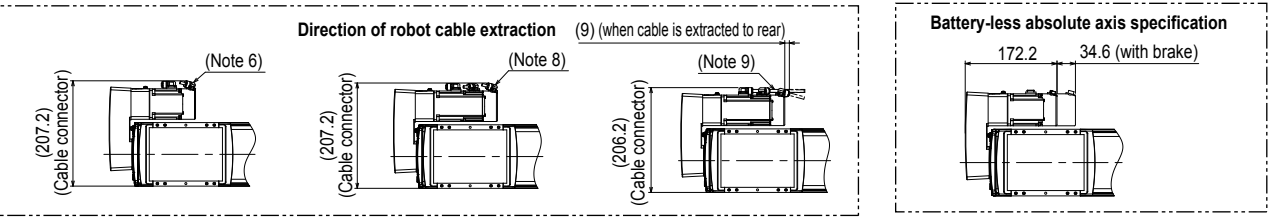
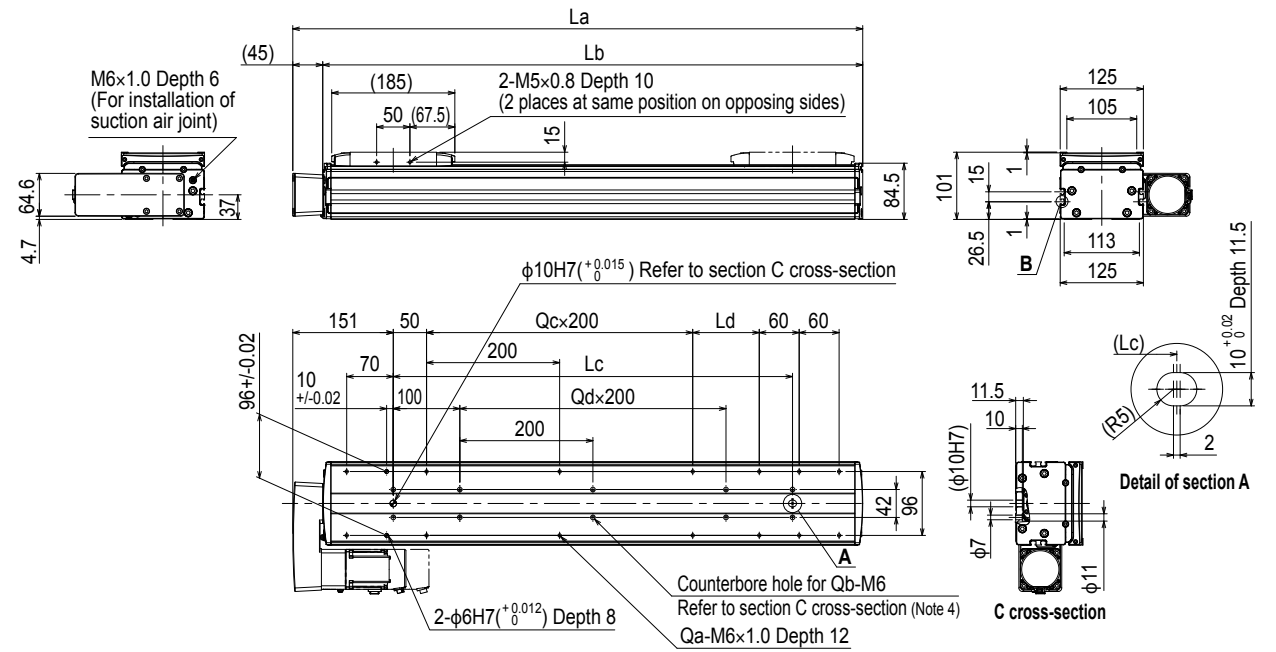
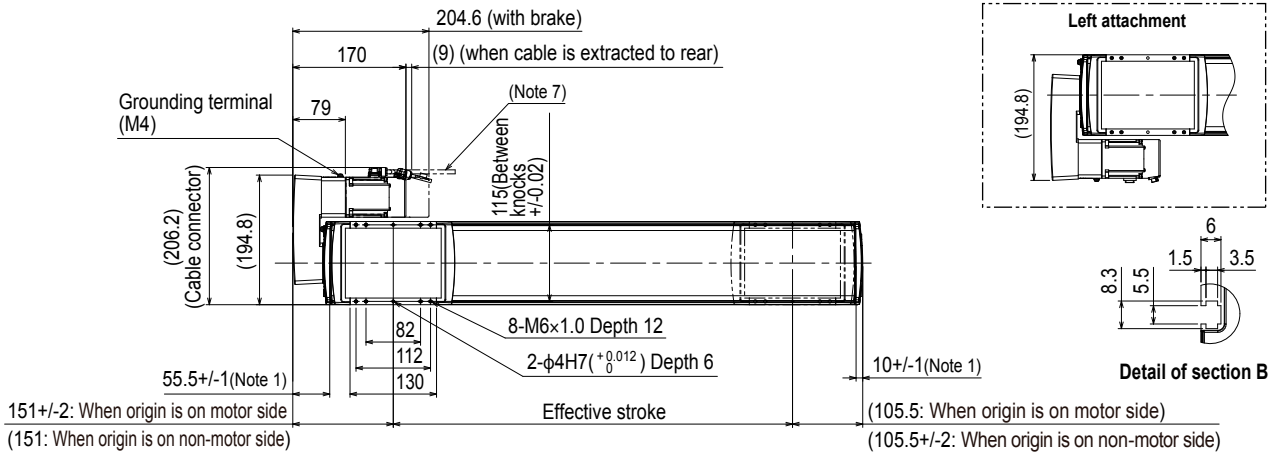
- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. The length under head of the hex socket head bolts <M6 × 1.0> used to mount the body with the mounting counterbore holes (section C cross-section) must be <<20 mm or more>>. The recommended length under head of the hex socket head bolts <M6 × 1.0> used to mount the body with the mounting tap hole specifications is <<frame thickness + 10 mm or less>>.
- Note 4. When using the mounting counterbore holes (section C cross-section) to mount the body, remove the seal, and then fix.
- Note 5. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. 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							
La	402.5	452.5	502.5	552.5	602.5	652.5	702.5	752.5	802.5	852.5	902.5	952.5	1002.5	1052.5	1102.5	1152.5	1202.5	1252.5	1302.5	1352.5	1402.5	1452.5	1502.5	1552.5							
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	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150							
Qa	8	10	10	10	10	12	12	12	12	14	14	14	14	14	16	16	16	16	18	18	18	20	20	20							
Qb	4	6	6	6	6	8	8	8	8	10	10	10	10	10	12	12	12	12	14	14	14	16	16	16							
Qc	0	0	0	0	0	1	1	1	1	2	2	2	2	2	3	3	3	3	4	4	4	4	5	5							
Qd	0	0	0	0	0	1	1	1	1	2	2	2	2	2	3	3	3	3	4	4	4	4	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	15.0	15.6	16.3	17.0	17.6	18.3	19.0	19.7	20.3	21.0	21.7	22.4	23.0							
Maximum speed (mm/sec)	Lead 30																1530	1350	1170	990	900	810	720	630	540	450					
	Lead 20																1020	900	780	660	600	540	480	420	360	300					
	Lead 10																510	450	390	330	300	270	240	210	180	150					
	Lead 5																255	225	195	165	150	135	120	105	90	75					
Speed setting																85%	75%	65%	55%	50%	45%	40%	35%	30%	25%						

Features
Basic model
Advanced model
Basic model
Basic model
Basic model
Advanced model
Basic model

Option
Single axis speed
positioner EP-01

AGXS12 Bending type (R/L)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. The length under head of the hex socket head bolts <M6 × 1.0> used to mount the body with the mounting counterbore holes (section C cross-section) must be <<20 mm or more>>. The recommended length under head of the hex socket head bolts <M6 × 1.0> used to mount the body with the mounting tap hole specifications is <<frame thickness + 10 mm or less>>.
- Note 4. When using the mounting counterbore holes (section C cross-section) to mount the body, remove the seal, and then fix.
- Note 5. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.
- Note 12. Grease gun nozzle (recommended) (see P.143 for detail)

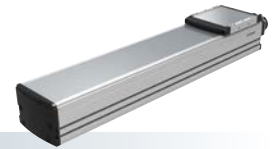
Effective stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
La	356.5	406.5	456.5	506.5	556.5	605.5	656.5	706.5	756.5	806.5	856.5	906.5	956.5	1006.5	1056.5	1106.5	1156.5	1206.5	1256.5	1306.5	1356.5	1406.5	1456.5	1506.5
Lb	311.5	361.5	411.5	461.5	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	14	16	16	16	16	18	18	18	18	20	20
Qb	4	6	6	6	6	8	8	8	8	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16
Qc	0	0	0	0	0	1	1	1	1	2	2	2	2	2	3	3	3	3	4	4	4	4	5	5
Qd	0	0	0	0	0	1	1	1	1	2	2	2	2	2	3	3	3	3	4	4	4	4	5	5
Weight (kg) Note 5	8.8	9.4	10.1	10.8	11.4	12.1	12.8	13.5	14.1	14.8	15.5	16.2	16.8	17.5	18.2	18.8	19.5	20.2	20.9	21.5	22.2	22.9	23.6	24.2
Maximum speed (mm/sec)	Lead 30	1530	1350	1170	990	900	810	720	630	540	450	360	270	180	150	120	90	75	60	45	30	15	10	7.5
	Lead 20	1020	900	780	660	600	540	480	420	360	300	240	180	150	120	90	75	60	45	30	15	10	7.5	5
	Lead 10	510	450	390	330	300	270	240	210	180	150	120	90	75	60	45	30	25	20	15	10	7.5	5	3.75
	Lead 5	255	225	195	165	150	135	120	105	90	75	60	45	30	25	20	15	10	7.5	6	4.5	3	2.25	1.5
Speed setting										85%	75%	65%	55%	50%	45%	40%	35%	30%	25%					

AGXS16

Advanced model

Single-axis robots

Slider type



Ordering method

AGXS16									EP-01					
Model	Acceleration/deceleration specifications	Lead	Shape <small>Note 1</small>	Motor specification	Stroke <small>Note 2</small>	Cable length <small>Note 3</small>	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit <small>Note 4</small>	I/O	Battery <small>Note 5</small>		
	No entry: Standard H: High agility	40: 40 mm 20: 20 mm 10: 10 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	100 to 1450 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A30: 400W/750W	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None		

Note 1. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.

Note 2. For the high acceleration/deceleration specifications, the stroke is 100 to 800 mm (50 mm pitch).

Note 3. The robot cable is flexible and resists bending.

Note 4. When the actuator is used vertically, the regenerative unit is needed. When the actuator is used horizontally and the stroke of lead 20 is 400 to 850 mm or the stroke of lead 40 is 600 to 950 mm, the regenerative unit is needed.

Note 5. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	750 W		
Repeatability <small>Note 1</small>	±0.005 mm		
Deceleration mechanism	Ground ball screw φ20 (C5 class)		
Stroke	100 mm to 1450 mm (50 mm pitch)		
Maximum speed <small>Note 2</small>	2400 mm/sec	1200 mm/sec	600 mm/sec
Ball screw lead	40 mm	20 mm	10 mm
Maximum payload	Horizontal	Vertical	
	45 kg	95 kg	130 kg
	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	Straight	ST + 344.8 mm	
	Bending	ST + 294.5 mm	
Degree of cleanliness <small>Note 3</small>	ISO CLASS 3 (ISO14644-1) or equivalent		
Intake air <small>Note 4</small>	30 Nl/min to 90 Nl/min		
Position detector	Absolute encoder Battery-less absolute encoder		
Resolution	23 bits		
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. 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 4. The required suction amount will vary according to the operating conditions and operating environment.
 Note. See P.130 for acceleration/deceleration.

Allowable overhang

AGXS16-40	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	B	C	
15kg	2876	1866	1253	15kg	1273	1802	2797	3kg	6605	6605
30kg	2385	997	776	30kg	782	935	2263	6kg	3699	3699
45kg	2339	720	604	45kg	598	658	2174	12kg	2827	2827

AGXS16-20	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	B	C	
30kg	3862	1255	1106	30kg	1102	1192	3742	10kg	3404	3404
50kg	2568	733	652	50kg	630	671	2422	20kg	1740	1740
80kg	1798	440	394	80kg	360	377	1612	28kg	1504	1504
95kg	1579	362	325	95kg	288	300	1373			

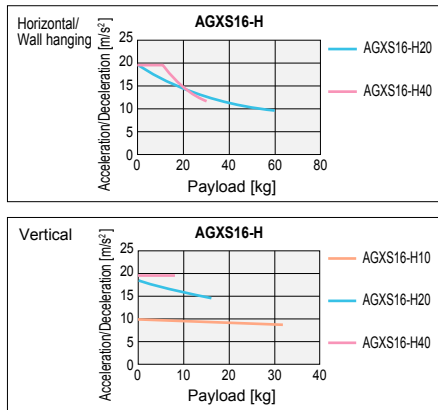
Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
 Note. Service life is calculated for 600 mm stroke models.

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	30 kg	60 kg	-
Maximum acceleration	Horizontal	Vertical	
	19.62 m/s ² (2 G)	19.84 m/s ² (2 G)	-
Maximum payload	8 kg	16 kg	32 kg
Maximum acceleration	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

AGXS16-H40	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	B	C	
10kg	1271	1669	836	10kg	816	1585	1240	3kg	2904	2904
20kg	725	803	429	20kg	404	725	683	5kg	1710	1710
30kg	534	514	287	30kg	259	441	480	8kg	1038	1038

AGXS16-H20	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	B	C	
20kg	1722	1123	875	20kg	842	1056	1679	5kg	3473	3473
40kg	952	535	428	40kg	388	470	895	10kg	1723	1723
60kg	682	339	276	60kg	232	275	611	16kg	1064	1064

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. When the actuator is used with the high acceleration/deceleration specifications, the operation duty and motor load factor need to be considered. (See P.93.)
 Note. See P.132 for acceleration/deceleration.

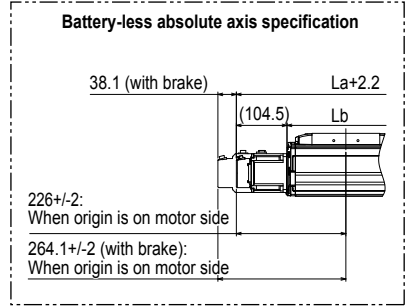
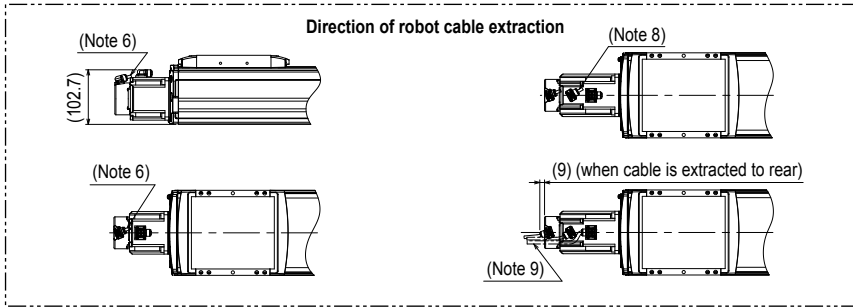
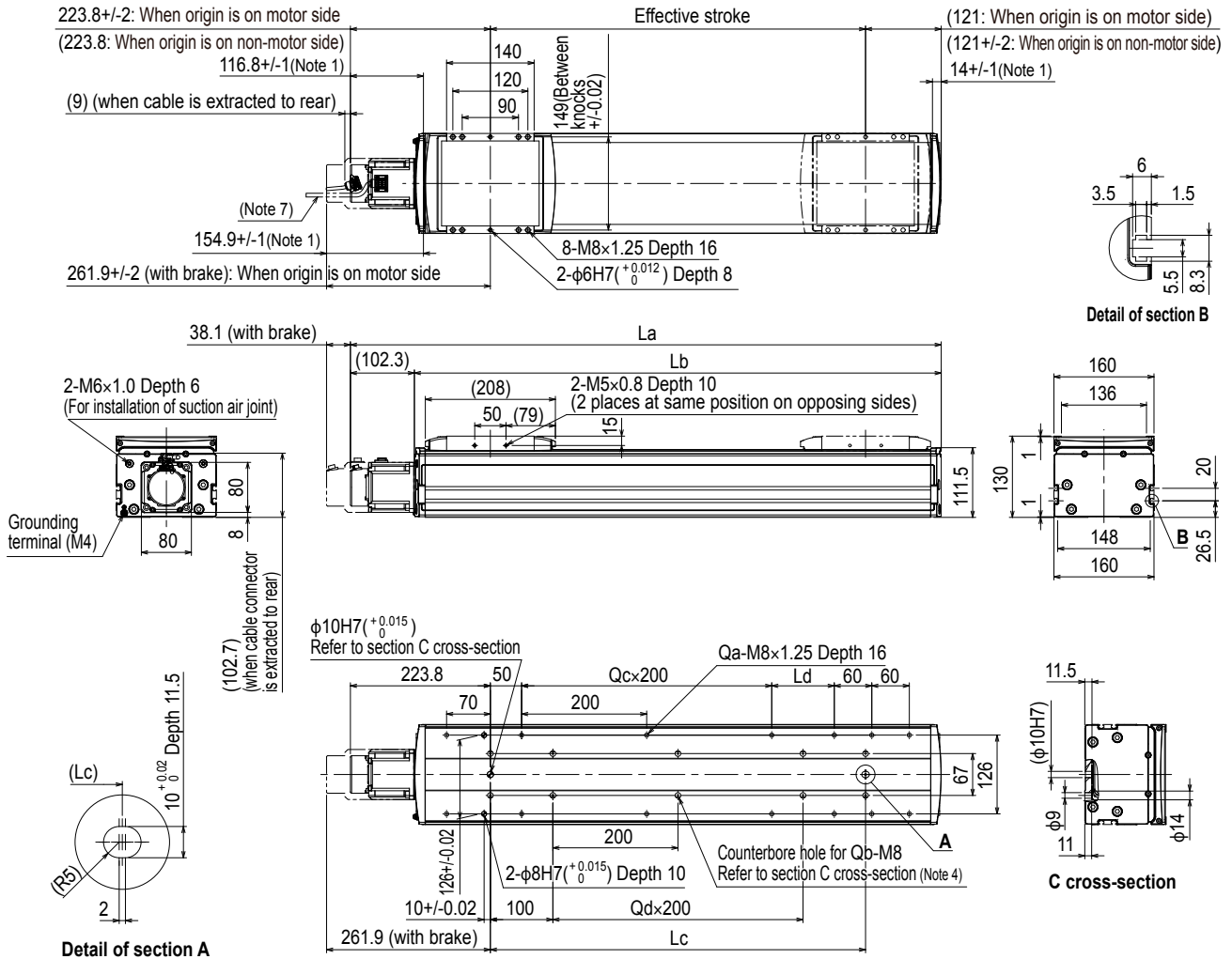
Access the website below.



▶ The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

Features
 Basic model
 LBAS
 Advanced model
 LGXS
 Basic model
 LBAR
 Basic model
 ABAS
 Advanced model
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single-axis positioner
 EP-01

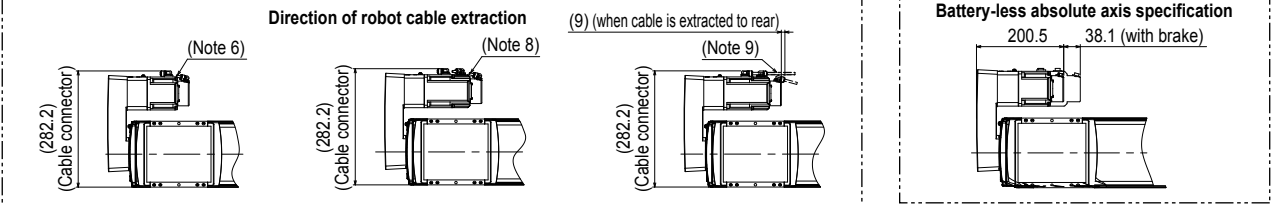
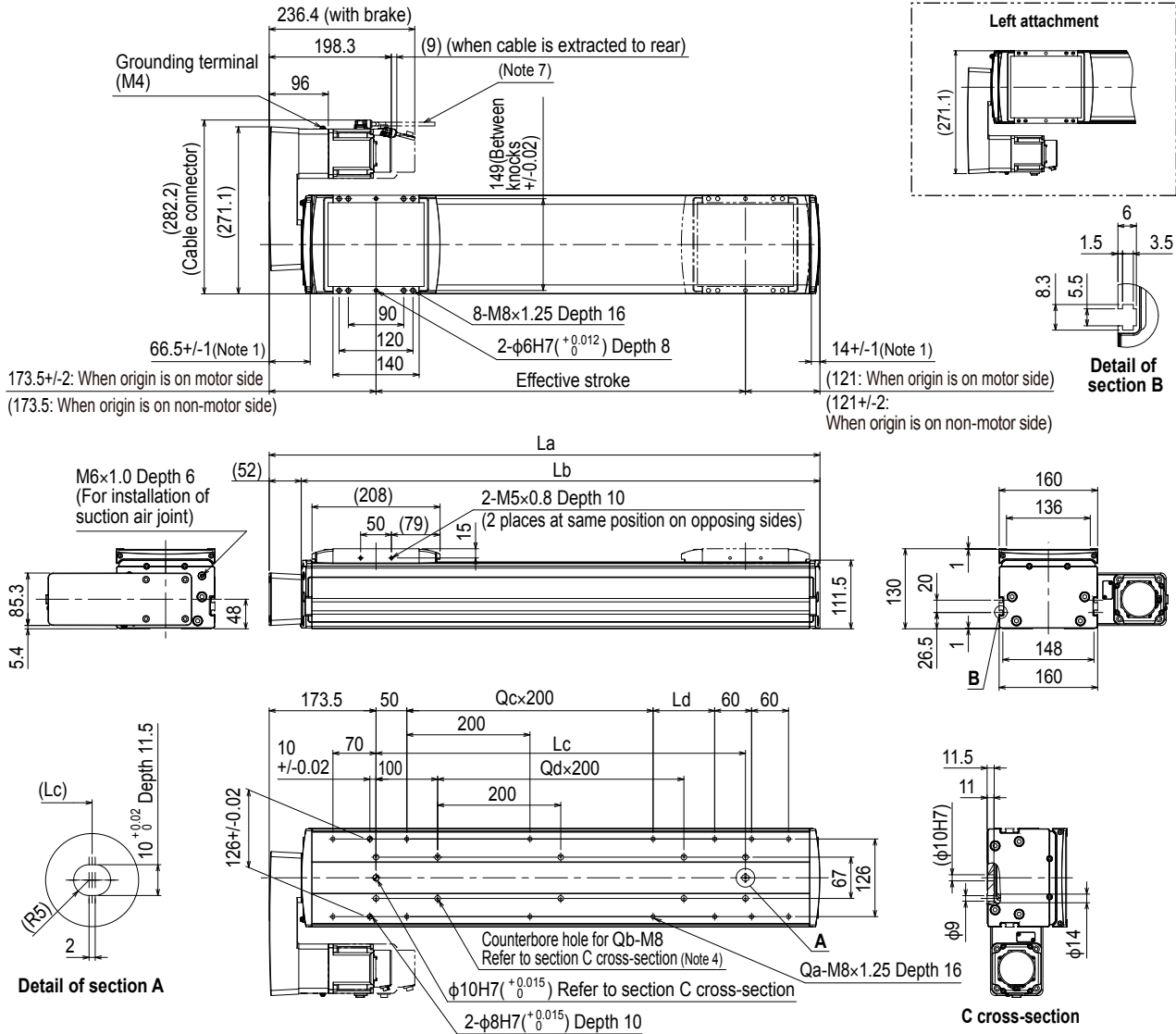
AGXS16 Straight type (S)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located 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 counterbore holes (section C cross-section) must be <<25 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 4. When using the mounting counterbore holes (section C cross-section) to mount the body, remove the seal, and then fix.
- Note 5. Weight without brake. The weight with the brake is 0.9 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. 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					
La	444.8	494.8	544.8	594.8	644.8	694.8	744.8	794.8	844.8	894.8	944.8	994.8	1044.8	1094.8	1144.8	1194.8	1244.8	1294.8	1344.8	1394.8	1444.8	1494.8	1544.8	1594.8	1644.8	1694.8	1744.8	1794.8					
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	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	14	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	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	4	5	5	5	5	6	6	6				
Weight (kg) <small>Note 5</small>	13.6	14.6	15.6	16.6	17.6	18.5	19.5	20.5	21.5	22.5	23.4	24.4	25.4	26.4	27.4	28.4	29.3	30.3	31.3	32.3	33.3	34.3	35.2	36.2	37.2	38.2	39.2	40.1					
Maximum speed (mm/sec)	Lead 40																2160	1920	1680	1440	1320	1200	1080	960	840	720	600	600	540	480	420	360	300
Lead 20																1080	960	840	720	660	600	540	480	420	360	300	270	240	210	180	150		
Lead 10																540	480	420	360	330	300	270	240	210	180	150							
Speed setting																90%	80%	70%	60%	55%	50%	45%	40%	35%	30%	25%							

AGXS16 Bending type (R/L)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. The length under head of the hex socket head bolts <M8 × 1.25> used to mount the body with the mounting counterbore holes (section C cross-section) must be <<25 mm or more>>. The recommended length under head of the hex socket head bolts <M8 × 1.25> used to mount the body with the mounting tap hole specifications is <<frame thickness + 15 mm or less>>.
- Note 4. When using the mounting counterbore holes (section C cross-section) to mount the body, remove the seal, and then fix.
- Note 5. Weight without brake. The weight with the brake is 0.9 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. When the shape is bending (R, L), the high acceleration/deceleration specifications cannot be selected.
- Note 12. 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					
La	394.5	444.5	494.5	544.5	594.5	644.5	694.5	744.5	794.5	844.5	894.5	944.5	994.5	1044.5	1094.5	1144.5	1194.5	1244.5	1294.5	1344.5	1394.5	1444.5	1494.5	1544.5	1594.5	1644.5	1694.5	1744.5					
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	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			
Qa	8	10	10	10	10	12	12	12	12	14	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	22	22	22	22				
Qb	4	6	6	6	6	8	8	8	8	10	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	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	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6				
Weight (kg) Note 5	16.3	17.3	18.3	19.3	20.3	21.2	22.2	23.2	24.2	25.2	26.1	27.1	28.1	29.1	30.1	31.1	32.0	33.0	34.0	35.0	36.0	37.0	37.9	38.9	39.9	40.9	41.9	42.8					
Maximum speed (mm/sec)	Lead 40																2400																
	Lead 20																1200																
	Lead 10																600																
	Speed setting																-																
																	2160	1920	1680	1440	1320	1200	1080	960	840	720	600	540	480	420	360	300	240
																	1080	960	840	720	660	600	540	480	420	360	300	270	240	210	180	150	
																	90%	80%	70%	60%	55%	50%	45%	40%	35%	30%	25%						

Features

- Basic model: LBAS
- Advanced model: LGXS
- Basic model: LBAR
- Basic model: ABAS
- Advanced model: AGXS
- Basic model: ABAR

Acceleration/Deceleration Inertia Moment

Option

Single axis speed parameter: EP-01

AGXS20

Advanced model

Single-axis robots

Slider type



Ordering method

AGXS20							EP-01				
Model	Lead	Shape	Motor specification	Stroke	Cable length	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit	I/O	Battery
	40: 40 mm 20: 20 mm 10: 10 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	100 to 1450 (50mm pitch)	Note 1 R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A30: 400W/750W	Note 2 No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	Note 3 B: With battery N: None

Note 1. The robot cable is flexible and resists bending.

Note 2. When the actuator is used vertically, the regenerative unit is needed.

When the actuator is used horizontally and the stroke of lead 20 is 400 to 850 mm or the stroke of lead 40 is 600 to 950 mm, the regenerative unit is needed.

Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	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	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
	Vertical	15 kg	35 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	Straight	ST + 390.8 mm	
	Bending	ST + 340.5 mm	
Degree of cleanliness Note 3	ISO CLASS 3 (ISO14644-1) or equivalent		
Intake air Note 4	30 Nℓ/min to 90 Nℓ/min		
Position detector	Absolute encoder Battery-less absolute encoder		
Resolution	23 bits		
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. 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.

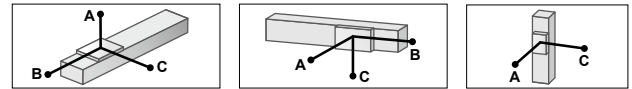
Note 4. The required suction amount will vary according to the operating conditions and operating environment.

Note. See P.133 for acceleration/deceleration.

Controller

Controller	Operation method
EP-01	I/O point trace/Remote command

Allowable overhang



AGXS20-40

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	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

AGXS20-20

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	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			

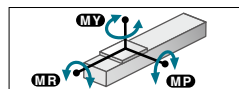
AGXS20-10

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	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.

Static loading moment



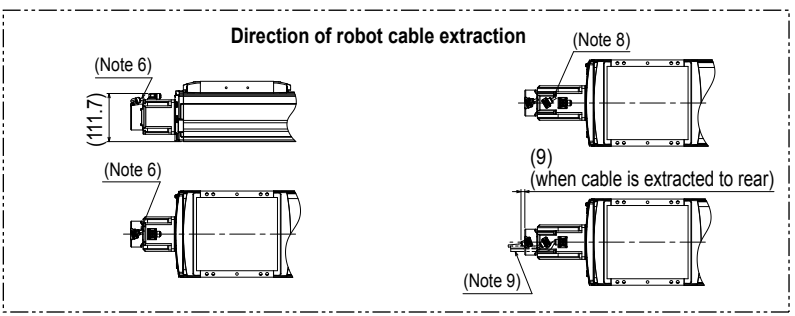
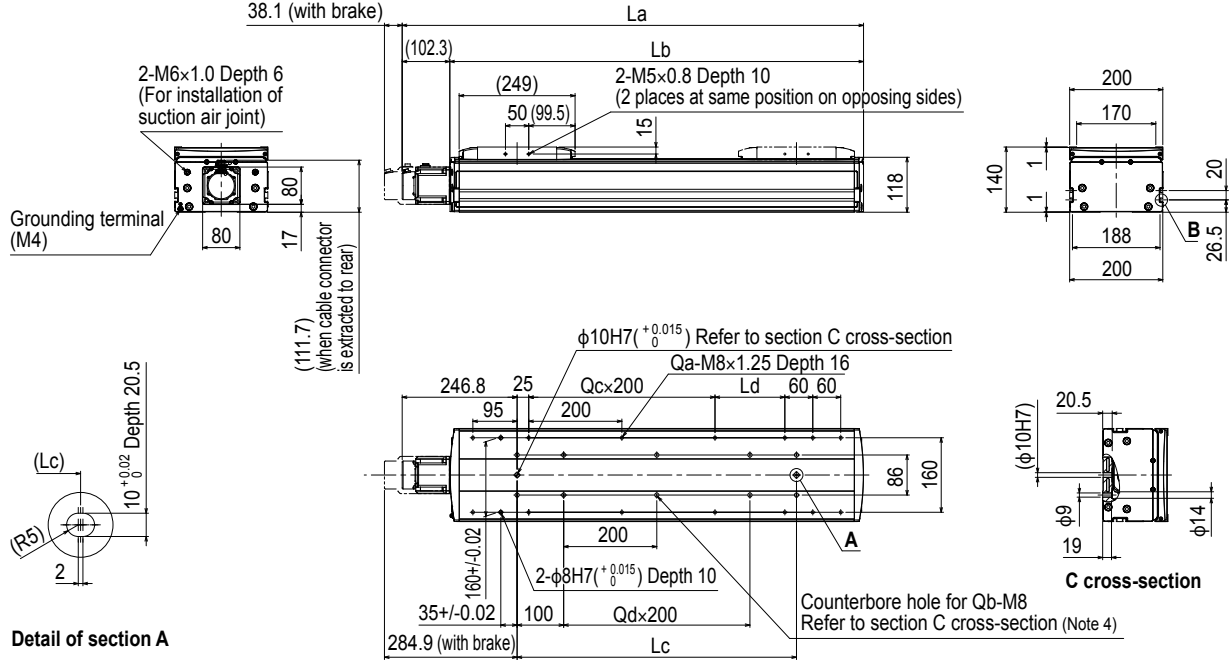
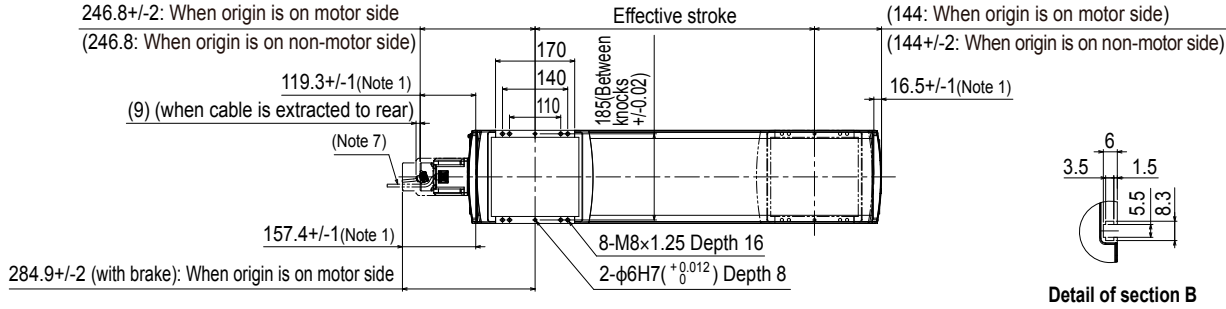
(Unit: N·m)		
MY	MP	MR
1423	1423	1251

Access the website below.



► The cycle time simulation and service life calculation can be performed easily from our member site. For details, see P.12.

AGXS20 Straight type (S)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. The length under head of the hex socket head bolts <M8 × 1.25> used to mount the body with the mounting counterbore holes (section C cross-section) must be <<25 mm or more>>. The recommended length under head of the hex socket head bolts <M8 × 1.25> used to mount the body with the mounting tap hole specifications is <<frame thickness + 15 mm or less>>.
- Note 4. When using the mounting counterbore holes (section C cross-section) to mount the body, remove the seal, and then fix.
- Note 5. Weight without brake. The weight with the brake is 1.1 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. 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					
La	490.8	540.8	590.8	640.8	690.8	740.8	790.8	840.8	890.8	940.8	990.8	1040.8	1090.8	1140.8	1190.8	1240.8	1290.8	1340.8	1390.8	1440.8	1490.8	1540.8	1590.8	1640.8	1690.8	1740.8	1790.8	1840.8					
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	19.1	20.4	21.7	23.0	24.3	25.6	26.9	28.2	29.5	30.7	32.0	33.3	34.6	35.9	37.2	38.5	39.8	41.1	42.3	43.6	44.9	46.2	47.5	48.8	50.1	51.4	52.7	53.9					
Maximum speed (mm/sec)	Lead 40																2160	1920	1680	1440	1320	1200	1080	960	840	720	600	540	480	420	360	300	
	Lead 20																1080	960	840	720	660	600	540	480	420	360	330	300	270	240	210	180	150
	Lead 10																540	480	420	360	330	300	270	240	210	180	150	150	150	150	150	150	150
	Speed setting																90%	80%	70%	60%	55%	50%	45%	40%	35%	30%	25%	25%	25%	25%	25%	25%	25%

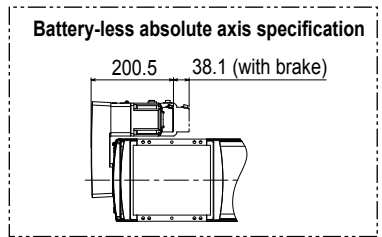
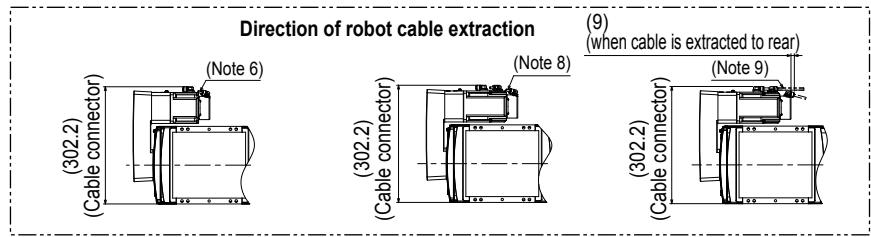
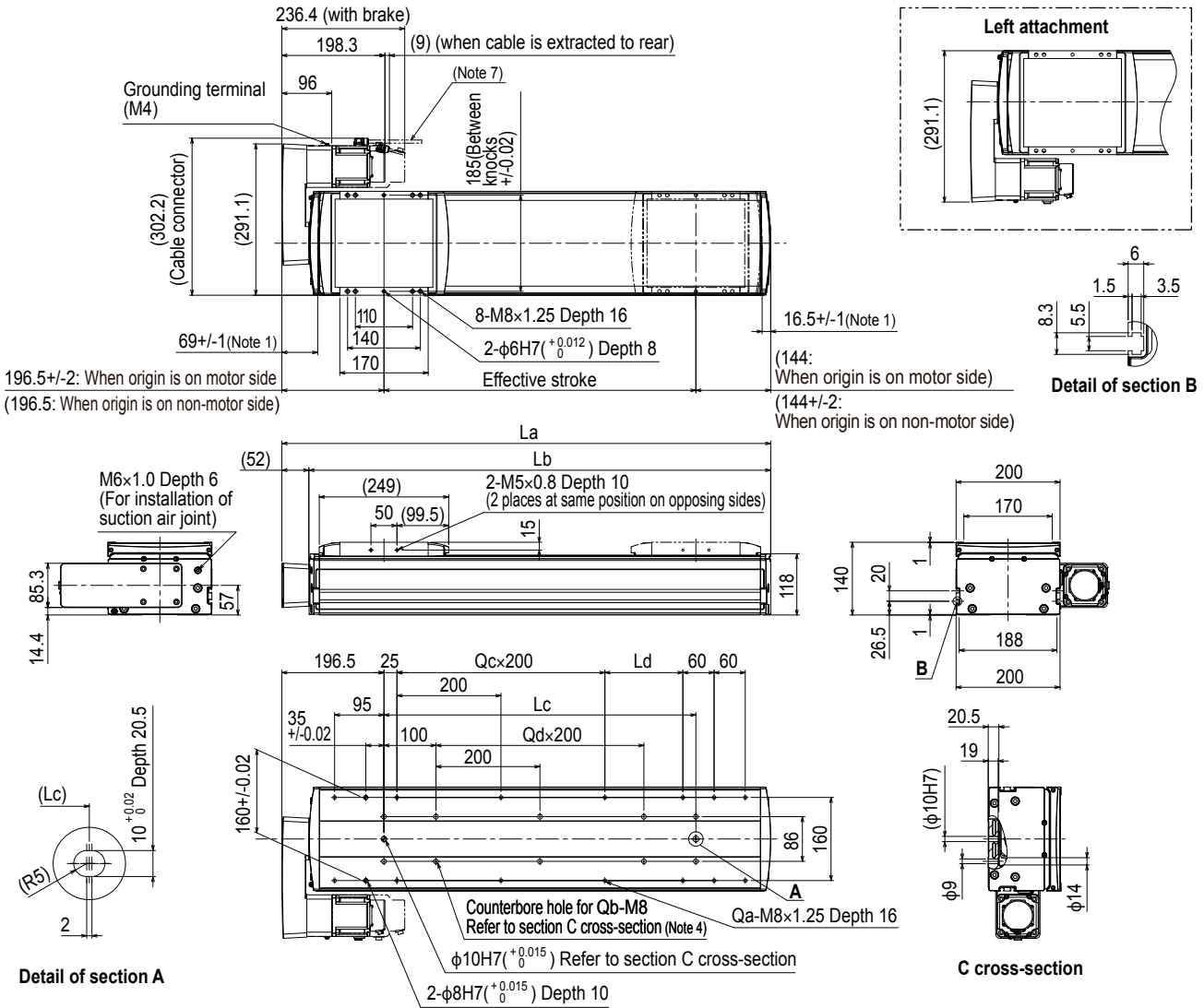
Features

- Basic model: LBAS
- Advanced model: LGXS
- Basic model: LBAR
- Basic model: ABAS
- Advanced model: AGXS
- Basic model: ABAR

Acceleration/Deceleration
Inertia Moment

Option
Single axis operation
EP-01

AGXS20 Bending type (R/L)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. The length under head of the hex socket head bolts <M8 × 1.25> used to mount the body with the mounting counterbore holes (section C cross-section) must be <<25 mm or more>>. The recommended length under head of the hex socket head bolts <M8 × 1.25> used to mount the body with the mounting tap hole specifications is <<frame thickness + 15 mm or less>>.
- Note 4. When using the mounting counterbore holes (section C cross-section) to mount the body, remove the seal, and then fix.
- Note 5. Weight without brake. The weight with the brake is 1.1 kg heavier than the value in the weight column.
- Note 6. The robot cable is extracted from the front.
- Note 7. The robot cable is extracted from the rear.
- Note 8. The robot cable (with brake) is extracted from the front.
- Note 9. The robot cable (with brake) is extracted from the rear.
- Note 10. The fixed minimum bending radius of the robot cable is R30. When using the robot cable as a flexible cable, use it with a minimum bending radius of R50 or more.
- Note 11. 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				
La	440.5	490.5	540.5	590.5	640.5	690.5	740.5	790.5	840.5	890.5	940.5	990.5	1040.5	1090.5	1140.5	1190.5	1240.5	1290.5	1340.5	1390.5	1440.5	1490.5	1540.5	1590.5	1640.5	1690.5	1740.5	1790.5				
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	20	20	20	20	22	22	22	22	22				
Qb	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	14	14	14	14	16	16	16	16	16	18	18	18				
Qc	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6				
Qd	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6				
Weight (kg) Note 5	21.8	23.1	24.4	25.7	27.0	28.3	29.6	30.9	32.2	33.4	34.7	36.0	37.3	38.6	39.9	41.2	42.5	43.8	45.0	46.3	47.6	48.9	50.2	51.5	52.8	54.1	55.4	56.6				
Maximum speed (mm/sec)	Lead 40																2160	1920	1680	1440	1320	1200	1080	960	840	720	600	480	420	360	300	
	Lead 20																1080	960	840	720	660	600	540	480	420	360	300	270	240	210	180	150
	Lead 10																540	480	420	360	330	300	270	240	210	180	150	120	100	90	80	70
	Speed setting																90%	80%	70%	60%	55%	50%	45%	40%	35%	30%	25%	20%	15%	10%	5%	

Operating duty and motor load factor

■ For high agility mode specifications

As the usable operating duty may vary depending on the payload or acceleration operating conditions, use the operating duty after checking the conditions.

Use the graph of the relationship between the operating duty ratio and continuous operable time as a reference.

For models not described in the graph, investigate an operating duty of 50% or less in the same manner as the standard model.

The actual operation may vary.

Adjust the operating conditions while checking the motor load factor of the controller.

When the operating duty of the robot is high, an error such as “overload” may occur.

In this case, decrease the acceleration/deceleration or increase the stop time to lower the motor load factor.

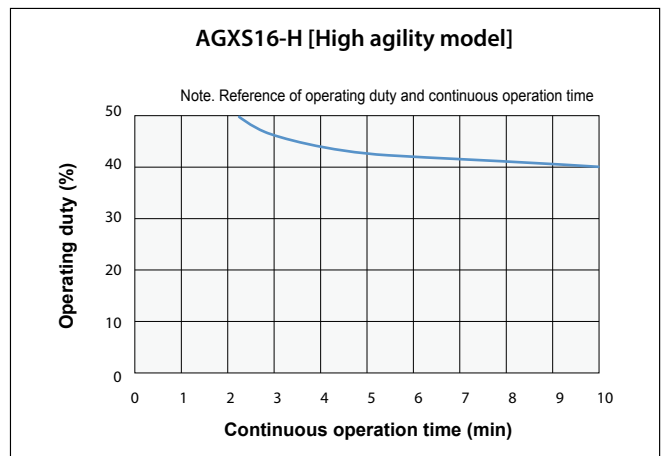
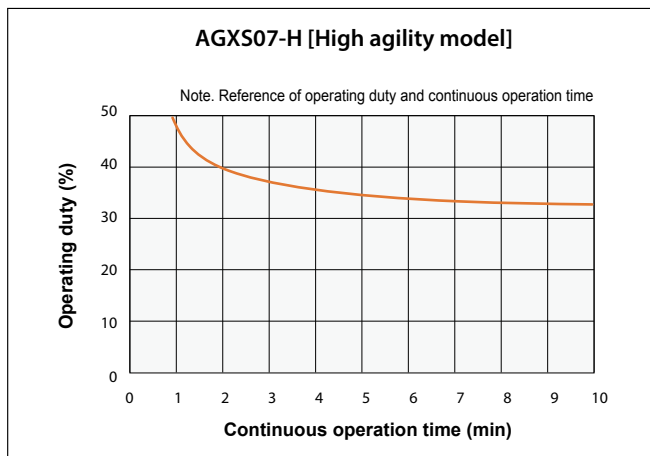
For details about how to check the motor load factor, see the controller manual.

In addition, use the information monitor screen of EP-Manager.

Note. Operating duty

$$\text{Operating duty} = \{ \text{Single-axis operation time} / (\text{Single-axis operation time} + \text{Single-axis stop time}) \} * 100 [\%]$$

■ Operating duty and continuous operation time (reference)



ABAR04

Basic model

Single-axis robots

Rod type



Ordering method

ABAR04							EP-01				
Model	Lead	Shape	Motor specification	Stroke	Cable length <small>Note 1</small>	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit <small>Note 2</small>	I/O	Battery <small>Note 3</small>
	12: 12 mm 6: 6 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/ With no brake BKBL: Battery-less absolute/ With brake	50 to 500 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None

Note 1. The robot cable is flexible and resists bending.
 Note 2. When the actuator is used vertically and the stroke is 250 mm or more, the regenerative unit is needed.
 Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	50 W	
Repeatability <small>Note 1</small>	+/- 0.01 mm	
Deceleration mechanism	Shifting position ball screw ϕ 10 (C7 class)	
Stroke	50 mm to 500 mm (50mm pitch)	
Maximum speed <small>Note 2</small>	720 mm/sec	360 mm/sec
Ball screw lead	12 mm	6 mm
Maximum payload	Horizontal	15 kg
	Vertical	25 kg
Max. pressing force	3 kg	5 kg
	83 N	167 N
Rotating backlash	+/- 0 °	
Maximum dimensions of cross section of main unit	W 44 mm x H 46 mm	
Overall length	Straight	ST + 326.5 mm
	Bending	ST + 245 mm
Position detector	Absolute encoder Battery-less absolute encoder	
Resolution	23 bits	
Using ambient temperature and humidity	0 to 40 °C, 35 to 80 %RH (non-condensing)	

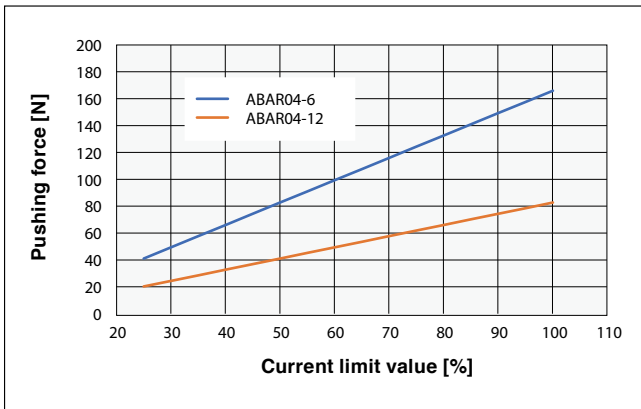
Note 1. Positioning repeatability in one direction.
 Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
 If the effective stroke exceeds 300 mm, the ball screw may resonate. (Critical speed)
 At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
 Note. See P.135 for acceleration/deceleration.

Controller

Controller	Operation method
EP-01	I/O point trace/Remote command

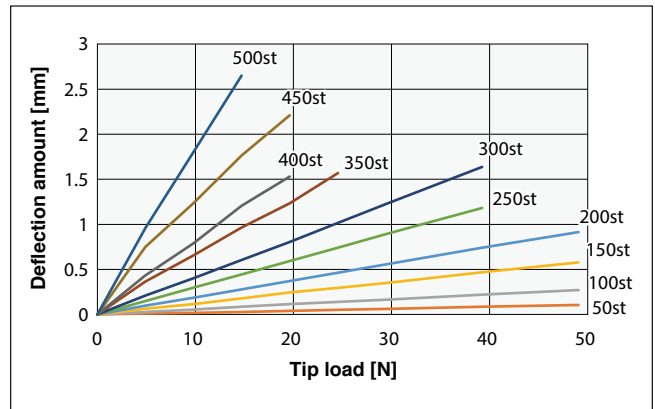
Pushing force (reference value)

For the pushing force during pushing operation, see the graph below.
 Note. The operable time (pushing judgement time) depends on the current limit value.
 Use the pushing force under the conditions that no overload error occurs.



Rod deflection amount (reference value)

For the deflection amount per stroke, see the graph below.



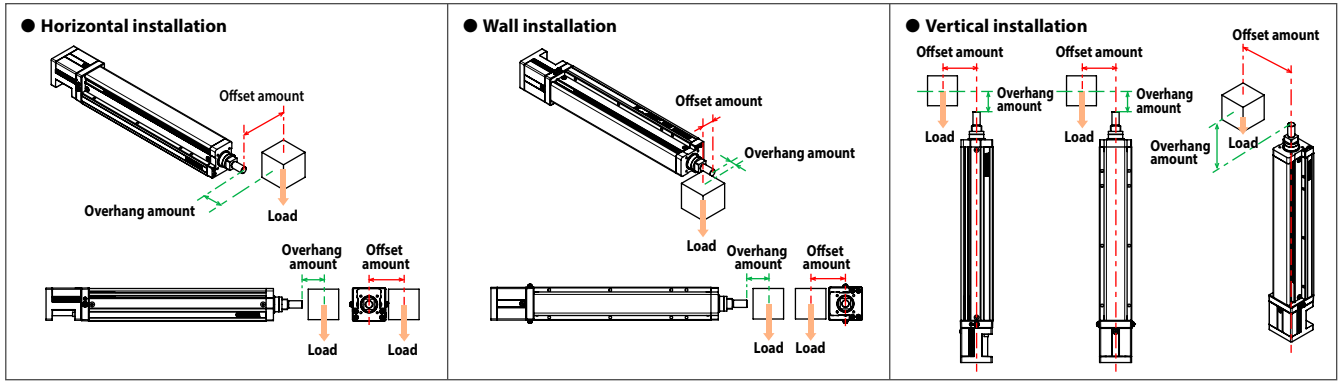
Access the website below.



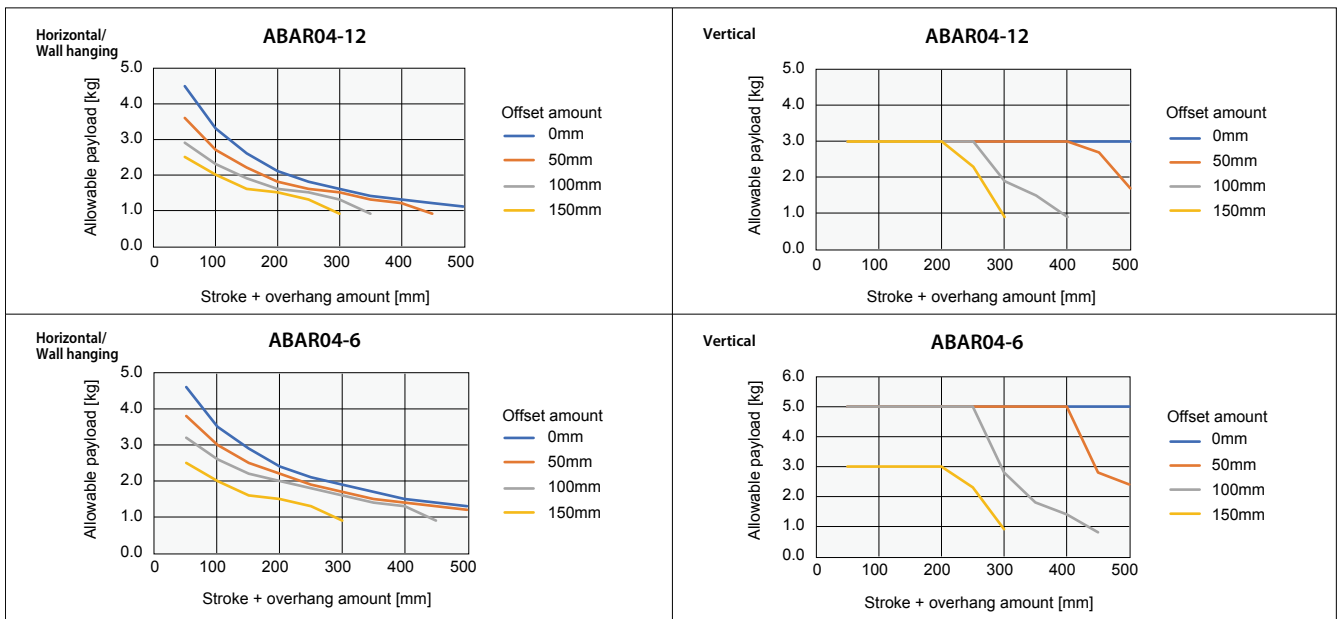
▶ The cycle time simulation can be performed easily from our member site. For details, see P.12.

■ Allowable payload

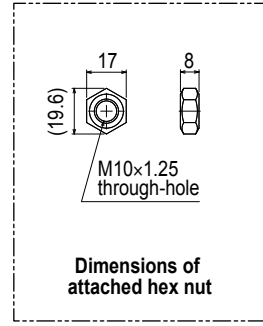
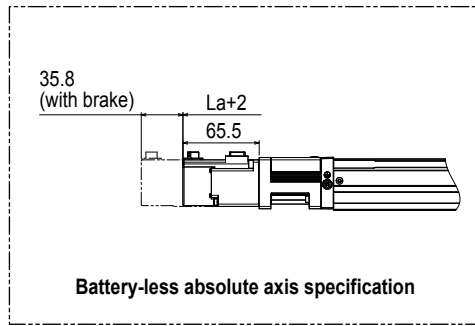
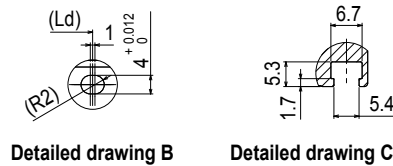
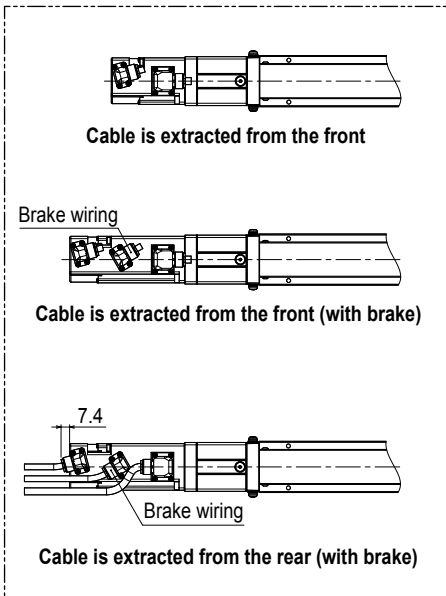
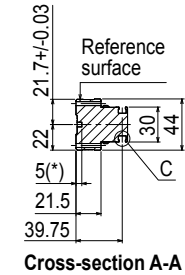
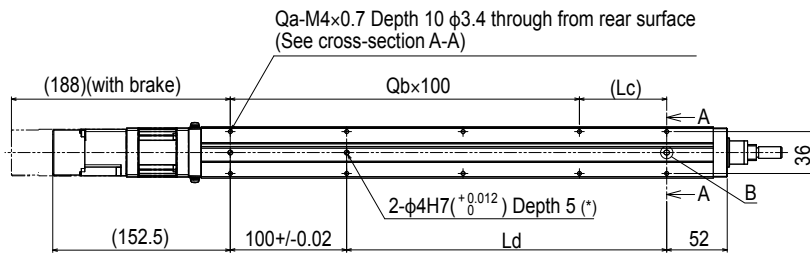
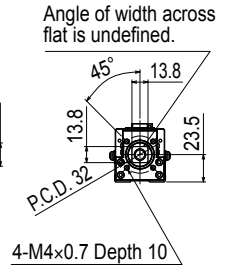
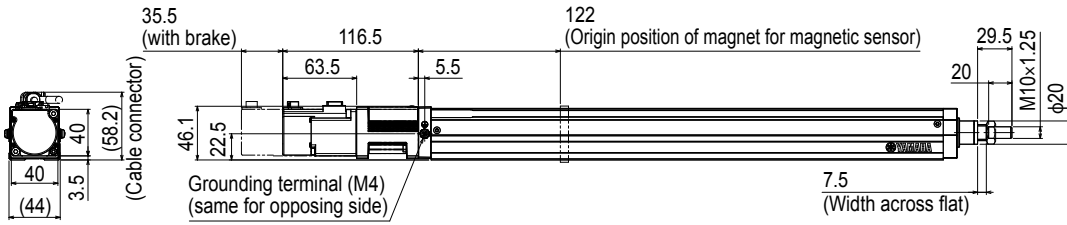
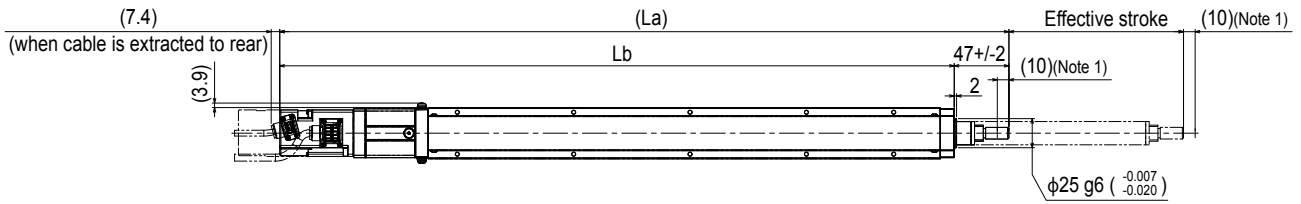
For the allowable payload per offset amount, see the graph below.



Note 1. When transferring an object with a weight exceeding the following, use an external support guide. Install the support guide flexibly so that no unnecessary load is applied to the rod.
 Note 2. The values are when the service life of the guide is 5000 km.



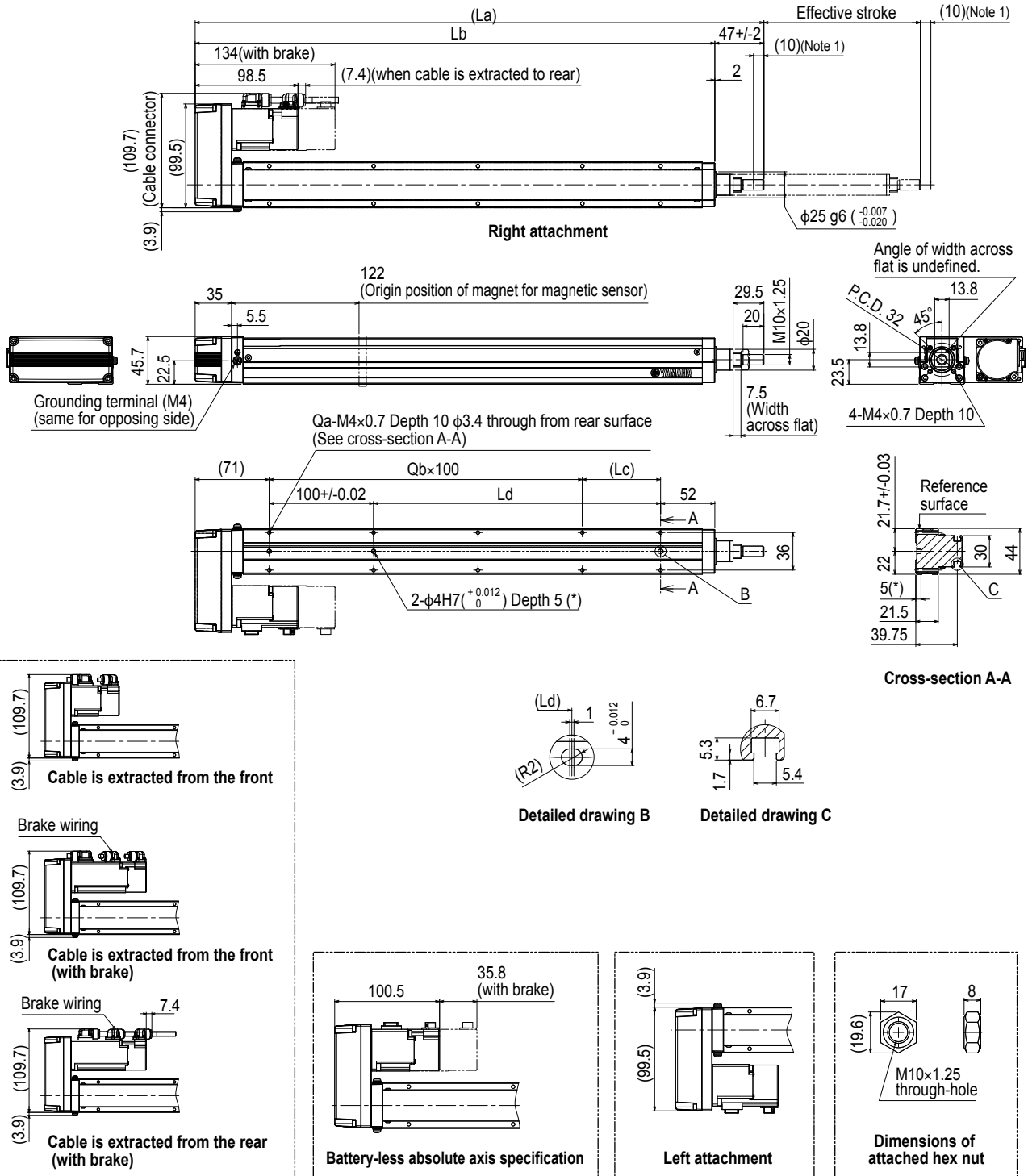
ABAR04 Straight type (S)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
- Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
- Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M3 × 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M4 × 0.7> used to install the main unit.
- Note 4. The weight with the brake is 0.2 kg heavier than the value in the weight column.
- Note 5. The minimum bending radius of the robot cable is R30 on the fixed side or R50 on the movable side. The cable extraction direction may vary depending on the specifications.
- Note 6. Grease gun nozzle (recommended) (see P.143 for detail)
Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500		
La	376.5	426.5	476.5	526.5	576.5	626.5	676.5	726.5	776.5	826.5		
Lb	329.5	379.5	429.5	479.5	529.5	579.5	629.5	679.5	729.5	779.5		
Lc	25	75	25	75	25	75	25	75	25	75		
Ld	25	75	125	175	225	275	325	375	425	475		
Qa	6	6	8	8	10	10	12	12	14	14		
Qb	1	1	2	2	3	3	4	4	5	5		
Weight (kg) Note 4	1.2	1.3	1.5	1.7	1.9	2	2.2	2.4	2.6	2.8		
Maximum speed (mm/sec)	Lead 12	720				648				504	396	324
	Lead 6	360				324				252	198	162
Speed setting	-						90%	70%	55%	45%		

ABAR04 Bending type (R/L)



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
 Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M3 × 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M4 × 0.7> used to install the main unit.
 Note 4. The weight with the brake is 0.2 kg heavier than the value in the weight column.
 Note 5. The minimum bending radius of the robot cable is R30 on the fixed side or R50 on the movable side. The cable extraction direction may vary depending on the specifications.
 Note 6. Grease gun nozzle (recommended) (see P.143 for detail)
 Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	
La	295	345	395	445	495	545	595	645	695	745	
Lb	248	298	348	398	448	498	548	598	648	698	
Lc	25	75	25	75	25	75	25	75	25	75	
Ld	25	75	125	175	225	275	325	375	425	475	
Qa	6	6	8	8	10	10	12	12	14	14	
Qb	1	1	2	2	3	3	4	4	5	5	
Weight (kg) Note 4	1.3	1.4	1.6	1.8	2	2.2	2.3	2.5	2.7	2.9	
Maximum speed (mm/sec)	Lead 12	720					648	504	396	324	
	Lead 6	360					324	252	198	162	
	Speed setting	-					90%	70%	55%	45%	

Features

Basic model LBAS

Advanced model LGXS

Basic model LBAR

Basic model ABAS

Advanced model AGXS

Basic model ABAR

Acceleration/Deceleration Inertia Moment

Option

Single axis sensor pushdown EP-01

ABAR05

Basic model

Single-axis robots

Rod type



Ordering method

ABAR05							EP-01				
Model	Lead	Shape	Motor specification	Stroke	Cable length <small>Note 1</small>	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit <small>Note 2</small>	I/O	Battery <small>Note 3</small>
	20: 20 mm 10: 10 mm 5: 5 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	50 to 600 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None

Note 1. The robot cable is flexible and resists bending.

Note 2. When the actuator is used vertically and the stroke is 150 mm or more, the regenerative unit is needed.

When the actuator is used horizontally and the stroke of lead 20 is 300 to 400 mm, the regenerative unit is needed.

Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	100 W		
Repeatability <small>Note 1</small>	+/-0.01 mm		
Deceleration mechanism	Shifting position ball screw ϕ 12 (C7 class)		
Stroke	50 mm to 600 mm (50mm pitch)		
Maximum speed <small>Note 2</small>	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	20 mm	10 mm	5 mm
Maximum payload	Horizontal	15 kg	25 kg
	Vertical	4 kg	8 kg
Max. pressing force	100 N	200 N	400 N
Rotating backlash	+/-0°		
Maximum dimensions of cross section of main unit	W 54 mm x H 54.7 mm		
Overall length	Straight	ST + 344 mm	
	Bending	ST + 249 mm	
Position detector	Absolute encoder Battery-less absolute encoder		
Resolution	23 bits		
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 350 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. See P.136 for acceleration/deceleration.

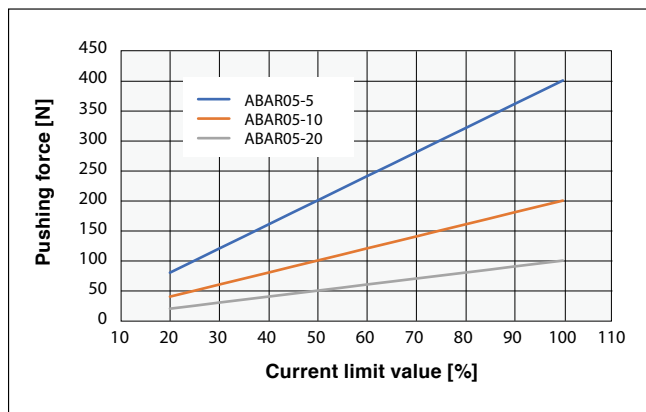
Controller

Controller	Operation method
EP-01	I/O point trace/Remote command

Pushing force (reference value)

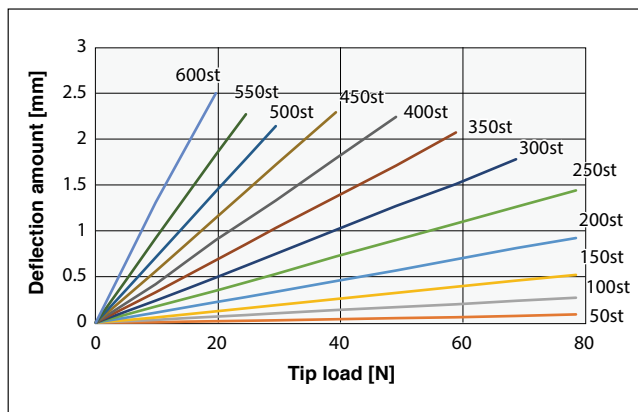
For the pushing force during pushing operation, see the graph below.

Note. The operable time (pushing judgement time) depends on the current limit value. Use the pushing force under the conditions that no overload error occurs.



Rod deflection amount (reference value)

For the deflection amount per stroke, see the graph below.



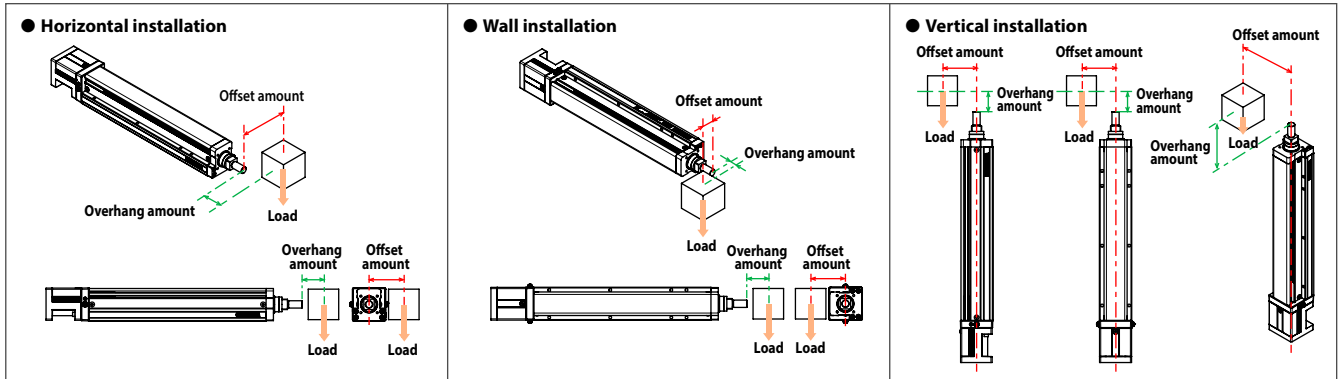
Access the website below.



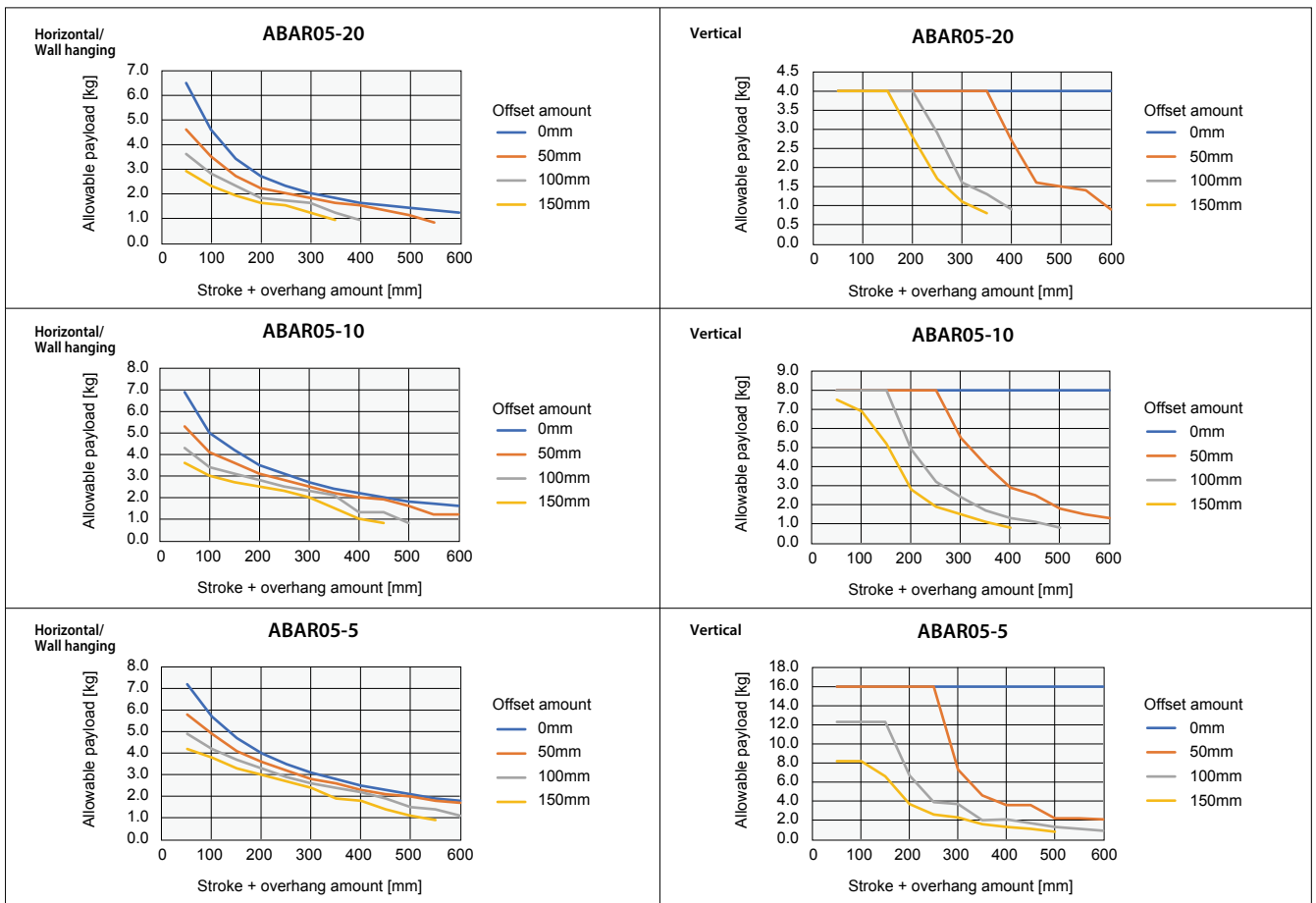
▶ The cycle time simulation can be performed easily from our member site. For details, see P.12.

Allowable payload

For the allowable payload per offset amount, see the graph below.



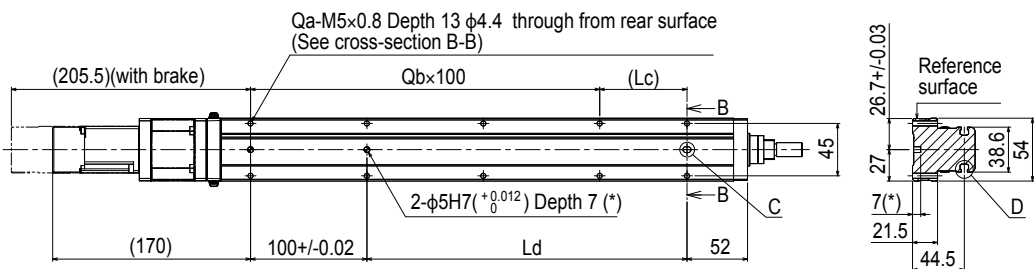
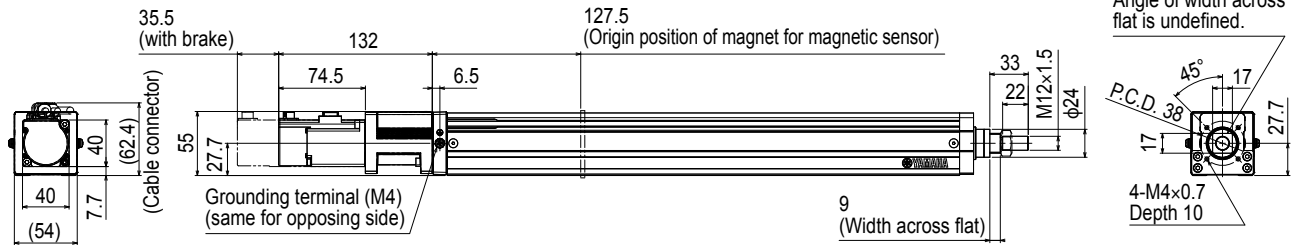
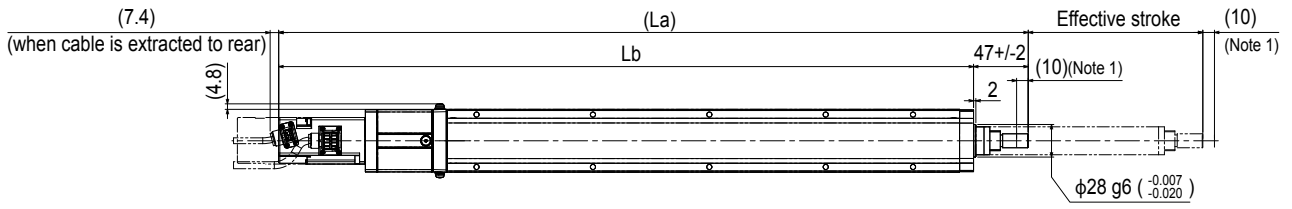
Note 1. When transferring an object with a weight exceeding the following, use an external support guide. Install the support guide flexibly so that no unnecessary load is applied to the rod.
 Note 2. The values are when the service life of the guide is 5000 km.



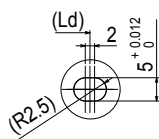
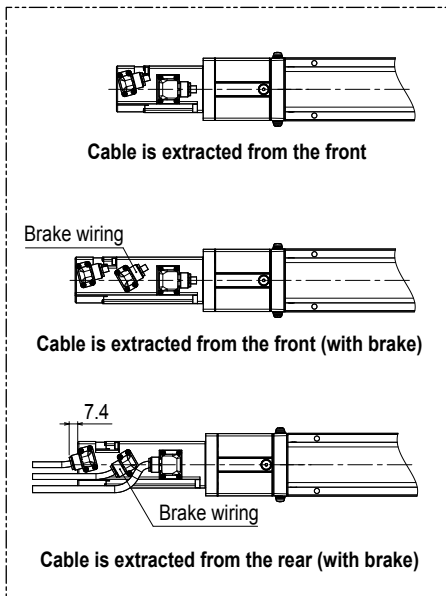
Features

- Basic model
- Advanced model
- With motor
- Acceleration/Deceleration
- Inertia Moment
- Option
- Single axis robot positioner

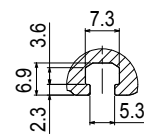
ABAR05 Straight type (S)



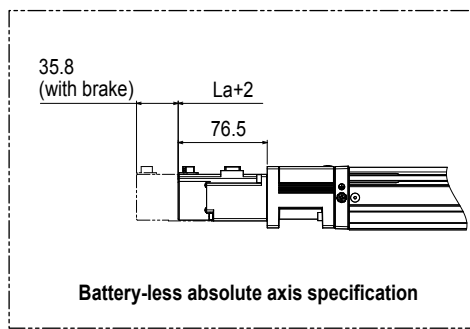
Cross-section B-B



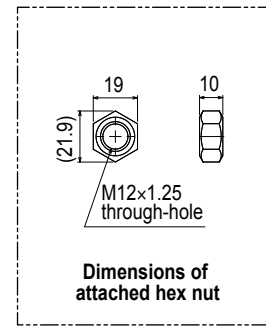
Detailed drawing C



Detailed drawing D



Battery-less absolute axis specification



Dimensions of attached hex nut

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

Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)

Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M3 × 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M4 × 0.7> used to install the main unit.

Note 4. The weight with the brake is 0.2 kg heavier than the value in the weight column.

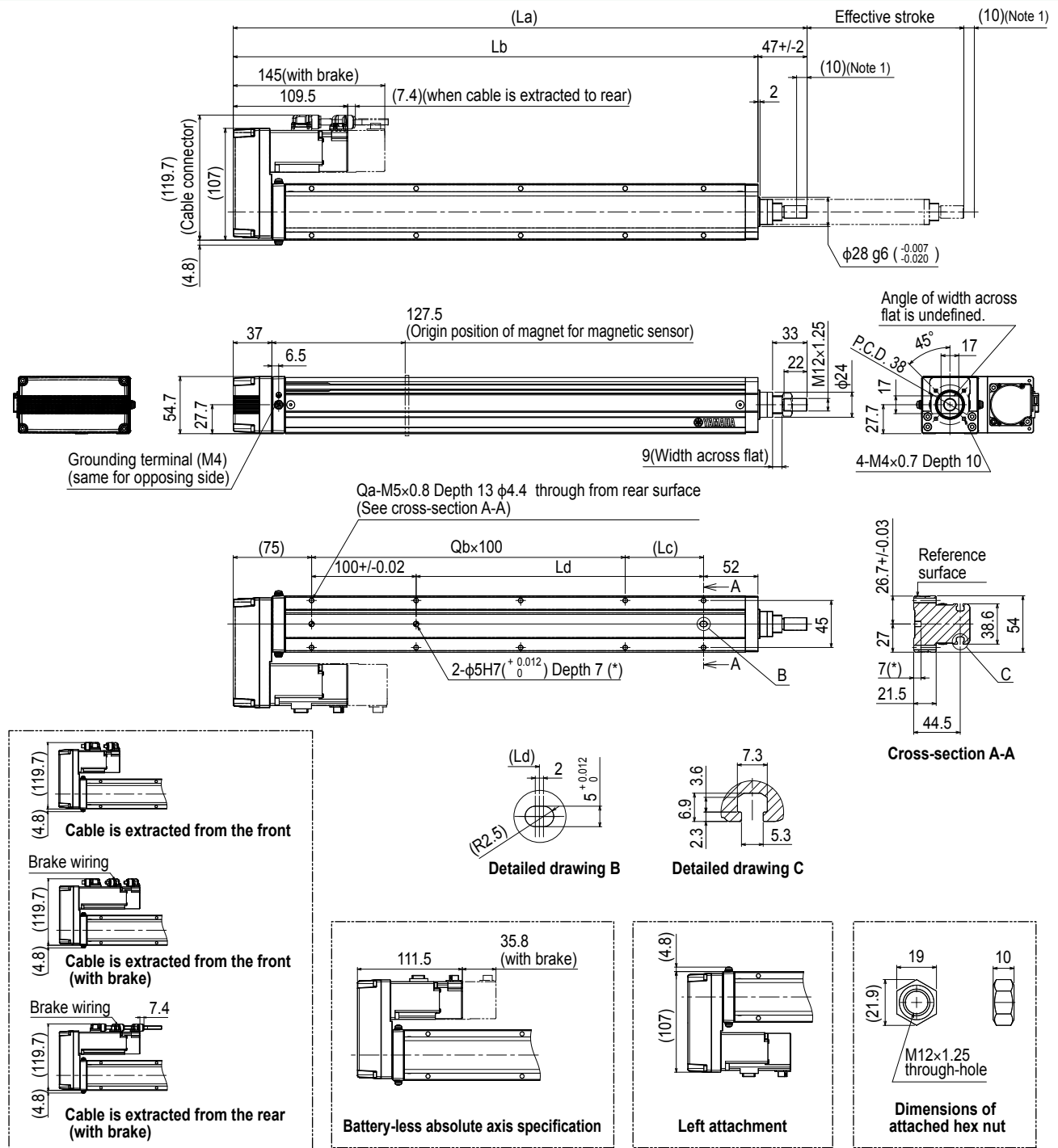
Note 5. The minimum bending radius of the robot cable is R30 on the fixed side or R50 on the movable side. The cable extraction direction may vary depending on the specifications.

Note 6. Grease gun nozzle (recommended) (see P.143 for detail)

Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	
La	394	444	494	544	594	644	694	744	794	844	894	944	
Lb	347	397	447	497	547	597	647	697	747	797	847	897	
Lc	25	75	25	75	25	75	25	75	25	75	25	75	
Ld	25	75	125	175	225	275	325	375	425	475	525	575	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	
Weight (kg) Note 4	2.1	2.3	2.4	2.6	2.8	3	3.1	3.2	3.3	3.4	3.6	3.8	
Maximum speed (mm/sec)	Lead 20							1200	960	780	600	480	420
	Lead 10							600	480	390	300	240	210
	Lead 5							300	240	195	150	120	105
Speed setting							-	80%	65%	50%	40%	35%	

ABAR05 Bending type (R/L)



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
 Note 3. For the installation through hole, the length under head << 30 mm or more >> is recommended for the hex socket head bolts <M3 × 0.5>. In the installation tap hole, the length under head << thickness of stand + 10 mm or less >> is recommended for the hex socket head bolts <M4 × 0.7> used to install the main unit.
 Note 4. The weight with the brake is 0.2 kg heavier than the value in the weight column.
 Note 5. The minimum bending radius of the robot cable is R30 on the fixed side or R50 on the movable side. The cable extraction direction may vary depending on the specifications.
 Note 6. Grease gun nozzle (recommended) (see P.143 for detail)
 Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600					
La	299	349	399	449	499	549	599	649	699	749	799	849					
Lb	252	302	352	402	452	502	552	602	652	702	752	802					
Lc	25	75	25	75	25	75	25	75	25	75	25	75					
Ld	25	75	125	175	225	275	325	375	425	475	525	575					
Qa	6	6	8	8	10	10	12	12	14	14	16	16					
Qb	1	1	2	2	3	3	4	4	5	5	6	6					
Weight (kg) Note 4	2.2	2.3	2.5	2.7	2.9	3.1	3.2	3.3	3.4	3.5	3.7	3.8					
Maximum speed (mm/sec)	Lead 20						1200						960	780	600	480	420
	Lead 10						600						480	390	300	240	210
	Lead 5						300						240	195	150	120	105
	Speed setting						-						80%	65%	50%	40%	35%

Features

- Basic model: LBAS
- Advanced model: LGXS
- Basic model: LBAR
- Basic model: ABAS
- Advanced model: AGXS
- Basic model: ABAR

Acceleration/Deceleration Inertia Moment

Option

Single axis sensor positioner EP-01

ABAR08

Basic model

Single-axis robots

Rod type



Ordering method

ABAR08							EP-01				
Model	Lead	Shape	Motor specification	Stroke	Cable length <small>Note 1</small>	Cable entry location	Robot positioner	Driver: Power capacity	Regenerative unit <small>Note 2</small>	I/O	Battery <small>Note 3</small>
	20: 20 mm 10: 10 mm 5: 5 mm	S: Straight R: Right bending L: Left bending	S: Standard/With no brake BK: Standard/With brake BL: Battery-less absolute/With no brake BKBL: Battery-less absolute/With brake	50 to 800 (50mm pitch)	R3: 3 m R5: 5 m R10: 10 m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None

Note 1. The robot cable is flexible and resists bending.

Note 2. When the actuator is used vertically, the regenerative unit is needed.

When the actuator is used horizontally and the stroke of lead 10 or 20 is 150 to 500 mm, the regenerative unit is needed.

Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.

Specifications

AC servo motor output	200 W		
Repeatability <small>Note 1</small>	±0.01 mm		
Deceleration mechanism	Shifting position ball screw φ 16 (C7 class)		
Stroke	50 mm to 800 mm (50mm pitch)		
Maximum speed <small>Note 2</small>	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead	20 mm	10 mm	5 mm
Maximum payload	Horizontal	30 kg	60 kg
	Vertical	8 kg	20 kg
Max. pressing force	201 N	402 N	804 N
Rotating backlash	+/- 0 °		
Maximum dimensions of cross section of main unit	W 82 mm × H 73.5 mm		
Overall length	Straight	ST + 401 mm	
	Bending	ST + 312.5 mm	
Position detector	Absolute encoder Battery-less absolute encoder		
Resolution	23 bits		
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 400 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. See P.138 for acceleration/deceleration.

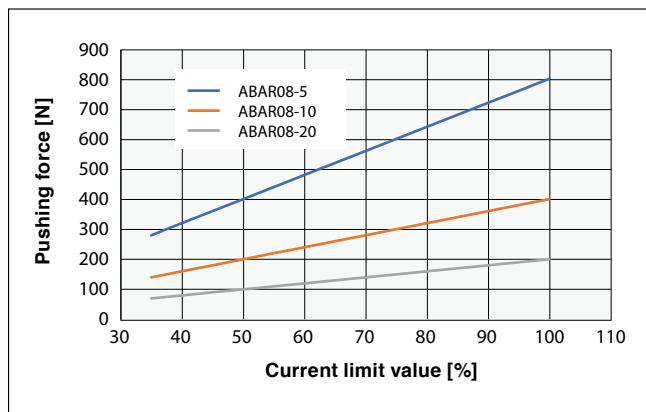
Controller

Controller	Operation method
EP-01	I/O point trace/Remote command

Pushing force (reference value)

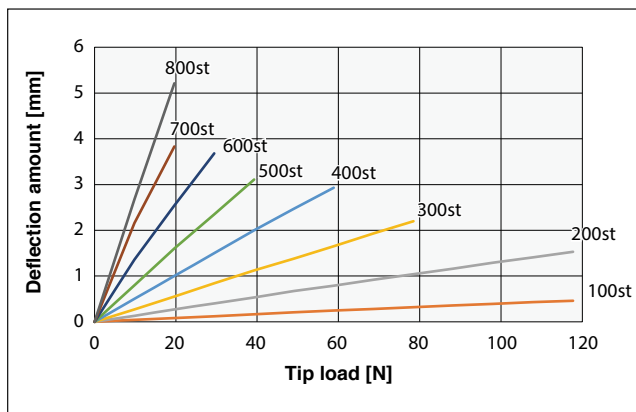
For the pushing force during pushing operation, see the graph below.

Note. The operable time (pushing judgement time) depends on the current limit value. Use the pushing force under the conditions that no overload error occurs.



Rod deflection amount (reference value)

For the deflection amount per stroke, see the graph below.



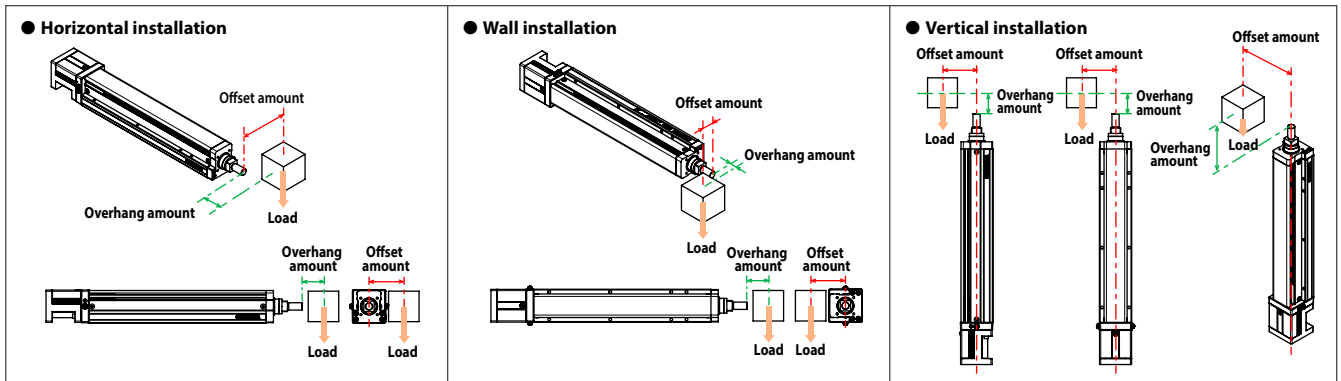
Access the website below.



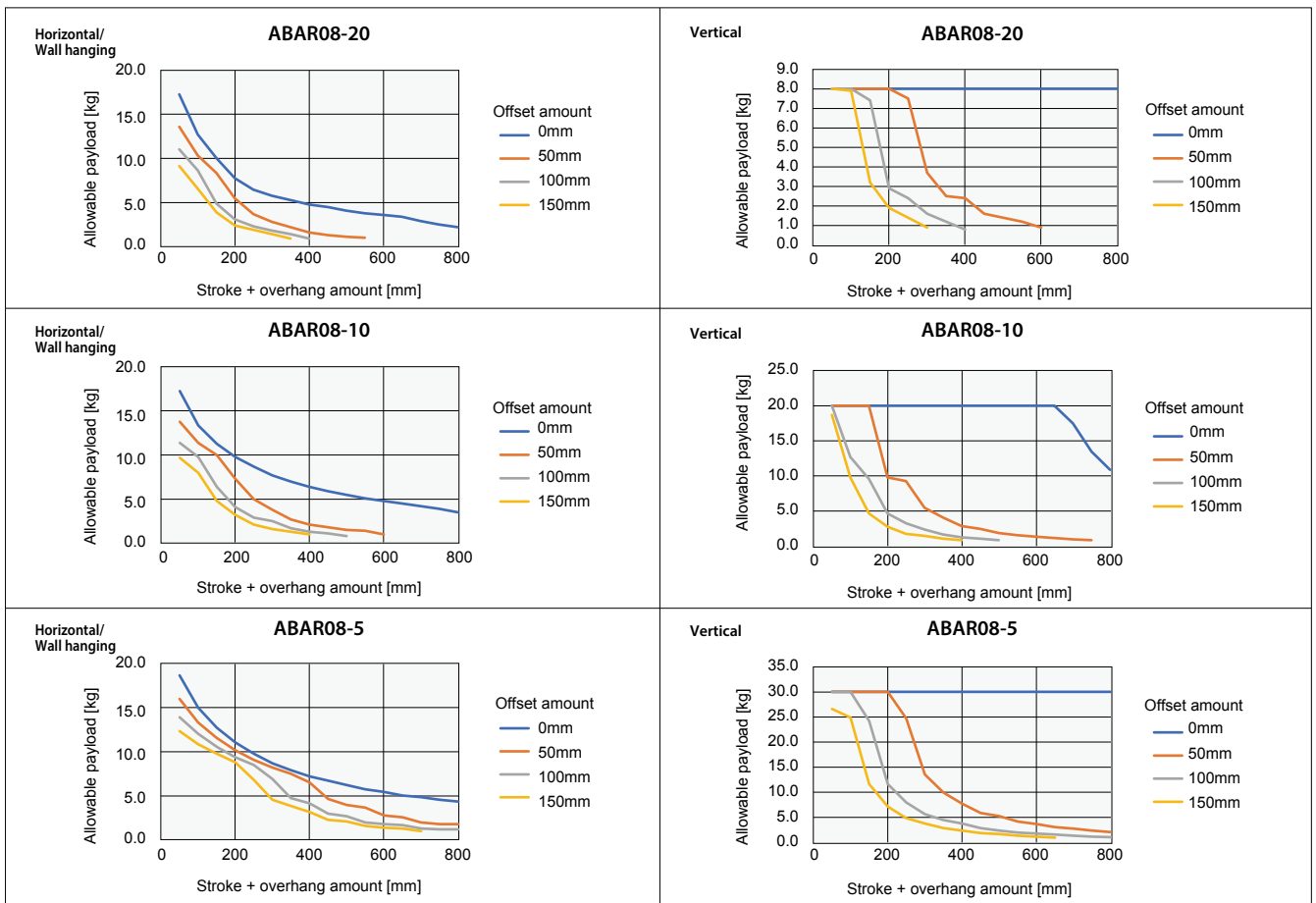
▶ The cycle time simulation can be performed easily from our member site. For details, see P.12.

Allowable payload

For the allowable payload per offset amount, see the graph below.

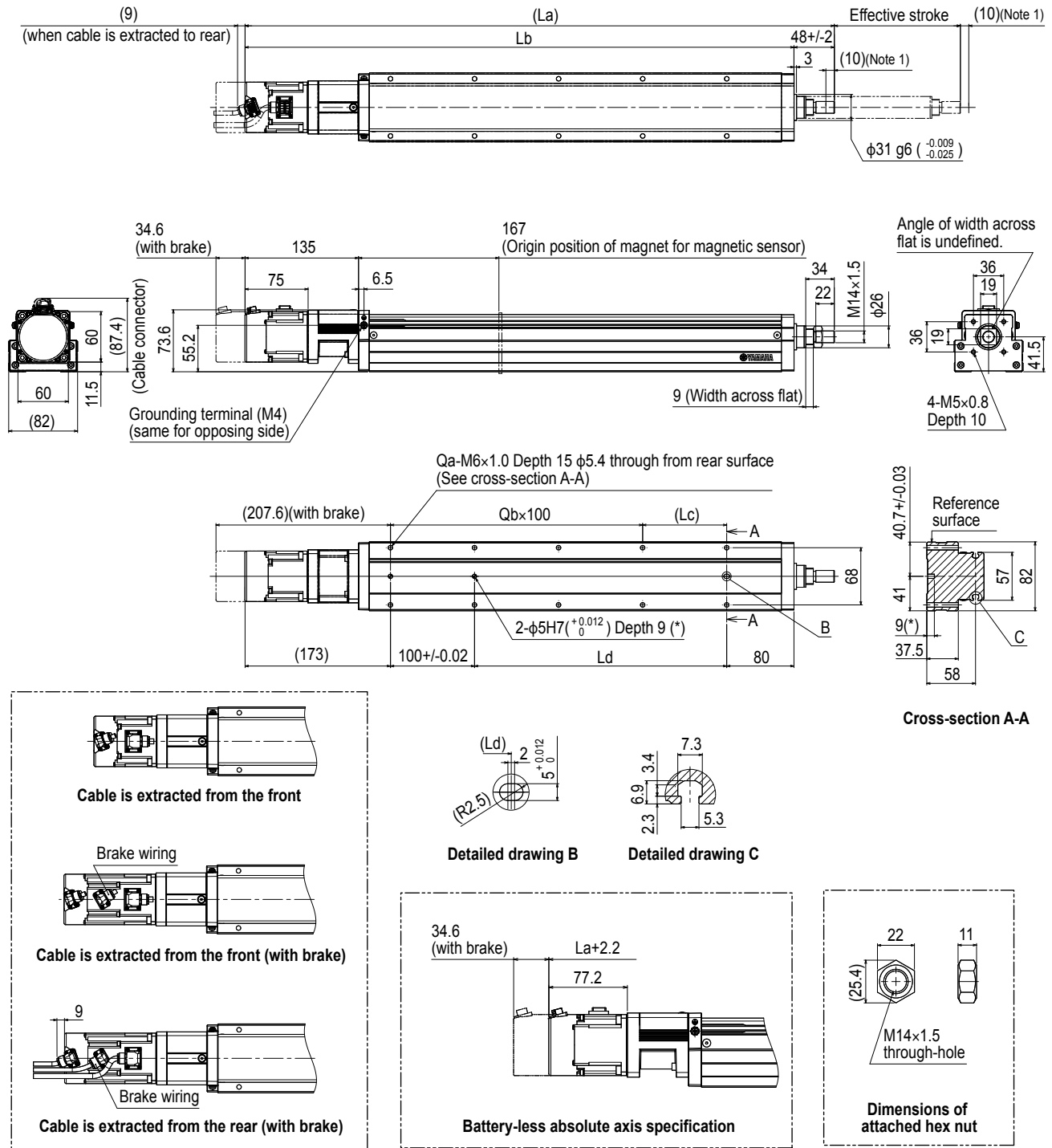


Note 1. When transferring an object with a weight exceeding the following, use an external support guide. Install the support guide flexibly so that no unnecessary load is applied to the rod.
 Note 2. The values are when the service life of the guide is 5000 km.



Features
 LBAS
 LGXS
 LBAR
 ABAS
 AGXS
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single axis robot positioner
 EP-01

ABAR08 Straight type (S)



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

Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)

Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M5 x 0.8>. In the installation tap hole, the length under head << thickness of stand +15 mm or less >> is recommended for the hex socket head bolts <M6 x 1.0> used to install the main unit.

Note 4. The weight with the brake is 0.4 kg heavier than the value in the weight column.

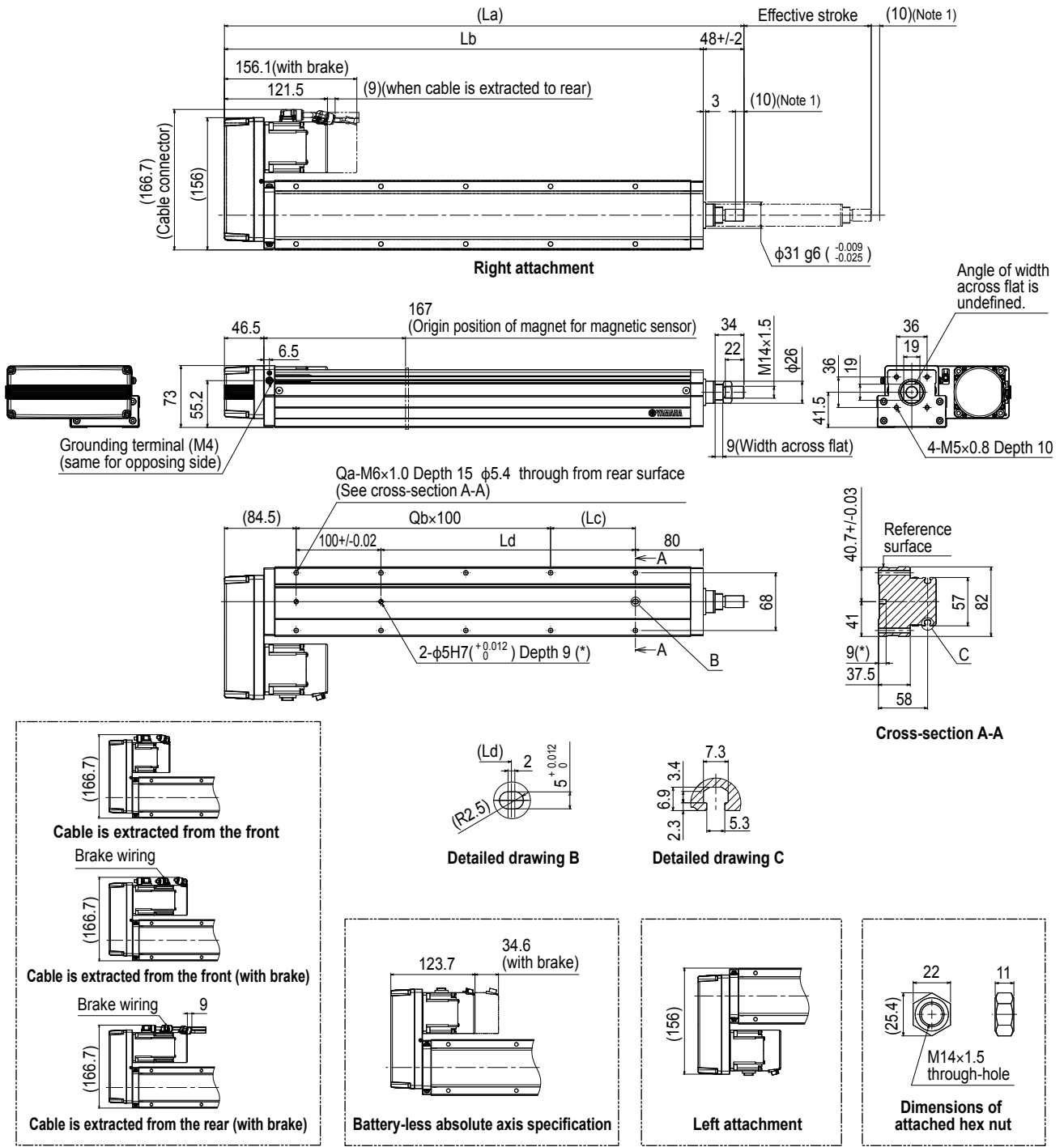
Note 5. The minimum bending radius of the robot cable is R30 on the fixed side or R50 on the movable side. The cable extraction direction may vary depending on the specifications.

Note 6. Grease gun nozzle (recommended) (see P.143 for detail)

Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
La	451	501	551	601	651	701	751	801	851	901	951	1001	1051	1101	1151	1201	
Lb	403	453	503	553	603	653	703	753	803	853	903	953	1003	1053	1103	1153	
Lc	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	
Ld	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
Weight (kg) Note 4	4.7	5.1	5.5	5.8	6.1	6.5	6.8	7.1	7.4	7.8	8.2	8.5	8.9	9.2	9.4	9.7	
Maximum speed (mm/sec)	Lead 20	1200								900	720	600	480	420	360	300	240
	Lead 10	600								450	360	300	240	210	180	150	120
	Lead 5	300								225	180	150	120	105	90	75	60
Speed setting	-								75%	60%	50%	40%	35%	30%	25%	20%	

ABAR08 Bending type (R/L)



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. When changing the return-to-origin direction, the parameter needs to be changed. (The standard is that the origin is located on the motor side.)
 Note 3. For the installation through hole, the length under head << 45 mm or more >> is recommended for the hex socket head bolts <M5 × 0.8>. In the installation tap hole, the length under head << thickness of stand + 15 mm or less >> is recommended for the hex socket head bolts <M6 × 1.0> used to install the main unit.
 Note 4. The weight with the brake is 0.4 kg heavier than the value in the weight column.
 Note 5. The minimum bending radius of the robot cable is R30 on the fixed side or R50 on the movable side. The cable extraction direction may vary depending on the specifications.
 Note 6. Grease gun nozzle (recommended) (see P.143 for detail)
 Part number: KFU-M3861-00

Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
La	362.5	412.5	462.5	512.5	562.5	612.5	662.5	712.5	762.5	812.5	862.5	912.5	962.5	1012.5	1062.5	1112.5	
Lb	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	
Lc	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	
Ld	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
Qa	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	
Qb	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	
Weight (kg) <small>Note 4</small>	5.1	5.5	5.9	6.2	6.5	6.9	7.2	7.5	7.8	8.2	8.6	8.9	9.3	9.6	9.8	10.1	
Maximum speed (mm/sec)	Lead 20	1200								900	720	600	480	420	360	300	240
	Lead 10	600								450	360	300	240	210	180	150	120
	Lead 5	300								225	180	150	120	105	90	75	60
	Speed setting	-								75%	60%	50%	40%	35%	30%	25%	20%

Features

- Basic model: LBAS
- Advanced model: LGXS
- Basic model: LBAR
- Basic model: ABAS
- Advanced model: AGXS
- Basic model: ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single axis sensor pushdown **EP-01**

LBAS04

Inertia Moment

[kg·m ² ·10 ⁻⁴]	Effective stroke [mm]															
	Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
LBAS04-6	0.060	0.063	0.067	0.071	0.075	0.079	0.083	0.087	0.090	0.094	0.098	0.102	0.106	0.110	0.114	0.117
LBAS04-12	0.069	0.072	0.076	0.080	0.084	0.088	0.092	0.096	0.099	0.103	0.107	0.111	0.115	0.119	0.123	0.126

LBAS04 **ABAS04**

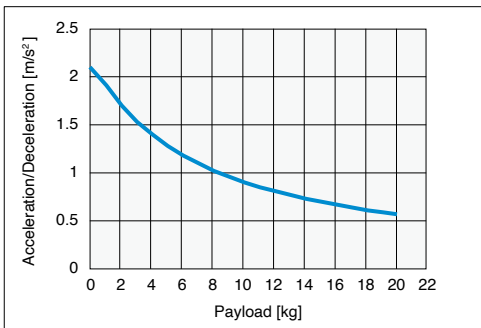
Acceleration/Deceleration

Model	LBAS04-6/ABAS04-6		LBAS04-12/ABAS04-12	
	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	2.1	2.1	4.2	3.6
1	1.91	2.1	3.84	2.4
2	1.7	1.64	2.99	1.8
3	1.53	1.34	2.45	
4	1.4	1.14	2.07	
5	1.28	0.99	1.8	
6	1.18		1.58	
7	1.1		1.42	
8	1.02		1.28	
9	0.96		1.17	
10	0.9		1.08	
11	0.85		1	
12	0.81		0.93	
13	0.77			
14	0.73			
15	0.7			
16	0.67			
17	0.64			
18	0.61			
19	0.59			
20	0.57			

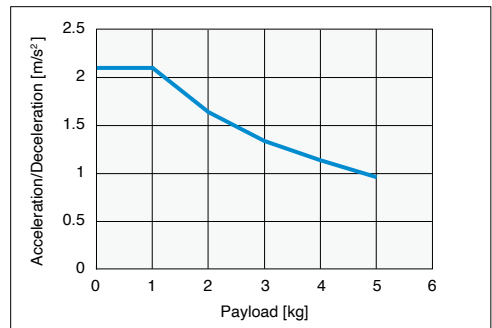
● **Payload – Acceleration/Deceleration Graph (Estimate)**

LBAS04-6 / ABAS04-6

Horizontal/Wall hanging

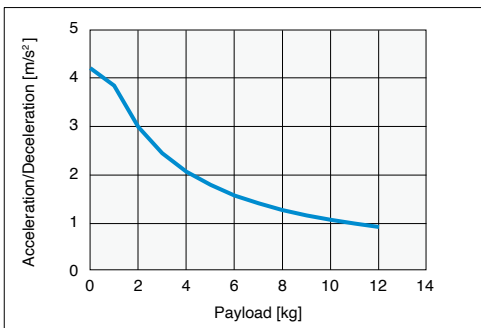


Vertical

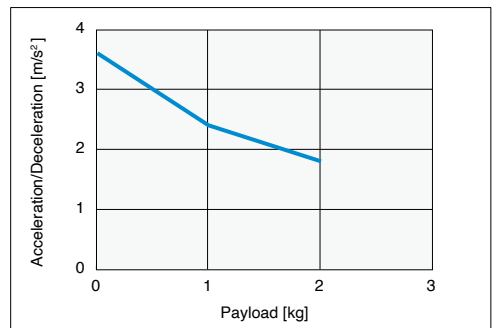


LBAS04-12 / ABAS04-12

Horizontal/Wall hanging



Vertical



LBAS05

Inertia Moment

Model	Effective stroke [mm]															
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
LBAS05-5	0.085	0.093	0.101	0.109	0.117	0.125	0.133	0.141	0.149	0.157	0.165	0.173	0.181	0.189	0.197	0.205
LBAS05-10	0.097	0.105	0.113	0.121	0.129	0.137	0.145	0.153	0.161	0.169	0.177	0.185	0.193	0.201	0.209	0.217
LBAS05-20	0.145	0.153	0.161	0.169	0.177	0.185	0.193	0.201	0.209	0.217	0.224	0.232	0.240	0.248	0.256	0.264

LBAS05 **ABAS05**

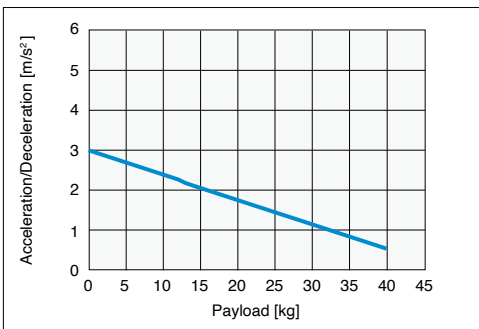
Acceleration/Deceleration

Model	LBAS05-5/ABAS05-5		LBAS05-10/ABAS05-10		LBAS05-20/ABAS05-20	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	3.04	3.34	4.64	4.86	7.44	7.44
1	2.97	3.18	4.44	4.56	7.44	6.99
2	2.91	3.03	4.25	4.3	7.44	5.65
3	2.85	2.88	4.07	4.06	7.44	3.42
4	2.79	2.73	3.9	3.85	7.44	
5	2.73	2.58	3.73	3.66	7.44	
6	2.67	2.43	3.57	3.49	6.64	
7	2.61	2.28	3.41		6	
8	2.55	2.13	3.27		5.47	
9	2.49	1.98	3.12		5.02	
10	2.43	1.83	2.99		4.65	
11	2.37	1.68	2.86		4.32	
12	2.31	1.53	2.74		4.04	
13	2.24		2.62			
14	2.18		2.51			
15	2.12		2.41			
16	2.06		2.31			
17	2		2.22			
18	1.94		2.14			
19	1.88		2.06			
20	1.82		1.99			
21	1.76		1.93			
22	1.7		1.87			
23	1.64		1.82			
24	1.58		1.77			
25	1.52					
26	1.45					
27	1.39					
28	1.33					
29	1.27					
30	1.21					
31	1.15					
32	1.09					
33	1.03					
34	0.97					
35	0.91					
36	0.85					
37	0.79					
38	0.72					
39	0.66					
40	0.6					

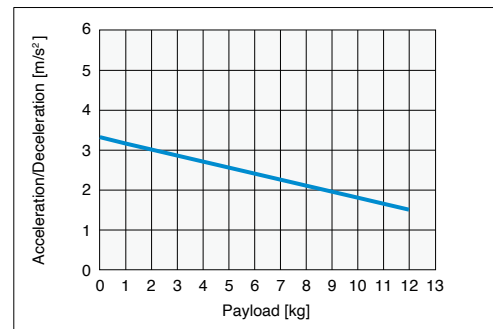
● **Payload – Acceleration/Deceleration Graph (Estimate)**

LBAS05-5 / ABAS05-5

Horizontal/
Wall hanging



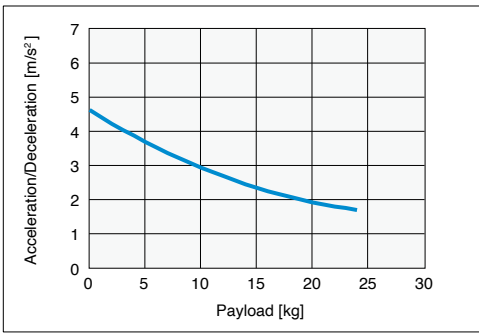
Vertical



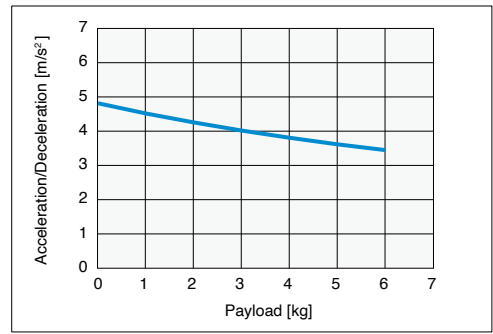
● Payload – Acceleration/Deceleration Graph (Estimate)

LBAS05-10 / ABAS05-10

Horizontal/
Wall hanging



Vertical

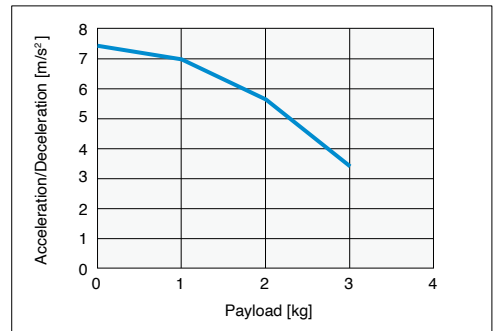


LBAS05-20 / ABAS05-20

Horizontal/
Wall hanging



Vertical



Features

Motorless
Slider type
Basic model

LBAS

Motorless
Slider type
Advanced model

LGXS

Motorless
Rod type
Basic model

LBAR

With motor
Slider type
Basic model

ABAS

With motor
Slider type
Advanced model

AGXS

With motor
Rod type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single-axis robot positioner

EP-01

LBAS08

Inertia Moment

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

LBAS08 **ABAS08**

Acceleration/Deceleration

Model	LBAS08-5/ABAS08-5		LBAS08-10/ABAS08-10		LBAS08-20/ABAS08-20	
	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	1.65	1.65	6.09	4.79	8.51	8.5
1	1.63	1.62	5.97	4.54	8.2	7.39
2	1.62	1.59	5.86	4.31	7.9	6.42
3	1.6	1.57	5.74	4.09	7.61	5.59
4	1.59	1.54	5.63	3.88	7.33	4.89
5	1.58	1.51	5.52	3.68	7.05	4.33
6	1.56	1.49	5.42	3.5	6.77	3.91
7	1.55	1.46	5.31	3.32	6.51	3.62
8	1.54	1.44	5.21	3.16	6.24	3.46
9	1.52	1.41	5.1	3.01	5.99	
10	1.51	1.38	5	2.87	5.74	
11	1.5	1.36	4.9	2.74	5.5	
12	1.49	1.33	4.8	2.62	5.26	
13	1.47	1.3	4.7	2.52	5.03	
14	1.46	1.28	4.61	2.42	4.8	
15	1.45	1.25	4.51	2.34	4.58	
16	1.43	1.23	4.42	2.27	4.37	
17	1.42	1.2	4.33	2.21	4.16	
18	1.41	1.17	4.24	2.16	3.96	
19	1.4	1.15	4.15	2.13	3.76	
20	1.38	1.12	4.06	2.1	3.57	
21	1.37	1.09	3.98		3.38	
22	1.36	1.07	3.89		3.21	
23	1.35	1.04	3.81		3.03	
24	1.34	1.02	3.73		2.87	
25	1.32	0.99	3.65		2.71	
26	1.31	0.96	3.57		2.55	
27	1.3	0.94	3.49		2.4	
28	1.29	0.91	3.42		2.26	
29	1.28	0.88	3.34		2.13	
30	1.26	0.86	3.27		1.99	
31	1.25		3.2		1.87	
32	1.24		3.13		1.75	
33	1.23		3.06		1.64	
34	1.22		2.99		1.53	
35	1.21		2.93		1.43	
36	1.19		2.86		1.34	
37	1.18		2.8		1.25	
38	1.17		2.74		1.16	
39	1.16		2.68		1.09	
40	1.15		2.62		1.02	
41	1.14		2.57			
42	1.13		2.51			
43	1.12		2.46			
44	1.11		2.41			
45	1.09		2.36			
46	1.08		2.31			
47	1.07		2.26			
48	1.06		2.21			
49	1.05		2.17			
50	1.04		2.12			
51	1.03		2.08			
52	1.02		2.04			
53	1.01		2			
54	1		1.96			
55	0.99		1.93			
56	0.98		1.89			
57	0.97		1.86			
58	0.96		1.83			
59	0.95		1.8			
60	0.94		1.77			
61	0.93		1.74			
62	0.92		1.72			
63	0.91		1.69			
64	0.9		1.67			
65	0.89		1.65			
66	0.88		1.63			
67	0.87		1.61			
68	0.86		1.59			
69	0.85		1.57			
70	0.84		1.56			
71	0.84		1.55			
72	0.83		1.54			
73	0.82		1.53			
74	0.81		1.52			
75	0.8		1.51			
76	0.79		1.51			
77	0.78		1.5			

Model	LBAS08-5/ABAS08-5		LBAS08-10/ABAS08-10		LBAS08-20/ABAS08-20	
	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
78	0.77		1.5			
79	0.76		1.5			
80	0.76		1.5			
81	0.75					
82	0.74					
83	0.73					
84	0.72					
85	0.71					
86	0.71					
87	0.7					
88	0.69					
89	0.68					
90	0.67					
91	0.67					
92	0.66					
93	0.65					
94	0.64					
95	0.63					
96	0.63					
97	0.62					
98	0.61					
99	0.6					
100	0.6					

Features

Basic model

Advanced model

Basic model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Acceleration/Deceleration Inertia Moment

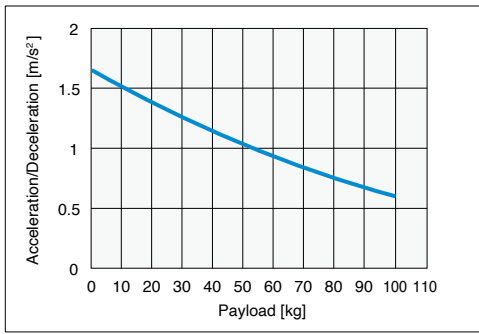
Option

Single axis robot positioner EP-01

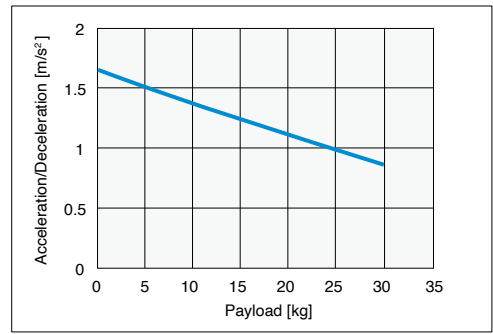
● Payload – Acceleration/Deceleration Graph (Estimate)

LBAS08-5 / ABAS08-5

Horizontal/
Wall hanging

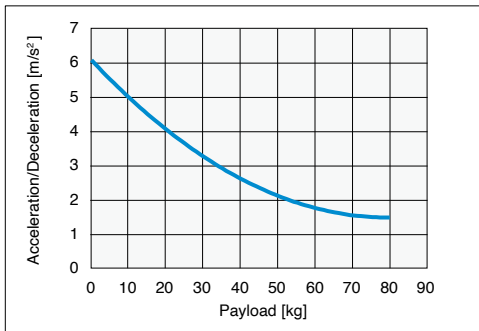


Vertical

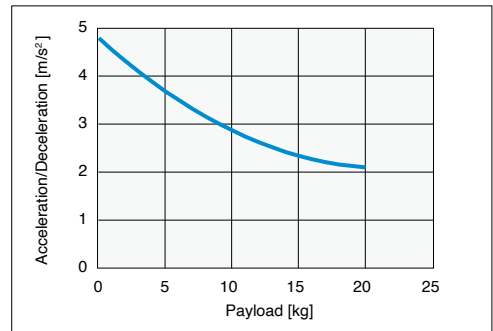


LBAS08-10 / ABAS08-10

Horizontal/
Wall hanging

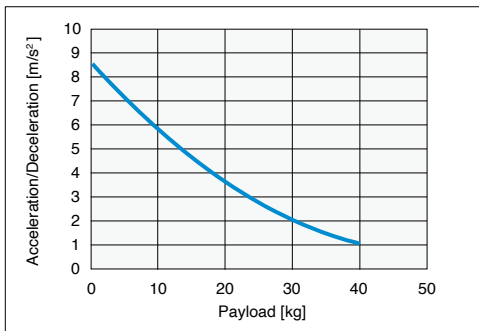


Vertical

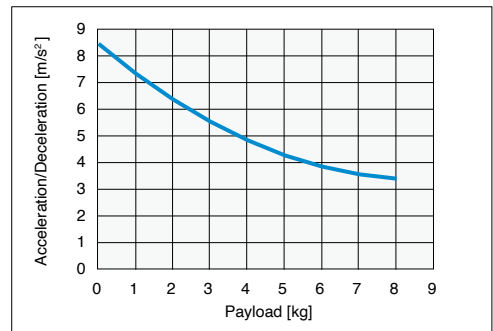


LBAS08-20 / ABAS08-20

Horizontal/
Wall hanging



Vertical



Features

Motorless
Slider type
Basic model

LBAS

Motorless
Slider type
Advanced model

LGXS

Motorless
Rod type
Basic model

LBAR

With motor
Slider type
Basic model

ABAS

With motor
Slider type
Advanced model

AGXS

With motor
Rod type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single-axis robot positioner

EP-01

LBAS12

Inertia Moment

[kg·m ² ·10 ⁻⁴]	Effective stroke [mm]																								
	Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
LBAS12-5	0.396	0.422	0.447	0.472	0.497	0.523	0.548	0.573	0.598	0.624	0.649	0.674	0.699	0.725	0.750	0.775	0.800	0.826	0.851	0.876	0.901	0.927	0.952	0.977	1.002
LBAS12-10	0.426	0.451	0.477	0.502	0.527	0.552	0.578	0.603	0.628	0.653	0.679	0.704	0.729	0.754	0.780	0.805	0.830	0.855	0.881	0.906	0.931	0.956	0.982	1.007	1.032
LBAS12-20	0.548	0.573	0.598	0.623	0.649	0.674	0.699	0.724	0.750	0.775	0.800	0.826	0.851	0.876	0.901	0.927	0.952	0.977	1.002	1.028	1.053	1.078	1.103	1.129	1.154
LBAS12-32	0.799	0.824	0.849	0.875	0.900	0.925	0.951	0.976	1.001	1.026	1.052	1.077	1.102	1.127	1.153	1.178	1.203	1.228	1.254	1.279	1.304	1.329	1.355	1.380	1.405

LBAS12 (200W) ABAS12

Acceleration/Deceleration

Model	LBAS12-5/ ABAS12-5		LBAS12-10/ ABAS12-10		LBAS12-20/ ABAS12-20		LBAS12-32/ ABAS12-32	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]	
0	2.27	1.9	6.89	3.29	6.59	8.11	9.75	9.75
1	2.24	1.87	6.78	3.26	6.53	7.85	9.75	9.75
2	2.22	1.84	6.67	3.24	6.48	7.6	9.75	9.75
3	2.2	1.82	6.56	3.22	6.43	7.34	9.75	9.75
4	2.18	1.79	6.45	3.19	6.38	7.09	9.75	
5	2.16	1.77	6.35	3.17	6.33	6.84	9.75	
6	2.14	1.74	6.24	3.15	6.28	6.58	9.75	
7	2.12	1.72	6.14	3.12	6.23	6.33	9.75	
8	2.1	1.69	6.03	3.1	6.18	6.07	9.75	
9	2.08	1.67	5.93	3.07	6.13		9.01	
10	2.06	1.64	5.83	3.05	6.08		8.37	
11	2.04	1.62	5.73	3.02	6.03		7.82	
12	2.02	1.59	5.63	3	5.98		7.34	
13	2	1.57	5.53	2.97	5.93		6.91	
14	1.98	1.54	5.44	2.94	5.88		6.53	
15	1.96	1.52	5.34	2.92	5.82		6.19	
16	1.95	1.49	5.24	2.89	5.77		5.88	
17	1.93	1.47	5.15	2.86	5.72		5.6	
18	1.91	1.44	5.06	2.83	5.67		5.35	
19	1.89	1.41	4.96	2.81	5.62		5.12	
20	1.87	1.39	4.87	2.78	5.57		4.91	
21	1.85	1.36	4.78		5.52			
22	1.84	1.34	4.69		5.47			
23	1.82	1.31	4.6		5.42			
24	1.8	1.29	4.52		5.37			
25	1.78	1.26	4.43		5.32			
26	1.76	1.24	4.34		5.27			
27	1.75	1.21	4.26		5.22			
28	1.73	1.19	4.18		5.17			
29	1.71	1.16	4.09		5.12			
30	1.7	1.14	4.01		5.06			
31	1.68		3.93		5.01			
32	1.66		3.85		4.96			
33	1.65		3.77		4.91			
34	1.63		3.69		4.86			
35	1.61		3.62		4.81			
36	1.6		3.54		4.76			
37	1.58		3.47		4.71			
38	1.57		3.39		4.66			
39	1.55		3.32		4.61			
40	1.53		3.25		4.56			
41	1.52		3.18					
42	1.5		3.11					
43	1.49		3.04					
44	1.47		2.97					
45	1.46		2.9					
46	1.44		2.83					
47	1.43		2.77					
48	1.42		2.7					
49	1.4		2.64					
50	1.39		2.58					
51	1.37		2.52					
52	1.36		2.46					
53	1.35		2.4					
54	1.33		2.34					
55	1.32		2.28					
56	1.3		2.22					
57	1.29		2.17					
58	1.28		2.11					
59	1.27		2.06					
60	1.25		2.01					
61	1.24		1.95					
62	1.23		1.9					
63	1.22		1.85					
64	1.2		1.81					
65	1.19		1.76					
66	1.18		1.71					
67	1.17		1.66					
68	1.16		1.62					
69	1.14		1.57					
70	1.13		1.53					
71	1.12		1.49					
72	1.11		1.45					
73	1.1		1.41					

Model	LBAS12-5/ ABAS12-5		LBAS12-10/ ABAS12-10		LBAS12-20/ ABAS12-20		LBAS12-32/ ABAS12-32	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]	
74	1.09		1.37					
75	1.08		1.33					
76	1.07		1.29					
77	1.06		1.26					
78	1.05		1.22					
79	1.04		1.19					
80	1.03		1.15					
81	1.02							
82	1.01							
83	1							
84	0.99							
85	0.98							
86	0.97							
87	0.96							
88	0.95							
89	0.94							
90	0.94							
91	0.93							
92	0.92							
93	0.91							
94	0.9							
95	0.9							
96	0.89							
97	0.88							
98	0.87							
99	0.87							
100	0.86							

Features

Basic model

Advanced model

Basic model

Basic model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Basic model

Option

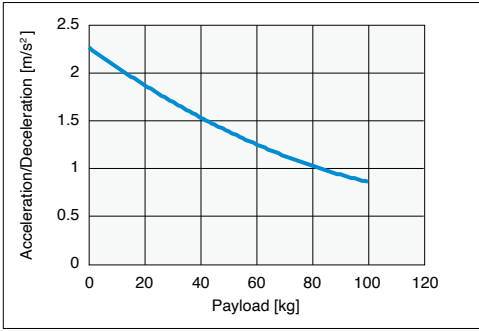
Single axis robot push/puller

EP-01

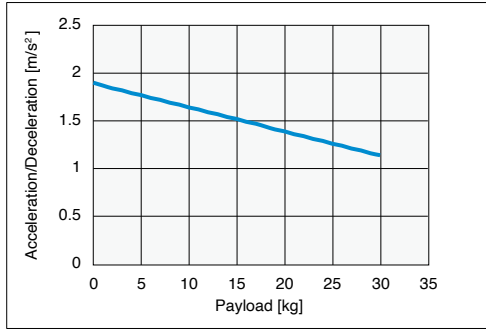
● Payload – Acceleration/Deceleration Graph (Estimate)

LBAS12-5 (200W) / ABAS12-5

Horizontal/
Wall hanging

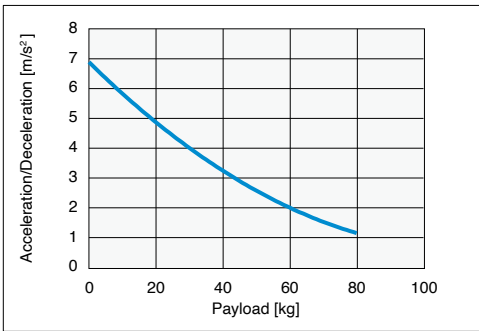


Vertical

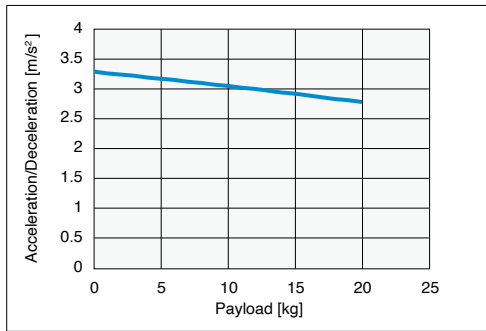


LBAS12-10 (200W) / ABAS12-10

Horizontal/
Wall hanging

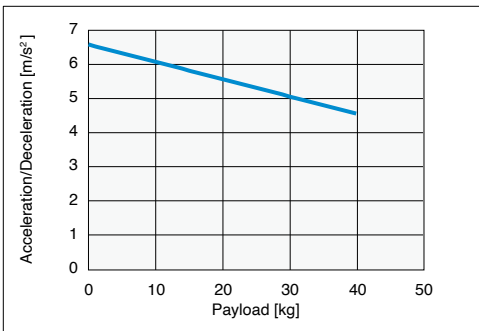


Vertical

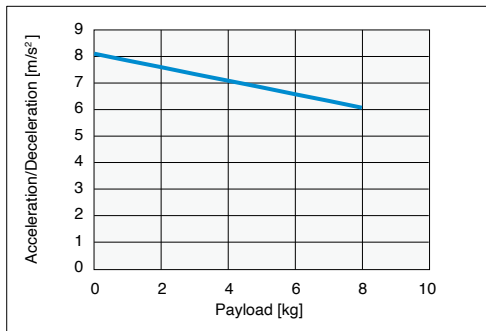


LBAS12-20 (200W) / ABAS12-20

Horizontal/
Wall hanging

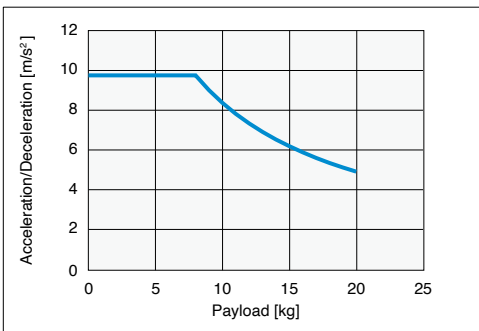


Vertical

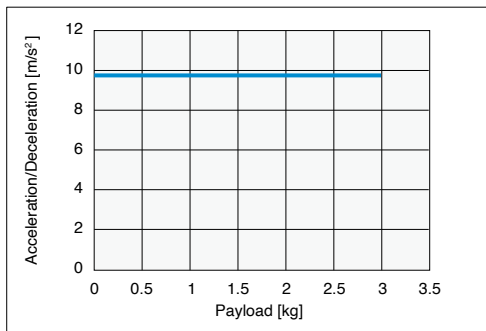


LBAS12-32 (200W) / ABAS12-32

Horizontal/
Wall hanging



Vertical



Features

Motorless
Slider type

LBAS

Motorless
Slider type

LGXS

Motorless
Rod type

LBAR

With motor
Slider type

ABAS

With motor
Slider type

AGXS

With motor
Rod type

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner

EP-01

LBAS12 (400W) ABAS12H

Acceleration/Deceleration

Model	LBAS12-5/ ABAS12H-5		LBAS12-10/ ABAS12H-10		LBAS12-20/ ABAS12H-20		LBAS12-32/ ABAS12H-32	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]	
0	2.27	1.9	8.61	3.29	9.73	8.11	9.75	9.75
1	2.24	1.87	8.47	3.26	9.53	7.85	9.75	9.75
2	2.22	1.84	8.33	3.24	9.35	7.6	9.75	9.75
3	2.2	1.82	8.2	3.22	9.16	7.34	9.75	9.75
4	2.18	1.79	8.06	3.19	8.98	7.09	9.75	9.75
5	2.16	1.77	7.93	3.17	8.8	6.84	9.75	9.75
6	2.14	1.74	7.8	3.15	8.62	6.58	9.75	9.75
7	2.12	1.72	7.67	3.12	8.45	6.33	9.75	9.75
8	2.1	1.69	7.54	3.1	8.28	6.07	9.75	9.75
9	2.08	1.67	7.41	3.07	8.11	5.82	9.01	
10	2.06	1.64	7.29	3.05	7.95	5.57	8.37	
11	2.04	1.62	7.16	3.02	7.79	5.31	7.82	
12	2.02	1.59	7.04	3	7.63	5.06	7.34	
13	2	1.57	6.92	2.97	7.48	4.81	6.91	
14	1.98	1.54	6.79	2.94	7.33	4.55	6.53	
15	1.96	1.52	6.67	2.92	7.18	4.3	6.19	
16	1.95	1.49	6.56	2.89	7.03		5.88	
17	1.93	1.47	6.44	2.86	6.89		5.6	
18	1.91	1.44	6.32	2.83	6.75		5.35	
19	1.89	1.41	6.21	2.81	6.61		5.12	
20	1.87	1.39	6.09	2.78	6.48		4.91	
21	1.85	1.36	5.98	2.75	6.35		4.71	
22	1.84	1.34	5.87	2.72	6.22		4.53	
23	1.82	1.31	5.76	2.69	6.1		4.37	
24	1.8	1.29	5.65	2.66	5.98		4.21	
25	1.78	1.26	5.54	2.63	5.86		4.07	
26	1.76	1.24	5.43		5.74		3.93	
27	1.75	1.21	5.32		5.63		3.81	
28	1.73	1.19	5.22		5.52		3.69	
29	1.71	1.16	5.12		5.41		3.58	
30	1.7	1.14	5.01		5.31		3.47	
31	1.68	1.11	4.91		5.21		3.37	
32	1.66	1.09	4.81		5.11		3.28	
33	1.65	1.06	4.72		5.02		3.19	
34	1.63	1.04	4.62		4.93		3.11	
35	1.61	1.01	4.52		4.84		3.03	
36	1.6	0.99	4.43		4.76			
37	1.58	0.96	4.33		4.67			
38	1.57	0.93	4.24		4.6			
39	1.55	0.91	4.15		4.52			
40	1.53	0.88	4.06		4.45			
41	1.52		3.97		4.38			
42	1.5		3.88		4.31			
43	1.49		3.8		4.25			
44	1.47		3.71		4.19			
45	1.46		3.63		4.13			
46	1.44		3.54		4.07			
47	1.43		3.46		4.02			
48	1.42		3.38		3.97			
49	1.4		3.3		3.93			
50	1.39		3.22		3.89			
51	1.37		3.15					
52	1.36		3.07					
53	1.35		3					
54	1.33		2.92					
55	1.32		2.85					
56	1.3		2.78					
57	1.29		2.71					
58	1.28		2.64					
59	1.27		2.58					
60	1.25		2.51					
61	1.24		2.44					
62	1.23		2.38					
63	1.22		2.32					
64	1.2		2.26					
65	1.19		2.2					
66	1.18		2.14					
67	1.17		2.08					
68	1.16		2.02					
69	1.14		1.97					
70	1.13		1.92					
71	1.12		1.86					
72	1.11		1.81					
73	1.1		1.76					
74	1.09		1.71					
75	1.08		1.66					
76	1.07		1.62					
77	1.06		1.57					
78	1.05		1.53					
79	1.04		1.48					
80	1.03		1.44					
81	1.02		1.4					
82	1.01		1.36					
83	1		1.32					
84	0.99		1.29					
85	0.98		1.25					
86	0.97		1.22					
87	0.96		1.18					
88	0.95		1.15					
89	0.94		1.12					

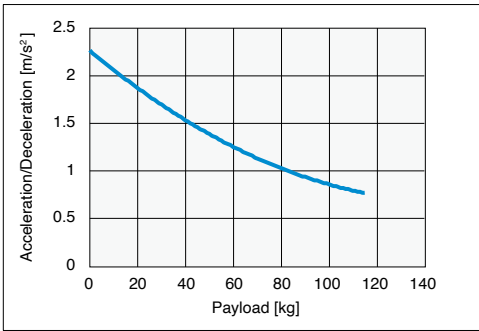
Model	LBAS12-5/ ABAS12H-5		LBAS12-10/ ABAS12H-10		LBAS12-20/ ABAS12H-20		LBAS12-32/ ABAS12H-32	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]		Acceleration/ Deceleration [m/s ²]	
90	0.94		1.09					
91	0.93		1.06					
92	0.92		1.03					
93	0.91		1.01					
94	0.9		0.98					
95	0.9		0.96					
96	0.89							
97	0.88							
98	0.87							
99	0.87							
100	0.86							
101	0.85							
102	0.84							
103	0.84							
104	0.83							
105	0.82							
106	0.82							
107	0.81							
108	0.81							
109	0.8							
110	0.79							
111	0.79							
112	0.78							
113	0.78							
114	0.77							
115	0.77							

Features
 LBAS
 LGXS
 LBAR
 ABAS
 AGXS
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single axis robot positioner EP-01

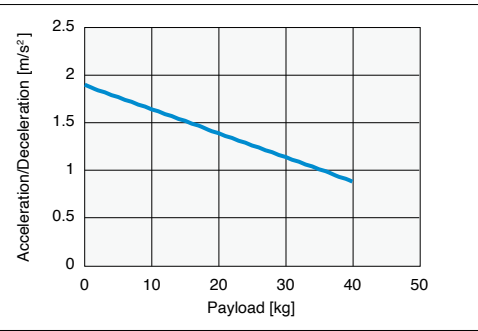
● Payload – Acceleration/Deceleration Graph (Estimate)

LBAS12-5 (400W) / ABAS12H-5

Horizontal/
Wall hanging

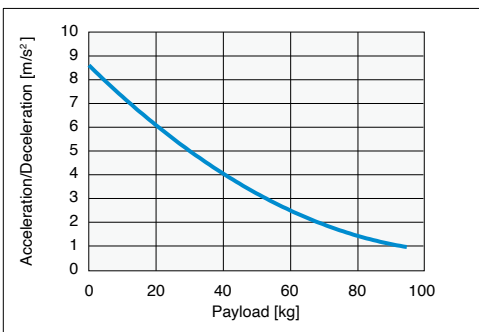


Vertical

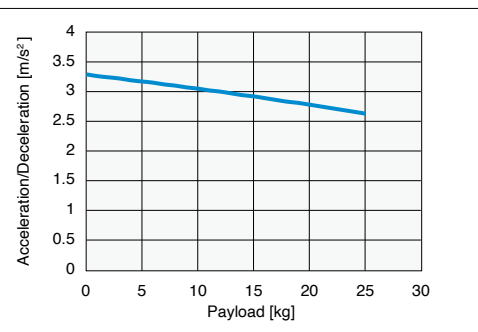


LBAS12-10 (400W) / ABAS12H-10

Horizontal/
Wall hanging

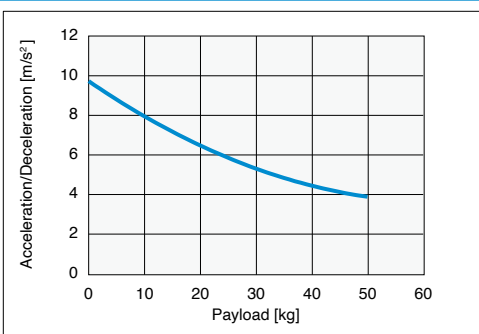


Vertical

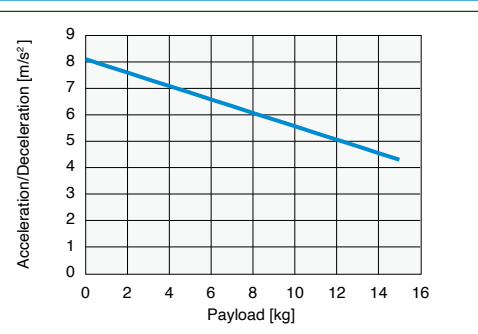


LBAS12-20 (400W) / ABAS12H-20

Horizontal/
Wall hanging

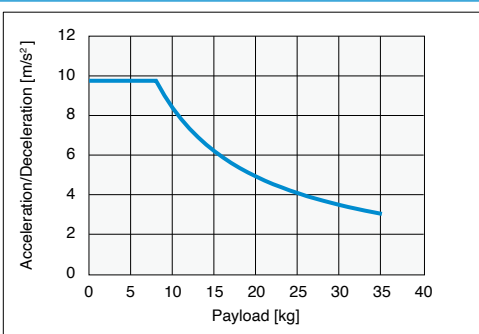


Vertical

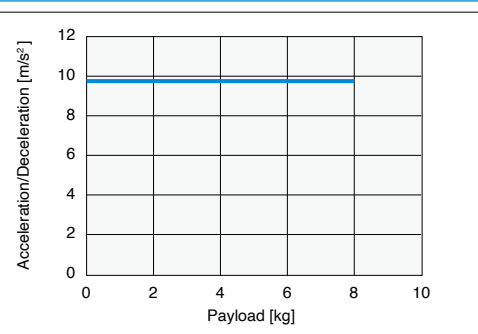


LBAS12-32 (400W) / ABAS12H-32

Horizontal/
Wall hanging



Vertical



Features

Motorless
Slider type

LBAS

Motorless
Slider type

LGXS

Motorless
Rod type

LBAR

With motor
Slider type

ABAS

With motor
Slider type

AGXS

With motor
Rod type

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner
EP-01

LGXS05

Inertia Moment

[kg·m ² ·10 ⁻⁴]	Effective stroke [mm]															
	Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750
LGXS05-5	0.139	0.147	0.155	0.163	0.171	0.179	0.187	0.195	0.203	0.211	0.219	0.227	0.235	0.243	0.251	0.259
LGXS05-10	0.146	0.154	0.162	0.170	0.178	0.186	0.194	0.202	0.210	0.218	0.226	0.234	0.242	0.250	0.258	0.266
LGXS05-20	0.177	0.185	0.193	0.201	0.209	0.217	0.225	0.233	0.241	0.249	0.257	0.265	0.273	0.281	0.289	0.297

LGXS05 AGXS05

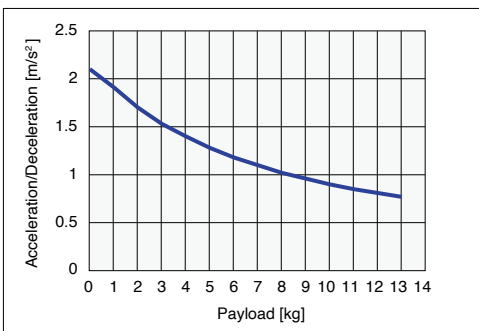
Acceleration/Deceleration

Model	LGXS05-5/AGXS05-5		LGXS05-10/AGXS05-10		LGXS05-20/AGXS05-20	
	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	2.1	2.1	4.2	3.6	5.3	5.3
1	1.91	2.1	3.84	2.4	5.3	5.3
2	1.7	1.64	2.99	1.8	3.98	3.98
3	1.53	1.34	2.45	1.44	3.19	
4	1.4	1.14	2.07	1.2	2.66	
5	1.28	0.99			2.28	
6	1.18	0.87	1.58			
7	1.1	0.78	1.42			
8	1.02	0.7	1.28			
9	0.96					
10	0.9					
11	0.85					
12	0.81					
13	0.77					

● Payload – Acceleration/Deceleration Graph (Estimate)

LGXS05-5 / AGXS05-5

Horizontal/Wall hanging

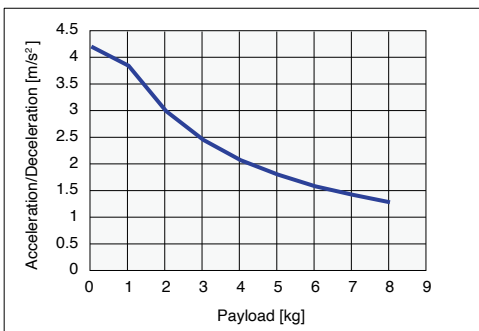


Vertical

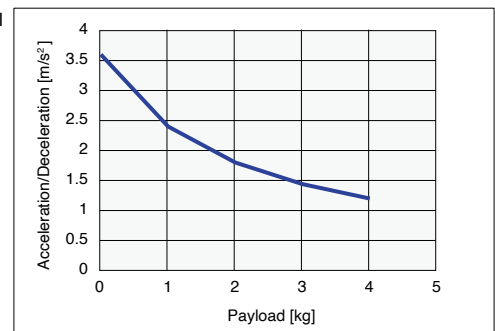


LGXS05-10 / AGXS05-10

Horizontal/Wall hanging

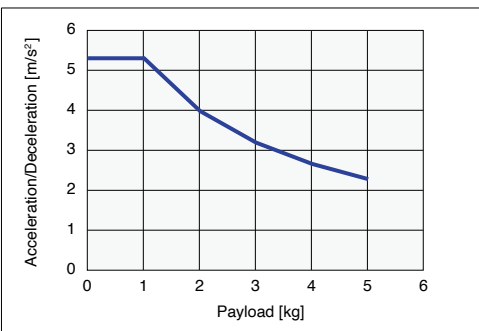


Vertical

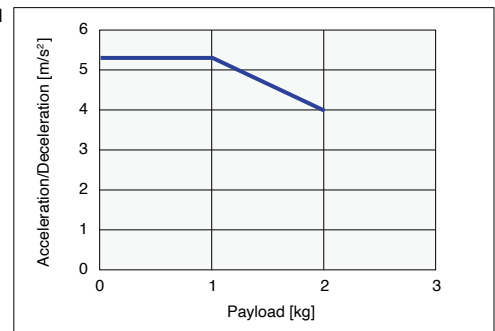


LGXS05-20 / AGXS05-20

Horizontal/Wall hanging



Vertical



Features

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Basic model

Advanced model

Option

Single axis positioner EP01

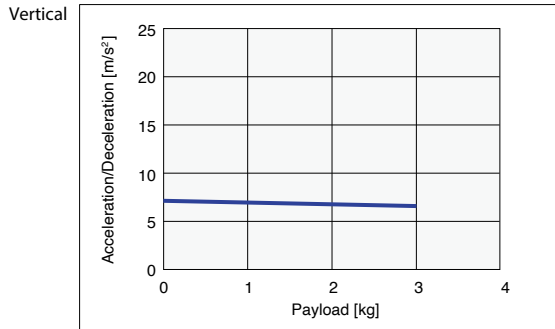
LGXS05 **AGXS05-H** High agility mode

Acceleration/Deceleration

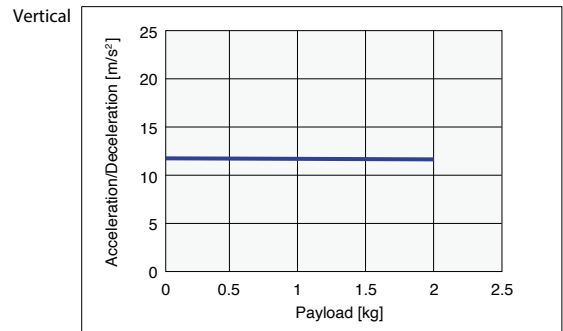
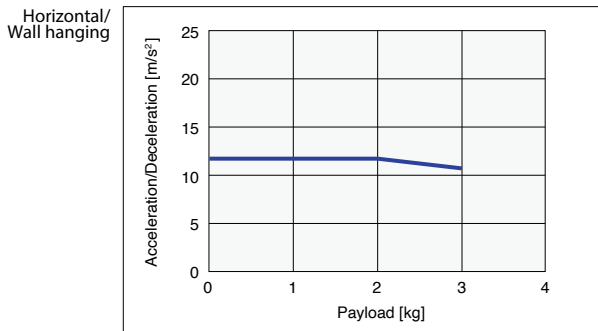
Model	LGXS05-5/ AGXS05-H5		LGXS05-10/ AGXS05-H10		LGXS05-20/ AGXS05-H20	
	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging
Payload [kg]	Acceleration/ Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]
0	7.17	11.77	11.77	11.77	11.77	11.77
1	6.99	11.77	11.77	11.77	11.77	11.77
2	6.82	11.77	11.58	11.77	11.77	11.77
3	6.66	10.91				

● **Payload – Acceleration/Deceleration Graph (Estimate)**

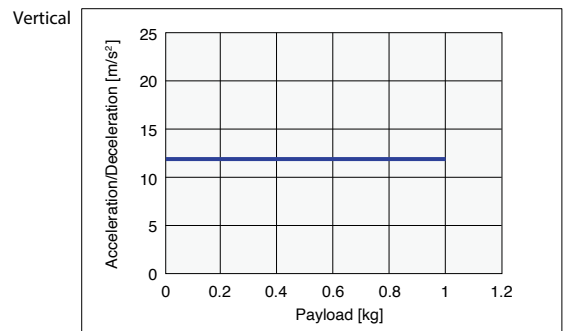
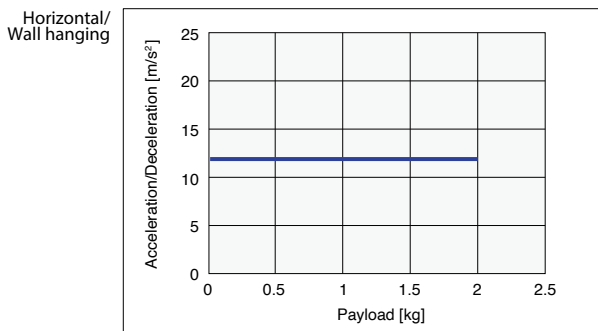
LGXS05-5 / AGXS05-H5



LGXS05-10 / AGXS05-H10



LGXS05-20 / AGXS05-H20



Features

Motorless
Slider type

Basic model

Motorless
Slider type

Advanced model

Motorless
Rod type

Basic model

With motor
Slider type

Basic model

With motor
Slider type

Advanced model

With motor
Rod type

Basic model

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner

EP-01

LGXS05L

Inertia Moment

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

LGXS05L AGXS05L

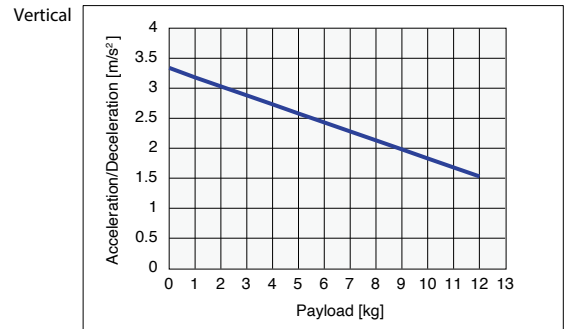
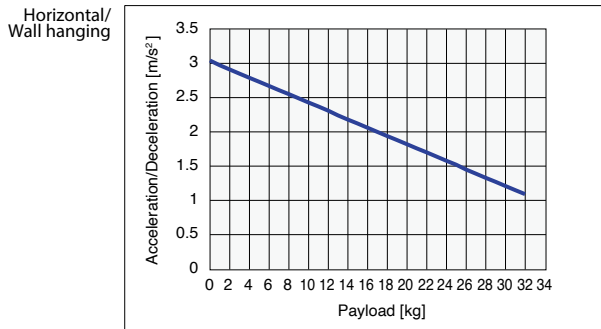
Acceleration/Deceleration

Model	LGXS05L-5/ AGXS05L-5		LGXS05L-10/ AGXS05L-10		LGXS05L-20/ AGXS05L-20	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	3.04	3.34	4.26	4.86	5.07	5.07
1	2.97	3.18	4.08	4.56	4.86	4.86
2	2.91	3.03	3.9	4.3	4.66	4.66
3	2.85	2.88	3.74	4.06	4.46	4.46
4	2.79	2.73	3.58	3.85	4.25	
5	2.73	2.58	3.42	3.66	4.05	
6	2.67	2.43	3.28	3.49	3.85	
7	2.61	2.28	3.13		3.65	
8	2.55	2.13	3		3.44	
9	2.49	1.98	2.87		3.24	
10	2.43	1.83	2.74		3.04	
11	2.37	1.68	2.62		2.83	
12	2.31	1.53	2.51		2.63	
13	2.24		2.41			
14	2.18		2.3			
15	2.12		2.21			
16	2.06		2.12			
17	2		2.04			

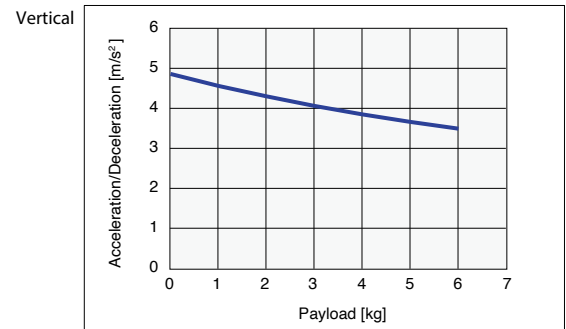
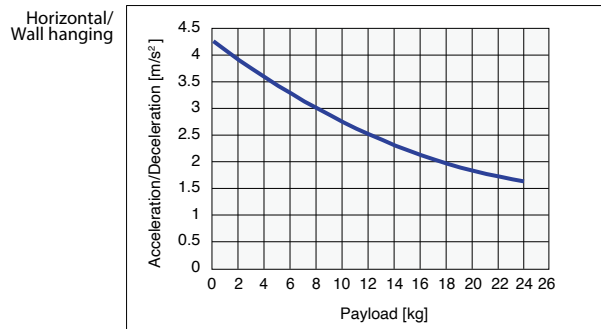
Model	LGXS05L-5/ AGXS05L-5		LGXS05L-10/ AGXS05L-10		LGXS05L-20/ AGXS05L-20	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
18	1.94			1.96		
19	1.88			1.89		
20	1.82			1.83		
21	1.77			1.77		
22	1.7			1.72		
23	1.64			1.67		
24	1.58			1.63		
25	1.52					
26	1.45					
27	1.39					
28	1.33					
29	1.27					
30	1.21					
31	1.15					
32	1.09					

● Payload – Acceleration/Deceleration Graph (Estimate)

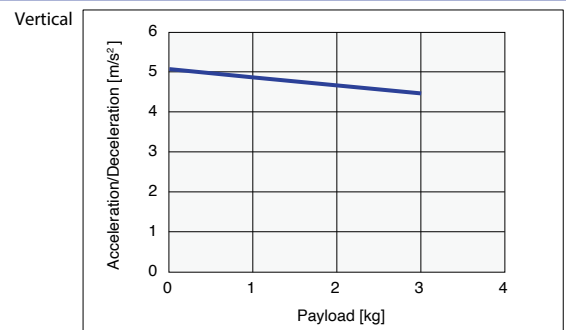
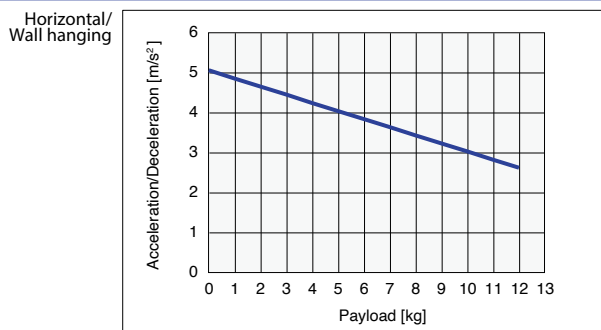
LGXS05L-5 / AGXS05L-5



LGXS05L-10 / AGXS05L-10



LGXS05L-20 / AGXS05L-20



Features
 Basic model
 Advanced model
 Basic model
 Basic model
 Advanced model
 Basic model
 Basic model
 Advanced model
 Basic model
 Basic model
 Advanced model
 Basic model
 Advanced model
 Inertia Moment
 Option
 Single axis positioner
 Ep01

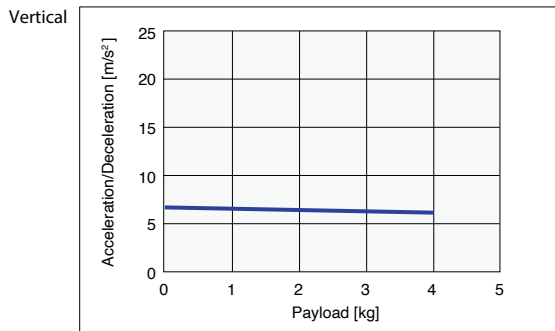
LGXS05L AGXS05L-H High agility mode

Acceleration/Deceleration

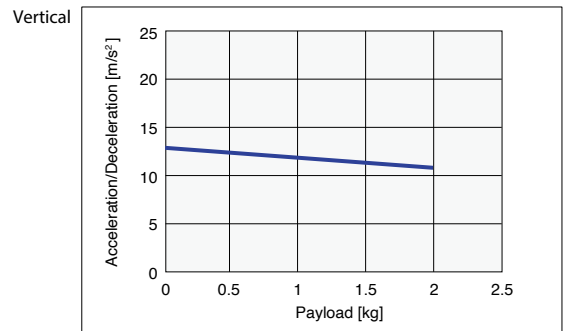
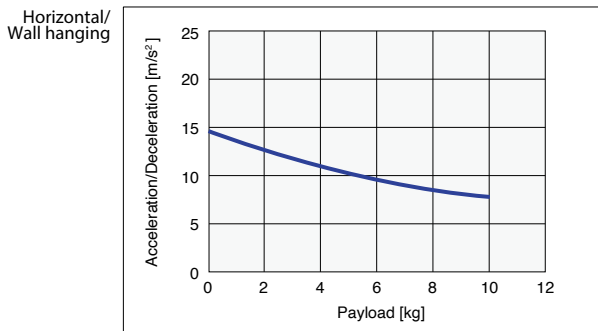
Model	LGXS05L-5/ AGXS05L-H5	LGXS05L-10/ AGXS05L-H10		LGXS05L-20/ AGXS05L-H20	
	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/ Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	6.65	14.72	12.68	14.72	14.72
1	6.50	13.50	11.65	14.72	14.72
2	6.35	12.46	10.78	14.72	
3	6.22	11.58		12.93	
4	6.08	10.81		11.16	
5		10.13		9.81	
6		9.54			
7		9.01			
8		8.54			
9		8.11			
10		7.73			

● Payload – Acceleration/Deceleration Graph (Estimate)

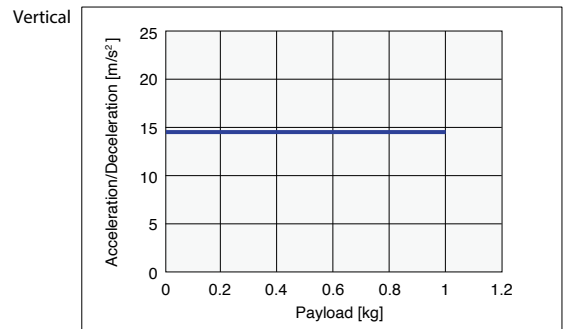
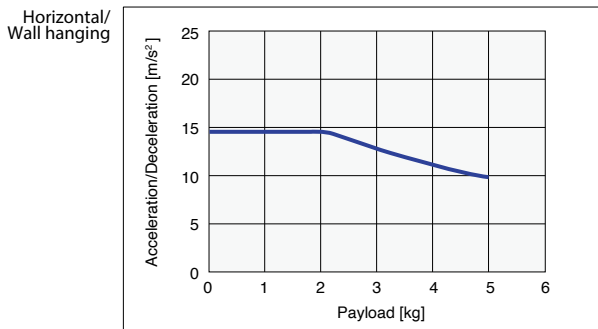
LGXS05L-5 / AGXS05L-H5



LGXS05L-10 / AGXS05L-H10



LGXS05L-20 / AGXS05L-H20



LGXS07

Inertia Moment

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

LGXS07 AGXS07

Acceleration/Deceleration

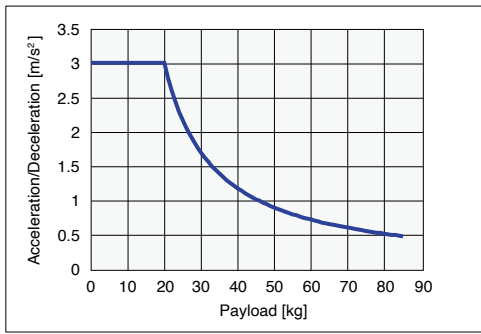
Model	LGXS07-5/ AGXS07-5		LGXS07-10/ AGXS07-10		LGXS07-20/ AGXS07-20		LGXS07-30/ AGXS07-30	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	3.04	2.53	6.08	5.57	7.09	6.08	6.99	6.99
1	3.04	2.47	5.68	5.29	6.74	5.57	6.64	6.64
2	3.04	2.42	5.33	5.02	6.4	5.15	6.31	6.31
3	3.04	2.37	5.02	4.75	6.07	4.78	5.98	
4	3.04	2.32	4.75	4.5	5.75	4.47	5.67	
5	3.04	2.27	4.5	4.24	5.44		5.36	
6	3.04	2.22	4.28	3.99	5.14		5.06	
7	3.04	2.17	4.08	3.75	4.85		4.78	
8	3.04	2.12	3.89	3.52	4.57		4.5	
9	3.04	2.07	3.73		4.3		4.24	
10	3.04	2.02	3.57		4.04		3.98	
11	3.04	1.97	3.43		3.79			
12	3.04	1.92	3.3		3.55			
13	3.04	1.87	3.18		3.32			
14	3.04	1.82	3.07		3.09			
15	3.04	1.77	2.96		2.88			
16	3.04	1.72	2.86		2.68			
17	3.04		2.77		2.49			
18	3.04		2.69		2.31			
19	3.04		2.6		2.14			
20	3.04		2.53		1.98			
21	2.82		2.46		1.83			
22	2.64		2.39		1.69			
23	2.48		2.32		1.56			
24	2.33		2.26		1.44			
25	2.21		2.21		1.32			
26	2.09		2.15					
27	1.99		2.1					
28	1.9		2.05					
29	1.81		2					
30	1.73		1.96					
31	1.66		1.91					
32	1.6		1.87					
33	1.53		1.83					
34	1.48		1.79					
35	1.43		1.76					
36	1.38		1.72					
37	1.33		1.69					
38	1.29		1.66					
39	1.25		1.63					
40	1.21		1.6					
41	1.18		1.57					
42	1.14		1.54					
43	1.11		1.51					
44	1.08		1.49					
45	1.05		1.46					
46	1.03							
47	1							
48	0.98							
49	0.95							
50	0.93							
51	0.91							
52	0.89							
53	0.87							
54	0.85							
55	0.83							
56	0.82							
57	0.8							
58	0.78							
59	0.77							
60	0.76							
61	0.74							
62	0.73							
63	0.71							
64	0.7							
65	0.69							
66	0.68							
67	0.67							
68	0.66							
69	0.65							
70	0.64							
71	0.63							
72	0.62							
73	0.61							
74	0.6							
75	0.59							

Features
 LTBAS
 LGXS
 LBAR
 ABAS
 AGXS
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single axis robot positioner EP01

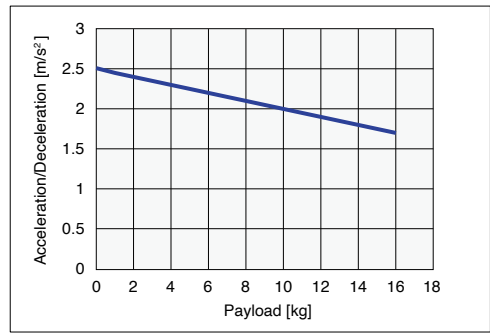
● Payload – Acceleration/Deceleration Graph (Estimate)

LGXS07-5 / AGXS07-5

Horizontal/
Wall hanging

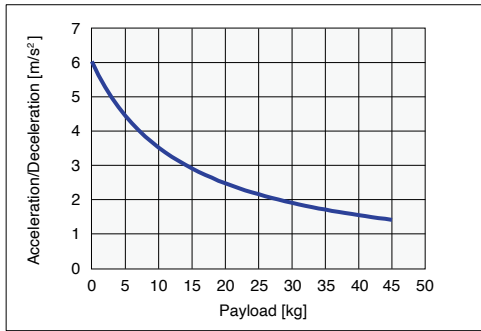


Vertical

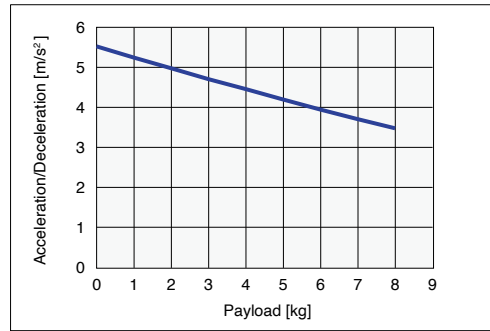


LGXS07-10 / AGXS07-10

Horizontal/
Wall hanging



Vertical

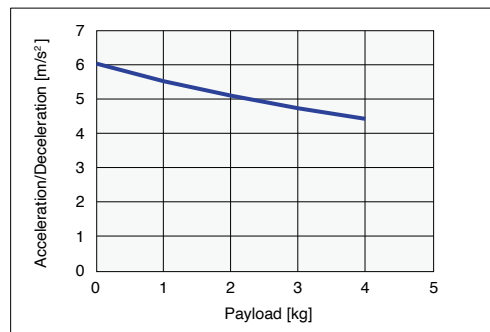


LGXS07-20 / AGXS07-20

Horizontal/
Wall hanging

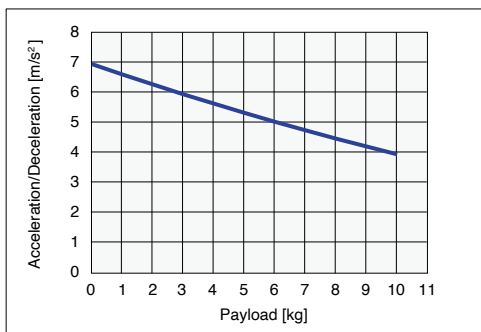


Vertical

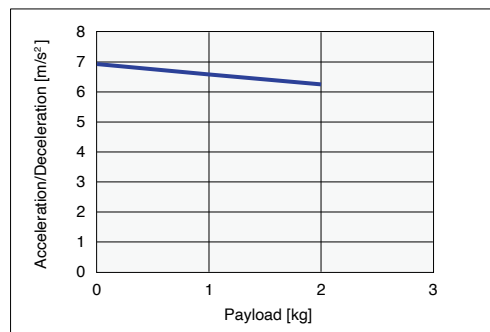


LGXS07-30 / AGXS07-30

Horizontal/
Wall hanging



Vertical



Features

Motorless
Slider type
Basic model

LBAS

Motorless
Slider type
Advanced model

LGXS

Motorless
Rod type
Basic model

LBAR

With motor
Slider type
Basic model

ABAS

With motor
Slider type
Advanced model

AGXS

With motor
Rod type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner

EP-01

LGXS07 **AGXS07-H** High agility mode

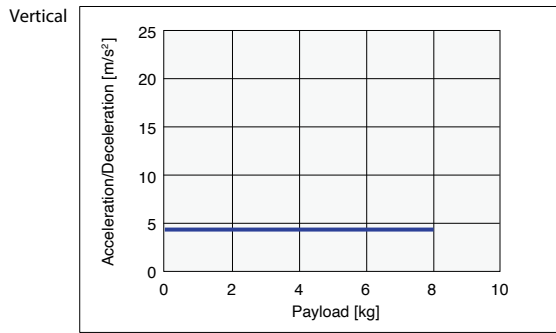
Acceleration/Deceleration

Model	LGXS07-5/ AGXS07-H5		LGXS07-10/ AGXS07-H10		LGXS07-20/ AGXS07-H20		LGXS07-30/ AGXS07-H30	
	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging
Payload [kg]	Acceleration/ Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		
0	4.32	9.64	8.44	14.72	14.72	14.72	14.72	
1	4.29	9.36	8.20	14.72	13.96	14.72	14.72	
2	4.26	9.10	7.97	14.47	12.71	14.72		
3	4.23	8.85	7.75	13.26		14.03		
4	4.20	8.61	7.54	12.23		12.39		
5	4.17	8.39		11.36		11.09		
6	4.14	8.17		10.59				
7	4.11	7.97		9.93				
8	4.08	7.78		9.34				
9		7.59		8.82				
10		7.42		8.36				

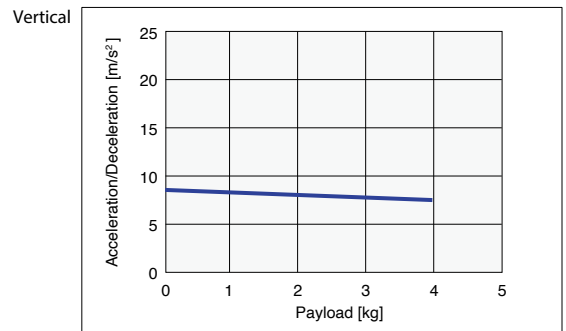
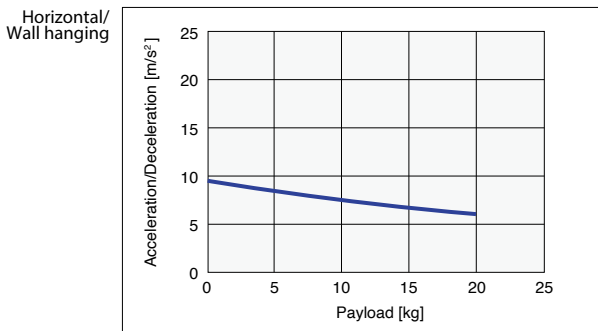
Model	LGXS07-5/ AGXS07-H5		LGXS07-10/ AGXS07-H10		LGXS07-20/ AGXS07-H20		LGXS07-30/ AGXS07-H30	
	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging
Payload [kg]	Acceleration/ Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		
11		7.25						
12		7.09						
13		6.94						
14		6.79						
15		6.65						
16		6.52						
17		6.39						
18		6.26						
19		6.14						
20		6.03						

● **Payload – Acceleration/Deceleration Graph (Estimate)**

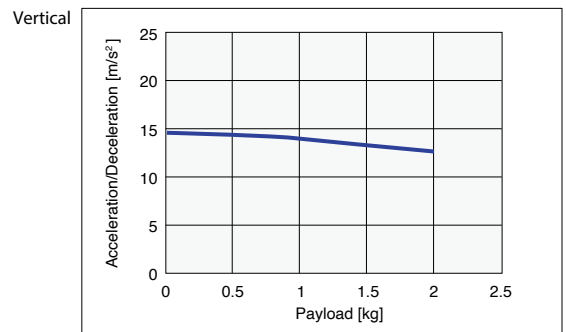
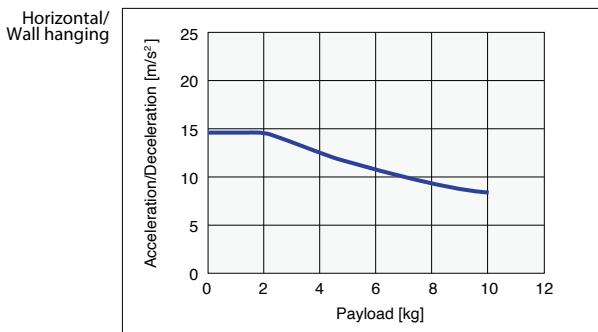
LGXS07-5 / AGXS07-H5



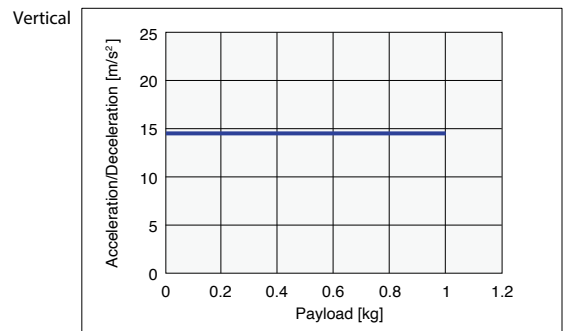
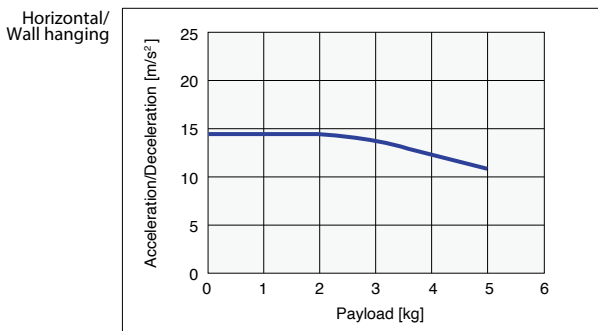
LGXS07-10 / AGXS07-H10



LGXS07-20 / AGXS07-H20



LGXS07-30 / AGXS07-H30



Features

Motorless
Slider type
Basic model

LBAS

Motorless
Slider type
Advanced model

LGXS

Motorless
Rod type
Basic model

LBAR

With motor
Slider type
Basic model

ABAS

With motor
Slider type
Advanced model

AGXS

With motor
Rod type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis
positioner
EP-01

LGXS10

Inertia Moment

[kg·m ² ·10 ⁻⁴]	Effective stroke [mm]																								
	Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
LGXS10-5	-	0.686	0.706	0.726	0.745	0.765	0.784	0.804	0.823	0.843	0.862	0.882	0.901	0.921	0.940	0.960	0.979	0.999	1.018	1.038	1.057	1.077	1.096	1.116	1.135
LGXS10-10	-	0.707	0.726	0.746	0.765	0.785	0.804	0.824	0.843	0.863	0.882	0.902	0.921	0.941	0.960	0.980	0.999	1.019	1.038	1.058	1.077	1.097	1.116	1.136	1.155
LGXS10-20	-	0.789	0.809	0.828	0.848	0.867	0.887	0.906	0.926	0.945	0.965	0.984	1.004	1.023	1.043	1.062	1.082	1.101	1.121	1.140	1.160	1.179	1.199	1.218	1.238
LGXS10-30	-	0.944	0.963	0.983	1.002	1.022	1.041	1.061	1.080	1.100	1.119	1.139	1.158	1.178	1.197	1.217	1.236	1.256	1.275	1.295	1.314	1.334	1.353	1.373	1.392

LGXS10 AGXS10

Acceleration/Deceleration

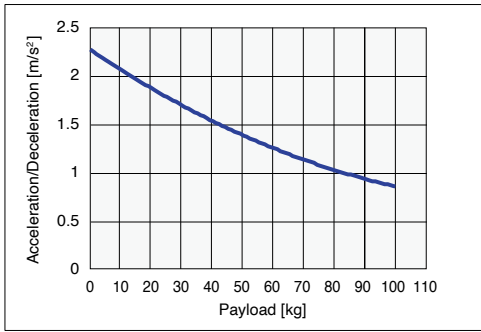
Model	LGXS10-5/AGXS10-5		LGXS10-10/AGXS10-10		LGXS10-20/AGXS10-20		LGXS10-30/AGXS10-30	
	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	2.27	1.9	6.89	3.29	6.59	8.11	9.75	9.75
1	2.25	1.87	6.78	3.27	6.54	7.86	9.75	9.75
2	2.23	1.85	6.67	3.24	6.49	7.6	9.75	9.75
3	2.21	1.82	6.56	3.22	6.44	7.35	9.75	9.75
4	2.19	1.8	6.46	3.2	6.39	7.09	9.75	9.75
5	2.17	1.77	6.35	3.17	6.34	6.84	9.75	
6	2.15	1.75	6.25	3.15	6.29	6.59	9.75	
7	2.13	1.72	6.14	3.13	6.24	6.33	9.75	
8	2.11	1.7	6.04	3.1	6.18	6.08	9.75	
9	2.09	1.67	5.94	3.08	6.13		9.01	
10	2.07	1.65	5.84	3.05	6.08		8.38	
11	2.05	1.62	5.74	3.03	6.03		7.83	
12	2.03	1.6	5.64	3	5.98		7.34	
13	2.01	1.57	5.54	2.97	5.93		6.91	
14	1.99	1.55	5.44	2.95	5.88		6.53	
15	1.97	1.52	5.34	2.92	5.83		6.19	
16	1.95	1.5	5.25	2.89	5.78		5.89	
17	1.93	1.47	5.16	2.87	5.73		5.61	
18	1.91	1.45	5.06	2.84	5.68		5.36	
19	1.9	1.42	4.97	2.81	5.63		5.13	
20	1.88	1.39	4.88	2.78	5.58		4.91	
21	1.86	1.37	4.79		5.53		4.72	
22	1.84	1.34	4.7		5.48		4.54	
23	1.82	1.32	4.61		5.42		4.37	
24	1.8	1.29	4.52		5.37		4.22	
25	1.79	1.27	4.44		5.32		4.07	
26	1.77	1.24	4.35		5.27			
27	1.75	1.22	4.27		5.22			
28	1.74	1.19	4.18		5.17			
29	1.72	1.17	4.1		5.12			
30	1.7	1.14	4.02		5.07			
31	1.68		3.94		5.02			
32	1.67		3.86		4.97			
33	1.65		3.78		4.92			
34	1.63		3.7		4.87			
35	1.62		3.62		4.82			
36	1.6		3.55		4.77			
37	1.59		3.47		4.71			
38	1.57		3.4		4.66			
39	1.55		3.32		4.61			
40	1.54		3.25		4.56			
41	1.52		3.18					
42	1.51		3.11					
43	1.49		3.04					
44	1.48		2.97					
45	1.46		2.91					
46	1.45		2.84					
47	1.43		2.77					
48	1.42		2.71					
49	1.41		2.65					
50	1.39		2.58					
51	1.38		2.52					
52	1.36		2.46					
53	1.35		2.4					
54	1.34		2.34					
55	1.32		2.29					
56	1.31		2.23					
57	1.3		2.17					
58	1.28		2.12					
59	1.27		2.06					
60	1.26		2.01					
61	1.25		1.96					
62	1.23		1.91					
63	1.22		1.86					
64	1.21		1.81					
65	1.2		1.76					
66	1.18		1.72					
67	1.17		1.67					
68	1.16		1.62					
69	1.15		1.58					
70	1.14		1.54					
71	1.13		1.49					
72	1.12		1.45					
73	1.11		1.41					
74	1.09		1.37					
75	1.08		1.33					

Model	LGXS10-5/AGXS10-5		LGXS10-10/AGXS10-10		LGXS10-20/AGXS10-20		LGXS10-30/AGXS10-30	
	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
76	1.07		1.3					
77	1.06		1.26					
78	1.05		1.23					
79	1.04		1.19					
80	1.03		1.16					
81	1.02							
82	1.01							
83	1							
84	0.99							
85	0.99							
86	0.98							
87	0.97							
88	0.96							
89	0.95							
90	0.94							
91	0.93							
92	0.92							
93	0.92							
94	0.91							
95	0.9							
96	0.89							
97	0.89							
98	0.88							
99	0.87							
100	0.86							

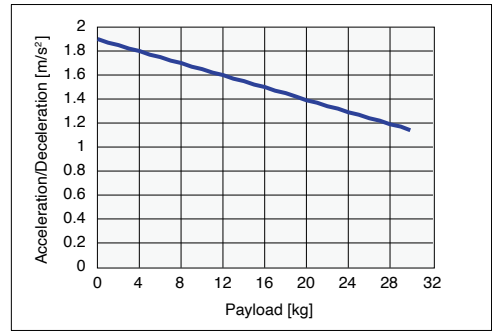
● Payload – Acceleration/Deceleration Graph (Estimate)

LGXS10-5 / AGXS10-5

Horizontal/
Wall hanging

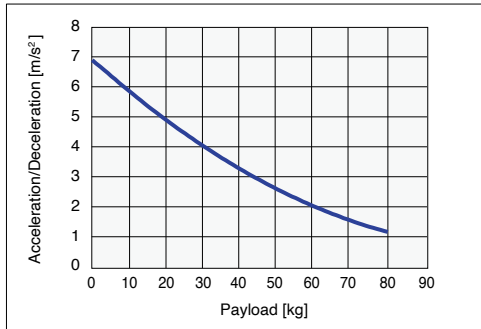


Vertical



LGXS10-10 / AGXS10-10

Horizontal/
Wall hanging

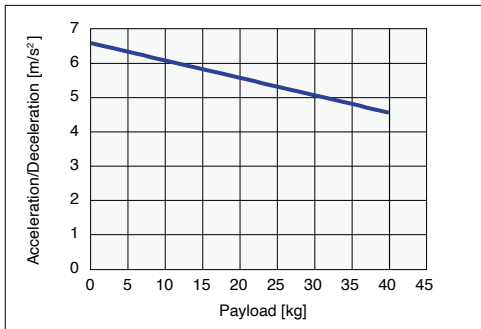


Vertical

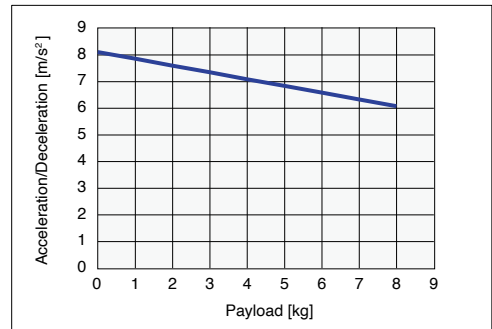


LGXS10-20 / AGXS10-20

Horizontal/
Wall hanging



Vertical

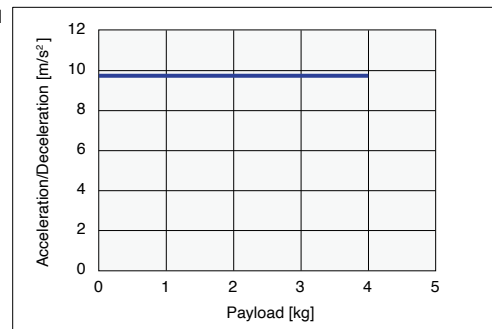


LGXS10-30 / AGXS10-30

Horizontal/
Wall hanging



Vertical



Features

Motorless
 Silver type
 Red type
LBAS
 Advanced model

Motorless
 Silver type
 Red type
LGXS
 Basic model

With motor
 Silver type
 Red type
LBAR
 Basic model

With motor
 Silver type
 Red type
ABAS
 Advanced model

With motor
 Silver type
 Red type
AGXS
 Basic model

With motor
 Silver type
 Red type
ABAR
 Basic model

Acceleration/Deceleration
 Inertia Moment

Option

Single
 axis robot
 positioner
EP-01

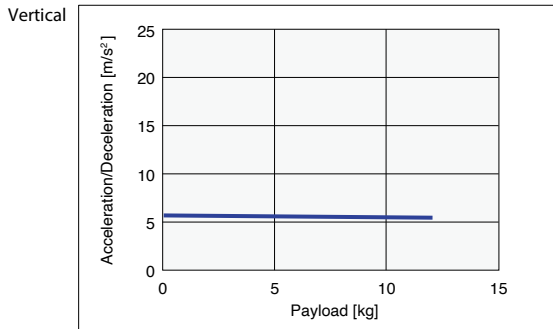
LGXS10 **AGXS10-H** High agility mode

Acceleration/Deceleration

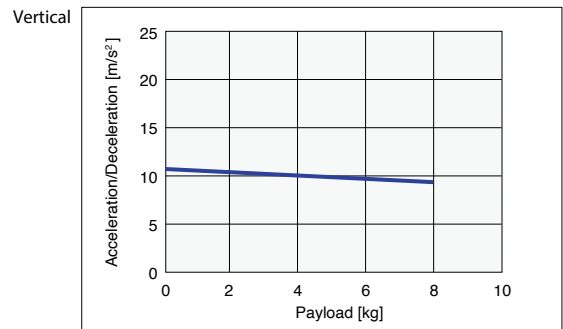
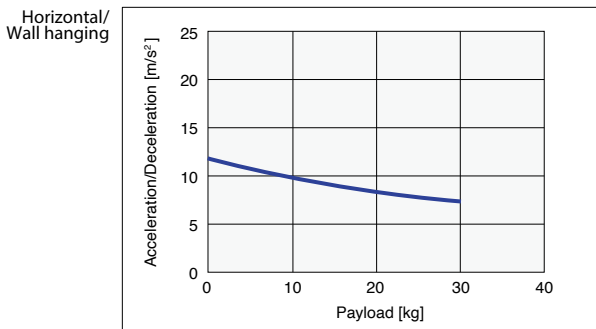
Model	LGXS10-5/ AGXS10-H5		LGXS10-10/ AGXS10-H10		LGXS10-20/ AGXS10-H20		LGXS10-30/ AGXS10-H30	
	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]
0	5.53	11.71	10.84	19.62	19.62	19.62	19.62	19.62
1	5.51	11.47	10.63	19.62	18.69	19.62	19.62	19.62
2	5.48	11.25	10.44	18.66	17.55	19.62	19.62	19.62
3	5.46	11.03	10.26	17.52	16.54	19.55		
4	5.43	10.82	10.08	16.52	15.65	17.74		
5	5.41	10.62	9.90	15.62		16.24		
6	5.38	10.43	9.74	14.81		14.96		
7	5.36	10.24	9.57	14.09		13.88		
8	5.33	10.06	9.42	13.43		12.94		
9	5.31	9.89		12.83		12.12		
10	5.28	9.72		12.28		11.40		
11	5.26	9.56		11.78				
12	5.23	9.40		11.32				
13		9.25		10.89				
14		9.10		10.49				
15		8.96		10.12				
16		8.82		9.78				
17		8.69		9.45				
18		8.56		9.15				
19		8.43		8.87				
20		8.31		8.60				
21		8.19						
22		8.07						
23		7.96						
24		7.85						
25		7.75						
26		7.64						
27		7.54						
28		7.44						
29		7.35						
30		7.26						

● Payload – Acceleration/Deceleration Graph (Estimate)

LGXS10-5 / AGXS10-H5



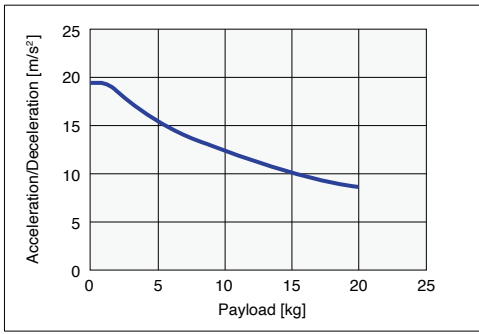
LGXS10-10 / AGXS10-H10



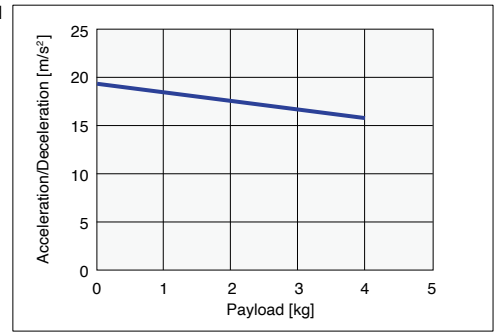
● Payload – Acceleration/Deceleration Graph (Estimate)

LGXS10-20 / AGXS10-H20

Horizontal/
Wall hanging

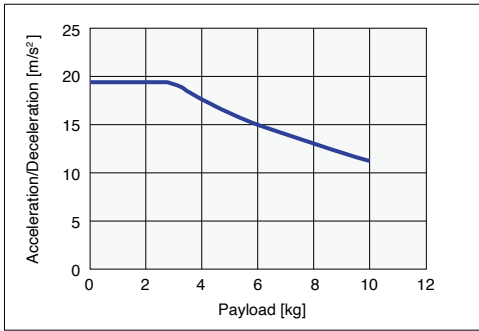


Vertical

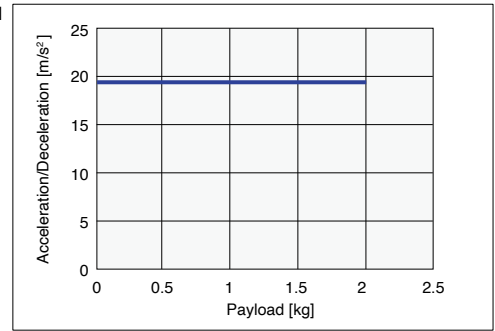


LGXS10-30 / AGXS10-H30

Horizontal/
Wall hanging



Vertical



Features

Motorless
Slider type
Basic model

LBAS

Motorless
Slider type
Advanced model

LGXS

Motorless
Rod type
Basic model

LBAR

With motor
Slider type
Basic model

ABAS

With motor
Slider type
Advanced model

AGXS

With motor
Rod type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner
EP-01

Acceleration/Deceleration and Inertia Moment (Advanced model)

LGXS12

Inertia Moment

Model	Effective stroke [mm]																								
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
LGXS12-5	-	0.702	0.721	0.741	0.761	0.780	0.800	0.819	0.839	0.858	0.878	0.897	0.917	0.936	0.956	0.975	0.995	1.014	1.034	1.053	1.073	1.092	1.112	1.131	1.151
LGXS12-10	-	0.733	0.753	0.772	0.792	0.811	0.831	0.850	0.870	0.889	0.909	0.928	0.948	0.967	0.987	1.006	1.026	1.045	1.065	1.085	1.104	1.124	1.143	1.163	1.182
LGXS12-20	-	0.862	0.881	0.901	0.920	0.940	0.959	0.979	0.998	1.018	1.037	1.057	1.076	1.096	1.115	1.135	1.154	1.174	1.193	1.213	1.232	1.252	1.271	1.291	1.310
LGXS12-30	-	1.092	1.111	1.131	1.150	1.170	1.189	1.209	1.228	1.248	1.267	1.287	1.306	1.326	1.345	1.365	1.384	1.404	1.423	1.443	1.462	1.482	1.501	1.521	1.540

LGXS12 AGXS12

Acceleration/Deceleration

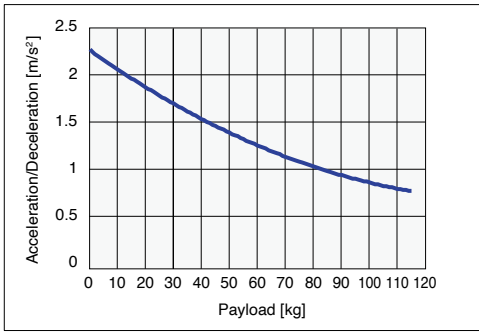
Model	LGXS12-5/AGXS12-5		LGXS12-10/AGXS12-10		LGXS12-20/AGXS12-20		LGXS12-30/AGXS12-30	
	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	2.27	1.9	8.61	3.29	9.73	8.11	9.75	9.75
1	2.24	1.87	8.47	3.26	9.53	7.85	9.75	9.75
2	2.22	1.84	8.33	3.24	9.35	7.6	9.75	9.75
3	2.2	1.82	8.2	3.22	9.16	7.34	9.75	9.75
4	2.18	1.79	8.06	3.19	8.98	7.09	9.75	9.75
5	2.16	1.77	7.93	3.17	8.8	6.84	9.75	9.75
6	2.14	1.74	7.8	3.15	8.62	6.58	9.75	9.75
7	2.12	1.72	7.67	3.12	8.45	6.33	9.75	9.75
8	2.1	1.69	7.54	3.1	8.28	6.07	9.75	9.75
9	2.08	1.67	7.41	3.07	8.11	5.82	9.01	
10	2.06	1.64	7.29	3.05	7.95	5.57	8.37	
11	2.04	1.62	7.16	3.02	7.79	5.31	7.82	
12	2.02	1.59	7.04	3	7.63	5.06	7.34	
13	2	1.57	6.92	2.97	7.48	4.81	6.91	
14	1.98	1.54	6.79	2.94	7.33	4.55	6.53	
15	1.96	1.52	6.67	2.92	7.18	4.3	6.19	
16	1.95	1.49	6.56	2.89	7.03		5.88	
17	1.93	1.47	6.44	2.86	6.89		5.6	
18	1.91	1.44	6.32	2.83	6.75		5.35	
19	1.89	1.41	6.21	2.81	6.61		5.12	
20	1.87	1.39	6.09	2.78	6.48		4.91	
21	1.85	1.36	5.98	2.75	6.35		4.71	
22	1.84	1.34	5.87	2.72	6.22		4.53	
23	1.82	1.31	5.76	2.69	6.1		4.37	
24	1.8	1.29	5.65	2.66	5.98		4.21	
25	1.78	1.26	5.54	2.63	5.86		4.07	
26	1.76	1.24	5.43		5.74		3.93	
27	1.75	1.21	5.32		5.63		3.81	
28	1.73	1.19	5.22		5.52		3.69	
29	1.71	1.16	5.12		5.41		3.58	
30	1.7	1.14	5.01		5.31		3.47	
31	1.68	1.11	4.91		5.21		3.37	
32	1.66	1.09	4.81		5.11		3.28	
33	1.65	1.06	4.72		5.02		3.19	
34	1.63	1.04	4.62		4.93		3.11	
35	1.61	1.01	4.52		4.84		3.03	
36	1.6	0.99	4.43		4.76			
37	1.58	0.96	4.33		4.67			
38	1.57	0.93	4.24		4.6			
39	1.55	0.91	4.15		4.52			
40	1.53	0.88	4.06		4.45			
41	1.52	0.86	3.97		4.38			
42	1.5	0.83	3.88		4.31			
43	1.49	0.81	3.8		4.25			
44	1.47	0.78	3.71		4.19			
45	1.46	0.76	3.63		4.13			
46	1.44		3.54		4.07			
47	1.43		3.46		4.02			
48	1.42		3.38		3.97			
49	1.4		3.3		3.93			
50	1.39		3.22		3.89			
51	1.37		3.15					
52	1.36		3.07					
53	1.35		3					
54	1.33		2.92					
55	1.32		2.85					
56	1.3		2.78					
57	1.29		2.71					
58	1.28		2.64					
59	1.27		2.58					
60	1.25		2.51					
61	1.24		2.44					
62	1.23		2.38					
63	1.22		2.32					
64	1.2		2.26					
65	1.19		2.2					
66	1.18		2.14					
67	1.17		2.08					
68	1.16		2.02					
69	1.14		1.97					
70	1.13		1.92					
71	1.12		1.86					
72	1.11		1.81					
73	1.1		1.76					
74	1.09		1.71					
75	1.08		1.66					
76	1.07		1.62					

Model	LGXS12-5/AGXS12-5		LGXS12-10/AGXS12-10		LGXS12-20/AGXS12-20		LGXS12-30/AGXS12-30	
	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical	Horizontal/Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
77	1.06							1.57
78	1.05							1.53
79	1.04							1.48
80	1.03							1.44
81	1.02							1.4
82	1.01							1.36
83	1							1.32
84	0.99							1.29
85	0.98							1.25
86	0.97							1.22
87	0.96							1.18
88	0.95							1.15
89	0.94							1.12
90	0.94							1.09
91	0.93							1.06
92	0.92							1.03
93	0.91							1.01
94	0.9							0.98
95	0.9							0.96
96	0.89							
97	0.88							
98	0.87							
99	0.87							
100	0.86							
101	0.85							
102	0.84							
103	0.84							
104	0.83							
105	0.82							
106	0.82							
107	0.81							
108	0.81							
109	0.8							
110	0.79							
111	0.79							
112	0.78							
113	0.78							
114	0.77							
115	0.77							

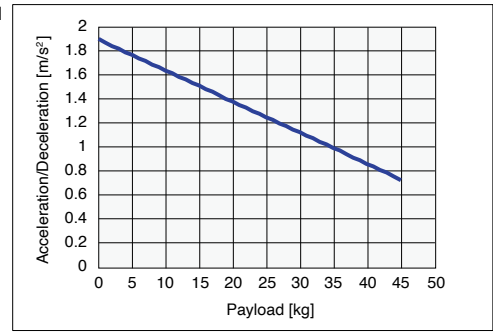
● Payload – Acceleration/Deceleration Graph (Estimate)

LGXS12-5 / AGXS12-5

Horizontal/
Wall hanging

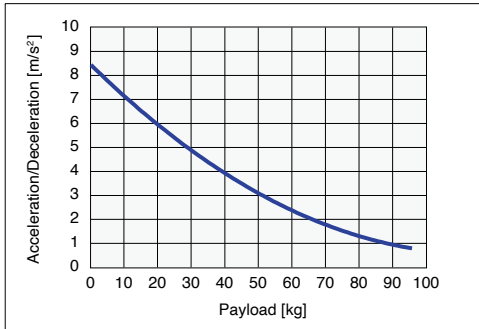


Vertical



LGXS12-10 / AGXS12-10

Horizontal/
Wall hanging

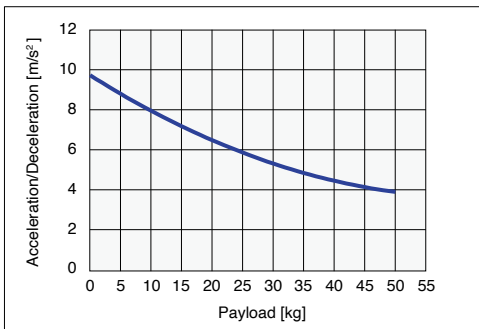


Vertical

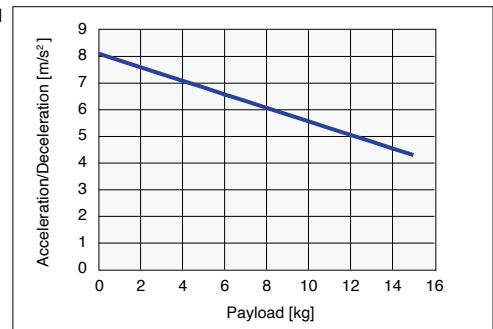


LGXS12-20 / AGXS12-20

Horizontal/
Wall hanging

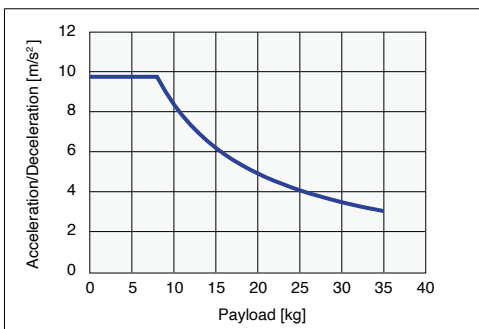


Vertical

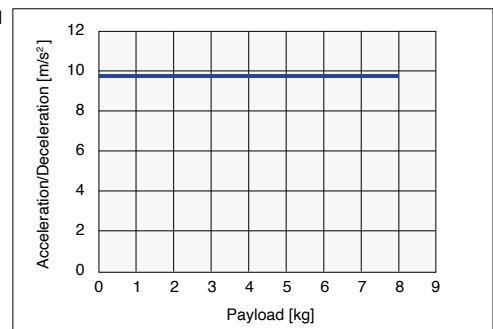


LGXS12-30 / AGXS12-30

Horizontal/
Wall hanging



Vertical



Features

Motorless
 Silver type
 Red type
LBAS

Motorless
 Silver type
 Red type
LGXS

Motorless
 Silver type
 Red type
LBAR

With motor
 Silver type
 Red type
ABAS

With motor
 Silver type
 Red type
AGXS

With motor
 Silver type
 Red type
ABAR

Acceleration/Deceleration
 Inertia Moment

Option

Single
 axis robot
 positioner
EP-01

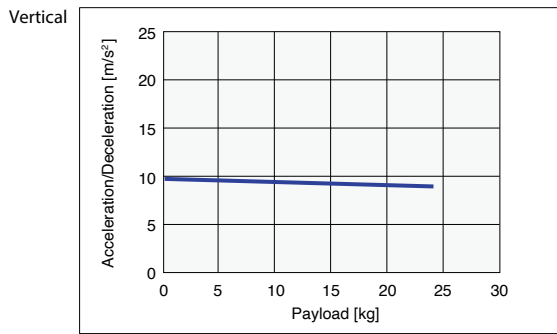
LGXS12 AGXS12-H High agility mode

Acceleration/Deceleration

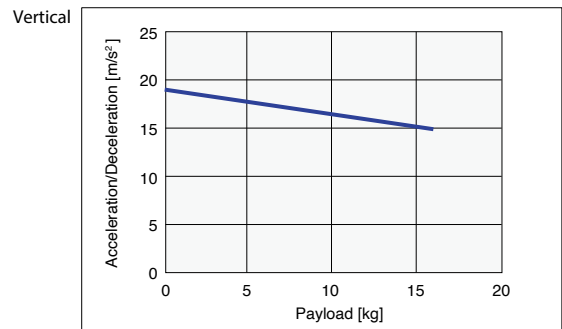
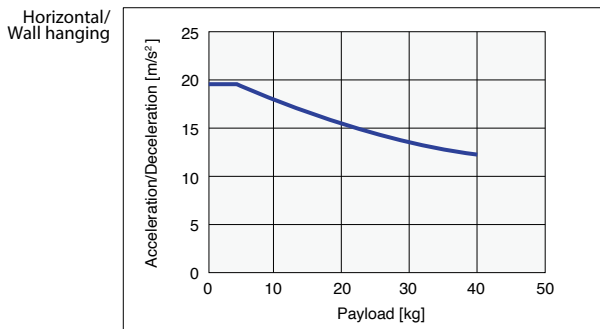
Model	LGXS12-5/ AGXS12-H5		LGXS12-10/ AGXS12-H10		LGXS12-20/ AGXS12-H20		LGXS12-30/ AGXS12-H30	
	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	9.85	19.62	19.21	19.62	19.62	19.62	19.62	19.62
1	9.81	19.62	18.90	19.62	19.62	19.62	19.62	19.62
2	9.77	19.62	18.59	19.62	19.62	19.62	19.62	19.62
3	9.73	19.62	18.29	19.62	19.62	19.62	19.62	19.62
4	9.69	19.62	18.00	19.62	19.62	19.62	19.62	19.62
5	9.65	19.53	17.72	19.62	19.62	19.62	19.62	19.62
6	9.61	19.20	17.45	19.62	19.62	19.62	19.62	19.62
7	9.57	18.89	17.19	19.62	19.62	19.62	19.62	19.62
8	9.53	18.58	16.94	19.62	19.62	19.62	19.62	19.62
9	9.49	18.28	16.69	19.62	19.62	19.62	19.62	19.62
10	9.45	17.99	16.45	19.62	19.62	19.62	19.62	19.62
11	9.41	17.71	16.21	19.62	19.62	19.62	19.62	19.62
12	9.37	17.44	15.99	19.62	19.62	19.62	19.62	19.62
13	9.34	17.18	15.77	19.62	19.62	19.62	19.62	19.62
14	9.30	16.93	15.55	19.62	19.62	19.62	19.62	19.62
15	9.26	16.68	15.34	19.06	19.06	19.06	19.06	19.06
16	9.22	16.44	15.14	18.45	18.45	18.45	18.45	18.45
17	9.19	16.21		17.87	17.87	17.87	17.87	17.87
18	9.15	15.98		17.33	17.33	17.33	17.33	17.33
19	9.11	15.76		16.83	16.83	16.83	16.83	16.83
20	9.08	15.54		16.35	16.35	16.35	16.35	16.35
21	9.04	15.33		15.89	15.89	15.89	15.89	15.89
22	9.01	15.13		15.47	15.47	15.47	15.47	15.47
23	8.97	14.93		15.06	15.06	15.06	15.06	15.06
24	8.94	14.74		14.67	14.67	14.67	14.67	14.67
25		14.55		14.31	14.31	14.31	14.31	14.31
26		14.37		13.96	13.96	13.96	13.96	13.96
27		14.19		13.63	13.63	13.63	13.63	13.63
28		14.02		13.31	13.31	13.31	13.31	13.31
29		13.85		13.01	13.01	13.01	13.01	13.01
30		13.68		12.72	12.72	12.72	12.72	12.72
31		13.52						
32		13.36						
33		13.21						
34		13.06						
35		12.91						
36		12.76						
37		12.62						
38		12.48						
39		12.35						
40		12.22						

● Payload – Acceleration/Deceleration Graph (Estimate)

LGXS12-5 / AGXS12-H5



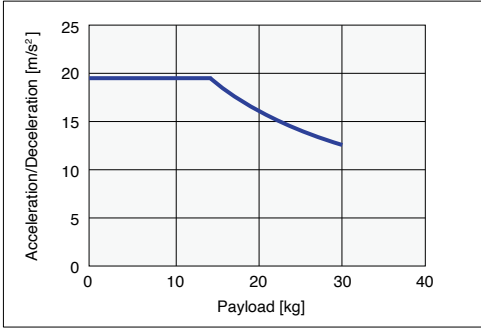
LGXS12-10 / AGXS12-H10



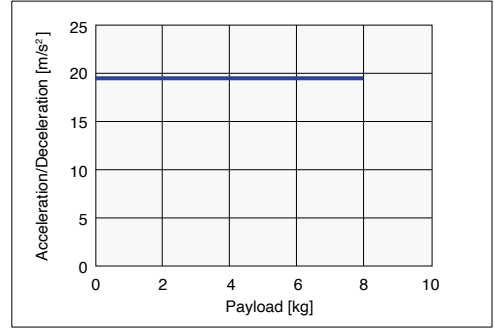
● Payload – Acceleration/Deceleration Graph (Estimate)

LGXS12-20 / AGXS12-H20

Horizontal/
Wall hanging

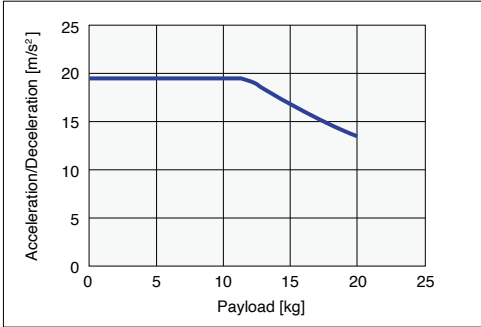


Vertical

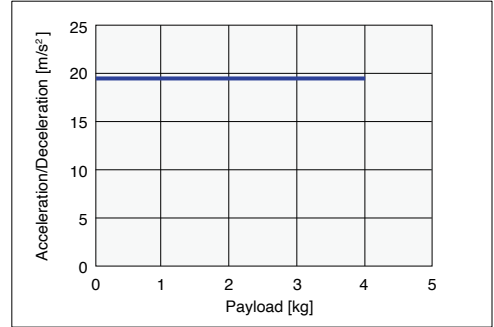


LGXS12-30 / AGXS12-H30

Horizontal/
Wall hanging



Vertical



Features

Motorless
Slider type
Basic model

LBAS

Motorless
Slider type
Advanced model

LGXS

Motorless
Rod type
Basic model

LBAR

With motor
Slider type
Basic model

ABAS

With motor
Slider type
Advanced model

AGXS

With motor
Rod type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner
EP-01

Acceleration/Deceleration and Inertia Moment (Advanced model)

LGXS16

Inertia Moment

Model	Effective stroke [mm]																												
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450
LGXS16-10	-	2.433	2.495	2.557	2.618	2.680	2.742	2.803	2.865	2.927	2.988	3.050	3.112	3.173	3.235	3.297	3.358	3.420	3.482	3.543	3.605	3.667	3.728	3.790	3.851	3.913	3.975	4.036	4.098
LGXS16-20	-	2.653	2.715	2.777	2.838	2.900	2.961	3.023	3.085	3.146	3.208	3.270	3.331	3.393	3.455	3.516	3.578	3.640	3.701	3.763	3.825	3.886	3.948	4.010	4.071	4.133	4.195	4.256	4.318
LGXS16-40	-	3.624	3.685	3.747	3.809	3.870	3.932	3.994	4.055	4.117	4.179	4.240	4.302	4.364	4.425	4.487	4.548	4.610	4.672	4.733	4.795	4.857	4.918	4.980	5.042	5.103	5.165	5.227	5.288

LGXS16 AGXS16

Acceleration/Deceleration

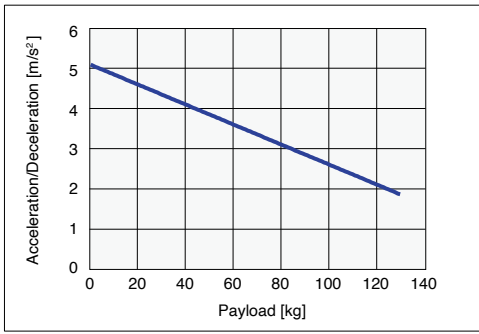
Model	LGXS16-10/ AGXS16-10		LGXS16-20/ AGXS16-20		LGXS16-40/ AGXS16-40	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	5.07	3.8	7.6	7.99	9.6	9.6
1	5.04	3.74	7.48	7.73	9.6	9.02
2	5.01	3.69	7.36	7.47	9.6	8.45
3	4.99	3.64	7.25	7.22	9.6	7.87
4	4.96	3.59	7.14	6.97	9.6	7.3
5	4.94	3.54	7.03	6.72	9.6	6.74
6	4.91	3.49	6.93	6.47	9.6	6.17
7	4.89	3.44	6.83	6.22	9.6	5.61
8	4.86	3.39	6.73	5.97	9.6	5.04
9	4.84	3.34	6.64	5.73	9.6	4.48
10	4.81	3.29	6.55	5.48	9.6	3.92
11	4.79	3.24	6.46	5.24	9.18	3.36
12	4.76	3.19	6.37	5	8.8	2.81
13	4.74	3.14	6.29	4.76	8.45	
14	4.71	3.09	6.2	4.53	8.13	
15	4.68	3.04	6.12	4.29	7.83	
16	4.66	2.99	6.05	4.05	7.55	
17	4.63	2.94	5.97	3.82	7.3	
18	4.61	2.89	5.9	3.59	7.05	
19	4.58	2.83	5.82	3.36	6.83	
20	4.56	2.78	5.75	3.13	6.62	
21	4.53	2.73	5.68	2.9	6.42	
22	4.51	2.68	5.62	2.68	6.23	
23	4.48	2.63	5.55	2.45	6.05	
24	4.46	2.58	5.49	2.23	5.88	
25	4.43	2.53	5.42	2.01	5.73	
26	4.41	2.48	5.36	1.79	5.58	
27	4.38	2.43	5.3	1.57	5.43	
28	4.36	2.38	5.24	1.35	5.3	
29	4.33	2.33	5.19		5.17	
30	4.3	2.28	5.13		5.05	
31	4.28	2.23	5.08		4.93	
32	4.25	2.18	5.02		4.82	
33	4.23	2.13	4.97		4.71	
34	4.2	2.08	4.92		4.61	
35	4.18	2.03	4.87		4.51	
36	4.15	1.98	4.82		4.42	
37	4.13	1.93	4.77		4.33	
38	4.1	1.87	4.72		4.24	
39	4.08	1.82	4.67		4.16	
40	4.05	1.77	4.63		4.08	
41	4.03	1.72	4.58		4	
42	4	1.67	4.54		3.93	
43	3.97	1.62	4.5		3.86	
44	3.95	1.57	4.46		3.79	
45	3.92	1.52	4.41		3.72	
46	3.9	1.47	4.37			
47	3.87	1.42	4.33			
48	3.85	1.37	4.29			
49	3.82	1.32	4.26			
50	3.8	1.27	4.22			
51	3.77	1.22	4.18			
52	3.75	1.17	4.14			
53	3.72	1.12	4.11			
54	3.7	1.07	4.07			
55	3.67	1.02	4.04			
56	3.65		4			
57	3.62		3.97			
58	3.59		3.94			
59	3.57		3.9			
60	3.54		3.87			
61	3.52		3.84			
62	3.49		3.81			
63	3.47		3.78			
64	3.44		3.75			
65	3.42		3.72			
66	3.39		3.69			
67	3.37		3.66			
68	3.34		3.63			
69	3.32		3.61			
70	3.29		3.58			
71	3.27		3.55			
72	3.24		3.53			
73	3.21		3.5			
74	3.19		3.47			
75	3.16		3.45			
76	3.14		3.42			
77	3.11		3.4			

Model	LGXS16-10/ AGXS16-10		LGXS16-20/ AGXS16-20		LGXS16-40/ AGXS16-40	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
78	3.09			3.38		
79	3.06			3.35		
80	3.04			3.33		
81	3.01			3.31		
82	2.99			3.28		
83	2.96			3.26		
84	2.94			3.24		
85	2.91			3.22		
86	2.88			3.19		
87	2.86			3.17		
88	2.83			3.15		
89	2.81			3.13		
90	2.78			3.11		
91	2.76			3.09		
92	2.73			3.07		
93	2.71			3.05		
94	2.68			3.03		
95	2.66			3.01		
96	2.63					
97	2.61					
98	2.58					
99	2.56					
100	2.53					
101	2.5					
102	2.48					
103	2.45					
104	2.43					
105	2.4					
106	2.38					
107	2.35					
108	2.33					
109	2.3					
110	2.28					
111	2.25					
112	2.23					
113	2.2					
114	2.18					
115	2.15					
116	2.12					
117	2.1					
118	2.07					
119	2.05					
120	2.02					
121	2					
122	1.97					
123	1.95					
124	1.92					
125	1.9					
126	1.87					
127	1.85					
128	1.82					
129	1.79					
130	1.77					

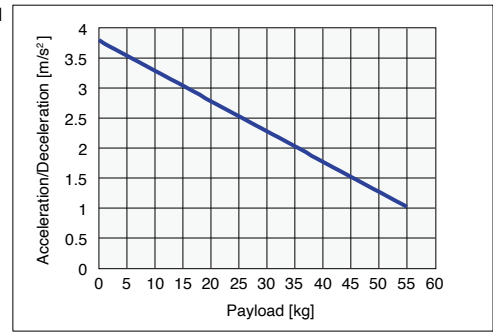
● Payload – Acceleration/Deceleration Graph (Estimate)

LGXS16-10 / AGXS16-10

Horizontal/
Wall hanging

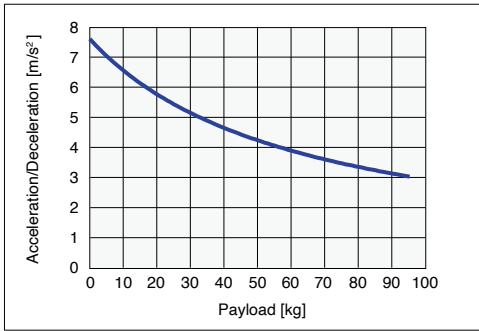


Vertical

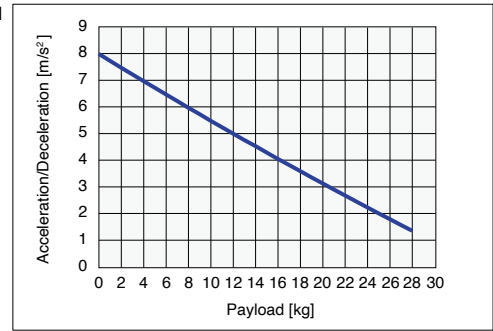


LGXS16-20 / AGXS16-20

Horizontal/
Wall hanging

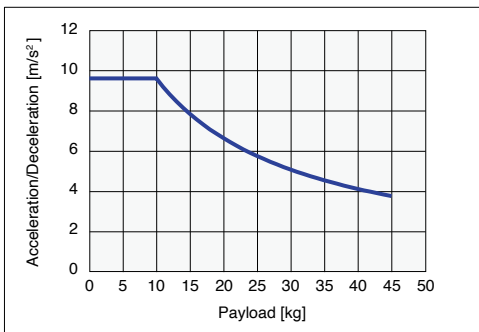


Vertical



LGXS16-40 / AGXS16-40

Horizontal/
Wall hanging



Vertical



Features

Without motor
Silver type
Basic model

LBAS

Without motor
Silver type
Advanced model

LGXS

Without motor
Red type
Basic model

LBAR

With motor
Silver type
Basic model

ABAS

With motor
Silver type
Advanced model

AGXS

With motor
Red type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis positioner
EP-01

LGXS16 AGXS16-H High agility mode

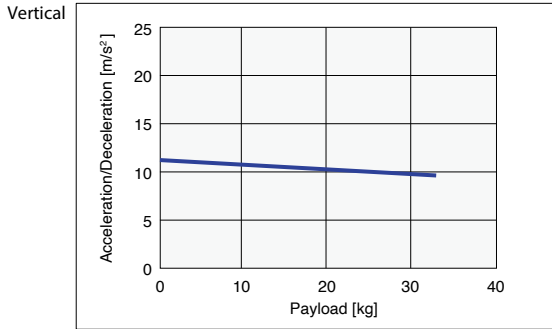
Acceleration/Deceleration

Model	LGXS16-10/ AGXS16-H10		LGXS16-20/ AGXS16-H20		LGXS16-40/ AGXS16-H40	
	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging
Payload [kg]	Acceleration/ Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		
0	11.17	19.48	18.43	19.62	19.62	
1	11.11	19.14	18.11	19.62	19.62	
2	11.07	18.80	17.81	19.62	19.62	
3	11.02	18.48	17.52	19.62	19.62	
4	10.97	18.16	17.24	19.62	19.62	
5	10.92	17.86	16.97	19.62	19.62	
6	10.87	17.57	16.70	19.62	19.62	
7	10.82	17.28	16.45	19.62	19.62	
8	10.78	17.01	16.20	19.62	19.62	
9	10.73	16.74	15.96	19.62	19.62	
10	10.68	16.49	15.72	19.62	19.62	
11	10.64	16.24	15.50	19.30		
12	10.59	15.99	15.27	18.63		
13	10.55	15.76	15.06	18.00		
14	10.50	15.53	14.85	17.42		
15	10.46	15.31	14.65	16.87		
16	10.41	15.09	14.45	16.35		
17	10.37	14.88		15.87		
18	10.33	14.68		15.41		
19	10.28	14.48		14.98		
20	10.24	14.29		14.57		
21	10.20	14.10		14.19		
22	10.16	13.91		13.82		
23	10.12	13.74		13.47		
24	10.07	13.56		13.14		
25	10.03	13.39		12.83		
26	9.99	13.23		12.53		
27	9.95	13.07		12.24		
28	9.91	12.91		11.97		
29	9.87	12.75		11.71		
30	9.83	12.60		11.46		
31	9.79	12.46				

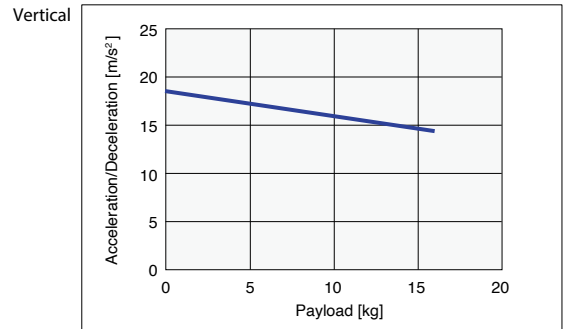
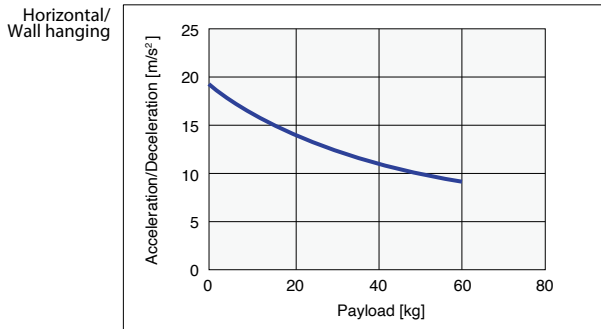
Model	LGXS16-10/ AGXS16-H10		LGXS16-20/ AGXS16-H20		LGXS16-40/ AGXS16-H40	
	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/ Deceleration [m/s ²]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		
32	9.76		12.31			
33			12.17			
34			12.04			
35			11.90			
36			11.77			
37			11.64			
38			11.52			
39			11.40			
40			11.28			
41			11.16			
42			11.04			
43			10.93			
44			10.82			
45			10.71			
46			10.61			
47			10.50			
48			10.40			
49			10.30			
50			10.20			
51			10.11			
52			10.01			
53			9.92			
54			9.83			
55			9.74			
56			9.65			
57			9.56			
58			9.48			
59			9.40			
60			9.31			

● **Payload – Acceleration/Deceleration Graph (Estimate)**

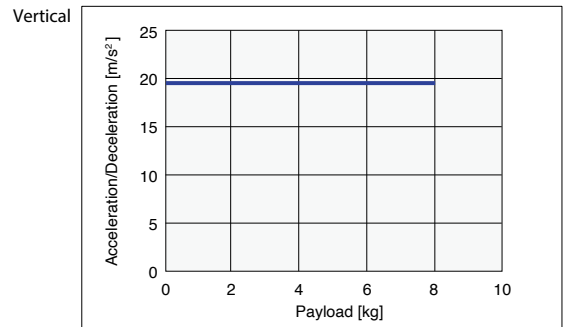
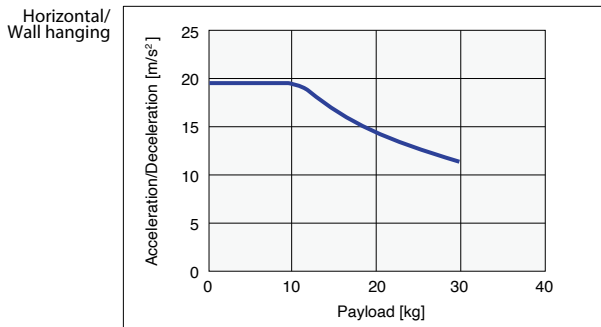
LGXS16-10 / AGXS16-H10



LGXS16-20 / AGXS16-H20



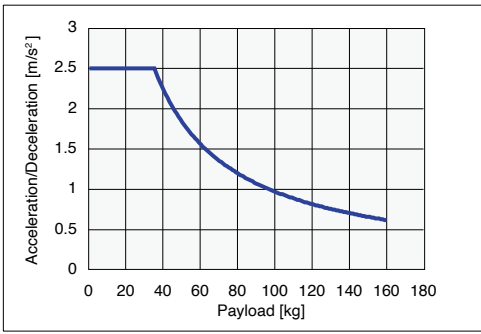
LGXS16-40 / AGXS16-H40



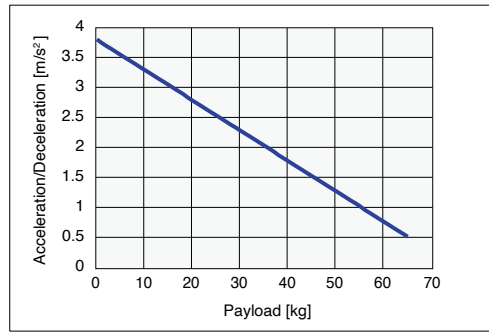
● Payload – Acceleration/Deceleration Graph (Estimate)

LGXS20-10 / AGXS20-10

Horizontal/
Wall hanging

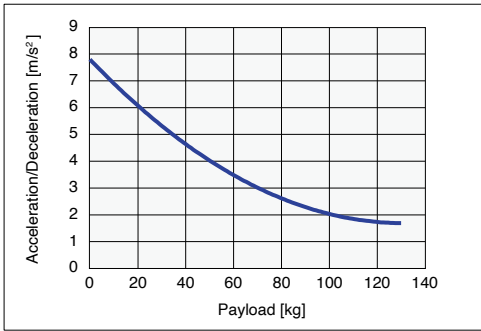


Vertical

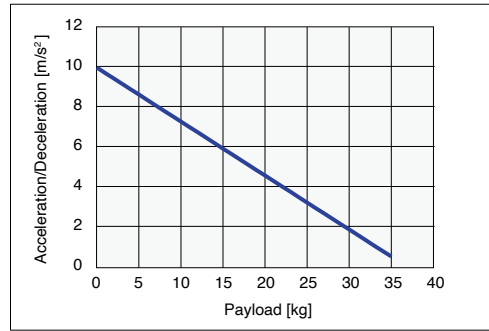


LGXS20-20 / AGXS20-20

Horizontal/
Wall hanging

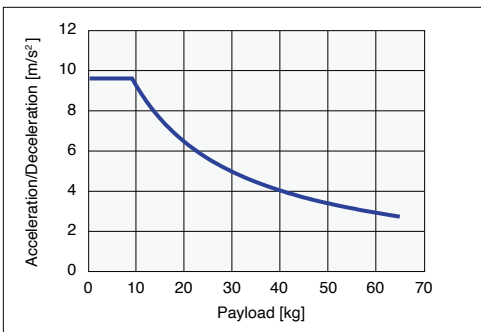


Vertical

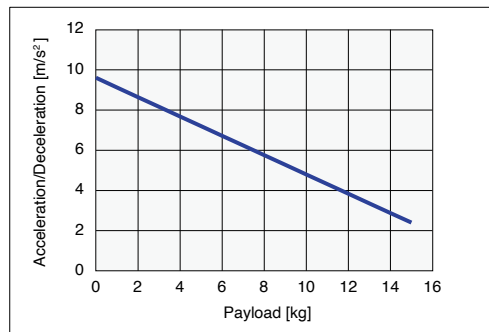


LGXS20-40 / AGXS20-40

Horizontal/
Wall hanging



Vertical



Features

Motorless
Slider type
Basic model

LBAS

Motorless
Slider type
Advanced model

LGXS

Motorless
Rod type
Basic model

LBAR

With motor
Slider type
Basic model

ABAS

With motor
Slider type
Advanced model

AGXS

With motor
Rod type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single-axis robot positioner

EP-01

LBAR04

Inertia Moment

[kg·m ² ·10 ⁻⁴]	Effective stroke [mm]									
	Model	50	100	150	200	250	300	350	400	450
LBAR04-6	0.063	0.067	0.071	0.075	0.079	0.083	0.087	0.091	0.096	0.100
LBAR04-12	0.068	0.072	0.077	0.082	0.087	0.092	0.097	0.101	0.106	0.111

LBAR04 ABAR04

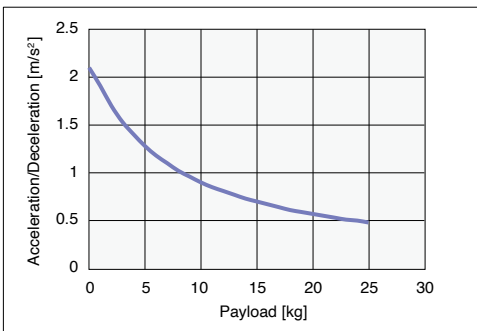
Acceleration/Deceleration

Model	LBAR04-6/ABAR04-6		LBAR04-12/ABAR04-12	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	2.1	2.1	4.2	3.6
1	1.91	2.1	3.84	2.4
2	1.7	1.64	2.99	1.8
3	1.53	1.34	2.45	1.44
4	1.4	1.14	2.07	
5	1.28	0.99	1.8	
6	1.18		1.58	
7	1.1		1.42	
8	1.02		1.28	
9	0.96		1.17	
10	0.9		1.08	
11	0.85		1	
12	0.81		0.93	
13	0.77		0.87	
14	0.73		0.81	
15	0.7		0.77	
16	0.67			
17	0.64			
18	0.61			
19	0.59			
20	0.57			
21	0.55			
22	0.53			
23	0.51			
24	0.5			
25	0.48			

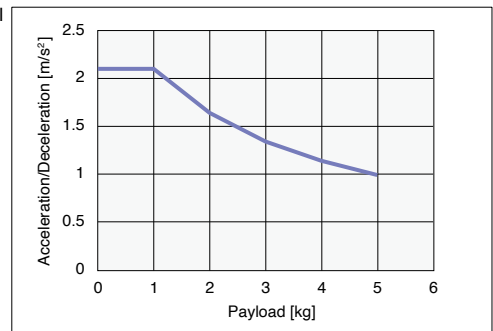
● **Payload – Acceleration/Deceleration Graph (Estimate)**

LBAR04-6 / ABAR04-6

Horizontal/
Wall hanging

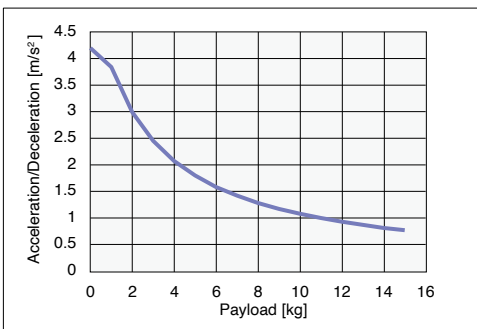


Vertical

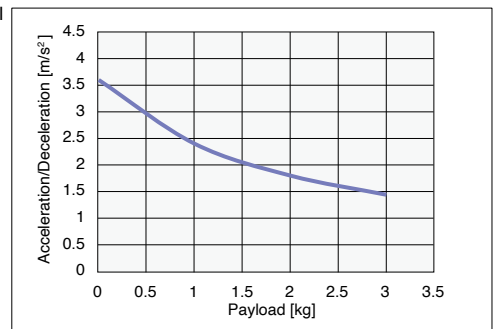


LBAR04-12 / ABAR04-12

Horizontal/
Wall hanging



Vertical



Features
 Motorless
 Basic model
 LBAS
 Motorless
 Advanced model
 LGXS
 Motorless
 Basic model
 LBAR
 With motor
 Basic model
 ABAS
 With motor
 Advanced model
 AGXS
 With motor
 Basic model
 ABAR
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single
 axis
 positioner
 EP-01

LBAR05

Inertia Moment

[kg·m ² ×10 ⁻⁴]	Effective stroke [mm]											
	Model	50	100	150	200	250	300	350	400	450	500	550
LBAR05-5	0.081	0.090	0.098	0.106	0.114	0.122	0.131	0.139	0.147	0.155	0.163	0.172
LBAR05-10	0.107	0.115	0.124	0.133	0.142	0.151	0.160	0.169	0.177	0.186	0.195	0.204
LBAR05-20	0.208	0.219	0.230	0.242	0.253	0.265	0.276	0.288	0.299	0.310	0.322	0.333

LBAR05 **ABAR05**

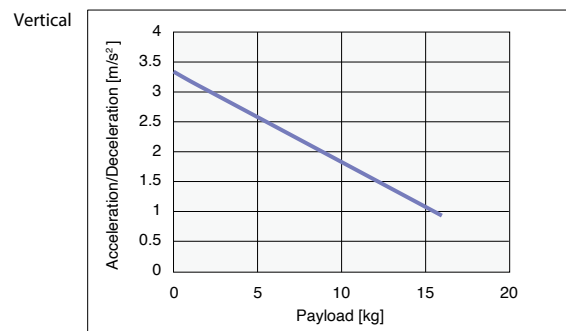
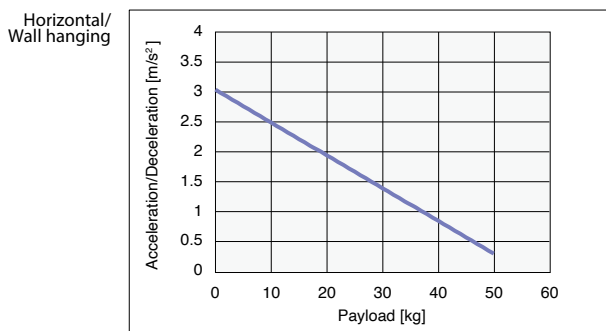
Acceleration/Deceleration

Model	LBAR05-5/ABAR05-5		LBAR05-10/ABAR05-10		LBAR05-20/ABAR05-20	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	3.04	3.34	4.64	4.86	7.44	7.44
1	2.98	3.18	4.44	4.56	7.44	6.42
2	2.93	3.03	4.25	4.3	7.44	5.41
3	2.87	2.88	4.07	4.06	7.44	4.4
4	2.82	2.73	3.9	3.85	7.44	3.39
5	2.76	2.58	3.73	3.66	7.44	
6	2.71	2.43	3.57	3.49	6.64	
7	2.65	2.28	3.41	3.34	6	
8	2.6	2.13	3.27	3.19	5.47	
9	2.54	1.98	3.12		5.02	
10	2.49	1.83	2.99		4.65	
11	2.43	1.68	2.86		4.32	
12	2.38	1.53	2.74		4.04	
13	2.32	1.38	2.62		3.79	
14	2.27	1.23	2.51		3.57	
15	2.21	1.08	2.41		3.38	
16	2.16	0.93	2.31			
17	2.1		2.22			
18	2.05		2.14			
19	2		2.06			
20	1.94		1.99			
21	1.89		1.93			
22	1.83		1.87			
23	1.78		1.82			
24	1.72		1.77			
25	1.67		1.74			
26	1.61					
27	1.56					
28	1.5					
29	1.45					
30	1.39					
31	1.34					
32	1.28					
33	1.23					
34	1.17					
35	1.12					
36	1.07					
37	1.01					
38	0.96					
39	0.9					
40	0.85					
41	0.79					

Model	LBAR05-5/ABAR05-5		LBAR05-10/ABAR05-10		LBAR05-20/ABAR05-20	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
42	0.74					
43	0.68					
44	0.63					
45	0.57					
46	0.52					
47	0.46					
48	0.41					
49	0.35					
50	0.3					

● **Payload – Acceleration/Deceleration Graph (Estimate)**

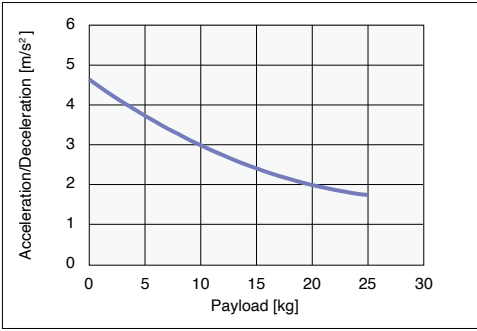
LBAR05-5 / ABAR05-5



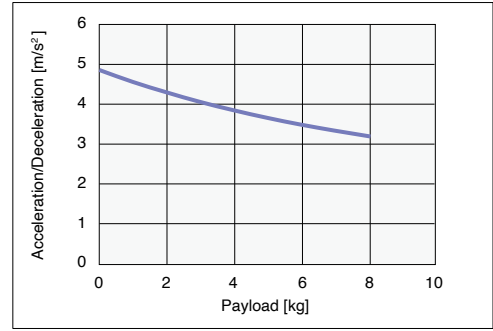
● Payload – Acceleration/Deceleration Graph (Estimate)

LBAR05-10 / ABAR05-10

Horizontal/
Wall hanging

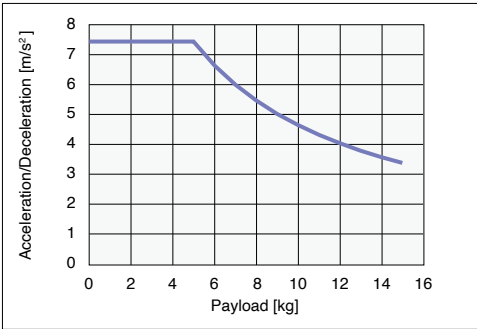


Vertical

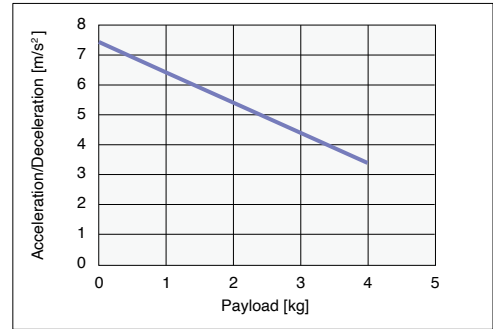


LBAR05-20 / ABAR05-20

Horizontal/
Wall hanging



Vertical



Features

Motorless
Slider type
Basic model

LBAS

Motorless
Slider type
Advanced model

LGXS

Motorless
Rod type
Basic model

LBAR

With motor
Slider type
Basic model

ABAS

With motor
Slider type
Advanced model

AGXS

With motor
Rod type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner
EP-01

LBAR08

Inertia Moment

[kg·m ² ×10 ⁻⁴]	Effective stroke [mm]																
	Model	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
LBAR08-5	0.252	0.278	0.303	0.329	0.354	0.379	0.405	0.430	0.456	0.481	0.507	0.532	0.558	0.583	0.608	0.634	
LBAR08-10	0.288	0.314	0.340	0.366	0.392	0.418	0.444	0.470	0.496	0.522	0.548	0.574	0.600	0.626	0.652	0.678	
LBAR08-20	0.436	0.464	0.492	0.520	0.549	0.577	0.605	0.633	0.661	0.690	0.718	0.746	0.774	0.802	0.831	0.859	

LBAR08 ABAR08

Acceleration/Deceleration

Model	LBAR08-5/ABAR08-5		LBAR08-10/ABAR08-10		LBAR08-20/ABAR08-20	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
0	1.65	1.65	6.09	4.79	8.51	8.5
1	1.63	1.62	5.97	4.54	8.2	7.39
2	1.62	1.59	5.86	4.31	7.9	6.42
3	1.6	1.57	5.74	4.09	7.61	5.59
4	1.59	1.54	5.63	3.88	7.33	4.89
5	1.58	1.51	5.52	3.68	7.05	4.33
6	1.56	1.49	5.42	3.5	6.77	3.91
7	1.55	1.46	5.31	3.32	6.51	3.62
8	1.54	1.44	5.21	3.16	6.24	3.46
9	1.52	1.41	5.1	3.01	5.99	
10	1.51	1.38	5	2.87	5.74	
11	1.5	1.36	4.9	2.74	5.5	
12	1.49	1.33	4.8	2.62	5.26	
13	1.47	1.3	4.7	2.52	5.03	
14	1.46	1.28	4.61	2.42	4.8	
15	1.45	1.25	4.51	2.34	4.58	
16	1.43	1.23	4.42	2.27	4.37	
17	1.42	1.2	4.33	2.21	4.16	
18	1.41	1.17	4.24	2.16	3.96	
19	1.4	1.15	4.15	2.13	3.76	
20	1.38	1.12	4.06	2.1	3.57	
21	1.37	1.09	3.98		3.38	
22	1.36	1.07	3.89		3.21	
23	1.35	1.04	3.81		3.03	
24	1.34	1.02	3.73		2.87	
25	1.32	0.99	3.65		2.71	
26	1.31	0.96	3.57		2.55	
27	1.3	0.94	3.49		2.4	
28	1.29	0.91	3.42		2.26	
29	1.28	0.88	3.34		2.13	
30	1.26	0.86	3.27		1.99	
31	1.25		3.2			
32	1.24		3.13			
33	1.23		3.06			
34	1.22		2.99			
35	1.21		2.93			
36	1.19		2.86			
37	1.18		2.8			
38	1.17		2.74			
39	1.16		2.68			
40	1.15		2.62			
41	1.14		2.57			
42	1.13		2.51			
43	1.12		2.46			
44	1.11		2.41			
45	1.09		2.36			
46	1.08		2.31			
47	1.07		2.26			
48	1.06		2.21			
49	1.05		2.17			
50	1.04		2.12			
51	1.03		2.08			
52	1.02		2.04			
53	1.01		2			
54	1		1.96			
55	0.99		1.93			
56	0.98		1.89			
57	0.97		1.86			
58	0.96		1.83			
59	0.95		1.8			
60	0.94		1.77			
61	0.93					
62	0.92					
63	0.91					
64	0.9					
65	0.89					
66	0.88					
67	0.87					
68	0.86					
69	0.85					
70	0.84					
71	0.84					
72	0.83					
73	0.82					
74	0.81					
75	0.8					
76	0.79					
77	0.78					

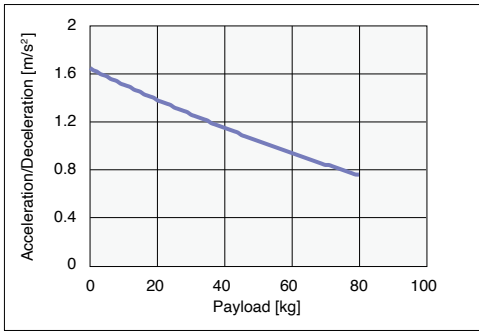
Model	LBAR08-5/ABAR08-5		LBAR08-10/ABAR08-10		LBAR08-20/ABAR08-20	
	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical	Horizontal/ Wall hanging	Vertical
Payload [kg]	Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]		Acceleration/Deceleration [m/s ²]	
78	0.77					
79	0.76					
80	0.76					

Features
Motorless
Slider type
Basic model
LBAS
Motorless
Slider type
Advanced model
LGXS
Motorless
Rod type
Basic model
LBAR
With motor
Slider type
Basic model
ABAS
With motor
Slider type
Advanced model
AGXS
With motor
Rod type
Basic model
ABAR
Acceleration/Deceleration
Inertia Moment
Option
Single axis robot positioner
EP-01

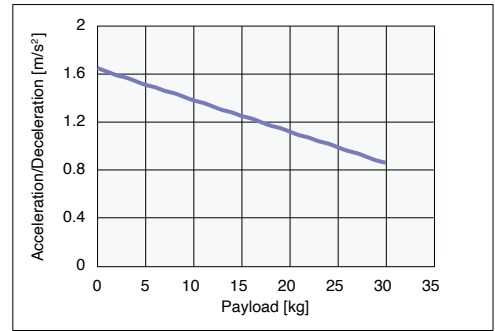
● Payload – Acceleration/Deceleration Graph (Estimate)

LBAR08-5 / ABAR08-5

Horizontal/
Wall hanging

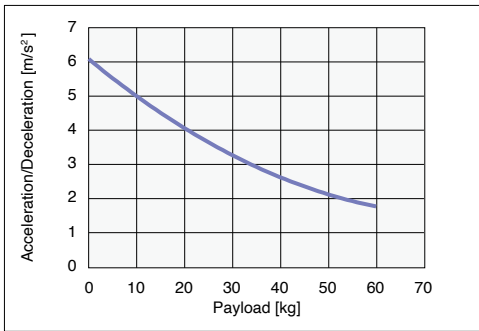


Vertical

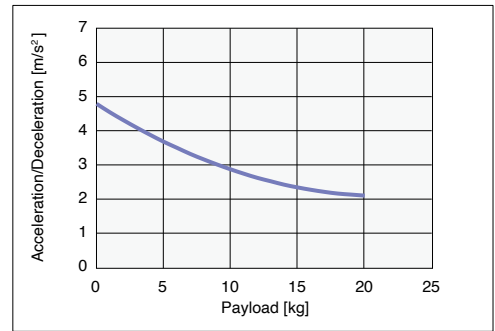


LBAR08-10 / ABAR08-10

Horizontal/
Wall hanging

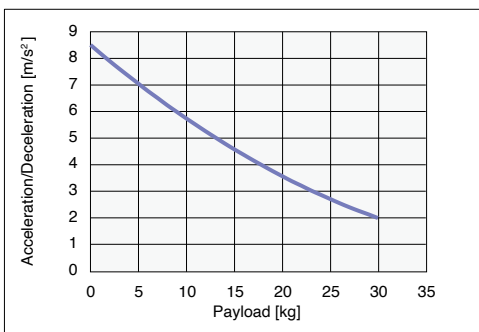


Vertical

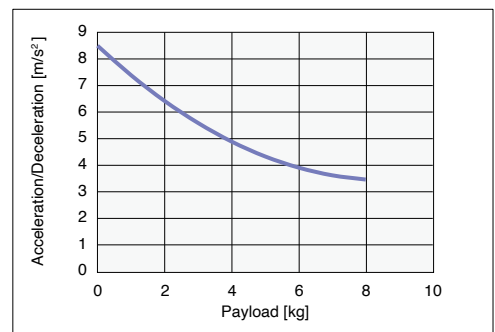


LBAR08-20 / ABAR08-20

Horizontal/
Wall hanging



Vertical



Features

Motorless
Slider type
Basic model
LBAS

Motorless
Slider type
Advanced model
LBAS

Motorless
Rod type
Basic model
LBAR

With motor
Slider type
Basic model
ABAS

With motor
Slider type
Advanced model
AGXS

With motor
Rod type
Basic model
ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
positioner
EP-01

■ Sensor Spec

Item	Specification
Manufacturer	Panasonic Industrial Device SUNX, Co., Ltd.
Model	GX-F8A GX-F8B
Output method	NPN type
Output action	ON when approaching ON when leaving
Power voltage	DC12 to 24V
Load current	100 mA or less
Consumption current	15 mA or less

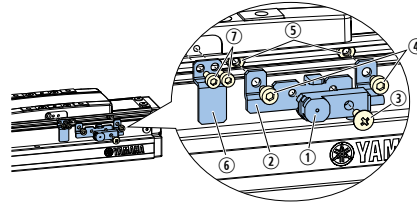
Item	Specification
Display lamp	Orange LED (ON when output ON)
Ambient environment and humidity	-25 to +75 °C, 35 to 85 %RH
Protection structure	IP68
Cable length	5 m

[Caution]

- Bracket screw tightening torque: 0.5 N·m
- The detection surface of the sensor and sensor plate clearance is approx. 1 mm.
- Be aware that separate sensor cable and connector are needed when connecting the external sensor to the EP-01.

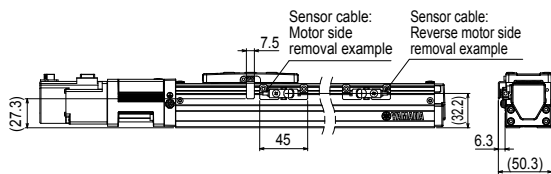
■ Example of proximity sensor attachment (Example of LBAS/ABAS left attachment)

Note 1. The sensor option is common to the LBAS and ABAS.
 Note 2. Installation is users' responsibility.
 Note 3. Mounting hardware included.
 Note 4. Sensor cable is 5 m. Adjust as needed.
 Note 5. Sensor cable outlet can be either motor end or no motor end of actuator.



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

LBAS04 ABAS04



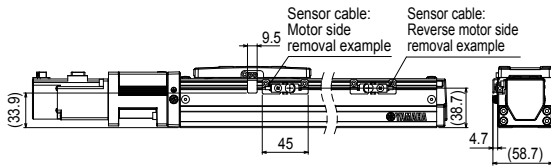
Proximity sensor option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KFU-M2205-10	KFU-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Sensor Bracket	KFU-M22FF-00		1	
	③ Bracket screw	90990-66J004		1	M3 × 0.5 Length 8
	④ Bracket bolt	91312-03005		2	M3 × 0.5 Length 5
	⑤ Bracket nut	95302-03700		2	M3

Target plate option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Target plate option	KFT-M2206-00			
Component	⑥ Switch target plate	KFT-M22G5-00		1	
	⑦ Target plate bolt	90112-02J005		2	M2 × 0.4 Length 5

LBAS05 ABAS05



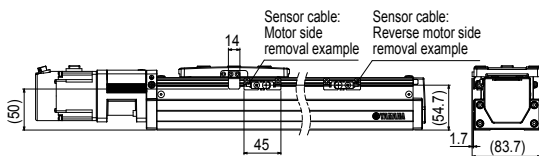
Proximity sensor option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KFU-M2205-10	KFU-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Sensor Bracket	KFU-M22FF-00		1	
	③ Bracket screw	90990-66J004		1	M3 × 0.5 Length 8
	④ Bracket bolt	91312-03005		2	M3 × 0.5 Length 5
	⑤ Bracket nut	95302-03700		2	M3

Target plate option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Target plate option	KFU-M2206-00			
Component	⑥ Switch target plate	KFU-M22G5-00		1	
	⑦ Target plate bolt	90112-2AJ005		2	M2.5 × 0.4 Length 5

LBAS08 ABAS08



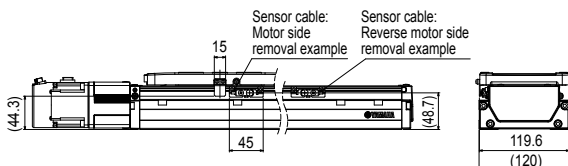
Proximity sensor option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KFU-M2205-10	KFU-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Sensor Bracket	KFU-M22FF-00		1	
	③ Bracket screw	90990-66J004		1	M3 × 0.5 Length 8
	④ Bracket bolt	91312-03005		2	M3 × 0.5 Length 5
	⑤ Bracket nut	95302-03700		2	M3

Target plate option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Target plate option	KFV-M2206-00			
Component	⑥ Switch target plate	KFV-M22G5-00		1	
	⑦ Target plate bolt	91312-03005		2	M3 × 0.5 Length 5

LBAS12 ABAS12



Proximity sensor option

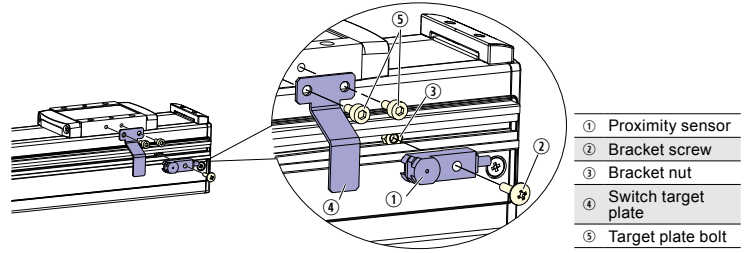
Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KFU-M2205-10	KFU-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Sensor Bracket	KFU-M22FF-00		1	
	③ Bracket screw	90990-66J004		1	M3 × 0.5 Length 8
	④ Bracket bolt	91312-03005		2	M3 × 0.5 Length 5
	⑤ Bracket nut	95302-03700		2	M3

Target plate option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Target plate option	KFY-M2206-00			
Component	⑥ Switch target plate	KFY-M22G5-00		1	
	⑦ Target plate bolt	91312-03006		2	M3 × 0.5 Length 6

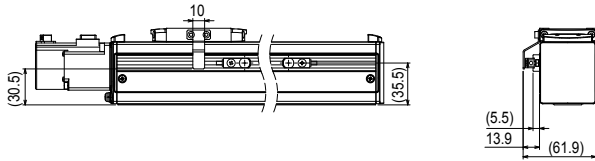
■ Example of proximity sensor attachment (Example of compact LGXS/AGXS left attachment)

- Note 1. The sensor option is common to the LGXS and AGXS.
- Note 2. Installation is users' responsibility.
- Note 3. Mounting hardware included.
- Note 4. Sensor cable is 5 m. Adjust as needed.
- Note 5. To install the sensor option, side cover with T groove is needed.
- Note 6. Sensor cable outlet can be either motor end or no motor end of actuator.



- ① Proximity sensor
- ② Bracket screw
- ③ Bracket nut
- ④ Switch target plate
- ⑤ Target plate bolt

LGXS05 **AGXS05**



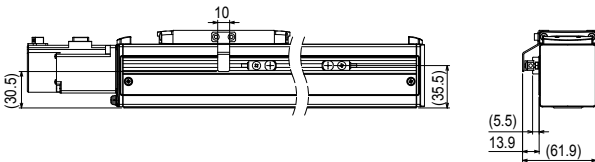
Proximity sensor option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KES-M2205-10	KES-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Bracket screw	90990-66J025		1	M3 × 0.5 Length 10
	③ Bracket nut	95302-03600		2	M3

Target plate option

Class	Name	Number	Qty	Remarks
Assy	Target plate option	KES-M2206-00		
Component	④ Switch target plate	KES-M22G5-00	1	
	⑤ Target plate bolt	91312-03006	2	M3 × 0.5 Length 6

LGXS05L **AGXS05L**



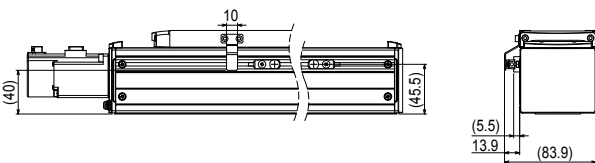
Proximity sensor option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KES-M2205-10	KES-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Bracket screw	90990-66J025		1	M3 × 0.5 Length 10
	③ Bracket nut	95302-03600		2	M3

Target plate option

Class	Name	Number	Qty	Remarks
Assy	Target plate option	KES-M2206-00		
Component	④ Switch target plate	KES-M22G5-00	1	
	⑤ Target plate bolt	91312-03006	2	M3 × 0.5 Length 6

LGXS07 **AGXS07**



Proximity sensor option

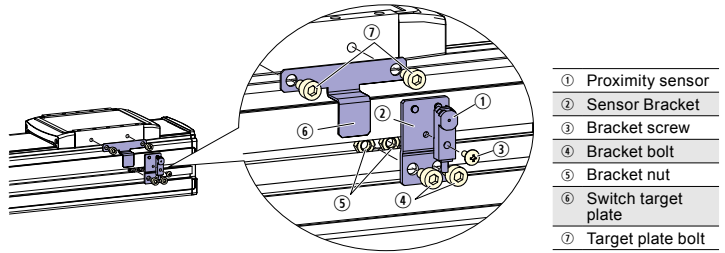
Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KES-M2205-10	KES-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Bracket screw	90990-66J025		1	M3 × 0.5 Length 10
	③ Bracket nut	95302-03600		2	M3

Target plate option

Class	Name	Number	Qty	Remarks
Assy	Target plate option	KES-M2206-00		
Component	④ Switch target plate	KES-M22G5-00	1	
	⑤ Target plate bolt	91312-03006	2	M3 × 0.5 Length 6

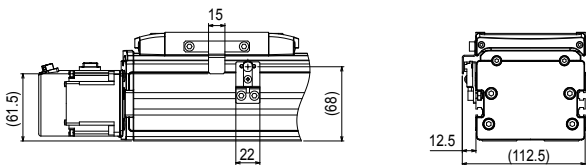
■ Example of proximity sensor attachment (Example of medium or large LGXS/AGXS left attachment)

Note 1. The sensor option is common to the LGXS and AGXS.
 Note 2. Installation is users' responsibility.
 Note 3. Mounting hardware included.
 Note 4. Sensor cable is 5 m. Adjust as needed.



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

LGXS10 AGXS10



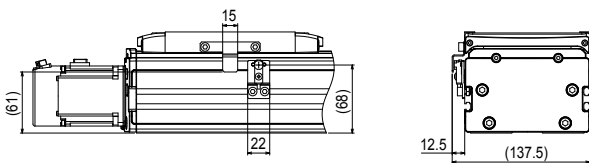
Proximity sensor option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KEV-M2205-10	KEV-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Sensor Bracket	KEV-M22FF-00		1	
	③ Bracket screw	90990-66J004		1	M3 × 0.5 Length 8
	④ Bracket bolt	91312-05008		2	M5 × 0.8 Length 8
	⑤ Bracket nut	95302-05700		2	M5

Target plate option

Class	Name	Number	Qty	Remarks
Assy	Target plate option	KEV-M2206-00		
Component	⑥ Switch target plate	KEV-M22G5-00	1	
	⑦ Target plate bolt	91312-05008	2	M5 × 0.8 Length 8

LGXS12 AGXS12



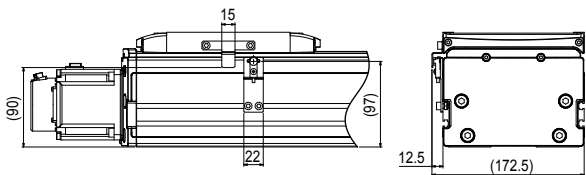
Proximity sensor option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KEV-M2205-10	KEV-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Sensor Bracket	KEV-M22FF-00		1	
	③ Bracket screw	90990-66J004		1	M3 × 0.5 Length 8
	④ Bracket bolt	91312-05008		2	M5 × 0.8 Length 8
	⑤ Bracket nut	95302-05700		2	M5

Target plate option

Class	Name	Number	Qty	Remarks
Assy	Target plate option	KEV-M2206-00		
Component	⑥ Switch target plate	KEV-M22G5-00	1	
	⑦ Target plate bolt	91312-05008	2	M5 × 0.8 Length 8

LGXS16 AGXS16



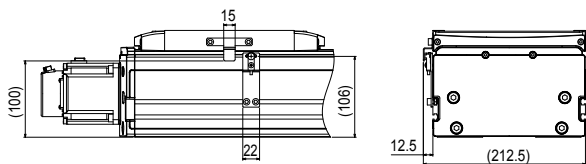
Proximity sensor option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KEX-M2205-10	KEV-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Sensor Bracket	KEX-M22FF-00		1	
	③ Bracket screw	90990-66J004		1	M3 × 0.5 Length 8
	④ Bracket bolt	91312-05008		2	M5 × 0.8 Length 8
	⑤ Bracket nut	95302-05700		2	M5

Target plate option

Class	Name	Number	Qty	Remarks
Assy	Target plate option	KEV-M2206-00		
Component	⑥ Switch target plate	KEV-M22G5-00	1	
	⑦ Target plate bolt	91312-05008	2	M5 × 0.8 Length 8

LGXS20 AGXS20



Proximity sensor option

Class	Name	Number		Qty	Remarks
		ON when approaching (NO, Normally Open)	ON when leaving (NC, Normally Closed)		
Assy	Proximity sensor option	KEY-M2205-10	KEY-M2205-00		
Component	① Proximity sensor	KES-M4855-00	KP6-M4855-01	1	
	② Sensor Bracket	KEY-M22FF-00		1	
	③ Bracket screw	90990-66J004		1	M3 × 0.5 Length 8
	④ Bracket bolt	91312-05008		2	M5 × 0.8 Length 8
	⑤ Bracket nut	95302-05700		2	M5

Target plate option

Class	Name	Number	Qty	Remarks
Assy	Target plate option	KEV-M2206-00		
Component	⑥ Switch target plate	KEV-M22G5-00	1	
	⑦ Target plate bolt	91312-05008	2	M5 × 0.8 Length 8

■ Sensor Spec

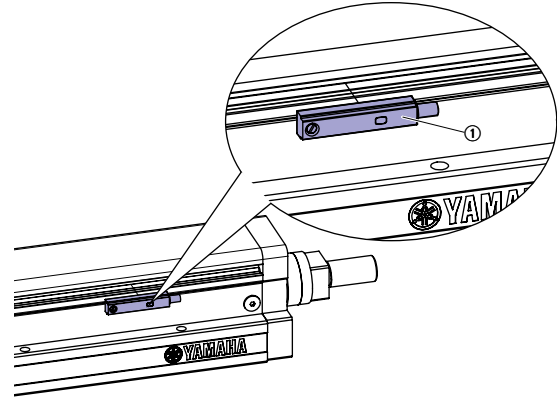
Item	Specification	Item	Specification
Manufacturer	KITA	Consumption current	17 mA or less (at DC24V)
Model	KT-32N	Display lamp	Red LED (Lit when the output is ON.)
Output method	NPN type	Ambient environment	-10 to +70 °C
Output action	ON when approaching	Protection structure	IP67
Power voltage	DC10 to 30V	Cable length	2 m
Load current	100 mA or less		

[Caution]

- For details about the sensor detection range, see the manual.
- For details about the sensor specifications, contact the manufacturer.
- Be aware that separate sensor cable and connector are needed when connecting the external sensor to the EP-01.

■ Example of magnetic sensor attachment (Example of LBAR/ABAR left attachment)

- Note 1. The sensor option is common to the LBAR and ABAR.
 Note 2. Installation is users' responsibility.
 Refer to the manual for detail.
 Note 3. The sensor can be secured with the screws supplied with the sensor.
 Note 4. Sensor cable is 2 m. Adjust as needed.
 Note 5. Sensor cable outlet can be either motor end or no motor end of actuator.



	Name	Number	Q'ty
①	Magnetic sensor option	KNB-M2205-00	1

■ Grease Gun Nozzle (for LBAS/ABAS/LBAR/ABAR)

Dedicated grease gun nozzles that supply the grease to the ball screws and linear guides of the Basic models LBAS/ABAS/LBAR/ABAR except for LBAS12/ABAS12(H).

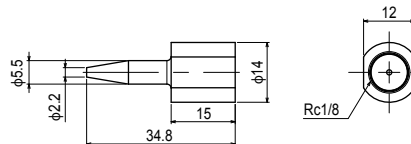
* It can be used by attaching to a commercially available general grease gun.

● Lubrication Kit

Grease nozzle and nozzle tip

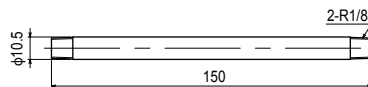
Part number	KFU-M3861-00
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● Nozzle tip



Part number	KFU-M2941-00
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● Grease nozzle



Part number	KFU-M2942-00
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■ Grease Gun Nozzle (for LBAS12/ABAS12(H)/LGXS/AGXS)

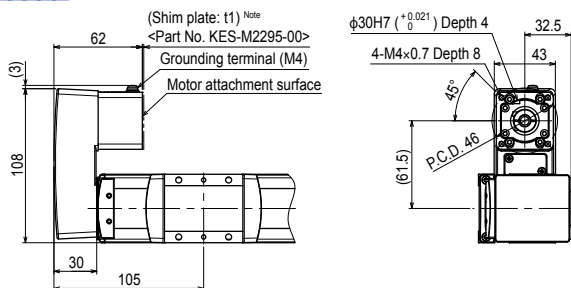
The following shows the recommended grease gun nozzles that supply the grease to the ball screws and linear guides of the Basic models LBAS12/ABAS12(H) and Advanced models LGXS/AGXS.

● Recommended grease gun nozzles

LBAS12/ABAS12(H)	Yamada Corporation CNP-2 or its equivalent
LGXS05/LGXS05L/LGXS07/LGXS10/LGXS12/AGXS05/AGXS05L/AGXS07/AGXS10/AGXS12	NSK HGP NZ4 tip nozzle or its equivalent
LGXS16/LGXS20/AGXS16/AGXS20	Tip nozzle, outside diameter φ10, inside diameter φ6.5 to φ7

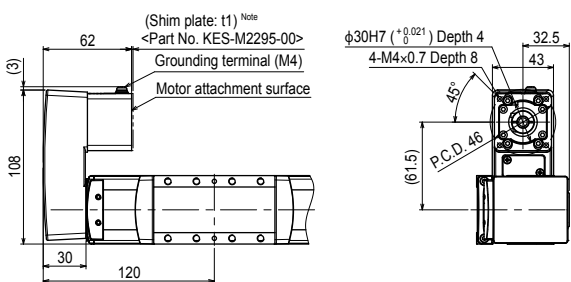
Robonity series Reference guide for right angle motor mount (right side shown) (Advanced LGXS Model)

LGXS05



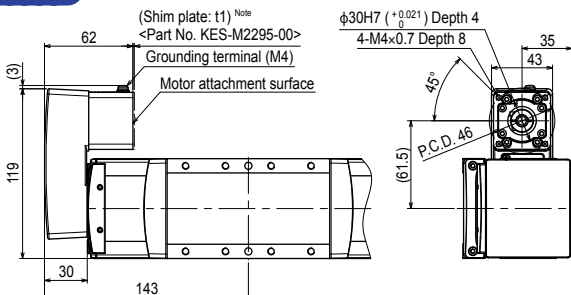
Note. For the availability of shim plate, see the adaptable servo motor table (P.32).

LGXS05L



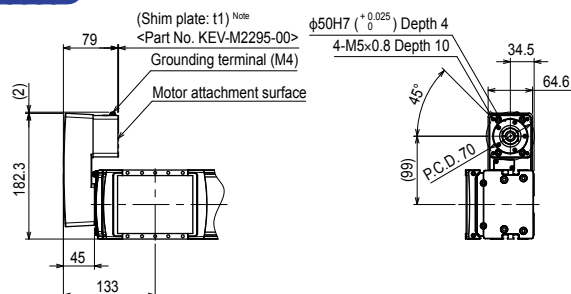
Note. For the availability of shim plate, see the adaptable servo motor table (P.34).

LGXS07



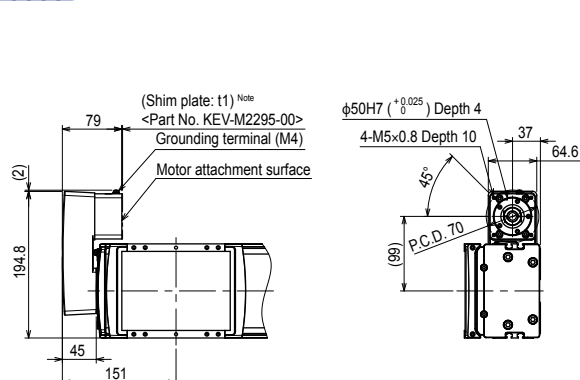
Note. For the availability of shim plate, see the adaptable servo motor table (P.36).

LGXS10



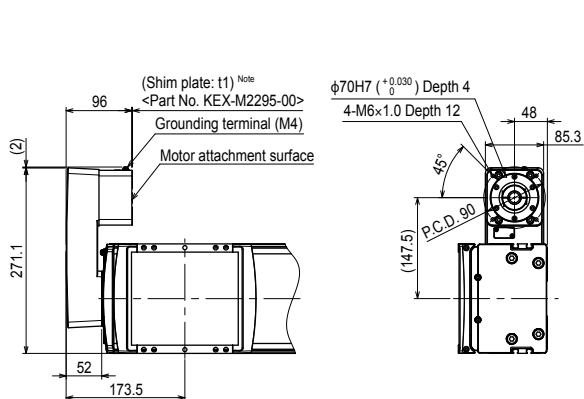
Note. For the availability of shim plate, see the adaptable servo motor table (P.38).

LGXS12



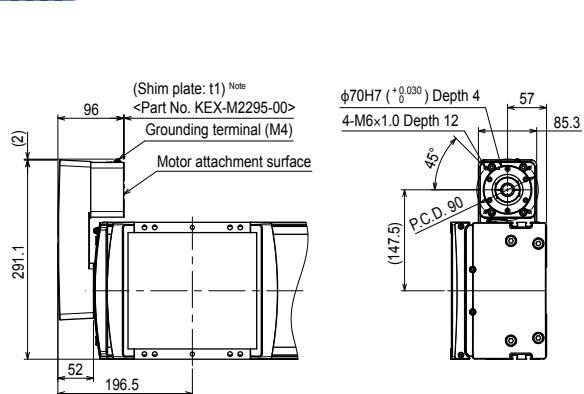
Note. For the availability of shim plate, see the adaptable servo motor table (P.40).

LGXS16



Note. For the availability of shim plate, see the adaptable servo motor table (P.42).

LGXS20



Note. For the availability of shim plate, see the adaptable servo motor table (P.44).

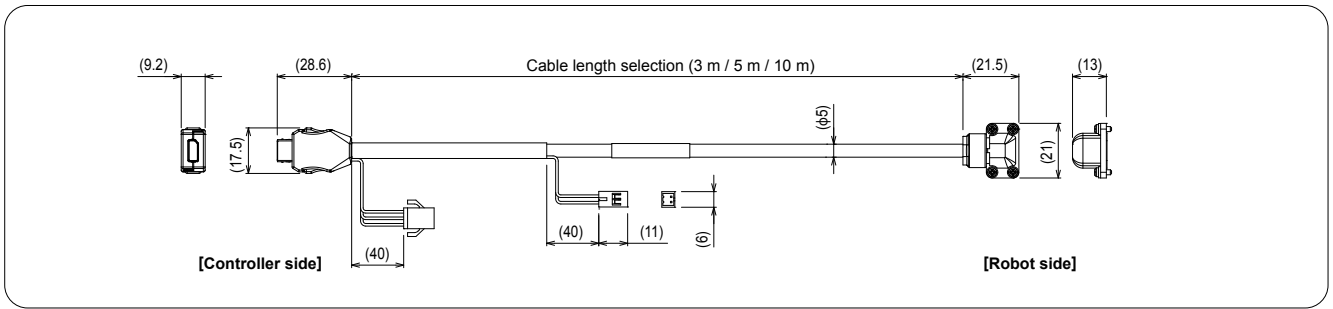
Note 1. Use by attaching the conversion adapter to the main unit. Refer to the manual for the attachment method.

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

Note 3. Right installation and left installation are possible.

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

Encoder cable



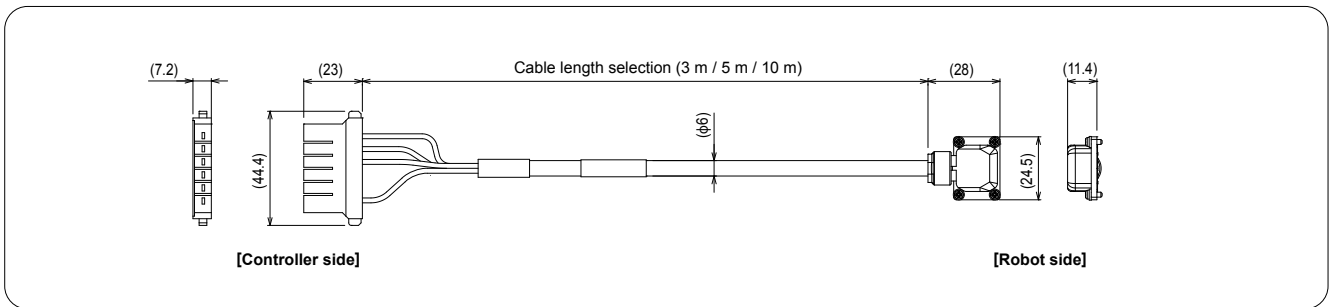
Rear Extraction specifications

Cable length	Part No.	Name
3m	KFT-M4751-30	CABLE ENC
5m	KFT-M4751-50	CABLE ENC
10m	KFT-M4751-A0	CABLE ENC

Front Extraction specifications

Cable length	Part No.	Name
3m	KFT-M4754-30	CABLE ENC
5m	KFT-M4754-50	CABLE ENC
10m	KFT-M4754-A0	CABLE ENC

Power cable



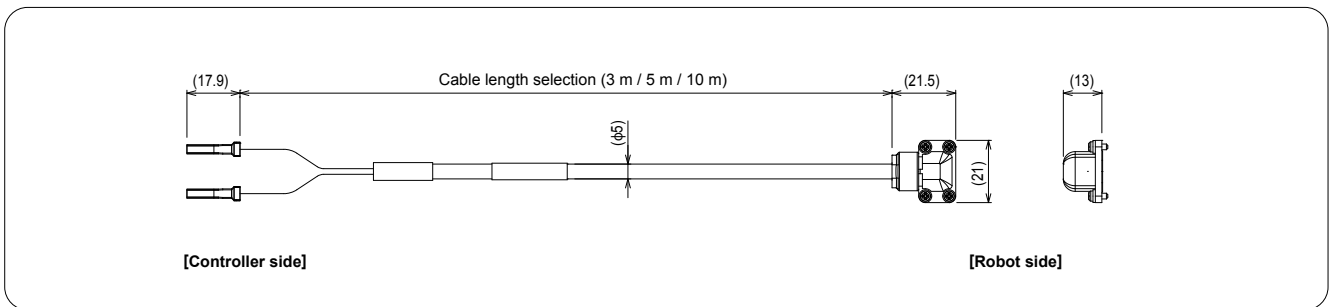
Rear Extraction specifications

Cable length	Part No.	Name
3m	KFT-M4752-30	CABLE UVW
5m	KFT-M4752-50	CABLE UVW
10m	KFT-M4752-A0	CABLE UVW

Front Extraction specifications

Cable length	Part No.	Name
3m	KFT-M4755-30	CABLE UVW
5m	KFT-M4755-50	CABLE UVW
10m	KFT-M4755-A0	CABLE UVW

Brake wiring



Rear Extraction specifications

Cable length	Part No.	Name
3m	KFT-M4753-30	CABLE BK
5m	KFT-M4753-50	CABLE BK
10m	KFT-M4753-A0	CABLE BK

Front Extraction specifications

Cable length	Part No.	Name
3m	KFT-M4756-30	CABLE BK
5m	KFT-M4756-50	CABLE BK
10m	KFT-M4756-A0	CABLE BK

Features

MicroBAS
Silver type
Basic model

LBAS

MicroBAS
Silver type
Advanced model

LGXS

MicroBAS
Red type
Basic model

LBAR

With motor
Silver type
Basic model

ABAS

With motor
Silver type
Advanced model

AGXS

With motor
Red type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single
axis robot
pushdowner

EP-01

EP-01

CE compliance

Single-axis robot positioner for single-axis robot Robonity series “ABAS”, “AGXS”, and “ABAR”.
This robot positioner supports Ethernet, is equipped with an Ethernet port as standard, and achieves 37 % size reduction when compared to the conventional robot positioner.
Following the TS series, usability is greatly improved.



EP-01



Handy terminal
 ▶ HT2 / HT2-D



Support software for PC
 ▶ EP-Manager
 * Free download is available at the member site.

Basic specifications

Item		EP-01	
Basic specifications	Driver model	EP-01-A10	EP-01-A30
	Number of controllable axes	Single-axis	
	Controllable robots	Single-axis robot Robonity series ABAS / AGXS / ABAR	
	Power capacity	420 VA	1600 VA
	Dimensions	W 40 × H 150 × D 130 mm	W 55 × H 150 × D 130 mm
	Weight	Approx. 0.6 kg	Approx. 1 kg
Input power supply	Control power supply	Single phase AC200 to 230V +/-10% 50/60Hz	
	Motor power supply	Single phase AC200 to 230V +/-10% 50/60Hz	
Control method		Closed loop vector control method	
Operating method		I/O point tracing (Positioning operation by specifying point number) / Remote command	
Operation types		Positioning, merge-positioning, push, and jog operations	
Position detection method		Optical encoder, battery absolute encoder, or battery-less absolute encoder is selected.	
Resolution		8,388,608 pulses/rev.	
Origin search method		Absolute	
Points	Number of points	255 points	
	Point type setting	(1) Standard setting: Set speed and acceleration in percent of the respective maximum settings. (2) Custom setting: Set speed and acceleration in SI units.	
Point teaching method		Manual data input (coordinates input), Teaching, Direct teaching	
I/O interface		Selectable from the following: EtherNet/IP™, PROFINET, EtherCAT, NPN, CC-Link	
Input		Servo ON (SERVO), reset (RESET), start (START), interlock (/LOCK) origin search (ORG), teaching mode (TMODE), jog motion - (JOG-), jog motion + (JOG+), point number selection (PIN0 to PIN7)	
Output		Servo status (SRV-S), alarm (/ALM), operation end (END), operation in-progress (BUSY), control outputs (OUT0 to 3), point number output 0 to 7 (POUT0 to POUT7), feedback pulse output (A/B/Z) (option)	
External communications		Ethernet (In conformity with IEEE802.3 100BASE-TX, Applicable to Auto Negotiation)	
Power supply for brake		DC24V +/-10% 300mA (prepared by the customer)	
Safety circuit		Emergency stop input, main power input ready output, emergency stop contact output (1 system: When the HT2 is used.)	
Options	Handy terminal	HT2, HT2-D (with enable switch)	
	Support software for PC	EP-Manager	
General specifications	Operating temperature / Operating humidity	0°C to 40°C, 35% to 85%RH (non-condensing)	
	Storage temperature / Storage humidity	-10°C to 65°C, 10% to 85%RH (non-condensing)	
	Atmosphere	Indoor location not exposed to direct sunlight. No corrosive, flammable gases, oil mist, or dust particles	
	Anti-vibration	All XYZ directions 10 to 57Hz unidirectional amplitude 0.075mm 57 to 150Hz 9.8m/s ²	
	Protective functions	Position detection error, power module error, temperature error, overload, overvoltage, low voltage, excessive position deviation, overcurrent, motor current error	
Protective structure		IP20	

Controllable robot **EP-01 ▶ Robonity (ABAS, AGXS, ABAR)**

CE marking		Field networks				
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■ Model Overview

Name		EP-01
Controllable robot		Single-axis robot Robonity (ABAS / AGXS / ABAR)
Input power	Main power supply	Single phase AC200 to 230V +/-10% 50/60Hz
	Control power supply	Single phase AC200 to 230V +/-10% 50/60Hz
Operating method		I/O point tracing (Positioning operation by specifying point number) / Remote command
Maximum number of controllable axes		Single-axis
Origin search method		Absolute

■ Ordering method

EP-01

Controller	Driver: Power capacity	Regenerative	I/O
	A10: 200W or less A30: 400W/750W	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link

Note. Whether the battery is provided with the robot positioner is selected by the robot order model.

■ Robonity specification selection table

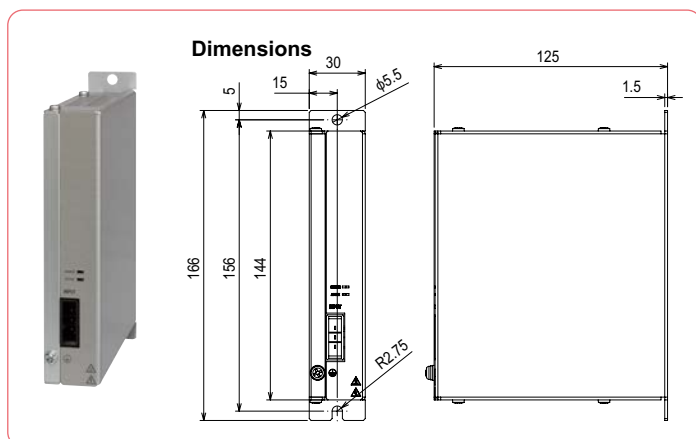
		Basic								Advanced							
		ABAS04	ABAS05	ABAS08	ABAS12	ABAS12H	ABAR04	ABAR05	ABAR08	AGXS05	AGXS05L	AGXS07	AGXS10	AGXS12	AGXS16	AGXS20	
Driver	EP-01-A10	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	EP-01-A30					●										●	
Regenerative unit EP-RU	Vertical		(1)	(2)	(4)	(6)	(7)	(8)	(10)			(12)	(12)	(10)	(14)	(10)	(10)
	Horizontal			(3)	(5)			(9)	(11)				(13)	(14)	(15)	(15)	

Conditions required for regenerative unit

- | | |
|---|--|
| <ul style="list-style-type: none"> (1) Stroke of lead 5 or 10 is 650 mm or more. (2) Stroke of lead 5 or 20 is 450 mm or more and stroke of lead 10 is 150 mm or more. (3) Stroke of lead 20 is 250 to 750 mm. (4) Stroke of lead 5, 10, or 20 is 150 mm or more and stroke of lead 32 is 300 to 750 mm. (5) Stroke of lead 10 or 20 is 250 to 750 mm and stroke of lead 32 is 400 to 750 mm. (6) Stroke of lead 5, 10, or 20 is 300 mm or more and stroke of lead 32 is 300 to 750 mm. | <ul style="list-style-type: none"> (7) Stroke of all leads is 250 mm or more. (8) Stroke of all leads is 150 mm or more. (9) Stroke of lead 20 is 300 to 400 mm. (10) All strokes of all leads (11) Stroke of lead 10 or 20 is 150 to 500 mm. (12) Stroke of all leads is 500 mm or more. (13) Stroke of lead 10, 20, or 30 is 300 to 800 mm. (14) Stroke of all leads is 400 mm or more. (15) Stroke of lead 20 is 400 to 850 mm and stroke of lead 40 is 600 to 950 mm. |
|---|--|

Note. The selection table is a guideline for the necessity of the regenerative unit, and may differ depending on the actual operating conditions.

■ Regenerative unit EP-RU



● Basic specifications

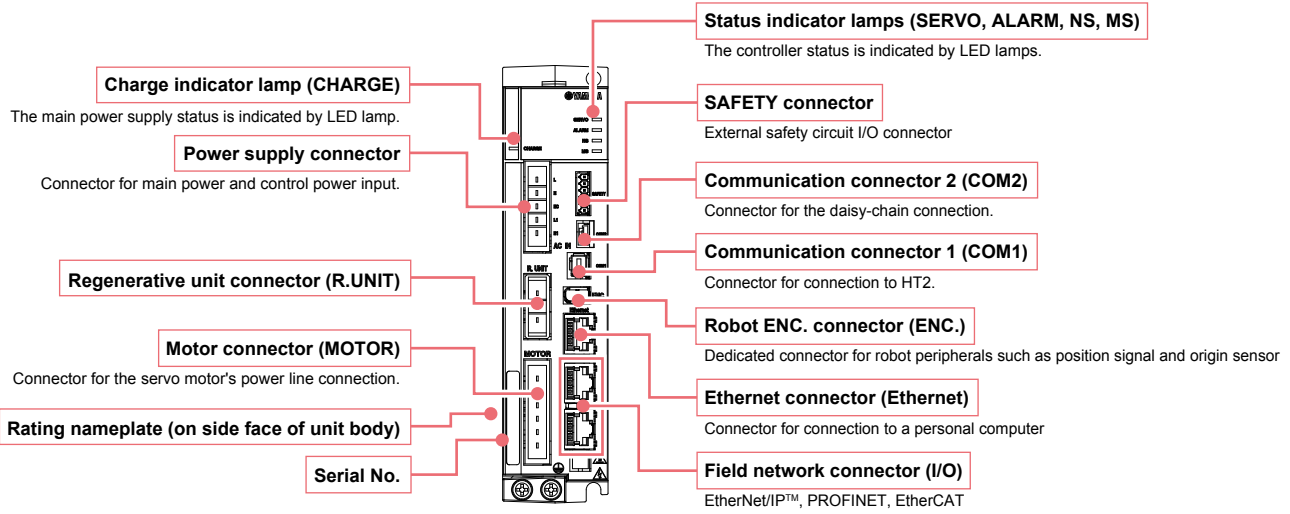
Item	EP-RU
Model	KFX-M5850-00
Dimensions	W30 × H144 (Not including installation stay) × D125 mm
Weight	650 g
Regenerative voltage	Approx. 380V or more
Regenerative stop voltage	Approx. 360V or less
Absorbable electric power	40W
Accessory	Cable for connection with controller (300 mm)

Note. Always leave an empty space (gap of about 20 mm) between this unit and the adjacent controller.

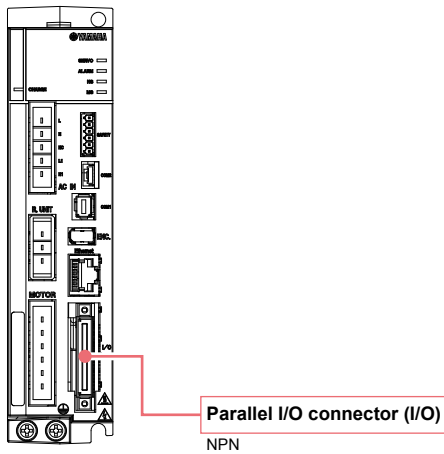
Also, always use the dedicated cable when connecting the controller.

Part names

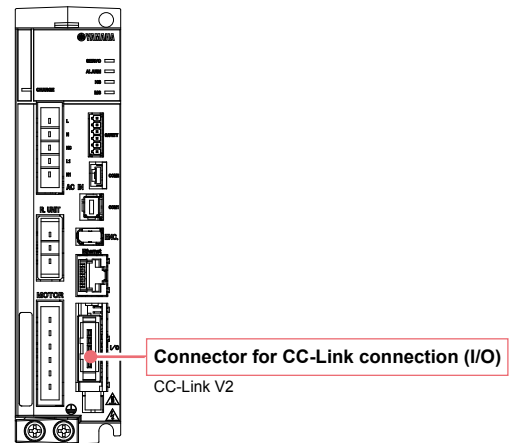
EP-01 (EtherNet/IP™, PROFINET, EtherCAT)



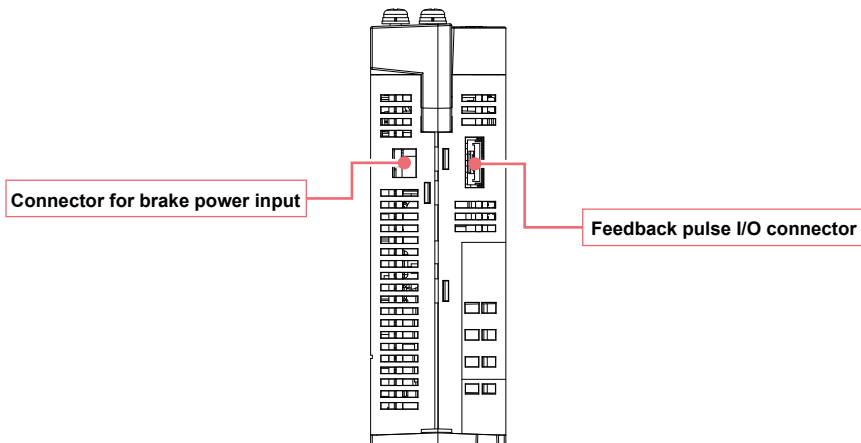
EP-01 (NPN)



EP-01 (CC-Link)



EP-01 (Bottom view)



Features

Motorless
Slider type
Basic model

LBAS
Advanced model

Motorless
Slider type
Basic model

LGXS
Basic model

Motorless
Ind type
Basic model

LBAR
Basic model

With motor
Slider type
Basic model

ABAS
Advanced model

With motor
Slider type
Basic model

AGXS
Basic model

With motor
Ind type
Basic model

ABAR
Basic model

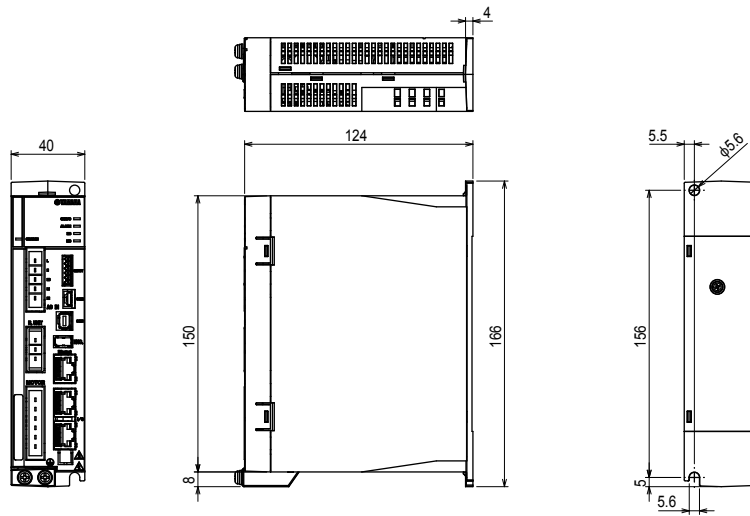
Acceleration/Deceleration
Inertia Moment

Option

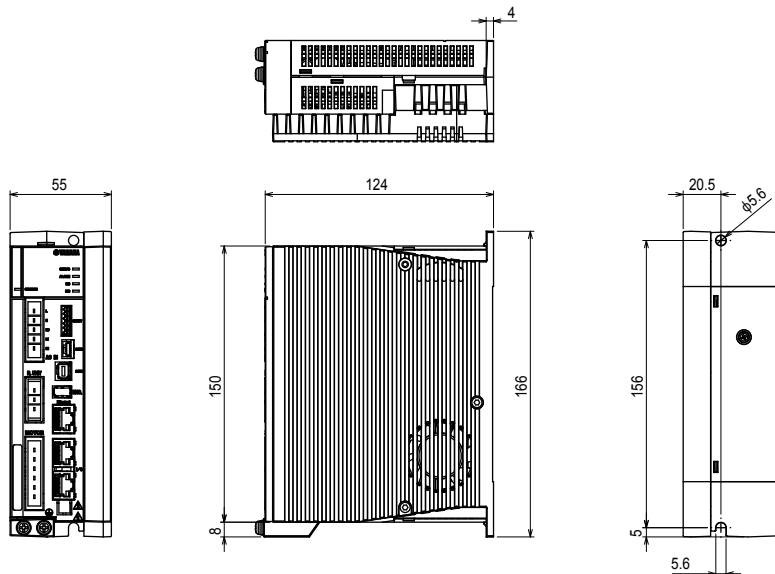
Single-axis Robot positioner
EP-01

■ Dimensions

■ EP-01-A10



■ EP-01-A30



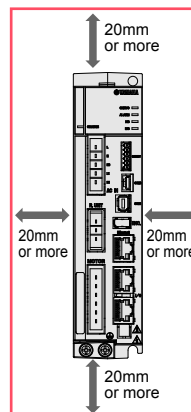
■ Installation conditions

- Install the EP-01 inside the control panel.
- Install the EP-01 on a metal wall vertically.
- Install the EP-01 in a well ventilated location, with space on all sides of the EP-01 (See fig. at right.).
- Ambient temperature : 0 to 40°C
- Ambient humidity : 35 to 85% RH (no condensation)

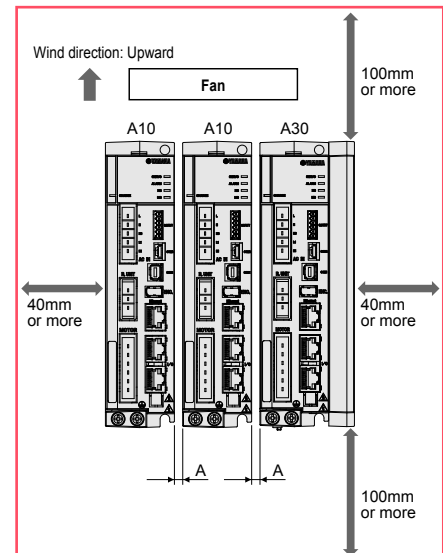
[When multiple EP-01 robot positioners are used]

- Install a fan to cool the controller main body sufficiently.
- When installing multiple controllers, keep at least 1 mm between the controllers.
- Install the controllers in a well-ventilated area with sufficient space around them. (See figure 2.)
- If the distance to the adjacent EP-01 is 20 mm or less (A in figure 2), set the effective load factor to 75% or less.

(Fig. 1)



(Fig. 2)



Features

Motorless
Sinter type
Basic model

LBAS

Motorless
Sinter type
Advanced model

LGXS

Motorless
Rod type
Basic model

LBAR

With motor
Sinter type
Basic model

ABAS

With motor
Sinter type
Advanced model

AGXS

With motor
Rod type
Basic model

ABAR

Acceleration/Deceleration
Inertia Moment

Option

Single-axis robot positioner
EP-01

Data overview

Point data and parameter data settings must be specified in order to operate a robot from a EP series controller.

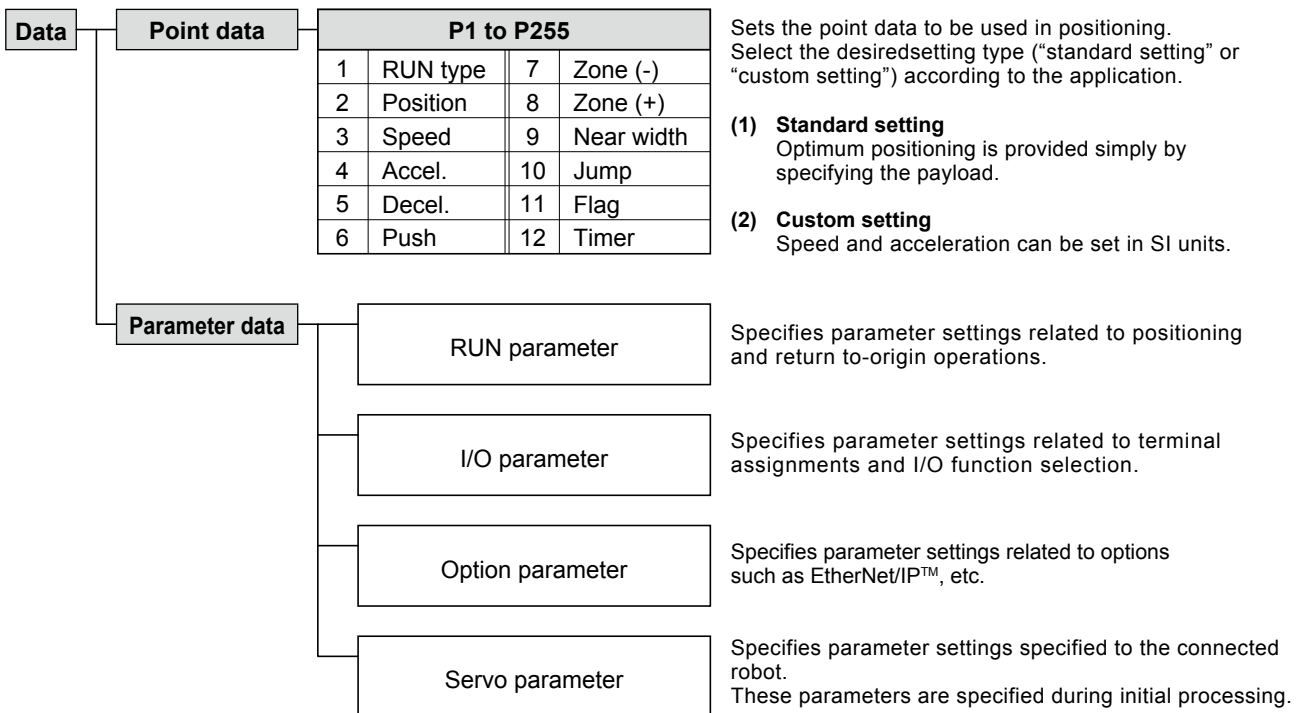
Point data

The point data used in positioning operations includes items such as the “RUN type”, “Position”, and “Speed”, etc. Up to 255 points (P1 to P255) can be registered. There are two point data setting types: “Standard setting” type that automatically defines optimal positioning simply by specifying the payload and “Custom setting” type that allows setting the speed (mm/s) and acceleration (m/s²) in SI units. Select the desired setting type according to the application.

Parameter data

Parameter data is divided into the following categories: “RUN parameters”, “I/O parameters”, “option parameters”, and “servo parameters”.

Data structure



Point data

Point data item list

P1 to P255		
Item		Description
1	RUN type	Specifies the positioning operation pattern.
2	Position	Specifies the positioning target position or movement amount.
3	Speed	Specifies the positioning speed.
4	Accel.	Specifies the positioning acceleration.
5	Decel.	Specifies the positioning deceleration (as a percentage of the acceleration).
6	Push	Specifies the electrical current limit value for “Push” operations.
7	Zone (-)	Specifies the “personal zone” output range.
8	Zone (+)	
9	Near width	Specifies the “near width” zone (distance tolerance relative to target position).
10	Jump	Specifies the next movement destination, or the next merge operation merge destination point No. following positioning completion.
11	Flag	Specifies other information related to the positioning operation.
12	Timer	Specifies the waiting time (delay) after positioning completion.

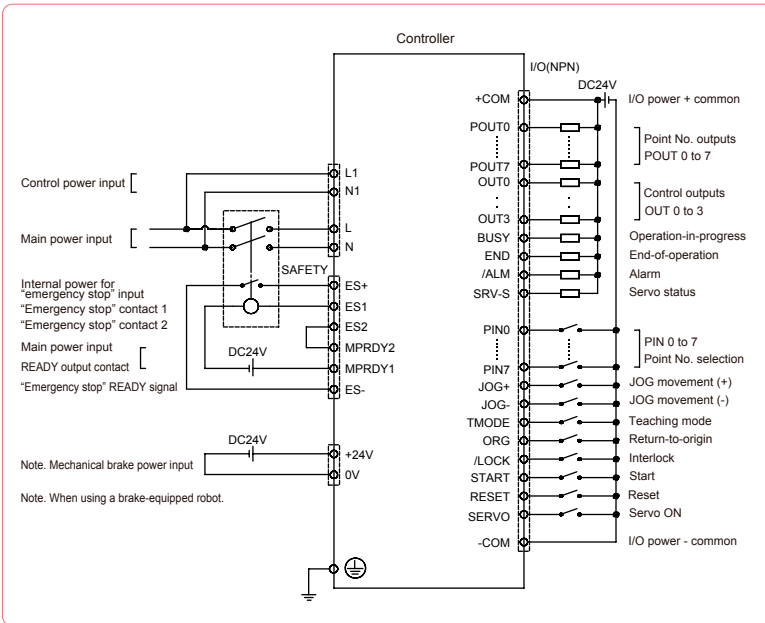
“Standard setting” and “custom setting”

There are 2 setting types for point data (“standard setting” or “custom setting”). Select the desired setting type according to the application.

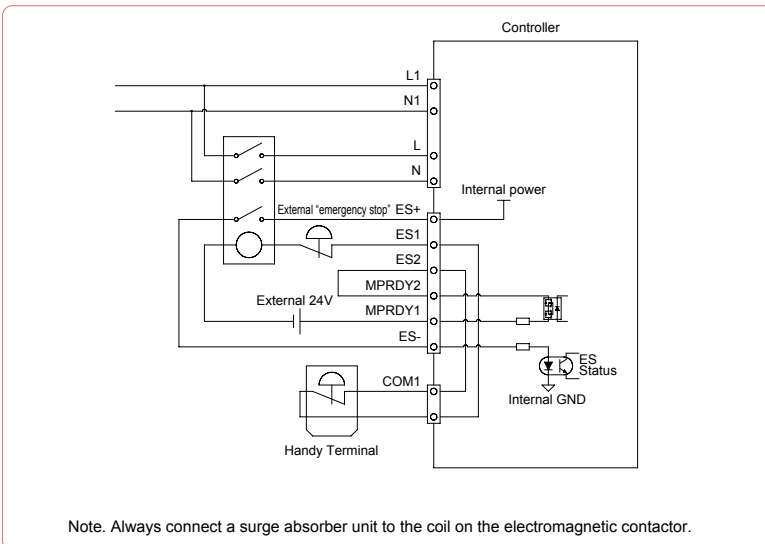
The maximum number of setting points for both setting types is 255 points (P1 to P255).

Setting Type	Description
Standard setting	Optimum positioning is provided simply by specifying the payload. This setting type is well-suited to assembly and transport applications.
Custom setting	Since the speed and acceleration can be changed arbitrarily in SI units, the positioning can be set freely. This setting type is suited for machining and inspection systems.

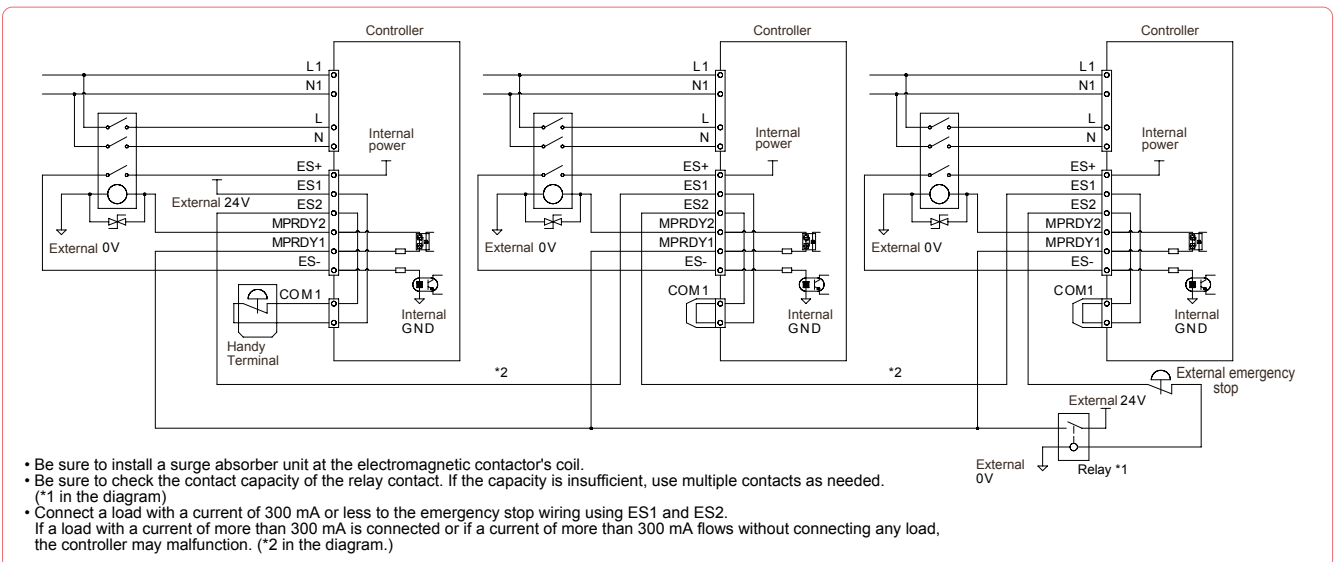
NPN type input / output wiring diagram



Emergency stop circuit example



Emergency stop circuit example (Daisy chain)



- Be sure to install a surge absorber unit at the electromagnetic contactor's coil.
- Be sure to check the contact capacity of the relay contact. If the capacity is insufficient, use multiple contacts as needed. (*1 in the diagram)
- Connect a load with a current of 300 mA or less to the emergency stop wiring using ES1 and ES2. If a load with a current of more than 300 mA is connected or if a current of more than 300 mA flows without connecting any load, the controller may malfunction. (*2 in the diagram.)

I/O Specifications

Item	Description
EtherNet/IP™	EtherNet/IP™ adapter (2 ports)
PROFINET	PROFINET Slave 1 node
EtherCAT	EtherCAT Slave 1 node
NPN	Input 16 points, 24VDC +/-10%, 5.1mA/point, positive common Output 16 points, 24VDC +/-10%, 50mA/point, sink type
CC-Link	CC-Link Ver.2.00 compatible, Remote station device (1 station double setting)

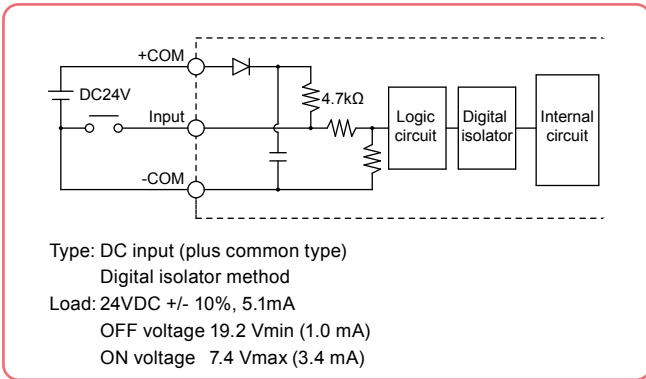
Features
 Basic model
 Advanced model
 Basic model
 Basic model
 Advanced model
 Basic model
 Basic model
 Advanced model
 Basic model
 Acceleration/Deceleration
 Inertia Moment
 Option
 Single-axis robot positioner EP-01

I/O signals (NPN)

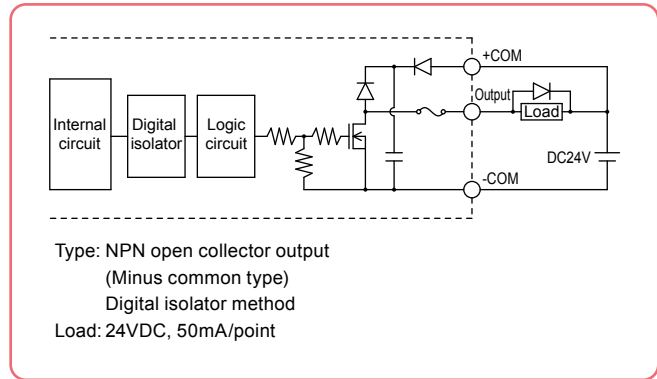
No.	Signal Name	Description	No.	Signal Name	Description
A1	+COM	I/O power input, positive common	B1	POUT0	Point No. outputs
A2			B2	POUT1	
A3	NC	No connection	B3	POUT2	
A4			B4	POUT3	
A5			B5	POUT4	
A6			B6	POUT5	
A7			B7	POUT6	
A8			B8	POUT7	
A9			B9	OUT0	
A10			B10	OUT1	
A11			B11	OUT2	
A12			B12	OUT3	
A13	JOG+ (A15: ON) SPD (A15: OFF)	JOG movement (+ direction) Speed switching	B13	BUSY	Operation-in-progress
A14	JOG-	JOG movement (- direction)	B14	END	Operation-end
A15	TMODE	Teaching mode (ON: I/O teaching mode OFF: I/O positioning mode)	B15	/ALM	Alarm
A16	ORG	Return-to-origin	B16	SRV-S	Servo status
A17	/LOCK	Interlock	B17	NC	No connection
A18	TEACH (A15: ON) START (A15: OFF)	Current position teaching Start	B18	NC	
A19	RESET	Reset	B19	-COM	I/O power input, negative common
A20	SERVO	Servo ON	B20		

NPN type I/O circuit details

Input circuit



Output circuit



Feedback pulse I/O signal table

Basic specifications

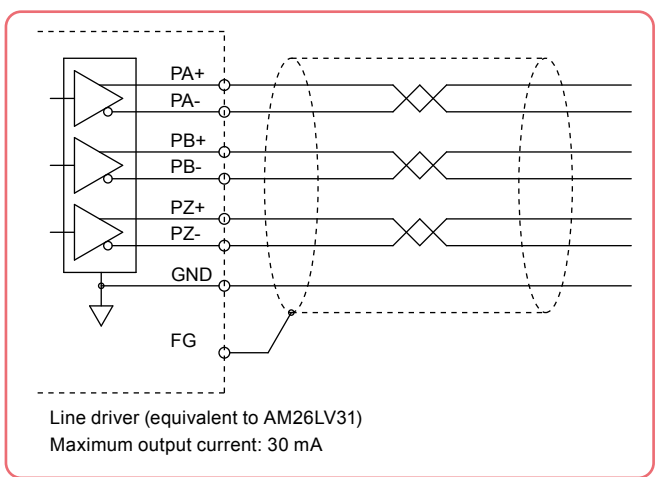
Item	Specification
Output signal	ABZ-phase pulse
Number of pulses per rotation	Variably changed in a range of 4 to 16384
Maximum rotation speed	6000 rpm
Maximum operating frequency	2 Mbps

Signal table

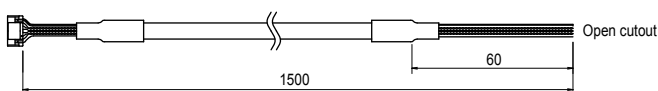
Signal name	Description	Wire color	Remarks
GND	Signal ground	White	
PA+	A-phase plus signal	Yellow	Twist pair (1)
PA-	A-phase minus signal	White	
PB+	B-phase plus signal	Green	Twist pair (2)
PB-	B-phase minus signal	White	
PZ+	Z-phase plus signal	Red	Twist pair (3)
PZ-	Z-phase minus signal	White	
FG	Frame ground	(Shield)	

Details of feedback pulse output circuit

Output circuit



Feedback pulse output cable



Model KFX-M532M-00

Accessories and part options

EP-01

Standard accessories

The icons indicated at the right end show the controllers that each component can use.

● Power connector + Operation lever



Model	Power connector	KFX-M5382-00
	Operation lever	KEF-M657M-00

EP-01

● Regeneration unit short-circuit connector



Model	KEK-M4431-00
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EP-01

YHX

RCX320

● HT2 dummy connector



Model	KEK-M5869-00
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EP-01

YHX

● SAFETY connector



Model	KEK-M4432-10
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EP-01

YHX

● Brake power cable (1 m) Note

Note. Included in the robot with brake.



Model	KFX-M532K-10
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EP-01

● I/O cables (2 m/20-core×2) Note

Note. Included in the robot with NPN specifications.



Model	KCA-M4421-20
-------	--------------

EP-01

TS-S2

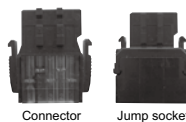
TS-SH

TS-X

TS-P

● CC-Link connector Note

Note. Included in the robot with CC-Link specifications.



Model	Connector <small>Note</small>	KCA-M4872-00
	Jump socket	KCA-M4873-00

EP-01

TS-S2

TS-SH

TS-X

TS-P

Note. This is a single connector type. (Insert two connectors into a branching socket.)

See next page for optional parts

Features

Controllers
 Silver type
 Basic model

LBAS

Controllers
 Silver type
 Advanced model

LGXS

Controllers
 Red type
 Basic model

LBAR

Controllers
 Silver type
 Basic model

ABAS

Controllers
 Silver type
 Advanced model

AGXS

Controllers
 Red type
 Basic model

ABAR

Acceleration/Deceleration
 Inertia Moment

Option

Single-axis robot positioner

EP-01

EP-01

Options The icons indicated at the right end show the controllers that each component can use.

● **Handy terminal HT2/HT2-D**



		HT2	HT2-D
Model	3.5m	KFX-M5110-0E	KFX-M5110-1E
	10m	KFX-M5110-2E	KFX-M5110-3E
Enable switch		–	Available
CE marking		Not supported	Applicable

EP-01

● **Support software EP-Manager**



Download from website (member site)

Model	KFX-M4990-00
-------	--------------

● **EP-Manager environment**

OS	Microsoft Windows 10 (32bit/64bit)
CPU	Exceeding the environment recommended by the OS being used
Memory	Exceeding the environment recommended by the OS being used
Communication port	Ethernet port (100BASE-TX) Ethernet cable (category 5 or higher)
Display	1024×768 or higher resolution, 256 colors or higher
Applicable controllers	EP-01

EP-01

Note. Windows is the registered trademark of US Microsoft Corporation in U.S.A. and other countries.

Note. Ethernet is a registered trademark of the XEROX Corporation, USA.

● **Absolute battery**

● **Absolute battery basic specifications**

Item	Absolute battery
Battery type	Lithium metallic battery
Battery capacity	3.6V/2700 mAh
Data holding time	About 10 years
Dimensions	φ17 × L47 mm
Weight	20.3 g



Model	KFX-M53G0-00
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Note. The absolute battery is subject to wear and requires replacement.

EP-01

● **Battery holder kit**



Model	KFX-M53G7-00
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Note. Set number containing the battery holder and two tie-up bands.

EP-01

● **CC-Link termination connector**



Model	KCA-M4874-00
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EP-01

TS-S2

TS-SH

TS-X

TS-P

● **Feedback pulse output cable**



Model	KFX-M532M-00
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EP-01

● **Daisy chain and gateway connection cable**



Model	KFX-M532L-00
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EP-01



Safety Precautions

Read the instruction manual thoroughly to operate the robot in a correct manner.



YAMAHA

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