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2023.11

AC Design 04-27071159



Electric Cylinder Series

Sliding Table, Rod, Slider



www.gmtglobalinc.com

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 The catalogue is subject to addition, revision and deletion without notice.
 Please visit [GMT](#) website, or contact the regional sales for the latest information.

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Electric Cylinder - Rod

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Electric Cylinder - Slider

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Precautions

Precautions

This is a precision product. For operating properly, please be familiar with the following precautions before using it.

Unpacking Precautions

Before unpacking, please check the appearance for damage, loose screws or components. If there are concerns about structure and appearance, please take photographs as evidence and e-mailed to the responsible unit.

When the packages arrive, please make sure that the specifications and contents are consistent with the order, and check whether any peripheral parts are missing.

For any questions, please contact the responsible unit.



Safety Precautions

Before placement and use, please make sure that there is sufficient working space around to prevent the possibility of falling and rolling.

→ CAUTION: A violation may result in personal injuries or product damage.



For safe installations and operations, please follow the electrical safety instructions. Do not use in any explosive, flammable, corrosive, humid environments or wet conditions nor near to such materials. Otherwise, there would be risks of fire and electric shocks.

→ CAUTION: A violation may result in serious personal injuries or product damage.



Please always check that whether the movement space of the motors and mechanisms is enough in operations, and avoid any body parts or clothing accessories being close of / entering into the working areas of the stages. It otherwise will cause dangers as rolling, pinching, and pulling.

→ CAUTION: A violation may result in personal injuries or product damage.



Please turn off the power before starting maintenance to prevent the danger as an electric shock.

→ CAUTION: A violation may result in serious personal injuries or product damage.

If the product is used in a vertical direction as Z-axis, please use safety devices to prevent slides or power interruptions are caused due to an overload.

→ CAUTION: A violation may result in personal injuries or product damage.

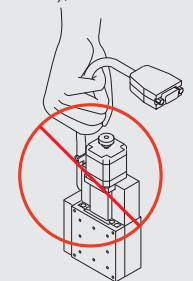
Precautions

Installation Precautions

Installation Precautions

If any unusual situations arise in operations (such as unusual sounds and vibrations), please immediately stop the machine.

→ CAUTION: A violation may result in personal injuries or product damage.



Do not forcibly pull or bend any electric wires and follow the wiring diagram for correct wiring.

→ CAUTION: A violation may result in personal injuries or product damage.

For tightening screws, please use a torque wrench corresponds to specifications of the screws.

→ CAUTION: A violation may cause loosening.

Please do not allow the setting of machine speed to exceed the maximum default speed, and avoid extreme changes of the setting and parameters.

→ CAUTION: A violation may result in personal injuries or product damage.

If any malfunctions or damage arise, please do not continue the use.

→ CAUTION: A violation may result in personal injuries or product damage.

Please make sure the wiring and connections of electric equipment are secured and the parameters are set correctly.

→ CAUTION: A violation may cause fire, electric shocks, personal injuries or product damage.

Environment Precautions

If any foreign objects such as dust or metal powder that enters into the screws or slide rails, it may reduce the product life and cause abnormal wears of products.

→ CAUTION: If any concerns exist, please implement the dust control measures.

Once the product is used as a mechanical processing standard, it may affect the life, performances and precision.

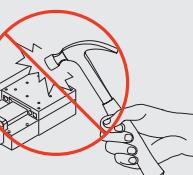
→ CAUTION: For this case, please have the installation be on a reliably rigid base.

The product is designed and planned to operate in the specified directions mentioned in the catalog. Please check with GMT if other directions will be applied.

→ CAUTION: If the product is used beyond the usage of horizontal directions, it will reduce the life and increase the probability of malfunctions.

Before installing our products, please make sure there are no unnecessary objects in the area, and use alcohol for cleaning to prevent for losing precision of the installation.

CAUTION: A violation may cause the product precision unable to match the specifications marked on the catalog.



Do not apply any inappropriate forces on or strike the product to prevent damage and the loss of precision and warranties.

→ CAUTION: A violation may cause the product precision unable to match the specifications marked on the catalog.

Installation Precautions

Please do not turn off the travel stroke limitation sensors during the operation, it otherwise will cause the deactivations of the sensors, and do not overuse the travel strokes while turning the knob on the back of the motors.

→ CAUTION: A violation may result in personal injuries or product damage.

While installing the peripheral mechanisms on the upper / lower board of the stage, please have the stage horizontally fixed and then make sure the flatness and the inclination angle of the mounting surface is within 0.01mm and 1° respectively to prevent for the arising of poor precision due to the deformations of the stage.

→ CAUTION: A violation may result in personal injuries or product damage.

Do not remove any parts of the precision motorized stage arbitrarily to prevent the loss of precision and warranties. If a service is needed, please contact our salespersons.

→ CAUTION: A violation may cause damage on product and the precision unable to match the specifications marked on the catalog.

If any screw holes do not fit or need additional screw holes, please contact our salespersons and do not handle it by self to guarantee the precision and warranties.

→ CAUTION: A violation may cause damage on product and the precision unable to match the specifications marked on the catalog.

All of the accessories and parts of the product are not water-proof or dust-proof; please do not directly use in oil misty, dusty or humid environments.

→ CAUTION: A violation may cause damage on product and the precision unable to match the specifications marked on the catalog.

Installation Procedures:

1. Please make sure there is no flash, dust, or dent on the installation surface.
2. Please put the product on the installation surface.
3. The screw holes should be aligned with the ones located on the installation surface.
4. It is suggested to use the screws according to the compliances of the standard specifications.
5. Use a torque wrench to tighten screws.

Precautions for product use environments:

Transporting temperature	-10°C ~ 70°C
Transporting humidity	below 90%RH (non-condensing)
Installation temperature	0°C ~ 40°C
Installation humidity	below 20% ~ 80%RH (non-condensing)
Environmental gases	It must not contain any corrosive, flammable gas, oil mist or dust indoors.

Warranty Instructions

→ Within a warranty period, if any following failures occur, our company will be responsible for the repair.



→ The product is warranted for one year, and is started from when the product is delivered to the designated place.

→ If any mention below occurs, it will not be covered under warranty:

1. The damage caused by using the product in any unspecified environments or methods.
2. The damage caused by unauthorized modifications or repairs.
3. The damage caused by natural disasters or misuses.
4. The damage caused after the purchase due to the careless uses or motions.
5. The malfunctions or damage caused by unauthorized connections with the other machines.
6. The malfunctions or damage caused by the violations of precautions and instructions.

Trouble Shooting Suggestions

→ If the motors or mechanisms are hit by the external forces, please check whether the properties of screws are in normal.

→ Please do not arbitrarily adjust the positions of the origin and both left and right limits to prevent the collisions of machines and the loss of warranties.

→ The wires and receptacles of limit switches must be secured to prevent loosening.

→ Do not arbitrarily loosen the couplings and transmission structures to guarantee the precision and warranties.

→ If any unusual noises or vibrations of the machines occur in operations, for safety, please turn off the power first.

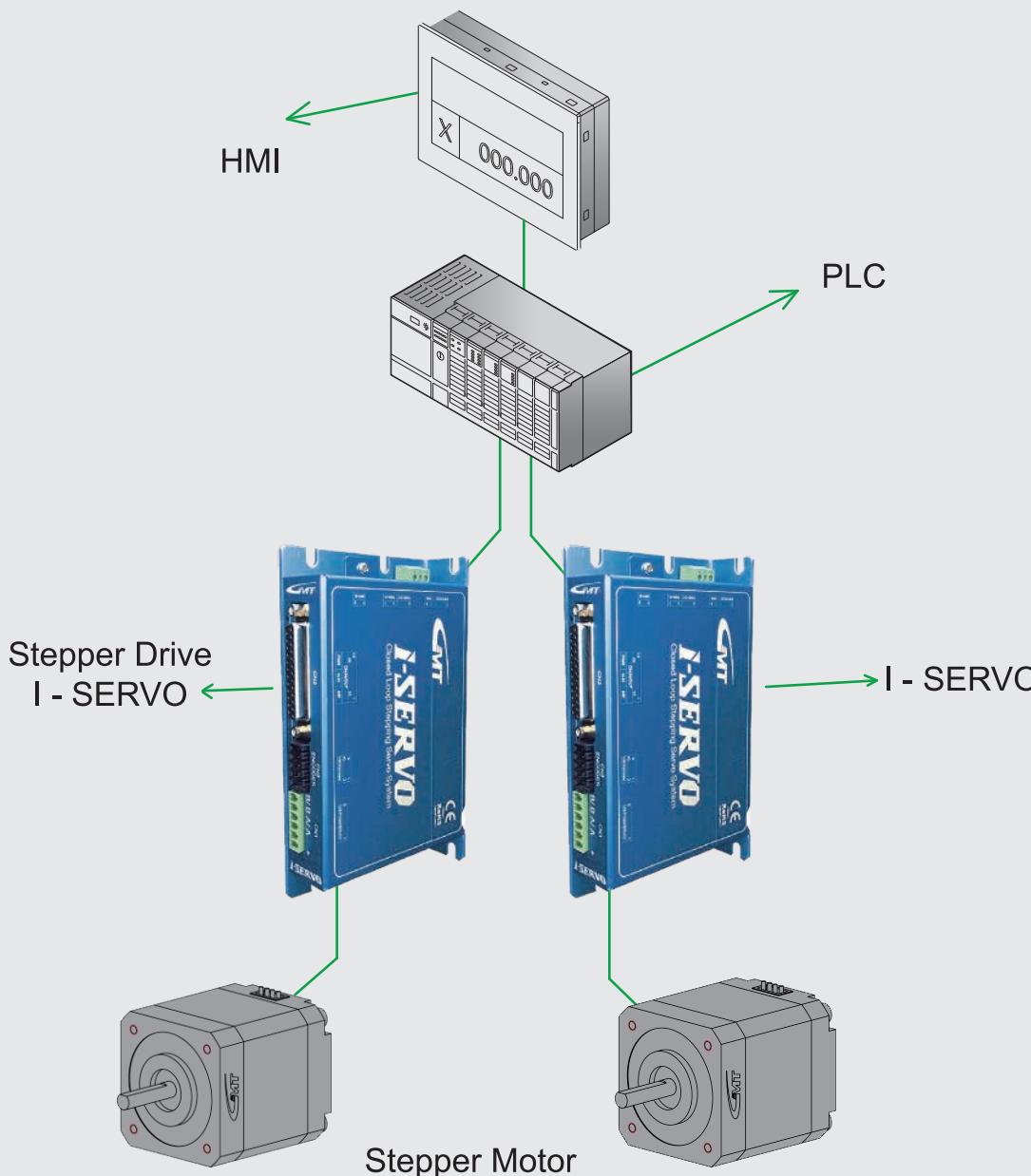
→ To see Q&As regarding to the product, please visit our GMT website.



The motor-driver set is provided by GMT: Stand-alone.

[Stand-alone] Driver control wiring (traditional) :

the driver and the motor need to be connected through the connecting cable.



Code	Name of driver	Appearance	Number of axes	Power voltage	Control method		
					Pulse	I/O	Communication
NA	GTR22G-D (Two-phase bipolar micro-stepper driver)		1	DC24V	•		—
VW	K-SERVO (DKM) (DC Servo Driver) GSV-DKM□□MB-□□DP		16	DC48V	•	•	RS485 Modbus RTU
QV	KE-SERVO (AC Servo Driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU

Code	Name of driver	Control mode			Point	Encoder feedback		Optical linear encoder feedback	* Reference page No. in the catalog
		Position	Speed	Torque		Optical encoder	Magnetic encoder		
NA	GTR22G-D (Two-phase bipolar micro-stepper driver)	•	—	—	—	—	—	—	【P.36】
VW	K-SERVO (DKM) (DC Servo Driver) GSV-DKM□□MB-□□DP	•	•	•	128	•	—	•	【P.148】
QV	KE-SERVO (AC Servo Driver) GSV-KE□□MB21CP	•	•	•	16	•	—	—	【P.152】

* Please refer to the motor-driver catalog.

GECA Description

Description

GECA Series

GECA [36] - [50] - P [2] - NA D D X
 Width Stroke (mm) Screw lead (mm) Motor + Driver Motor installed direction D Sub connector (Optional) cable

【 Package code 】

36	20/30/40/50/60 70/80/90/100	P/lead	2 / 4 / 6	2 / 5	2 / 5 / 10	NA: Two-phase stepper motor+Driver GTR22G-D (package)		
40	20/30/40/50/60 70/80/90/100					NX: Two-phase stepper motor , Without driver		
50	25/50/75/100 25/50/75/100/ 125/150	QV	2 / 5			VW: GMT DC Servo motor+DC Servo driver (package); To go with the GECA60 and GECA75 mechanisms only		
60	25/50/75/100/ 125/150					QV: GMT AC Servo motor+AC Servo driver (package); To go with the GECA60 and GECA75 mechanisms only		
75	25/50/75/100/125 150/175/200					XX: Without motor , Without driver		

D: Motor, direct-coupled
R: Motor, right fold
L: Motor, left fold

X: Not enclosed (in the case of a servo motor)

2: 2m Cable
4: 4m Cable
6: 6m Cable
X: Not enclosed
Note: for use on the cylinder

◎ The model described is GECA36

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Point	Encoder feedback	Optical linear encoder feedback	Reference page number in the catalog	
					Pulse	I/O	Communication	Position	Speed	Torque					
NA	GTR22G-D (Two-phase bipolar micro-step driver)		1	DC24V	●	—	—	●	—	—	—	—	—	【P.36】	
VW	K-SERVO (DKM) (DC servo driver) GSV-DKM□□MB-□□DP		16	DC48V	●	●	RS485 Modbus RTU	●	●	●	128	●	—	●	【P.148】
QV	KE-SERVO (AC servo driver) GSV-KE□□MB21CP		32	AC220V	●	●	RS485 Modbus RTU	●	●	●	16	●	—	—	【P.152】

* Please refer to the motor-driver catalog.

GECA Specification



◎ GECA series - stepper motors

Stepper motor

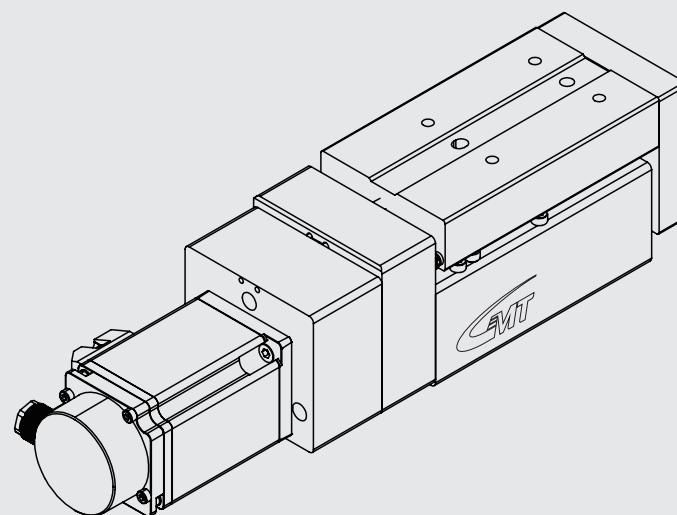
	Model No.	GECA36	GECA40	GECA50
Mechanical spec.	Width of cylinder (mm)	36	40	50
	Stroke (mm)	20~100 (Every 10 mm)		25~100 (Every 25 mm)
	Drive type	Ball screw Ø6		Ball screw Ø8
	Lead (mm)	2	4	6
	Rail			Linear ball guide
	Materials of the cylinder	Aluminum alloy / Anodized		
	Feed-out direction	N : GMT Standard		
Precision	Maximum speed (mm/s)	30	60	90
	Repeatability (mm)			± 0.005 *
	Maximum thrust force (N)	132	93	77
	Horizontal load (Kgf)	8	7	6
	Vertical load (Kgf)	4	3	2
Electrical	Open loop	Driver	GTR22G-D [□20]	GTR22G-D [□28]
	Closed loop	Driver	-	-
Connector	Lateral connector of the cylinder			15-pin male D-SUB connector
	Lateral connector of the transmission cable			15-pin female D-SUB connector

* 1 The precision for foldleft series is ± 0.01mm °

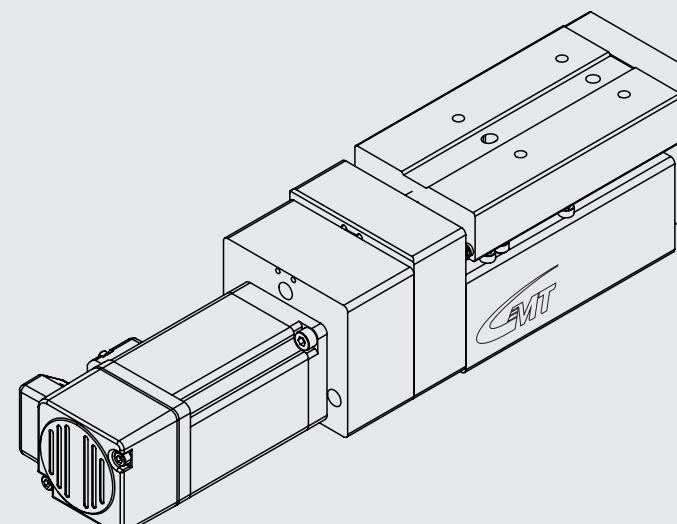
* 2 If a brake-type is needed, please contact Sales to select the type.

* Should you have other needed motor specifications, please contact Sales.

GECA Product diagram



◎ GECA series - DC servo motor



◎ GECA series - AC servo motor types

GECA Specification

Stepper / Servo motor

	Model No.	GECA60	GECA75
Mechanical spec.	Width of cylinder (mm)	60	75
	Stroke (mm)	25~150 (Every 25 mm)	25~200 (Every 25 mm)
	Drive type		Ball screw Ø10
	Lead (mm)	2	5
	Rail		Linear ball circulation
	Materials of the cylinder		Aluminum alloy / Anodized
	Feed-out direction		N : GMT Standard
Step precision spec.	Maximum speed (mm/s)	30	75
	Repeatability (mm)		± 0.005 *
	Maximum thrust force (N)	567	224
	Horizontal load (Kgf)	8	6
	Vertical load (Kgf)	4	2
Step electrical spec.	Open loop		
	Driver		GTR22G-D [□42]
	Closed loop		-
	Driver		
DC servo-precision spec.	Lateral connector of the cylinder		15-pin male D-SUB connector
DC servo-electrical spec.	Connector		15-pin female D-SUB connector
	Maximum speed (mm/s)	50	125
	Repeatability (mm)		± 0.005 *
	Maximum thrust force (N)	848	339
	Horizontal load (Kgf)	8	6
	Vertical load (kgf)	4	2
AC servo-precision spec.	DC servo motor		50W : GSVM-D0BMD4
AC servo-electrical spec.	DC servo driver		K-SERVO [GSV-DK0BMR-48DP]
	Lateral connector of the cylinder	Manufacturer : TE Connectivity Power cable : 172159-1+170366-1(male) Encoder cable : 172161-1+170365-1(male)	
	Lateral connector of the transmission cable	Manufacturer : KST Power cable : E1510-RED(European terminal) Manufacturer : JST Encoding cable : PHDR-12VS+SPHD-001T-P0.5(female)	
	Maximum speed (mm/s)	50	125
	Repeatability (mm)		± 0.005 *
	Maximum thrust force (N)	853	341
	Horizontal load (Kgf)	8	6
	Vertical load (Kgf)	4	2
AC servo-precision spec.	AC servo motor		100W : GSVM-A01LC4
AC servo-electrical spec.	AC servo driver		GSV-KE01MB-21CP
	Lateral connector of the cylinder	Manufacturer : Tyco electronics Power cable : 172167-1(male)	Encoding cable : 172171-1(male)
	Lateral connector of the transmission cable	Manufacturer : Tyco electronics Power cable : 172159-1(female)	Encoding cable : 172163-1(female)

* 1 The precision for foldleft series is ± 0.01mm °

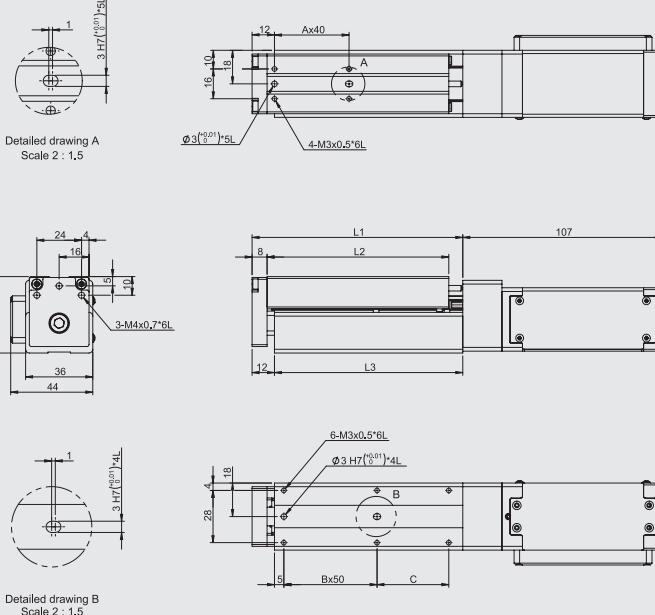
* 2 If a brake-type is needed, please contact Sales to select the type.

* Should you have other needed motor specifications, please contact Sales.

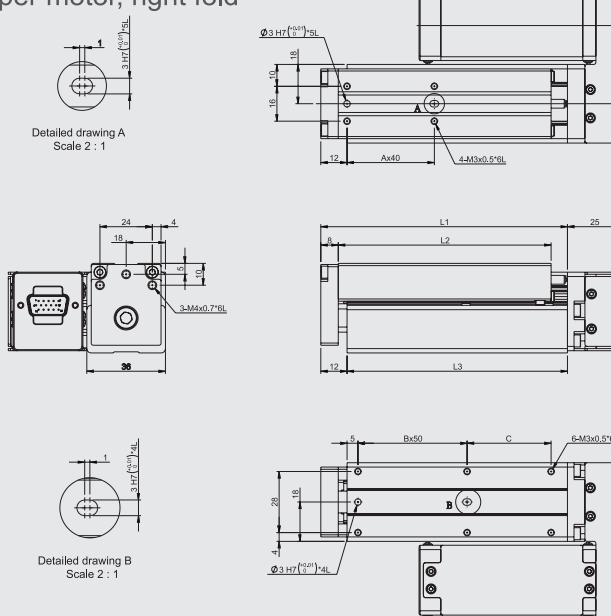
GECA Dimension

GECA36

Stepper motor



Spec.	A	B	C	L1	L2	L3
GECA36-20	1	1	28.5	103	87.5	91
GECA36-30	1	1	38.5	113	97.5	101
GECA36-40	1	1	48.5	123	107.5	111
GECA36-50	1	1	58.5	133	117.5	121
GECA36-60	2	2	18.5	143	127.5	131
GECA36-70	2	2	28.5	153	137.5	141
GECA36-80	2	2	38.5	163	147.5	151
GECA36-90	2	2	48.5	173	157.5	161
GECA36-100	2	2	58.5	183	167.5	171

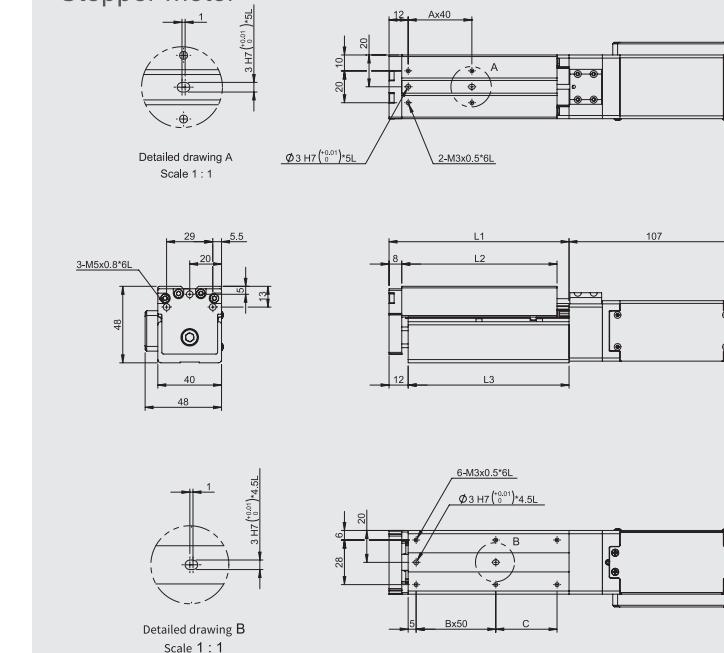
GECA36
Stepper motor, right fold


Spec.	A	B	C	L1	L2	L3
GECA36-20	1	1	28.5	103	87.5	91
GECA36-30	1	1	38.5	113	97.5	101
GECA36-40	1	1	48.5	123	107.5	111
GECA36-50	1	1	58.5	133	117.5	121
GECA36-60	2	2	18.5	143	127.5	131
GECA36-70	2	2	28.5	153	137.5	141
GECA36-80	2	2	38.5	163	147.5	151
GECA36-90	2	2	48.5	173	157.5	161
GECA36-100	2	2	58.5	183	167.5	171

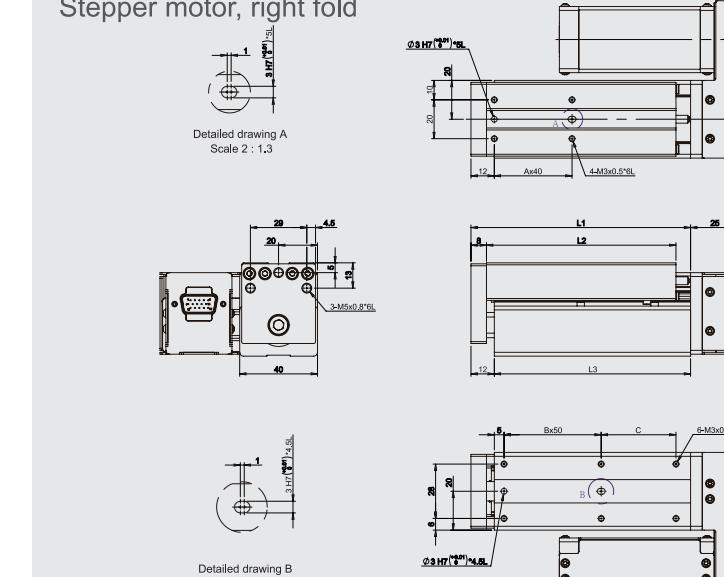
GECA Dimension

GECA40

Stepper motor



Spec.	A	B	C	L1	L2	L3
GECA40-20	1	1	28.5	103	87.5	91
GECA40-30	1	1	38.5	113	97.5	101
GECA40-40	1	1	48.5	123	107.5	111
GECA40-50	1	1	58.5	133	117.5	121
GECA40-60	2	2	18.5	143	127.5	131
GECA40-70	2	2	28.5	153	137.5	141
GECA40-80	2	2	38.5	163	147.5	151
GECA40-90	2	2	48.5	173	157.5	161
GECA40-100	2	2	58.5	183	167.5	171

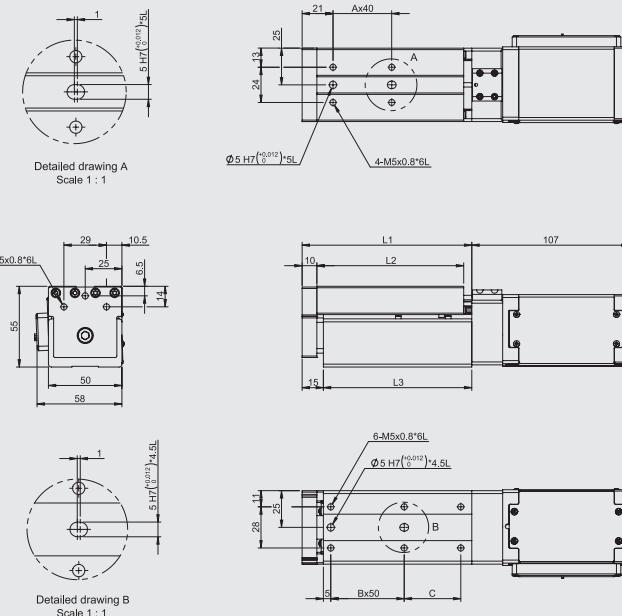
GECA40
Stepper motor, right fold


Spec.	A	B	C	L1	L2	L3
GECA40-20	1	1	28.5	103	87.5	91
GECA40-30	1	1	38.5	113	97.5	101
GECA40-40	1	1	48.5	123	107.5	111
GECA40-50	1	1	58.5	133	117.5	121
GECA40-60	2	2	18.5	143	127.5	131
GECA40-70	2	2	28.5	153	137.5	141
GECA40-80	2	2	38.5	163	147.5	151
GECA40-90	2	2	48.5	173	157.5	161
GECA40-100	2	2	58.5	183	167.5	171

GECA Dimension

GECA50

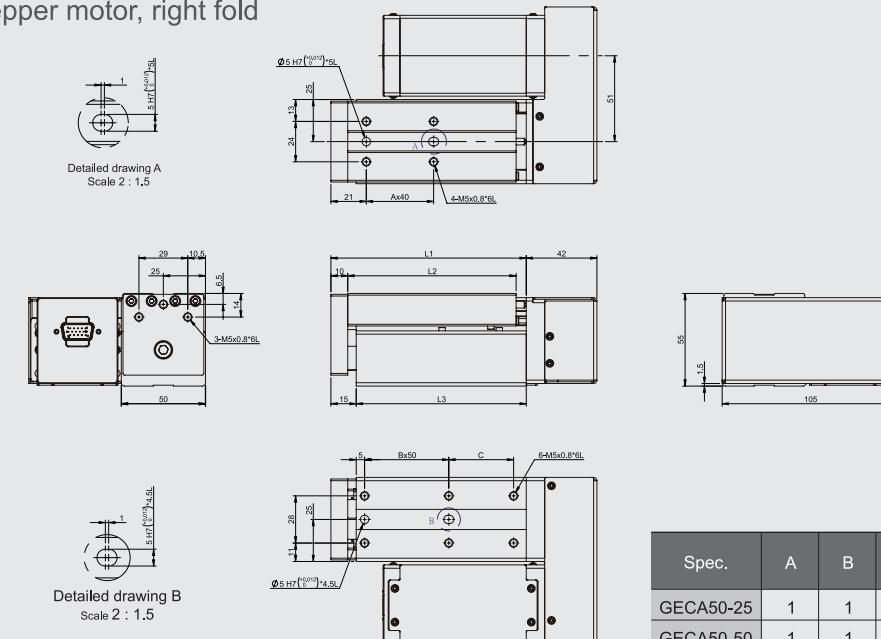
Stepper motor



Spec.	A	B	C	L1	L2	L3
GECA50-25	1	1	38.5	115.5	100	101
GECA50-50	1	1	63.5	140.5	125	126
GECA50-75	2	2	38.5	165.5	150	151
GECA50-100	2	2	63.5	190.5	175	176

GECA50

Stepper motor, right fold

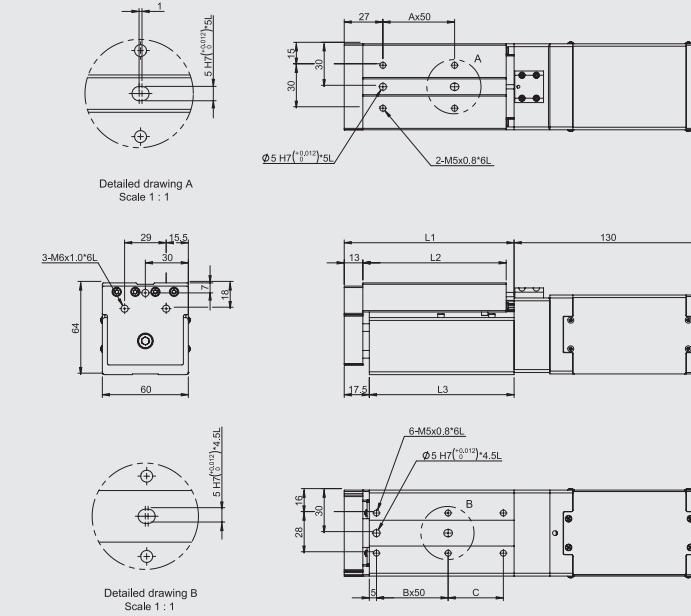


Spec.	A	B	C	L1	L2	L3
GECA50-25	1	1	38.5	115.5	100	101
GECA50-50	1	1	63.5	140.5	125	126
GECA50-75	2	2	38.5	165.5	150	151
GECA50-100	2	2	63.5	190.5	175	176

GECA Dimension

GECA60

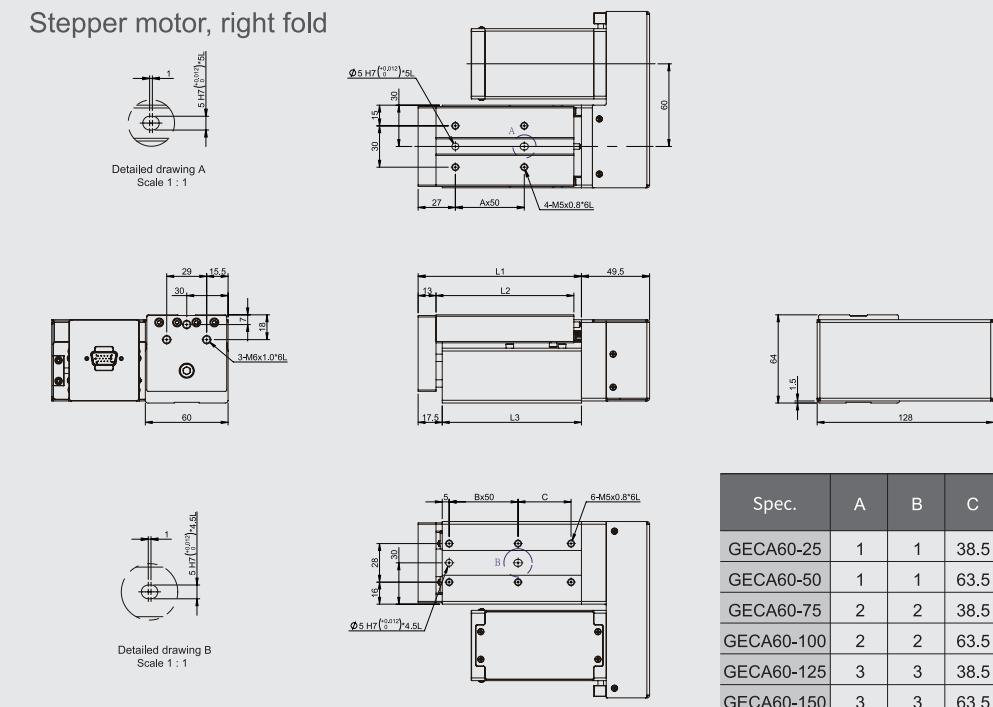
Stepper motor



Spec.	A	B	C	L1	L2	L3
GECA60-25	1	1	38.5	118.5	100	101
GECA60-50	1	1	63.5	143.5	125	126
GECA60-75	2	2	38.5	168.5	150	151
GECA60-100	2	2	63.5	193.5	175	176
GECA60-125	3	3	38.5	218.5	200	201
GECA60-150	3	3	63.5	243.5	225	226

GECA60

Stepper motor, right fold

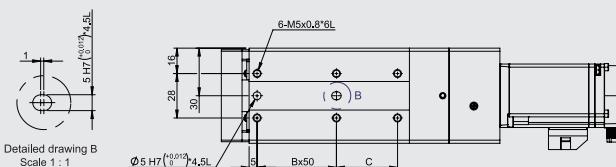
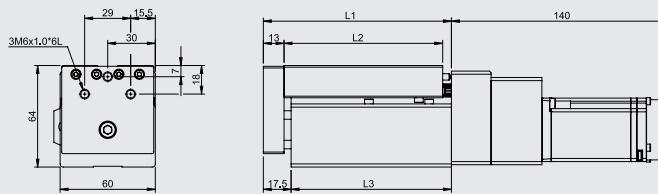
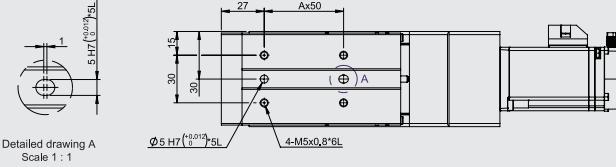


Spec.	A	B	C	L1	L2	L3
GECA60-25	1	1	38.5	118.5	100	101
GECA60-50	1	1	63.5	143.5	125	126
GECA60-75	2	2	38.5	168.5	150	151
GECA60-100	2	2	63.5	193.5	175	176
GECA60-125	3	3	38.5	218.5	200	201
GECA60-150	3	3	63.5	243.5	225	226

GECA Dimension

GECA60

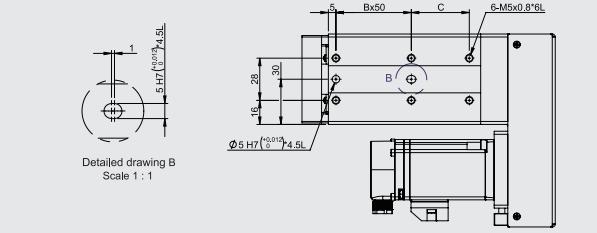
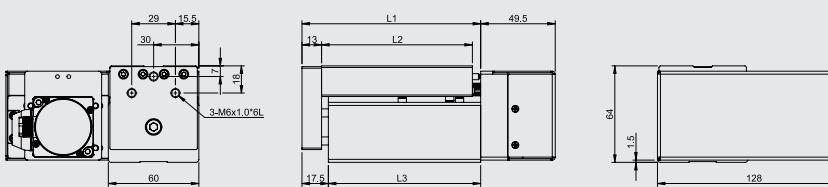
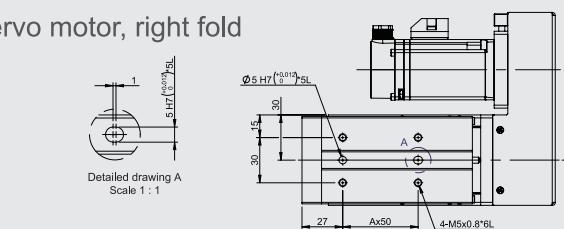
DC Servo motor



Spec.	A	B	C	L1	L2	L3
GECA60-25	1	1	38.5	118.5	100	101
GECA60-50	1	1	63.5	143.5	125	126
GECA60-75	2	2	38.5	168.5	150	151
GECA60-100	2	2	63.5	193.5	175	176
GECA60-125	3	3	38.5	218.5	200	201
GECA60-150	3	3	63.5	243.5	225	226

GECA60

DC Servo motor, right fold

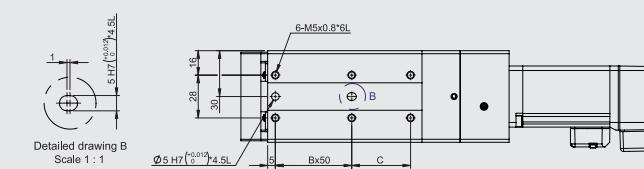
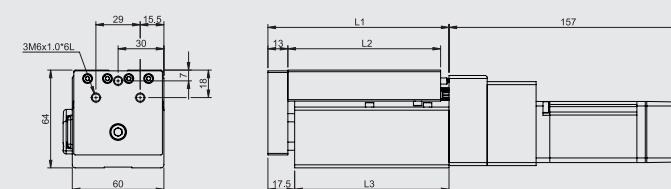
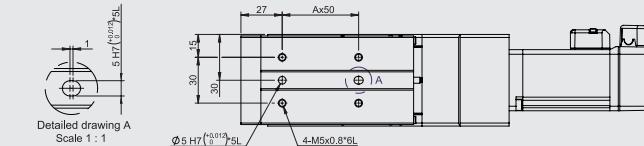


Spec.	A	B	C	L1	L2	L3
GECA60-25	1	1	38.5	118.5	100	101
GECA60-50	1	1	63.5	143.5	125	126
GECA60-75	2	2	38.5	168.5	150	151
GECA60-100	2	2	63.5	193.5	175	176
GECA60-125	3	3	38.5	218.5	200	201
GECA60-150	3	3	63.5	243.5	225	226

GECA Dimension

GECA60

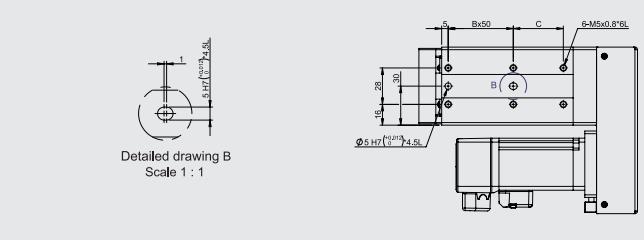
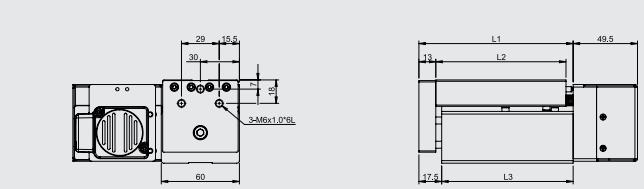
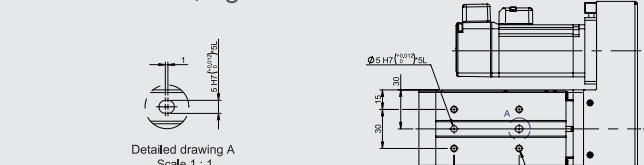
AC Servo motor



Spec.	A	B	C	L1	L2	L3
GECA60-25	1	1	38.5	118.5	100	101
GECA60-50	1	1	63.5	143.5	125	126
GECA60-75	2	2	38.5	168.5	150	151
GECA60-100	2	2	63.5	193.5	175	176
GECA60-125	3	3	38.5	218.5	200	201
GECA60-150	3	3	63.5	243.5	225	226

GECA60

AC Servo motor, right fold

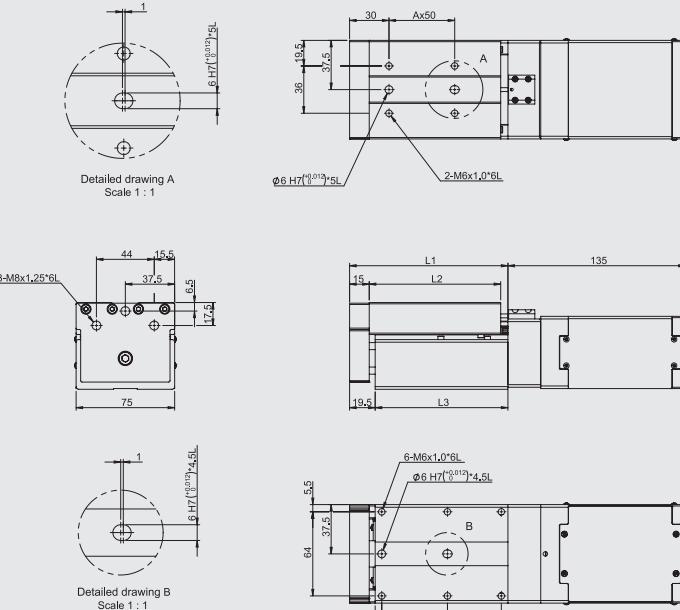


Spec.	A	B	C	L1	L2	L3
GECA60-25	1	1	38.5	118.5	100	101
GECA60-50	1	1	63.5	143.5	125	126
GECA60-75	2	2	38.5	168.5	150	151
GECA60-100	2	2	63.5	193.5	175	176
GECA60-125	3	3	38.5	218.5	200	201
GECA60-150	3	3	63.5	243.5	225	226

GECA Dimension

GECA75

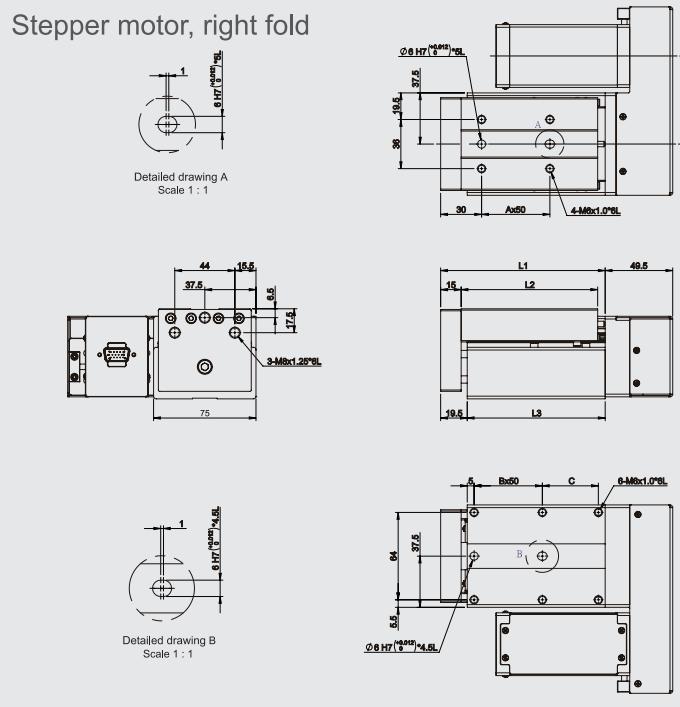
Stepper motor



Spec.	A	B	C	L1	L2	L3
GECA75-25	1	1	41	120.5	100	101
GECA75-50	1	1	66	145.5	125	126
GECA75-75	2	2	41	170.5	150	151
GECA75-100	2	2	66	195.5	175	176
GECA75-125	3	3	41	220.5	200	201
GECA75-150	3	3	66	245.5	225	226
GECA75-175	4	4	41	270.5	250	251
GECA75-200	4	4	66	295.5	275	276

GECA75

Stepper motor, right fold

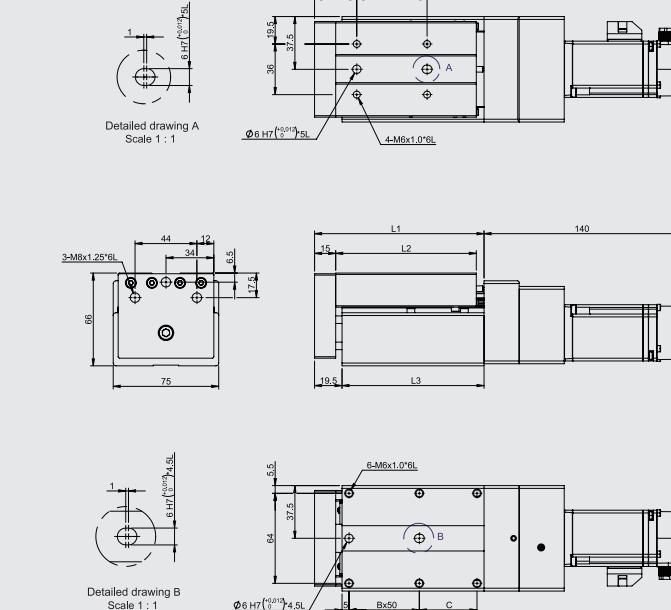


Spec.	A	B	C	L1	L2	L3
GECA75-25	1	1	41	120.5	100	101
GECA75-50	1	1	66	145.5	125	126
GECA75-75	2	2	41	170.5	150	151
GECA75-100	2	2	66	195.5	175	176
GECA75-125	3	3	41	220.5	200	201
GECA75-150	3	3	66	245.5	225	226
GECA75-175	4	4	41	270.5	250	251
GECA75-200	4	4	66	295.5	275	276

GECA Dimension

GECA75

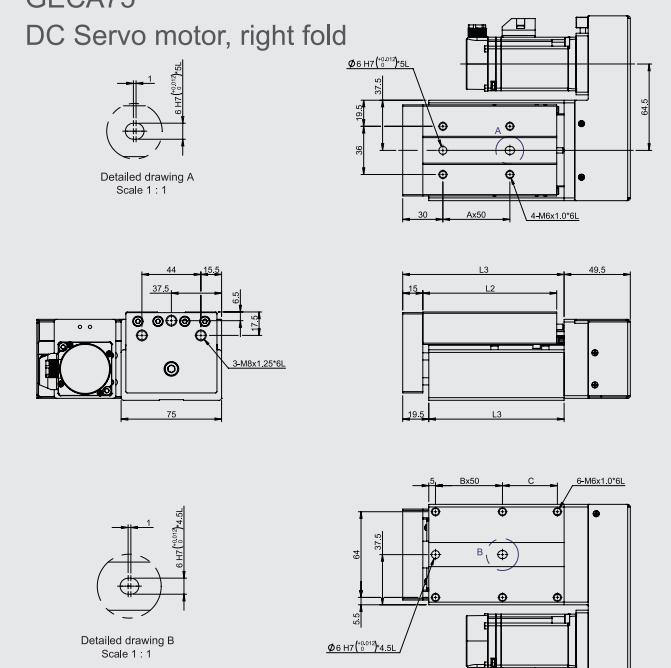
DC Servo motor



Spec.	A	B	C	L1	L2	L3
GECA75-25	1	1	41	120.5	100	101
GECA75-50	1	1	66	145.5	125	126
GECA75-75	2	2	41	170.5	150	151
GECA75-100	2	2	66	195.5	175	176
GECA75-125	3	3	41	220.5	200	201
GECA75-150	3	3	66	245.5	225	226
GECA75-175	4	4	41	270.5	250	251
GECA75-200	4	4	66	295.5	275	276

GECA75

DC Servo motor, right fold

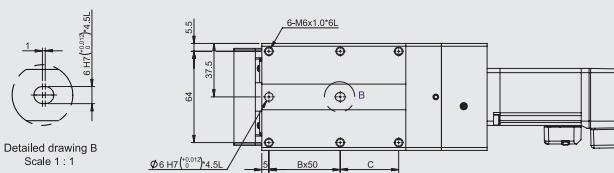
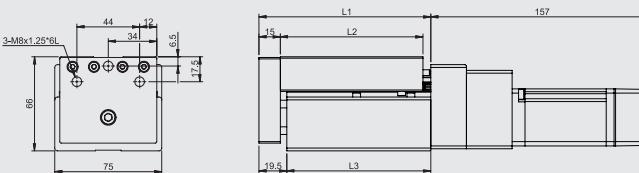
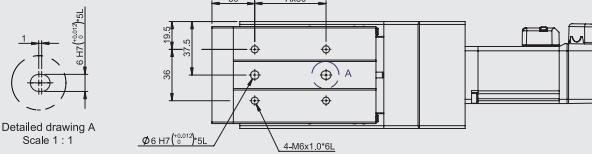


Spec.	A	B	C	L1	L2	L3
GECA75-25	1	1	41	120.5	100	101
GECA75-50	1	1	66	145.5	125	126
GECA75-75	2	2	41	170.5	150	151
GECA75-100	2	2	66	195.5	175	176
GECA75-125	3	3	41	220.5	200	201
GECA75-150	3	3	66	245.5	225	226
GECA75-175	4	4	41	270.5	250	251
GECA75-200	4	4	66	295.5	275	276

GECA Dimension

GECA75

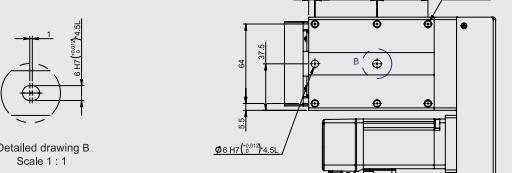
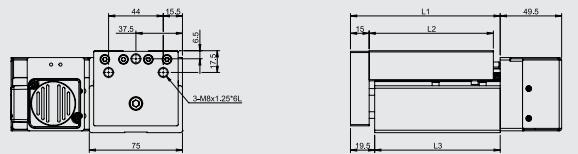
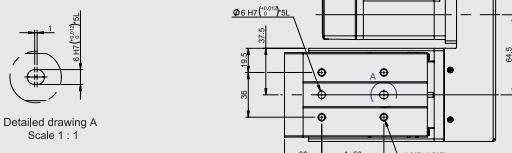
AC Servo motor



Spec.	A	B	C	L1	L2	L3
GECA75-25	1	1	41	120.5	100	101
GECA75-50	1	1	66	145.5	125	126
GECA75-75	2	2	41	170.5	150	151
GECA75-100	2	2	66	195.5	175	176
GECA75-125	3	3	41	220.5	200	201
GECA75-150	3	3	66	245.5	225	226
GECA75-175	4	4	41	270.5	250	251
GECA75-200	4	4	66	295.5	275	276

GECA75

AC Servo motor, right fold



Spec.	A	B	C	L1	L2	L3
GECA75-25	1	1	41	120.5	100	101
GECA75-50	1	1	66	145.5	125	126
GECA75-75	2	2	41	170.5	150	151
GECA75-100	2	2	66	195.5	175	176
GECA75-125	3	3	41	220.5	200	201
GECA75-150	3	3	66	245.5	225	226
GECA75-175	4	4	41	270.5	250	251
GECA75-200	4	4	66	295.5	275	276

Description

GECB Series

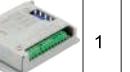
GECB	32	-	50	- P	1	-	NA	D	-	D	X
Width of cylinder (mm)	Stroke (mm)	Screw lead (mm)	Motor + Driver		Motor installed direction		D Sub connector	(Optional) cable			
32 30 / 50	36 30 / 50	P-Bad	1	2	4	6	D: Motor, direct-coupled				
36 30 / 50	50 30 / 50		NA: Two-phase stepper motor+driver GTR22G-D (package)	NA							
50 30 / 50	58 30 / 50		NX: Two-phase stepper motor, Without driver *2	NX							
58 30 / 50	48 50 / 75			2 / 5 / 8	2 / 5 / 8						
48 50 / 75	80 50 / 75										

【 Package code 】
 D: Motor, direct-coupled
 NA: Two-phase stepper motor+driver GTR22G-D (package)
 NX: Two-phase stepper motor, Without driver *2

2: 2m Cable
 4: 4m Cable
 6: 6m Cable
 X: Not enclosed
 Note: for use on the cylinder

◎The model described is GECB32

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method		Control mode		Point	Encoder feedback	Optical linear encoder feedback	Reference * page number in the catalog
					Pulse	I/O	Communication	Position		Optical encoder	Magnetic encoder	
NA	GTR22G-D (Two-phase bipolar micro-stepper driver)		1	DC24V	●	—	—	●	—	—	—	【P.36】

* Please refer to the motor-driver catalog.



◎ GECB32

Stepper motor

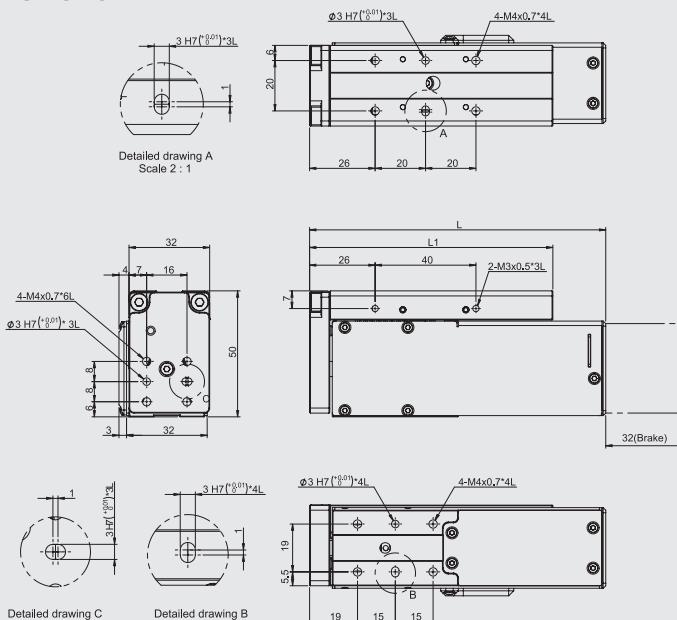
Model No.		GECB32	GECB36	GECB50	GECB58
Mechanical spec.	Width of cylinder (mm)	32	36	50	58
	Stroke (mm)		30 ~ 50		
	Drive type		Ball screw Ø6		
	Lead (mm)	1	2	4	6
	Rail		Cross roller guide rail		
	Materials of the cylinder		Aluminum alloy / Anodized		
	Feed-out direction		N : GMT Standard		
Precision	Maximum speed (mm/s)	15	30	60	90
	Repeatability (mm)		± 0.005		
	Maximum thrust force (N)	178	89	44	29
	Horizontal load (Kgf)	12	6	3	2
	Vertical load (Kgf)	3	1.5	0.75	0.5
Electrical	Open loop	Driver	GTR22G-D [□28]		
	Closed loop	Driver	-		
	Connector	Lateral connector of the cylinder	15-pin male D-SUB connector		
		Lateral connector of the transmission cable	15-pin female D-SUB connector		

Stepper motor

Model No.		GECB48	GECB80
Mechanical spec.	Width of cylinder (mm)	48	80
	Stroke (mm)	50 ~ 75	
	Drive type	Ball screw Ø8	
	Lead (mm)	2	5
	Rail		Cross roller guide rail
	Materials of the cylinder		Aluminum alloy / Anodized
	Feed-out direction		N : GMT Standard
Precision	Maximum speed (mm/s)	30	75
	Repeatability (mm)		± 0.005
	Maximum thrust (N)	116	46
	Horizontal load (Kgf)	8	3
	Vertical load (Kgf)	2	0.8
Electrical	Open loop	Driver	GTR22G-D [□42]
	Closed loop	Driver	-
	Connector	Lateral connector of the cylinder	15-pin male D-SUB connector
		Lateral connector of the transmission cable	15-pin female D-SUB connector

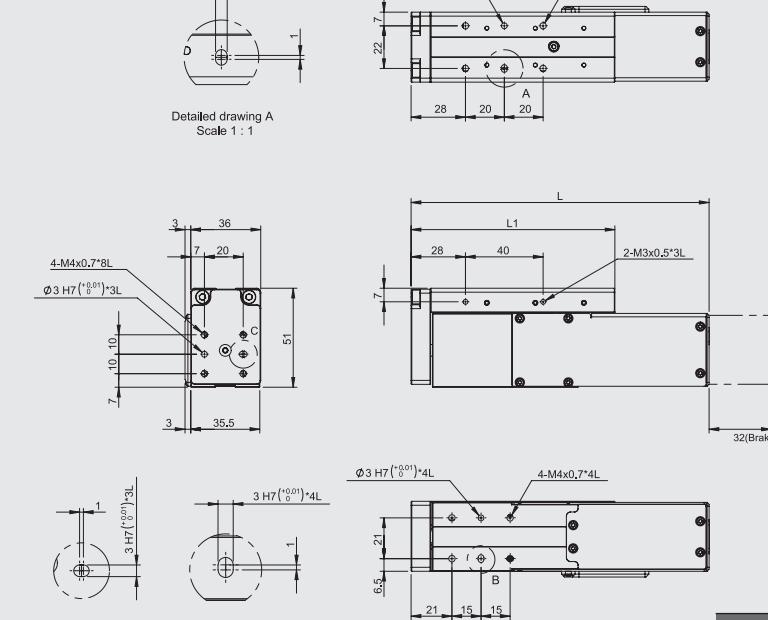
*1 If a brake-type is needed, please contact Sales to select the type.

GECB Dimension

GECB32


*When designing an adapter plate, customers should pay attention to ensuring that the protruding length of screws is shorter than the depth indicated in the drawings for the threaded holes in order not to damage the mechanism.

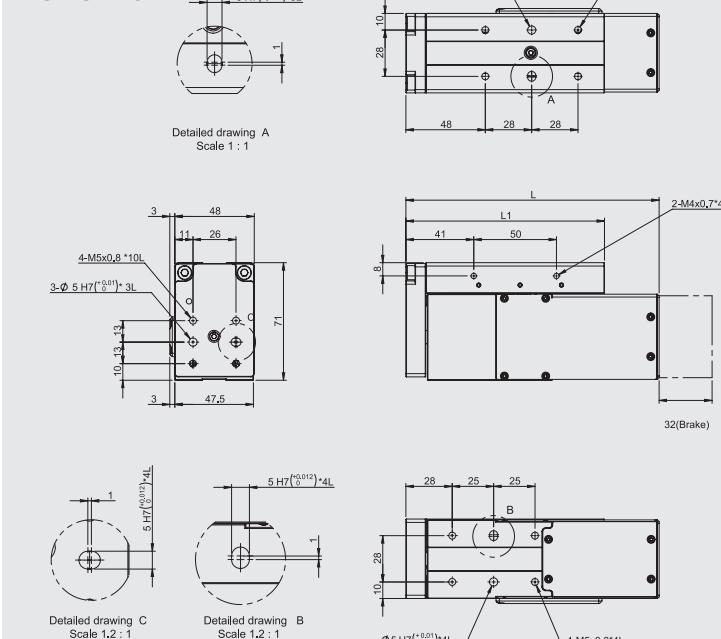
Spec.	L	L1
GECB32-30	117.5	96.5
GECB32-50	137.5	116.5

GECB36


*When designing an adapter plate, customers should pay attention to ensuring that the protruding length of screws is shorter than the depth indicated in the drawings for the threaded holes in order not to damage the mechanism.

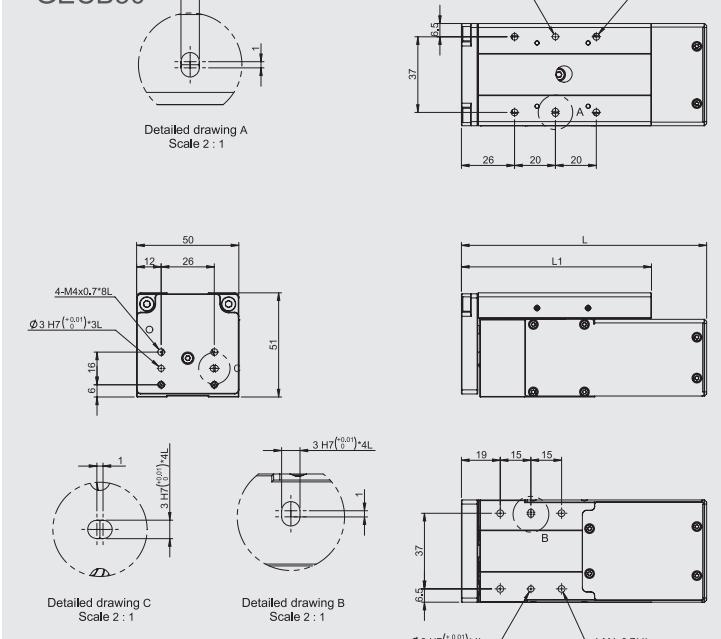
Spec.	L	L1
GECB36-30	133.5	85
GECB36-50	153.5	105

GECB Dimension

GECB48


*When designing an adapter plate, customers should pay attention to ensuring that the protruding length of screws is shorter than the depth indicated in the drawings for the threaded holes in order not to damage the mechanism.

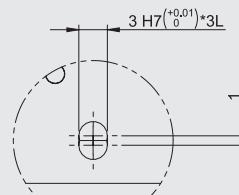
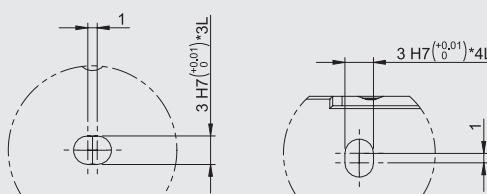
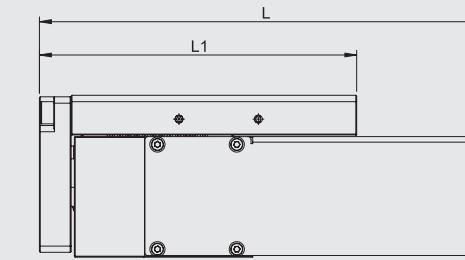
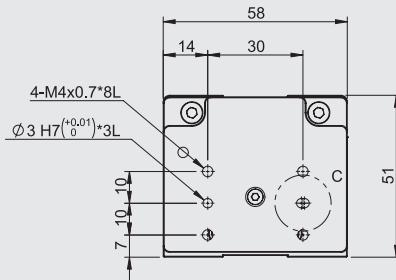
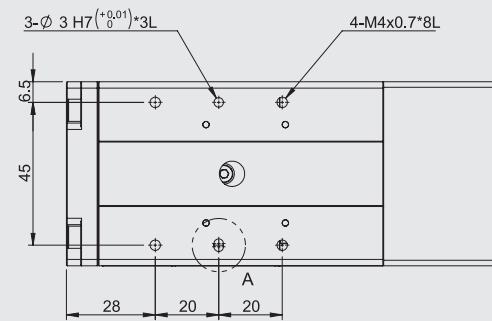
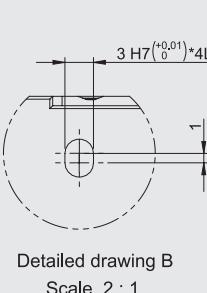
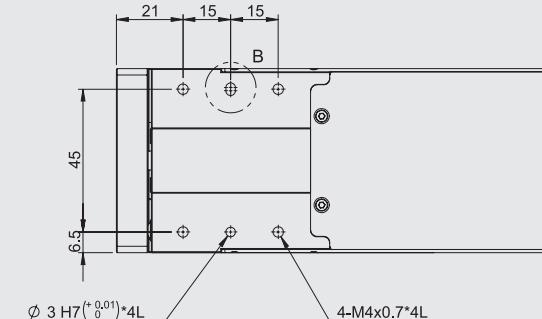
Spec.	L	L1
GECB48-50	153	120
GECB48-75	178	145

GECB50


*When designing an adapter plate, customers should pay attention to ensuring that the protruding length of screws is shorter than the depth indicated in the drawings for the threaded holes in order not to damage the mechanism.

Spec.	L	L1
GECB50-30	120	93
GECB50-50	140	113

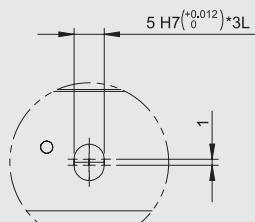
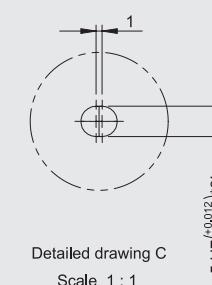
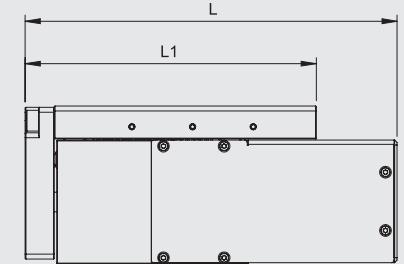
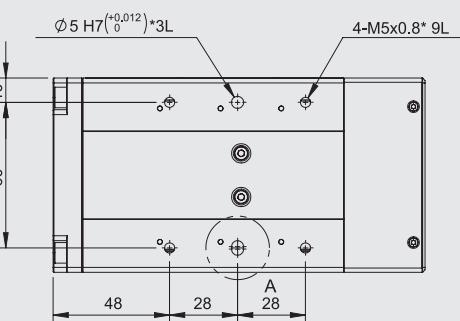
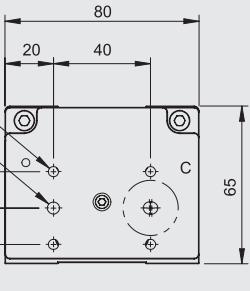
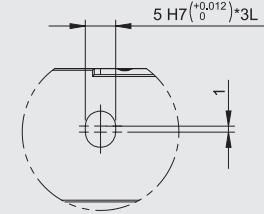
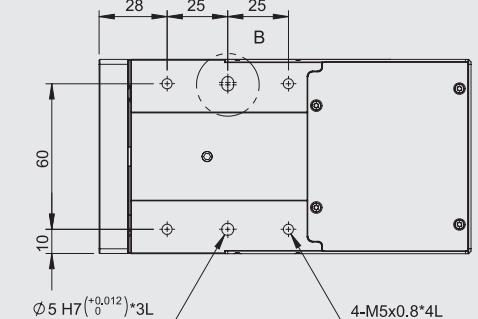
GECB Dimension

GECB58

Detailed drawing A
Scale 2 : 1

Detailed drawing C
Scale 2 : 1

Detailed drawing B
Scale 2 : 1


Spec.	L	L1
GECB58-30	142	100
GECB58-50	162	120

*When designing an adapter plate, customers should pay attention to ensuring that the protruding length of screws is shorter than the depth indicated in the drawings for the threaded holes in order not to damage the mechanism.

GECB Dimension

GECB80

Detailed drawing A
Scale 1 : 1

Detailed drawing C
Scale 1 : 1

Detailed drawing B
Scale 1 : 1


Spec.	L	L1
GECB80-50	160.5	120
GECB80-75	185.5	145

*When designing an adapter plate, customers should pay attention to ensuring that the protruding length of screws is shorter than the depth indicated in the drawings for the threaded holes in order not to damage the mechanism.

GECC Description

Description

GECC Series

GECC	65	-	50	-	P	2	-	NA	D	-	D	X
Width of cylinder (mm)	Stroke (mm)		Screw lead (mm)					Motor + Driver	Motor installed direction	D Sub connector	(Optional) cable	
65	30 / 50		1 / 2									
75	30 / 50		4 / 6									
95	50 / 75		2 / 5 / 8									
[Package code]												
D: Motor, direct-coupled												
NA: Two-phase stepper motor+ DriverGTR22G-D (package)												
NX: Two-phase stepper motor, Without driver												
2: 2m Cable												
4: 4m Cable												
6: 6m Cable												
X: Not enclosed												
Note: for use on the cylinder												

◎The model described is GECC35.

Motor-driver package list

Code	Name of driver	Appearance	Number of axes	Power voltage	Control method		Control mode		Encoder feedback	Optical linear encoder feedback	Reference page number in the catalog	
					Pulse	I/O	Position	Speed	Torque			
NA	GTR22G-D (Two-phase bipolar micro-step driver)		1	DC24V	●	—	—	●	—	—	—	【P.36】

* Please refer to the motor-driver catalog.



◎ GECC65

GECC Specification

Stepper motor

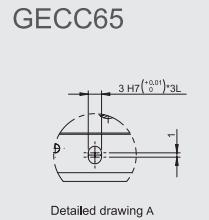
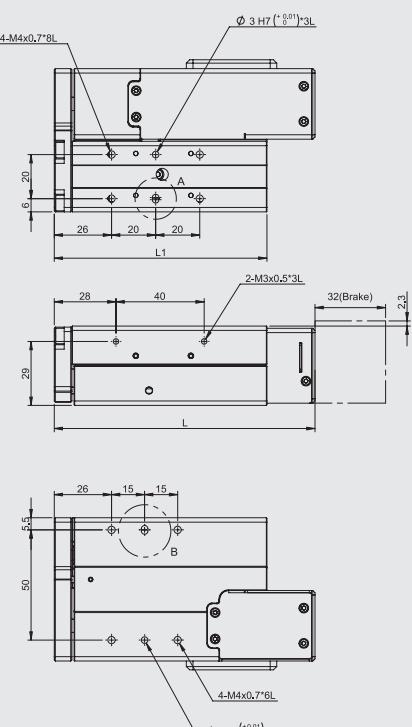
Model No.		GECC65	GECC75
Mechanical spec.	Width of cylinder (mm)	65	75
	Stroke (mm)	30 ~ 50	Ball screw Ø6
	Drive type		
	Lead (mm)	1	2
	Rail		Cross roller guide rail
	Materials of the cylinder		Aluminum alloy / Anodized
	Feed-out direction		N : GMT Standard
	Maximum speed (mm/s)	15	30
	Repeatability (mm)		± 0.005
	Maximum thrust force (N)	178	89
Precision	Horizontal load (kgf)	12	6
	Vertical load (kgf)	3	1.5
	Driver		GTR22G-D [□28]
	Connector		
Electrical	Driver		-
	Lateral connector of the cylinder		15-pin male D-SUB connector
	Lateral connector of the transmission cable		15-pin female D-SUB connector
	Connector		

Stepper motor

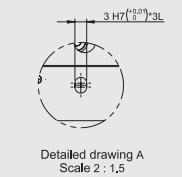
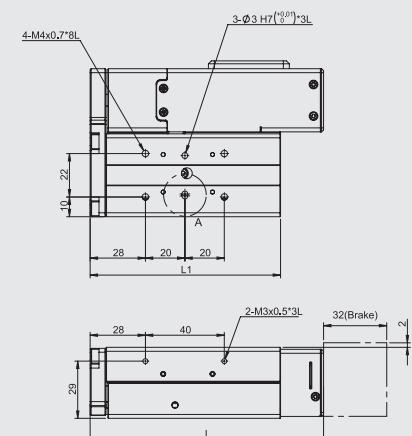
Model No.		GECC95	
Mechanical spec.	Width of cylinder (mm)	95	
	Stroke (mm)	50 ~ 75	
	Drive type		Ball screw Ø8
	Lead (mm)	2	5
	Rail		Cross roller guide rail
	Materials of the cylinder		Aluminum alloy / Anodized
	Feed-out direction		N : GMT Standard
	Maximum speed (mm/s)	30	75
	Repeatability (mm)		± 0.005
	Maximum thrust force (N)	116	46
Precision	Horizontal load (Kgf)	8	3
	Vertical load (Kgf)	2	0.8
	Driver		GTR22G-D [□42]
	Connector		
Electrical	Driver		-
	Lateral connector of the cylinder		15-pin male D-SUB connector
	Lateral connector of the transmission cable		15-pin female D-SUB connector
	Connector		

*1 If a brake-type is needed, please contact Sales to select the type.

GECC Dimension

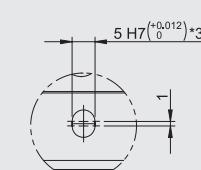
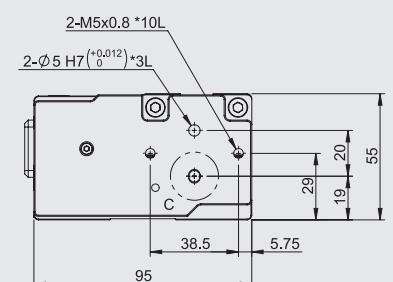
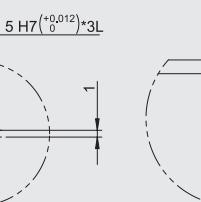
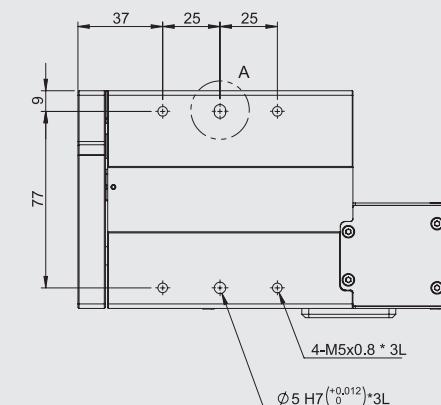
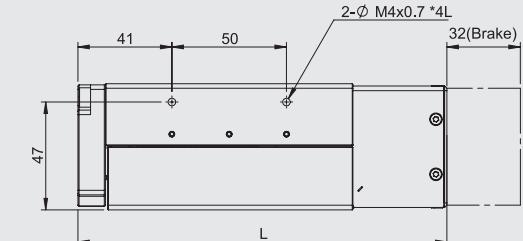
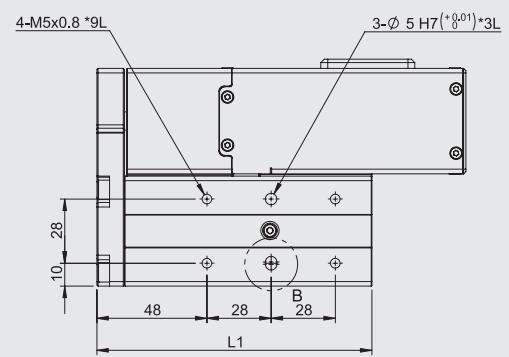
GECC65

Detailed drawing A
Scale 2 : 1.5

Detailed drawing B
Scale 2 : 1.5

Spec.	L	L1
GECC65-30	118.3	96.5
GECC65-50	138.3	116.5

GECC75

Detailed drawing A
Scale 2 : 1.5

Detailed drawing B
Scale 2 : 1.5

Spec.	L	L1
GECC75-30	118.3	96.5
GECC75-50	138.3	116.5

GECC Dimension

GECC95

Detailed drawing B
Scale 1 : 1

Detailed drawing C
Scale 1.5 : 1

Detailed drawing A
Scale 1.5 : 1


Spec.	L	L1
GECC95-50	161	120
GECC95-75	186	145

Description

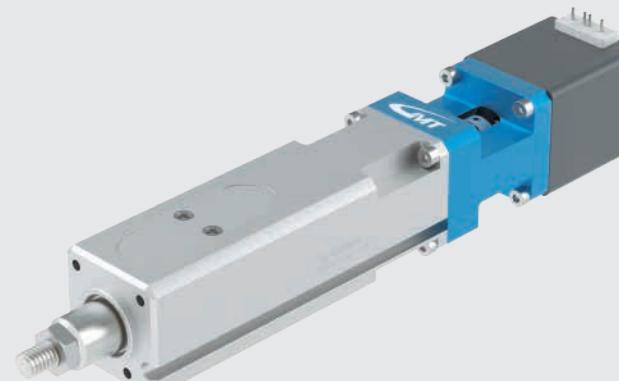
GECD Series

GECD	20	-	50	-	P	2	-	NA	D	-	C	X
Width of cylinder(mm)	20	Stroke (mm)	50	Screw lead (mm)	2			Motor + Driver	Motor installed direction	Connector*2	(Optional) cable*2	
20	15/25/50/75	P	1/2/4									
[Package code]												
28	25/50/75/100	P	1/2/4					NA: Two-phase stepper motor +Driver GTR22G-D (package)	D: Motor, direct-coupled			
								NX: Two-phase stepper motor, Without driver	R: Motor, right fold			
								XX: Without motor, Without driver	L: Motor, left fold			

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method		Control mode		Point	Encoder feedback		Optical linear encoder feedback	Reference* page number in the catalog
					Pulse	I/O	Communication	Position		Optical encoder	Magnetic encoder		
NA	GTR22G-D (Two-phase bipolar micro-stepper driver)		1	DC24V	●	—	—	●	—	—	—	—	【P.36】

* Please refer to the motor-driver catalog.



◎GECD series

Stepper motor

Model No.		GECD20		
Mechanical spec.	Width of cylinder (mm)	20		
	Stroke (mm)	15 / 25 / 50 / 75		
	Drive type	Ball screw Ø6		
	Lead (mm)	1	2	
	Rail	Self-lubricating sleeve guide		
	Materials of the cylinder	Aluminum alloy / Anodized		
	Feed-out direction	N : GMT Standard		
	Maximum speed (mm/s)	15	30	
	Repeatability (mm)	± 0.005		
	Maximum thrust force (N)	127	63	
Precision	Open loop	Driver	GTR22G-D [□20]	
	Closed loop	Driver	-	
	Connector	Lateral connector of the cylinder	15-pin male D-SUB connector	
		Lateral connector of the transmission cable	15-pin female D-SUB connector	
Electrical				

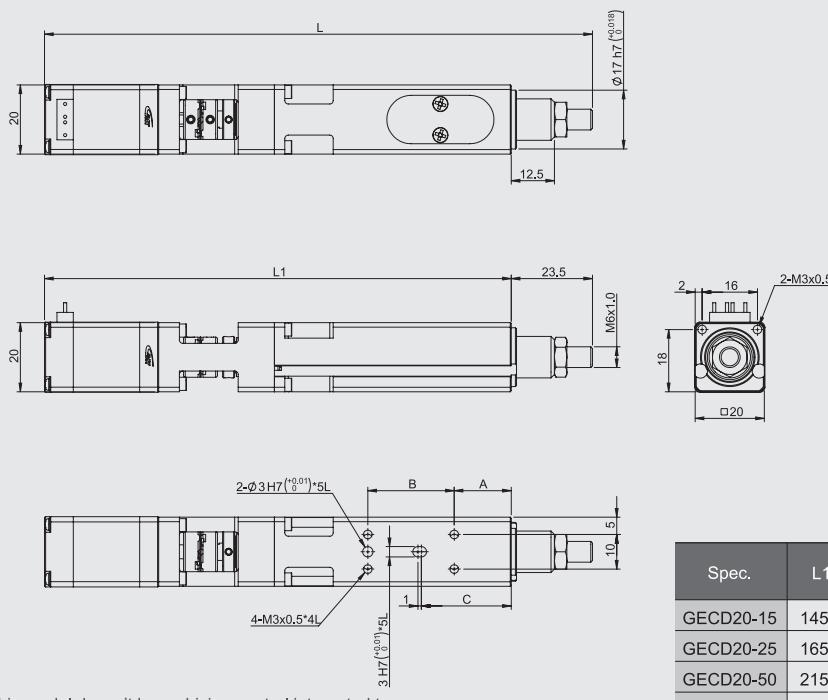
Stepper motor

Model No.		GECD28		
Mechanical spec.	Width of cylinder (mm)	28		
	Stroke (mm)	25 / 50 / 75 / 100		
	Drive type	Ball screw Ø6		
	Lead (mm)	1	2	4
	Rail	Self-lubricating sleeve guide		
	Materials of the cylinder	Aluminum alloy / Anodized		
	Feed-out direction	N : GMT Standard		
	Maximum speed (mm/s)	15	30	60
	Repeatability (mm)	± 0.005		
	Maximum thrust force (N)	254	127	63
Precision	Open loop	Driver	GTR22G-D [□28]	
	Closed loop	Driver	-	
	Connector	Lateral connector of the cylinder	15-pin male D-SUB connector	
		Lateral connector of the transmission cable	15-pin female D-SUB connector	
Electrical				

*1 If a brake-type is needed, please contact Sales to select the type.

*2 For the electrical specifications, please visit the official website.

GECD Dimension

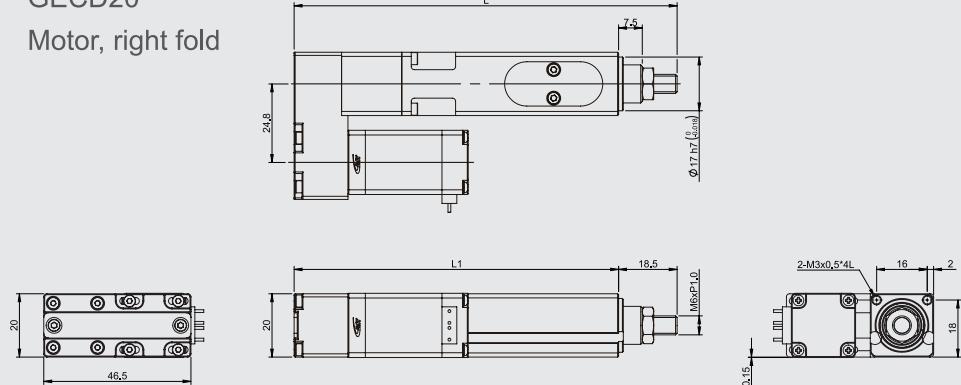
GECD20


* This model doesn't have driving-control integrated type.

Spec.	L1	L	A	B	C
GECD20-15	145.5	169	16.5	25	26
GECD20-25	165.5	189	26.5	25	36
GECD20-50	215.5	239	26.5	50	36
GECD20-75	265.5	289	26.5	75	36

GECD20

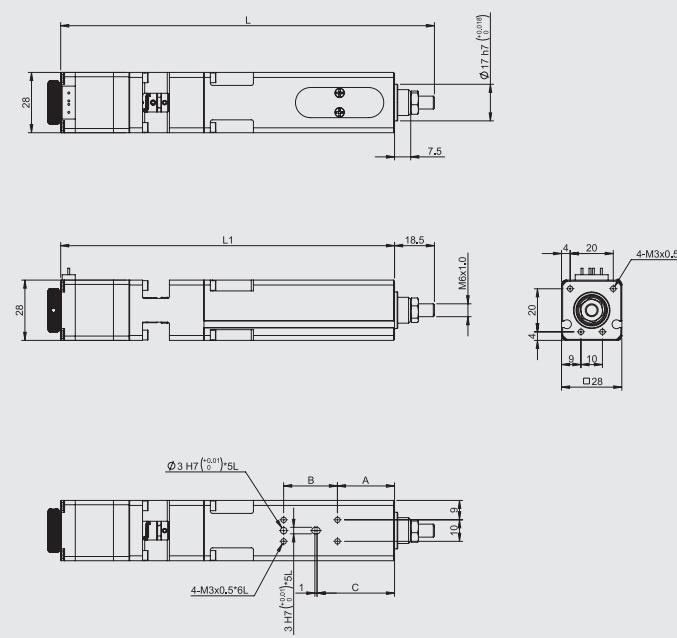
Motor, right fold



Spec.	L1	L	A	B	C
GECD20-15	102.5	121	16.5	25	26
GECD20-25	122.5	141	26.5	25	36
GECD20-50	172.5	191	26.5	50	36
GECD20-75	222.5	241	26.5	75	36

*If you need a knob, please contact Sales.

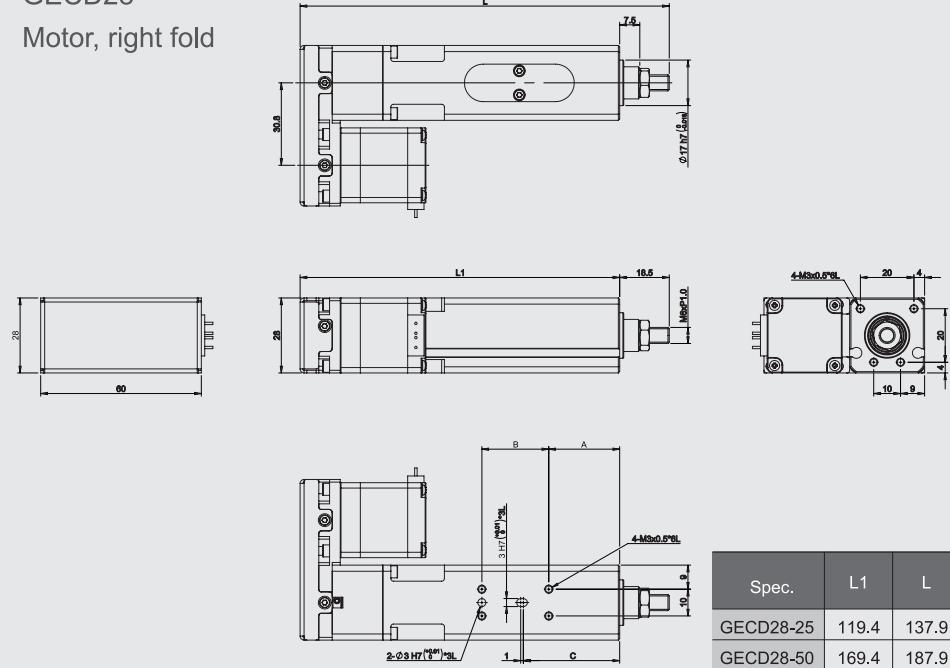
GECD Dimension

GECD28


Spec.	L1	L	A	B	C
GECD28-25	159	177.5	26.5	25	36
GECD28-50	209	227.5	26.5	50	36
GECD28-75	259	277.5	26.5	75	36
GECD28-100	309	327.5	26.5	100	36

GECD28

Motor, right fold

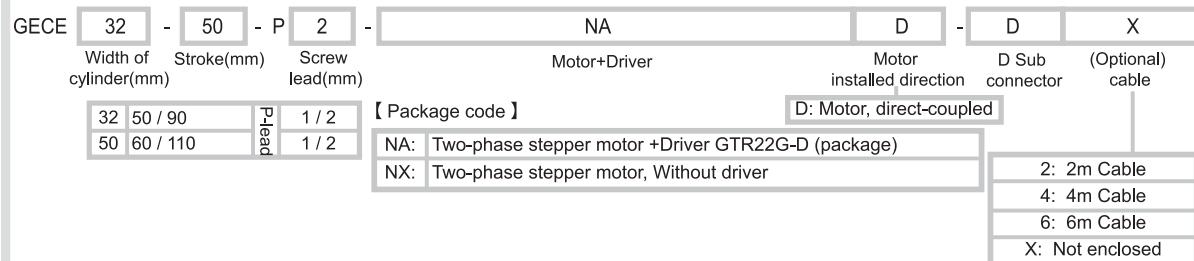


Spec.	L1	L	A	B	C
GECD28-25	119.4	137.9	26.5	25	36
GECD28-50	169.4	187.9	26.5	50	36
GECD28-75	219.4	237.9	26.5	75	36
GECD28-100	269.4	287.9	26.5	100	36

GECE Description

Description

GECE Series



GECE Specification



Motor-driver package list

Code	Name of driver	Appearance	Number of axes	Power voltage	Control method			Control mode			Point	Encoder feedback	Optical linear encoder feedback	Reference page number in the catalog
					Pulse	I/O	Communication	Position	Speed	Torque				
NA	GTR22G-D (Two-phase bipolar micro-stepper driver)		1	DC24V	●	—	—	●	—	—	—	—	—	【P.36】

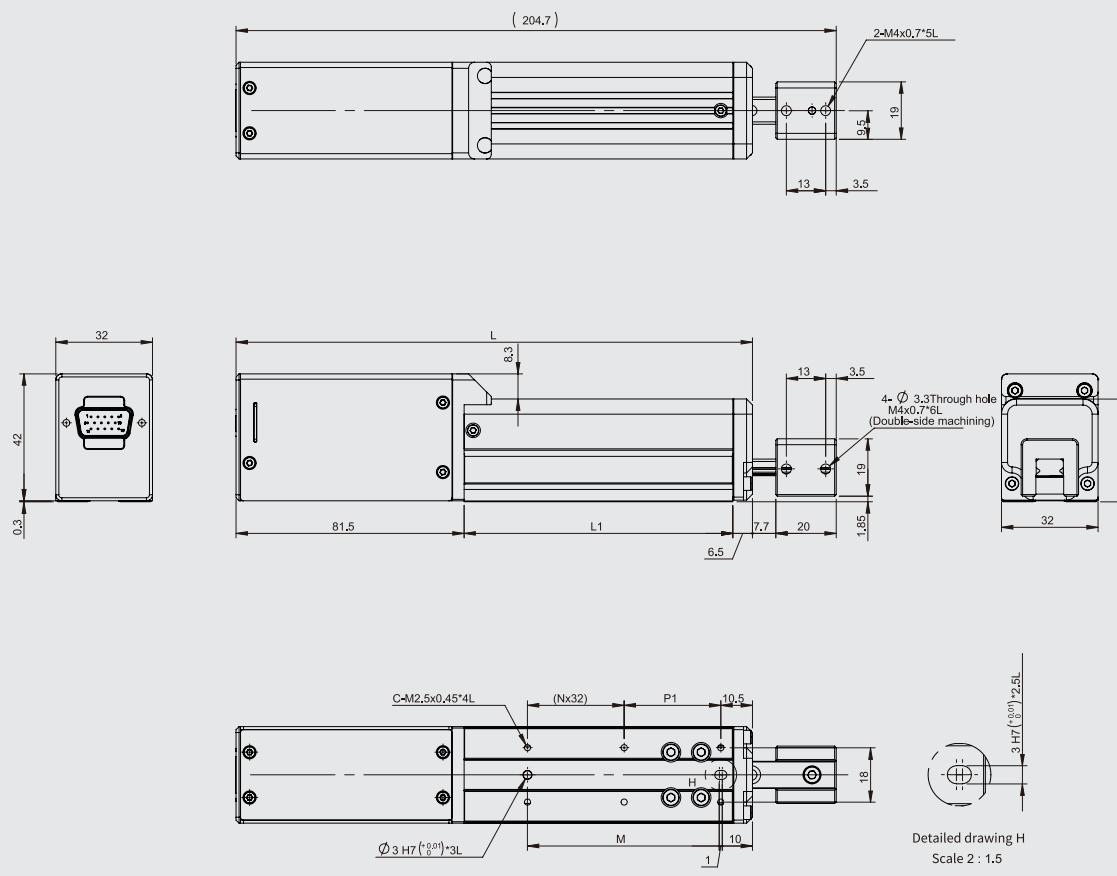
* Please refer to the motor-driver catalog.

Stepper motor

	Model No.		GECE32-50	GECE32-90	GECE50-60	GECE50-110	
Mechanical spec.	Width of cylinder (mm)		32		50		
	Stroke (mm)		50	90	60	110	
	Drive type		Ball screw Ø6				
	Lead (mm)		1	2	1	2	
	Rail		Circular linear ball guide				
	Materials of the cylinder		Aluminum alloy / Anodized				
	Feed-out direction		N : GMT Standard				
Precision	Maximum speed (mm/s)		15	30	15	30	
	Repeatability (mm)		± 0.005				
	Referencine Precision (mm)		± 0.01				
	Maximum thrust force (N)		151	75	151	75	
	Vertical load (kgf)		1	0.5	1	0.5	
Electrical	Open loop	Driver	GTR22G-D [□28]			GTR22G-D [□42]	
	Closed loop	Driver	-			-	
	Connector	Lateral connector of the cylinder	15-pin male D-SUB connector				
		Lateral connector of the transmission cable	15-pin female D-SUB connector				

GECE Dimension

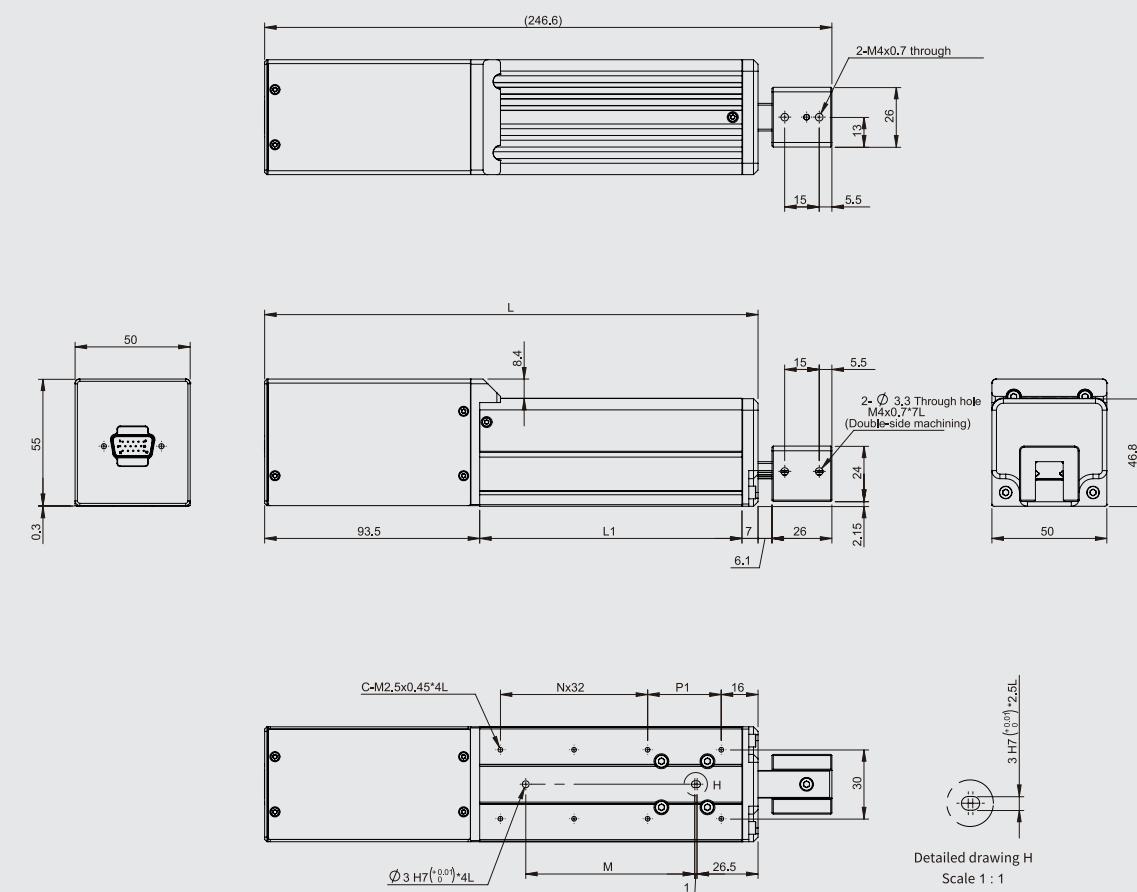
GECE32



Stroke	L	L1	P1	M	N	C
50	177	89	32	63.5	1	6
90	217	129	32	95.5	2	8

GECE Dimension

GECE50

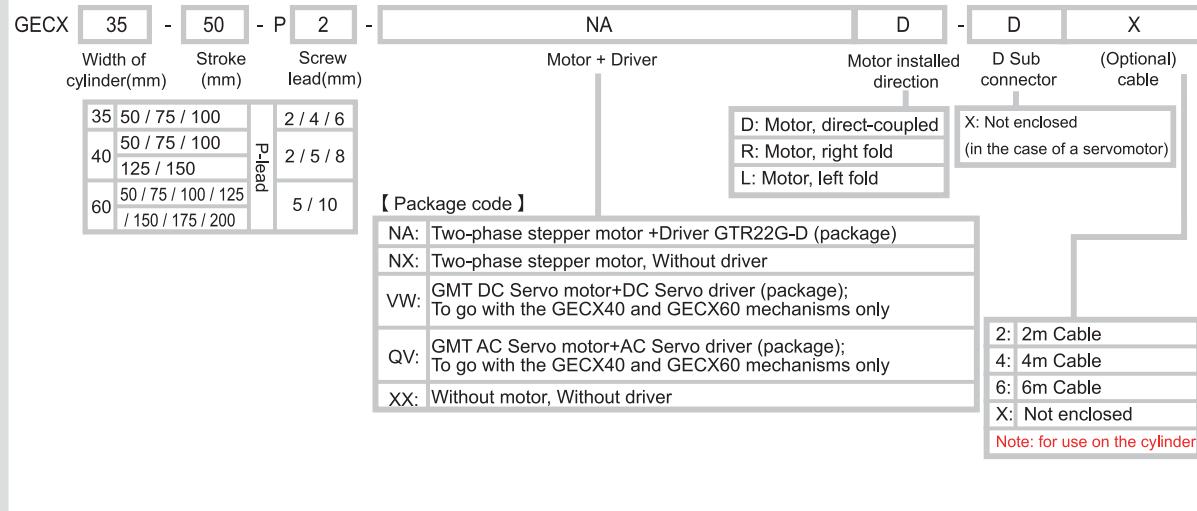


Stroke	L	L1	P1	M	N	C
60	214.5	114	32	73.5	2	8
110	264.5	164	32	123.5	3	10

GECX Description

Description

GECX Series

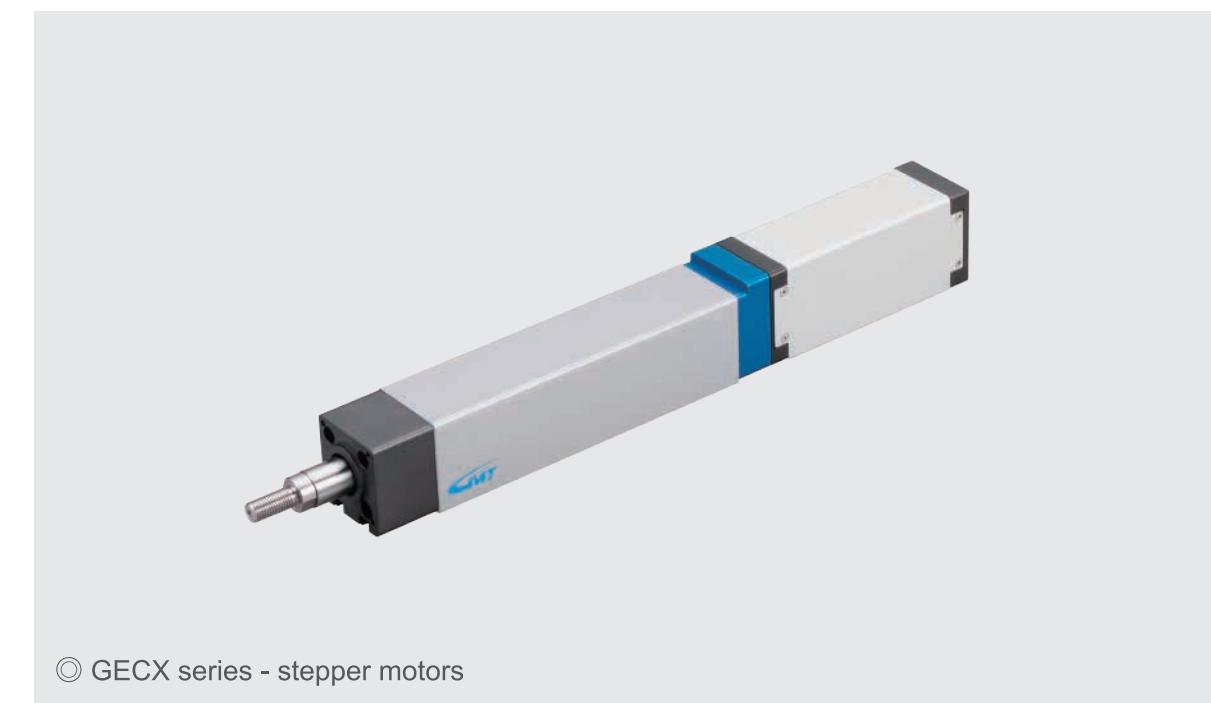


Motor-driver package list

Code	Name of driver	Appearance	Number of axes	Power voltage	Control method			Control mode		Encoder feedback	Optical linear encoder	Reference page number in the catalog			
					Pulse	I/O	Communication	Position	Speed	Torque					
NA	GTR22G-D (Two-phase bipolar micro-stepper driver)		1	DC24V	●	—	—	●	—	—	—	—	【P.36】		
VW	K-SERVO (DKM) (DC Servo driver) GSV-DKM□□MB-□□DP		16	DC48V	●	●	RS485 Modbus RTU	●	●	●	128	●	—	●	【P.148】
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	●	●	RS485 Modbus RTU	●	●	●	16	●	—	—	【P.152】

* Please refer to the motor-driver catalog.

GECX Specification



◎ GECX series - stepper motors

Stepper motor

Model No.		GECX35			GECX40			GECX60		
Mechanical spec.	Width of cylinder (mm)	35			40			60		
	Stroke (mm)	50 / 75 / 100			50 / 75 / 100 / 125 / 150			50 / 75 / 100 / 125 / 150 / 200		
	Drive type	Ball screw Ø6			Ball screw Ø8			Ball screw Ø10		
	Lead (mm)	2	4	6	2	5	8	5	10	
	Rail	Self-lubricating sleeve guide								
	Materials of the cylinder	Aluminum alloy / Anodized								
	Feed-out direction	N : GMT Standard								
	Maximum speed (mm/s)	40	80	120	40	100	160	100	200	
	Repeatability (mm)	± 0.005								
	Referencine Precision (mm)	± 0.01								
Precision	Change in the turning angle at the end of the push rod*1	0								
	Maximum thrust force (N)	89	44	22	132	77	33	77	42	
	Horizontal load (kgf)*2	12	9	6	30	20	10	40	28	
	Vertical load (kgf)	4	3	2	6	4	2	10	5	
	Open loop	Driver	GTR22G-D [□28]						GTR22G-D [□42]	
Electrical	Closed loop	Driver	-						-	
	Connector	Lateral connector of the cylinder	15-pin male D-SUB connector							
		Lateral connector of the transmission cable	15-pin female D-SUB connector							

* 1 Change in the turning angle of the push rod when unloaded.

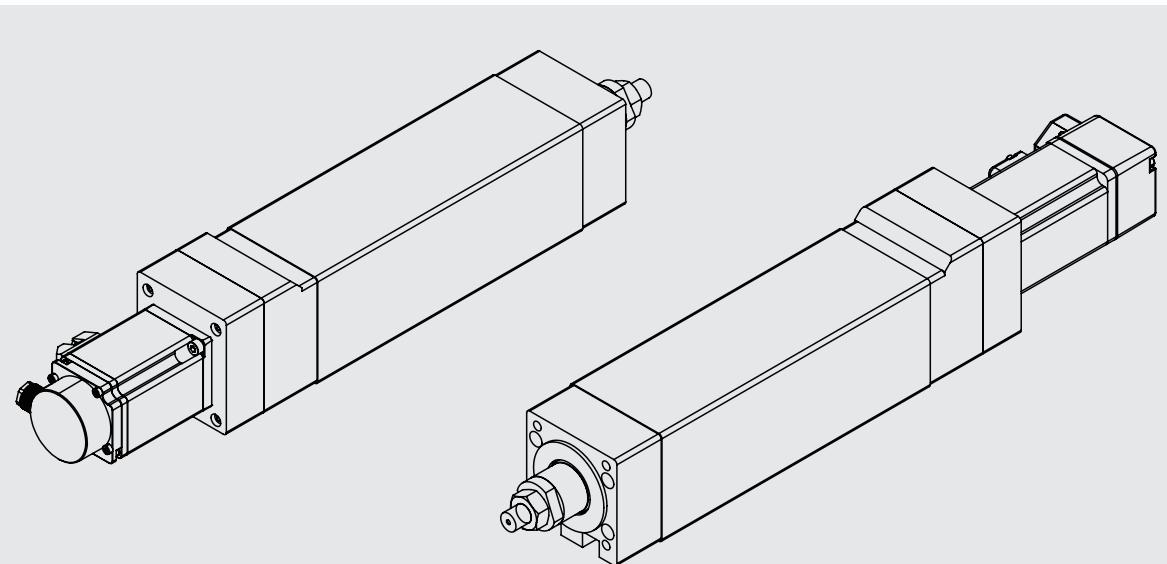
* 2 Horizontal load means the value after the external rail is equipped If the load is not along with the push rod moving direction, it may damage the self-lubricating sleeve.

* 3 If a brake-type is needed, please contact Sales to select the type.

* Should you have other needed motor specifications, please contact Sales.

GECX Specification

GECX Specification



◎ GECX series - DC servo motor

◎ GECX series - AC servo motor

Servo motor		GECX40			GECX60					
Model No.		40		60						
Mechanical spec.	Width of cylinder (mm)	50 / 75 / 100 / 125 / 150		50 / 75 / 100 / 125 / 150 / 200						
	Stroke (mm)	2	5	8	5	10				
	Drive type	Ball screw Ø8		Ball screw Ø10						
	Lead (mm)									
	Rail	Self-lubricating sleeve guide								
	Materials of the cylinder	Aluminum alloy / Anodized								
	Feed-out direction	N : GMT Standard								
DC Precision spec.	Maximum speed(mm/s)*2	50	125	250	125	250				
	Repeatability (mm)			± 0.005 *1						
	Maximum thrust force (N)*2	424	169	106	339	169				
	Horizontal load (Kgf)	30	20	10	20	14				
	Vertical load (Kgf)	6	4	2	5	3.5				
DC Electrical spec.	DC Servo motor	50W : GSVM-D0BMD4			100W : GSVM-D01MD4					
	DC Servo driver	K-SERVO [GSV-DK0BMR-48DP]			K-SERVO [GSV-DK01MR-48DP]					
	Connector	Lateral connector of the cylinder	Manufacturer : TE Connectivity Power cable : 172159-1+170366-1(male) Encoding cable : 172161-1+170365-1(male)							
		Lateral connector of the transmission cable	Manufacturer : KST Power cable : E1510-RED(European terminal) Manufacturer : JST Encoding cable : PHDR-12VS+SPHD-001T-P0.5(female)							
AC Precision spec.	Maximum speed(mm/s)*2	50	125	200	125	250				
	Repeatability (mm)			± 0.005 *1						
	Maximum thrust force (N)*2	853	341	213	341	170				
	Horizontal load(Kgf)	30	20	10	20	14				
	Vertical load(Kgf)	6	4	2	5	3.5				
AC Electrical spec.	AC Servo motor	100W : GSVM-A01LC4								
	AC Servo driver	GSV-KE01MB-21CP								
	Connector	Lateral connector of the cylinder	Manufacturer : Tyco electronics	Power cable : 172167-1(male)	Encoding cable : 172171-1(male)					
		Lateral connector of the transmission cable	Manufacturer : Tyco electronics	Power cable : 172159-1(female)	Encoding cable : 172163-1(female)					

*1 The precision for foldleft series is 0.01mm

*2 The maximum speed and thrust are tested by the servo motors which with the rotation speed is 3000 rpm and are corresponded to GMT DC and AC specification respectively. If it is not equipped with a motor, the above data for maximum speed and thrust are not applicable.

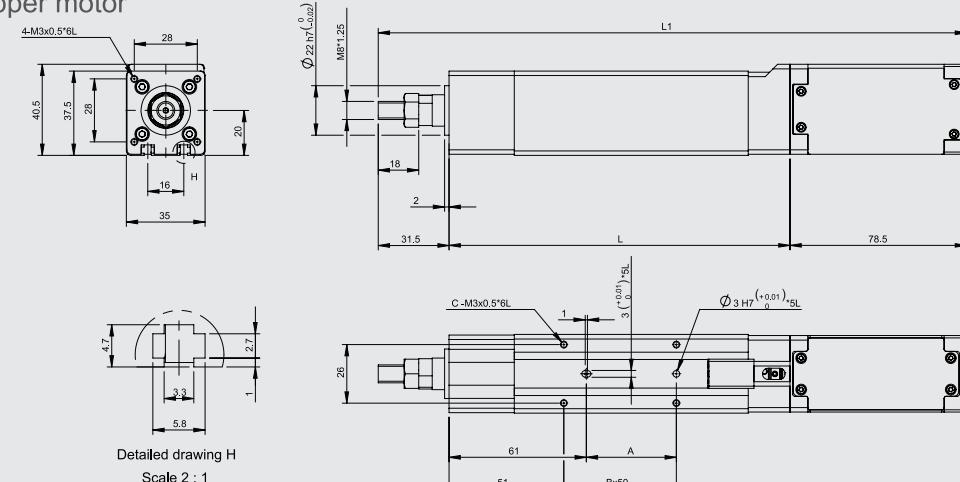
*3 If a brake-type is needed, please contact Sales to select the type.

* Should you have other needed motor specifications, please contact Sales.

GECX Dimension

GECX35

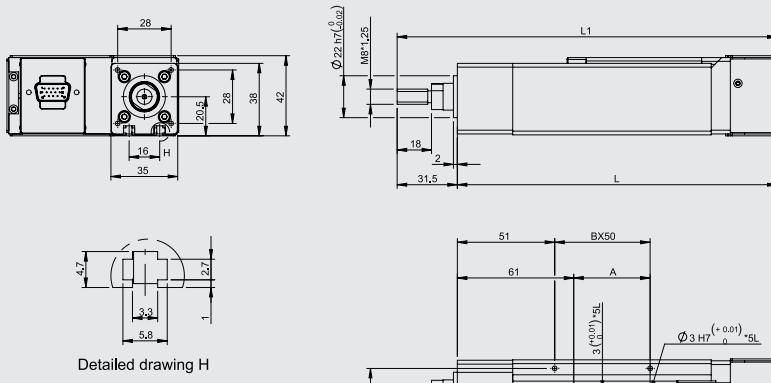
Stepper motor



Stroke	50	75	100
A	40	40	90
B	1	1	2
C	4	4	6
L	151.5	176.5	201.5
L1	261.5	286.5	311.5

GECX35

Stepper motor, right fold

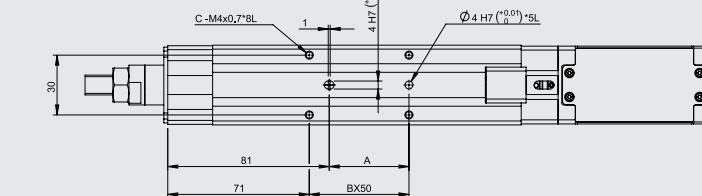
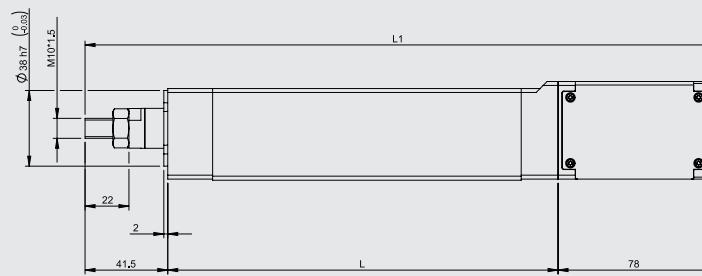
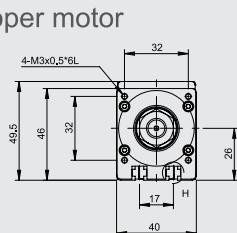


Stroke	50	75	100
A	40	40	90
B	1	1	2
C	4	4	6
L	167.5	192.5	217.5
L1	199	224	249

GECX Dimension

GECX40

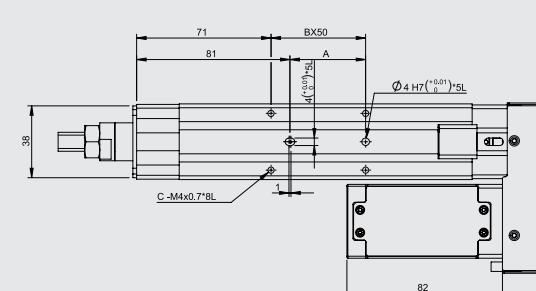
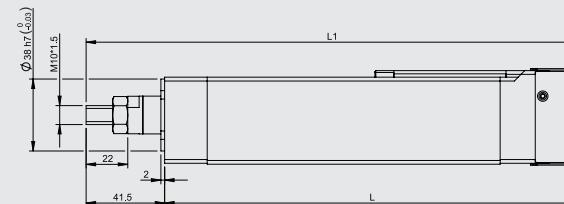
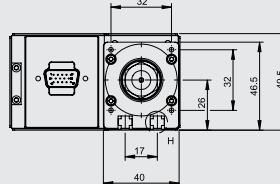
Stepper motor



Stroke	50	75	100	125	150
A	40	40	90	140	140
B	1	1	2	3	3
C	4	4	6	8	8
L	195.8	220.8	245.5	270.8	295.8
L1	315.4	340.4	365.4	390.4	415.4

GECX40

Stepper motor, right fold

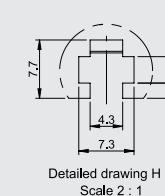
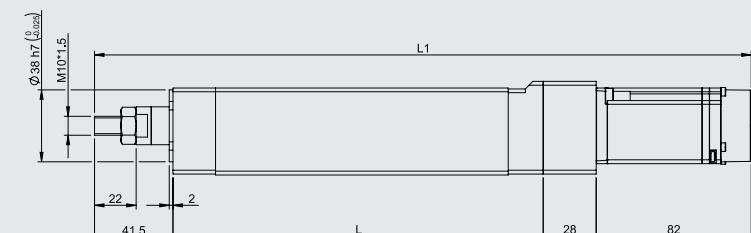
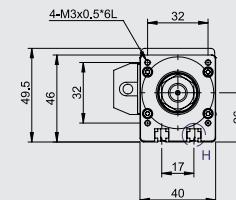
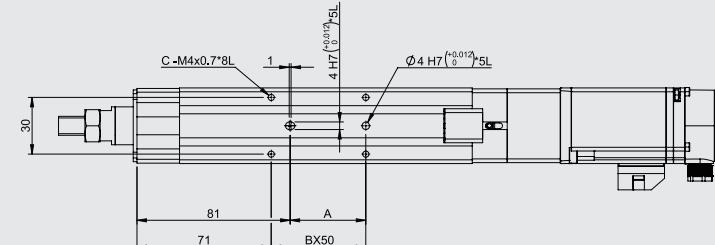


Stroke	50	75	100	125	150
A	40	40	90	140	140
B	1	1	2	3	3
C	4	4	6	8	8
L	220	245	270	295	320
L1	261.5	286.5	311.5	336.5	361.5

GECX Dimension

GECX40

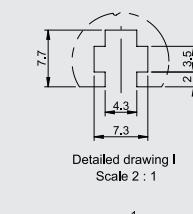
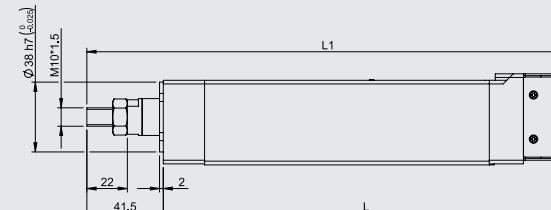
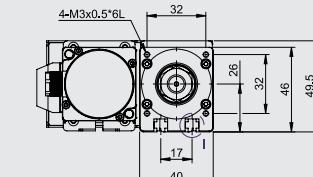
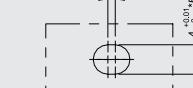
DC Servo motor

Detailed drawing H
Scale 2 : 1

Stroke	50	75	100	125	150
A	40	40	90	140	140
B	1	1	2	3	3
C	4	4	6	8	8
L	195.8	220.8	245.8	270.8	295.8
L1	347.3	372.3	397.3	422.3	447.3

GECX40

DC Servo motor, right fold

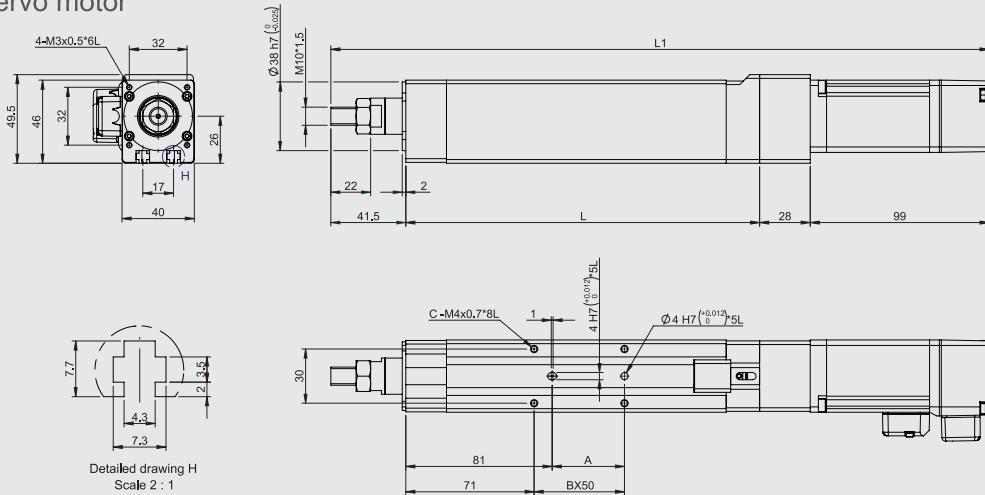
Detailed drawing H
Scale 2 : 1Detailed drawing I
Scale 2 : 1

Stroke	50	75	100	125	150
A	40	40	90	140	140
B	1	1	2	3	3
C	4	4	6	8	8
L	220	245	270	295	320
L1	261.5	286.5	311.5	336.5	361.5

GECX Dimension

GECX40

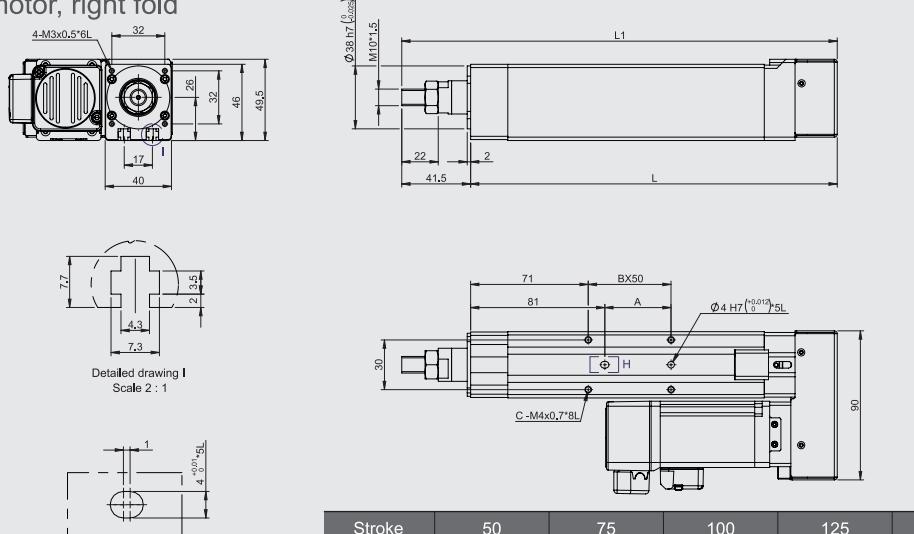
AC Servo motor



Stroke	50	75	100	125	150
A	40	40	90	140	140
B	1	1	2	3	3
C	4	4	6	8	8
L	195.8	220.8	245.8	270.8	295.8
L1	364.3	389.3	414.3	439.3	464.3

GECX40

AC Servo motor, right fold

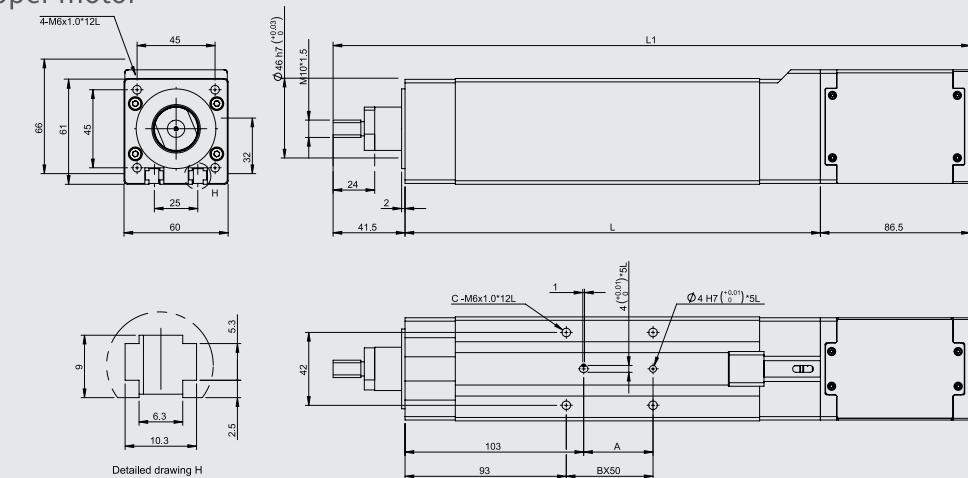


Stroke	50	75	100	125	150
A	40	40	90	140	140
B	1	1	2	3	3
C	4	4	6	8	8
L	220	245	270	295	320
L1	261.5	286.5	311.5	336.5	361.5

GECX Dimension

GECX60

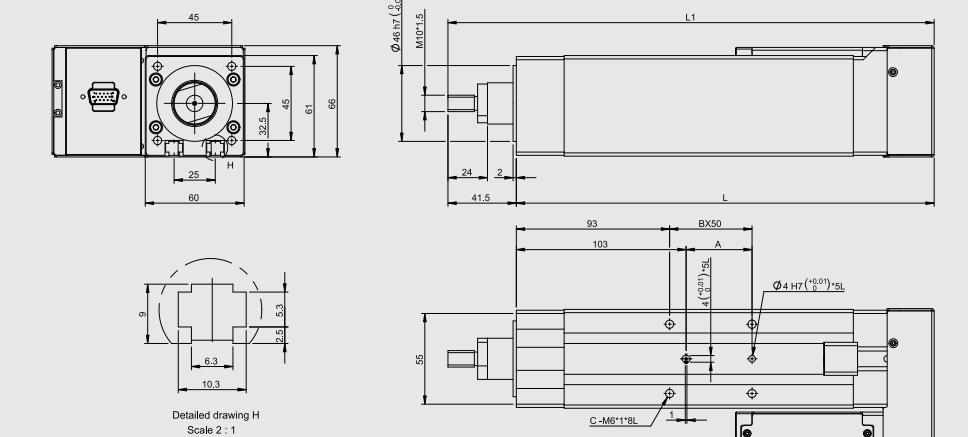
Stepper motor



Stroke	50	75	100	125	150	175	200
A	40	90	90	140	140	190	190
B	1	2	2	3	3	4	4
C	4	6	6	8	8	10	10
L	239.5	264.5	289.5	314.5	339.5	364.5	389.5
L1	367.5	392.5	417.5	442.5	467.5	492.5	517.5

GECX60

Stepper motor, right fold



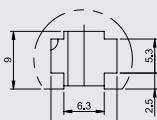
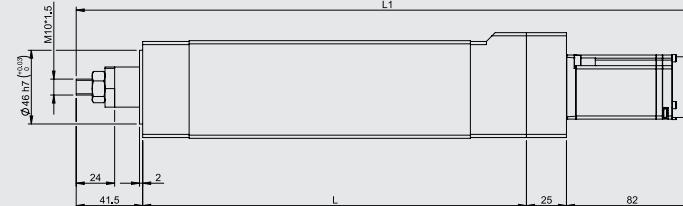
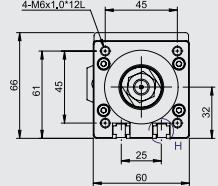
Stroke	50	75	100	125	150	175	200
A	40	90	90	140	140	190	190
B	1	2	2	3	3	4	4
C	4	6	6	8	8	10	10
L	253.5	278.5	303.5	328.5	353.5	378.5	403.5
L1	295	320	345	370	395	420	445

GECX Dimension

GECX Dimension

GECX60

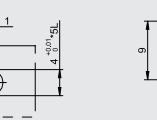
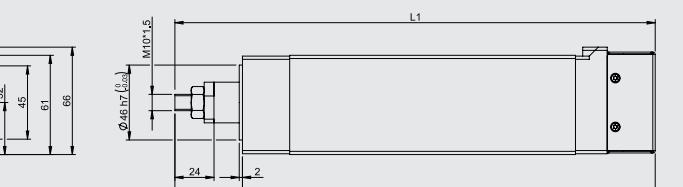
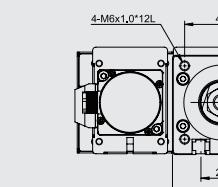
DC Servo motor


Detailed drawing H
Scale 2 : 1

Stroke	50	75	100	125	150	175	200
A	40	90	90	140	140	190	190
B	1	2	2	3	3	4	4
C	4	6	6	8	8	10	10
L	239.5	264.5	289.5	314.5	339.5	364.5	389.5
L1	388	413	438	463	488	513	538

GECX60

DC Servo motor, right fold


Detailed drawing H
Scale 2 : 1

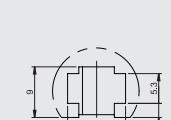
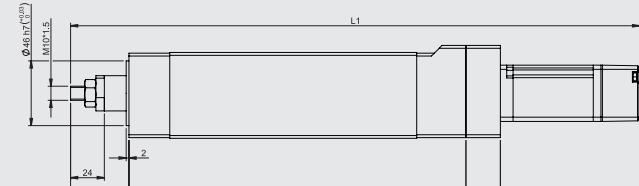
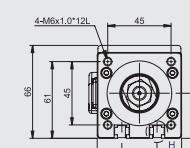
Stroke	50	75	100	125	150	175	200
A	40	90	90	140	140	190	190
B	1	2	2	3	3	4	4
C	4	6	6	8	8	10	10
L	253.5	278.5	303.5	328.5	353.5	378.5	403.5
L1	295	320	345	370	395	420	445

GECX Dimension

GECX Dimension

GECX60

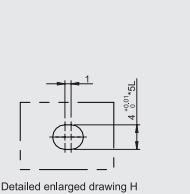
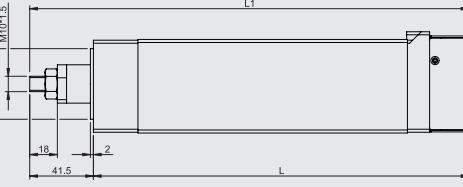
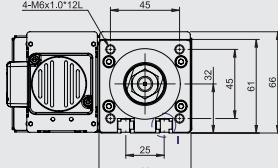
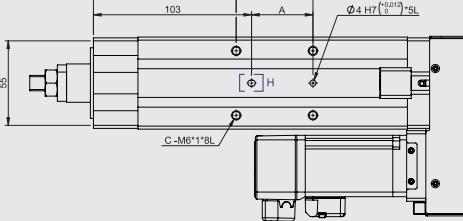
AC Servo motor


Detailed enlarged drawing H
Scale 2 : 1

Stroke	50	75	100	125	150	175	200
A	40	90	90	140	140	190	190
B	1	2	2	3	3	4	4
C	4	6	6	8	8	10	10
L	239.5	264.5	289.5	314.5	339.5	364.5	389.5
L1	405	430	455	480	505	530	555

GECX60

AC Servo motor, right fold


Detailed enlarged drawing H
Scale 2 : 1


Stroke	50	75	100	125	150	175	200
A	40	90	90	140	140	190	190
B	1	2	2	3	3	4	4
C	4	6	6	8	8	10	10
L	253.5	278.5	303.5	328.5	353.5	378.5	403.5
L1	295	320	345	370	395	420	445

GECF Description

Description

GECF Series

GECF [40] - [50] - P [2] - NA D D X
 Width of cylinder (mm) Stroke (mm) Screw lead (mm) Motor + Driver Motor installed direction D Sub (Optional) cable connector

[Package code]

D: Motor, direct-coupled

40	50 / 75	P	2 / 4
50	50 / 100 / 150 / 200	Ied	2 / 5

NA: Two-phase stepper motor+driver GTR22G-D (package)

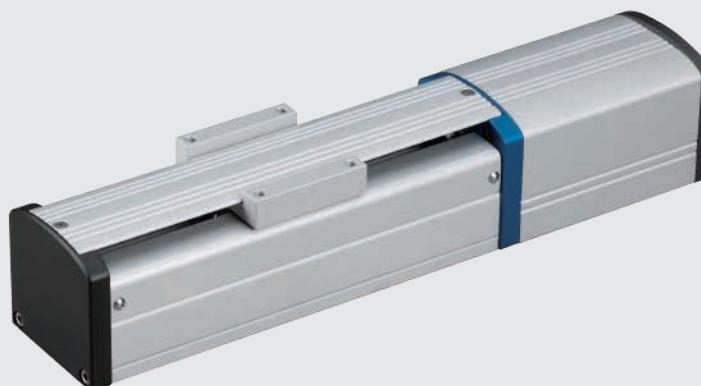
NX: Two-phase stepper motor, Without driver

2: 2m Cable
4: 4m Cable
6: 6m Cable
X: Not enclosed
Note: for use on the cylinder

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method		Control mode	Point	Encoder feedback		Optical linear encoder feedback	Reference page number in the catalog
					Pulse	I/O			Optical encoder	Magnetic encoder		
NA	GTR22G-D (Two-phase bipolar micro-stepper driver)		1	DC24V	●	—	—	●	—	—	—	【P.36】

* Please refer to the motor-driver catalog.



◎ GECF series

GECF Specification

Stepper motor

Model No.		GECF40	
Mechanical spec.	Width of cylinder (mm)	40	
	Stroke (mm)	50 ~ 75	
	Drive type	Ball screw Ø6	
	Lead (mm)	2	4
	Rail	Circular linear ball guide	
	Materials of the cylinder	Aluminum alloy / Anodized	
	Feed-out direction	N : GMT Standard	
Precision	Maximum speed (mm/s)	30	60
	Repeatability (mm)	± 0.005	
	Referencine Precision (mm)	± 0.01	
	Maximum thrust force (N)	100	50
	Horizontal load (Kgf)	5	3
	Vertical load (Kgf)	2	1

Electrical	Open loop	Driver	GTR22G-D [□28]
	Closed loop	Driver	-
	Connector	Lateral connector of the cylinder Lateral connector of the transmission cable	15-pin male D-SUB connector 15-pin female D-SUB connector

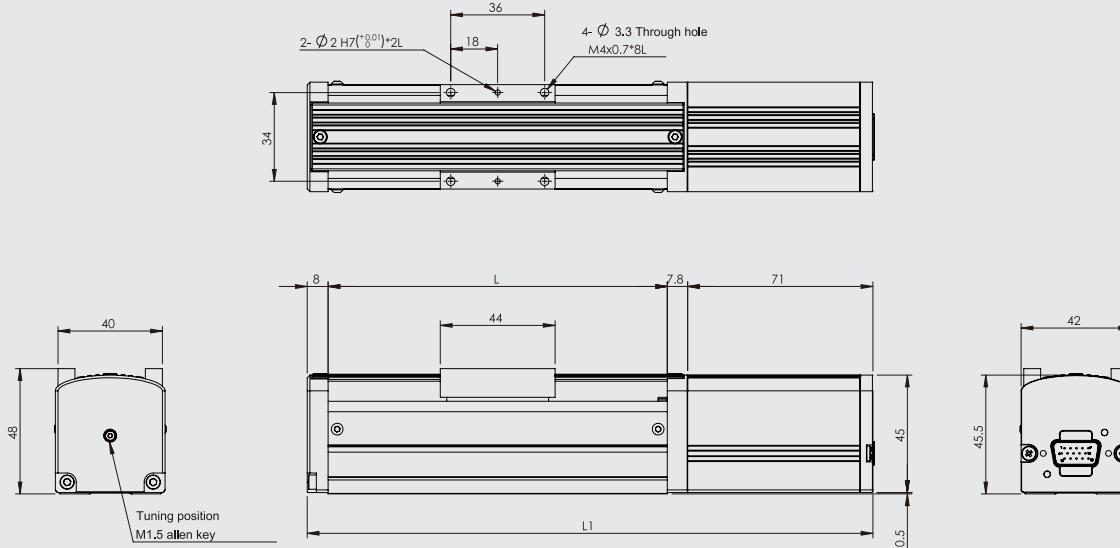
Stepper motor

Model No.		GECF50	
Mechanical spec.	Width of cylinder (mm)	50	
	Stroke (mm)	50 ~ 100 ~ 150 ~ 200	
	Drive type	Ball screw Ø8	
	Lead (mm)	2	5
	Rail	Circular linear ball guide	
	Materials of the cylinder	Aluminum alloy main part/anode	
	Feed-out direction	N : General feed-out	
Precision	Maximum speed (mm/s)	30	75
	Repeatability (mm)	± 0.005	
	Referencine Precision (mm)	± 0.01	
	Maximum thrust force (N)	140	70
	Horizontal load (Kgf)	8	4
	Vertical load (Kgf)	4	2
Electrical	Open loop	Driver	GTR22G-D [□42]
	Closed loop	Driver	-
	Connector	Lateral connector of the cylinder Lateral connector of the transmission cable	15-pin male D-SUB connector 15-pin female D-SUB connector

* If a brake-type is needed, please contact Sales to select the type.

GECF Dimension

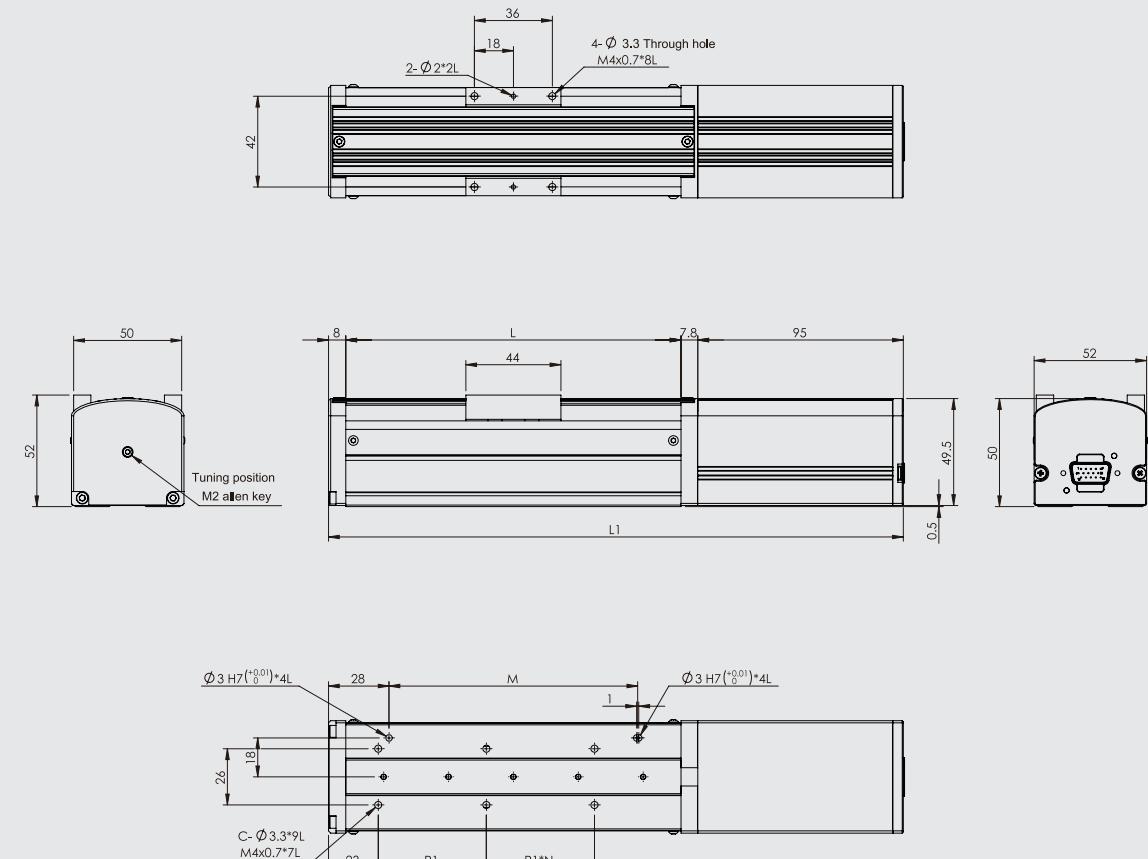
GECF40



Stroke	L	L1	P1	M	N	C
50	105	191.8	50	65	0	4
75	130	216.8	50	90	1	6

GECF Dimension

GECF50



Stroke	L	L1	P1	M	N	C
50	105	215.8	25	65	2	8
100	155	265.5	50	115	1	6
150	205	315.8	50	165	2	8
200	255	365.8	50	215	3	10

Description

GIRC / GIRO Series

GIRC GIRO	32	-	50	-	P 2	-	NA	D	-	D	X
	Width of cylinder(mm)	Stroke (mm)	Screw lead (mm)				Motor + Driver	Motor installed direction	D Sub connector	(Optional) cable	
C: Fully sealed	32	50 / 100 / 150 200 / 250 / 300			2 / 5 / 8						
O: Semi sealed	32	50 / 100 / 150 / 200 250 / 300 / 350 400 / 450 / 500			5 / 10						
	40	50 / 100 / 150 / 200 250 / 300 / 350 400 / 450 / 500			5 / 10						
	50	50 / 100 / 150 / 200 250 / 300 / 350 / 400 450 / 500 / 550 / 600			5 / 10						
	60	50 / 100 / 150 / 200 250 / 300 / 350 / 400 450 / 500 / 550 / 600			5 / 10						

【 Package code 】

D: Motor, direct-coupled

NA:	Two-phase stepper motor + Driver (package)
NX:	Two-phase stepper motor, Without driver
VW:	GMT DC Servo motor+DC Servo driver (package) For GIRC50~GIRC60 only
QV:	GMT AC Servo motor+DC Servo driver (package) For GIRC50~GIRC60 only
XX:	Optional motor, optional driver

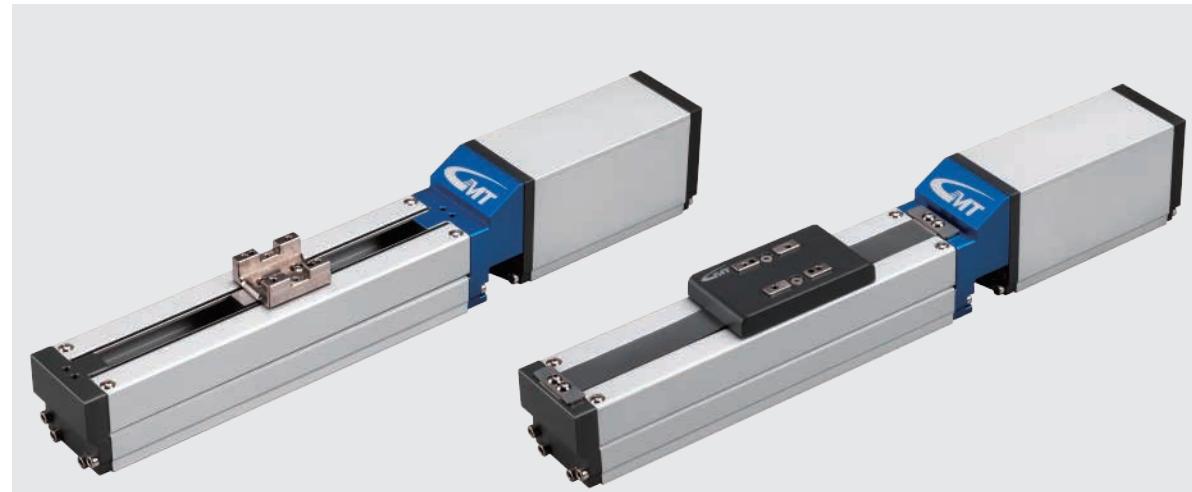
2: 2m Cable
4: 4m Cable
6: 6m Cable
X: Not enclosed
Note: for use on the cylinder

◎ The model described is GIRO/ C32.

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode Point	Encoder feedback		Reference * page number in the catalog	
					Pulse	I/O	Communication		Position	Speed	Torque	
NA	GTR22G-D (Two-phase bipolar micro-stepper driver)		1	DC24V	●	—	—	●	—	—	—	— [P.36]
VW	K-SERVO (DKM) (DC Servo driver) GSV-DKM□□MB-□□DP		16	DC48V	●	●	RS485 Modbus RTU	● ● ●	128	●	—	● [P.148]
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	●	●	RS485 Modbus RTU	● ● ●	16	●	—	— [P.152]

* Please refer to the motor-driver catalog.



◎ GIRO series (Closed loop)

◎ GIRC series (Closed loop)

Stepper motor

Model No.		GIRC32/GIRO32	GIRC40/GIRO40	GIRC50/GIRO50	GIRC60/GIRO60				
Mechanical spec.	Width of cylinder (mm)	32	40	50	60				
	Stroke (Every 50 mm)	50~300	50~500	50~600	50~600				
	Drive type	Ball screw Ø8	Ball screw Ø10	Ball screw Ø10	Ball screw Ø12				
	Lead (mm)	2 5 8	5 10	5 10	5 10				
	Rail	Circular linear ball guide							
	Materials of the cylinder	Aluminum alloy / Anodized							
	Feed-out direction	N : Horizontal ; V : Vertical							
	Maximum speed (mm/s)	60 120 180 150	300 250 500	150	187 95				
	Repeatability (mm)	± 0.005							
Precision	Maximum thrust force (N)	42	20	14	66	30			
	Horizontal load (Kgf)	3	2	1	8.8	6.8			
	Vertical load (Kgf)	1.5	1	0.5	3.8	1			
	Open loop	Driver	GTR22G-D[□28]		GTR22G-D[□35]	GTR22G-D[□42]			
Electrical	Closed loop	Driver							
	Connector	Lateral connector of the cylinder	15-pin male D-SUB connector						
		Lateral connector of the transmission cable	15-pin female D-SUB connector						

* 1 If a brake-type is needed, please contact Sales to select the type.

* Should you have other needed motor specifications, please contact Sales.

Servo motor

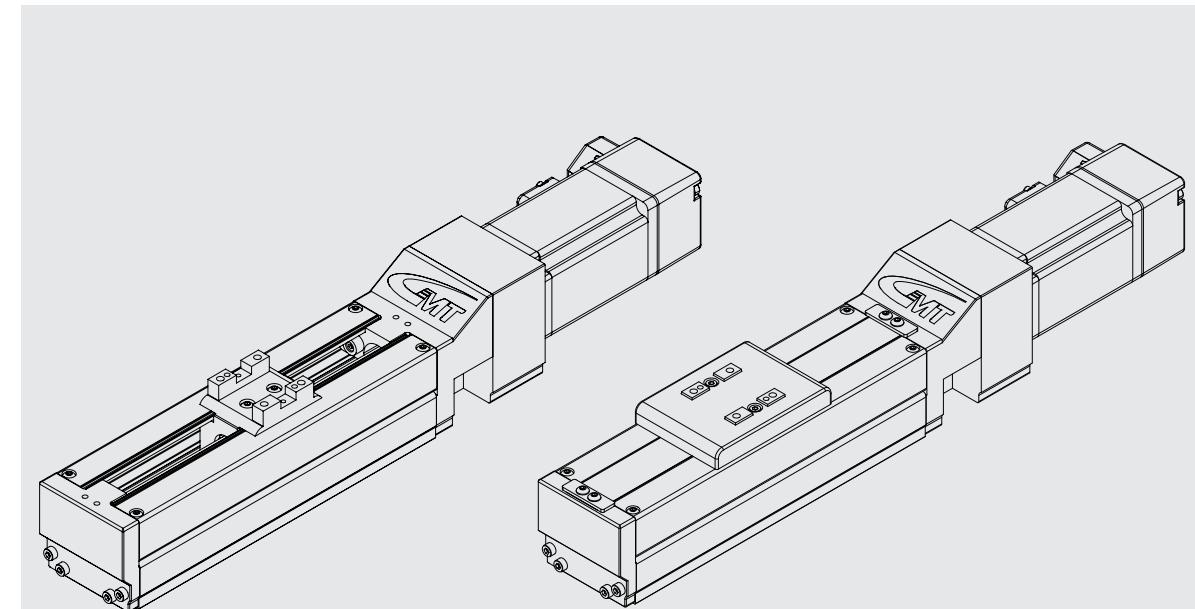
	Model No.		GIRC50/GIRO50		GIRC60/GIRO60			
Mechanical spec.	Width of cylinder (mm)	50			60			
	Stroke (Every 50 mm)	50~600			50~600			
	Drive type	Ball screw Ø10			Ball screw Ø12			
	Lead (mm)	5	10	5	10			
	Rail	Circular linear ball guide						
	Materials of the slide table	Aluminum alloy / Anodized						
	Feed-out direction	N : GMT Standard						
DC Precision spec.	Maximum speed (mm/s) *2	250	500 *3	250	500			
	Repeatability (mm)	± 0.005						
	Maximum thrust force (N) *2	339	169	339	169			
	Horizontal load (Kgf)	15	7.5	18.8	10			
	Vertical load (Kgf)	4	1.8	5	2			
DC Electrical spec.	DC Servo motor	100W : GSVM-D01MD4						
	DC Servo driver	K-SERVO [GSV-DK01MB-24DP]						
	Connector	Manufacturer : TE Connectivity Power cable : 172159-1+170366-1(male) Encoder cable : 172161-1+170365-1(male)						
AC Precision spec.	Lateral connector of the cylinder	Manufacturer : KST Power cable : E1510-RED(European terminal) Manufacturer : JST Encoding cable : PHDR-12VS+SPHD-001T-P0.5(female)						
	Lateral connector of the transmission cable							
	Maximum speed (mm/s)*2	250	500 *3	250	500			
	Repeatability (mm)	± 0.005						
	Maximum thrust force (N)*2	341	170	341	170			
AC Electrical spec.	Horizontal load (Kgf)	15	7.5	18.8	10			
	Vertical load (Kgf)	4	1.8	5	2			
	AC Servo motor	100W : GSVM-A01LC4						
Connector	AC Servo driver	GSV-KE01MB21CP						
	Lateral connector of the cylinder	Manufacturer : Tyco electronics	Power cable : 172167-1(male)	Encoder cable : 172171-1(male)				
	Lateral connector of the transmission cable	Manufacturer : Tyco electronics	Power cable : 172159-1(female)	Encoder cable : 172163-1(female)				

*1 If a brake-type is needed, please contact Sales to select the type.

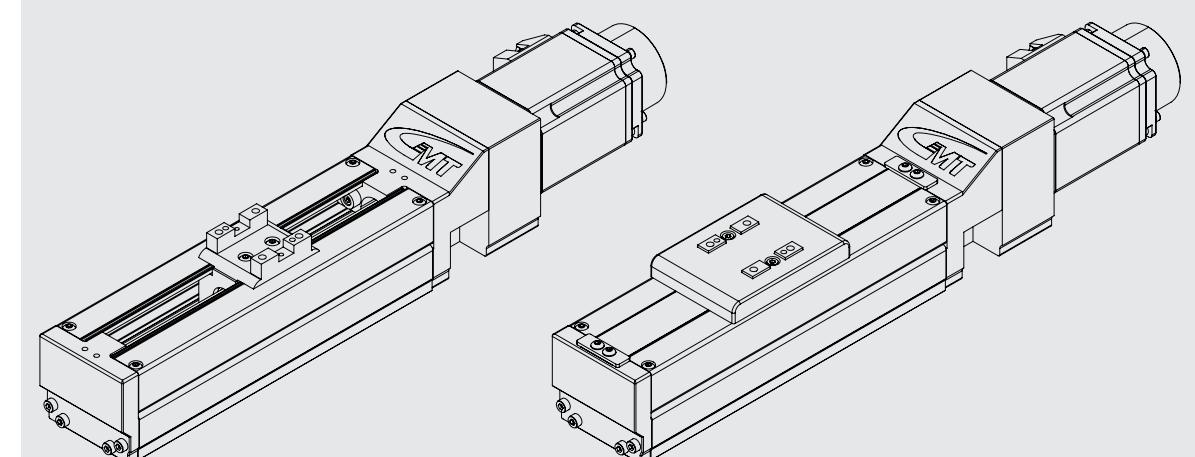
*2 The maximum speed and thrust are tested by the servo motors which with the rotation speed is 3000 rpm and are corresponded to GMT DC and AC specification respectively. If it is not equipped with a motor, the above data for maximum speed and thrust are not applicable.

*3 The maximum safe speed is 450 mm/s for the travel stroke 600mm, if exceeding safe speed, the module might be having serious resonance and noise.

*Should you have other needed motor specifications, please contact Sales.



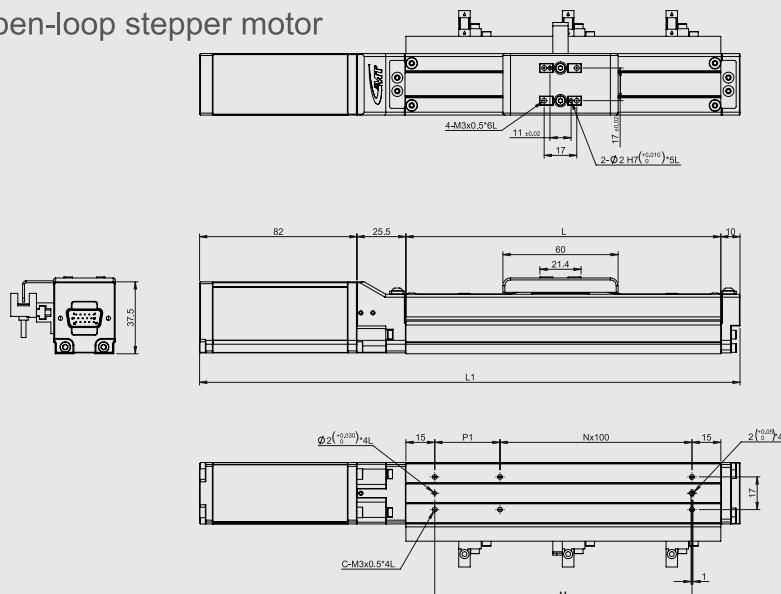
◎ GIRO series - AC servo motor



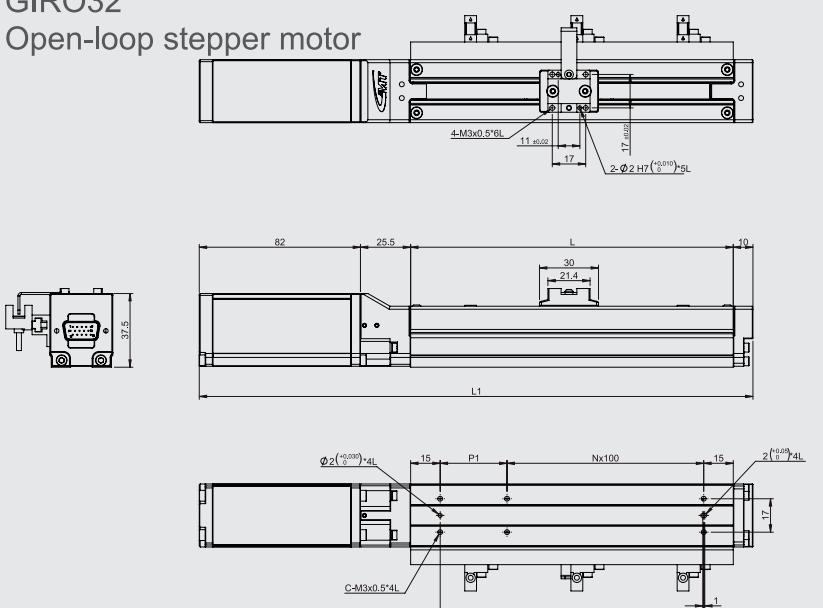
◎ GIRO series - DC servo motor

GIRC32 / GIRO32 Dimension

GIRC32
Open-loop stepper motor



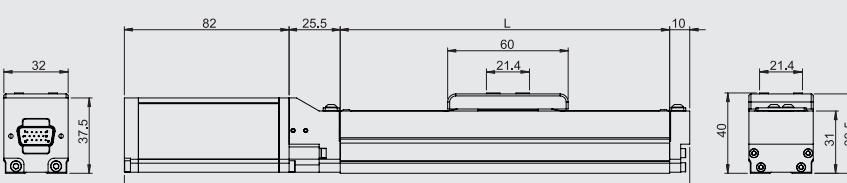
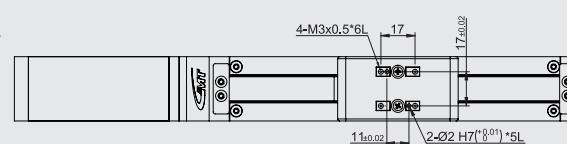
GIRO32
Open-loop stepper motor



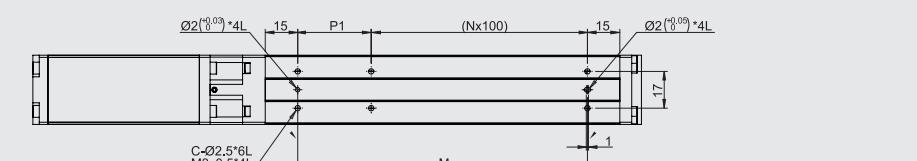
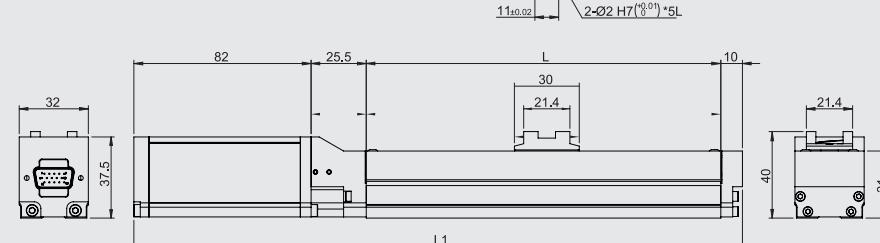
Stroke (mm)	L	L1	P1	M	N	C	Weight (kg)	
							Semi sealed	Fully sealed
50	114	231.5	84	84	0	4	0.55	0.6
100	164	281.5	34	134	1	6	0.65	0.7
150	214	331.5	84	184	1	6	0.75	0.8
200	264	381.5	34	234	2	8	0.85	0.9
250	314	431.5	84	284	2	8	0.95	1.0
300	364	481.5	34	334	3	10	1.05	1.1

GIRC32 / GIRO32 Dimension

GIRC32
Closed-loop stepper motor



GIRO32
Closed-loop stepper motor

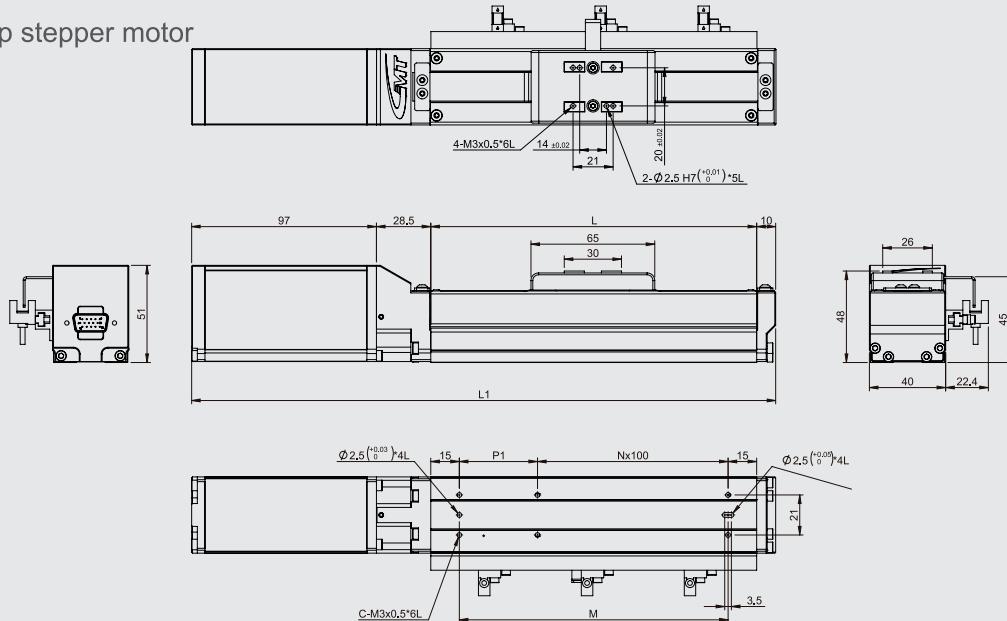


Stroke (mm)	L	L1	P1	M	N	C	Weight (kg)	
							Semi sealed	Fully sealed
50	114	231.5	84	84	0	4	0.55	0.6
100	164	281.5	34	134	1	6	0.65	0.7
150	214	331.5	84	184	1	6	0.75	0.8
200	264	381.5	34	234	2	8	0.85	0.9
250	314	431.5	84	284	2	8	0.95	1.0
300	364	481.5	34	334	3	10	1.05	1.1

GIRC40 / GIRO40 Dimension

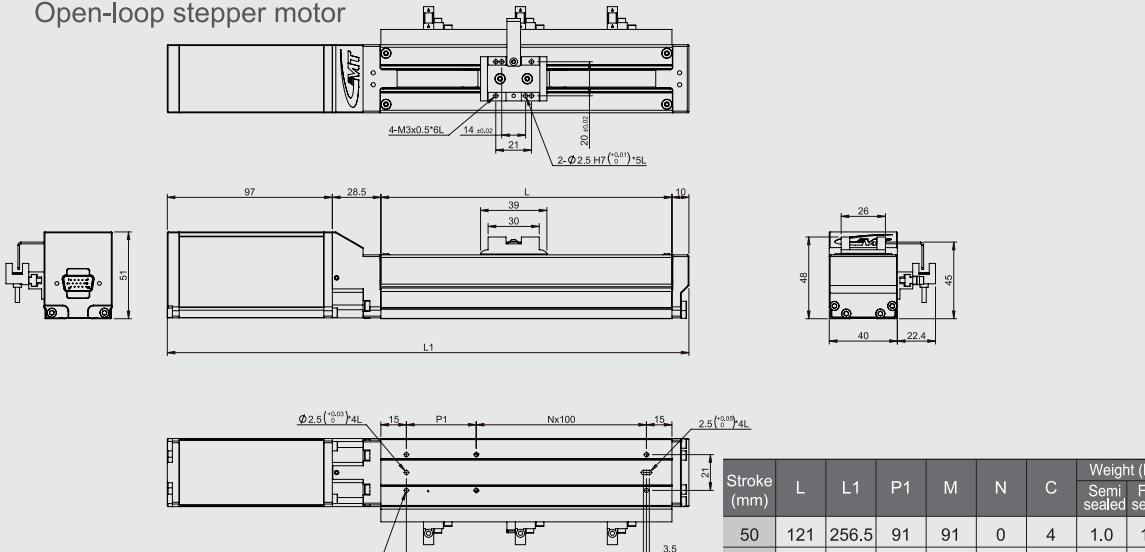
GIRC40

Open-loop stepper motor



GIRO40

Open-loop stepper motor

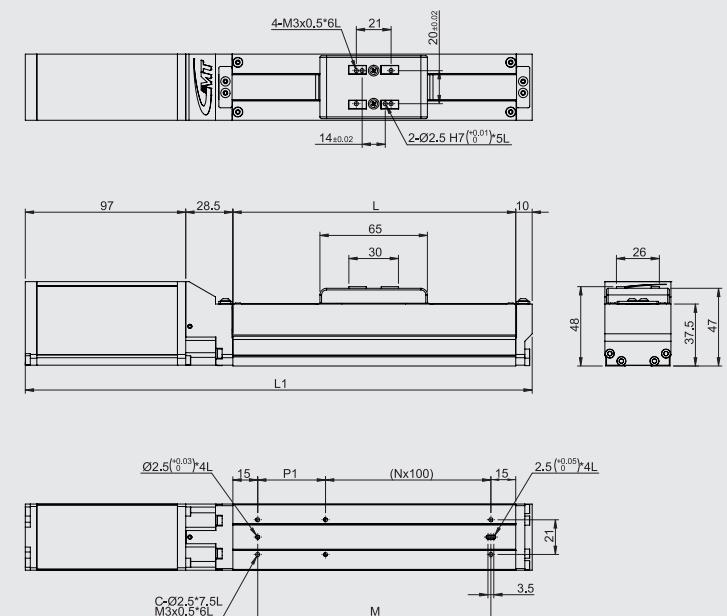


Stroke (mm)	L	L1	P1	M	N	C	Weight (kg) Semi sealed	Fully sealed
50	121	256.5	91	91	0	4	1.0	1.1
100	171	306.5	41	141	1	6	1.1	1.2
150	221	356.5	91	191	1	6	1.2	1.3
200	271	406.5	41	241	2	8	1.3	1.4
250	321	456.5	91	291	2	8	1.4	1.5
300	371	506.5	41	341	3	10	1.5	1.6
350	421	556.5	91	391	3	10	1.6	1.7
400	471	606.5	41	441	4	12	1.7	1.8
450	521	656.5	91	491	4	12	1.8	1.9
500	571	706.5	41	541	5	14	1.9	2.0

GIRC40 / GIRO40 Dimension

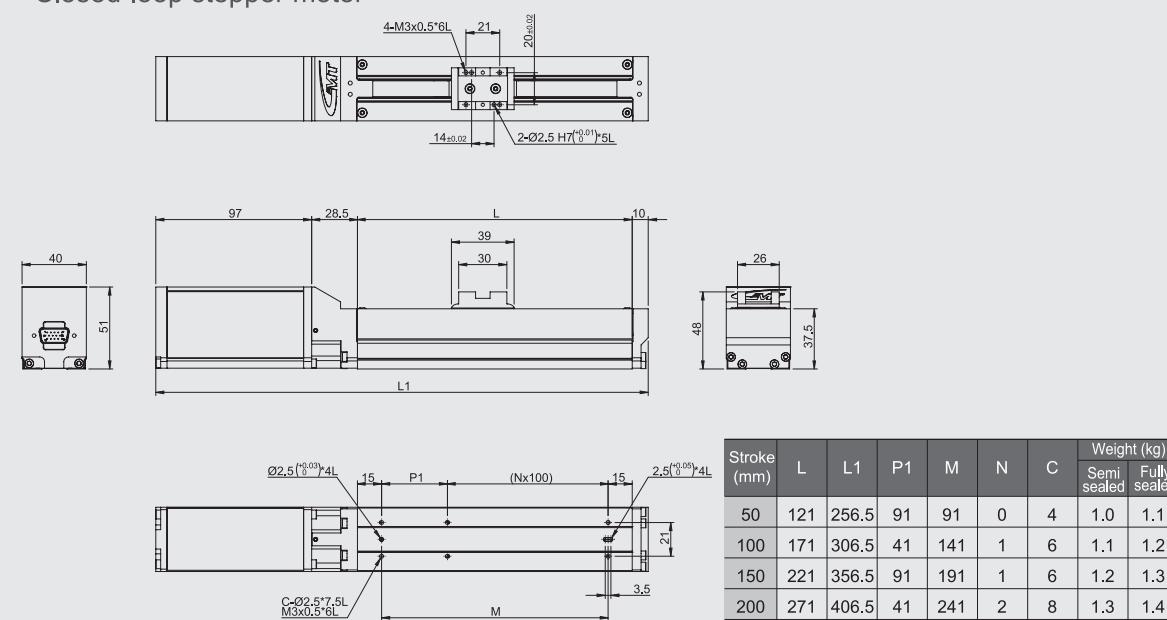
GIRC40

Closed-loop stepper motor



GIRO40

Closed-loop stepper motor

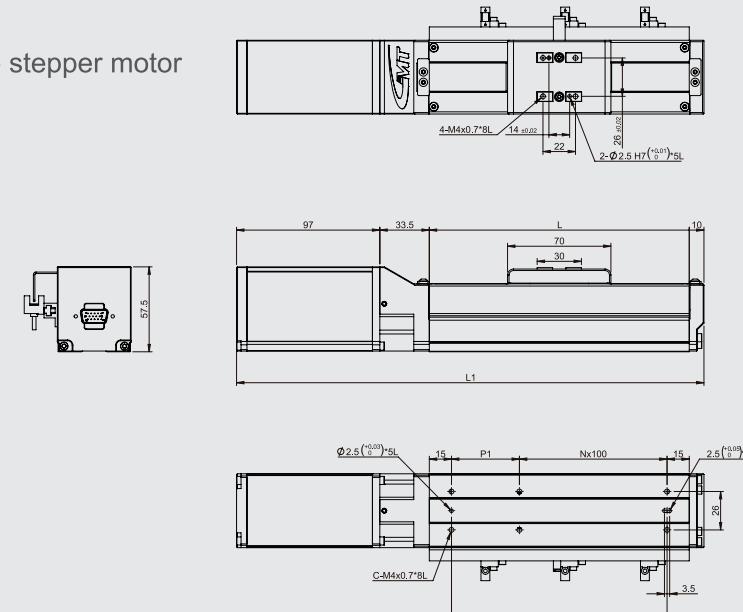


Stroke (mm)	L	L1	P1	M	N	C	Weight (kg) Semi sealed	Fully sealed
50	121	256.5	91	91	0	4	1.0	1.1
100	171	306.5	41	141	1	6	1.1	1.2
150	221	356.5	91	191	1	6	1.2	1.3
200	271	406.5	41	241	2	8	1.3	1.4
250	321	456.5	91	291	2	8	1.4	1.5
300	371	506.5	41	341	3	10	1.5	1.6
350	421	556.5	91	391	3	10	1.6	1.7
400	471	606.5	41	441	4	12	1.7	1.8
450	521	656.5	91	491	4	12	1.8	1.9
500	571	706.5	41	541	5	14	1.9	2.0

GIRC50 / GIRO50 Dimension

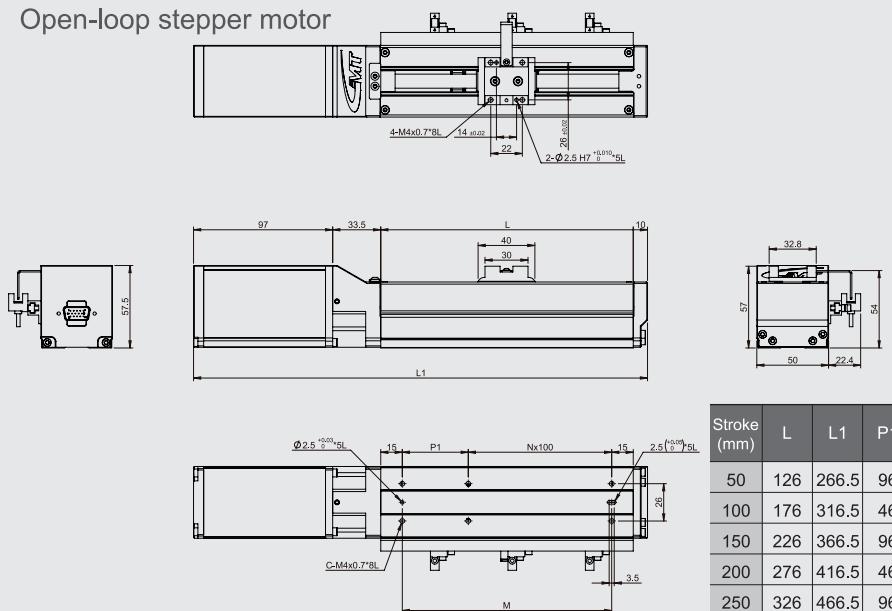
GIRC50

Open-loop stepper motor



GIRO50

Open-loop stepper motor

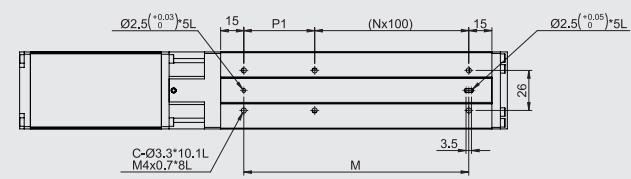
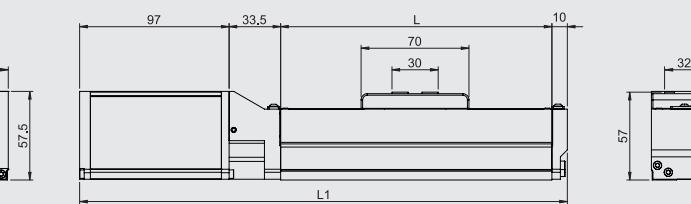
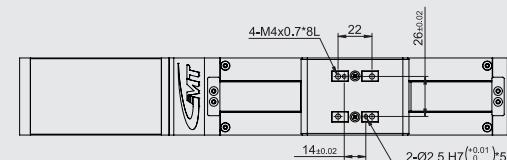


Stroke (mm)	L	L1	P1	M	N	C	Weight (kg)	
							Semi sealed	Fully sealed
50	126	266.5	96	96	0	4	1.5	1.6
100	176	316.5	46	146	1	6	1.6	1.7
150	226	366.5	96	196	1	6	1.7	1.8
200	276	416.5	46	246	2	8	1.8	1.9
250	326	466.5	96	296	2	8	1.9	2.0
300	376	516.5	46	346	3	10	2.0	2.1
350	426	566.5	96	396	3	10	2.1	2.2
400	476	616.5	46	446	4	12	2.2	2.3
450	526	666.5	96	496	4	12	2.3	2.4
500	576	716.5	46	546	5	14	2.4	2.5
550	626	766.5	96	596	5	14	2.5	2.6
600	676	816.5	46	646	6	16	2.6	2.7

GIRC50 / GIRO50 Dimension

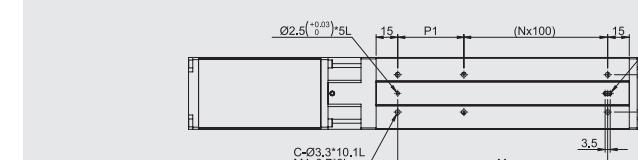
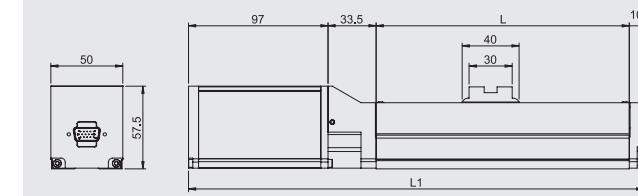
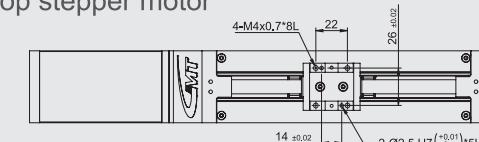
GIRC50

Closed-loop stepper motor



GIRO50

Closed-loop stepper motor

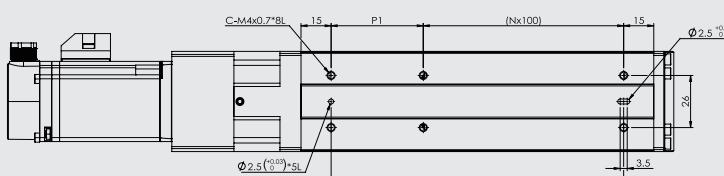
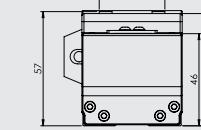
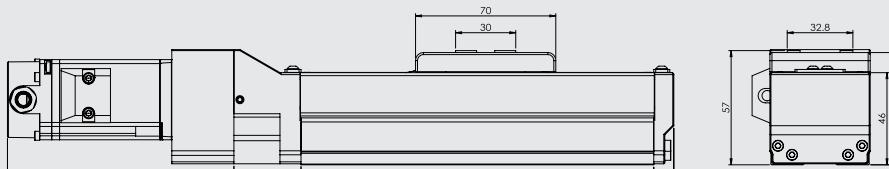
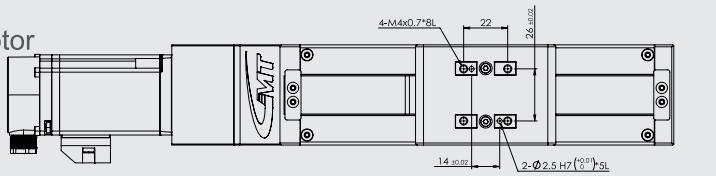


Stroke (mm)	L	L1	P1	M	N	C	Weight (kg)	
							Semi sealed	Fully sealed
50	126	266.5	96	96	0	4	1.5	1.6
100	176	316.5	46	146	1	6	1.6	1.7
150	226	366.5	96	196	1	6	1.7	1.8
200	276	416.5	46	246	2	8	1.8	1.9
250	326	466.5	96	296	2	8	1.9	2.0
300	376	516.5	46	346	3	10	2.0	2.1
350	426	566.5	96	396	3	10	2.1	2.2
400	476	616.5	46	446	4	12	2.2	2.3
450	526	666.5	96	496	4	12	2.3	2.4
500	576	716.5	46	546	5	14	2.4	2.5
550	626	766.5	96	596	5	14	2.5	2.6
600	676	816.5	46	646	6	16	2.6	2.7

GIRC50 / GIRO50 Dimension

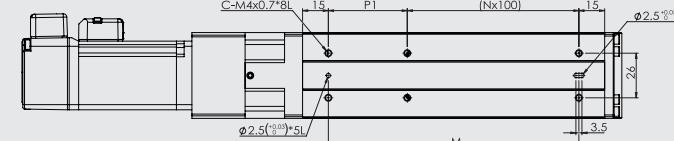
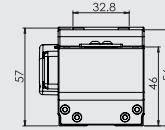
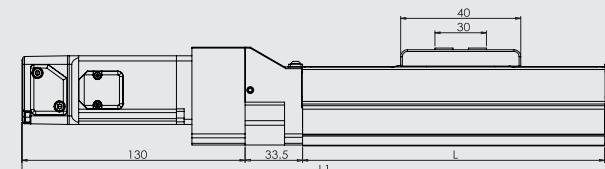
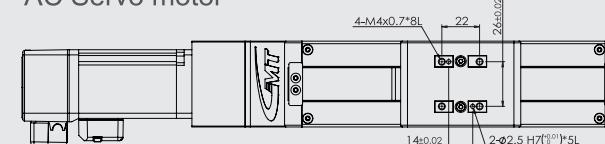
GIRC50

DC Servo motor



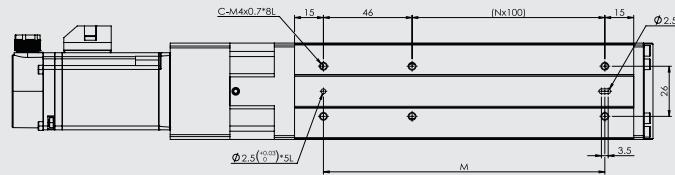
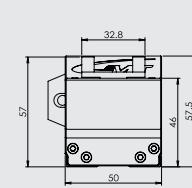
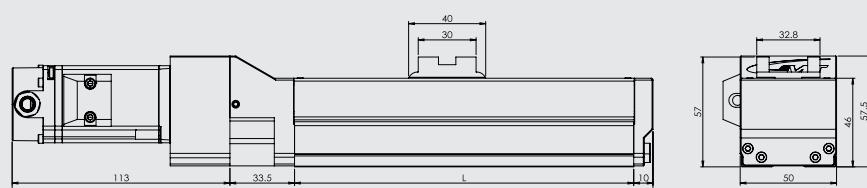
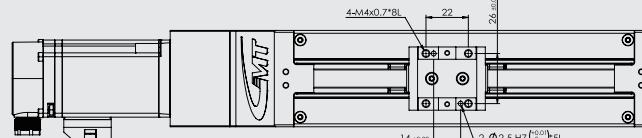
GIRC50

AC Servo motor



GIRO50

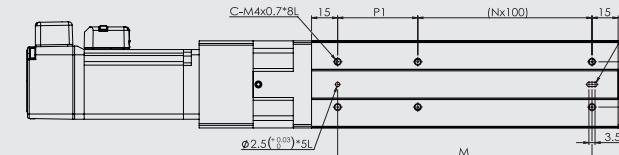
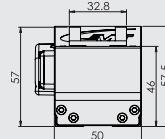
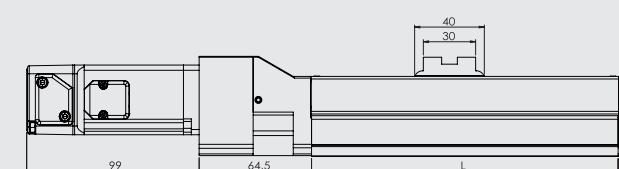
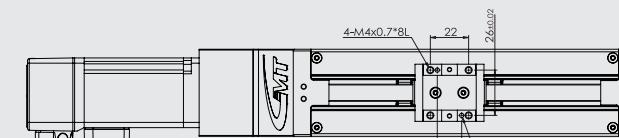
DC Servo motor



Stroke (mm)	L	L1	P1	M	N	C	Weight (kg) Semi sealed	Weight (kg) Fully sealed
50	126	282.5	96	96	0	4	1.5	1.6
100	176	332.5	46	146	1	6	1.6	1.7
150	226	382.5	96	196	1	6	1.7	1.8
200	276	432.5	46	246	2	8	1.8	1.9
250	326	482.5	96	296	2	8	1.9	2.0
300	376	532.5	46	346	3	10	2.0	2.1
350	426	582.5	96	396	3	10	2.1	2.2
400	476	632.5	46	446	4	12	2.2	2.3
450	526	682.5	96	496	4	12	2.3	2.4
500	576	732.5	46	546	5	14	2.4	2.5
550	626	782.5	96	596	5	14	2.5	2.6
600	676	832.5	46	646	6	16	2.6	2.7

GIRO50

AC Servo motor

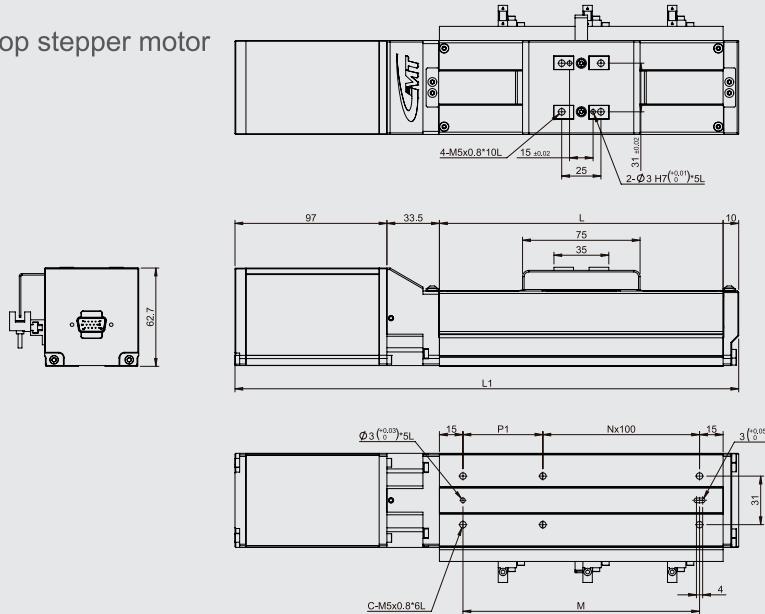


Stroke (mm)	L	L1	P1	M	N	C	Weight (kg) Semi sealed	Weight (kg) Fully sealed
50	126	299.5	96	96	0	4	1.5	1.6
100	176	349.5	46	146	1	6	1.6	1.7
150	226	399.5	96	196	1	6	1.7	1.8
200	276	449.5	46	246	2	8	1.8	1.9
250	326	499.5	96	296	2	8	1.9	2.0
300	376	549.5	46	346	3	10	2.0	2.1
350	426	599.5	96	396	3	10	2.1	2.2
400	476	649.5	46	446	4	12	2.2	2.3
450	526	699.5	96	496	4	12	2.3	2.4
500	576	749.5	46	546	5	14	2.4	2.5
550	626	799.5	96	596	5	14	2.5	2.6
600	676	849.5	46	646	6	16	2.6	2.7

GIRC60 / GIRO60 Dimension

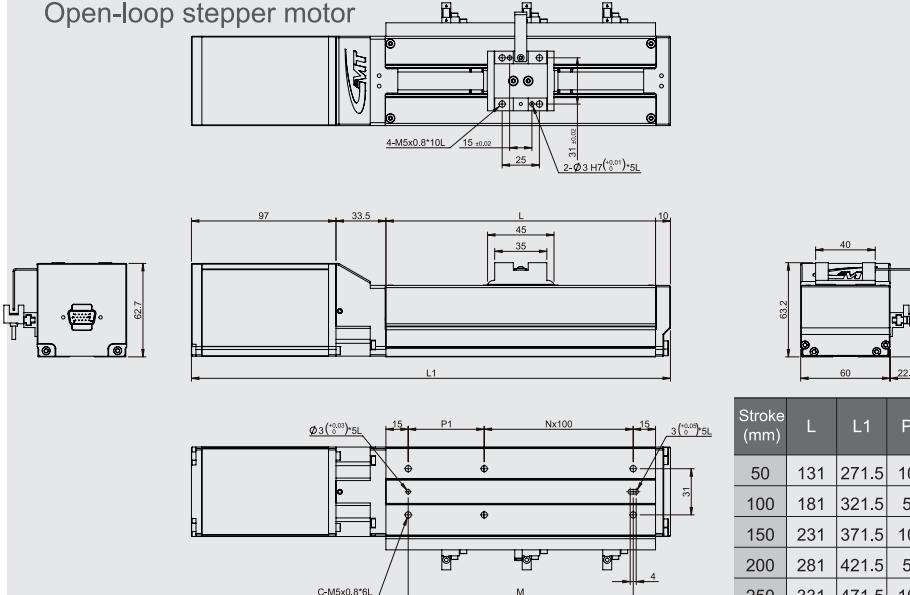
GIRC60

Open-loop stepper motor



GIRO60

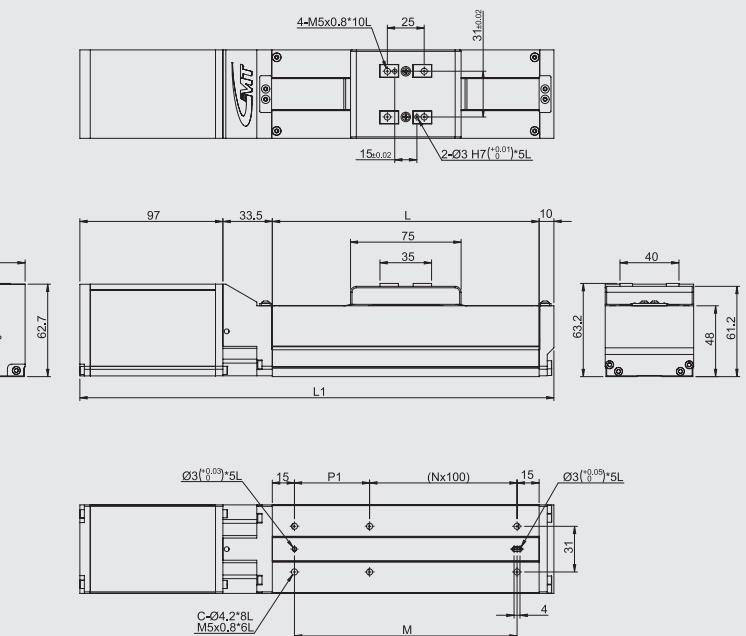
Open-loop stepper motor



Stroke (mm)	L	L1	P1	M	N	C	Weight (kg) Semi sealed	Weight (kg) Fully sealed
50	131	271.5	101	101	0	4	1.9	2.0
100	181	321.5	51	151	1	6	2.0	2.1
150	231	371.5	101	201	1	6	2.1	2.2
200	281	421.5	51	251	2	8	2.2	2.3
250	331	471.5	101	301	2	8	2.3	2.4
300	381	521.5	51	351	3	10	2.4	2.5
350	431	571.5	101	401	3	10	2.5	2.6
400	481	621.5	51	451	4	12	2.6	2.7
450	531	671.5	101	501	4	12	2.7	2.8
500	581	721.5	51	551	5	14	2.8	2.9
550	631	771.5	101	601	5	14	2.9	3.0
600	681	821.5	51	651	6	16	3.0	3.1

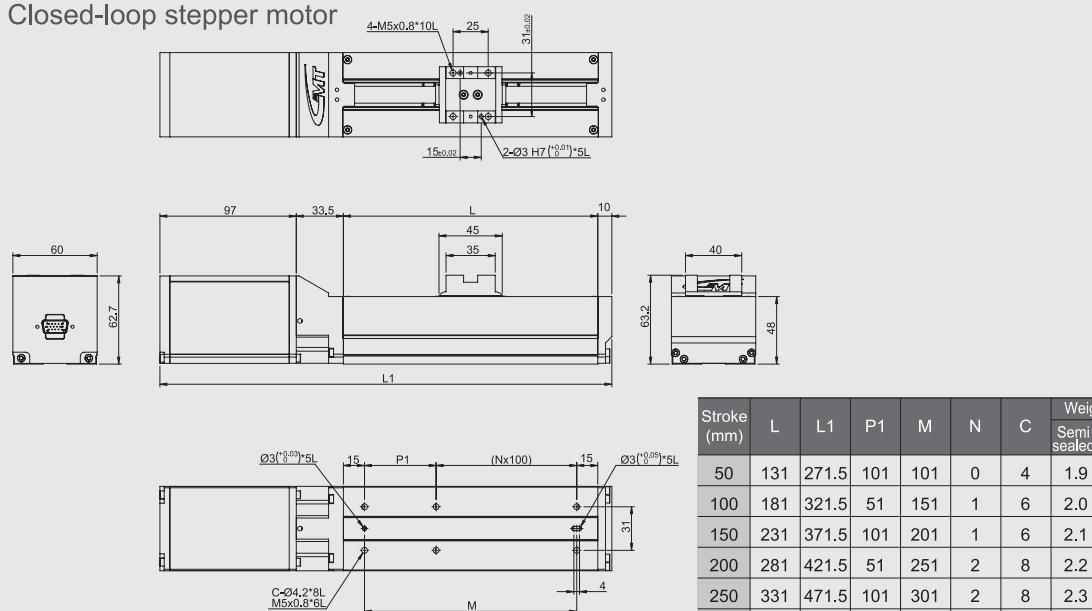
GIRC60

Closed-loop stepper motor



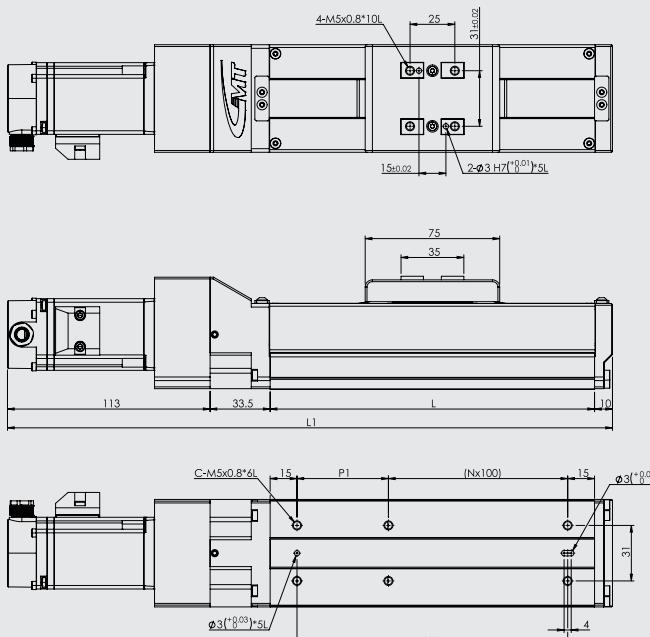
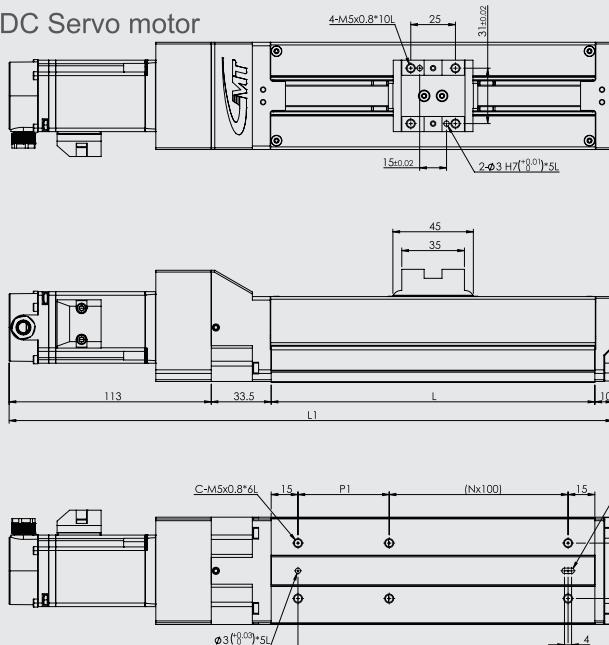
GIRO60

Closed-loop stepper motor



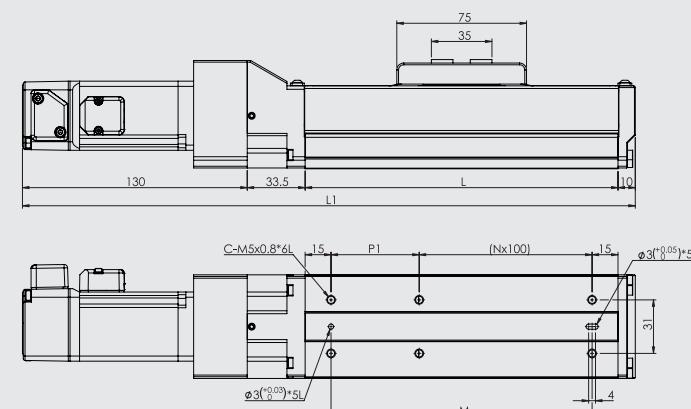
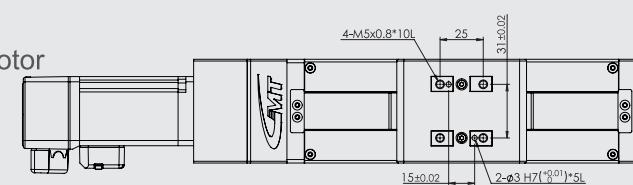
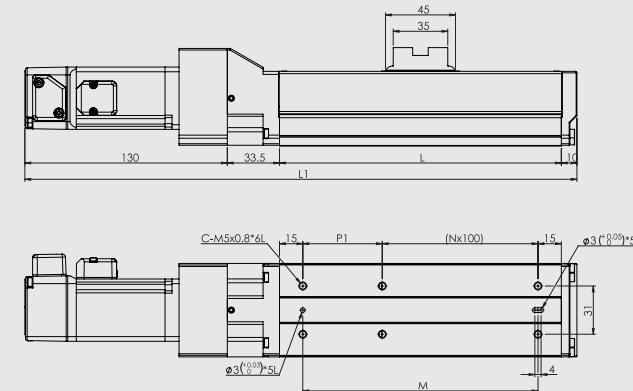
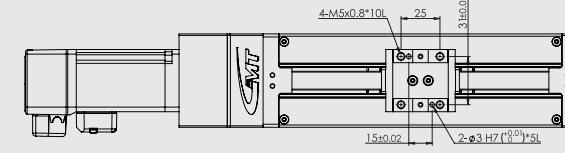
Stroke (mm)	L	L1	P1	M	N	C	Weight (kg) Semi sealed	Weight (kg) Fully sealed
50	131	271.5	101	101	0	4	1.9	2.0
100	181	321.5	51	151	1	6	2.0	2.1
150	231	371.5	101	201	1	6	2.1	2.2
200	281	421.5	51	251	2	8	2.2	2.3
250	331	471.5	101	301	2	8	2.3	2.4
300	381	521.5	51	351	3	10	2.4	2.5
350	431	571.5	101	401	3	10	2.5	2.6
400	481	621.5	51	451	4	12	2.6	2.7
450	531	671.5	101	501	4	12	2.7	2.8
500	581	721.5	51	551	5	14	2.8	2.9
550	631	771.5	101	601	5	14	2.9	3.0
600	681	821.5	51	651	6	16	3.0	3.1

GIRC60 / GIRO60 Dimension

GIRC60
DC Servo motorGIRO60
DC Servo motor

Stroke (mm)	L	L1	P1	M	N	C	Weight (kg)	
							Semi sealed	Fully sealed
50	131	287.5	101	101	0	4	1.9	2.0
100	181	337.5	51	151	1	6	2.0	2.1
150	231	387.5	101	201	1	6	2.1	2.2
200	281	437.5	51	251	2	8	2.2	2.3
250	331	487.5	101	301	2	8	2.3	2.4
300	381	537.5	51	351	3	10	2.4	2.5
350	431	587.5	101	401	3	10	2.5	2.6
400	481	637.5	51	451	4	12	2.6	2.7
450	531	687.5	101	501	4	12	2.7	2.8
500	581	737.5	51	551	5	14	2.8	2.9
550	631	787.5	101	601	5	14	2.9	3.0
600	681	837.5	51	651	6	16	3.0	3.1

GIRC60 / GIRO60 Dimension

GIRC60
AC Servo motorGIRO60
AC Servo motor

Stroke (mm)	L	L1	P1	M	N	C	Weight (kg)	
							Semi sealed	Fully sealed
50	131	304.5	101	101	0	4	1.9	2.0
100	181	354.5	51	151	1	6	2.0	2.1
150	231	404.5	101	201	1	6	2.1	2.2
200	281	454.5	51	251	2	8	2.2	2.3
250	331	504.5	101	301	2	8	2.3	2.4
300	381	554.5	51	351	3	10	2.4	2.5
350	431	604.5	101	401	3	10	2.5	2.6
400	481	654.5	51	451	4	12	2.6	2.7
450	531	704.5	101	501	4	12	2.7	2.8
500	581	754.5	51	551	5	14	2.8	2.9
550	631	804.5	101	601	5	14	2.9	3.0
600	681	854.5	51	651	6	16	3.0	3.1

GERC Description

GERC Series

Description

GERC	60	-	100	-	P	5	-	NA	D	-	D	X
	Width of cylinder (mm)		Stroke (mm)		Screw lead(mm)			Motor + Driver	Motor installed direction		D Sub connector	(Optional) cable
										D: Motor, direct-coupled	X: Not enclosed (in the case of a servomotor)	
										R: Motor, right fold	L: Motor, left fold	
60	100 / 150 / 200 / 250 300 / 350 / 400 / 450 500 / 550 / 600							5 / 10				
80	100 / 150 / 200 / 250 300 / 350 / 400 / 450 500 / 550 / 600 700 / 800							5 / 10				
100	200 / 250 / 300 / 350 400 / 450 / 500 / 550 600 / 700 / 800 / 900 1000							10 / 20				
120	100 / 150 / 200 / 250 300 / 350 / 400 / 450 500 / 550 / 600							5 / 10				

【 Package code 】

VW: GMT DC Servo motor +DC Servo driver (package)
QV: GMT AC Servo motor +AC Servo driver (package)
NA: Two-phase stepper motor +Driver (package)
NX: Two-phase stepper motor, Without driver
XX: Without motor, Without driver

P:Lead

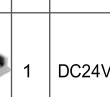
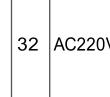
2: 2m Cable
4: 4m Cable
6: 6m Cable
X: Not enclosed

Note: for use on the cylinder



◎ GERC60-600

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method		Control mode		Point	Encoder feedback	Optical linear encoder	Reference page number in the catalog
					Pulse	I/O	Communication	Position				
NA	GTR22G-D (Two-phase bipolar micro-stepper driver)		1	DC24V	●	—	—	●	—	—	—	【P.36】
VW	K-SERVO (DKM) (DC Servo driver) GSV-DKM□□MB-□□DP		16	DC48V	●	●	RS485 Modbus RTU	●	●	128	●	—
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	●	●	RS485 Modbus RTU	●	●	●	●	【P.152】

* Please refer to the motor-driver catalog.

Standard travel stroke (mm) and suggestion for using safe speed (mm/s)								
Model No.	Stroke	Lead	100	150	200~550	600	700	800
GERC60	5		250			225	-	-
	10		500			450	-	-
GERC80	5		250			200	150	-
	10		500			400	300	-
GERC100	10		-	-	500		450	350
	20		-	-	1000		900	700
GERC-W120	5		250			-	-	-
	10		500			-	-	-

* The speed value which is corresponded to each travel stroke represents the maximum safe speed that can be used. If the speed is exceeded, the module might be having serious resonance and noise, and affect the accuracy and life of the module.

Servo motor

Model No.	GERC60	GERC80	GERC100	GERC-W120
Width of cylinder (mm)	60	80	100	120
Stroke (Every 50 mm)	100~600	100~600 / 700 / 800	200~600 / 700 / 800 / 900 / 1000	100~600
Drive type	Ball screw Ø10	Ball screw Ø12	Ball screw Ø16	Ball screw Ø12
Lead (mm)	5 10	5 10	10 20	5 10
Rail	Linear ball cycle			
Materials of the cylinder	Aluminum alloy / Anodized			
Feed-out direction	N : Standard			
Maximum speed(mm/s)*2	250	500	250	500
Repeatability (mm)	± 0.005 *1			
Maximum thrust force (N)*2	339	169	683	341
Horizontal load (Kgf)	20	14	56	49
Vertical load (Kgf)	5	3.5	14	12
DC Servo motor	100W : GSVM-D01MD4			
DC Servo driver	K-SERVO[GSV-DK01MR-48DP]			
Connector	Lateral connector of the cylinder Manufacturer : TE Connectivity Power cable : 172159-1+170366-1(male) Encoding cable : 172161-1+170365-1(male)			
AC Precision spec.	Manufacturer : KST Power cable : E1510-RED(European terminal) Manufacturer : JST Encoding cable : PHDR-12VS+SPHD-001T-P0.5(female)			
AC Precision spec.	250	500	250	500
Repeatability (mm)	± 0.005 *1			
Maximum thrust force (N)*2	341	170	693	346
Horizontal load(Kgf)	20	14	56	49
Vertical load(Kgf)	5	3.5	14	12
AC Electrical spec.	AC Servo motor 100W : GSVM-A01LC4 AC Servo driver GSV-KE01MB21CP			
Connector	Lateral connector of the cylinder Manufacturer : Tyco electronics Power cable : 172167-1(male) Encoding cable : 172171-1(male)			
AC Electrical spec.	Lateral connector of the transmission cable Manufacturer : Tyco electronics Power cable : 172159-1(female) Encoding cable : 172163-1(female)			

*1 The precision for foldleft series is ± 0.01mm.

*2 The maximum speed and thrust are tested by the servo motors which with the rotation speed is 3000 rpm and are corresponded to GMT DC and AC specification respectively, please reference to P.70 for safe speed.

*3 If it is not equipped with a motor, the above data for maximum speed and thrust are not applicable.

* Should you have other needed motor specifications, please contact Sales.

Stepper motor-
Closed loop

Model No.	GERC60		GERC80		GERC100		GERC-W120	
Mechanical spec.	Width of cylinder (mm)	60	80	100	120			
	Stroke (Every 50 mm)	100~600	100~600 / 700 / 800	200~600 / 700 / 800 / 900 / 1000	100~600			
	Drive type	Ball screw Ø10	Ball screw Ø12	Ball screw Ø16	Ball screw Ø12			
	Lead (mm)	5 10	5 10	10 20	5 10			
	Rail	Circular linear ball guide						
	Materials of the cylinder	Aluminum alloy / Anodized						
	Feed-out direction	N : GMT Standard						
	Maximum speed (mm/s)*2	100 200	100 200	200 200	400 100	100 200		
	Repeatability (mm)	$\pm 0.005^{\ast 1}$						
Precision	Maximum thrust force (N)*2	260	130	530	265	265	133	130
	Horizontal load (Kgf)	20	14	56	49	80	70	32
	Vertical load (Kgf)	5	3.5	14	12	20	17.5	8
	Driver	-	-	-	-	-	-	-
Electrical	Lateral connector of the cylinder	15-pin male D-SUB connector						
	Connector	15-pin female D-SUB connector						

Stepper motor-
Open loop

Model No.	GERC60		GERC80		GERC100		GERC-W120					
Mechanical spec.	Width of cylinder (mm)	60	80	100	120							
	Stroke (Every 50 mm)	100~600	100~600 / 700 / 800	200~600 / 700 / 800 / 900 / 1000	100~600							
	Drive type	Ball screw Ø10	Ball screw Ø12	Ball screw Ø16	Ball screw Ø12							
	Lead (mm)	5 10	5 10	10 20	5 10							
	Rail	Circular linear ball guide										
	Materials of the cylinder	Aluminum alloy / Anodized										
	Feed-out direction	N : GMT Standard										
	Maximum speed (mm/s)	100 200	75 150	150 150	300 100	100 200						
	Repeatability (mm)	$\pm 0.005^{\ast 1}$										
Precision	Maximum thrust force (N)	180	90	248	124	124	62	180				
	Horizontal load (Kgf)	20	14	56	49	80	70	32				
	Vertical load (Kgf)	5	3.5	14	12	20	17.5	8				
	Driver	GTR22G-D [□42]		CVD228B-K [□57]		CVD228B-K [□57]		GTR22G-D [□42]				
Electrical	Lateral connector of the cylinder	15-pin male D-SUB connector										
	Connector	15-pin female D-SUB connector										

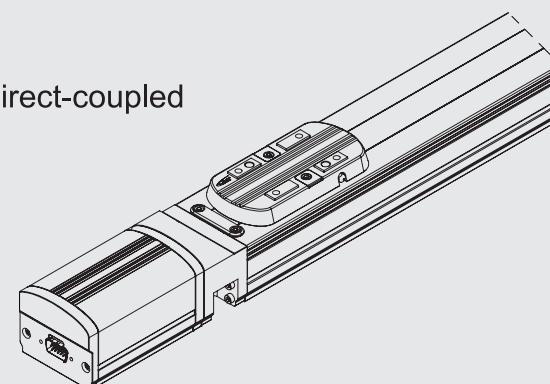
*1 The precision for foldleft series is $\pm 0.01\text{mm}$.

*2 If it is not equipped with a motor, the above data for maximum speed and thrust are not applicable.

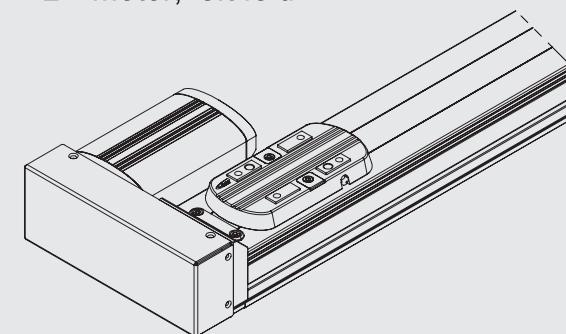
*Should you have other needed motor specifications, please contact Sales.

Motor installed direction

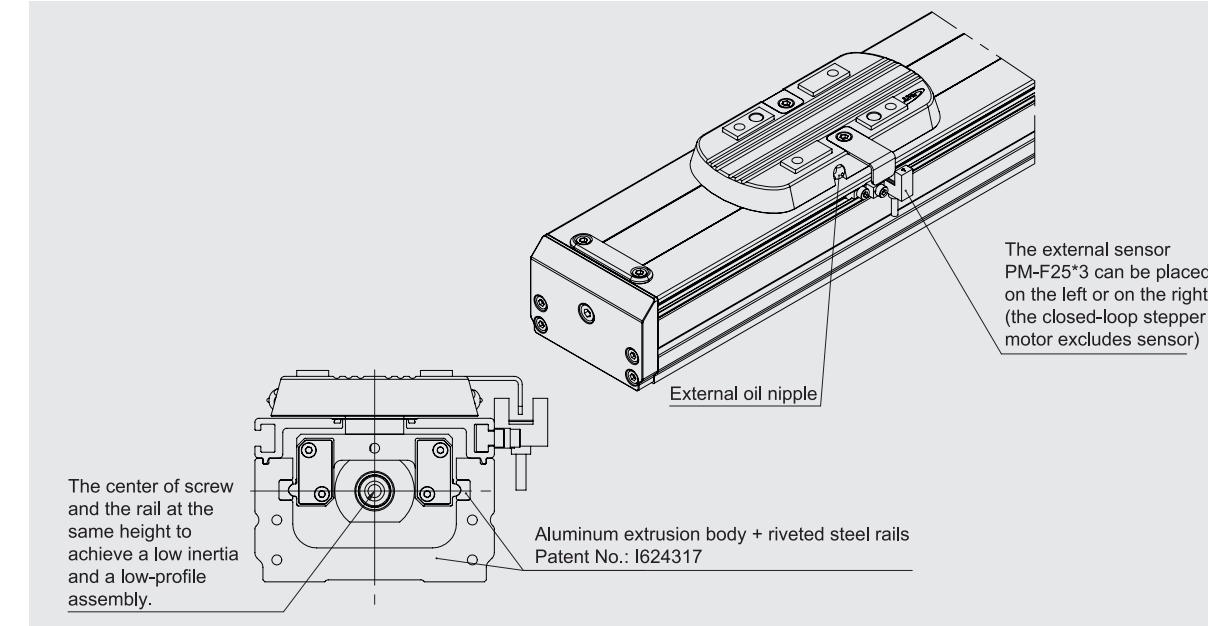
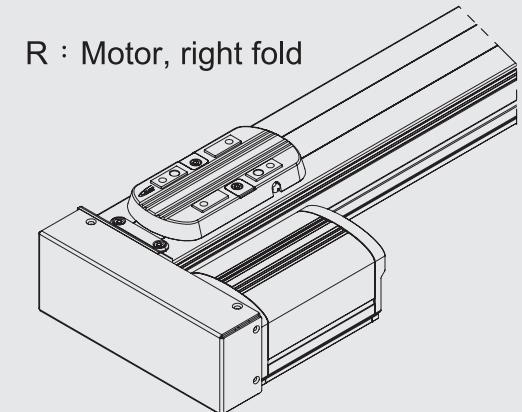
D : Motor direct-coupled



L : Motor, left fold

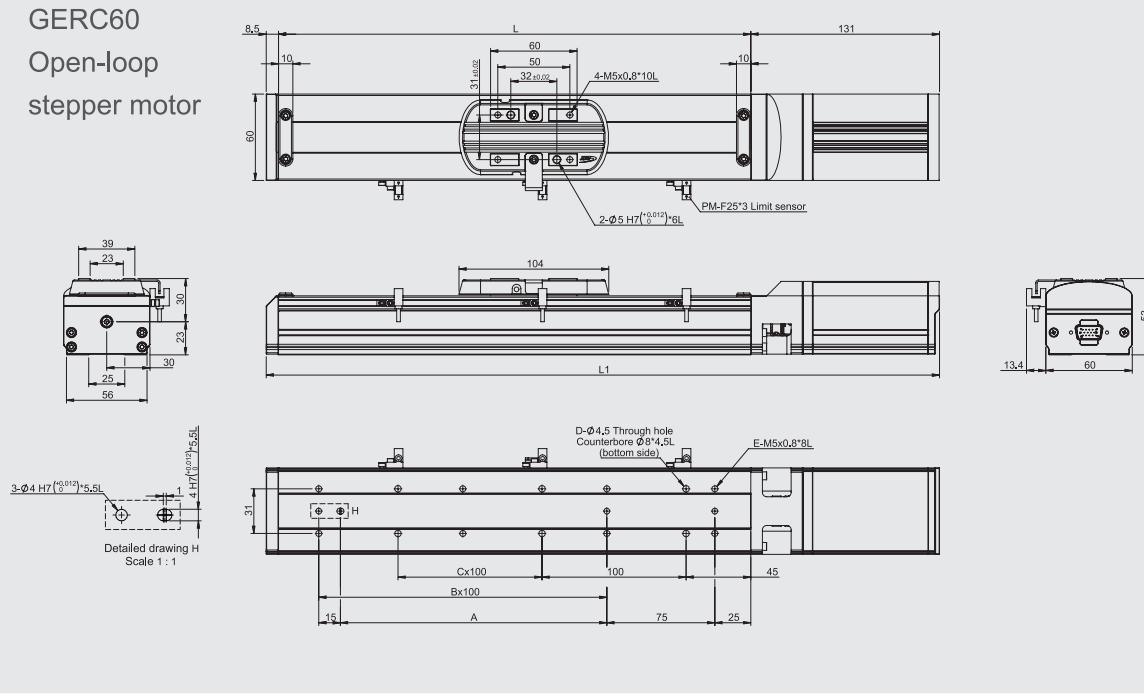
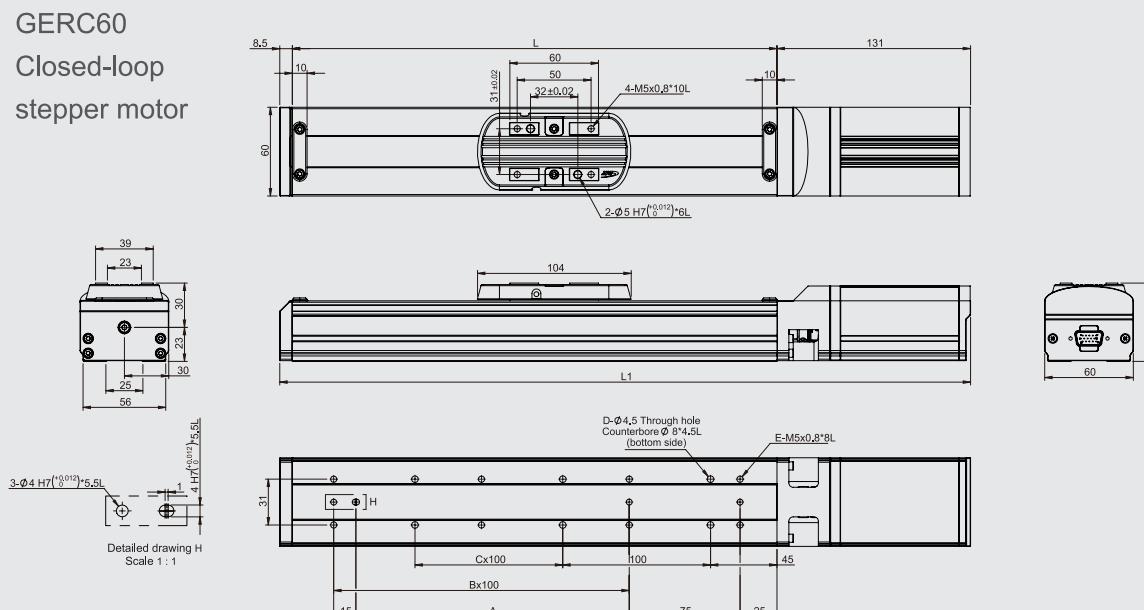


R : Motor, right fold



Electric Cylinder - Slider ▶ GERC

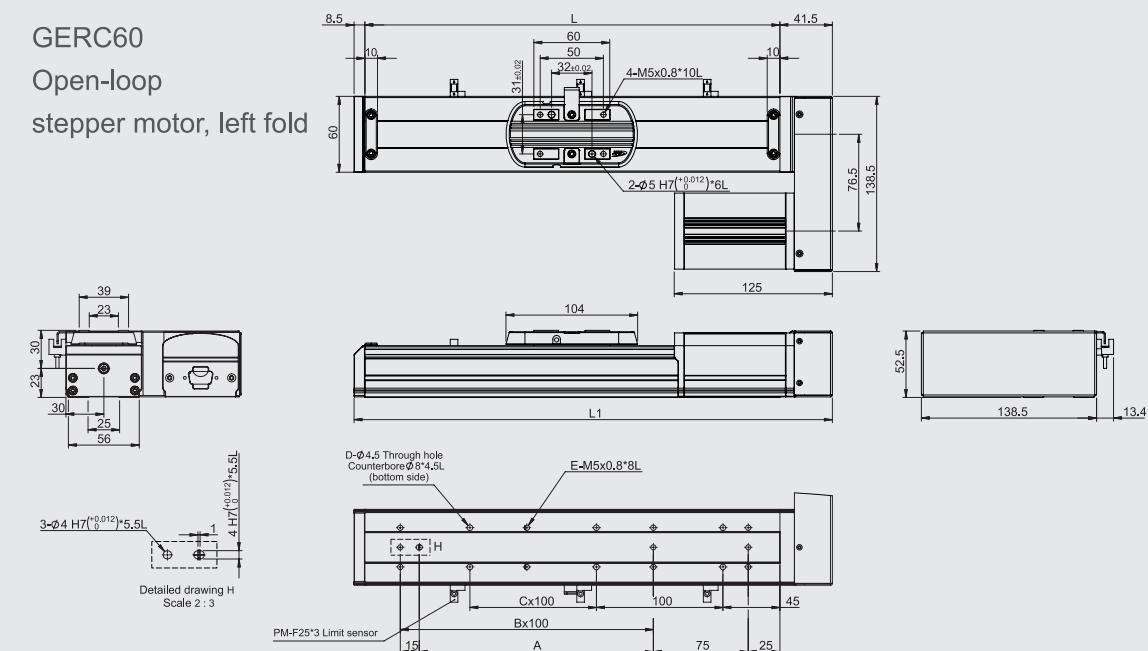
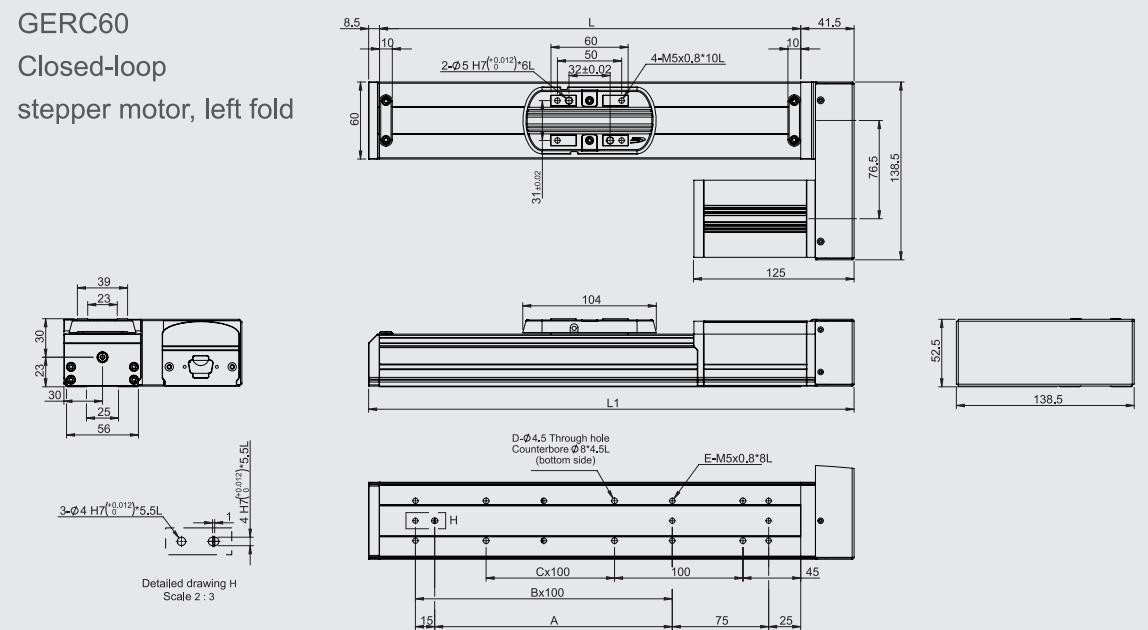
GERC Dimension

GERC60
Open-loop
stepper motorGERC60
Closed-loop
stepper motor

Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
A	85	85	185	185	285	285	385	385	485	485	585
B	1	1	2	2	3	3	4	4	5	5	6
C	0	1	1	2	2	3	3	4	4	5	5
D	4	6	6	8	8	10	10	12	12	14	14
E	6	6	8	8	10	10	12	12	14	14	16
L	228	278	328	378	428	478	528	578	628	678	728
L1	367.5	417.5	467.5	517.5	567.5	617.5	667.5	717.5	767.5	817.5	867.5
Weight (kg)	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.9	4.1

Electric Cylinder - Slider ▶ GERC

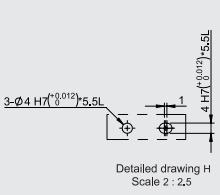
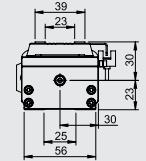
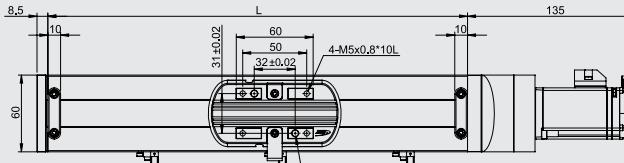
GERC Dimension

GERC60
Open-loop
stepper motor, left foldGERC60
Closed-loop
stepper motor, left fold

Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
A	85	85	185	185	285	285	385	385	485	485	585
B	1	1	2	2	3	3	4	4	5	5	6
C	0	1	1	2	2	3	3	4	4	5	5
D	4	6	6	8	8	10	10	12	12	14	14
E	6	6	8	8	10	10	12	12	14	14	16
L	228	278	328	378	428	478	528	578	628	678	728
L1	278	328	378	428	478	528	578	628	678	728	778
Weight (kg)	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.9	4.1

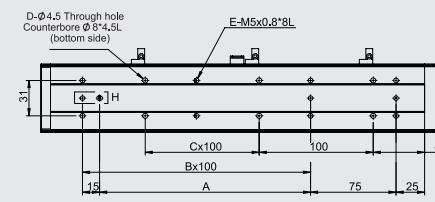
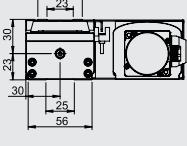
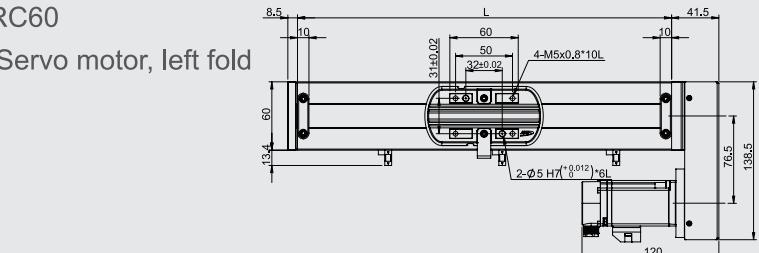
GERC Dimension

GERC60
DC Servo motor



Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
A	85	85	185	185	285	385	385	485	485	585	585
B	1	1	2	2	3	3	4	4	5	5	6
C	0	1	1	2	2	3	3	4	4	5	5
D	4	6	6	8	8	10	10	12	12	14	14
E	6	6	8	8	10	10	12	12	14	14	16
L	228	278	328	378	428	478	528	578	628	678	728
L1	371.5	421.5	471.5	521.5	571.5	621.5	671.5	721.5	771.5	821.5	871.5
Weight (kg)	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.9

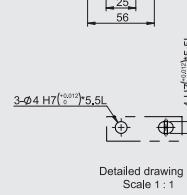
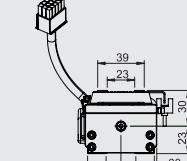
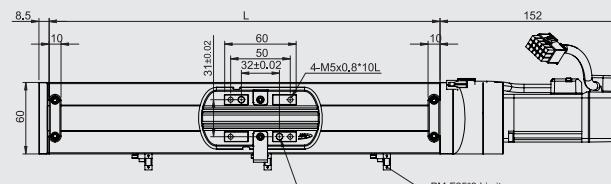
GERC60
DC Servo motor, left fold



Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
A	85	85	185	185	285	385	385	485	485	585	585
B	1	1	2	2	3	3	4	4	5	5	6
C	0	1	1	2	2	3	3	4	4	5	5
D	4	6	6	8	8	10	10	12	12	14	14
E	6	6	8	8	10	10	12	12	14	14	16
L	228	278	328	378	428	478	528	578	628	678	728
L1	278	328	378	428	475	528	578	628	678	728	778
Weight (kg)	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.9

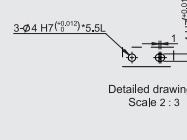
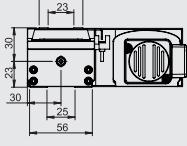
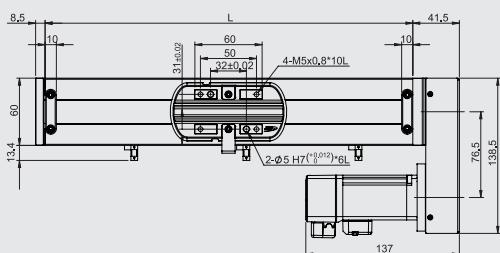
GERC Dimension

GERC60
AC Servo motor



Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
A	85	85	185	185	285	385	385	485	485	585	585
B	1	1	2	2	3	3	4	4	5	5	6
C	0	1	1	2	2	3	3	4	4	5	5
D	4	6	6	8	8	10	10	12	12	14	14
E	6	6	8	8	10	10	12	12	14	14	16
L	228	278	328	378	428	478	528	578	628	678	728
L1	388.5	438.5	488.5	538.5	588.5	638.5	688.5	738.5	788.5	838.5	888.5
Weight (kg)	2	2.2	2.4	2.6	2.8	3	3.2	3.4	3.6	3.8	4

GERC60
AC Servo motor, left fold

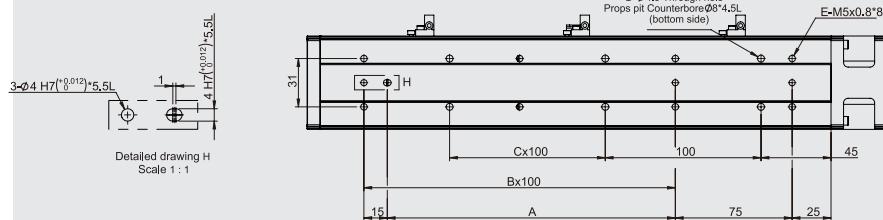
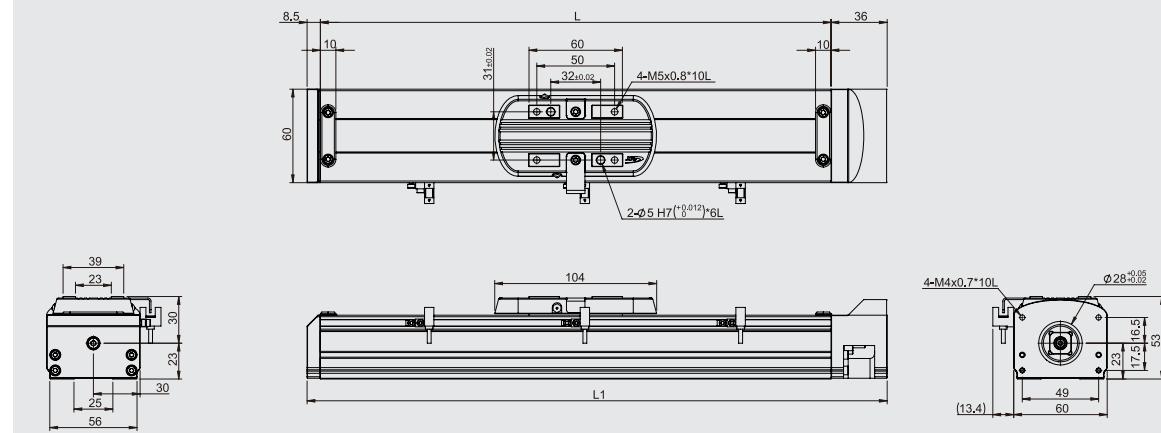


Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
A	85	85	185	185	285	385	385	485	485	585	585
B	1	1	2	2	3	3	4	4	5	5	6
C	0	1	1	2	2	3	3	4	4	5	5
D	4	6	6	8	8	10	10	12	12	14	14
E	6	6	8	8	10	10	12	12	14	14	16
L	228	278	328	378	428	478	528	578	628	678	728
L1	278	328	378	428	475	528	578	628	678	728	778
Weight (kg)	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.9

GERC Dimension

GERC60

No motor

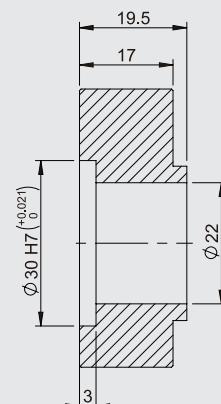
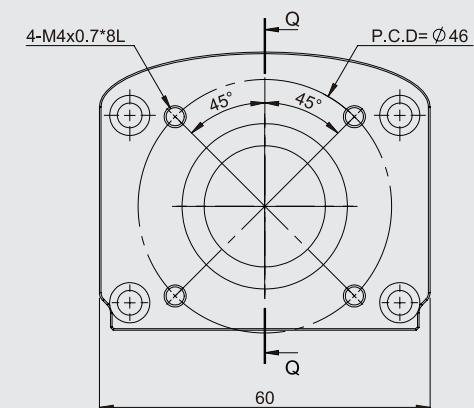


Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600
A	85	85	185	185	285	285	385	385	485	485	585
B	1	1	2	2	3	3	4	4	5	5	6
C	0	1	1	2	2	3	3	4	4	5	5
D	4	6	6	8	8	10	10	12	12	14	14
E	6	6	8	8	10	10	12	12	14	14	16
L	228	278	328	378	428	478	528	578	628	678	728
L1	272.5	322.5	372.5	422.5	472.5	522.5	572.5	622.5	672.5	722.5	772.5
Weight (kg)	1.4	1.6	1.8	2	2.2	2.4	2.6	2.8	3	3.2	3.4

GERC Dimension

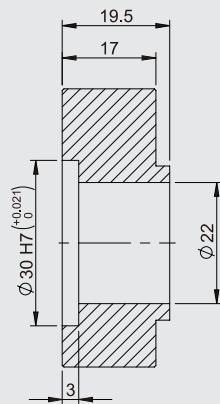
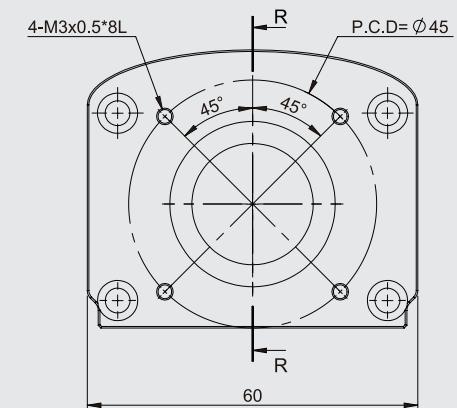
GERC60

Servo motor mounting plate



Sectional view Q-Q

GMT,Delta, Mitsubishi, Yaskawa 50 / 100W

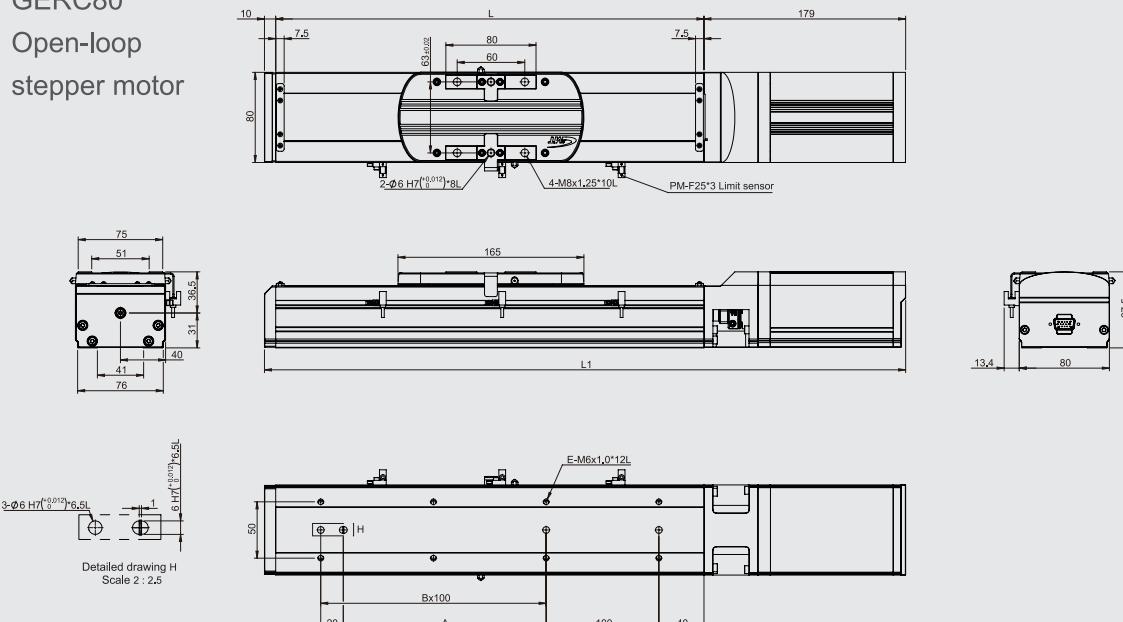


Sectional view R-R

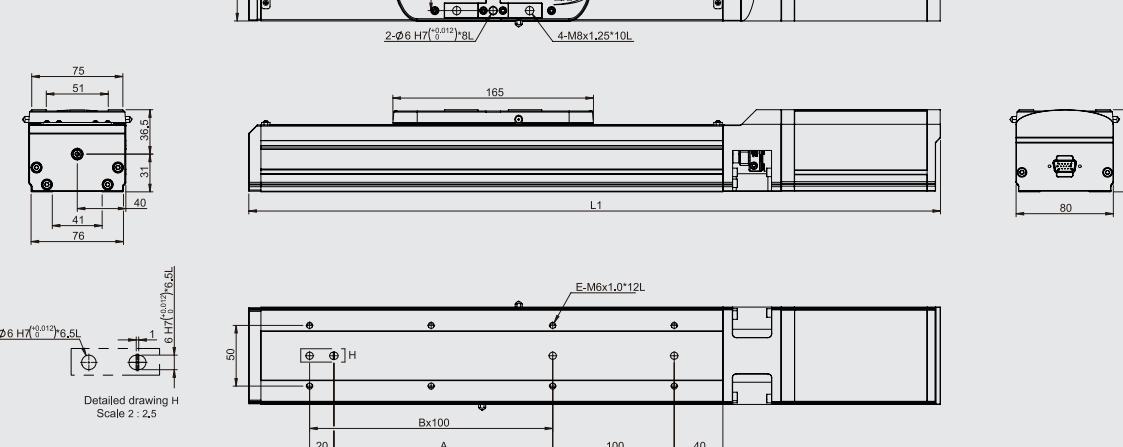
Panasonic 50 / 100W

GERC Dimension

GERC80
Open-loop
stepper motor



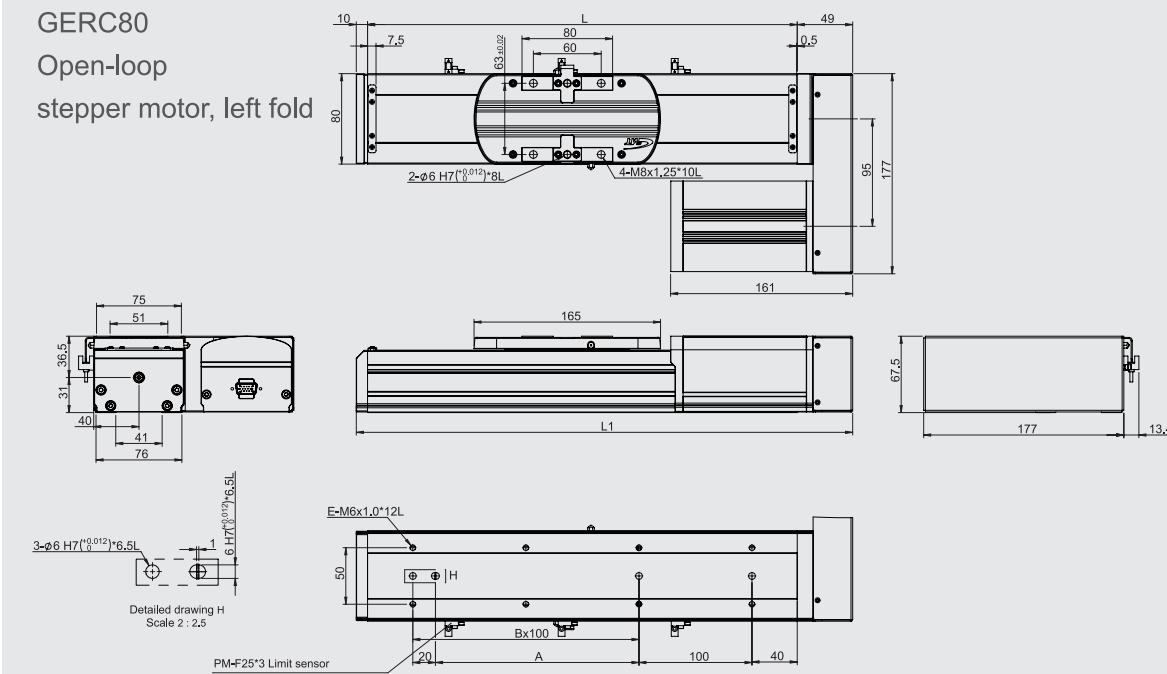
GERC80
Closed-loop
stepper motor



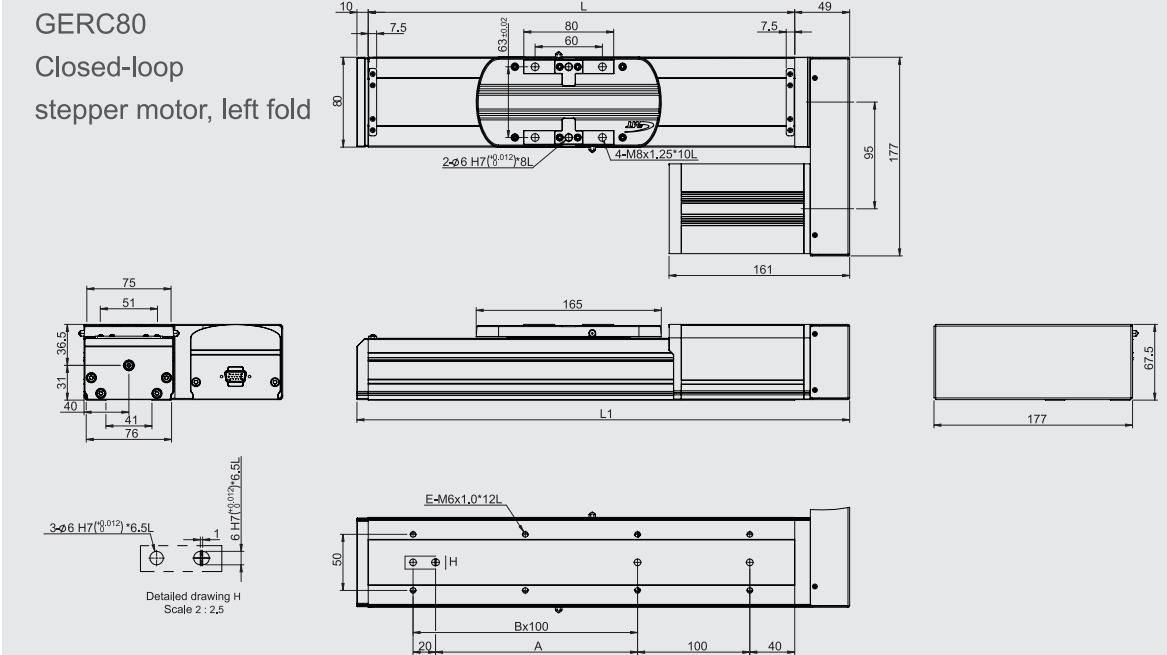
Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	700	800
A	-	80	180	180	280	280	380	380	480	480	580	680	780
B	1	1	2	2	3	3	4	4	5	5	6	7	8
E	6	6	8	8	10	10	12	12	14	14	16	18	20
L	280	330	380	430	480	530	580	630	680	730	780	880	980
L1	469	519	569	619	669	719	769	819	869	919	969	1069	1169
Weight (kg)	4.3	4.6	4.9	5.2	5.5	5.8	6.1	6.4	6.7	7	7.3	7.9	8.5

GERC Dimension

GERC80
Open-loop
stepper motor, left fold



GERC80
Closed-loop
stepper motor, left fold

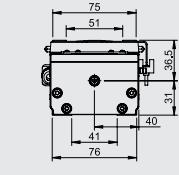
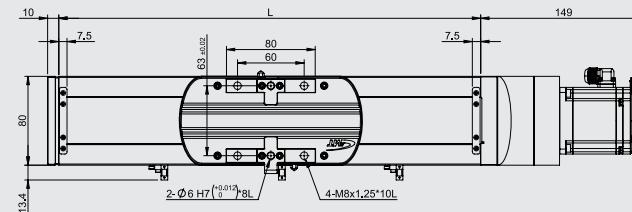


Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	700	800
A	-	80	180	180	280	280	380	380	480	480	580	680	780
B	1	1	2	2	3	3	4	4	5	5	6	7	8
E	6	6	8	8	10	10	12	12	14	14	16	18	20
L	280	330	380	430	480	530	580	630	680	730	780	880	980
L1	339	389	439	489	539	589	639	689	739	789	839	939	1039
Weight (kg)	4.3	4.6	4.9	5.2	5.5	5.8	6.1	6.4	6.7	7	7.3	7.9	8.5

GERC Dimension

GERC80

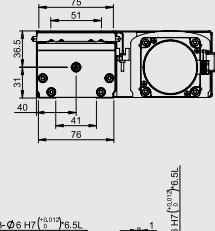
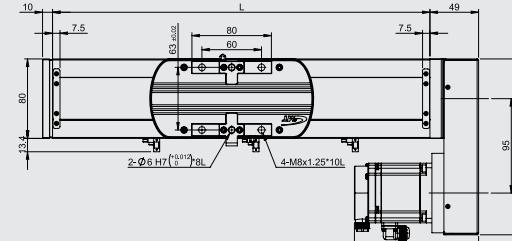
DC Servo motor

Detailed drawing H
Scale 2 : 3

Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	700	800
A	-	80	180	180	280	280	380	380	480	480	580	680	780
B	1	1	2	2	3	3	4	4	5	5	6	7	8
E	6	6	8	8	10	10	12	12	14	14	16	18	20
L	280	330	380	430	480	530	580	630	680	730	780	880	980
L1	439	489	539	589	639	689	739	789	839	889	939	1039	1139
Weight (kg)	3.6	3.8	4	4.2	4.4	4.6	4.8	5	5.2	5.4	5.6	5.8	6

GERC80

DC Servo motor, left fold

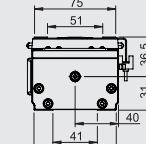
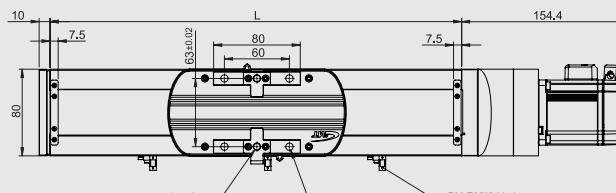
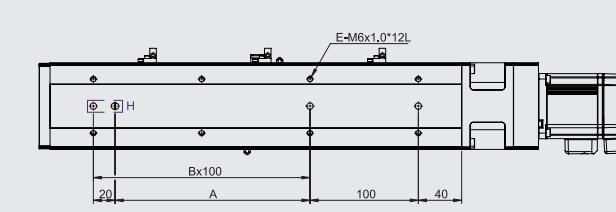
Detailed drawing H
Scale 2 : 3

Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	700	800
A	-	80	180	180	280	280	380	380	480	480	580	680	780
B	1	1	2	2	3	3	4	4	5	5	6	7	8
E	6	6	8	8	10	10	12	12	14	14	16	18	20
L	280	330	380	430	480	530	580	630	680	730	780	880	980
L1	339	389	439	489	539	589	639	689	739	789	839	939	1039
Weight (kg)	3.6	3.8	4	4.2	4.4	4.6	4.8	5	5.2	5.4	5.6	5.8	6

GERC Dimension

GERC80

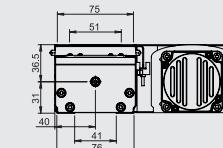
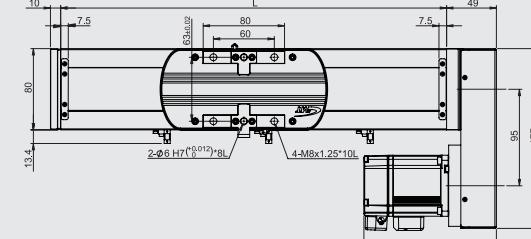
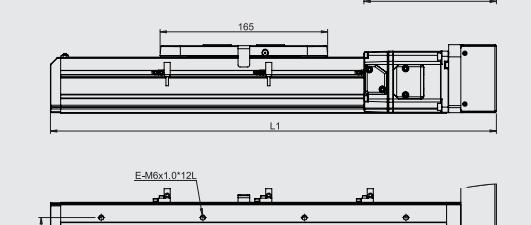
AC Servo motor

Detailed drawing H
Scale 1 : 1

Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	700	800
A	-	80	180	180	280	280	380	380	480	480	580	680	780
B	1	1	2	2	3	3	4	4	5	5	6	7	8
E	6	6	8	8	10	10	12	12	14	14	16	18	20
L	280	330	380	430	480	530	580	630	680	730	780	880	980
L1	444.4	494.4	544.4	594.5	644.4	694.4	744.4	794.4	844.4	894.4	944.4	1044.4	1144.4
Weight (kg)	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6	6.3	6.6	7.2	7.8

GERC80

AC Servo motor, left fold

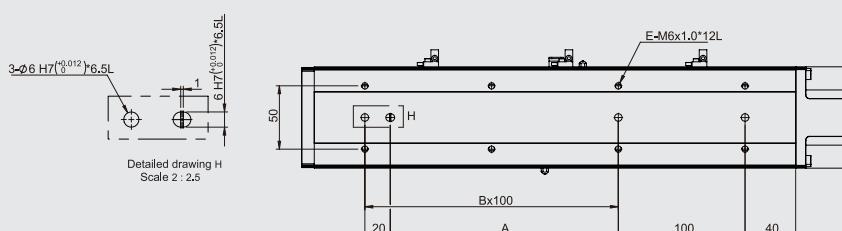
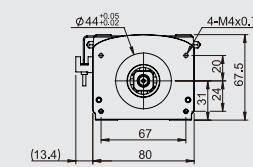
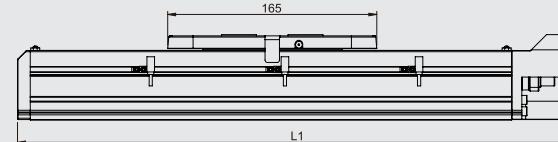
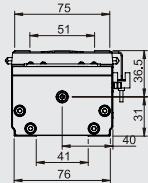
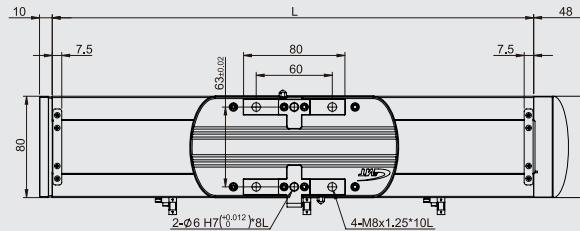
Detailed drawing H
Scale 2 : 5

Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	700	800
A	-	80	180	180	280	280	380	380	480	480	580	680	780
B	1	1	2	2	3	3	4	4	5	5	6	7	8
E	6	6	8	8	10	10	12	12	14	14	16	18	20
L	280	330	380	430	480	530	580	630	680	730	780	880	980
L1	339	389	439	489	539	589	639	689	739	789	839	939	1039
Weight (kg)	3.5	3.8	4.1	4.4	4.7	5	5.3	5.6	5.9	6.2	6.5	7.1	7.7

GERC Dimension

GERC80

No motor

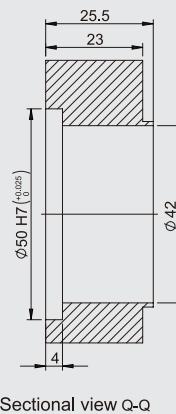
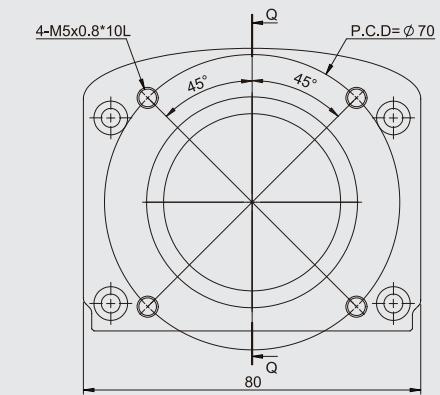


Stroke (mm)	100	150	200	250	300	350	400	450	500	550	600	700	800
A	-	80	180	180	280	280	380	380	480	480	580	680	780
B	1	1	2	2	3	3	4	4	5	5	6	7	8
E	6	6	8	8	10	10	12	12	14	14	16	18	20
L	280	330	380	430	480	530	580	630	680	730	780	880	980
L1	338	388	438	488	538	588	638	688	738	788	838	938	1038
Weight (kg)	3	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6	6.6	7.2

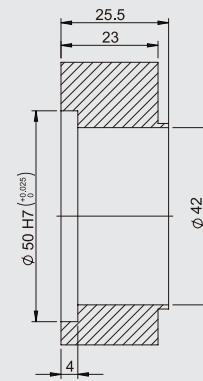
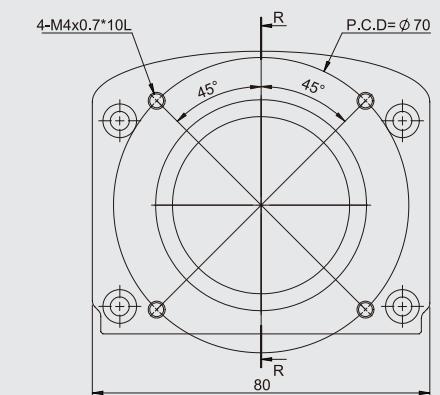
GERC Dimension

GERC80

Servo motor mounting plate



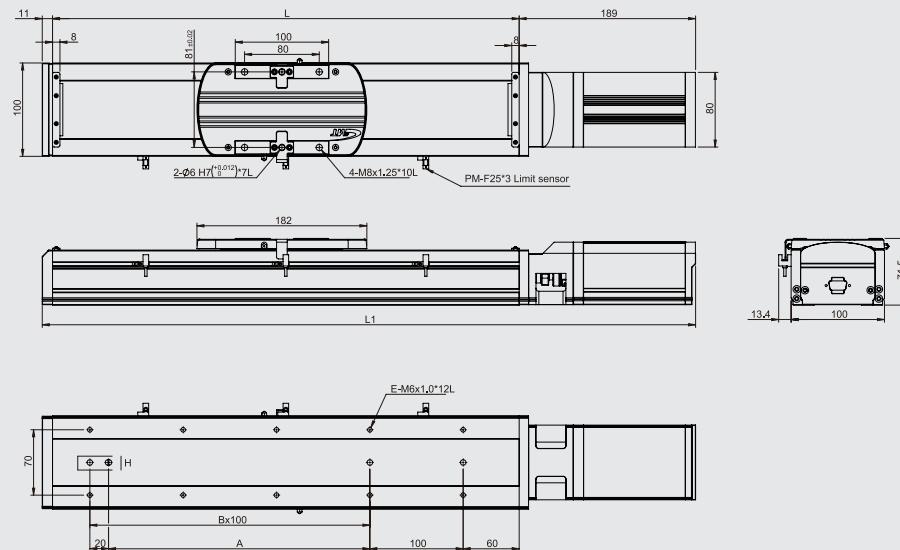
Delta, Mitsubishi, Yaskawa 200 / 400W



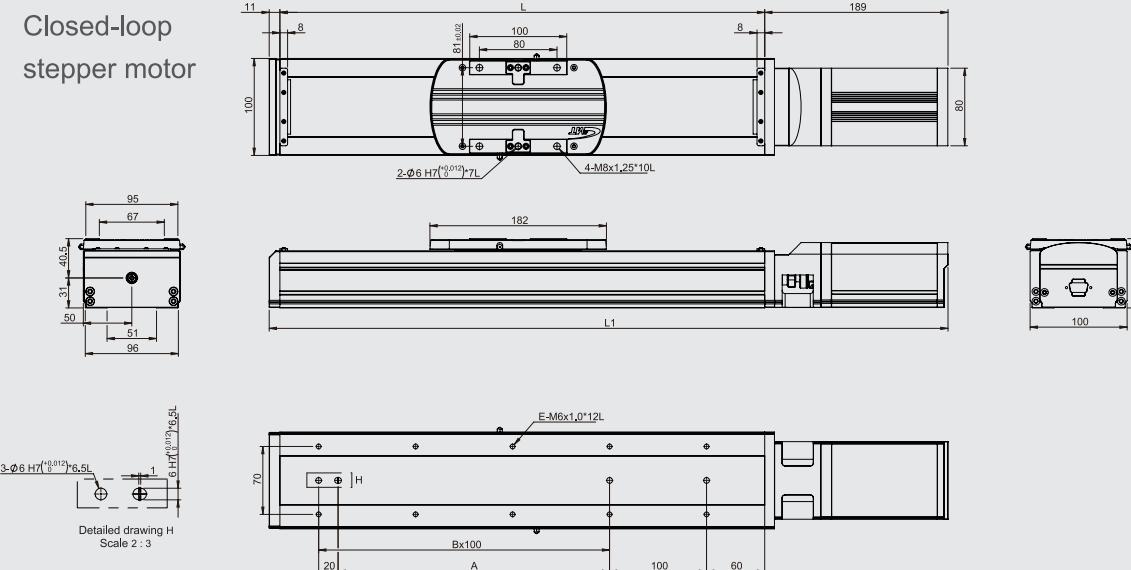
GMT, Panasonic 200 / 400W

GERC Dimension

GERC100
Open-loop
stepper motor



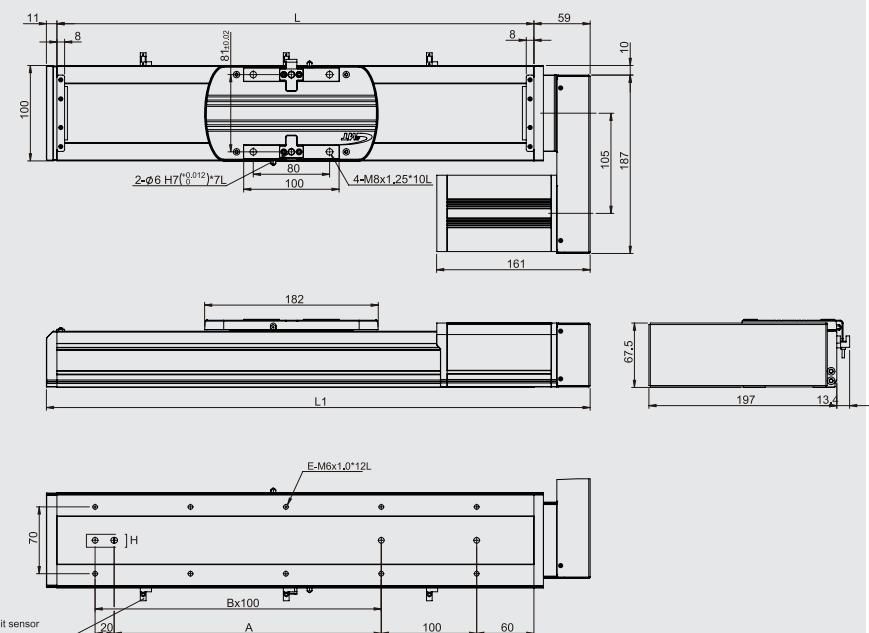
GERC100
Closed-loop
stepper motor



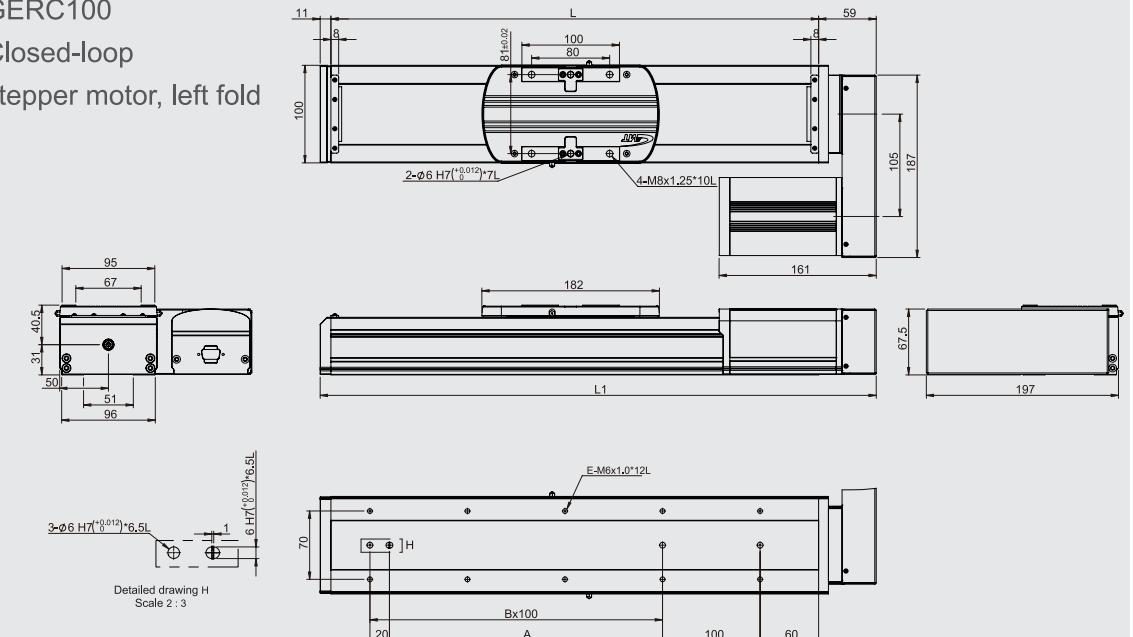
Stroke (mm)	200	250	300	350	400	450	500	550	600	700	800	900	1000
A	180	180	280	280	380	380	480	480	580	680	780	880	980
B	5	2	3	3	4	4	5	5	6	7	8	9	10
E	8	8	10	10	12	12	14	14	16	18	20	22	24
L	400	450	500	550	600	650	700	750	800	900	1000	1100	1200
L1	600	650	700	750	800	850	900	950	1000	1100	1200	1300	1400
Weight (kg)	6.2	6.5	6.8	7.1	7.4	7.7	8	8.3	8.6	9.2	9.8	10.4	11.3

GERC Dimension

GERC100
Open-loop
stepper motor, left fold



GERC100
Closed-loop
stepper motor, left fold



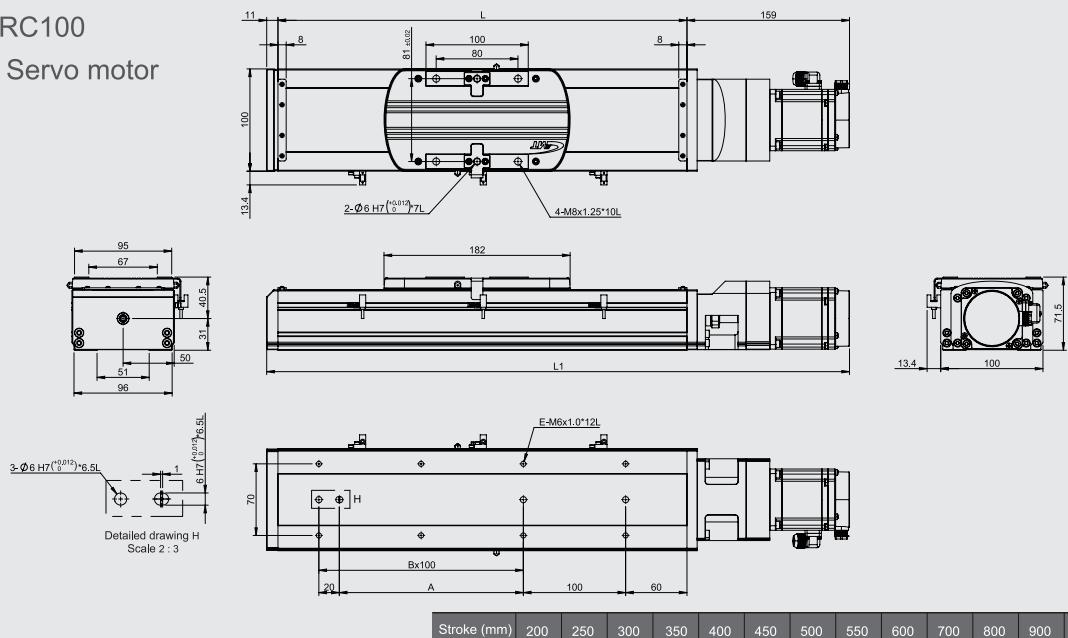
Stroke (mm)	200	250	300	350	400	450	500	550	600	700	800	900	1000
A	180	180	280	280	380	380	480	480	580	680	780	880	980
B	5	2	3	3	4	4	5	5	6	7	8	9	10
E	8	8	10	10	12	12	14	14	16	18	20	22	24
L	400	450	500	550	600	650	700	750	800	900	1000	1100	1200
L1	470	520	570	620	670	720	770	820	870	920	1020	1120	1220
Weight (kg)	6.2	6.5	6.8	7.1	7.4	7.7	8	8.3	8.6	9.2	9.8	10.4	11.3

Electric Cylinder - Slider ➤ GERC

GERC Dimension

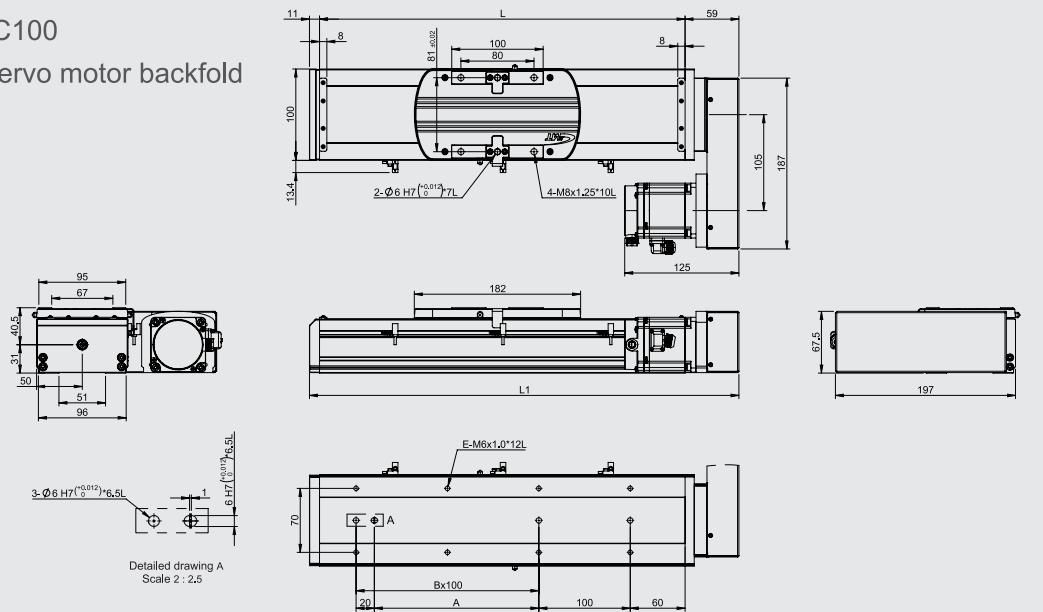
GERC100

DC Servo motor



GERC100

DC Servo motor backfold

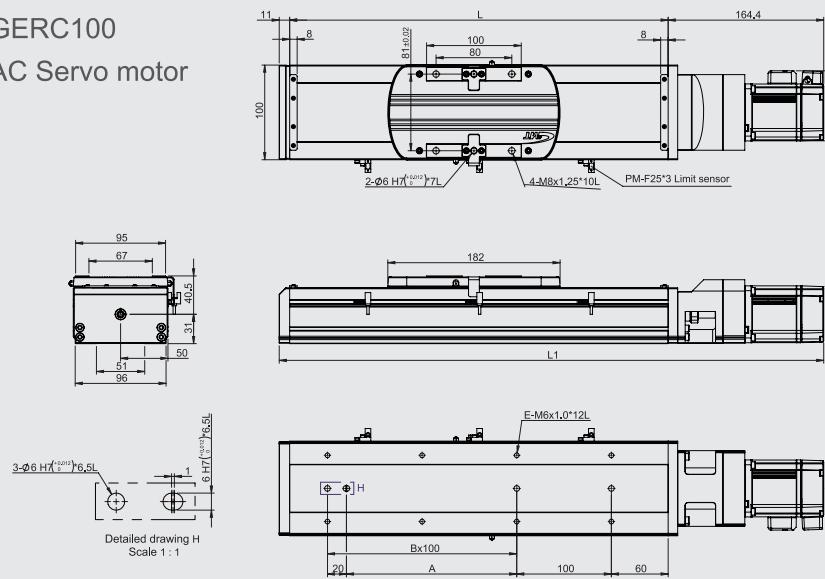


Electric Cylinder - Slider ➤ GERC

GERC Dimension

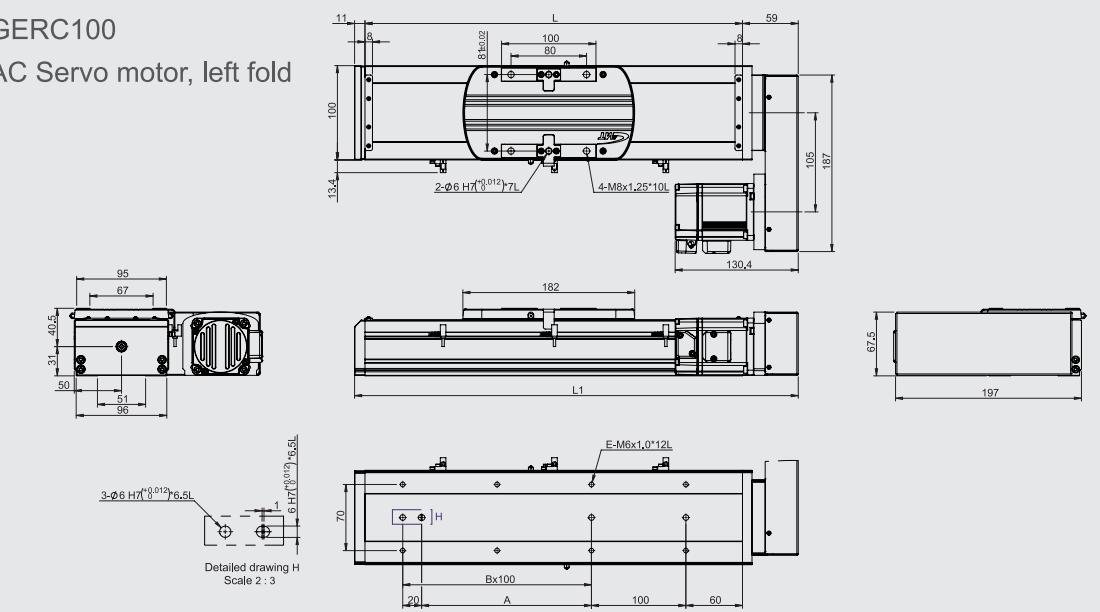
GERC100

AC Servo motor



GERC100

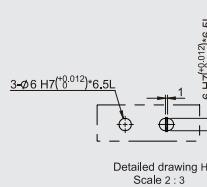
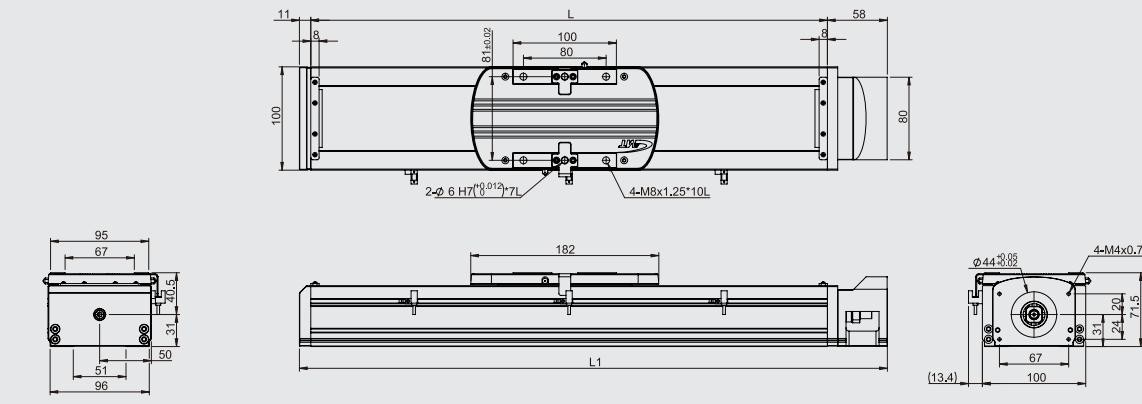
AC Servo motor, left fold



GERC Dimension

GERC100

No motor

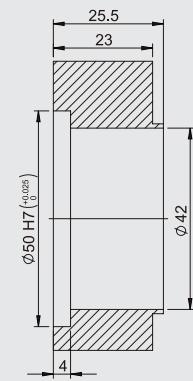
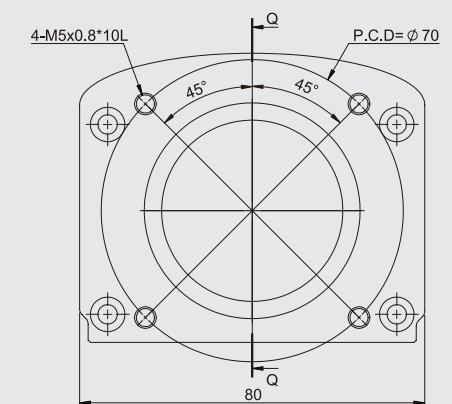


Stroke (mm)	200	250	300	350	400	450	500	550	600	700	800	900	1000
A	180	180	280	280	380	380	480	480	580	680	780	880	980
B	5	2	3	3	4	4	5	5	6	7	8	9	10
E	8	8	10	10	12	12	14	14	16	18	20	22	24
L	400	450	500	550	600	650	700	750	800	900	1000	1100	1200
L1	469	519	569	619	669	719	769	819	869	969	1069	1169	1269
Weight (kg)	5.2	5.5	5.8	6.1	6.4	6.7	7	7.3	7.6	8.2	8.8	9.4	10

GERC Dimension

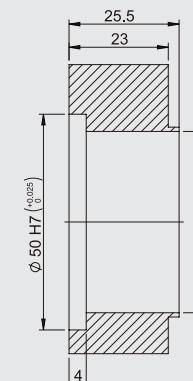
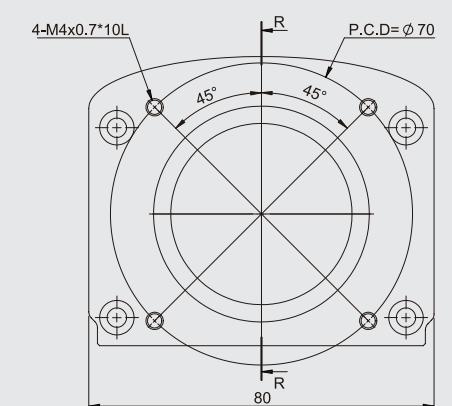
GERC100

Servo motor mounting plate



Sectional view Q-Q

Delta, Mitsubishi, Yaskawa 200 / 400W



Sectional view R-R

GMT, Panasonic 200 / 400W

Stepper motor-
Closed loop

Model No.	GESC4			GESC5			GESC8	
Mechanical spec.	Width of cylinder (mm)	44		54		82		
	Stroke (Every 50 mm)	50~400		50~800		50~1100		
	Drive type	Ball screw Ø8		Ball screw Ø10		Ball screw Ø12		
	Lead (mm)	2	5	8	5	10	5	10
	Rail	Circular linear ball guide						
	Materials of the cylinder	Aluminum alloy / Anodized						
	Feed-out direction	N : GMT Standard						
Precision	Maximum speed (mm/s) ^{*2}	40	100	160	100	200	100	200
	Repeatability (mm)	$\pm 0.005^{\ast 1}$						
	Maximum thrust force (N) ^{*2}	658	260	163	260	130	530	265
	Horizontal load (Kgf)	25	20	12	30	15	50	30
Electrical	Vertical load (Kgf)	8	5	2	10	5	15	8
	Driver	-						
	Lateral connector of the cylinder	15-pin male D-SUB connector						
Connector	Lateral connector of the transmission cable	15-pin female D-SUB connector						

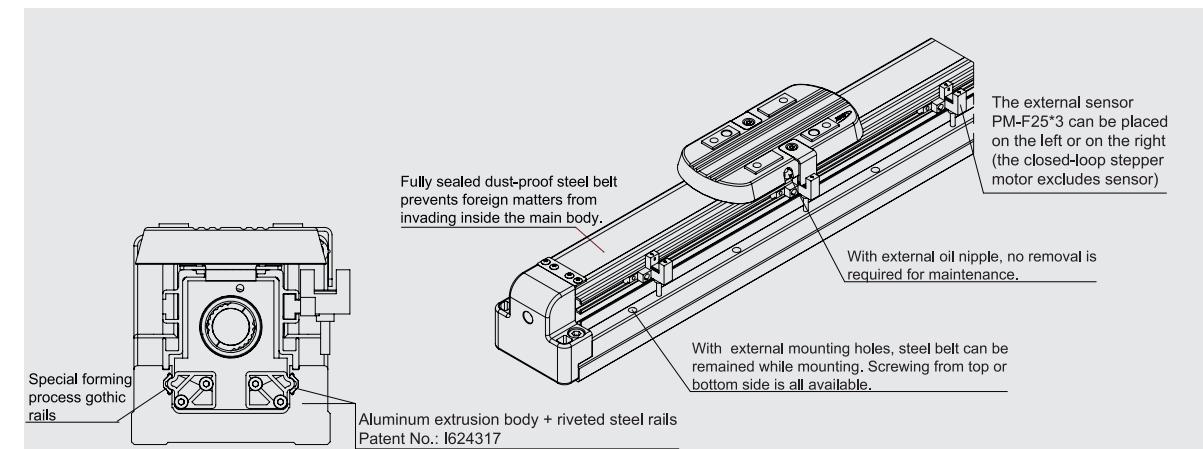
Stepper motor-
Open loop

Model No.	GESC4			GESC5			GESC8			
Mechanical spec.	Width of cylinder (mm)	44		54		82				
	Stroke (Every 50 mm)	50~400		50~800		50~1100				
	Drive type	Ball screw Ø8		Ball screw Ø10		Ball screw Ø12				
	Lead (mm)	2	5	8	5	10	5	10		
	Rail	Circular linear ball guide								
	Materials of the cylinder	Aluminum alloy / Anodized								
	Feed-out direction	N : GMT Standard								
Precision	Maximum speed (mm/s)	40	100	160	100	200	100	200		
	Repeatability (mm)	$\pm 0.005^{\ast 1}$								
	Maximum thrust force (N)	453	180	113	180	90	180	90		
	Horizontal load (Kgf)	25	20	12	30	15	50	30		
Electrical	Vertical load (Kgf)	8	5	2	10	5	15	8		
	Driver	GTR22G-D [□42]				CVD228B-K [□57]				
	Connector	15-pin male D-SUB connector								
Connector	Lateral connector of the transmission cable	15-pin female D-SUB connector								

*1 The precision for foldleft series is $\pm 0.01\text{mm}$.

*2 If it is not equipped with a motor, the above data for maximum speed and thrust are not applicable.

* Should you have other needed motor specifications, please contact Sales.



◎ GESC series without a motor

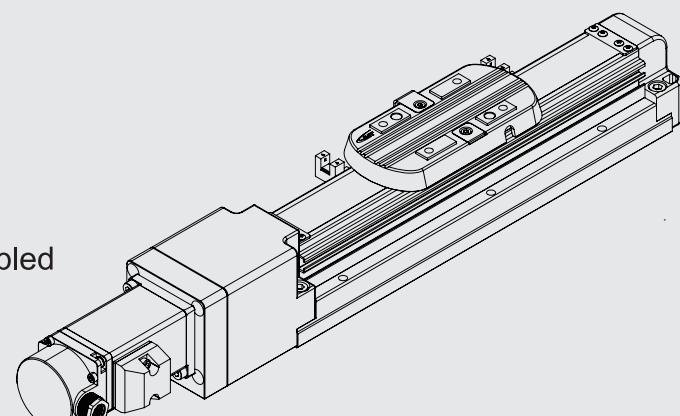
Without motor

Model No.	GESC4			GESC5			GESC8			
Mechanical spec.	Width of cylinder (mm)	44		54		82				
	Stroke (Every 50 mm)	50~400		50~800		50~1100				
	Drive type	Ball screw Ø8		Ball screw Ø10		Ball screw Ø12				
	Lead (mm)	2	5	8	5	10	5	10		
	Rail	Circular linear ball guide								
	Materials of the cylinder	Aluminum alloy / Anodized								
	Feed-out direction	N : GMT Standard								
Precision	Maximum speed (mm/s)	40	100	160	100	200	100	200		
	Repeatability (mm)	$\pm 0.005^{\ast 1}$								
	Maximum thrust force (N)	453	180	113	180	90	180	90		
	Horizontal load (Kgf)	25	20	12	30	15	50	30		
Electrical	Vertical load (Kgf)	8	5	2	10	5	15	8		
	Driver	GTR22G-D [□42]				CVD228B-K [□57]				
	Connector	15-pin male D-SUB connector								
Connector	Lateral connector of the transmission cable	15-pin female D-SUB connector								

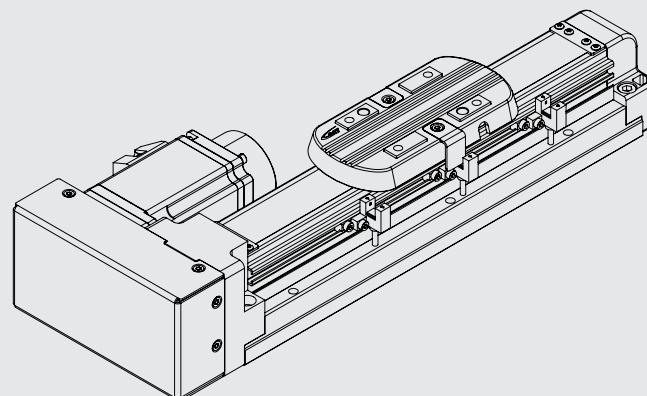
GESC Motor installed direction

Motor installed direction

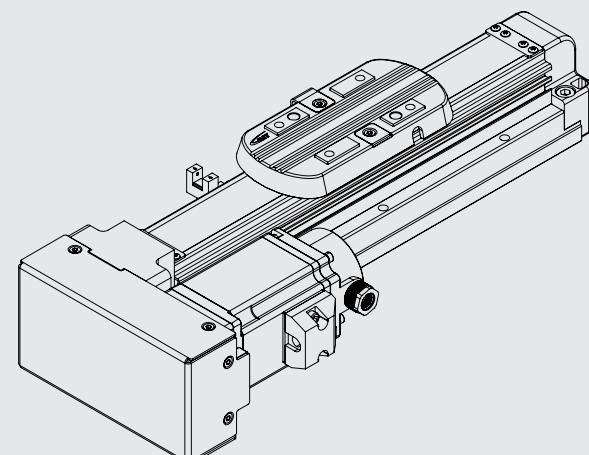
D : Motor direct-coupled



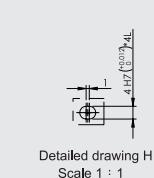
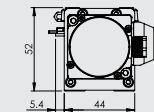
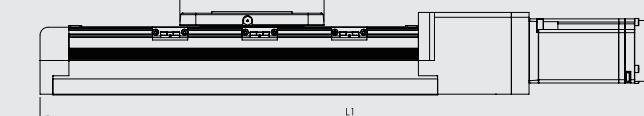
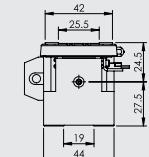
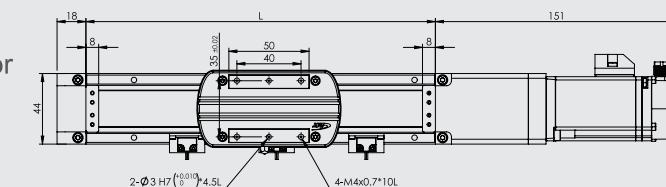
L : Motor, left fold



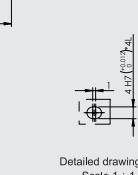
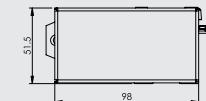
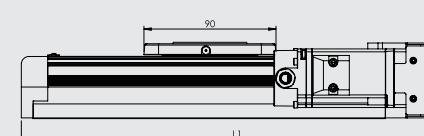
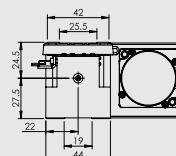
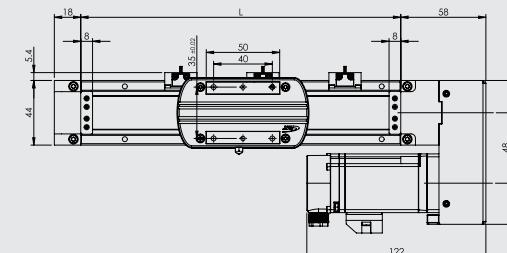
R : Motor, right fold



GESC Dimension

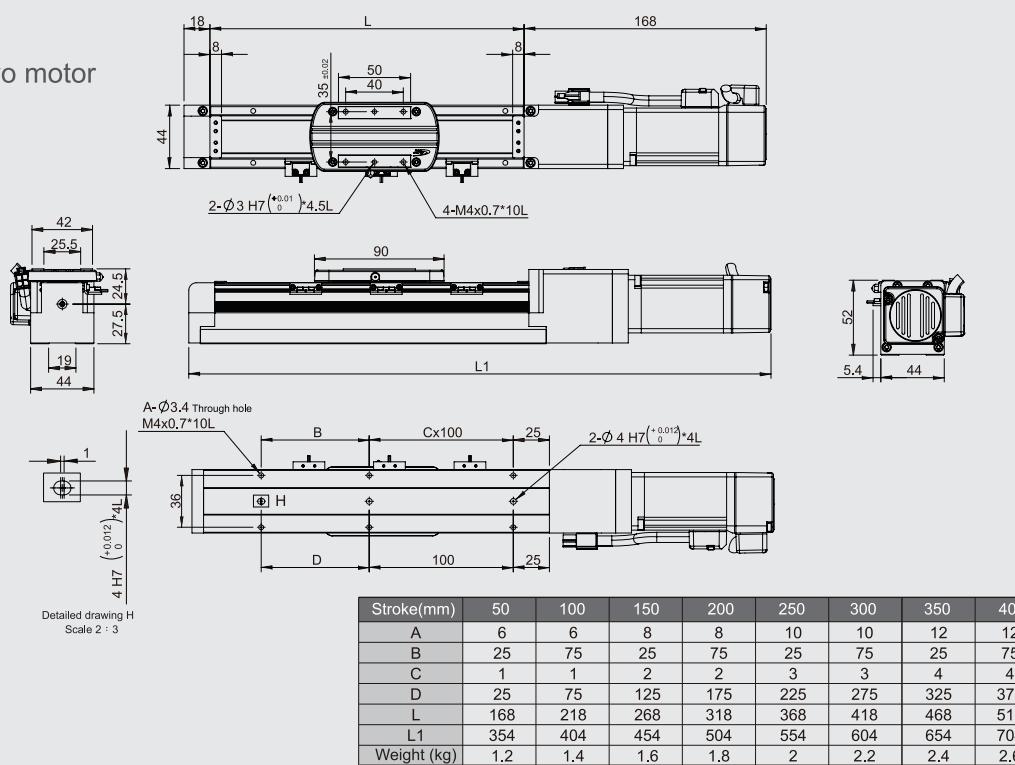
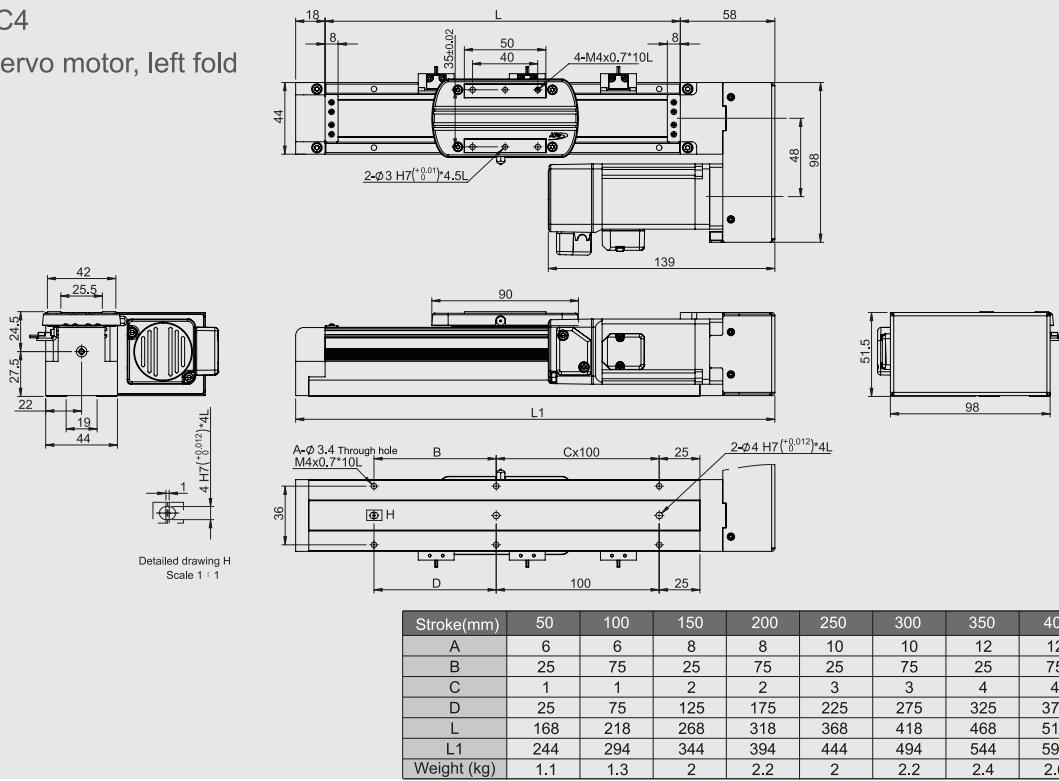
GESC4
DC Servo motorDetailed drawing H
Scale 1 : 1

Stroke(mm)	50	100	150	200	250	300	350	400
A	6	6	8	8	10	10	12	12
B	25	75	25	75	25	75	25	75
C	1	1	2	2	3	3	4	4
D	25	75	125	175	225	275	325	375
L	168	218	268	318	368	418	468	518
L1	337	387	437	487	537	587	637	687
Weight(kg)	1	1.2	1.4	1.6	1.8	2	2.2	2.4

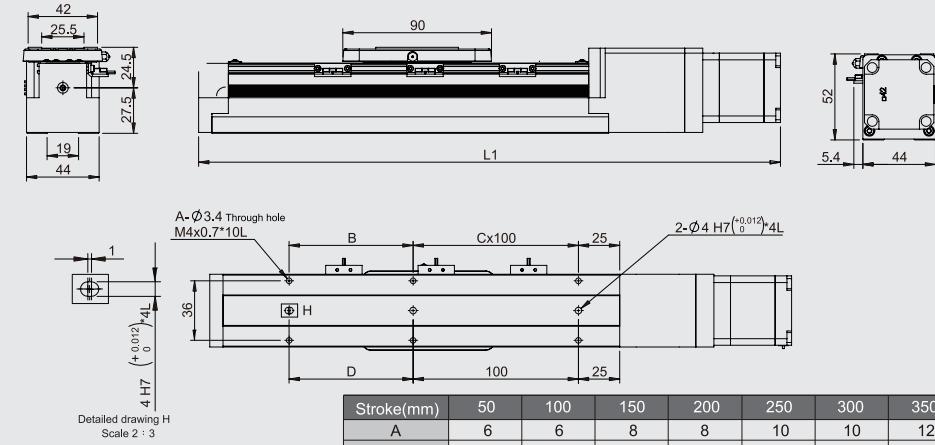
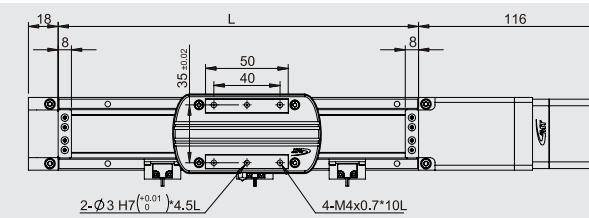
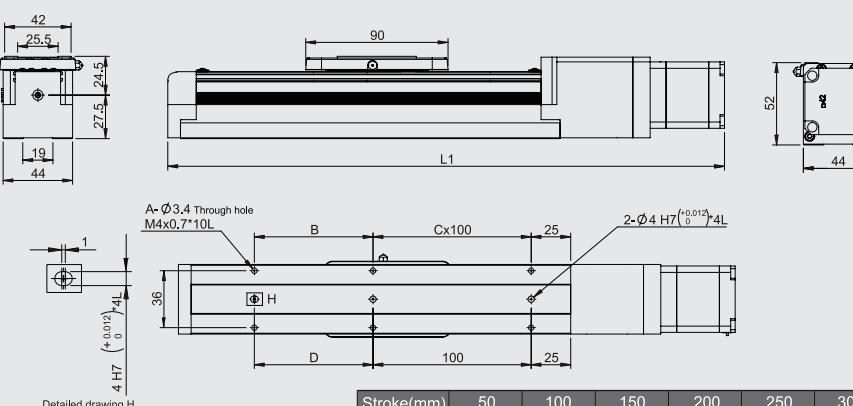
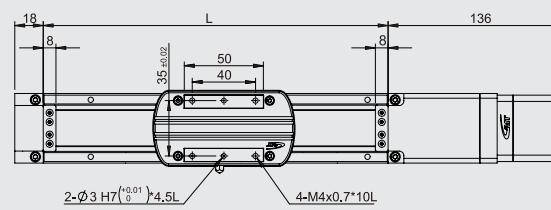
GESC4
DC Servo motor, left foldDetailed drawing H
Scale 1 : 1

Stroke(mm)	50	100	150	200	250	300	350	400
A	6	6	8	8	10	10	12	12
B	25	75	25	75	25	75	25	75
C	1	1	2	2	3	3	4	4
D	25	75	125	175	225	275	325	375
L	168	218	268	318	368	418	468	518
L1	244	294	344	394	444	494	544	594
Weight (kg)	1	1.2	1.4	1.6	1.8	2	2.2	2.4

GESC Dimension

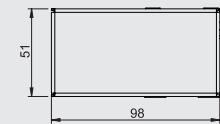
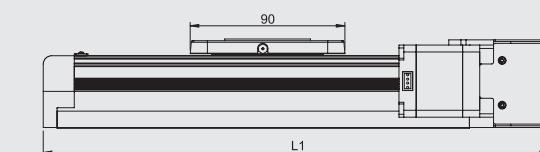
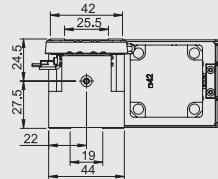
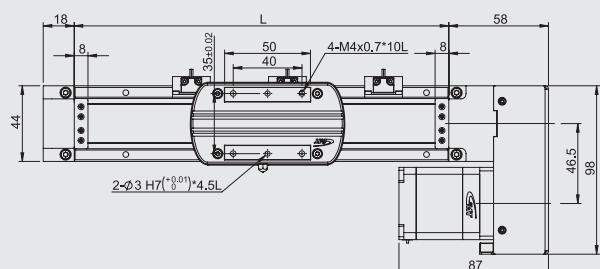
GESC4
AC Servo motorGESC4
AC Servo motor, left fold

GESC Dimension

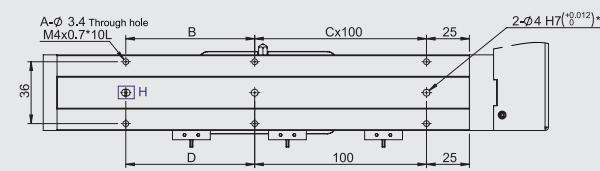
GESC4
Open-loop
stepper motorGESC4
Closed-loop
stepper motor

GESC Dimension

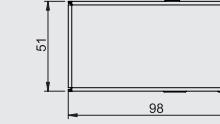
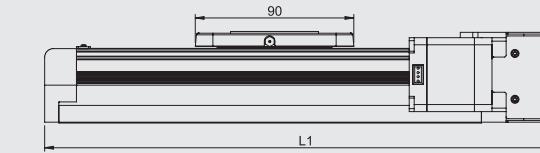
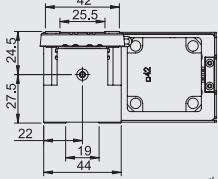
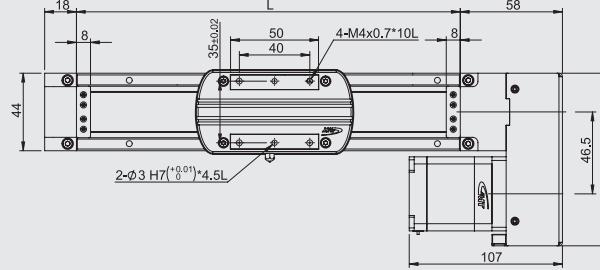
GESC4
Open-loop
stepper motor, left fold



Detailed drawing H
Scale 1 : 1



GESC4
Closed-loop
stepper motor, left fold

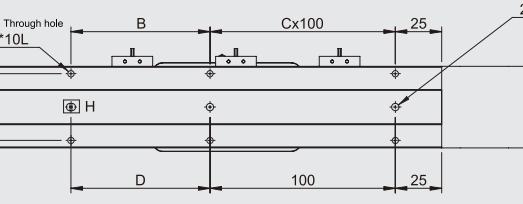
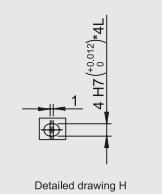
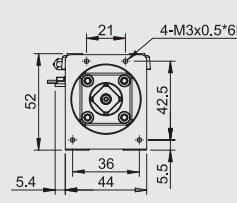
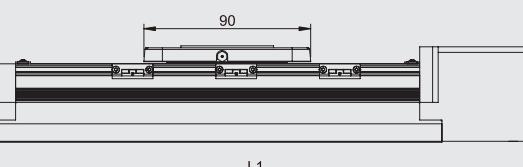
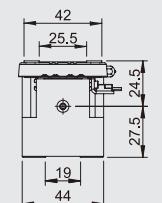
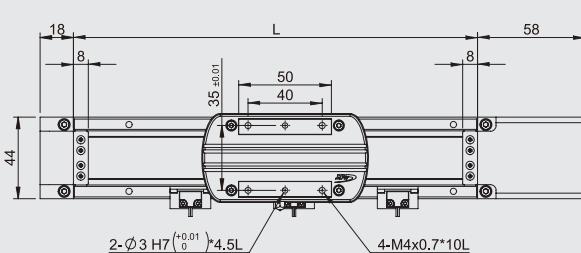


Detailed drawing H
Scale 1 : 1

Stroke(mm)	50	100	150	200	250	300	350	400
A	6	6	8	8	10	10	12	12
B	25	75	25	75	25	75	25	75
C	1	1	2	2	3	2	3	4
D	25	75	125	175	225	275	325	375
L	168	218	268	318	368	418	468	518
L1	244	294	344	394	502	552	602	652
Weight (kg)	1.1	1.3	2	2.2	1.8	2	2.2	2.4

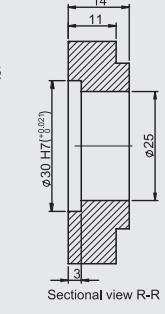
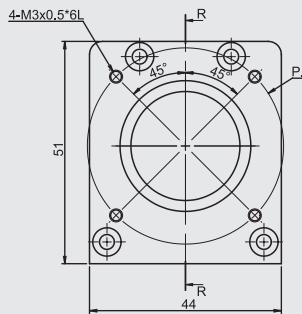
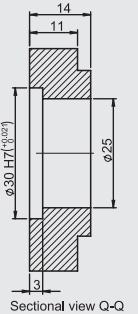
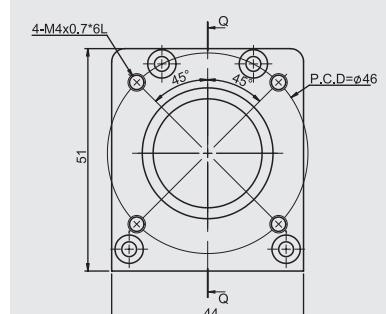
GESC Dimension

GESC4
No motor



Stroke(mm)	50	100	150	200	250	300	350	400
A	6	6	8	8	10	10	12	12
B	25	75	25	75	25	75	25	75
C	1	1	2	2	3	2	3	4
D	25	75	125	175	225	275	325	375
L	168	218	268	318	368	418	468	518
L1	244	294	344	394	502	552	602	652
Weight (kg)	0.7	0.9	1.1	1.3	1.7	1.9	2.1	2.3

GESC4
Servo motor mounting plate



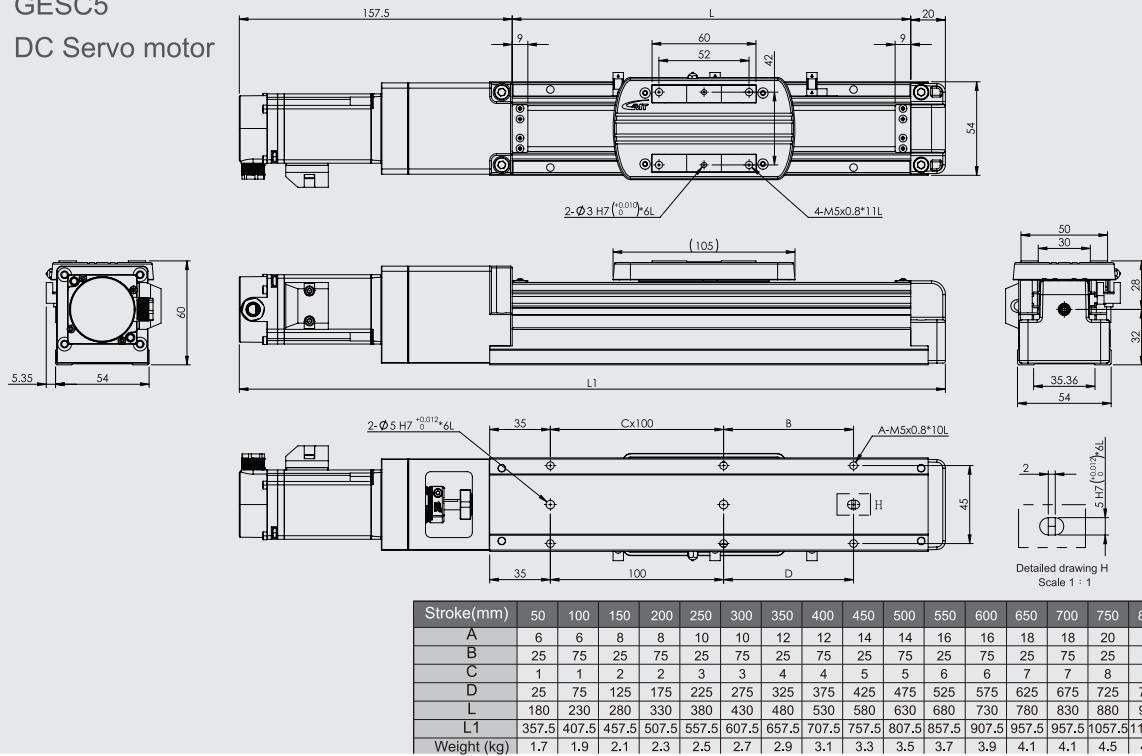
GMT, Delta, Mitsubishi, Yasukawa 50/100W

Panasonic 50/100W

GESC Dimension

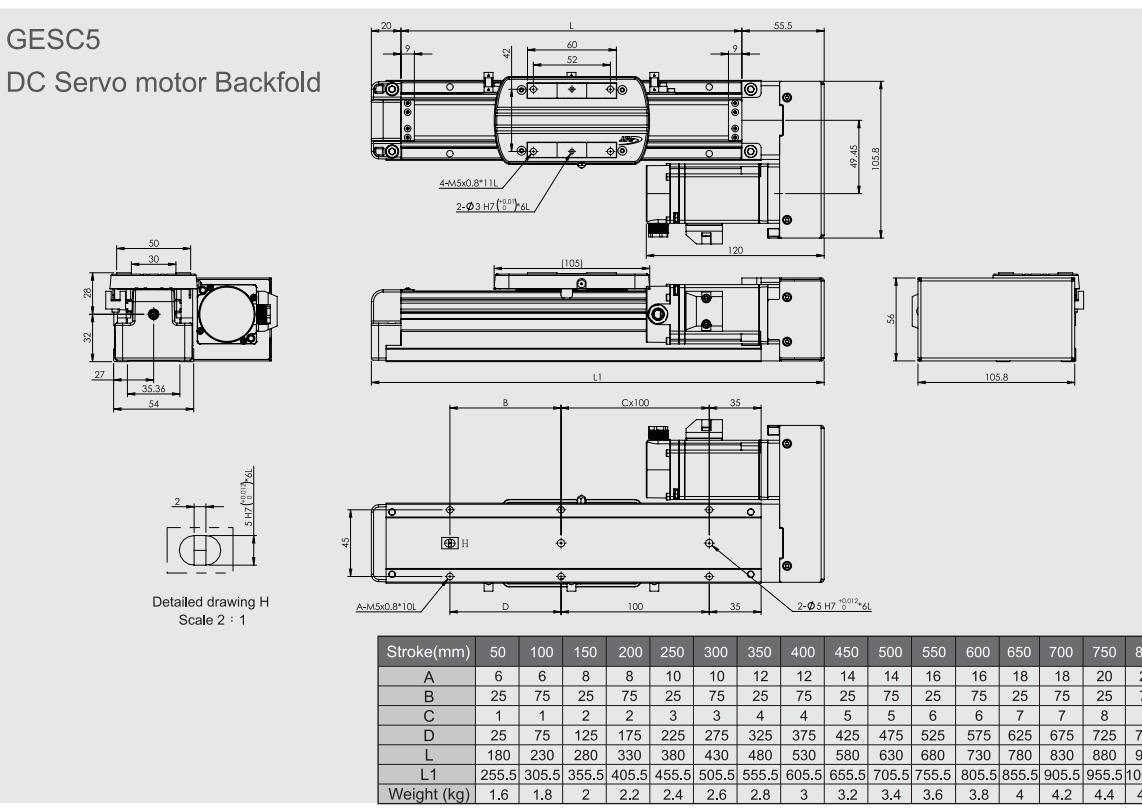
GESC5

DC Servo motor



GESC5

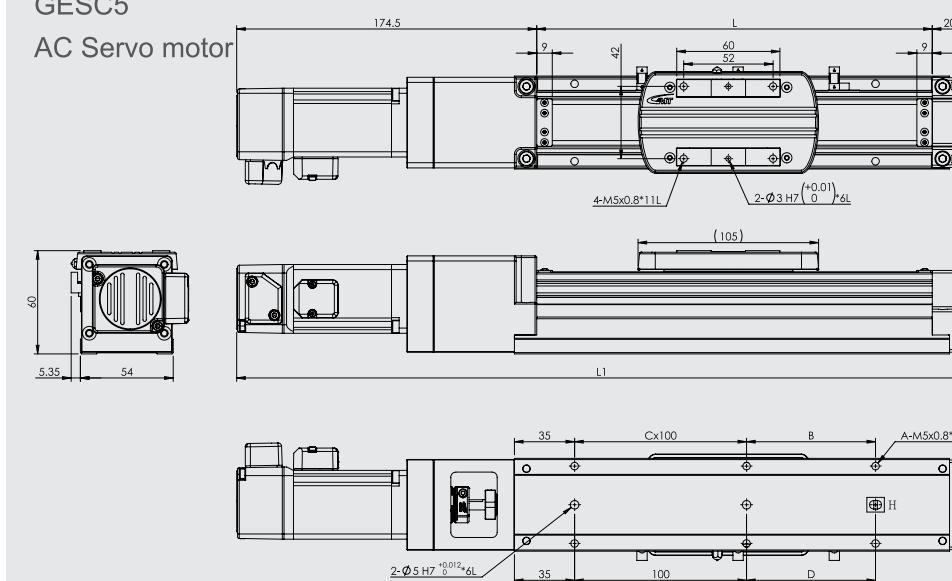
DC Servo motor Backfold



GESC Dimension

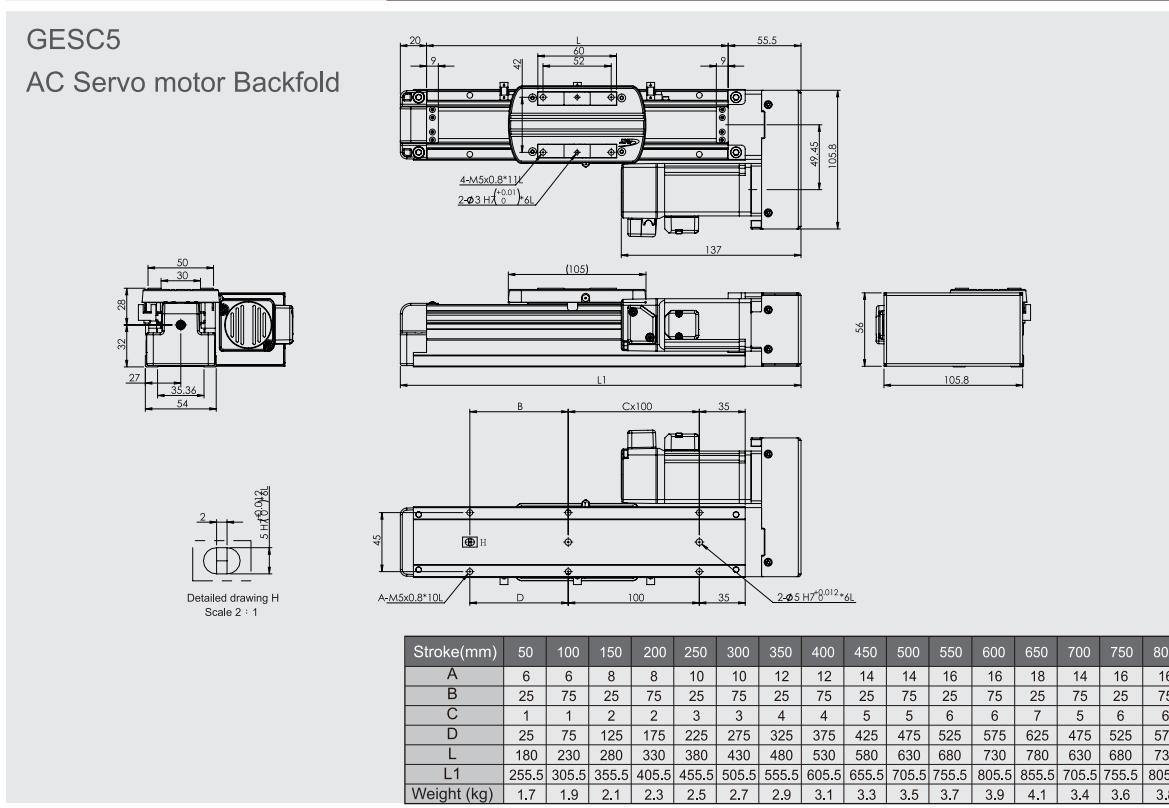
GESC5

AC Servo motor



GESC5

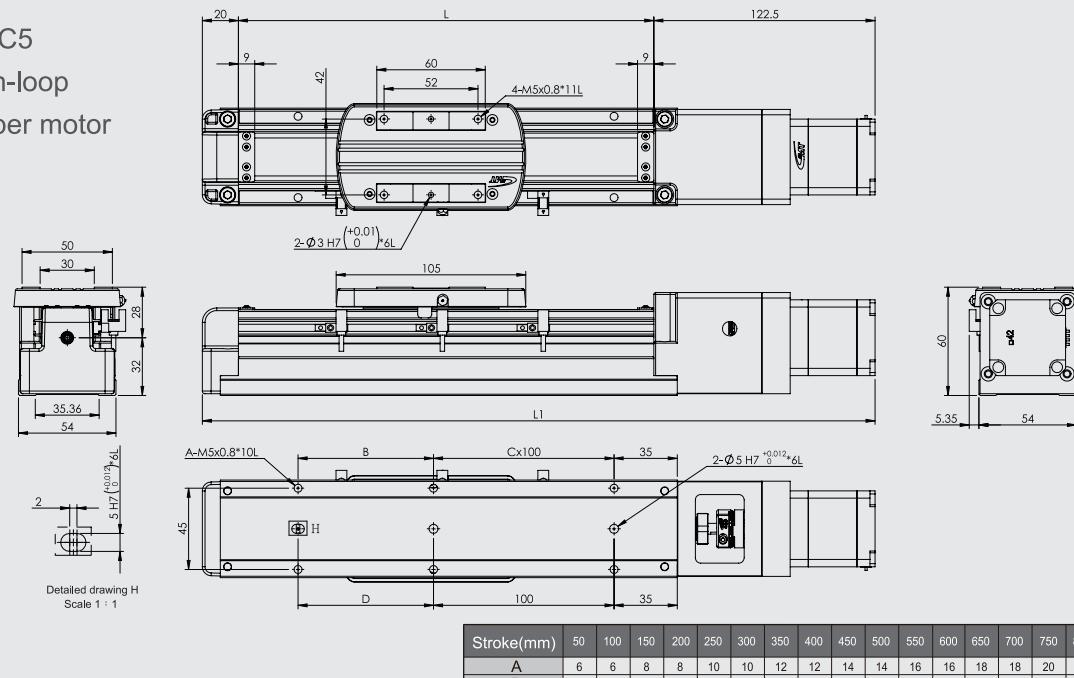
AC Servo motor Backfold



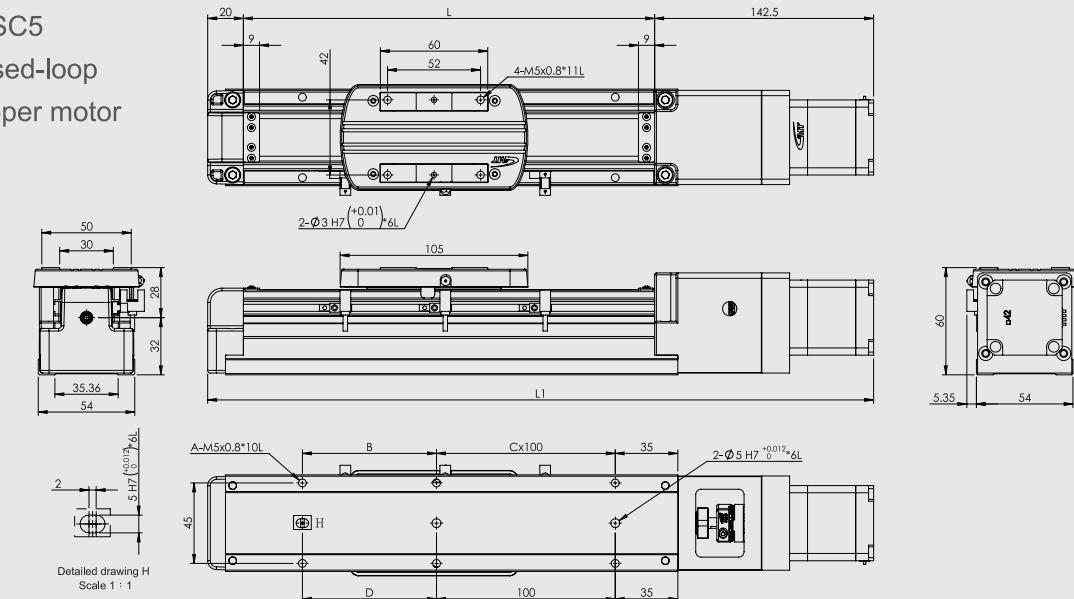
Electric Cylinder - Slider ➔ GESC

GESC Dimension

GESC5
Open-loop
stepper motor



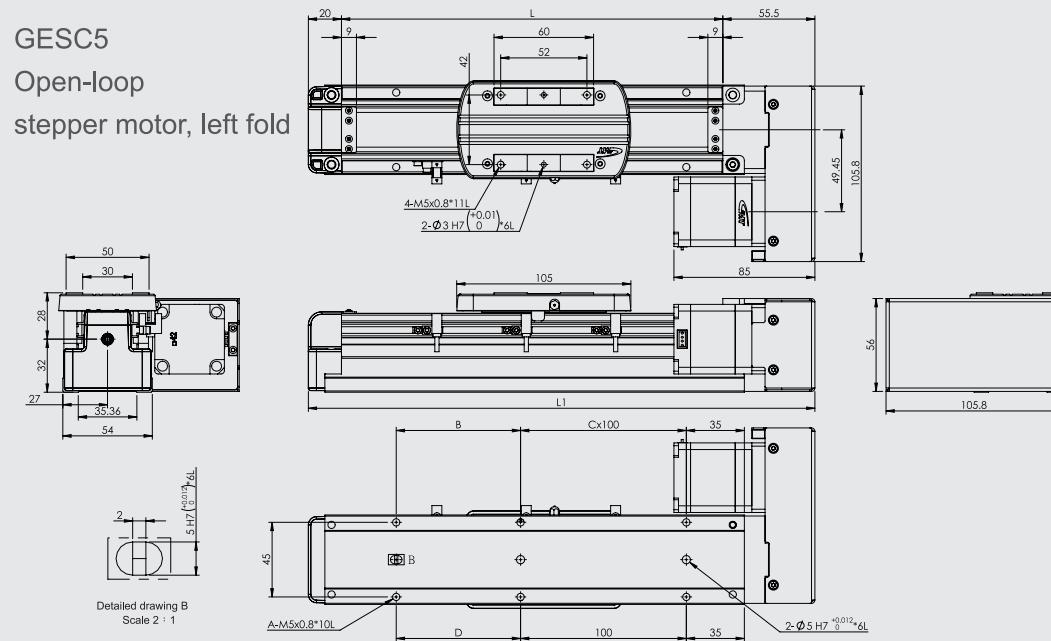
GESC5
Closed-loop
stepper motor



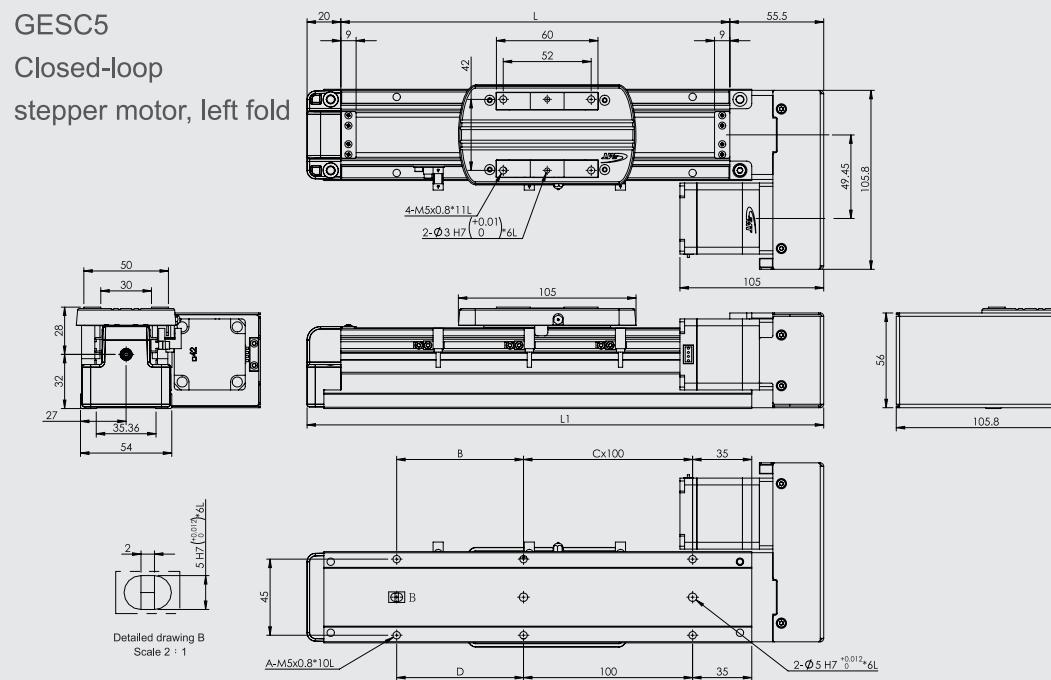
Electric Cylinder - Slider ➔ GESC

GESC Dimension

GESC5
Open-loop
stepper motor, left fold



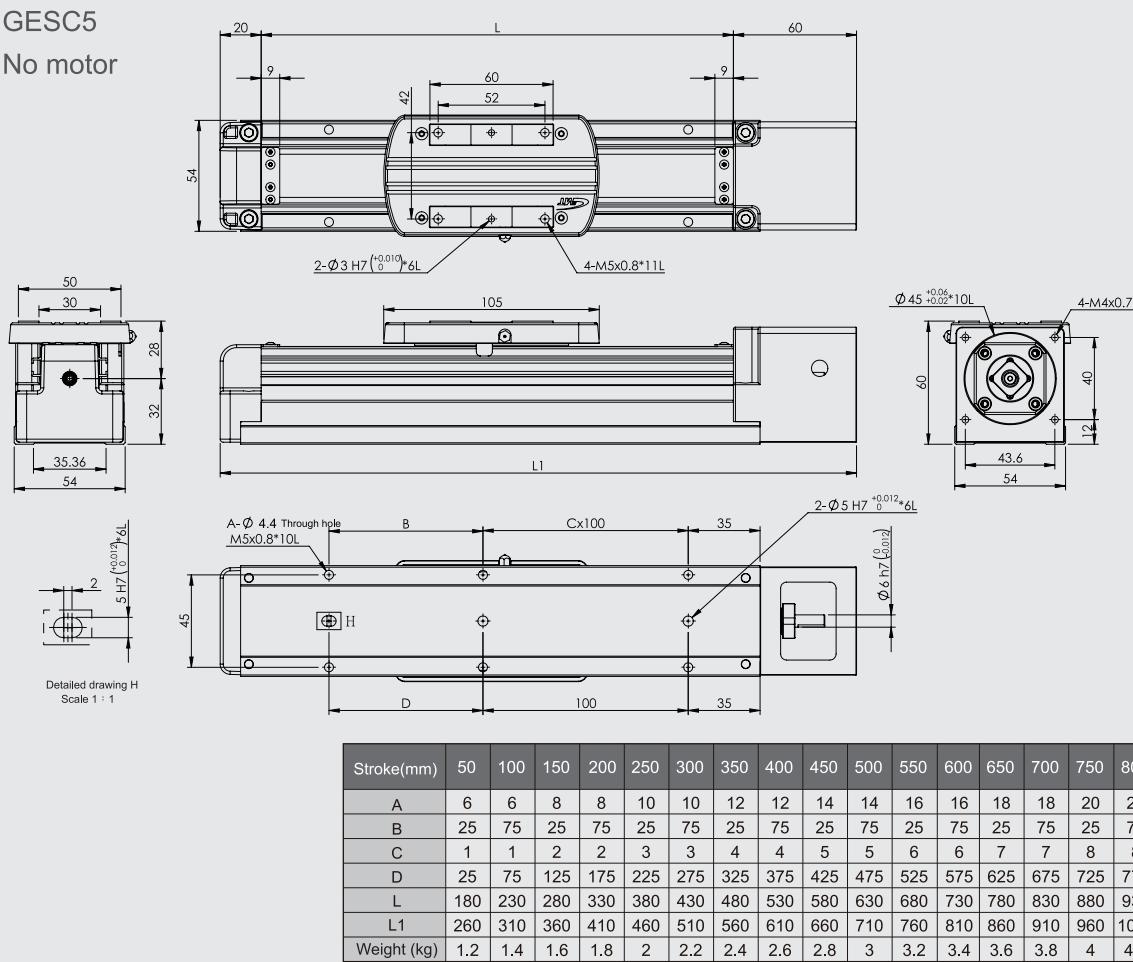
GESC5
Closed-loop
stepper motor, left fold



GESC Dimension

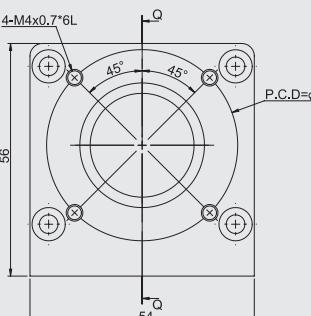
GESC5

No motor

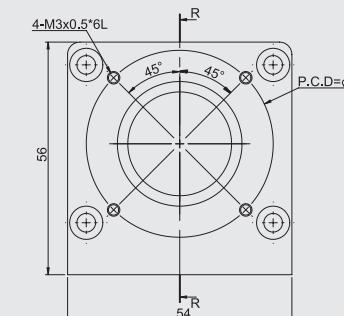


GESC5

Servo motor mounting plate



GMT, Delta, Mitsubishi, Yasukawa 50/100W

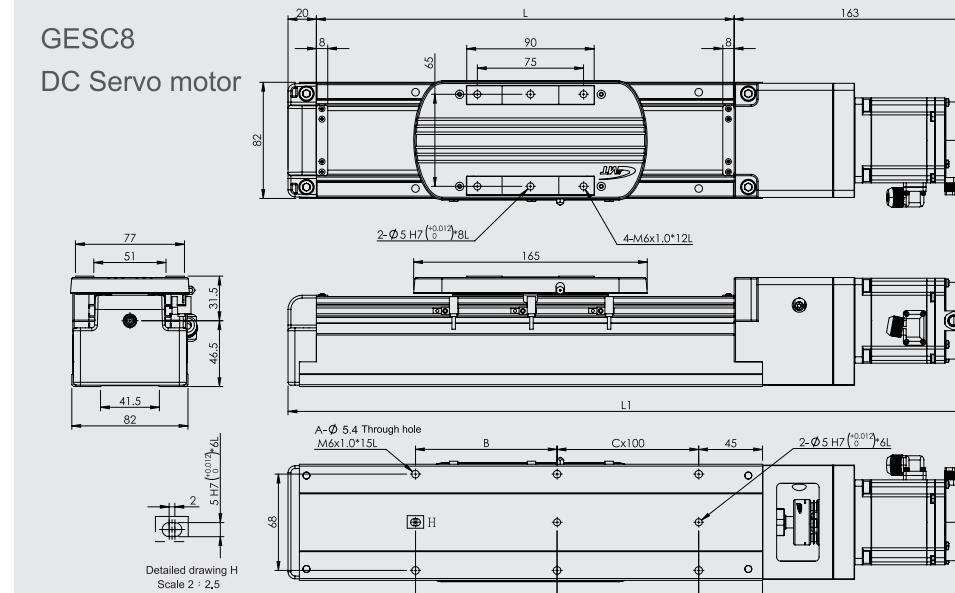


Panasonic 50/100W

GESC Dimension

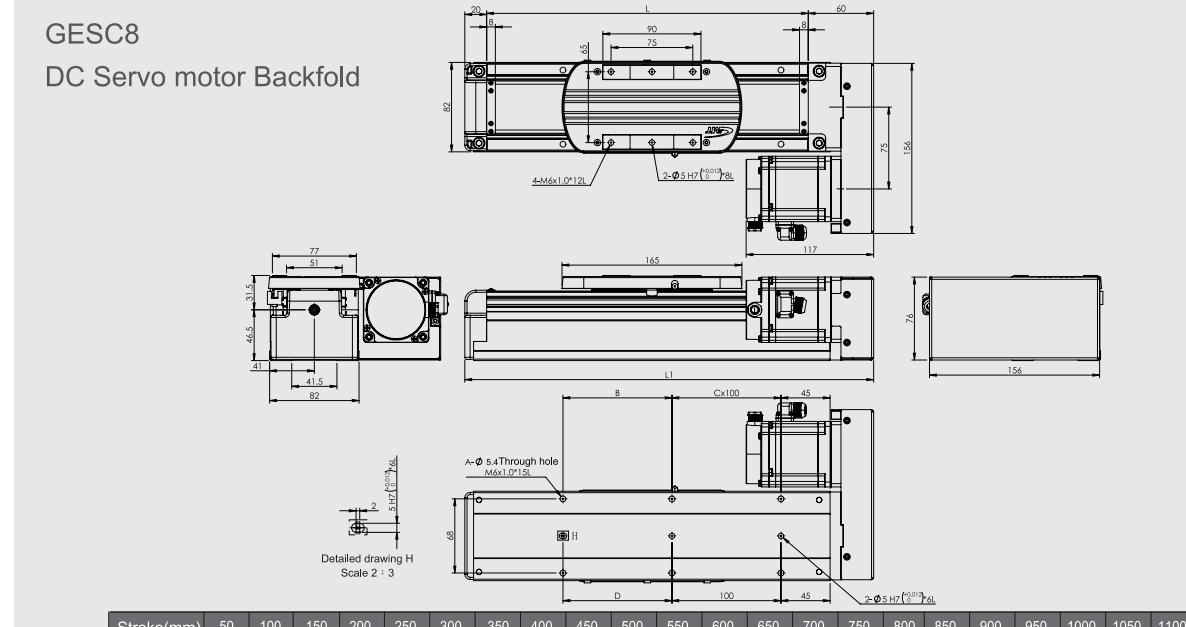
GESC8

DC Servo motor

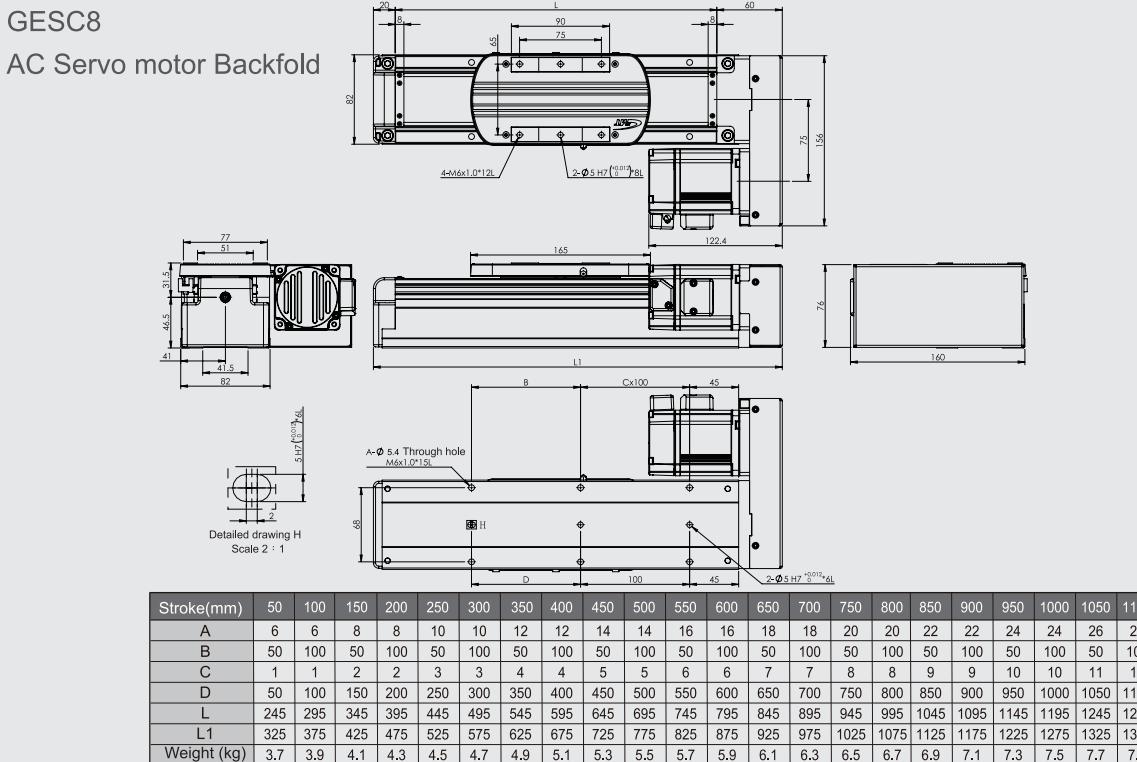
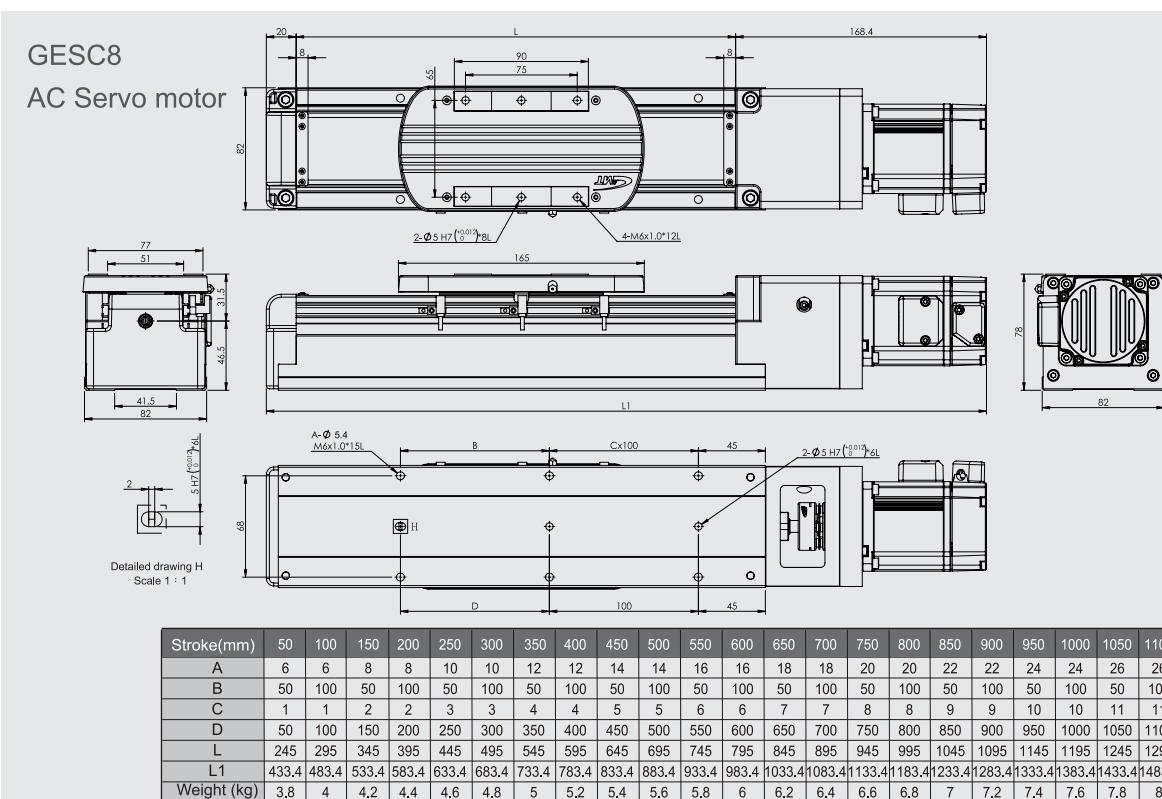


GESC8

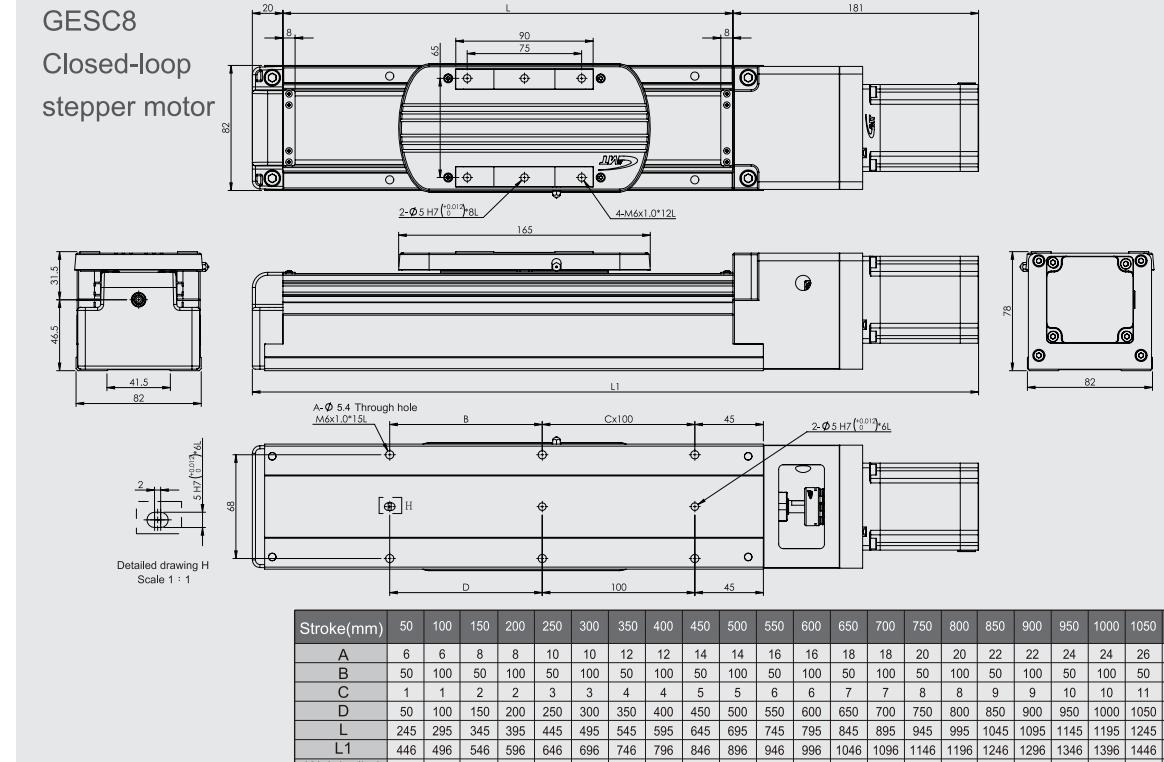
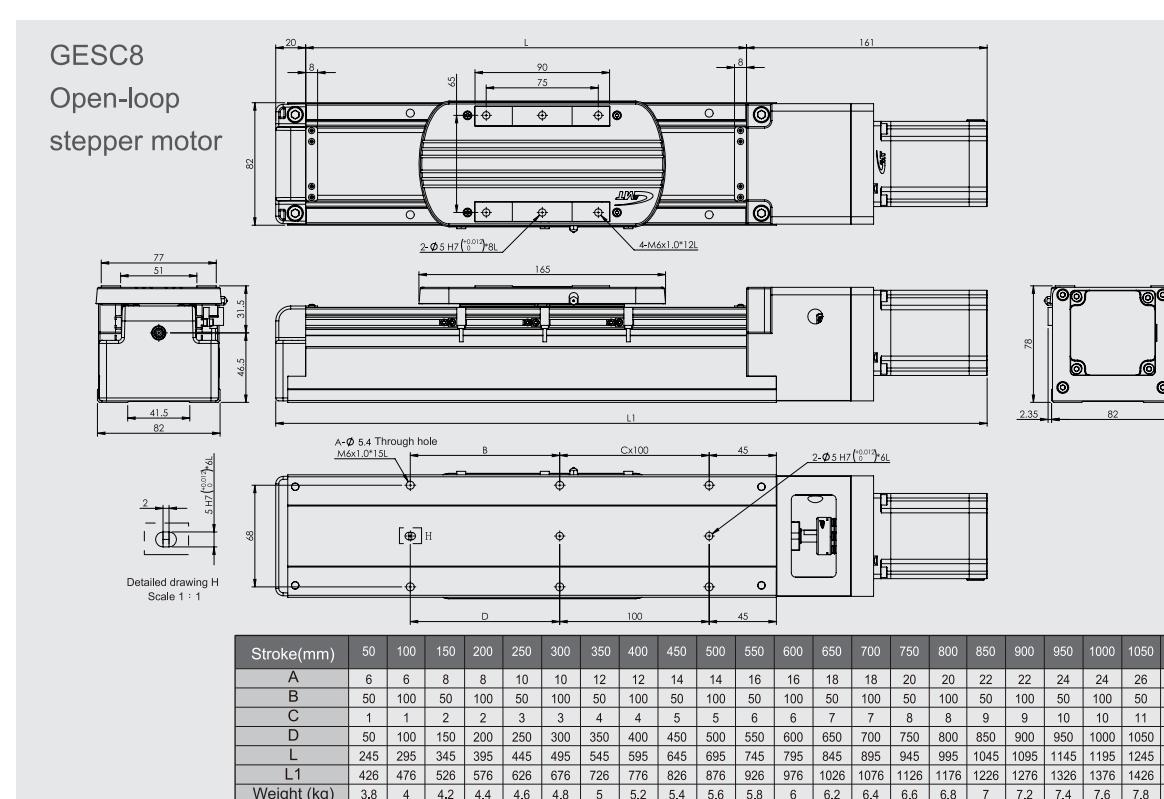
DC Servo motor Backfold



GESC Dimension

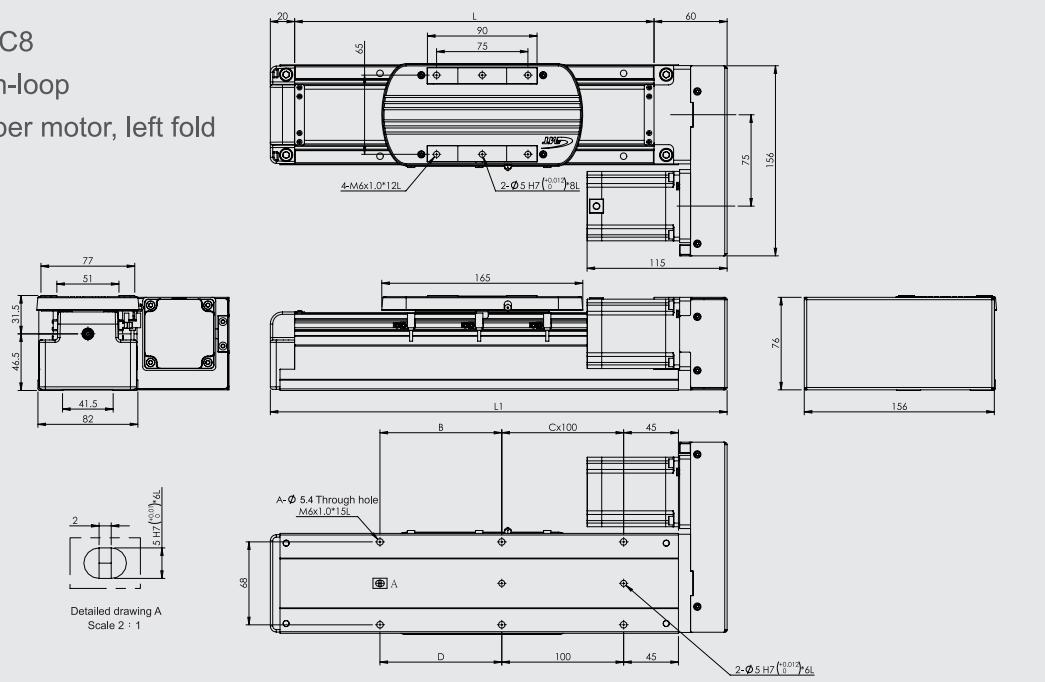


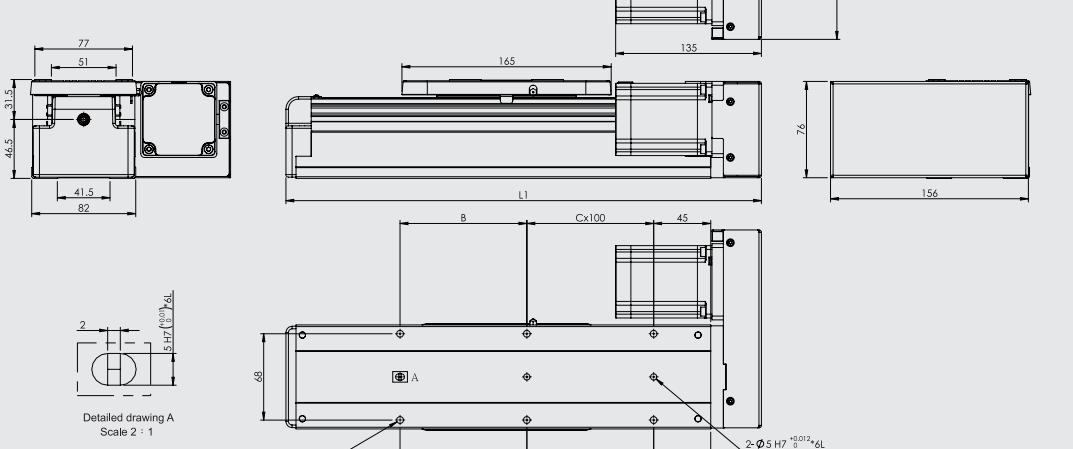
GESC Dimension



GESC Dimension

GESC8

Open-loop
stepper motor, left fold

GESC8

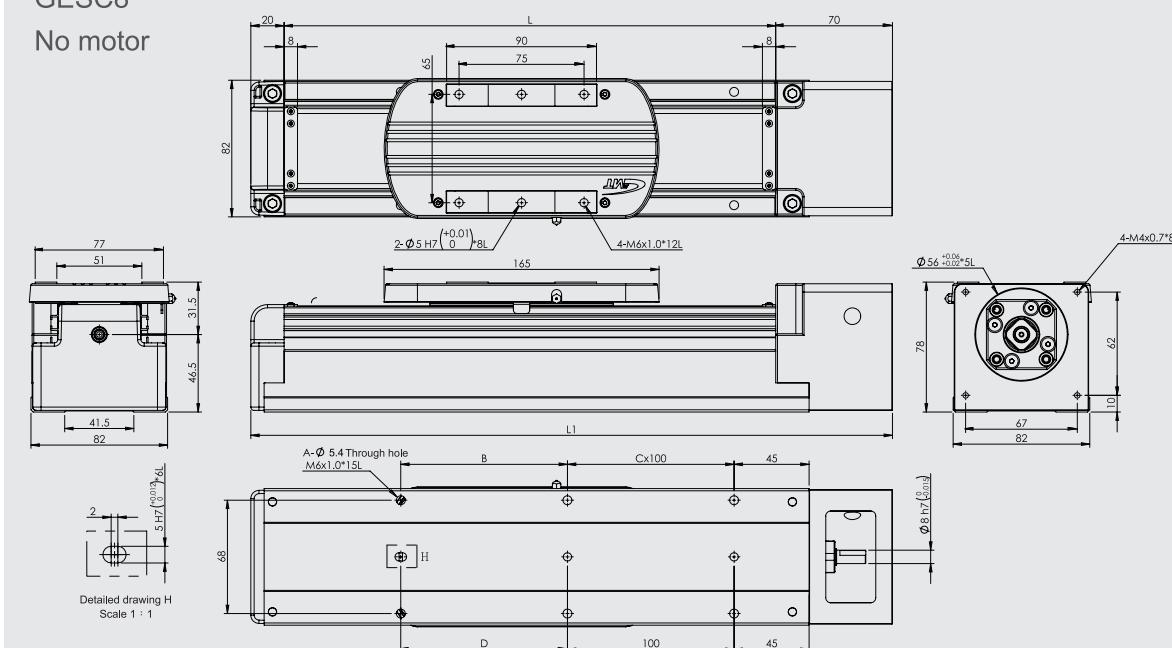
Closed-loop
stepper motor, left fold


Stroke(mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
B	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
C	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
D	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	245	295	345	395	445	495	545	595	645	695	745	795	845	895	945	995	1045	1095	1145	1195	1245	1295
L1	325	375	4251	475	525	575	627	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375
Weight (kg)	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.5	6.7	7	7.2	7.4	7.6	7.8	8

GESC Dimension

GESC8

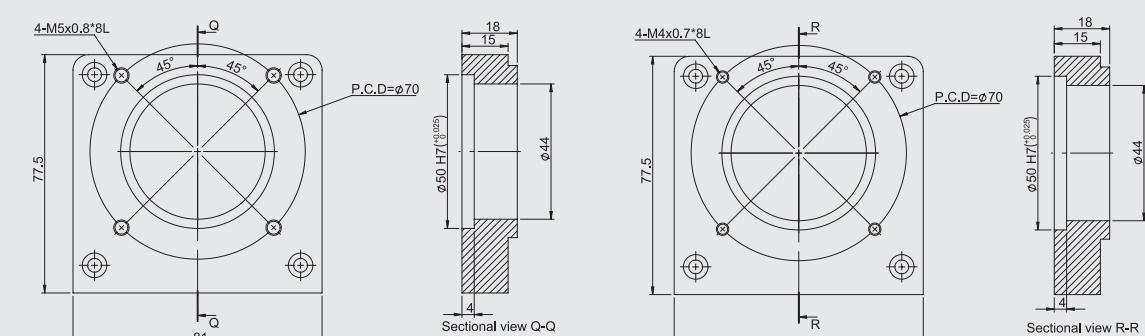
No motor



Stroke(mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
B	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
C	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
D	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	245	295	345	395	445	495	545	595	645	695	745	795	845	895	945	995	1045	1095	1145	1195	1245	1295
L1	335	385	435	485	535	585	635	685	735	785	835	885	935	985	1035	1085	1135	1185	1235	1285	1335	1385
Weight (kg)	3.2	3.4	3.6	3.8	4	4.2	4.4	4.6	4.8	5	5.2	5.4	5.6	5.8	6	6.2	6.4	6.6	6.8	7	7.2	7.4

GESC8

Servo motor mounting plate

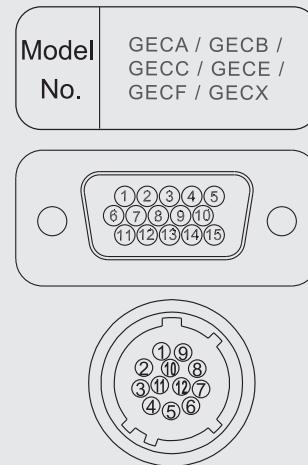


Delta, Mitsubishi, Yaskawa 200/400W

GMT, Panasonic 200/400W

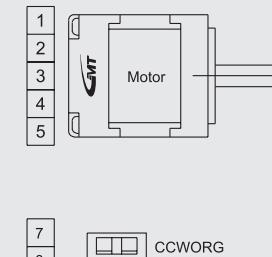
Electrical specifications

Electrical specifications

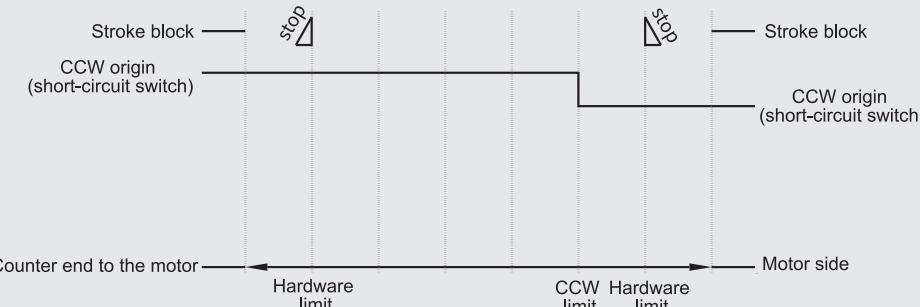
 Male connector
PIN layout & Definition


Wiring diagram

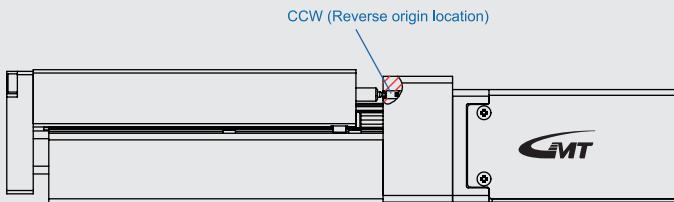
1	Motor lead A+
2	Motor lead A-
3	Motor lead B+
4	Motor lead B-
5	Not used
6	Not used
* 7	Micro-switch - short-circuit output
* 8	Micro-switch - short-circuit output
9	Not used
10	Not used
11	Not used
12	Not used
13	Not used
14	Not used
15	Not used



Sequence diagram



Electric cylinder micro-switch sitemap



*GERC, GESC, GIRC, and GIRO: Pin 7 and 8 has no signal output.

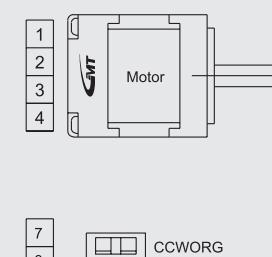
Electrical specifications

Electrical specifications

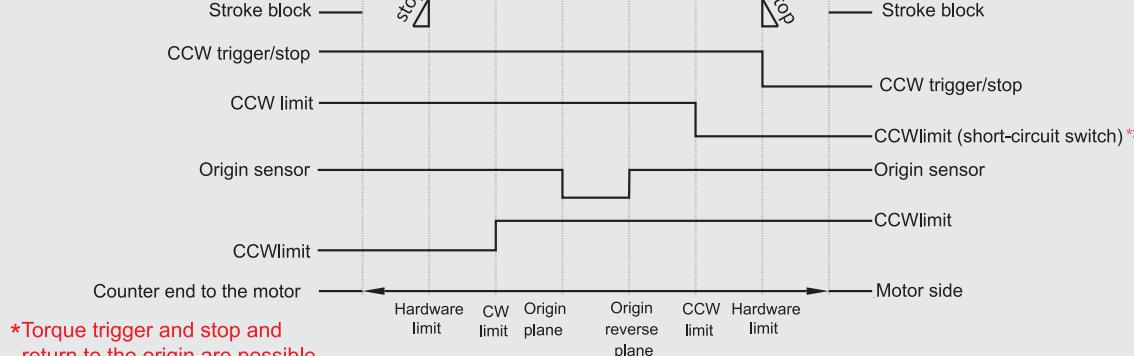
 Male connector
PIN layout & Definition


Wiring diagram

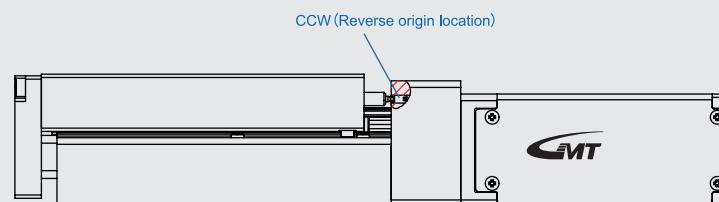
1	Motor lead A+
2	Motor lead A-
3	Motor lead B+
4	Motor lead B-
5	+5V
6	GND
* 7	Micro-switch - short-circuit output
* 8	Micro-switch - short-circuit output
9	CHA
10	CH/A
11	CHB
12	CH/B
* 13	CHZ
* 14	CH/Z
15	Not used



Sequence diagram



Electric cylinder micro-switch sitemap



1 GERC, GESC, GIRC, and GIRO; Pins 7 and 8 are idle-contacted, without signal output.

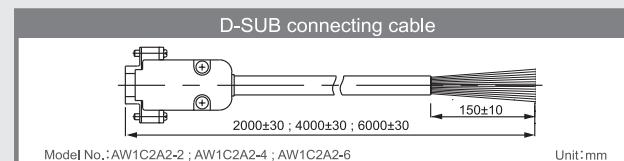
*2 If the motor is equipped with magnetic encoder, Pin 13 and 14 has no signal output.

*3 If the cylinder is in standard series mentioned above, the short-circuit switch or trigger/stop can be used to return to the origin. If the cylinder is in the series such as GERC & GESC with external sensors, the external sensor or trigger/stop can be used to return to the origin.

Definition of D-sub connecting cable and the Conversion Cable

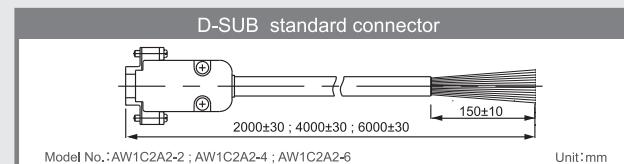
Definition of D-sub connecting cable and the Conversion Cable

- For all GMT electric cylinders, GMT self-designed D-sub and HRS connectors are used.
- The standard connecting cables includes a connector on one side. 2m cable is in stock.
- D-sub and HRS connecting cables are both optional.
- When using the standard connecting cable, please insulate the flying lead based on your required functions.
- If the length is longer than 6m, it may cause abnormal function.
- The bendable radius of the connector is 5 times the wire diameter.



Female D-sub connector		Control side - 15 flying leads	
Motor lead A	1	Green cable / Black dot	1
Motor lead B	2	Green cable / Red dot	2
Motor lead C	3	Pink cable / Black dot	3
Motor lead D	4	Pink cable / Red dot	4
Motor lead E	5	Blue cable / Black dot	5
CWLS output	6	Blue cable / Red dot	6
CCWLS output	7	White cable / Black dot	7
Motor rotation ORG2 output	8	White cable / Red dot	8
Power input (+)	9	Grey cable / Black dot	9
Travel stroke ORG1 output	10	Grey cable / Red dot	10
Power input (-)	11	Yellow cable / Black dot	11
Ground $\frac{1}{2}$	12	Yellow cable / Red dot	12
Not used	13		
Not used	14		
Not used	15		

Corresponding pins

Connector


Female D-sub connector		Control side - 15 flying leads	
Motor lead A+	1	Green cable / Black dot	1
Motor lead A-	2	Green cable / Red dot	2
Motor lead B+	3	Pink cable / Black dot	3
Motor lead B-	4	Pink cable / Red dot	4
Encoder +5V	5	Blue cable / Black dot	5
Encoder GND	6	Blue cable / Red dot	6
Micro-switch	7	White cable / Black dot	7
Micro-switch	8	White cable / Red dot	8
Encoder CHA	9	Grey cable / Black dot	9
Encoder CH/A	10	Grey cable / Red dot	10
Encoder CHB	11	Yellow cable / Black dot	11
Encoder CH/B	12	Yellow cable / Red dot	12
Motor lead Z+	13	Not used	13
Motor lead Z-	14	Not used	14
Not used	15	Not used	15

Corresponding pins

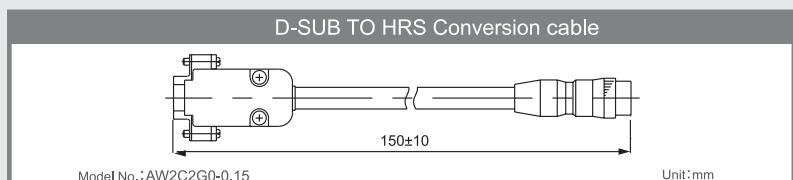
**Connector
(Closed-loop magnetic encoder)**

*GERC, GESC; Pins 7 and 8 are idle-contacted, without signal output.

Definition of D-sub connecting cable and the Conversion Cable

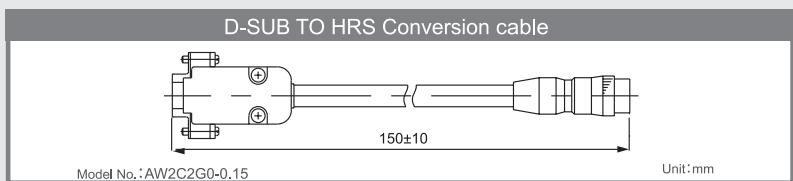
Definition of D-sub connecting cable and the Conversion Cable

D-SUB TO HRS Conversion cable



Female D-sub connector	
Motor lead A	1
Motor lead B	2
Motor lead C	3
Motor lead D	4
Motor lead E	5
CWLS output	6
CCWLS output	7
Motor rotation ORG2 output	8
Power input (+)	9
Travel stroke ORG1 output	10
Power input (-)	11
Ground $\frac{1}{2}$	12
Not used	13
Not used	14
Not used	15

Male HRS connector	
Motor lead A	1
Motor lead B	2
Motor lead C	3
Motor lead D	4
Motor lead E	5
CWLS output	6
CCWLS output	7
Motor rotation ORG2 output	8
Power input (+)	9
Travel stroke ORG1 output	10
Power input (-)	11
Ground $\frac{1}{2}$	12

Conversion cable
**Conversion cable
(Closed-loop magnetic encoder)**


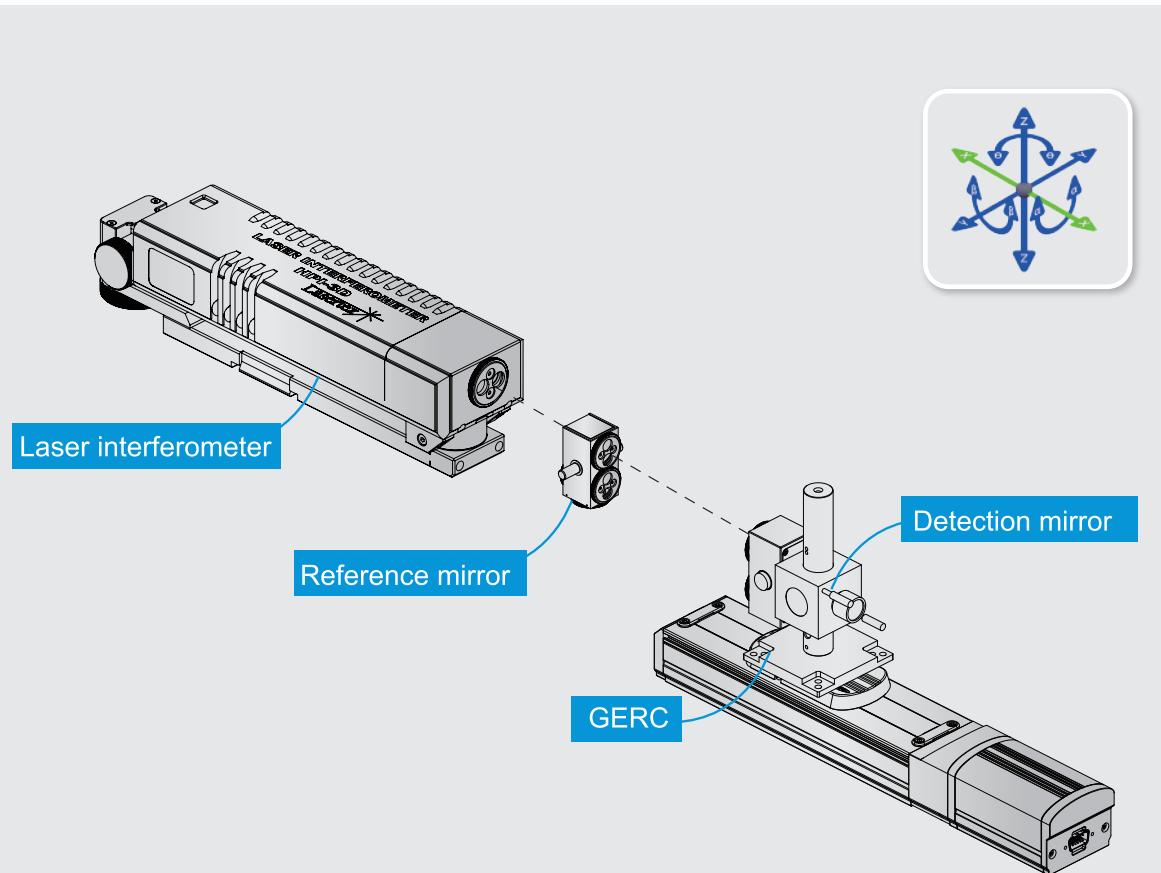
Female D-sub connector	
Motor lead A+	1
Motor lead A-	2
Motor lead B+	3
Motor lead B-	4
Encoder +5V	5
Encoder GND	6
Micro-switch	7
Micro-switch	8
Encoder CHA	9
Encoder CH/A	10
Encoder CHB	11
Encoder CH/B	12
Motor lead Z+	13
Motor lead Z-	14
Not used	15

Male HRS connector	
Motor lead A+	1
Motor lead A-	2
Motor lead B+	3
Motor lead B-	4
Encoder +5V	5
Encoder GND	6
Micro-switch	7
Micro-switch	8
Encoder CHA	9
Encoder CH/A	10
Encoder CHB	11
Encoder CH/B	12
Motor lead Z+	13
Motor lead Z-	14
Not used	15

* This is special product, only producing when receiving an order.

Detection method

Detection method



Detection instrument: laser interferometer, ZEISS coordinate measuring machine

While detecting, hold the base plate of the cylinder in position and move the workbench of the cylinder.

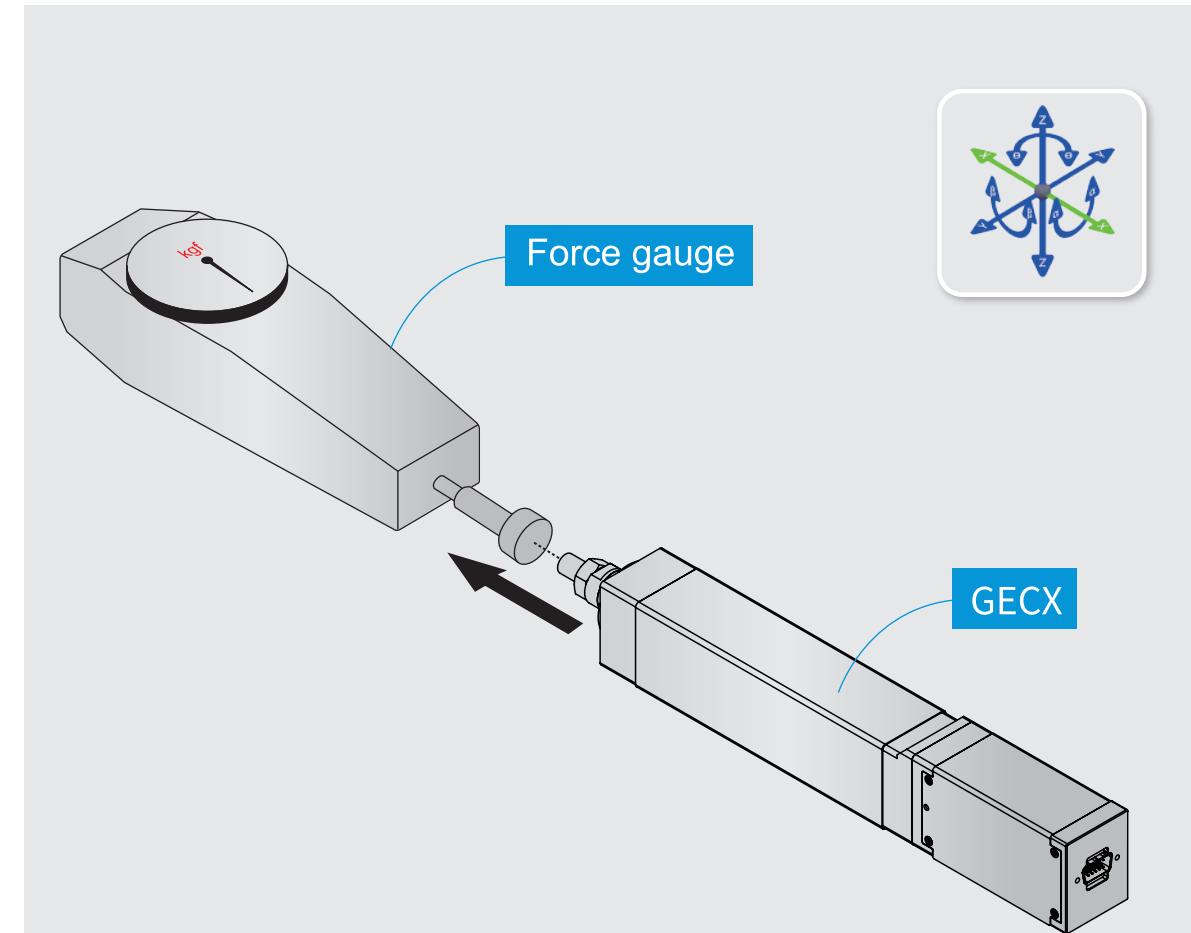


Repeatability (Unit : $\pm\mu\text{m}$)

Repeat the measurement seven times with the laser interferometer or the ZEISS coordinate measuring machine. With 1/2 of the obtained maximum error among errors in the same direction up to stop at any point, obtain the maximum difference by measuring in the center and on both ends of the moving distance. The obtained value is the repeated positioning accuracy.

Detection method

Detection method



Detection instrument: force gauge.

While inspecting, hold the force gauge in position and operate the electric cylinder



Maximum thrust force (Unit : N)

Place the electric cylinder on the granite examination table and measure with this force gauge in the direction that the workbench of the electric cylinder runs. The electric cylinder moves now to exercise force on the force gauge and the maximum value is obtained. The value is the maximum force.

