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Actuators





2022.07

AC Design 04-27071159



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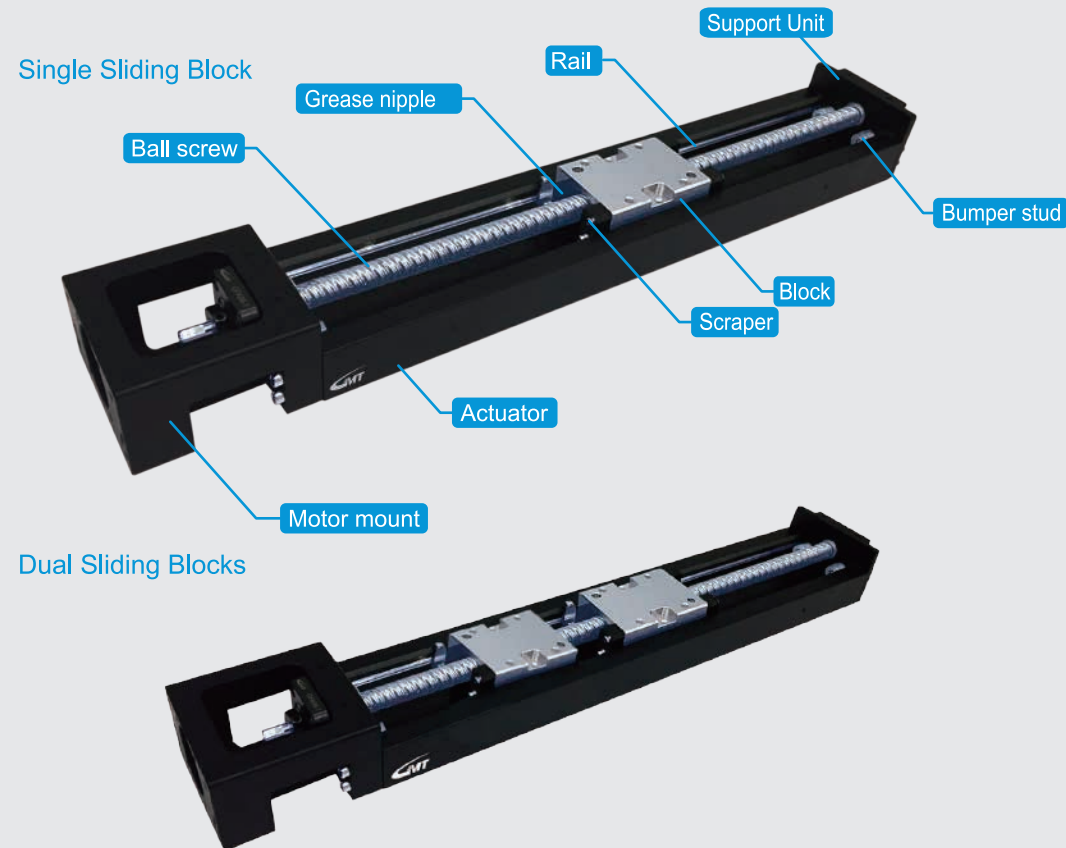
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Features

- ◎ The rail is built up by: "Linear ball guide " and "Gothic arch groove "to form a sturdy sliding structure.
- ◎ Transmission mode - ball screw has higher positioning accuracy and longer service life, and possesses characteristics such as high-speed forward and backward transmission and variable transmission.
- ◎ Offering a variety of rail lengths, the precision of the actuator can be classified as either precision type (P) or standard type (N), allowing users to choose the appropriate actuator type based on their needs.
- ◎ Lightweight design - (GKA) uses aluminum alloy to reduce the cost waste of user handling process.
- ◎ High-rigidity design - (GKS) uses carbon steel to increase structural rigidity.

Introduction of Structure



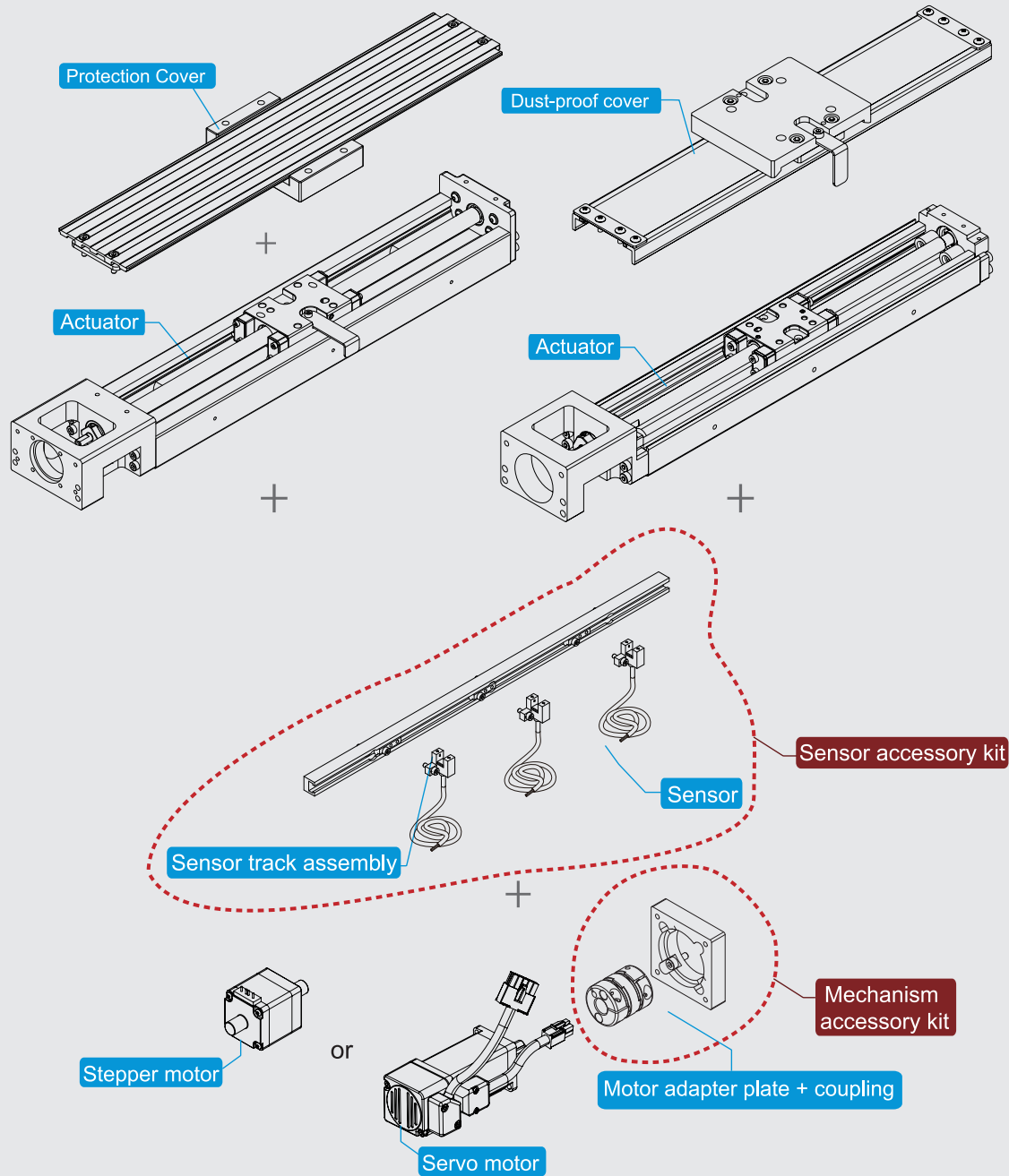
Model Selection Steps

1 Use conditions			
<ul style="list-style-type: none"> ◎ Effective stroke ◎ Space limitation (length, width, height) ◎ Mounting direction (horizontal, vertical, side-hanging) ◎ Center of Gravity location ◎ Operating conditions (lead, acceleration / deceleration, frequency of use) ◎ Application environment (high temperature, vibration, grease, corrodent environment) 			
2 Accuracy	3 Number of axis	4 Motor options	5 Motor loading
<ul style="list-style-type: none"> ◎ Positioning accuracy ◎ Repeatability ◎ Running Parallelism 	<ul style="list-style-type: none"> ◎ Single axis ◎ Double axes ◎ Multi axes ◎ Special combination 	<ul style="list-style-type: none"> ◎ DC Servo motor ◎ AC Servo motor ◎ Stepper motor 	<ul style="list-style-type: none"> ◎ Max. speed ◎ Motor resolution ◎ Motor torque

Features

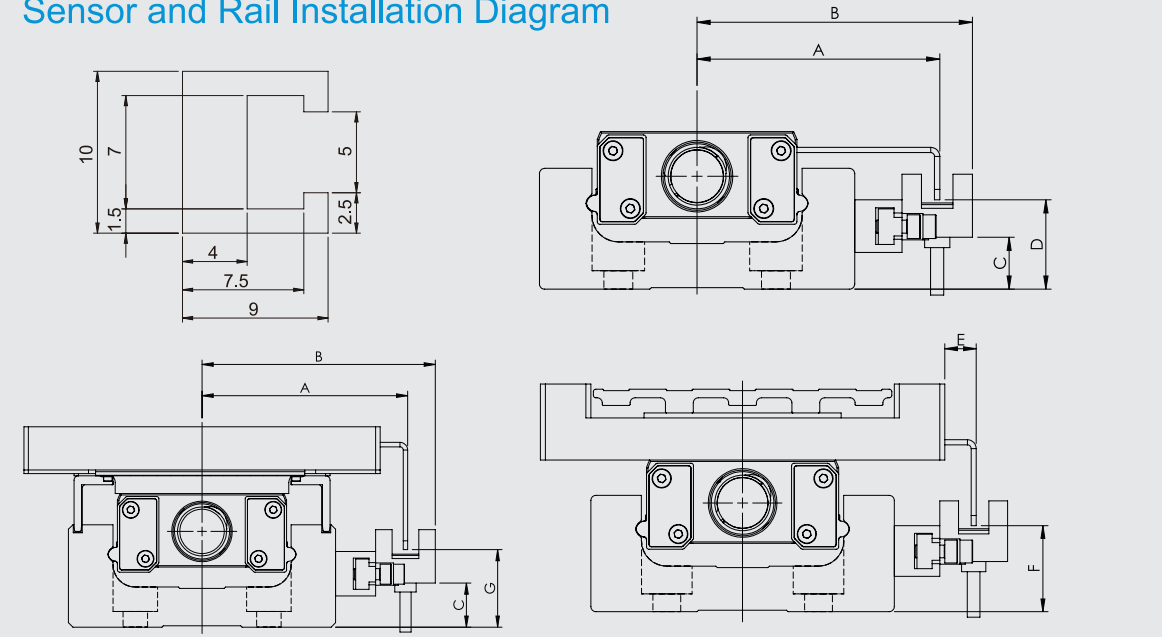
	GKA(Aluminum alloy)	GKS(Carbon steel)
Accuracy	Precision	Precision
Load capacity	Medium loading	Heavy loading
Weight	Light	Heavy
Rigidity	Standard(Aluminum alloy)	Excellent(Carbon steel)
Cleanness	Standard	Standard
Anti-corrosion	Standard	Standard
Drive method	Ball screw	Ball screw
Motor to ball scw	Direct-coupled with a coupling	Direct-coupled with a coupling
Dustproof cover	Available (Optional)	Available (Optional)
Screw direction	Right - tighty	Right - tighty

Introduction of Accessory



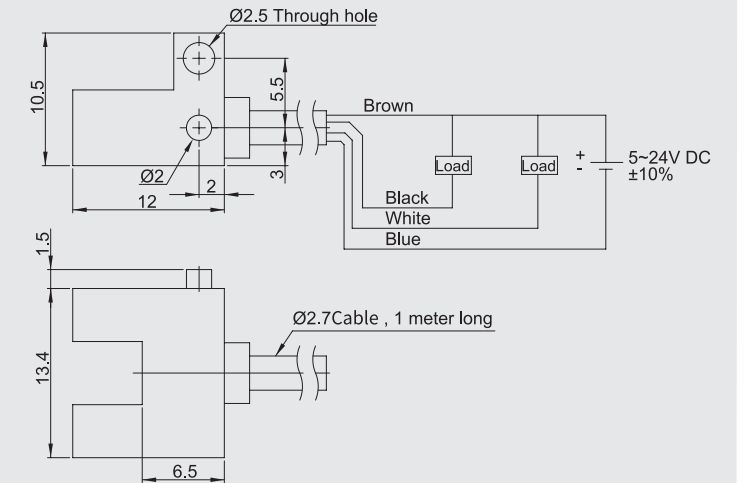
*The catalog drawings are for illustrative purposes only, and all accessories will be assembled and shipped according to the selected options in an order.

Sensor and Rail Installation Diagram

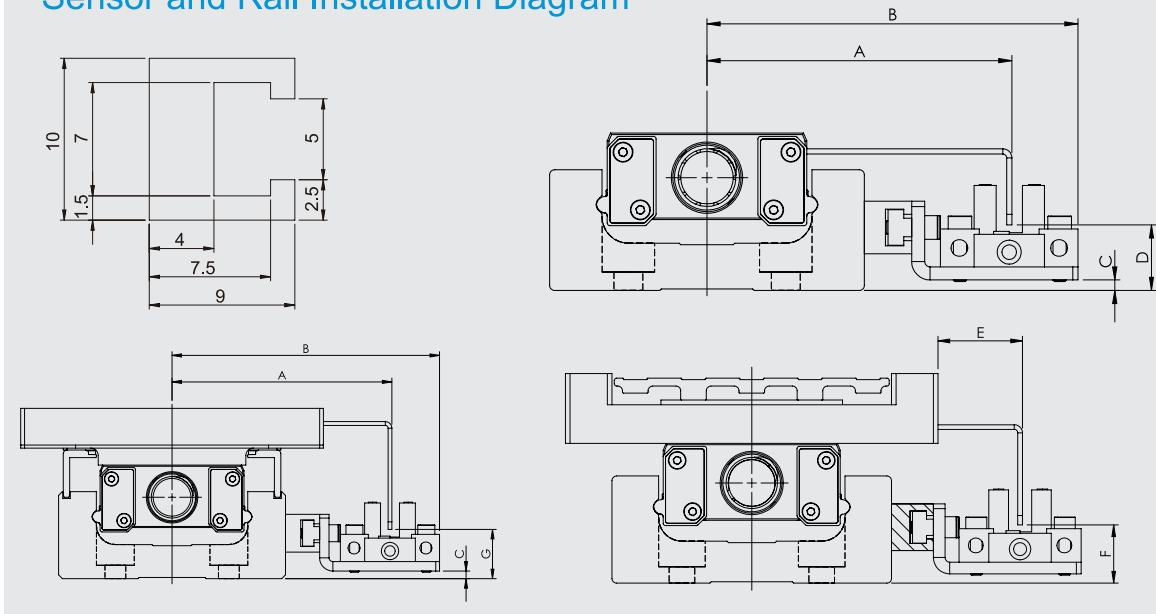


Model No.	A	B	C	D	E	F	G
2040	36.2	42.4	3.9	11	10.2	11	11
2650	41.2	47.7	10	17	10.2	17	17.5
3060	46.2	52.4	9.9	17	6.2	17	17.4
3360	46.2	52.4	9.9	17	3.2	17.1	17
4580	56.2	62.4	15.9	23	4.2	23	23.4
4686	59.2	65.4	16.9	24	3.2	24	24

Brand	Panasonic
Title	PM-F25
Power voltage	5~24V DC±10%, with P-P ripple below 10%
Power consumption	Below 15mA
Output	NPN type Black: ON when light is received White: ON when light is blocked
Response time	Less than 20μs when exposed to light. 100μs or less when shading (Response frequency: above 1KHz.)

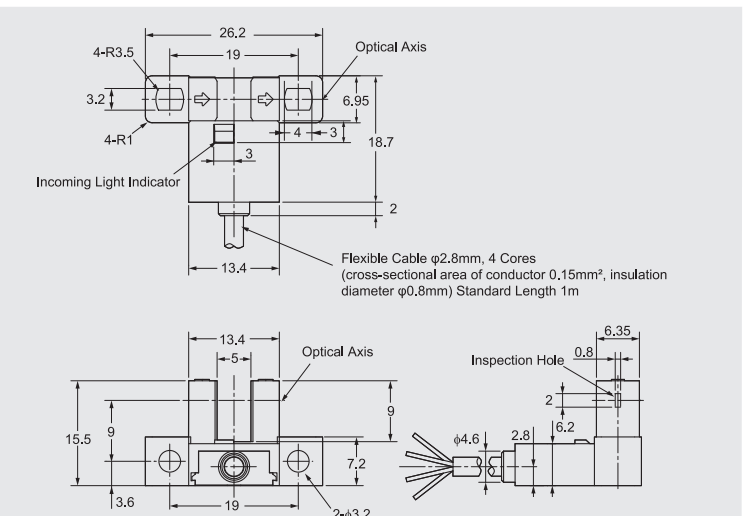


Sensor and Rail Installation Diagram

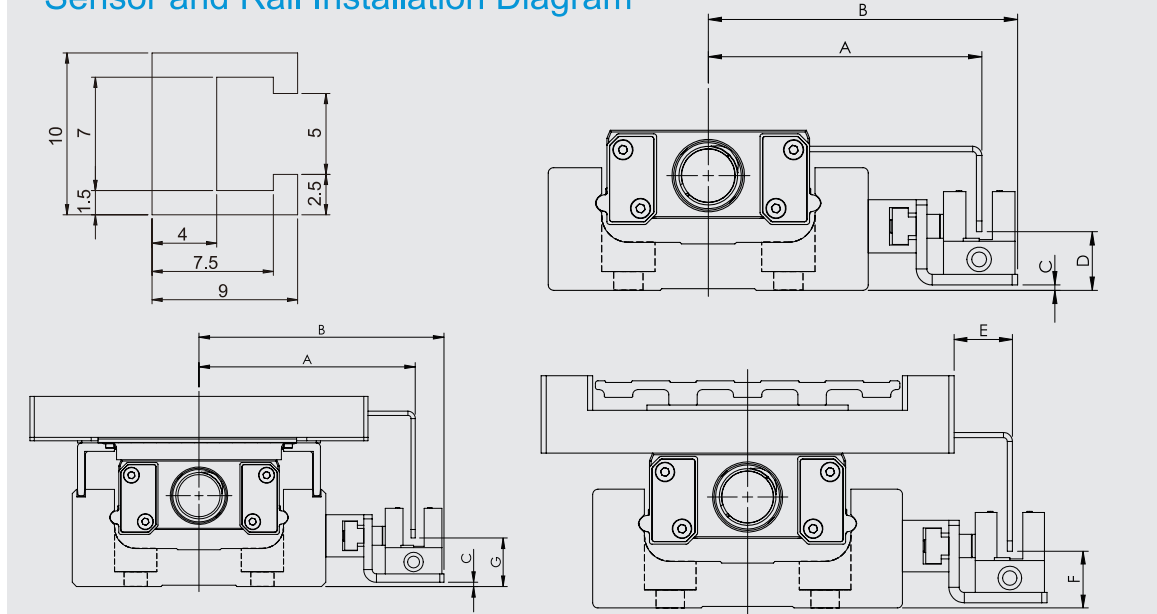


Model No.	A	B	C	D	E	F	G
2040	48.1	60.7	0.5	10.5	22.1	11	10.5
2650	53.1	65.7	2	12.5	22.1	12.5	13
3060	58.1	70.7	2	12.5	18.1	12.5	13
3360	58.1	70.7	2	12.5	15.1	12.5	13
4580	68.1	80.7	8	18.5	16.1	18.5	19
4686	71.7	83.7	9	18.5	15.1	19.5	20

Brand	OMRON
Title	EE-SX671
Power voltage	5~24V DC±10%, with P-P ripple below 10%
Power consumption	Below 15mA
Output	NPN type Black: ON when light is received White: ON when light is blocked
Response time	Less than 20μs when exposed to light. 100μs or less when shading (Response frequency: above 1KHz.)

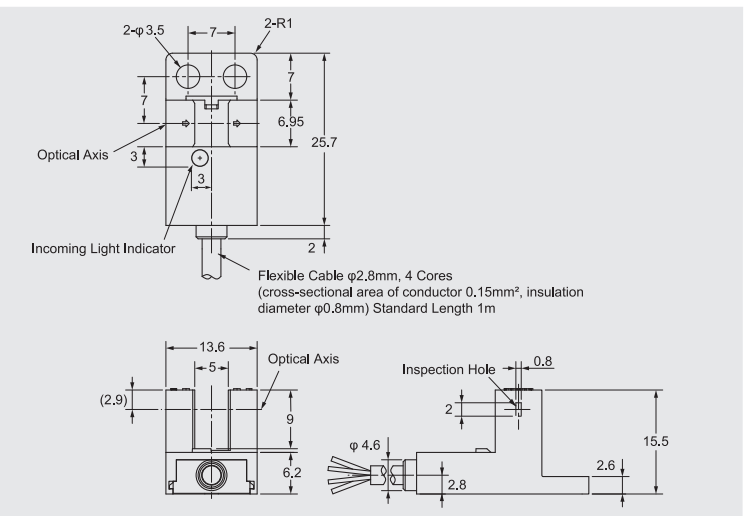


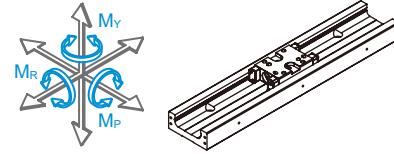
Sensor and Rail Installation Diagram



Model No.	A	B	C	D	E	F	G
2040	42.2	48.9	0.4	9.9	16.2	10.4	10.4
2650	46.3	53	1	11	15.3	11	11.5
3060	51.3	58	1	11	11.3	11	11.5
3360	51.3	58	1	11	8.3	11	11.5
4580	61.3	68	7	17	9.3	17	17.5
4686	64.3	71	8	18	8.3	18	18.5

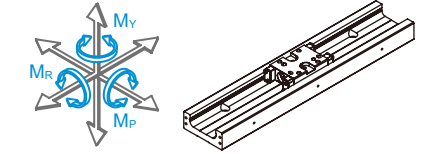
Brand	OMRON
Title	EE-SX674
Power voltage	5~24V DC±10%, with P-P ripple below 10%
Power consumption	Below 15mA
Output	NPN type Black: ON when light is received White: ON when light is blocked
Response time	Less than 20μs when exposed to light. 100μs or less when shading (Response frequency: above 1KHz.)





Load Specifications

Model No.		Ball screw				Linear guide rail				
		Nominal outer diameter (mm)	Lead (mm)	Basic dynamic load rating (N)	Basic static load rating (N)	Slide				
						Basic dynamic load rating (N)	Basic static load rating (N)	Permissible static moment		
								Pitch M_P (N·m)	Yaw M_Y (N·m)	Roll M_R (N·m)
GKS2040	Standard	6	2	550	920	2872	5040	24.8	24.8	66.4
	Precision									
	Standard		6	630	830					
	Precision									
GKS2650	Standard	8	2	1700	3200	5792	9720	60.2	60.2	150.5
	Precision									
	Standard		5	2410	3490					
	Precision									
GKS3060	Standard	10	5	2730	4440	8120	14140	110.3	110.3	275.6
	Precision									
	Standard		10	1740	2580					
	Precision									
GKS3360	Standard	12	5	3220	5850	8120	14140	110.3	110.3	275.6
	Precision									
	Standard		10	2140	3600					
	Precision									
GKS4580	Standard	15	10	5060	8620	17775	28917	288.8	288.8	721.9
	Precision									
GKS4686	Standard	15	10	5060	8620	19750	32130	288.8	288.8	721.9
	Precision									



Load Specifications

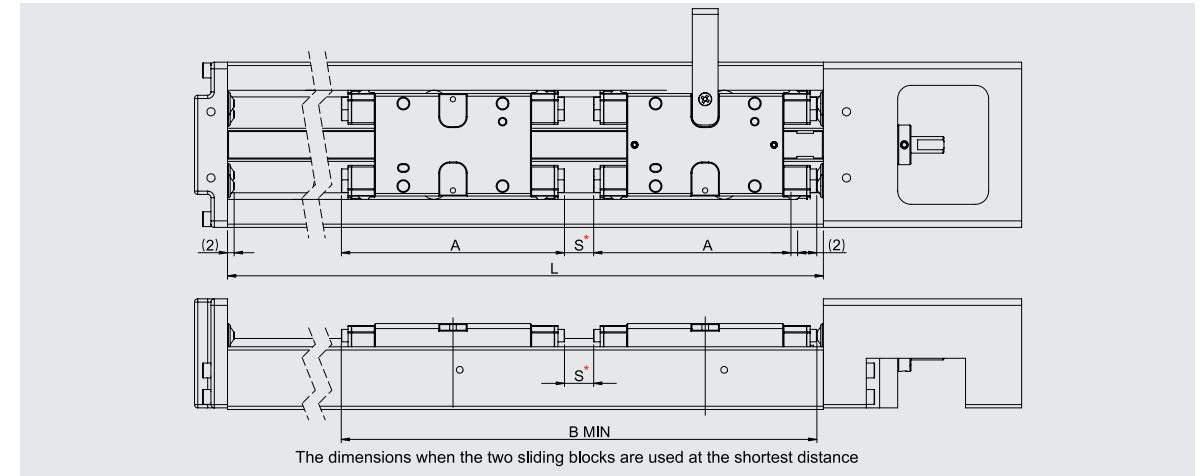
Model No.		Ball screw				Linear guide rail				
		Nominal outer diameter (mm)	Lead (mm)	Basic dynamic load rating (N)	Basic static load rating (N)	Slide				
						Basic dynamic load rating (N)	Basic static load rating (N)	Permissible static moment		
								Pitch M_P (N·m)	Yaw M_Y (N·m)	Roll M_R (N·m)
GKA2040	Standard	6	2	550	920	2010.4	3528	17.4	17.1	46.5
	Precision									
	Standard		6	630	830					
	Precision									
GKA2650	Standard	8	2	1700	3200	4054.4	6804	48.2	48.2	120.4
	Precision									
	Standard		5	2410	3490					
	Precision									
GKA3060	Standard	10	5	2730	4440	5684	9898	88.2	88.2	220.5
	Precision									
	Standard		10	1740	2580					
	Precision									
GKA3360	Standard	12	5	3220	5850	5684	9898	88.2	88.2	220.5
	Precision									
	Standard		10	2140	3600					
	Precision									
GKS4580	Standard	15	10	5060	8620	12442.5	20241.9	231	231	577.5
	Precision									
GKS4686	Standard	15	10	5060	8620	13825	22491	231	231	577.5
	Precision									

Precision Grade

unit (mm)

Model No.	Stroke	Repeatability		Uni-directional positioning accuracy		Running parallelism		Max torque(N·cm)	
		Standard	Precision	Standard	Precision	Standard	Precision	Standard	Precision
GK□2040	30	±0.005	±0.003	-	0.02	0.025	0.01	0.5	1.2
	80								
	130								
GK□2650	60	±0.005	±0.003	-	0.02	0.025	0.01	1.5	3
	110								
	160								
	210								
GK□3060	50	±0.005	±0.003	-	0.02	0.025	0.01	7	15
	100								
	150								
	200				0.04	0.035	0.015		
	300								
	400								
GK□3360	50	±0.005	±0.003	-	0.02	0.025	0.01	7	15
	100								
	150								
	200				0.04	0.035	0.015		
	300								
	400								
GK□4580	200	±0.005	±0.003	-	0.02	0.035	0.015	10	12
	300								
	400								
	500				0.04	0.02			
	600								
	700								
GK□4686	190	±0.005	±0.003	-	0.025	0.035	0.015	10	12
	290								
	390								
	490				0.03	0.04	0.02		
	590								
	690								
790	0.035	0.05	0.025						

* Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.



Specifications of Dual Sliding Blocks

unit : mm

Model No.	Rail length (L)	Single sliding block travel stroke	Dual sliding blocks travel stroke	Total length of a single sliding block (A)	The dimensions when the two sliding blocks are used at the shortest distance (B-S)	Distance decided by user (S)
2040	100	30	-	48	96	1~30
	150	80	30			
	200	130	80			
2650	150	60	-	67.5	135	1~150
	200	110	50			
	250	160	100			
	300	210	150			
3060	150	50	-	74	148	1~430
	200	100	-			
	250	150	80			
	300	200	130			
	400	300	230			
	500	400	330			
3360	150	50	-	74	148	1~430
	200	100	-			
	250	150	80			
	300	200	130			
	400	300	230			
	500	400	330			
4580	340	200	120	101	202	1~720
	440	300	220			
	540	400	320			
	640	500	420			
	740	600	520			
	840	700	620			
	940	800	720			
4686	340	190	120	101	202	1~720
	440	290	220			
	540	390	320			
	640	490	420			
	740	590	520			
	840	690	620			

* The dual sliding block travel stroke is the value when two sliding blocks are used at the shortest distance.

* With a gap between two sliding blocks, the travel stroke changes on the basis of the gap decided by the customer.

* Code S in the illustration is the gap between two sliding blocks decided by the customer.

The formula for calculating the travel stroke:

$$\text{Rail length (L)} - \text{Total length of two sliding blocks (B)} - \text{Gap (S)} = \text{Dual sliding block travel stroke}$$

Velocity Calculation

1 Maximum Linear Velocity

The maximum linear velocity of the actuator (V) is calculated from the maximum rotational speed of the ball screw (S) multiplied by the lead (L).

$$V \left(\frac{\text{mm}}{\text{s}} \right) = \left(\frac{S(\text{rpm})}{60} \right) \times L(\text{mm})$$

2 Acceleration/Deceleration

① Velocity is the operating speed of the sliding block. The sliding block needs to accelerate from a stopped state to reach the working speed and move toward the set position and start to slow down upon arrival to a stop.

② Acceleration or deceleration are based on the actual demand of user.

※ Acceleration/Deceleration will generate inertial force during transport.
The greater the acceleration/deceleration, the lesser the loading and the greater impact; it should be avoided.

3 Calculation of the Working Cycle

The working cycle is to be decided by the user as needed.

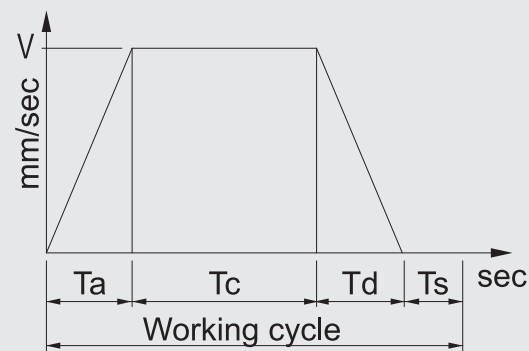
The cycle is shown in the graph below and consists of acceleration time (T_a), constant speed time (T_c), deceleration time (T_d), and staying time (T_s).

◎ Acceleration: $\frac{V}{T_a}$

◎ Deceleration: $\frac{V}{T_d}$

◎ Working cycle: $T_a + T_c + T_d + T_s$

◎ Working time = working cycle × frequency



Service Life Testing

Linear Guide Rail

$$M = \left(\frac{f_t}{f_w} \cdot \frac{C}{f_n} \right)^3 \times 50 \text{ km}$$

- ◎ M : Rating life (km)
- ◎ C : Basic dynamic load rating (N)
- ◎ f_n : Axial loading (N)
- ◎ f_t : Contact ratio (Table A)
- ◎ f_w : Load ratio (Table B)

Table A

Contact ratio (f_t)

1.0




Table B

Operating condition		Load ratio (f_w)
Load status	Velocity (V)	
No vibration and smooth	$V < 15$ m/min	1.0 ~ 1.5
Ordinary force and vibration	$15 < V < 60$ m/min	1.5 ~ 2.0
High impact force and vibration	$V > 60$ m/min	2.0 ~ 3.5

Ball screw and bearing

$$M = \left(\frac{1}{f_w} \cdot \frac{C}{f_a} \right)^3 \times 10^6 \text{ rev}$$

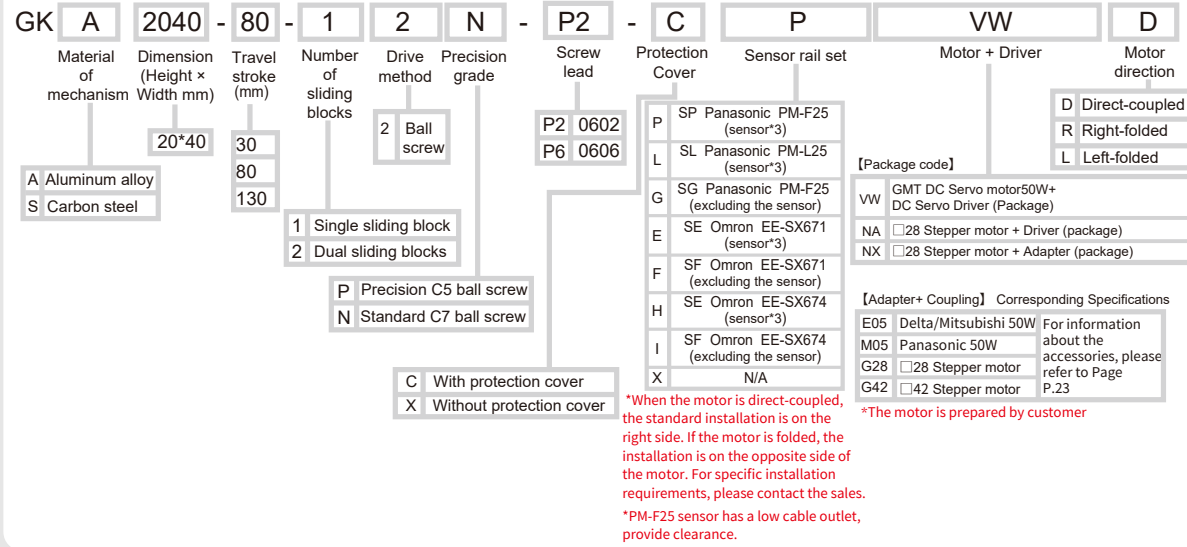
- ◎ M : Rating life (km)
- ◎ C : Basic dynamic load rating (N)
- ◎ f_a : Axial loading (N)
- ◎ f_w : Load ratio (Table B)

Code	Name of driver	Appearance	Number of axes	Power voltage	Control method		
					Pulse	I/O	Communication
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU
NA	GTR22G-D (2-phase bipolar micro-stepper driver)		1	DC24V	•		—

Code	Name of driver	Control mode			Point	Encoder feedback		Optical linear encoder feedback
		Location	Speed	Torque		Optical encoder	Magnetic encoder	
VW	K-SERVO (DC Servo driver)	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver)	•	•	•	16	•	—	—
NA	GTR22G-D	•	—	—	—	—	—	—

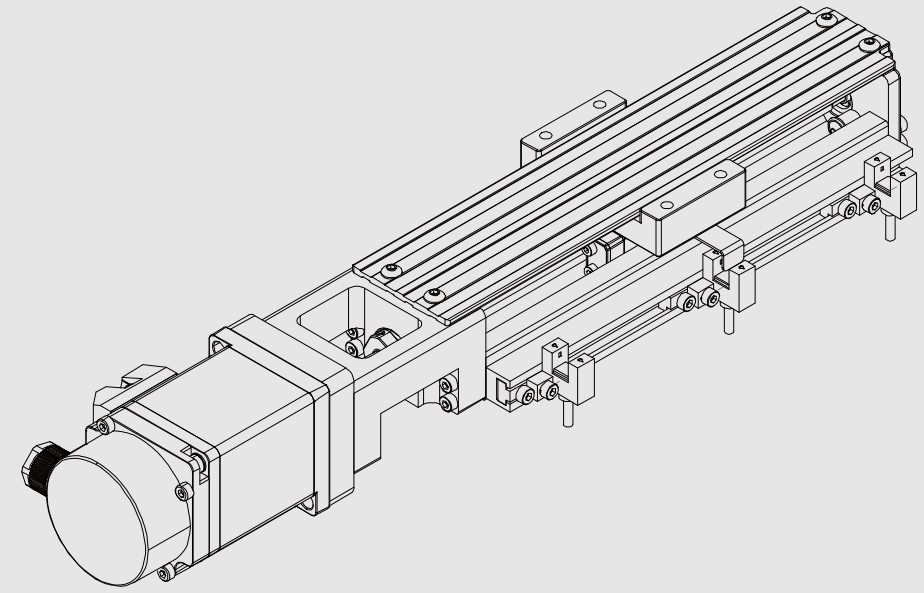
Description

GK□ 2040 Series



Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (DKM) (DC Servo driver) GSV-KM□□MB-□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
NA	GTR22G-D (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

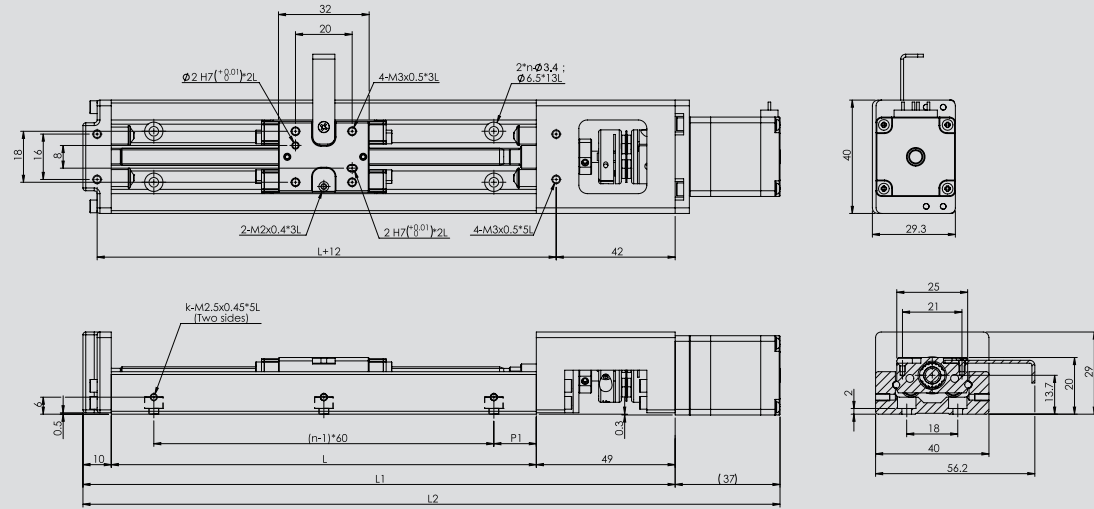


© GKA2040-80-12N-P2-CPVWD

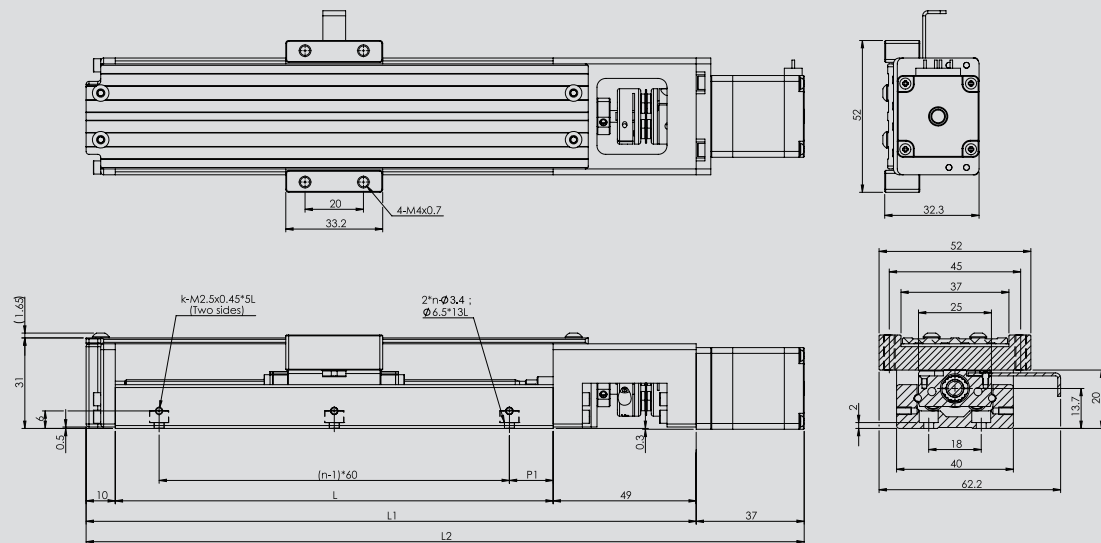
Model No.	GK□2040-N						GK□2040-P							
	Dimension (Height × Width) (mm)	20 x 40												
Stroke (mm)	30	80	130	30	80	130	30	80	130	30	80	130		
Drive method	Ball screw Ø6													
Lead (mm)	2			6			2			6				
Rail	Recirculating linear ball guide													
Material of mechanism	A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)													
Precision *2	Maximum speed (mm/s)	Servo motor	100						300					
		Stepper motor	40						120					
	Uni-directional positioning accuracy (mm)	-						0.02						
	Repeatability (mm)	±0.005						±0.003						
	Running parallelism (mm)	0.025						0.01						
Maximum torque (N·cm)	0.5						1.2							
DC Electrical spec.	DC Servo motor	50W : GSVM-D0BMD4												
	DC Servo driver	50W : K-SERVO [GSV-KM0BMR-48DP]												
	Lateral connector of the actuator	Manufacturer:TE Connectivity Power cable:172159-1+170355-1(male)Encoder cable:172161-1+170365-1(male)												
	Lateral connector of the transmission cable	Manufacturer:KST Power cable:E1510-RED(European terminal) Manufacturer:JST Encoder cable:PHDR-12VS+SPHD-001T-P0.5(female)												
Step electrical spec.	Open loop driver	GTR22G-D [□28]												
	Closed loop driver	-												
	Lateral connector of the actuator	15-pin male D-SUB connector												
	Lateral connector of the transmission cable	15-pin female D-SUB connector												

*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
 *2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK□2040 Direct-Coupled Open Loop Stepper Motor Without Protection Cover

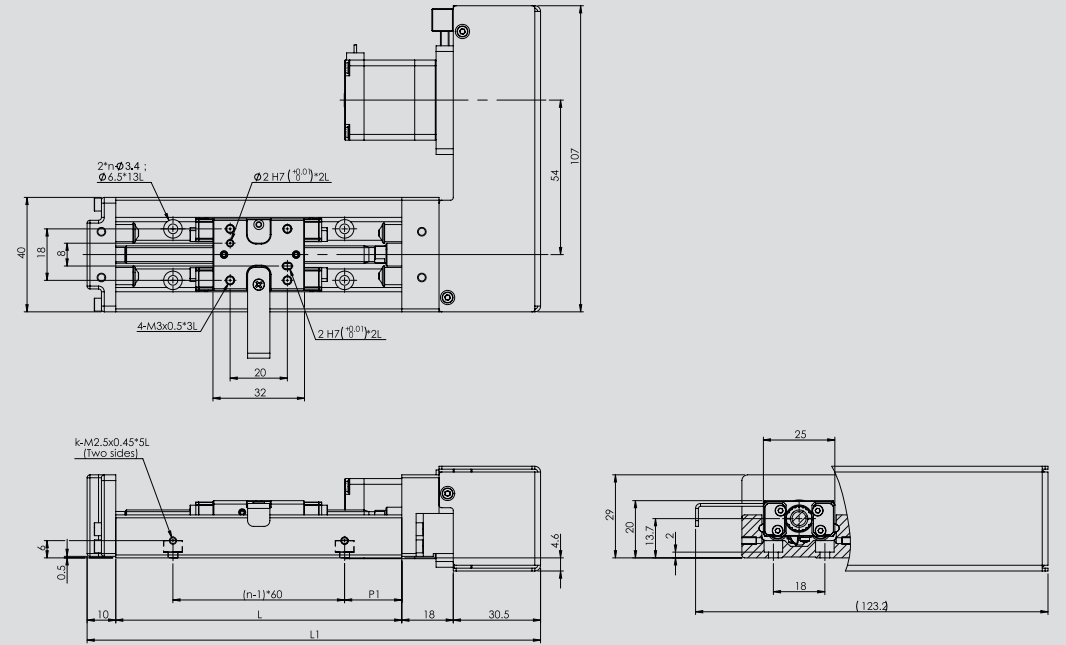


GK□2040 Direct-Coupled Open Loop Stepper Motor With Protection Cover

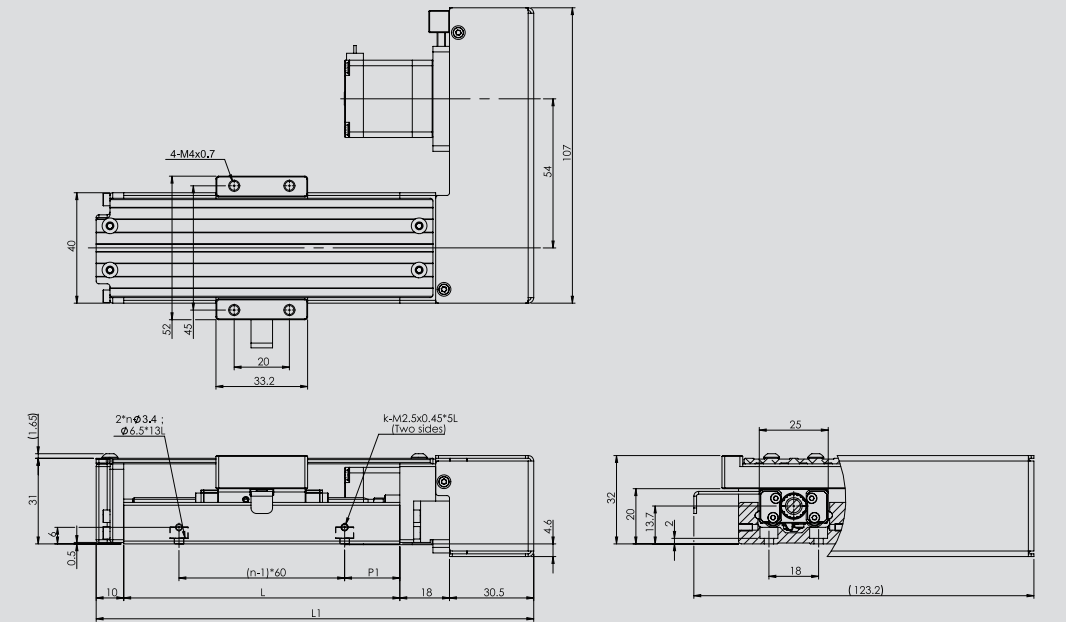


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK□2040	30	100	159	196	2	2	20
	80	150	209	246	3	3	15
	130	200	259	296	3	3	40

GK□2040 Folded Open Loop Stepper Motor Without Protection Cover

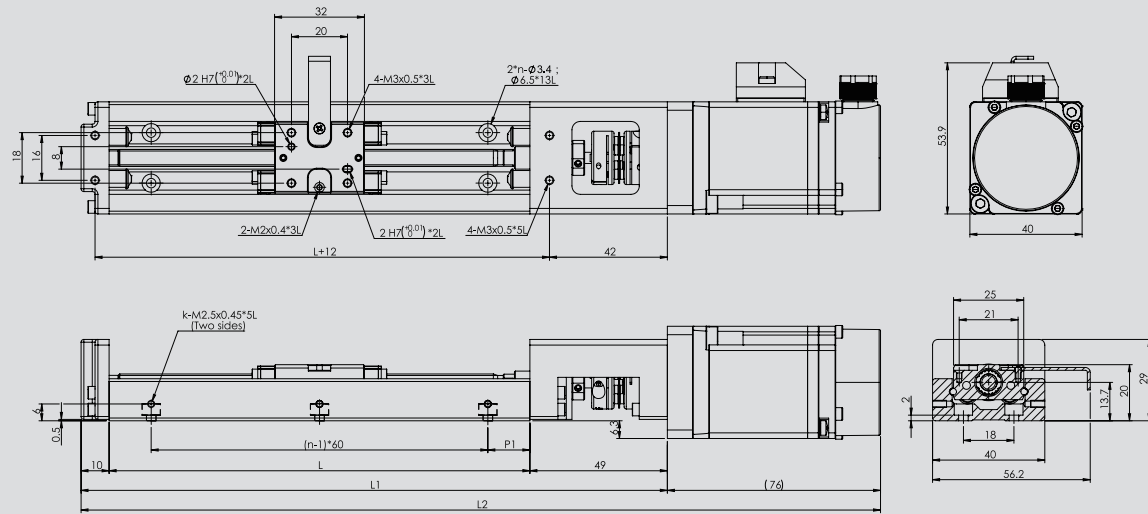


GK□2040 Folded Open Loop Stepper Motor With Protection Cover

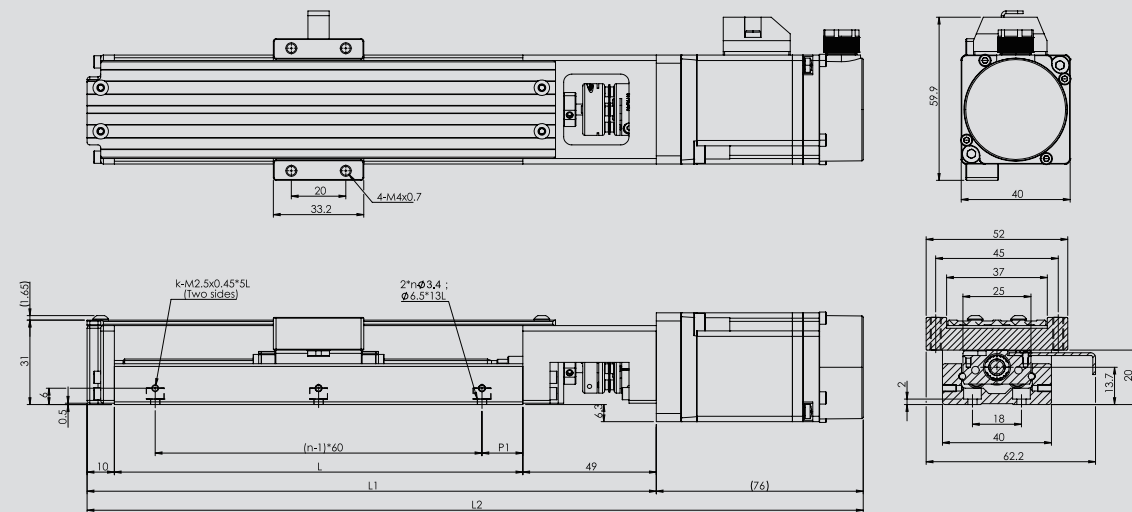


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1
GK□2040	30	100	158.5	2	2	20
	80	150	208.5	3	3	15
	130	200	258.5	3	3	40

GK□2040 Direct-Coupled DC Servo Motor Without Protection Cover

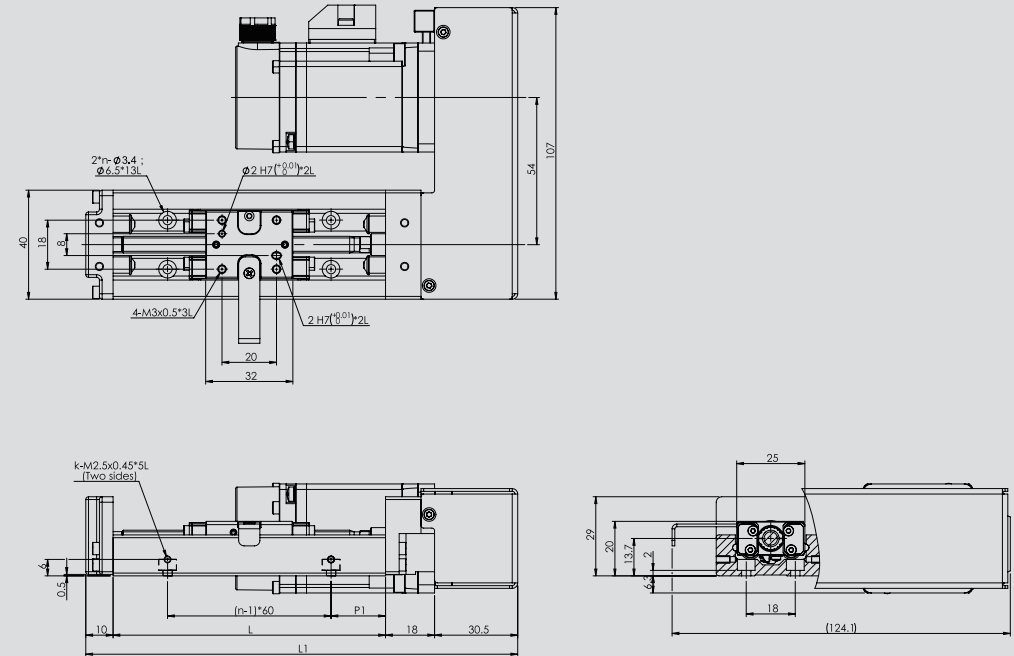


GK□2040 Direct-Coupled DC Servo Motor With Protection Cover

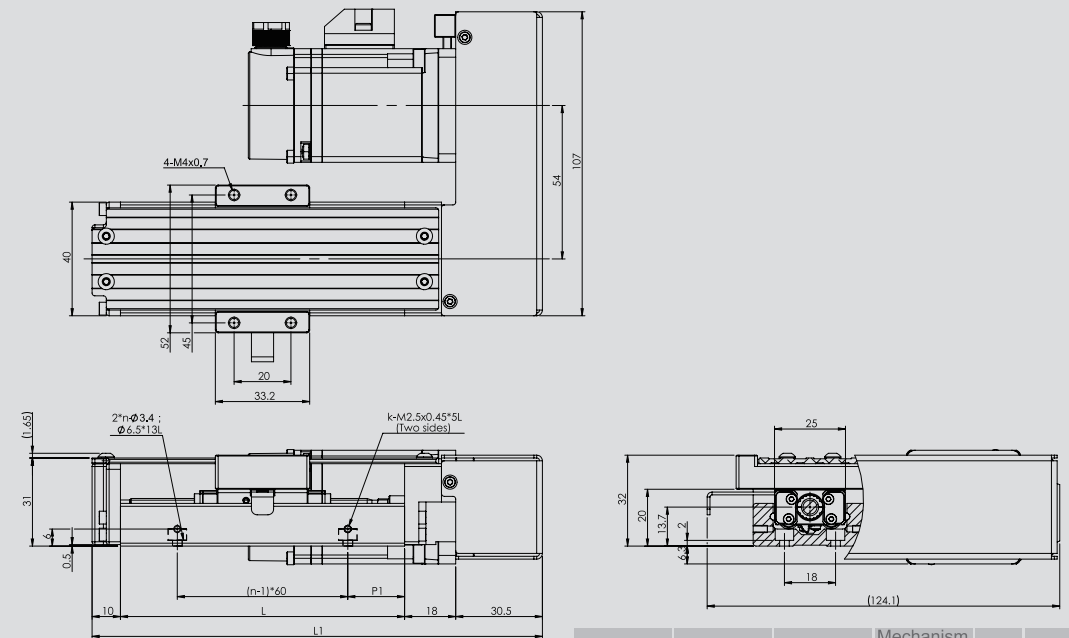


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK□2040	30	100	159	285	2	2	20
	80	150	209	335	3	3	15
	130	200	259	385	3	3	40

GK□2040 Folded DC Servo Motor Without Protection Cover

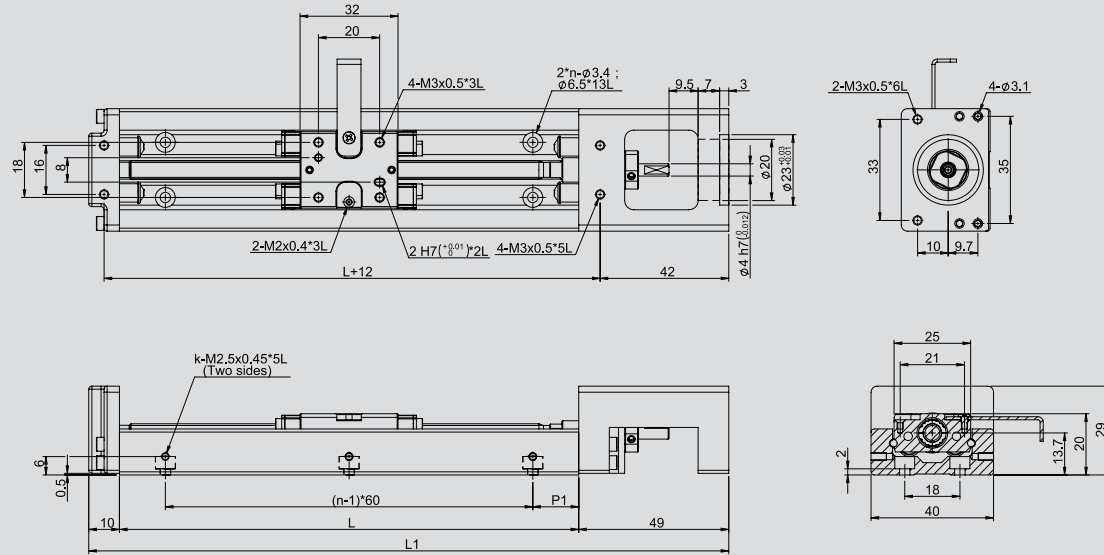


GK□2040 Folded DC Servo Motor With Protection Cover

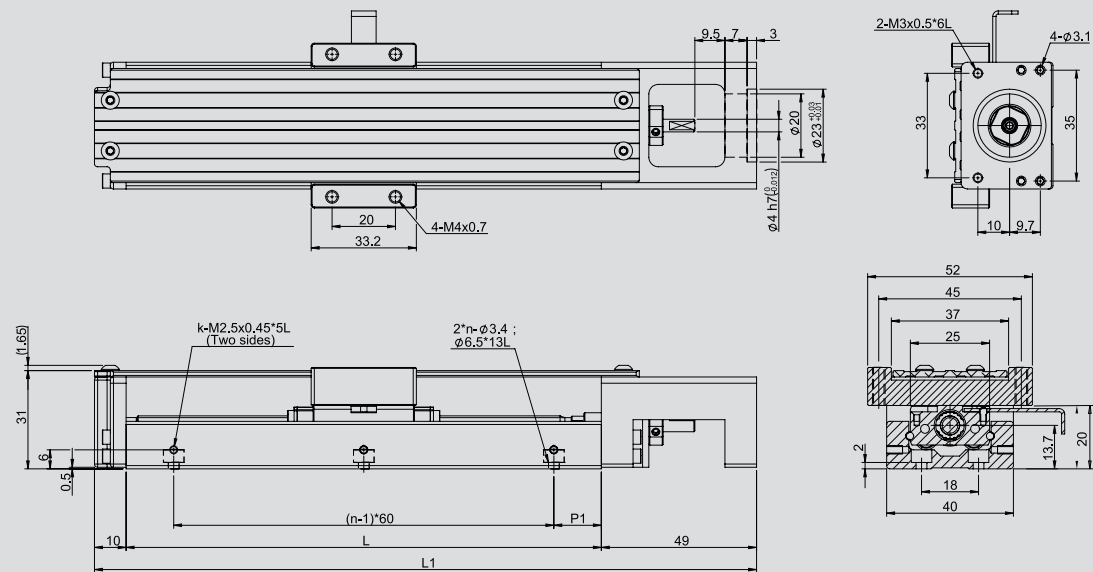


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1
GK□2040	30	100	158.5	2	2	20
	80	150	208.5	3	3	15
	130	200	258.5	3	3	40

GK□2040 No Direct-Coupling Configured Without Protection Cover



GK□2040 No Direct-Coupling Configured With Protection Cover

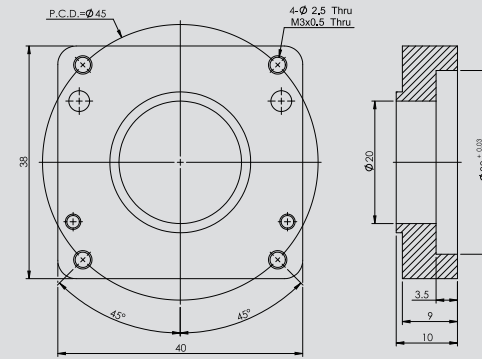


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK□2040	30	100	159	2	2	20
	80	150	209	3	3	15
	130	200	259	3	3	40

GK□2040 Motor Adapter

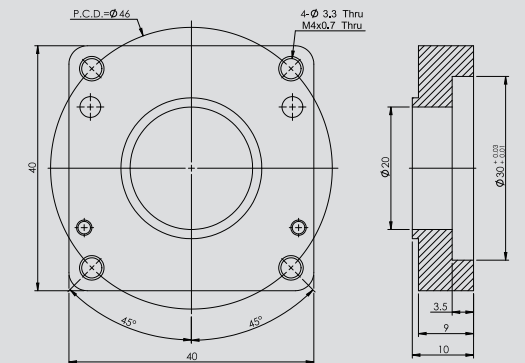
Servo Motor

GK20-M05 (Panasonic 50W Servo motor)



*Applicable coupling FACHS19-4*8

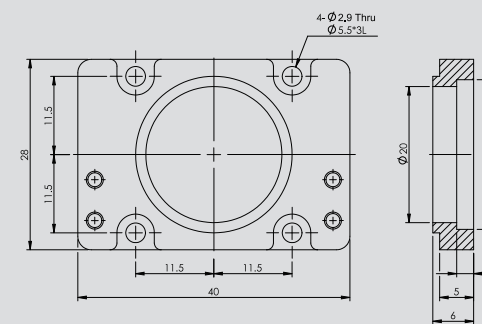
GK20-E05 (GMT, Delta, Mitsubishi 50W Servo motor)



*Applicable coupling FACHS19-4*8

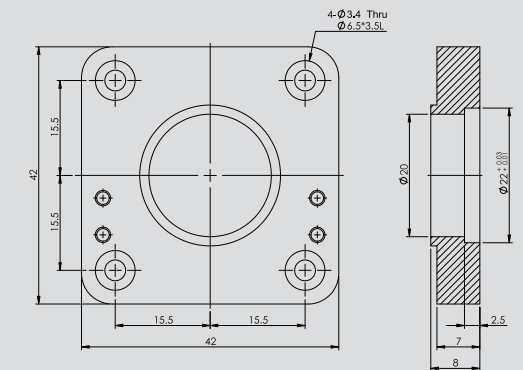
Stepper Motor

GK20-G28 (GMT 28mm Stepper motor)



*Applicable coupling FACHS19-4*5

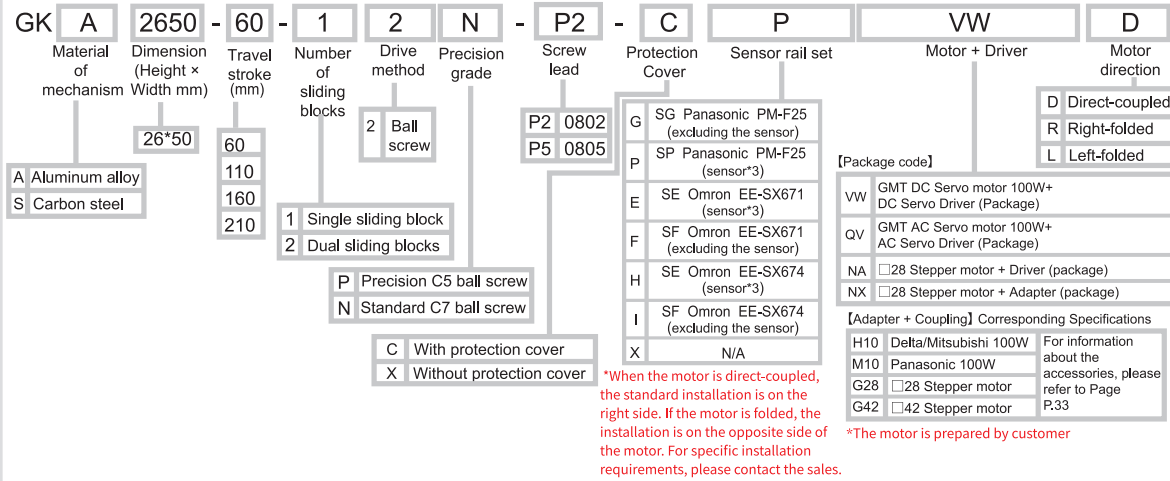
GK20-G42 (GMT 42mm Stepper motor)



*Applicable coupling FACHS19-4*5

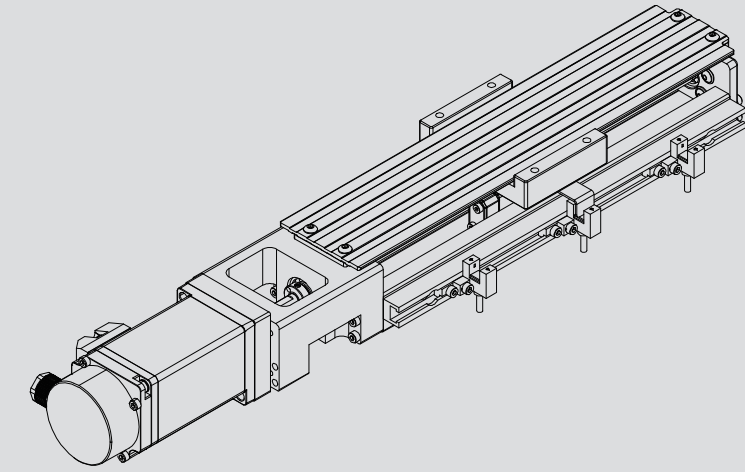
Description

GK□ 2650 Series



Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU	•	•	•	16	•	—	—
NA	GTR22G-D (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

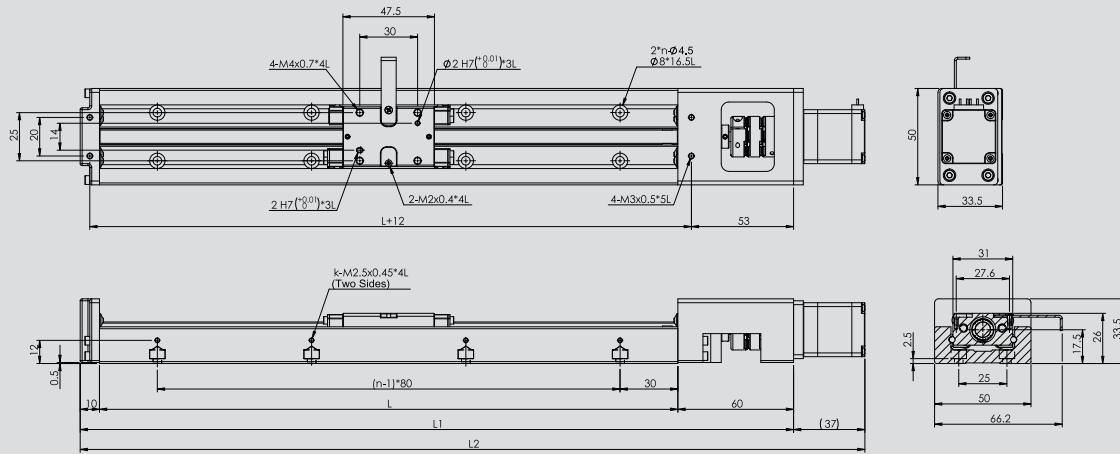


© GKA2650-110-12N-P2-CPVWD

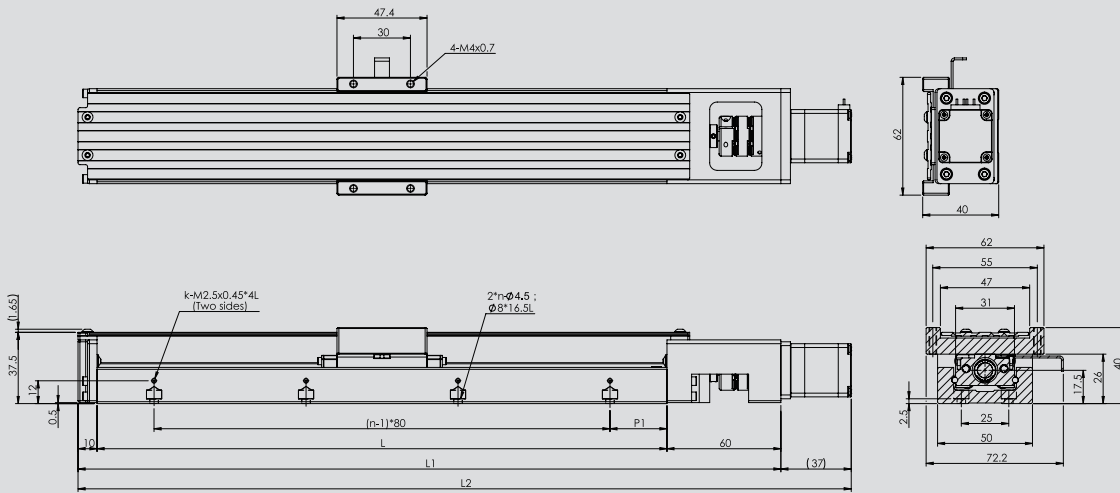
Model No.		GK□2650-N				GK□2650-P			
Mechanical spec.	Dimension (Height x Width) (mm)	26 x 50							
	Stroke (mm)	60	110	160	210	60	110	160	210
	Drive method	Ball screw Ø8							
	Lead (mm)	2		5		2		5	
	Rail	Recirculating linear ball guide							
Precision	Material of mechanism	A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)							
	Maximum speed (mm/s)	*1 Servo motor: 100		250		100		250	
		Stepper motor: 40		100		40		100	
	Uni-directional positioning accuracy (mm)	-				0.02			
	Repeatability (mm)	±0.005				±0.003			
	Running parallelism (mm)	0.025				0.01			
	Maximum torque (N-cm)	1.5				3			
DC Electrical spec.	DC Servo motor	100W : GSV-M-D01MD4							
	DC Servo driver	100W: K-SERVO 【GSV-KM01MR-48DP】							
	Lateral connector of the actuator	Manufacturer:TE Connectivity Power cable:172159-1+170355-1(male)Encoder cable:172161-1+170365-1(male)							
	Lateral connector of the transmission cable	Manufacturer:KST Power cable:E1510-RED(European terminal) Manufacturer:JST Encoder cable:PHDR-12VS+SPHD-001T-P0.5(female)							
AC Electrical spec.	AC Servo motor	100W : GSV-M-A01LC4							
	AC Servo driver	100W : GSV-KE01MB21CP							
	Lateral connector of the actuator	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)							
Step electrical spec.	Open loop driver	GTR22G-D 【□28】							
	Closed loop driver	-							
	Lateral connector of the actuator	15-pin male D-SUB connector							
	Lateral connector of the transmission cable	15-pin female D-SUB connector							

*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
 *2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK□2650 Direct-Coupled Open Loop Stepper Motor Without Protection Cover

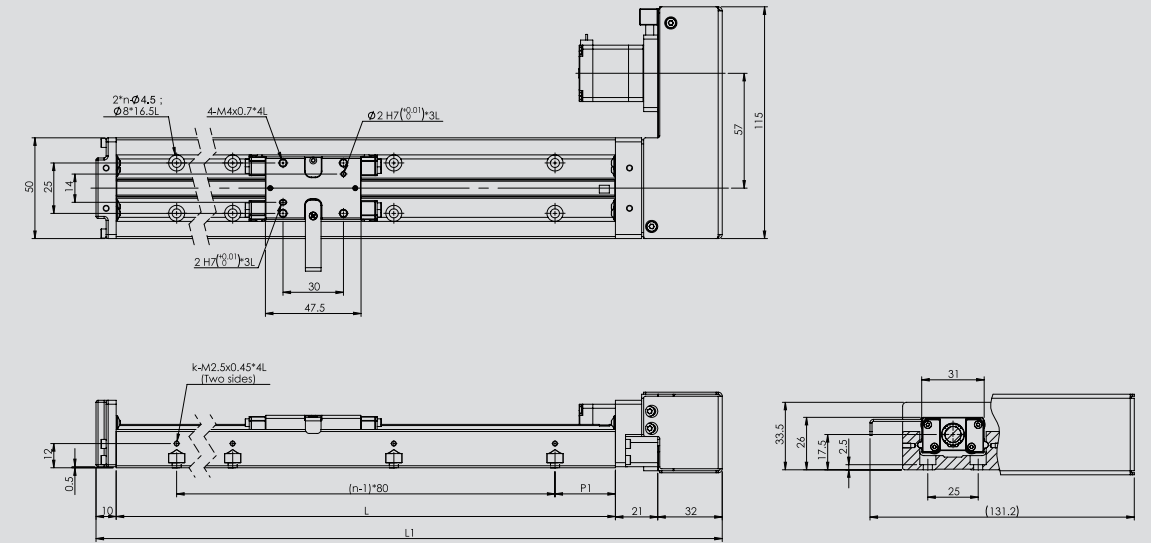


GK□2650 Direct-Coupled Open Loop Stepper Motor With Protection Cover

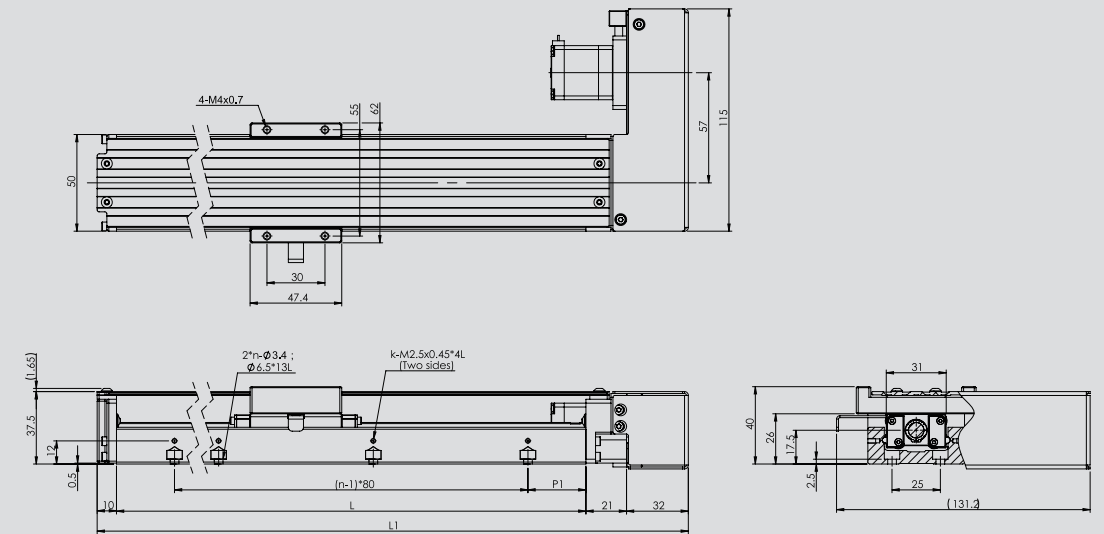


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK□2650	60	150	220	257	2	2	35
	110	200	270	307	3	3	20
	160	250	320	357	3	3	45
	210	300	370	407	4	4	30

GK□2650 Folded Open Loop Stepper Motor Without Protection Cover

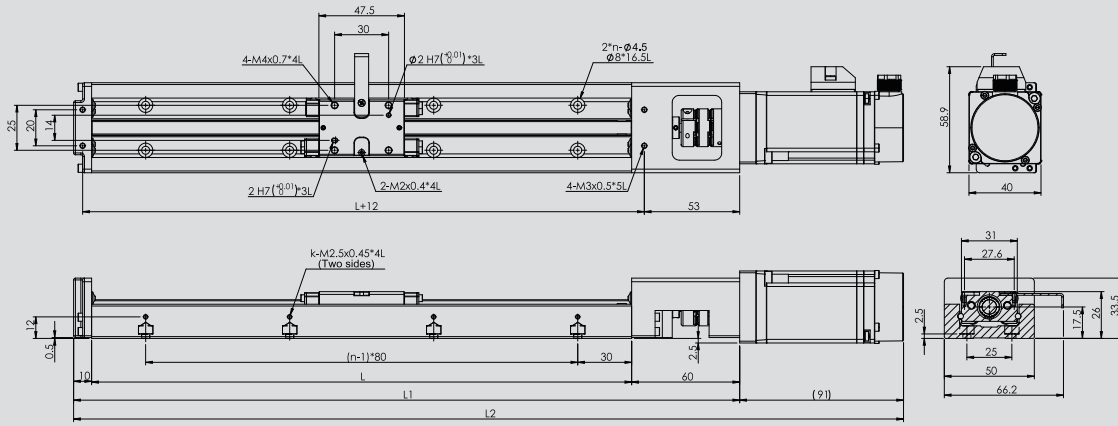


GK□2650 Folded Open Loop Stepper Motor With Protection Cover

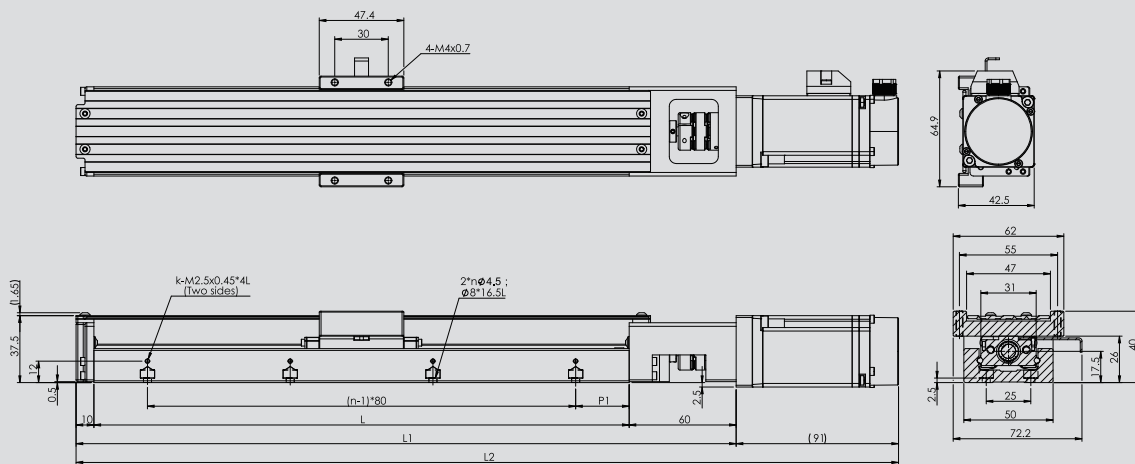


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK□2650	60	100	213	2	2	35
	110	150	263	3	3	20
	160	250	313	3	3	45
	210	300	363	4	4	30

GK□2650 Direct-Coupled DC Servo Motor Without Protection Cover

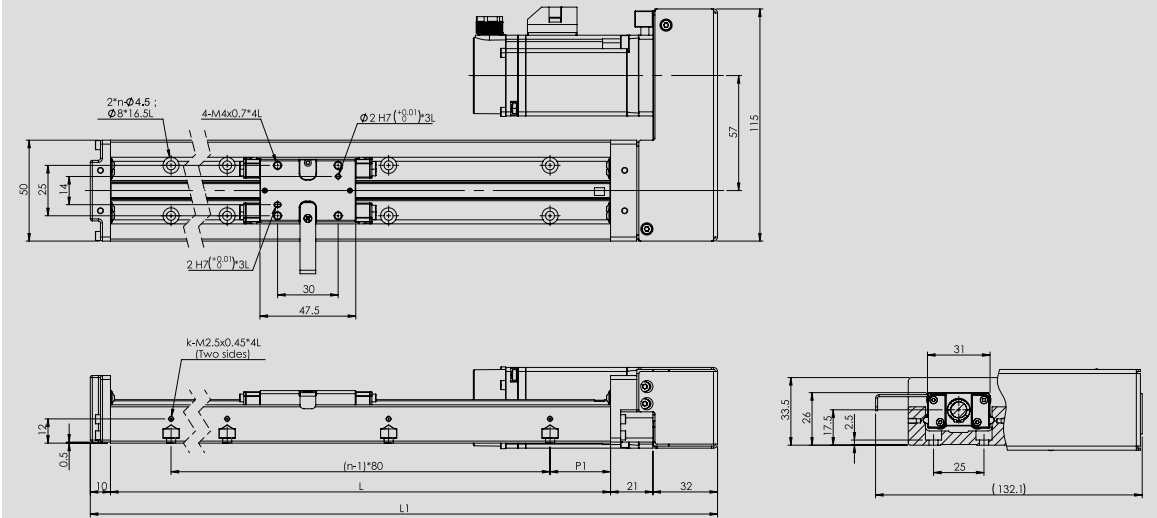


GK□2650 Direct-Coupled DC Servo Motor With Protection Cover

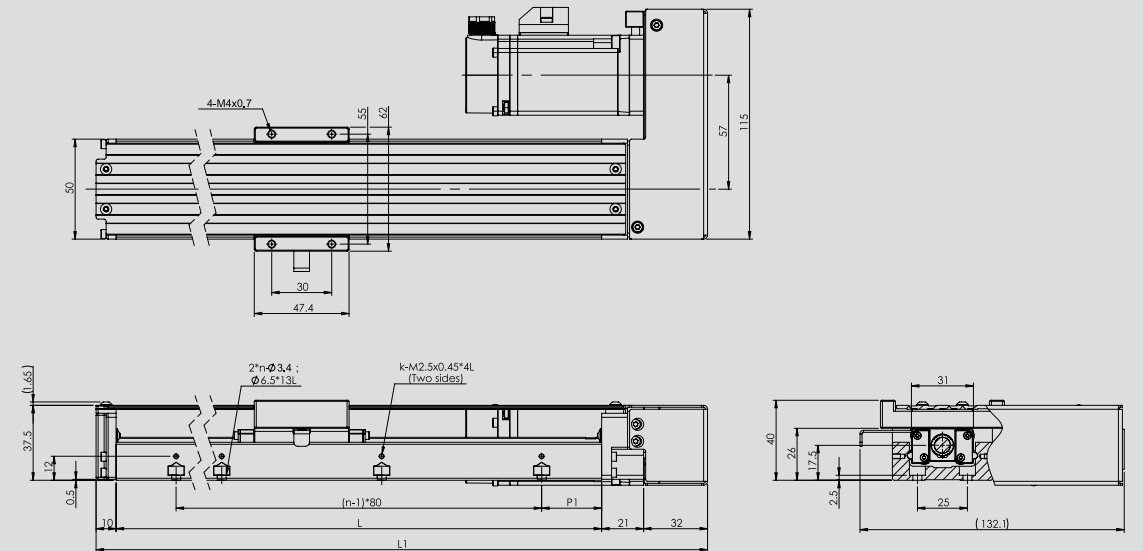


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK□2650	60	150	220	311	2	2	35
	110	200	270	361	3	3	20
	160	250	320	411	3	3	45
	210	300	370	461	4	4	30

GK□2650 Folded DC Servo Motor Without Protection Cover

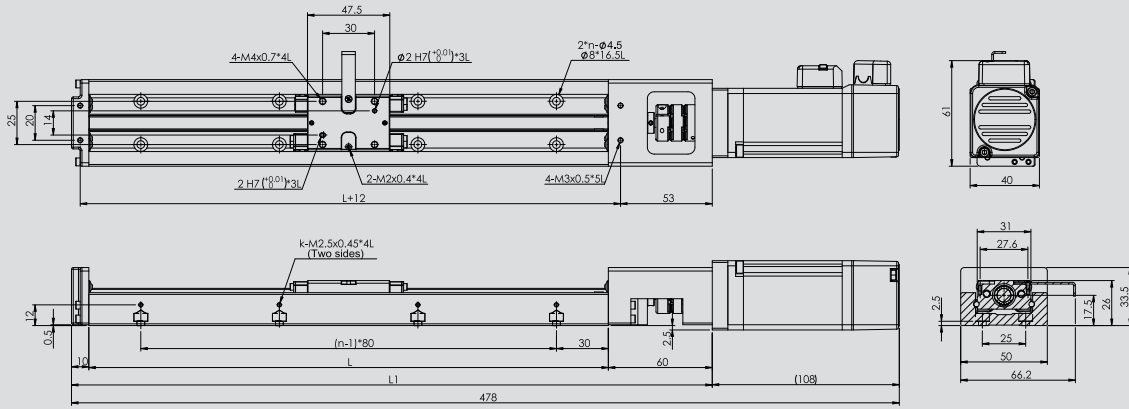


GK□2650 Folded DC Servo Motor With Protection Cover

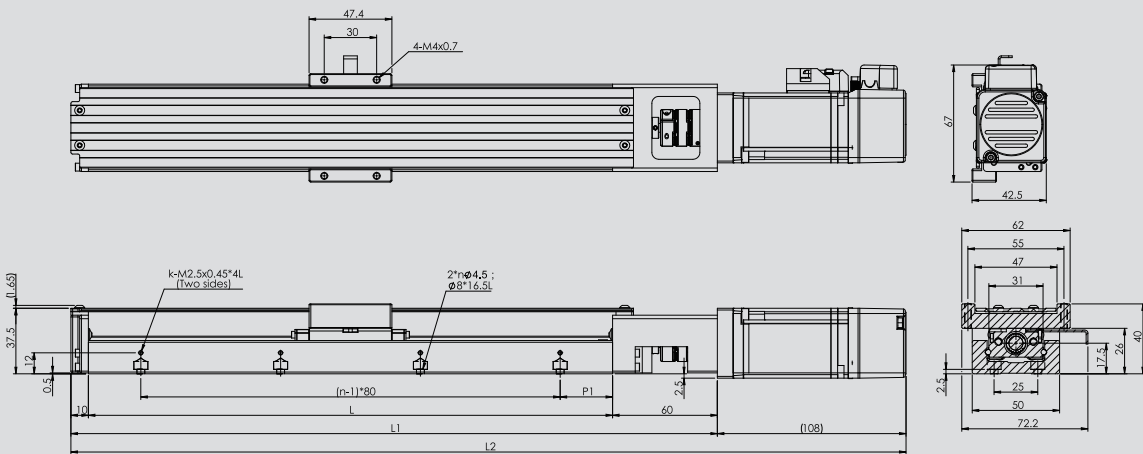


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK□2650	60	100	213	2	2	35
	110	150	263	3	3	20
	160	250	313	3	3	45
	210	300	363	4	4	30

GK□2650 Direct-Coupled AC Servo Motor Without Protection Cover

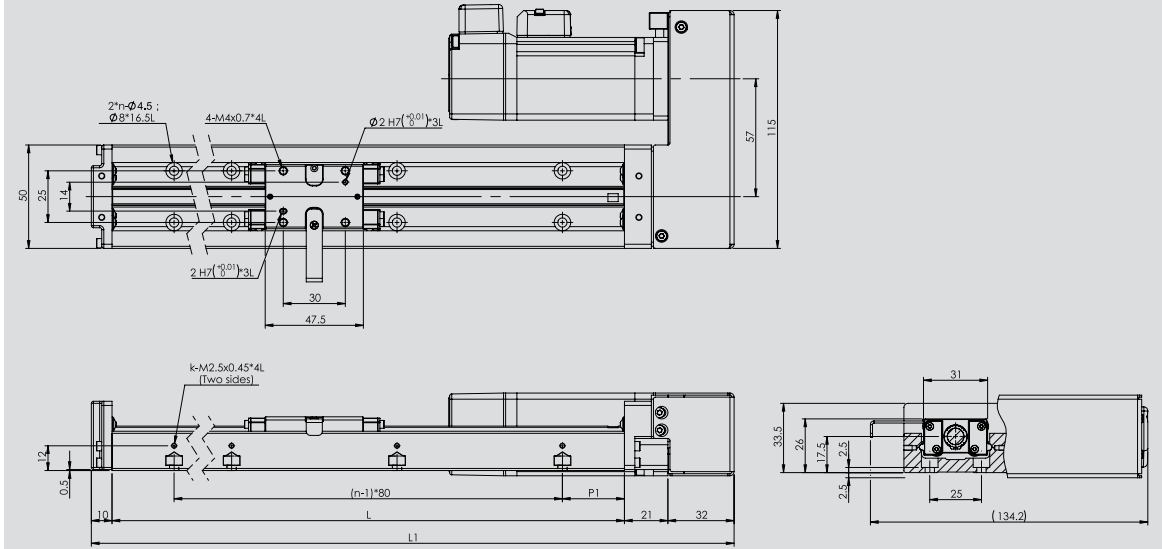


GK□2650 Direct-Coupled AC Servo Motor With Protection Cover

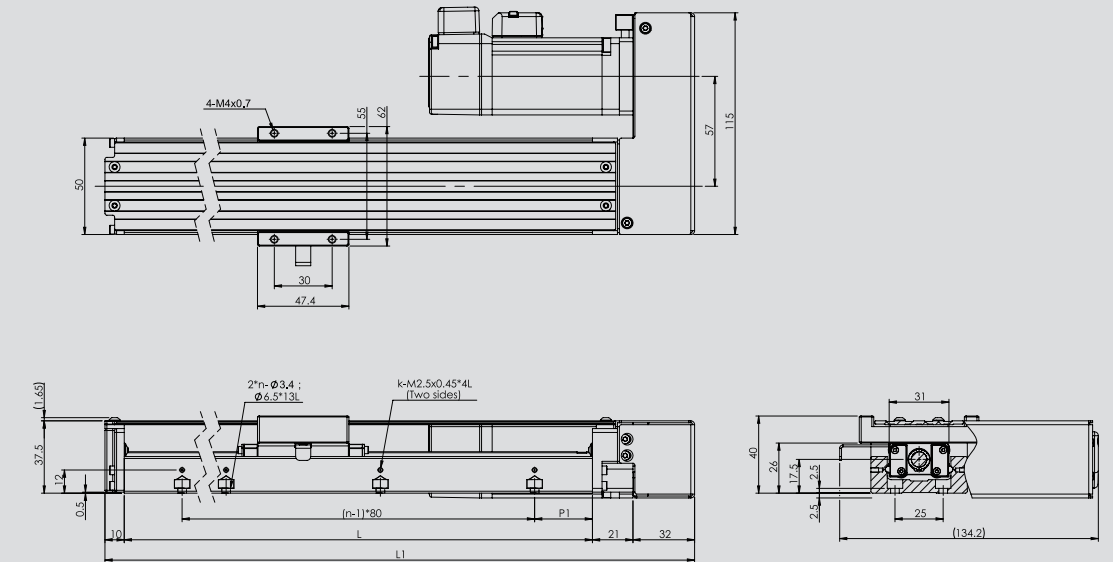


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK□2650	60	150	220	328	2	2	35
	110	200	270	378	3	3	20
	160	250	320	428	3	3	45
	210	300	370	478	4	4	30

GK□2650 Folded AC Servo Motor Without Protection Cover



GK□2650 Folded AC Servo Motor With Protection Cover



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK□2650	60	100	213	2	2	35
	110	150	263	3	3	20
	160	250	313	3	3	45
	210	300	363	4	4	30

Description

GK□ 3060 series

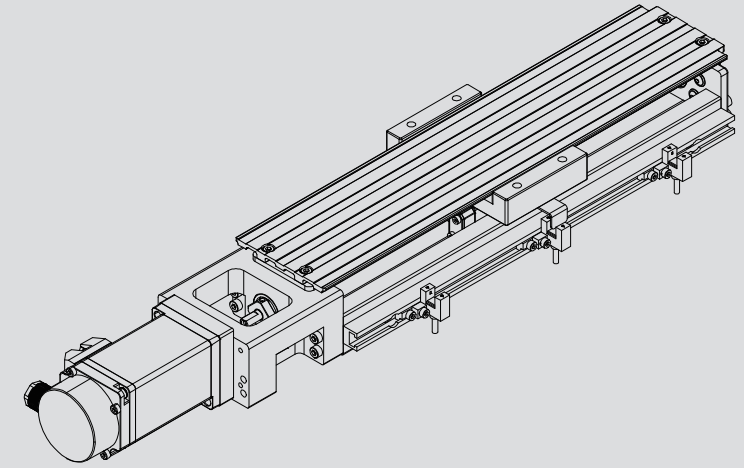
GK	A	3060	-	50	-	1	2	N	-	P5	-	C	P	VW	D
Material of mechanism		Dimension (Height x Width mm)	Travel stroke (mm)	Number of sliding blocks	Drive method	Precision grade	Screw lead	Protection Cover	Sensor rail set	Motor + Driver	Motor direction				
A Aluminum alloy S Carbon steel		30*60	50 100 150 200 300 400 500	1 Single sliding block 2 Dual sliding blocks	2 Ball screw	P Precision C5 ball screw N Standard C7 ball screw	P 5 1005 P10 1010	G SG Panasonic PM-F25 (excluding the sensor) P SP Panasonic PM-F25 (sensor*3) E SE Omron EE-SX671 (sensor*3) F SF Omron EE-SX671 (excluding the sensor) H SE Omron EE-SX674 (sensor*3) I SF Omron EE-SX674 (excluding the sensor) X N/A	[Package code] VW GMT DC Servo motor 100W+ DC Servo Driver (Package) QV GMT AC Servo motor 100W+ AC Servo Driver (Package) NA □42 Stepper motor + Driver (package) NX □42 Stepper motor + Adapter (package)	D Direct-coupled R Right-folded L Left-folded					
												[Adapter+ Coupling] Corresponding Specifications H10 Delta/Mitsubishi 100W M10 Panasonic 100W G42 □42 Stepper motor		For information about the accessories, please refer to Page P.43	

*When the motor is direct-coupled, the standard installation is on the right side. If the motor is folded, the installation is on the opposite side of the motor. For specific installation requirements, please contact the sales.

*The motor is prepared by customer

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU	•	•	•	16	•	—	—
NA	GTR22G-D (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

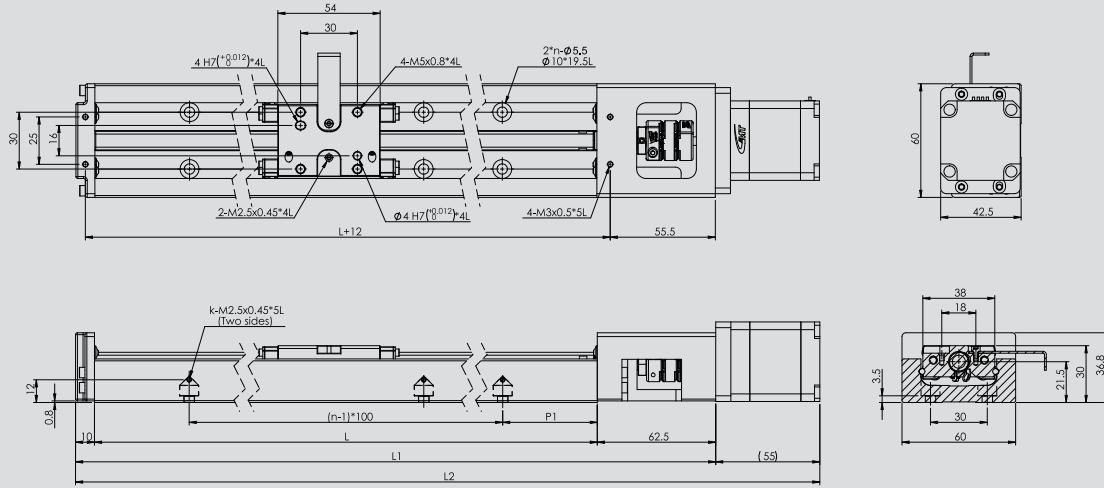


© GKA3060-150-12N-P5-CPVWD

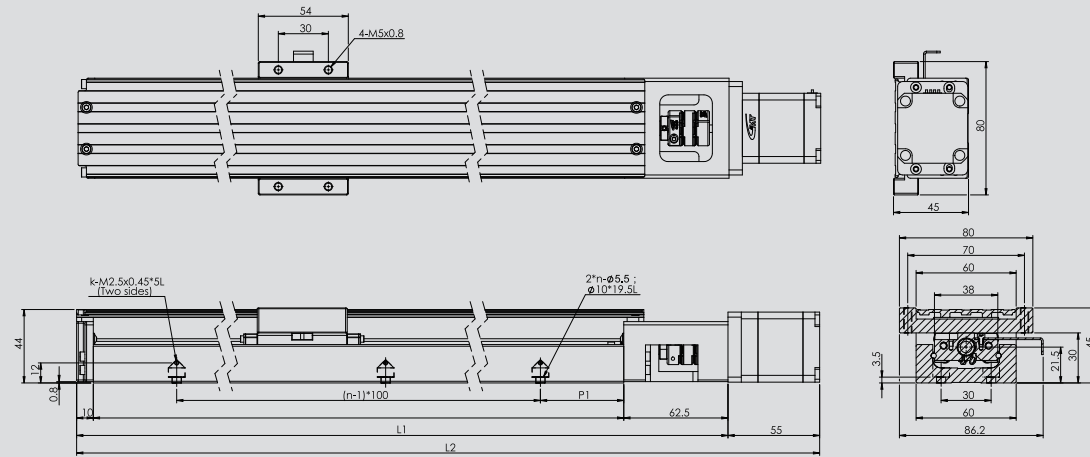
Model No.	GK□3060-N				GK□3060-P				
Mechanical spec.	Dimension (Height x Width) (mm)	30 x 60							
	Stroke (mm)	50/100/150/200/300	400/500	50/100/150/200/300	400/500	50/100/150/200/300	400/500	50/100/150/200/300	400/500
	Drive method	Ball screw Ø10							
	Lead (mm)	5		10		5		10	
	Rail	Recirculating linear ball guide							
Precision	Material of mechanism	A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)							
	Maximum speed (mm/s)	*1 Servo motor 250		500		250		500	
		*1 Stepper motor 100		200		100		200	
	Uni-directional positioning accuracy (mm)	-				0.02		0.04	
	Repeatability (mm)	±0.005				±0.003			
	*2 Running parallelism (mm)	0.025	0.035	0.025	0.035	0.01	0.015	0.01	0.015
DC Electrical spec.	Maximum torque (N-cm)	7				15			
	DC Servo motor	100W : GSV-M-D01MD4							
	DC Servo driver	100W : K-SERVO 【GSV-KM01MR-48DP】							
	Lateral connector of the actuator	Manufacturer:TE Connectivity Power cable:172159-1+170355-1(male)Encoder cable:172161-1+170365-1(male)							
AC Electrical spec.	Lateral connector of the transmission cable	Manufacturer:KST Power cable:E1510-RED(European terminal) Manufacturer:JST Encoder cable:PHDR-12VS+SPHD-001T-P0.5(female)							
	AC Servo motor	100W : GSV-M-A01LC4							
	AC Servo drive	100W : GSV-KE01MB21CP							
Step electrical spec.	Lateral connector of the actuator	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)							
Step electrical spec.	Open loop driver	GTR22G-D 【□42】							
	Closed loop driver	-							
	Lateral connector of the actuator	15-pin male D-SUB connector							
	Lateral connector of the transmission cable	15-pin female D-SUB connector							

*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
*2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK□3060 Direct-Coupled Open Loop Stepper Motor Without Protection Cover

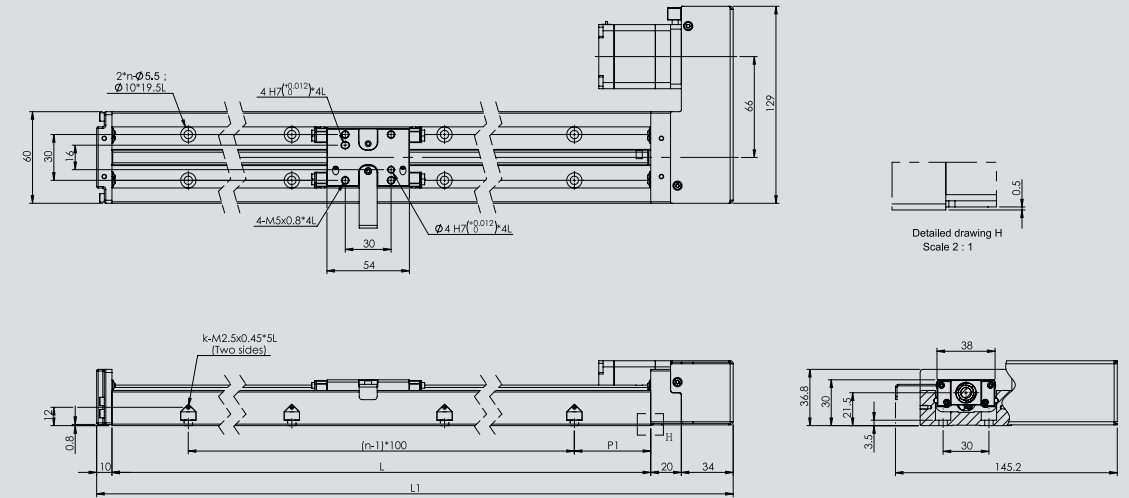


GK□3060 Direct-Coupled Open Loop Stepper Motor With Protection Cover

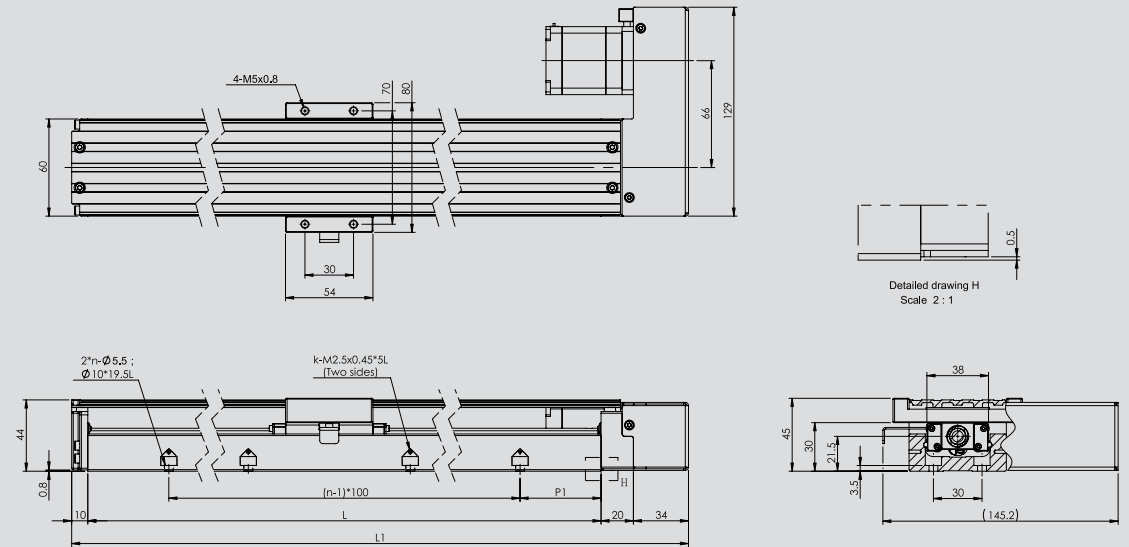


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK□3060	50	150	222.5	277.5	2	2	25
	100	200	272.5	327.5	2	2	50
	150	250	322.5	377.5	3	3	25
	200	300	372.5	427.5	3	3	50
	300	400	472.5	527.5	4	4	50
	400	500	572.5	627.5	5	5	50
	500	600	672.5	727.5	6	6	50

GK□3060 Folded Open Loop Stepper Motor Without Protection Cover

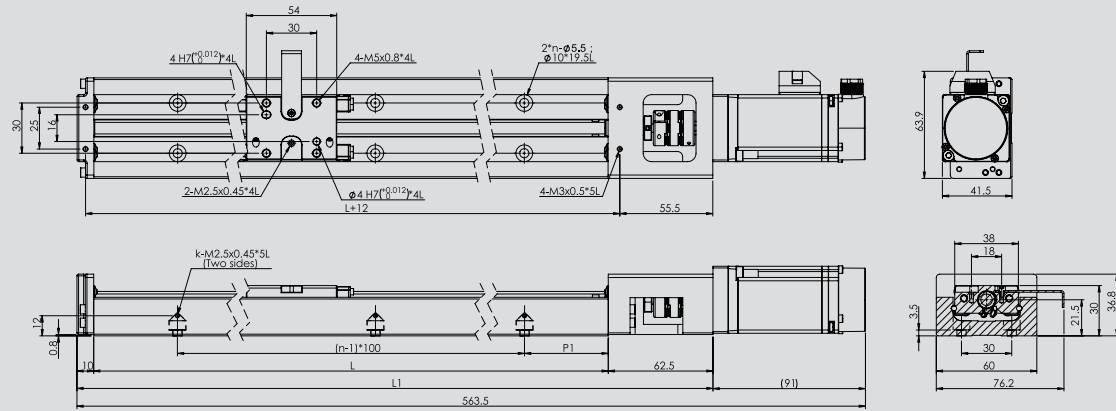


GK□3060 Folded Open Loop Stepper Motor With Protection Cover

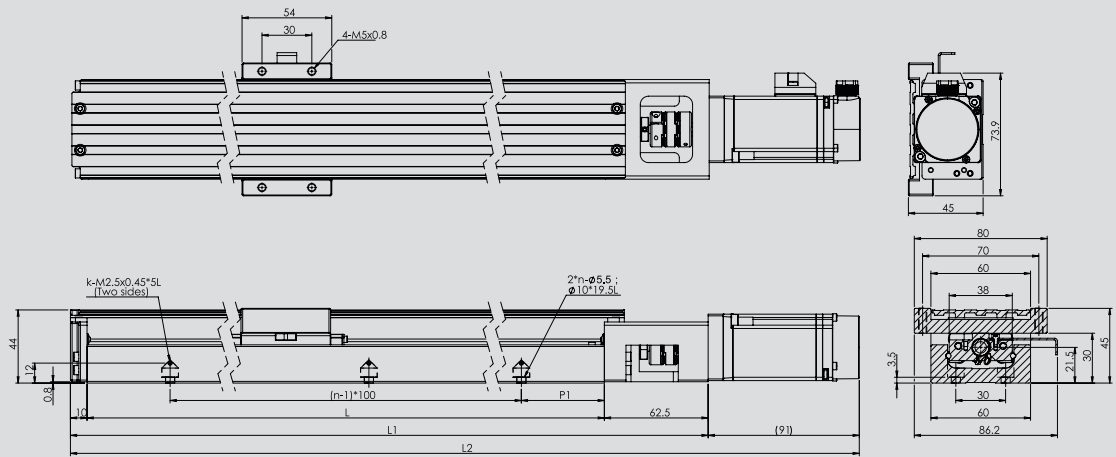


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK□3060	50	150	214	2	2	25
	100	200	264	2	2	50
	150	250	314	3	3	25
	200	300	364	3	3	50
	300	400	464	4	4	50
	400	500	564	5	5	50
	500	600	664	6	6	50

GK□3060 Direct-Coupled DC Servo Motor Without Protection Cover

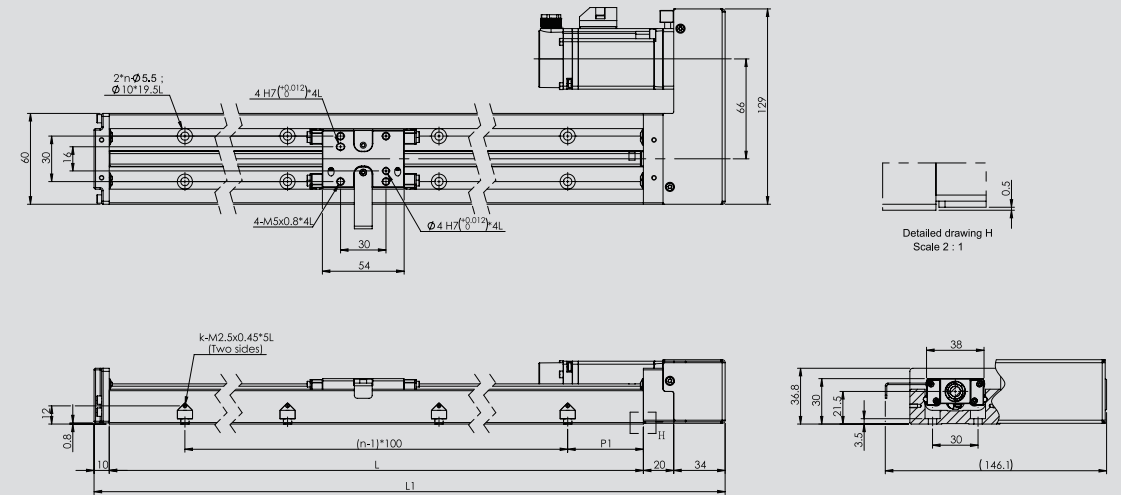


GK□3060 Direct-Coupled DC Servo Motor With Protection Cover

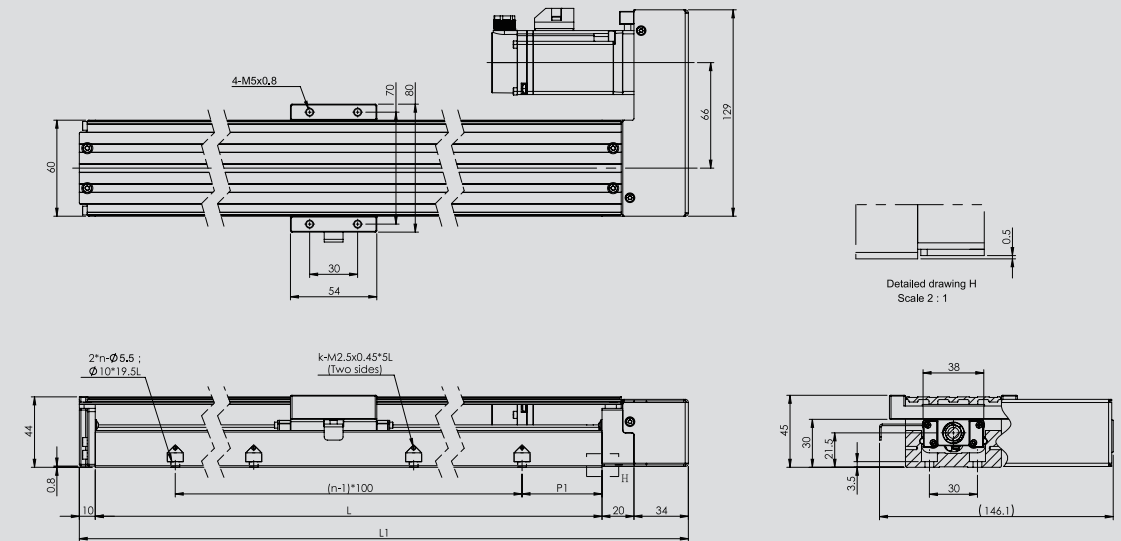


Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	Overall total length L2 (mm)	n	k	P1
GK□3060	50	150	222.5	313.5	2	2	25
	100	200	272.5	363.5	2	2	50
	150	250	322.5	413.5	3	3	25
	200	300	372.5	463.5	3	3	50
	300	400	472.5	563.5	4	4	50
	400	500	572.5	663.5	5	5	50
	500	600	672.5	763.5	6	6	50

GK□3060 Folded DC Servo Motor Without Protection Cover

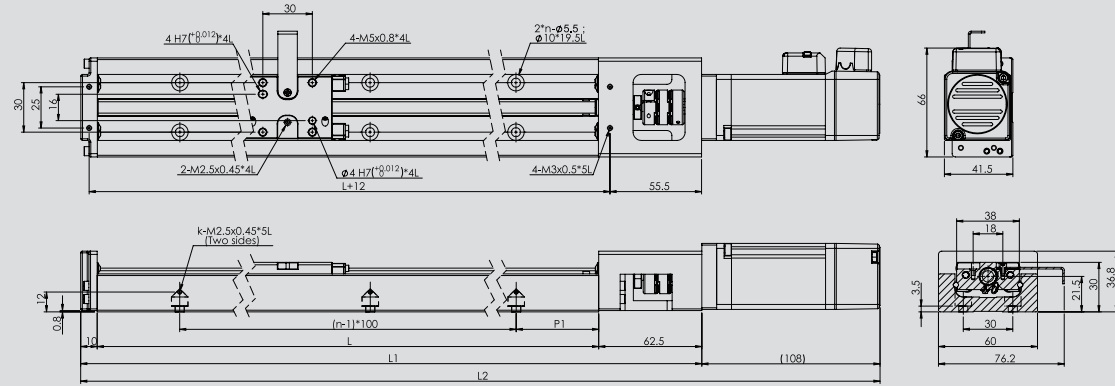


GK□3060 Folded DC Servo Motor With Protection Cover

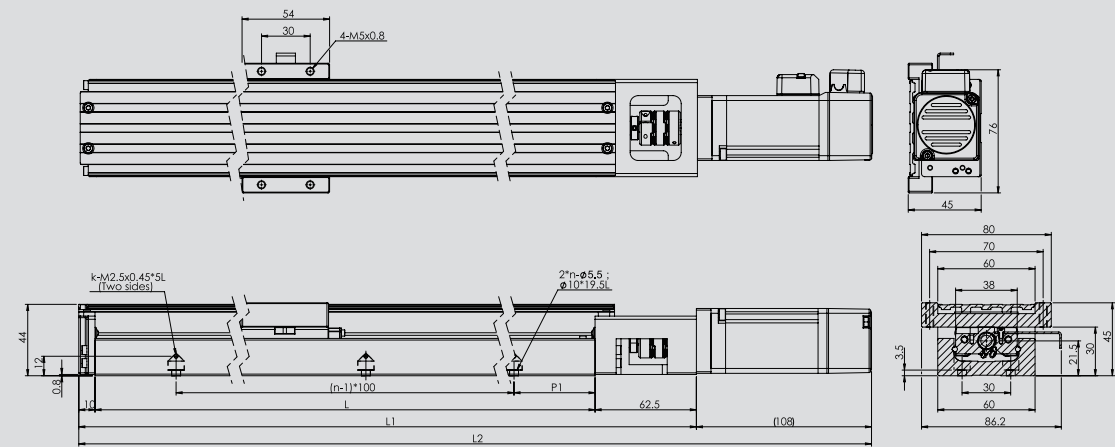


Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	k	n	P1
GK□3060	50	150	214	2	2	25
	100	200	264	2	2	50
	150	250	314	3	3	25
	200	300	364	3	3	50
	300	400	464	4	4	50
	400	500	564	5	5	50
	500	600	664	6	6	50

GK□3060 Direct-Coupled AC Servo Motor Without Protection Cover

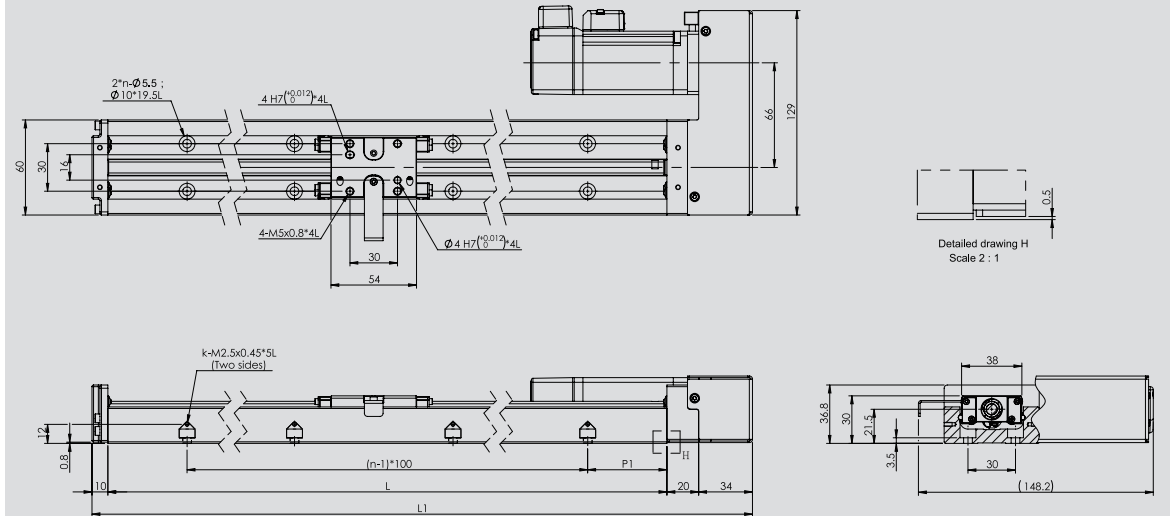


GK□3060 Direct-Coupled AC Servo Motor With Protection Cover

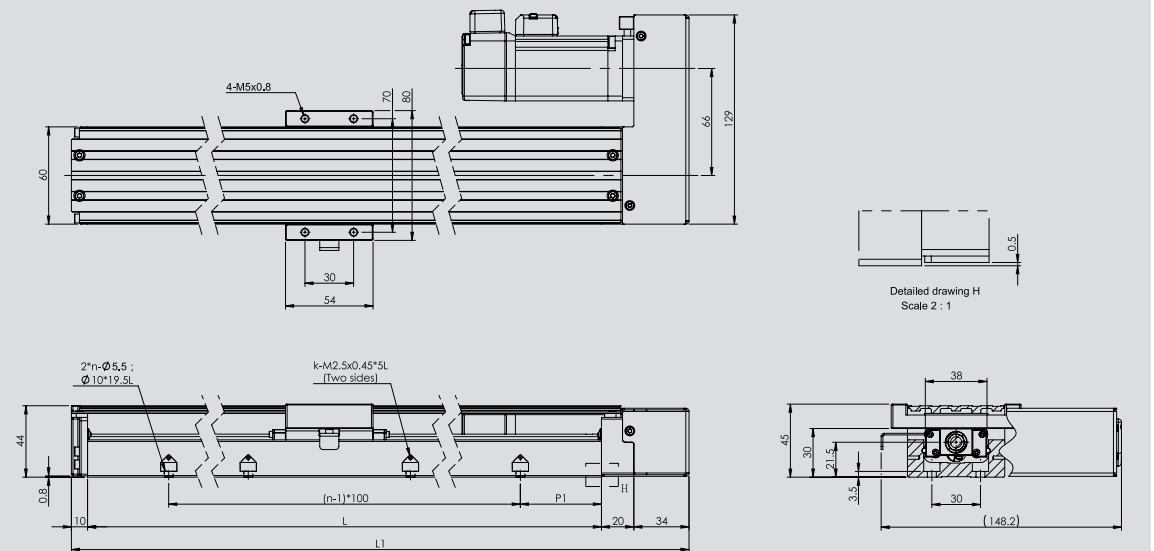


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK□3060	50	150	222.5	330.5	2	2	25
	100	200	272.5	380.5	2	2	50
	150	250	322.5	430.5	3	3	25
	200	300	372.5	480.5	3	3	50
	300	400	472.5	580.5	4	4	50
	400	500	572.5	680.5	5	5	50
	500	600	672.5	780.5	6	6	50

GK□3060 Folded AC Servo Motor Without Protection Cover

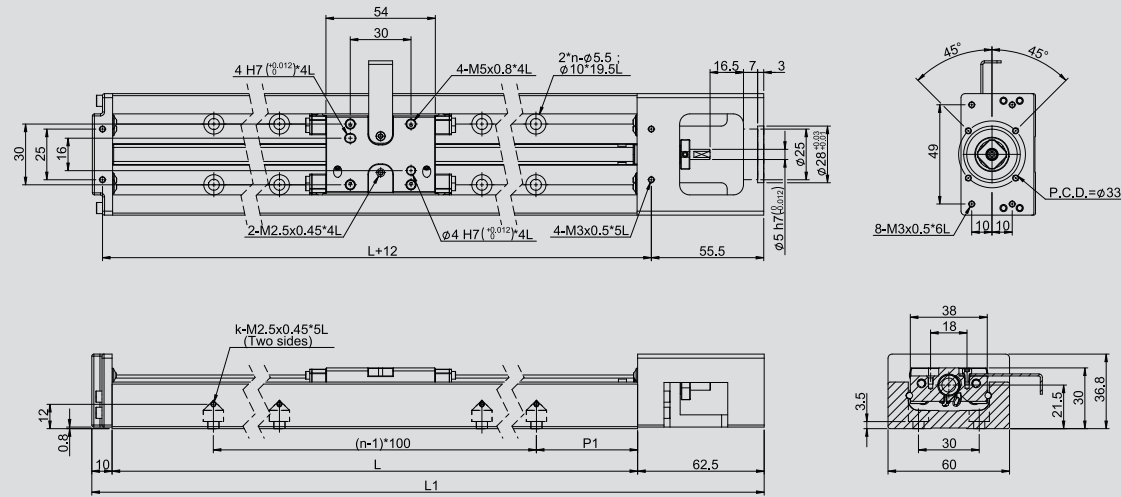


GK□3060 Folded AC Servo Motor With Protection Cover

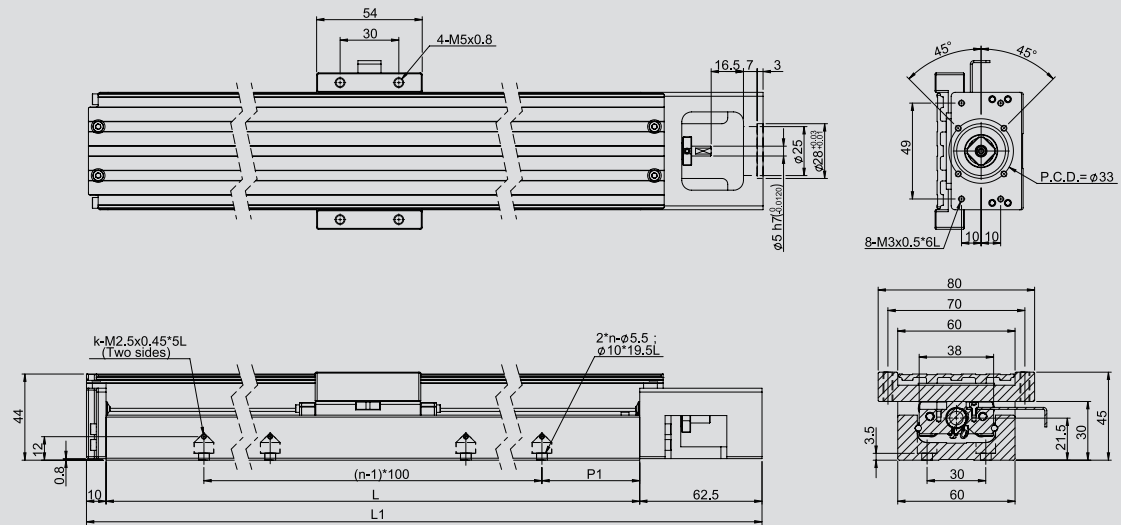


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK□3060	50	150	214	2	2	25
	100	200	264	2	2	50
	150	250	314	3	3	25
	200	300	364	3	3	50
	300	400	464	4	4	50
	400	500	564	5	5	50
	500	600	664	6	6	50

GK□3060 No Direct-Coupling Configured Without Protection Cover



GK□3060 No Direct-Coupling Configured With Protection Cover

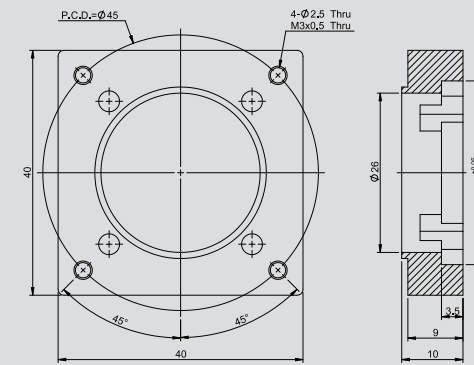


Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	k	n	P1
GK□3060	50	150	222.5	2	2	25
	100	200	272.5	2	2	
	150	250	322.5	3	3	
	200	300	372.5	3	3	50
	300	400	472.5	4	4	
	400	500	572.5	5	5	
	500	600	672.5	6	6	

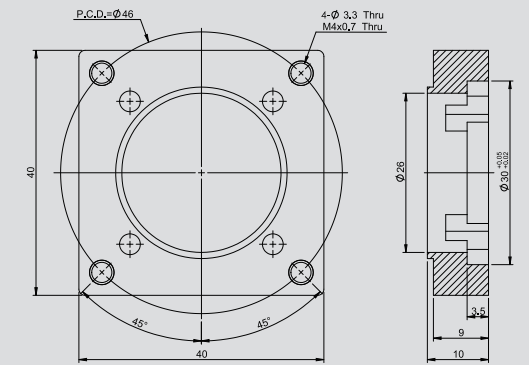
GK□3060 Motor Adapter

Servo Motor

GK-M10 (Panasonic 50, 100W Servo motor)



GK-H10 (GMT 100W / Delta, Mitsubishi 50, 100W Servo motor)

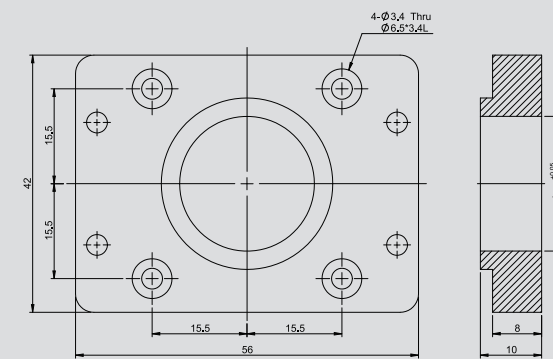


* Applicable coupling FACCL21-5*8

* Applicable coupling FACCL21-5*8

Stepper Motor

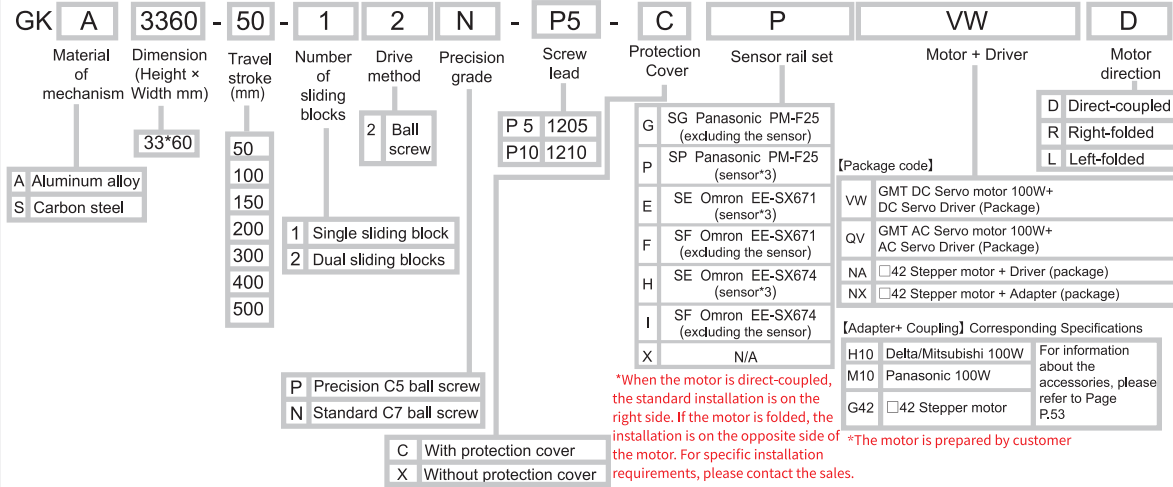
GK-G42 (GMT 42mm Stepper motor)



* Applicable coupling FACCL21-5*5

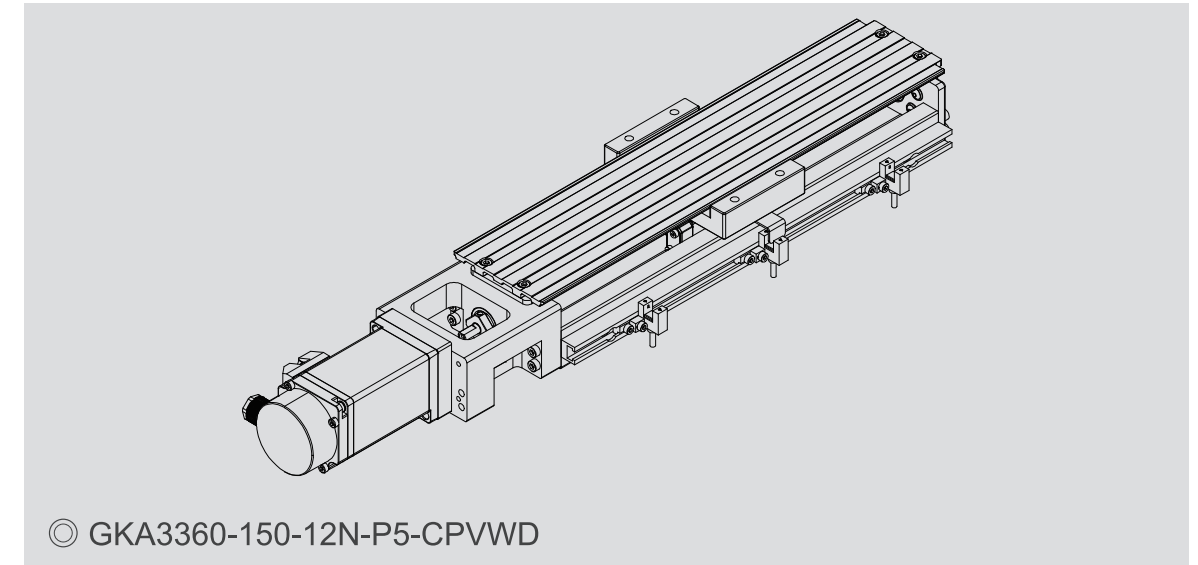
Description

GK□ 3360 series



Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU	•	•	•	16	•	—	—
NA	GTR22G-D (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

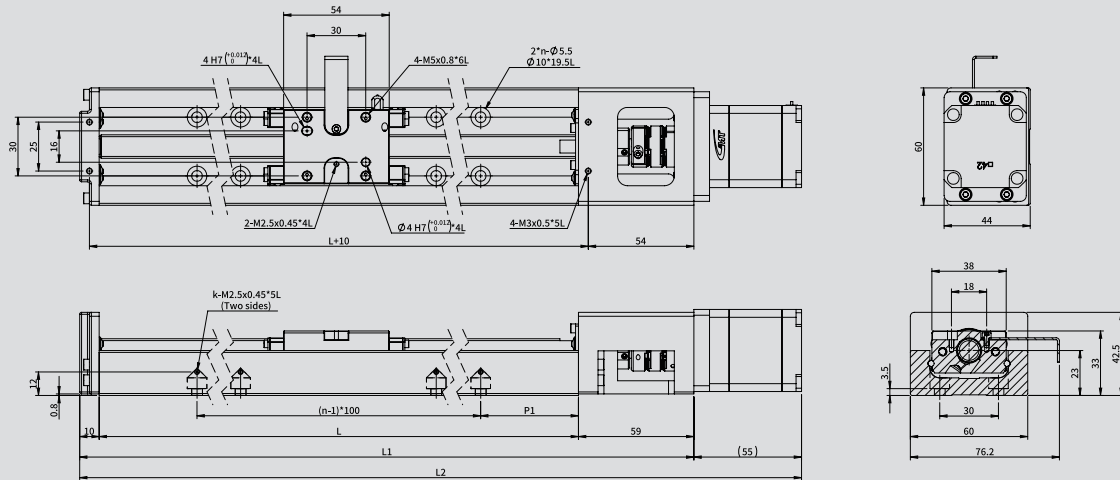


© GKA3360-150-12N-P5-CPVWD

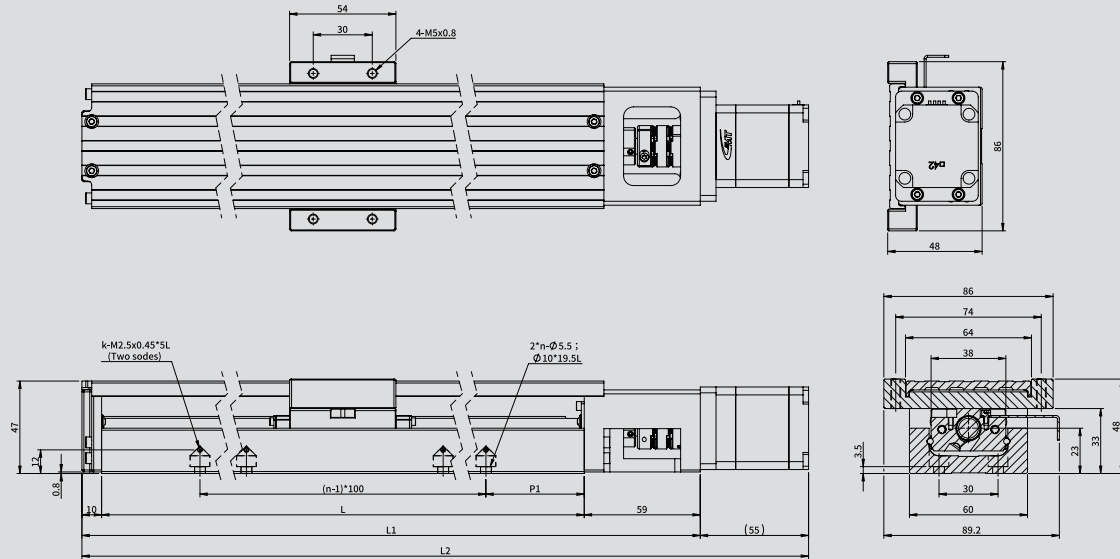
Model No.		GK□3360-N				GK□3360-P							
Mechanical spec.	Dimension (Height x Width) (mm)	33 x 60											
	Stroke (mm)	50/100/150/200/300	400/500	50/100/150/200/300	400/500	50/100/150/200/300	400/500	50/100/150/200/300	400/500				
	Drive method	Ball screw Ø12											
	Lead (mm)	5		10		5		10					
	Rail	Recirculating linear ball guide											
Material of mechanism		A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)											
Precision ⁺²	Maximum speed ^{*1} (mm/s)	Servo motor		250		500		250		500			
		Stepper motor		100		200		100		200			
	Uni-directional positioning accuracy (mm)	-				0.02		0.04		0.02		0.04	
	Repeatability (mm)	±0.005				±0.003							
	Running parallelism (mm)	0.025	0.035	0.025	0.035	0.01	0.015	0.01	0.015				
Maximum torque (N·cm)		7				15							
DC Electrical spec.	DC Servo motor	100W : GSV-M-D01MD4											
	DC Servo driver	100W : K-SERVO 【GSV-KM01MR-48DP】											
	Lateral connector of the actuator	Manufacturer : TE Connectivity Power cable : 172159-1+170355-1(male) Encoder cable : 172161-1+170365-1(male)											
AC Electrical spec.	Lateral connector of the transmission cable	Manufacturer :KST Power cable : E1510-RED(European terminal) Manufacturer :JST Encoder cable : PHDR-12VS+SPHD-001T-P0.5(female)											
	AC Servo motor	100W : GSV-M-A01LC4											
	AC Servo driver	100W : GSV-KE01MB21CP											
Step electrical spec.	Lateral connector of the actuator	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)											
	Open loop driver	GTR22G-D 【□42】											
Step electrical spec.	Closed loop driver	-											
	Lateral connector of the actuator	15-pin male D-SUB connector											
	Lateral connector of the transmission cable	15-pin female D-SUB connector											

*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
*2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK□3360 Direct-Coupled Open Loop Stepper Motor Without Protection Cover

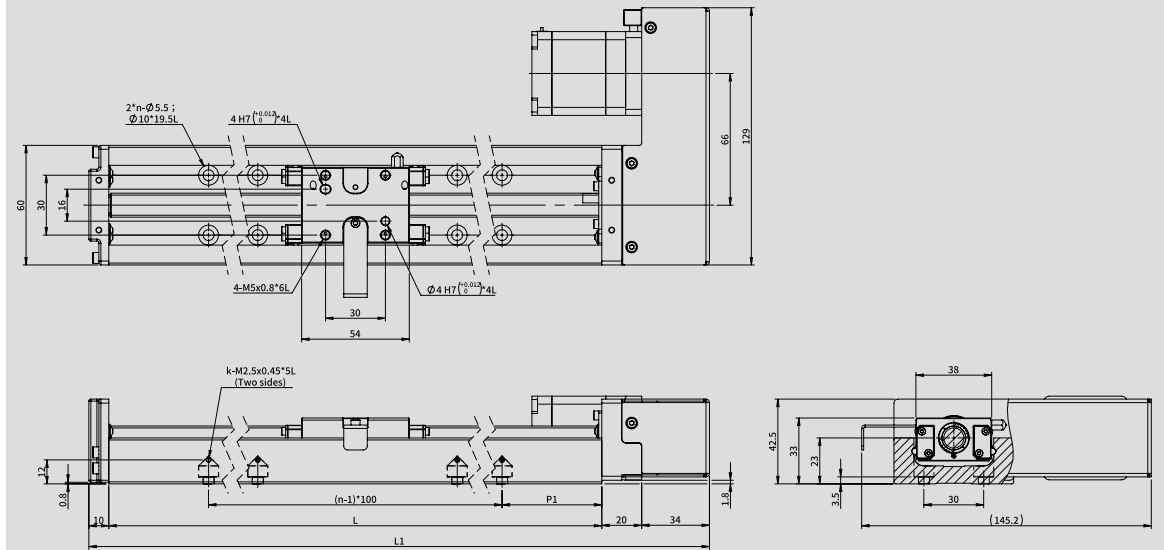


GK□3360 Direct-Coupled Open Loop Stepper Motor With Protection Cover

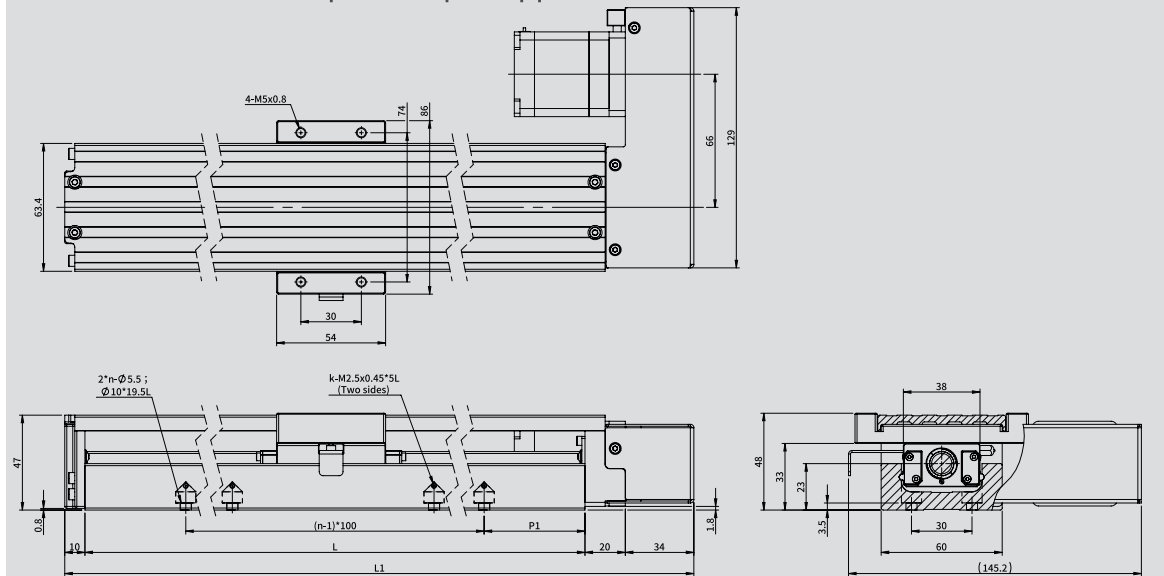


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK□3360	50	150	219	274	2	2	25
	100	200	269	324	2	2	50
	150	250	319	374	3	3	25
	200	300	369	424	3	3	50
	300	400	469	524	4	4	50
	400	500	569	624	5	5	50
	500	600	669	724	6	6	50

GK□3360 Folded Open Loop Stepper Motor Without Protection Cover

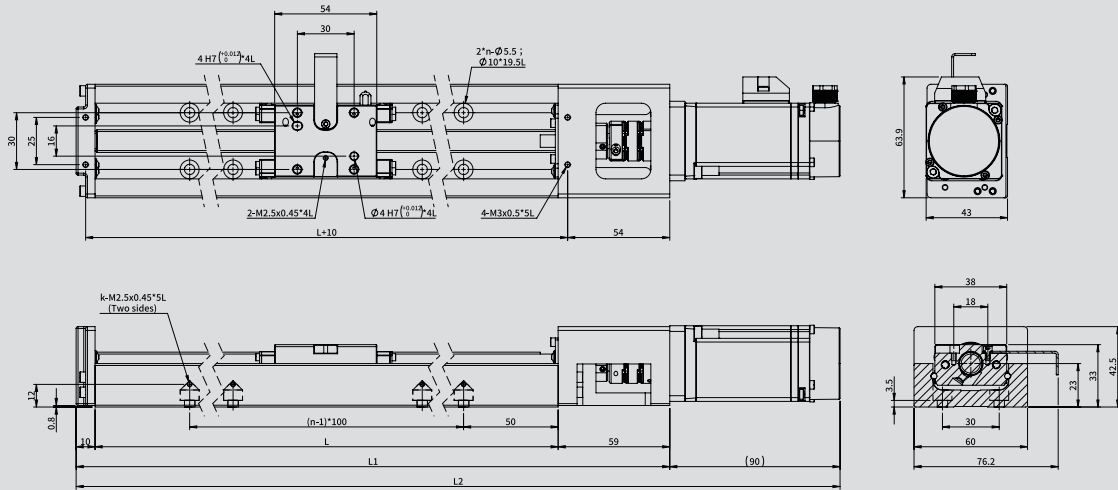


GK□3360 Folded Open Loop Stepper Motor With Protection Cover

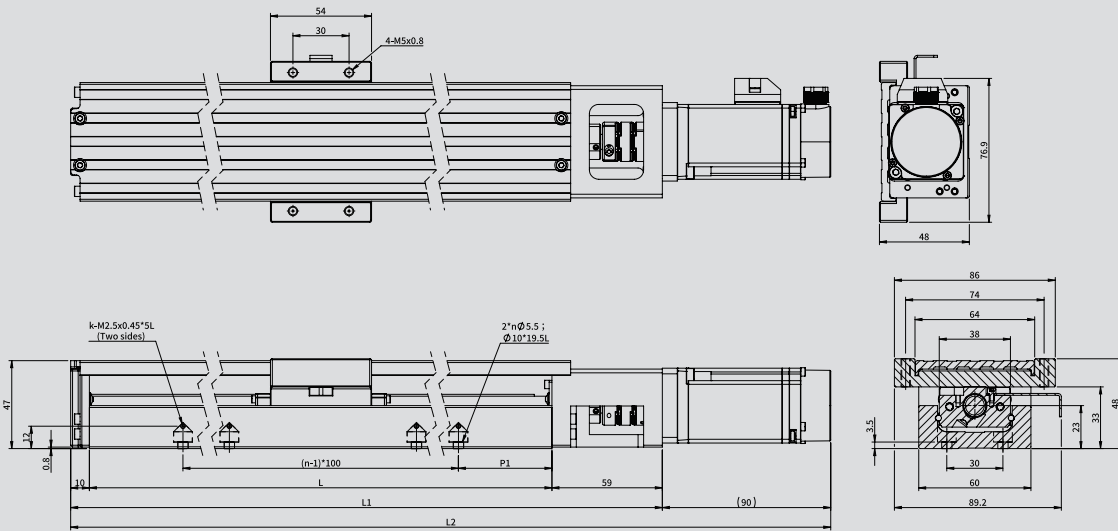


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK□3360	50	150	214	2	2	25
	100	200	264	2	2	50
	150	250	314	3	3	25
	200	300	364	3	3	50
	300	400	464	4	4	50
	400	500	564	5	5	50
	500	600	664	6	6	50

GK□3360 Direct-Coupled DC Servo Motor Without Protection Cover

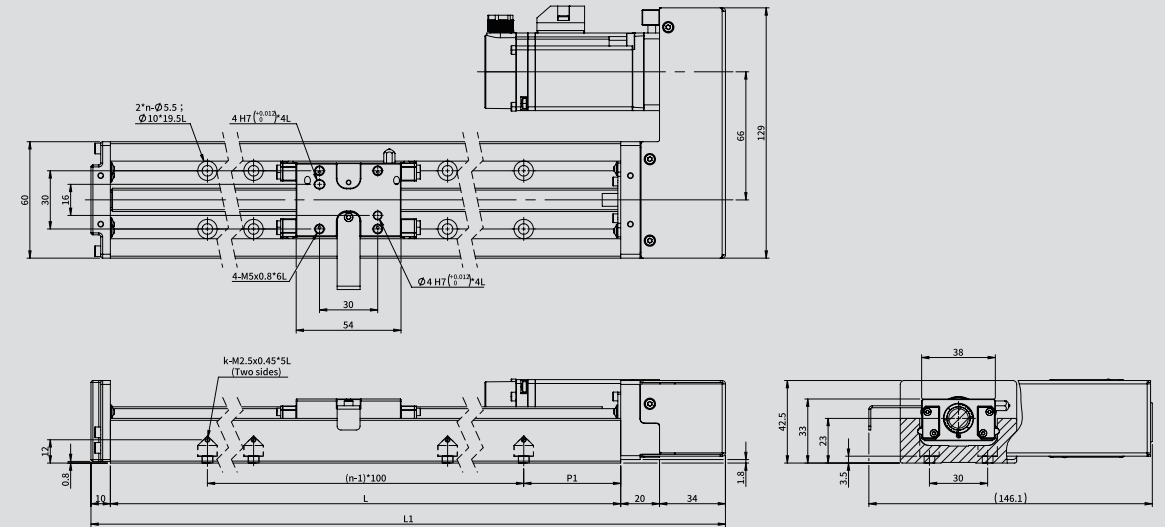


GK□3360 Direct-Coupled DC Servo Motor With Protection Cover

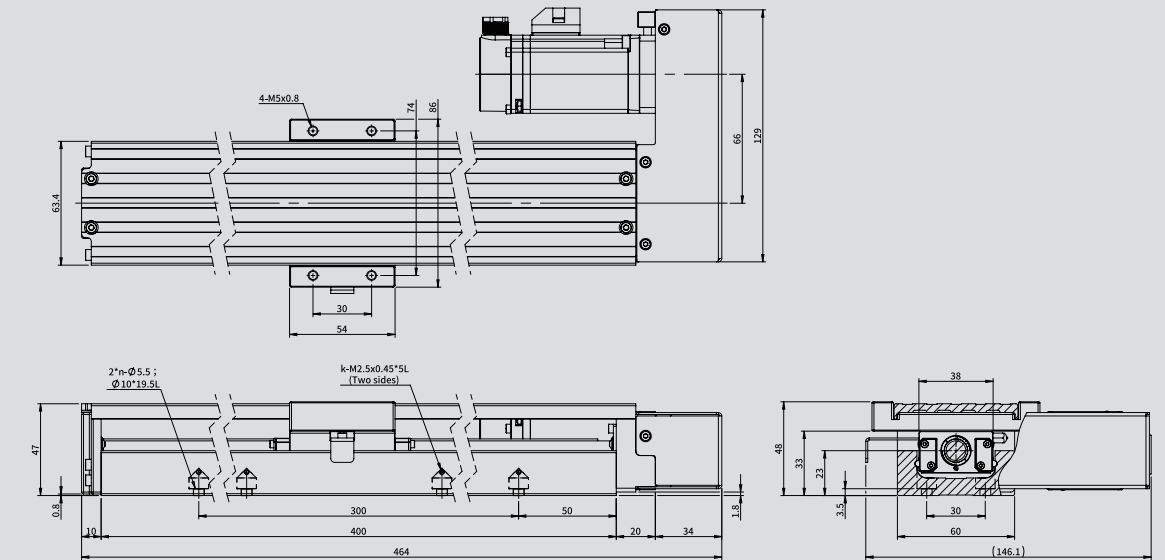


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK□3360	50	150	219	309	2	2	25
	100	200	269	359	2	2	50
	150	250	319	409	3	3	25
	200	300	369	459	3	3	50
	300	400	469	559	4	4	50
	400	500	569	659	5	5	50
	500	600	669	759	6	6	50

GK□3360 Folded DC Servo Motor Without Protection Cover



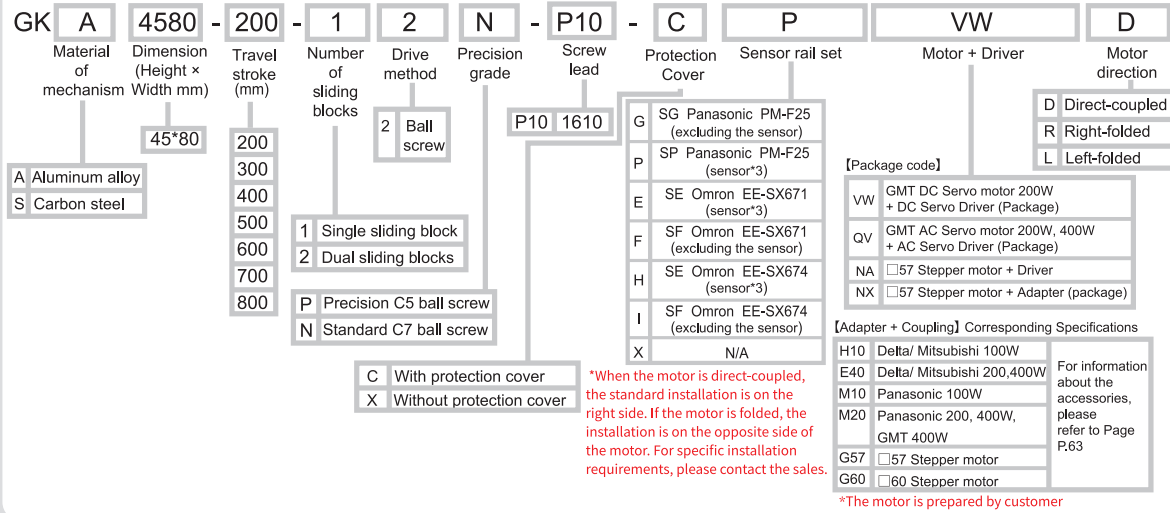
GK□3360 Folded DC Servo Motor With Protection Cover



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK□3360	50	150	214	2	2	25
	100	200	264	2	2	50
	150	250	314	3	3	25
	200	300	364	3	3	50
	300	400	464	4	4	50
	400	500	564	5	5	50
	500	600	664	6	6	50

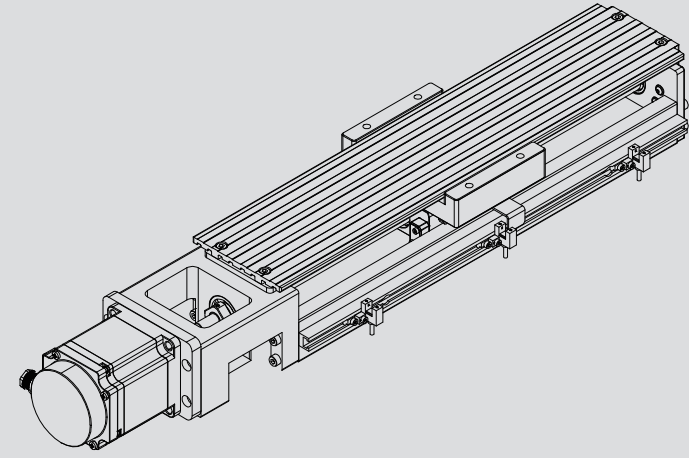
Description

GK 4580 series



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	
					Pulse	I/O	Communication	Location	Speed		Torque	Optical encoder		Magnetic encoder
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU	•	•	•	16	•	—	—
NA	CVD228B-K (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

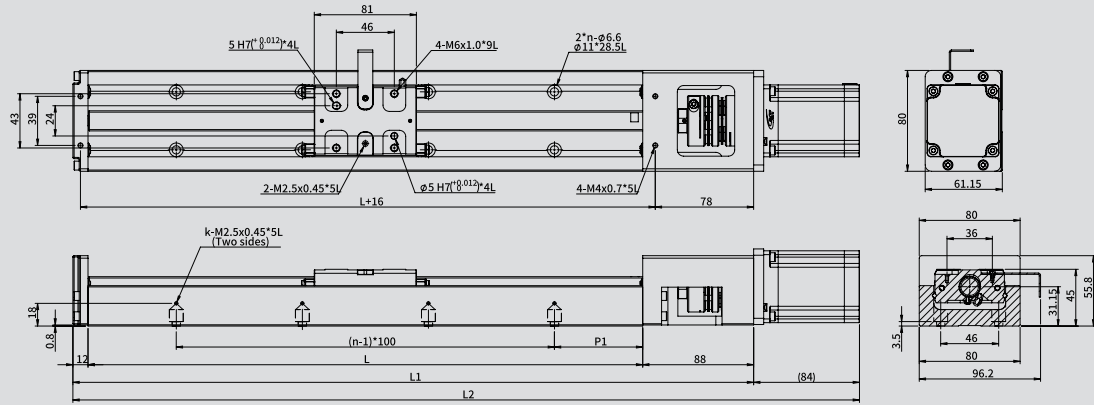


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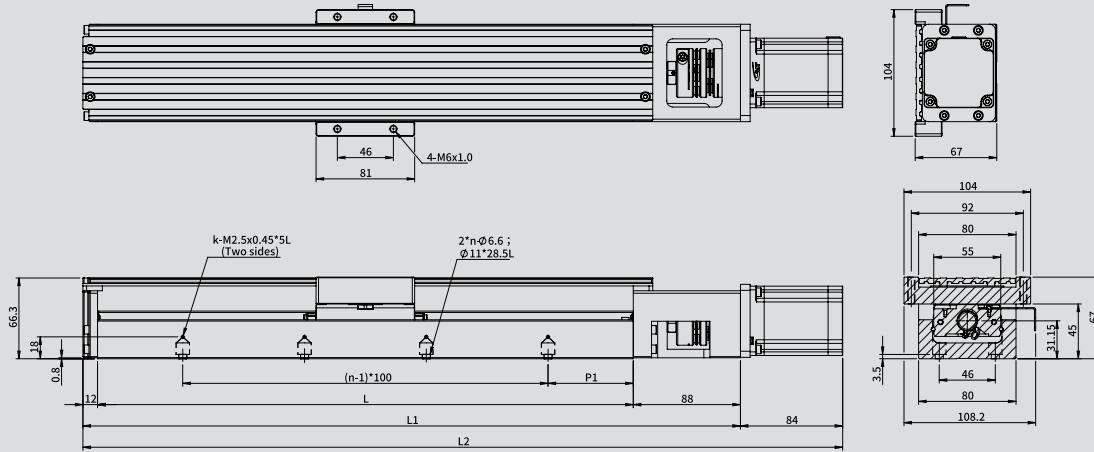
Model No.		GK 4580-N				GK 4580-P					
Mechanical spec.	Dimension (Height × Width) (mm)	45 × 80									
	Stroke (mm)	200~500	600	700~800	200~300	400	500	600	700~800		
	Drive method	Ball screw Ø16									
	Lead (mm)	10									
	Rail	Recirculating linear ball guide									
Material of mechanism		A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)									
Precision	Maximum speed*1 (mm/s)	500									
	Uni-directional positioning accuracy (mm)	-				0.02		0.04		0.08	
	Repeatability (mm)	±0.005				±0.003					
	Running parallelism (mm)	0.035	0.04	0.05	0.015		0.02		0.04		
	Maximum torque (N·cm)	10				12		15		-	
DC Electrical spec.	DC Servo motor	200W : GSV-M-D02MD4									
	DC Servo driver	200W : K-SERVO 【GSV-KM02MR-48DP】									
	Lateral connector of the actuator	Manufacturer : TE Connectivity Power cable : 172159-1+170355-1(male) Encoder cable : 172161-1+170365-1(male)									
	Lateral connector of the transmission cable	Manufacturer :KST Power cable : E1510-RED (European terminal) Manufacturer :JST Encoder cable : PHDR-12VS+SPHD-001T-P0.5(female)									
AC Electrical spec.	AC Servo motor	200W : GSV-M-A02LC4									
	AC Servo driver	200W : GSV-KE02MB21CP									
	Lateral connector of the actuator	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)									
Step electrical spec.	Open loop driver	CVD228B-K 【□57】									
	Lateral connector of the actuator	15-pin male D-SUB connector									
	Lateral connector of the transmission cable	15-pin female D-SUB connector									

*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
*2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK4580 Direct-Coupled Open Loop Stepper Motor Without Protection Cover

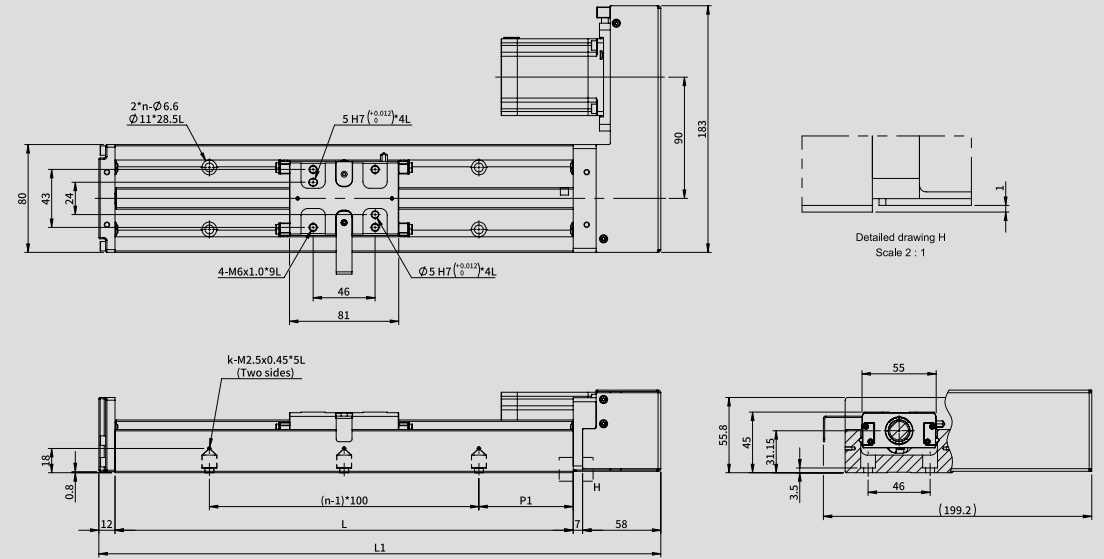


GK4580 Direct-Coupled Open Loop Stepper Motor With Protection Cover

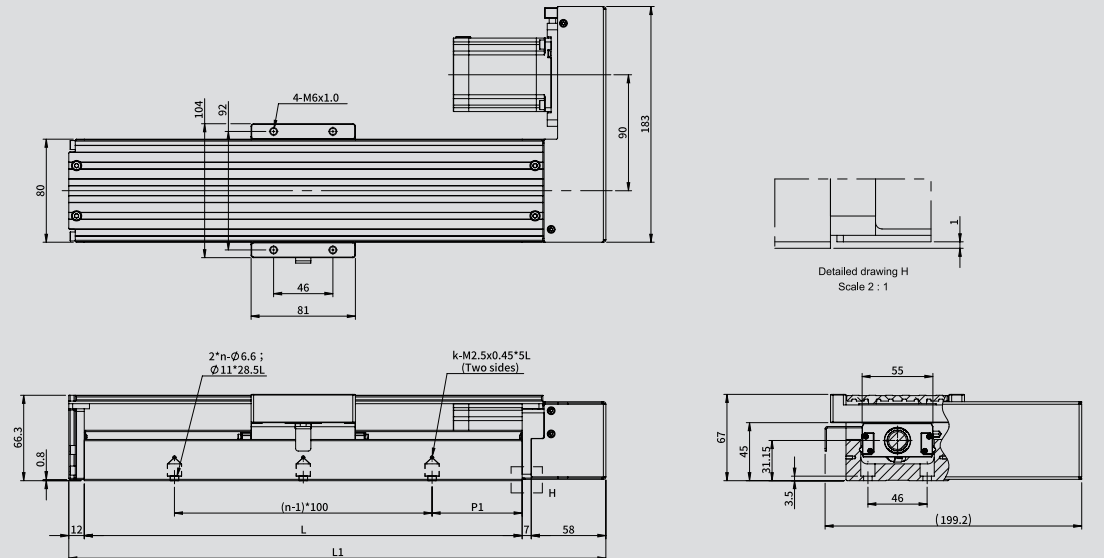


Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	Overall total length L2 (mm)	n	k	P1
GK4580	200	340	440	524	3	3	70
	300	440	540	624	4	4	
	400	540	640	724	5	5	
	500	640	740	824	6	6	
	600	740	840	924	7	7	
	700	840	940	1024	8	8	
	800	940	1040	1124	9	9	

GK4580 Folded Open Loop Stepper Motor Without Protection Cover

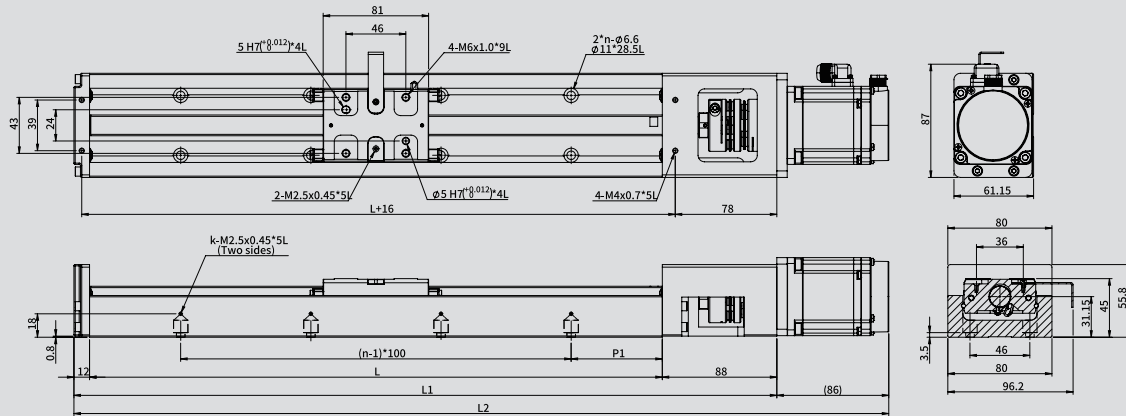


GK4580 Folded Open Loop Stepper Motor With Protection Cover

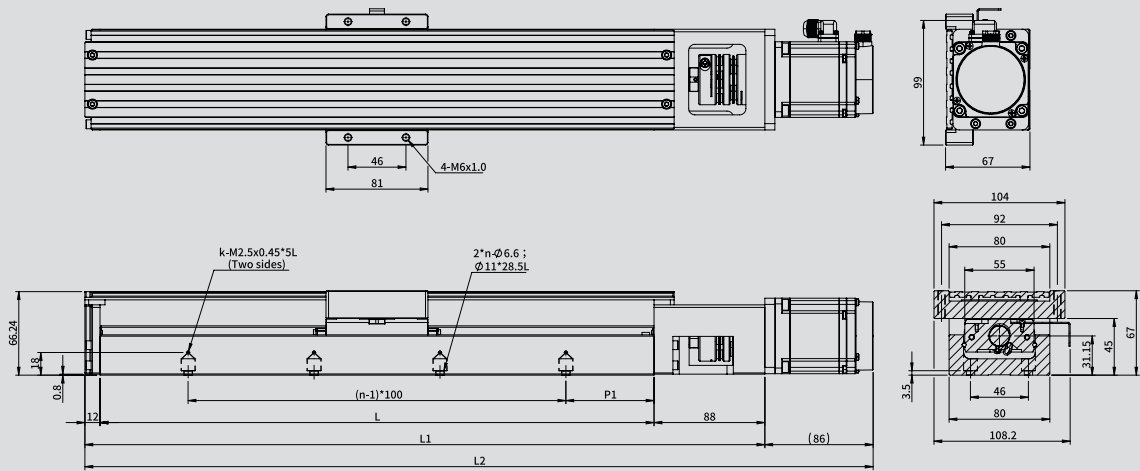


Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	k	n	P1
GK4580	200	340	417	3	3	70
	300	440	517	4	4	
	400	540	617	5	5	
	500	640	717	6	6	
	600	740	817	7	7	
	700	840	917	8	8	
	800	940	1017	9	9	

GK4580 Direct-Coupled DC Servo Motor Without Protection Cover

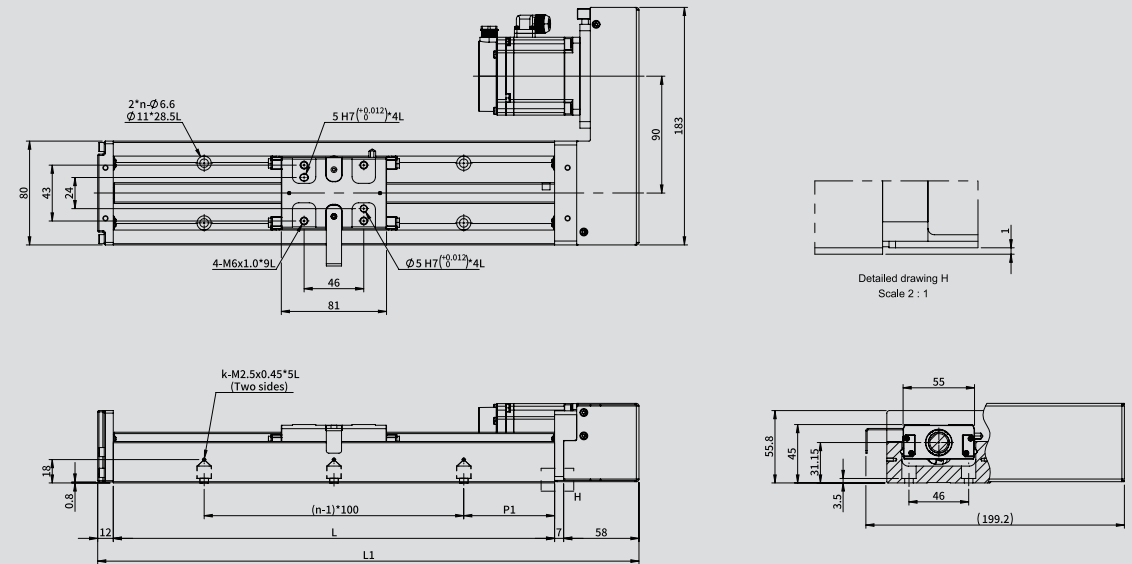


GK4580 Direct-Coupled DC Servo Motor With Protection Cover

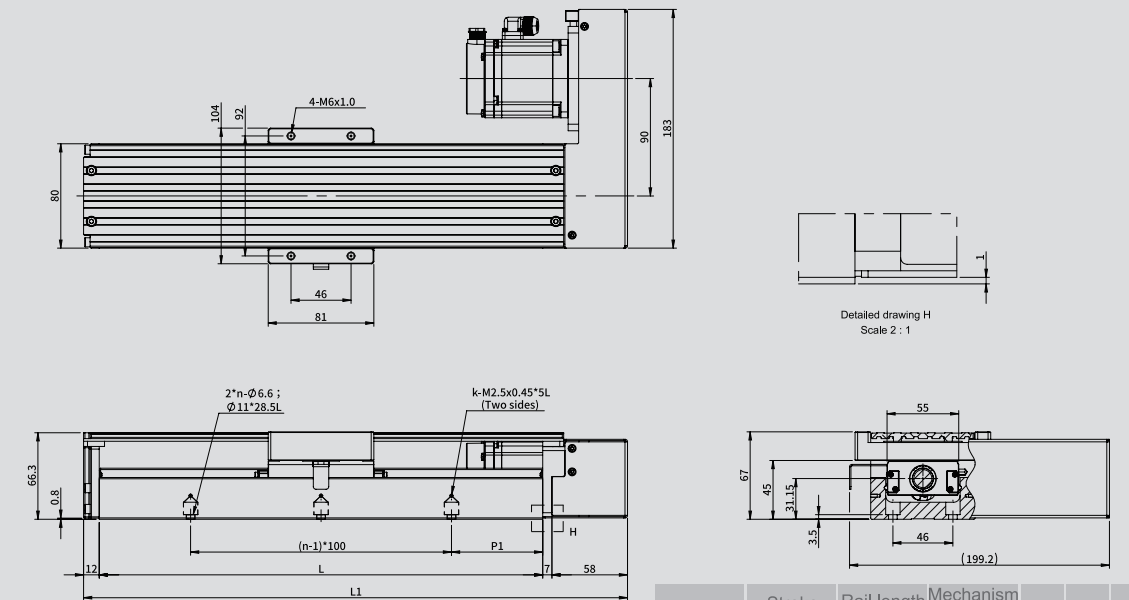


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK4580	200	340	440	526	3	3	70
	300	440	540	626	4	4	
	400	540	640	726	5	5	
	500	640	740	826	6	6	
	600	740	840	926	7	7	
	700	840	940	1026	8	8	
	800	940	1040	1126	9	9	

GK4580 Folded DC Servo Motor Without Protection Cover

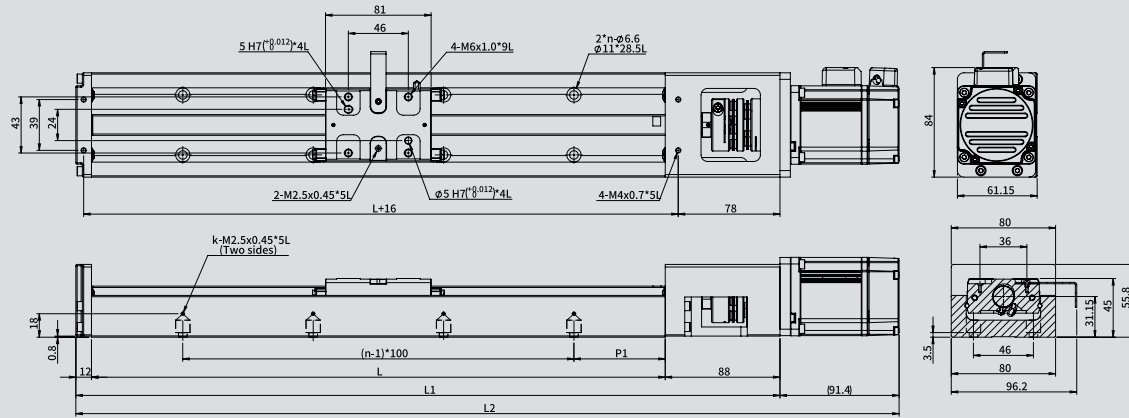


GK4580 Folded DC Servo Motor With Protection Cover

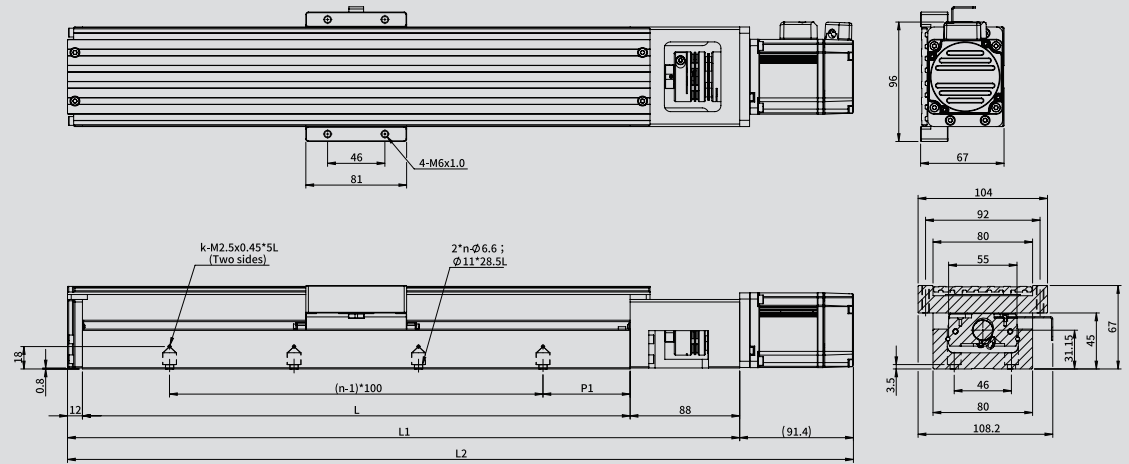


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK4580	200	340	417	3	3	70
	300	440	517	4	4	
	400	540	617	5	5	
	500	640	717	6	6	
	600	740	817	7	7	
	700	840	917	8	8	
	800	940	1017	9	9	

GK4580 Direct-Coupled AC Servo Motor Without Protection Cover

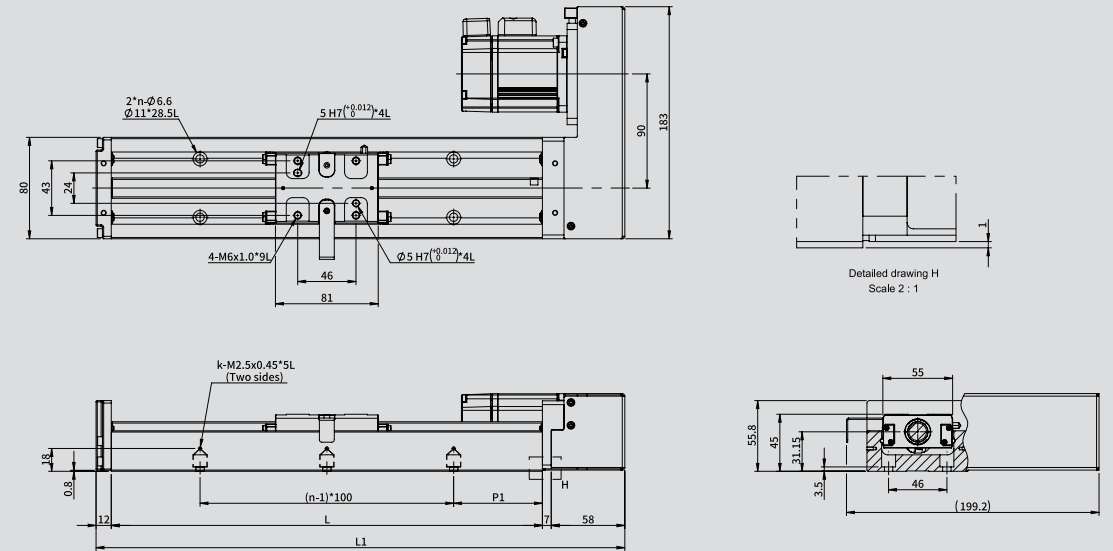


GK4580 Direct-Coupled AC Servo Motor With Protection Cover

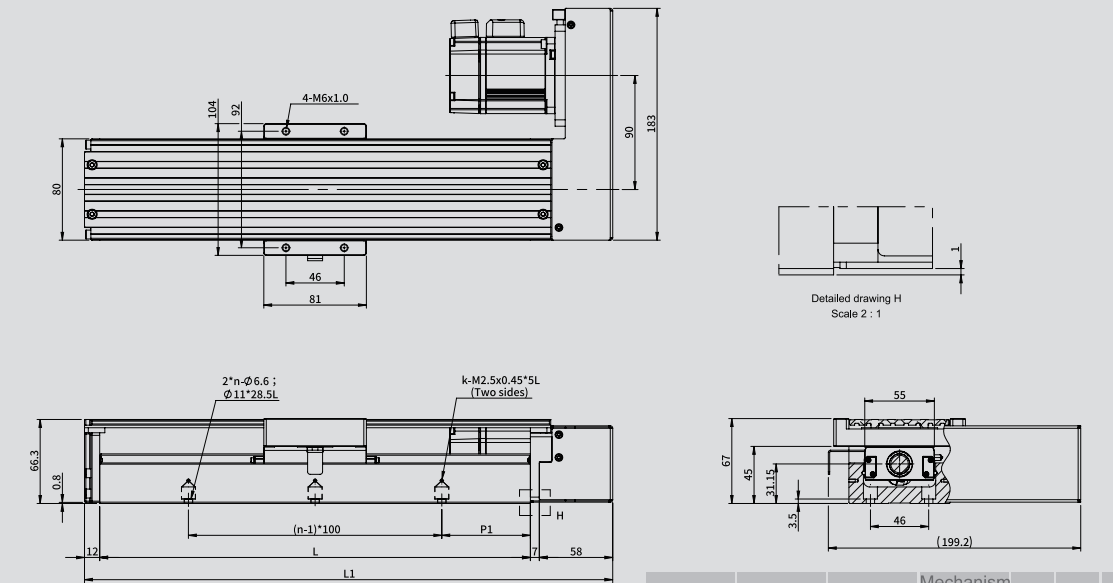


Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	Overall total length L2 (mm)	n	k	P1
GK4580	200	440	417	531.4	3	3	70
	300	540	517	631.4	4	4	
	400	640	617	731.4	5	5	
	500	740	717	831.4	6	6	
	600	840	817	931.4	7	7	
	700	940	917	1031.4	8	8	
	800	1040	1017	1131.4	9	9	

GK4580 Folded DC Servo Motor Without Protection Cover



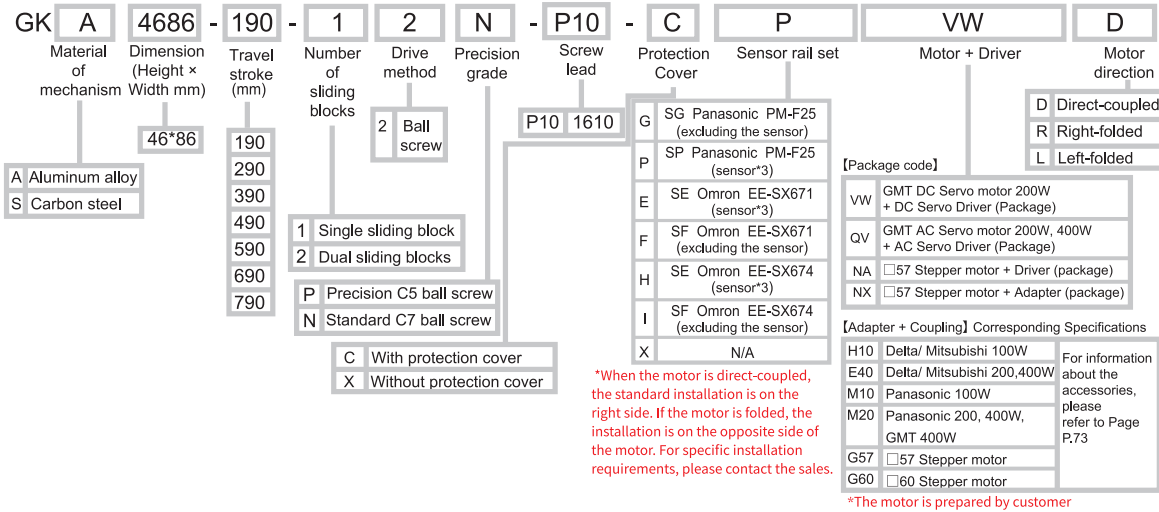
GK4580 Folded DC Servo Motor With Protection Cover



Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	k	n	P1
GK4580	200	340	417	3	3	70
	300	440	517	4	4	
	400	540	617	5	5	
	500	640	717	6	6	
	600	740	817	7	7	
	700	840	917	8	8	
	800	940	1017	9	9	

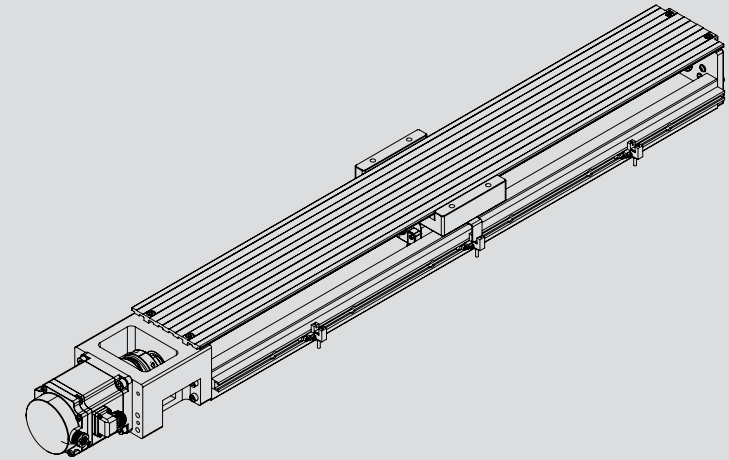
Description

GK 4686 series



Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU	•	•	•	16	•	—	—
NA	CVD228B-K (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

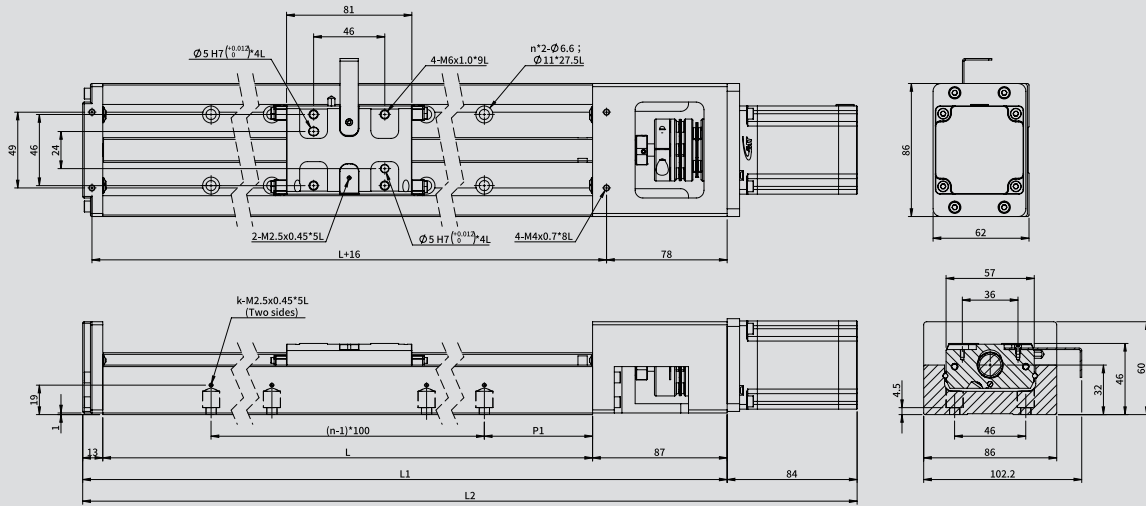


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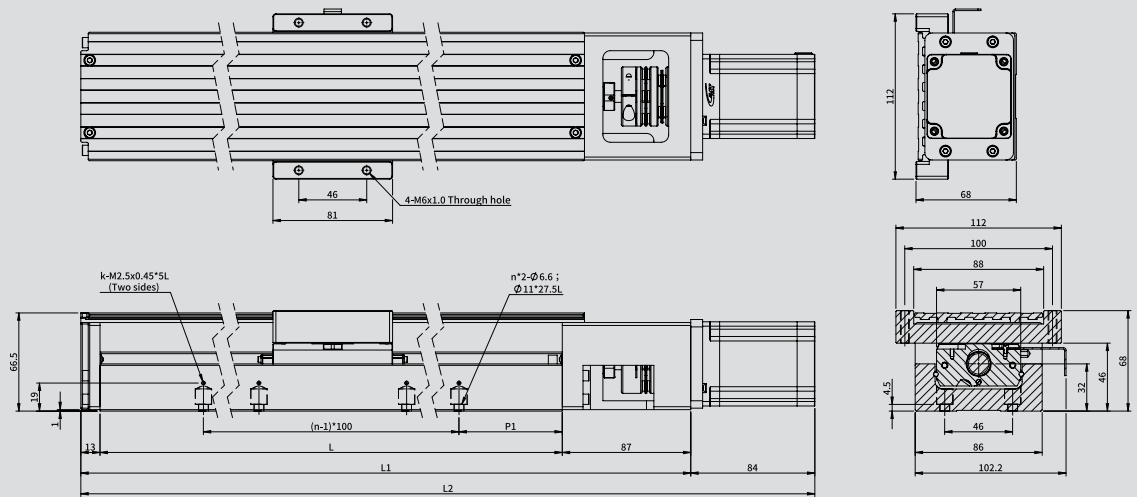
Model No.		GK 4686-N				GK 4686-P			
Mechanical spec.	Dimension (Height x Width) (mm)	46 x 86							
	Stroke (mm)	190~490	590	690~790	190~290	390	490	590	690~790
	Drive method	Ball screw Ø16							
	Lead (mm)	10							
	Rail	Recirculating linear ball guide							
	Material of mechanism	A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)							
Precision *2	Maximum speed (mm/s) *1 Servo motor Stepper motor	500 200							
	Uni-directional positioning accuracy (mm)	-			0.02	0.04		0.08	
	Repeatability (mm)	±0.005				±0.003			
	Running parallelism (mm)	0.035	0.04	0.05	0.015		0.02	0.04	
	Maximum torque (N·cm)	10			12		15		-
DC Electrical spec.	DC Servo motor	200W : G SVM-D02MD4							
	DC Servo driver	200W : K-SERVO 【GSV-KM02MR-48DP】							
	Lateral connector of the actuator	Manufacturer : TE Connectivity Power cable : 172159-1+170355-1(male) Encoder cable : 172161-1+170365-1(male)							
	Lateral connector of the transmission cable	Manufacturer :KST Power cable : E1510-RED (European terminal) Manufacturer :JST Encoder cable : PHDR-12VS+SPHD-001T-P0.5(female)							
AC Electrical spec.	AC Servo motor	200W : G SVM-A02LC4							
	AC Servo driver	200W : GSV-KE02MB21CP							
	Lateral connector of the actuator	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)							
Step electrical spec.	Open loop driver	CVD228B-K 【□57】							
	Lateral connector of the actuator	15-pin male D-SUB connector							
	Lateral connector of the transmission cable	15-pin female D-SUB connector							

*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
 *2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK4686 Direct-Coupled Open Loop Stepper Motor Without Protection Cover

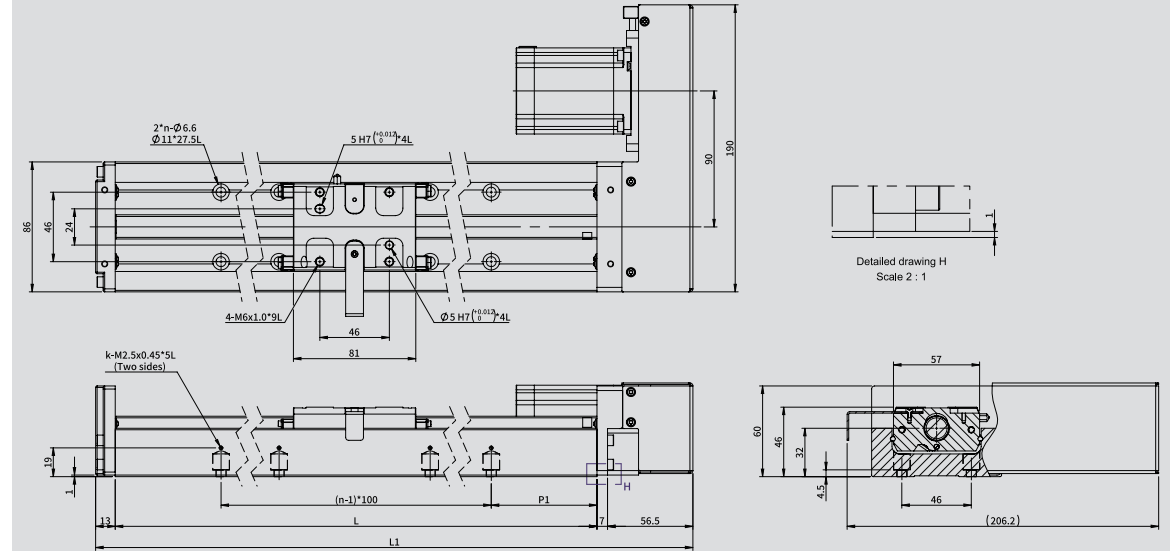


GK4686 Direct-Coupled Open Loop Stepper Motor With Protection Cover

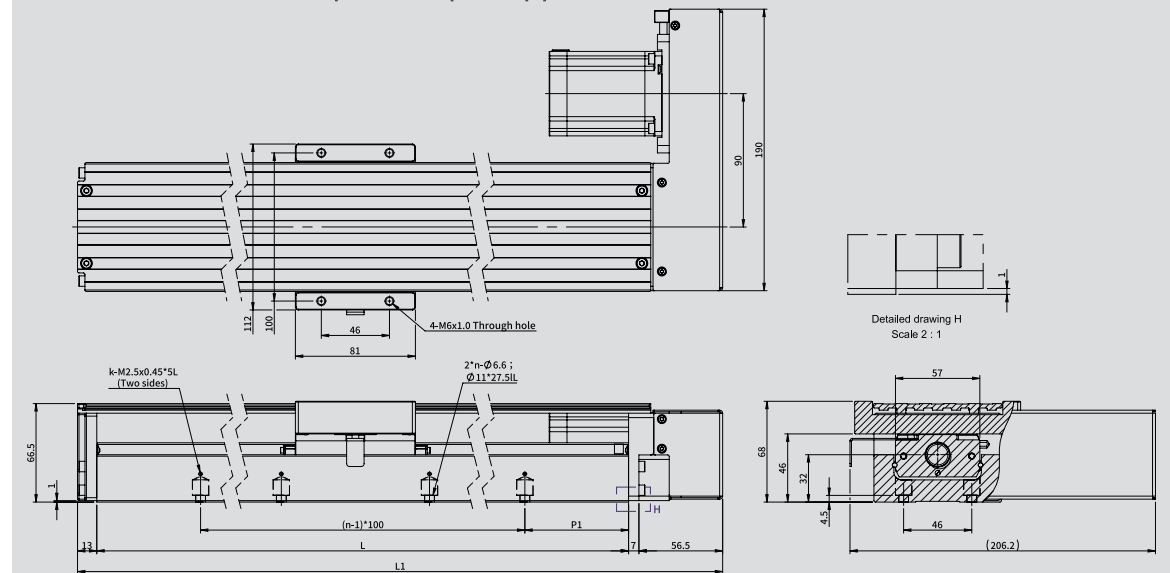


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1
GK4686	190	340	440	524	3	3	70
	290	440	540	624	4	4	
	390	540	640	724	5	5	
	490	640	740	824	6	6	
	590	740	840	924	7	7	
	690	840	940	1024	8	8	
	790	940	1040	1124	9	9	

GK4686 Folded Open Loop Stepper Motor Without Protection Cover

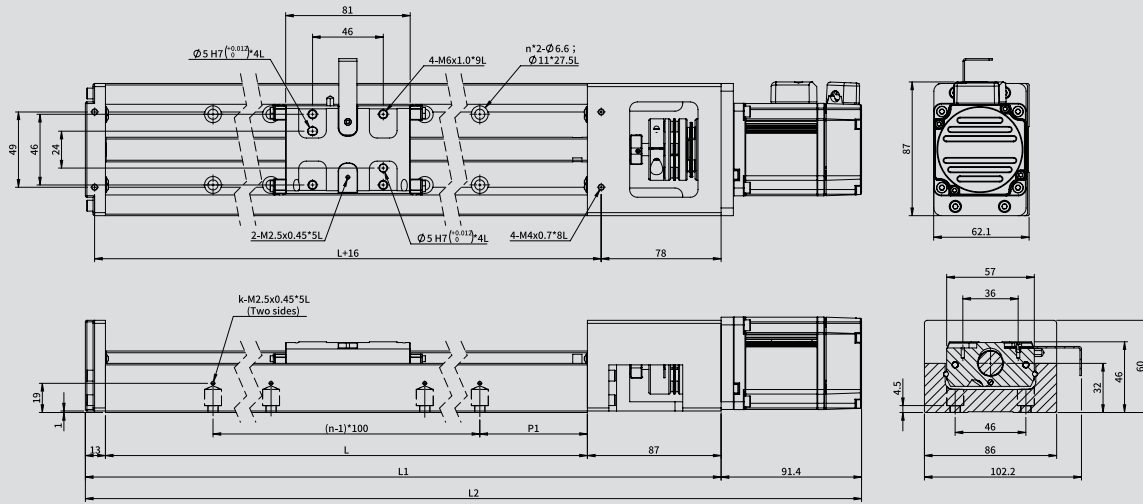


GK4686 Folded Open Loop Stepper Motor With Protection Cover

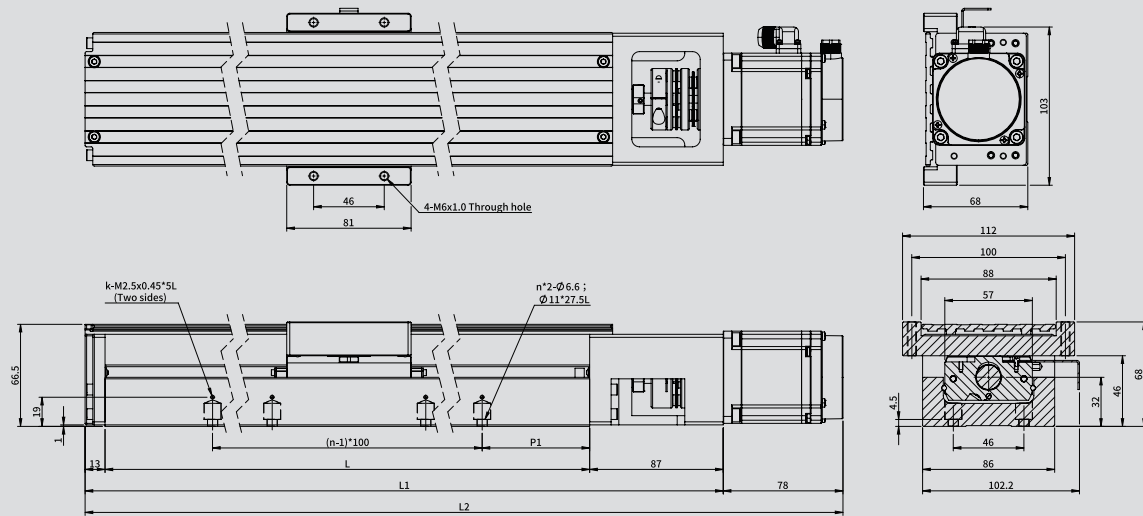


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK4686	190	340	416.5	3	3	70
	290	440	516.5	4	4	
	390	540	616.5	5	5	
	490	640	716.5	6	6	
	590	740	816.5	7	7	
	690	840	916.5	8	8	
	790	940	1016.5	9	9	

GK4686 Direct-Coupled DC Servo Motor Without Protection Cover

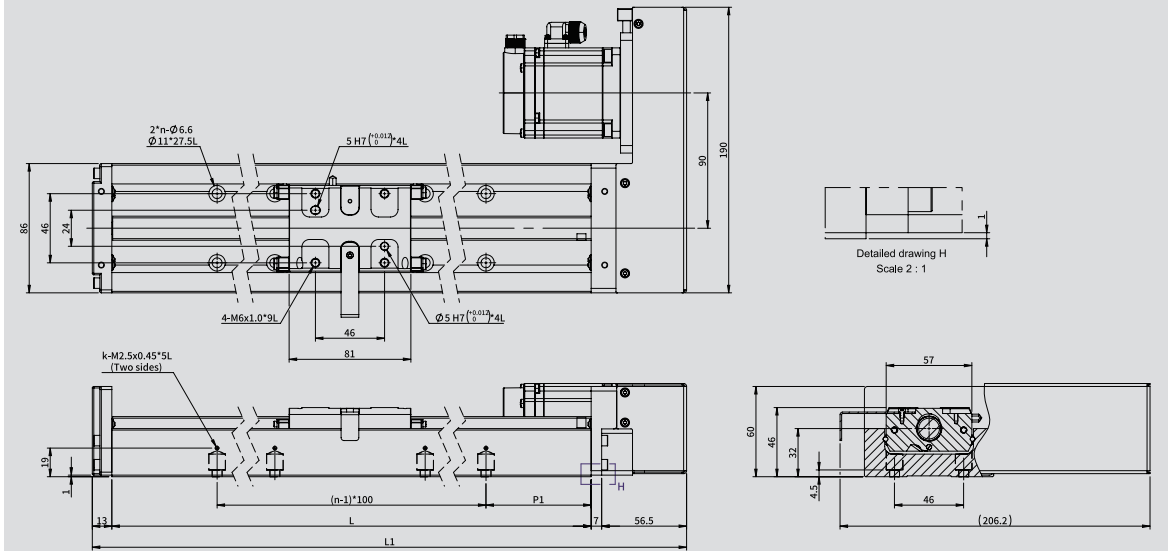


GK4686 Direct-Coupled DC Servo Motor With Protection Cover

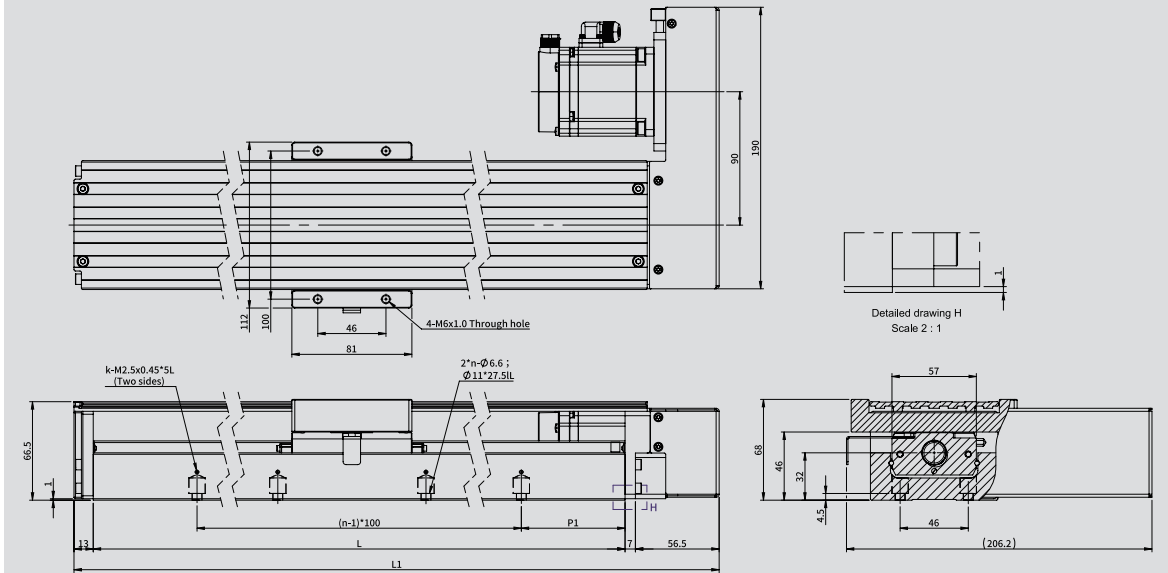


Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	Overall total length L2 (mm)	n	k	P1
GK4686	190	340	440	418	3	3	70
	290	440	540	518	4	4	
	390	540	640	618	5	5	
	490	640	740	718	6	6	
	590	740	840	918	7	7	
	690	840	940	1018	8	8	
	790	940	1040	1118	9	9	

GK4686 Folded DC Servo Motor Without Protection Cover

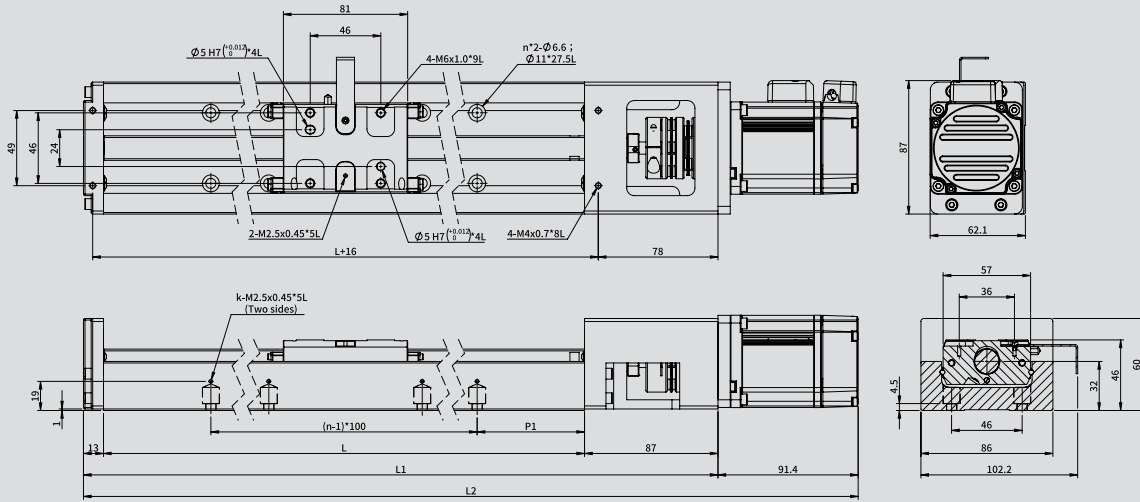


GK4686 Folded DC Servo Motor With Protection Cover

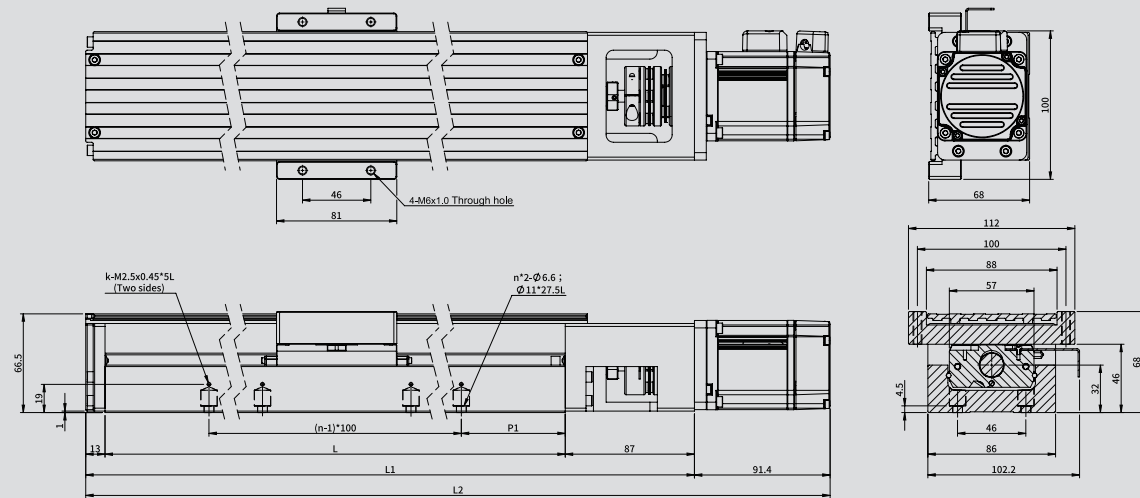


Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	k	n	P1
GK4686	190	340	416.5	3	3	70
	290	440	516.5	4	4	
	390	540	616.5	5	5	
	490	640	716.5	6	6	
	590	740	816.5	7	7	
	690	840	916.5	8	8	
	790	940	1016.5	9	9	

GK4686 Direct-Coupled AC Servo Motor Without Protection Cover

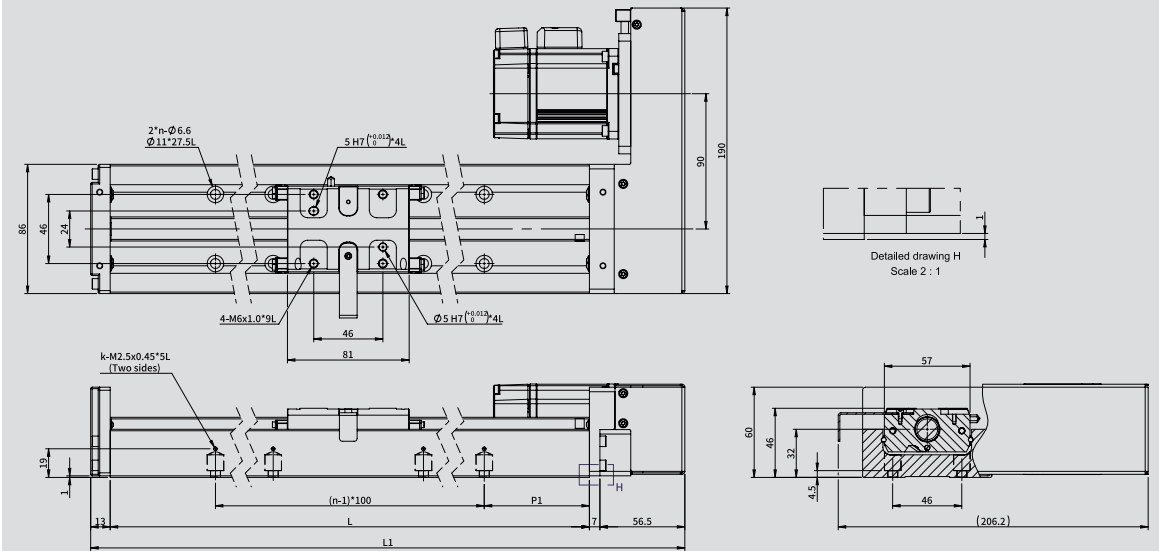


GK4686 Direct-Coupled AC Servo Motor With Protection Cover

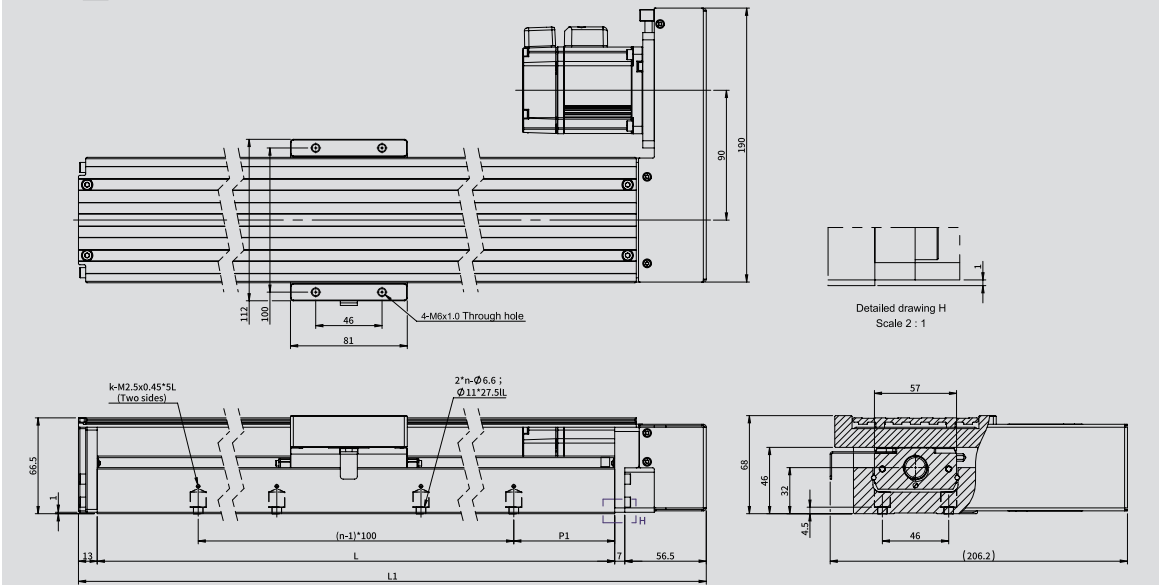


Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	Overall total length L2 (mm)	n	k	P1
GK4686	190	340	440	531.4	3	3	70
	290	440	540	631.4	4	4	
	390	540	640	731.4	5	5	
	490	640	740	831.4	6	6	
	590	740	840	931.4	7	7	
	690	840	940	1031.4	8	8	
	790	940	1040	1131.4	9	9	

GK4686 Folded AC Servo Motor Without Protection Cover

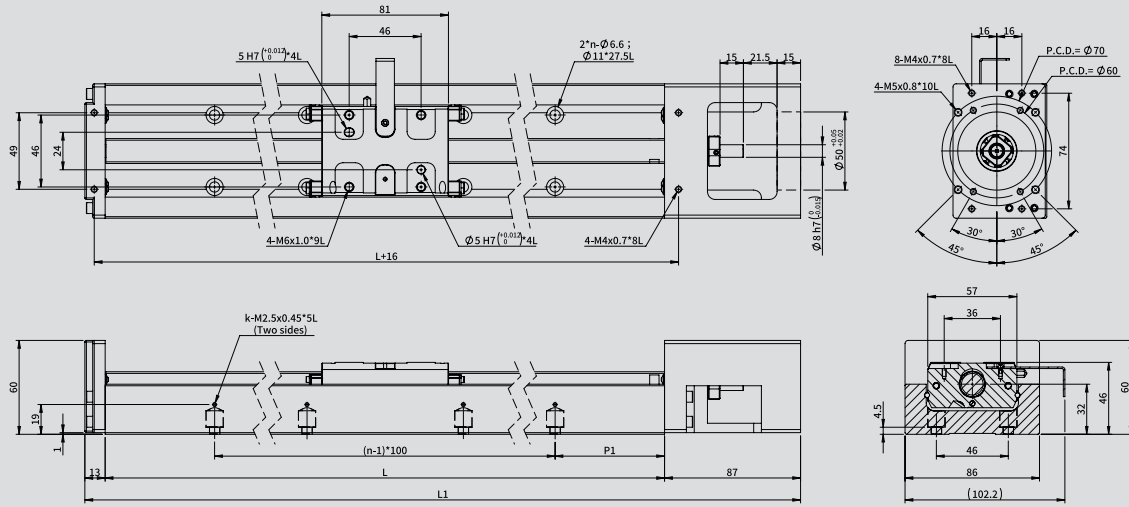


GK4686 Folded AC Servo Motor With Protection Cover

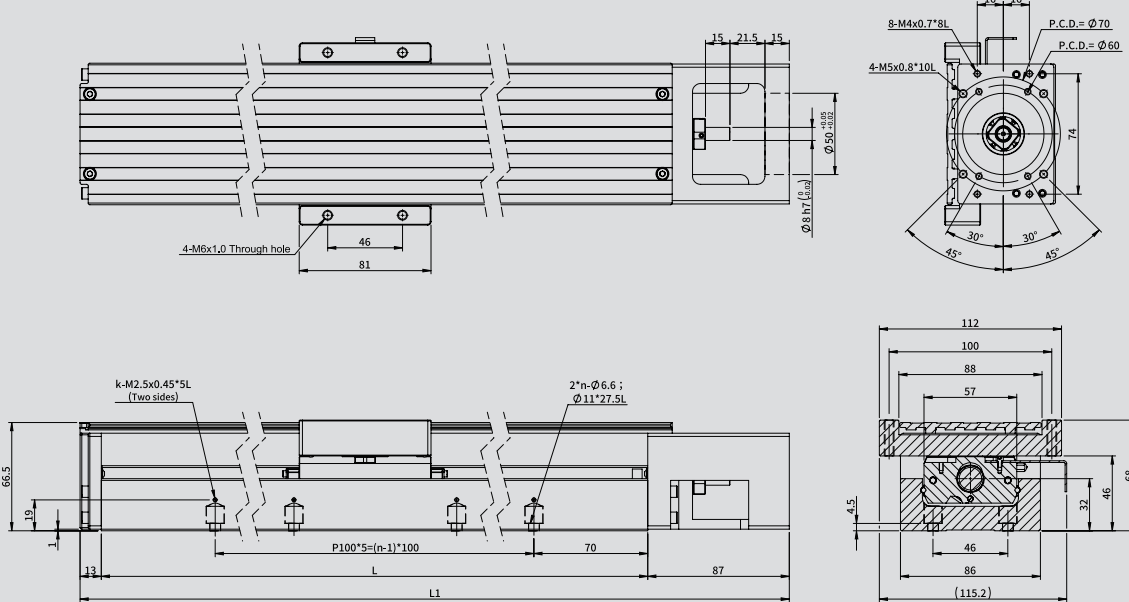


Model No.	Stroke (mm)	Rail length L (mm)	Mechanism length L1 (mm)	k	n	P1
GK4686	190	340	416.5	3	3	70
	290	440	516.5	4	4	
	390	540	616.5	5	5	
	490	640	716.5	6	6	
	590	740	816.5	7	7	
	690	840	916.5	8	8	
	790	940	1016.5	9	9	

GK4686 No Direct-Coupling Configured Without Protection Cover



GK4686 No Direct-Coupling Configured With Protection Cover

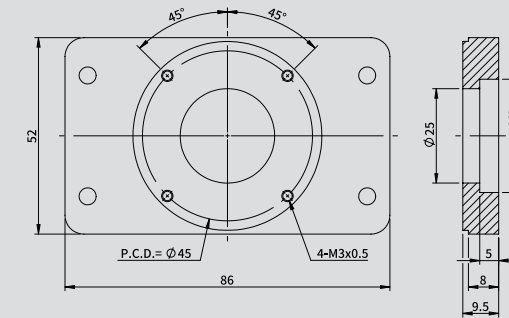


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	k	n	P1
GK4686	190	340	416.5	3	3	70
	290	440	516.5	4	4	
	390	540	616.5	5	5	
	490	640	716.5	6	6	
	590	740	816.5	7	7	
	690	840	916.5	8	8	
	790	940	1016.5	9	9	

GK4686 Motor Adapter

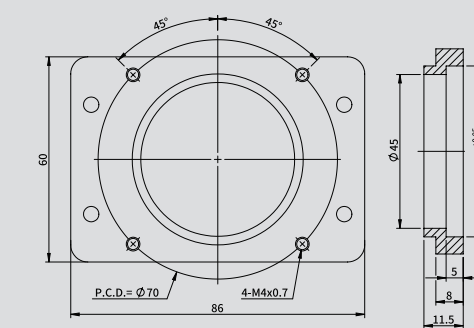
Servo Motor

GK46-M10 (Panasonic 100W Servo motor)



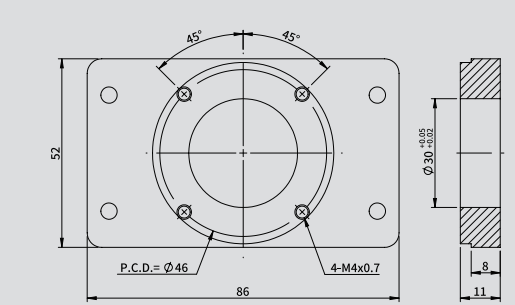
* Applicable coupling FACHL40-8*8

GK46-M20 (GMT, Panasonic 200, 400W Servo motor)



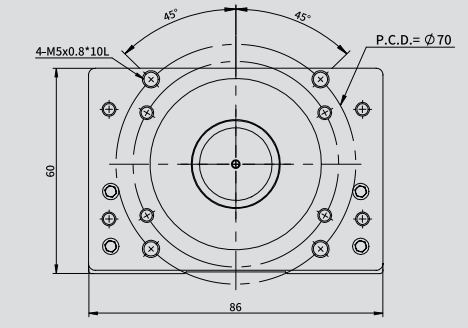
* Applicable coupling
200W~400W: FACHL40-8*11(Panasonic)
200W~400W: FACHL40-8*14(GMT)

GK46-H10 (GMT, Delta, Mitsubishi 100W Servo motor)



* Applicable coupling FACHL40-8*8

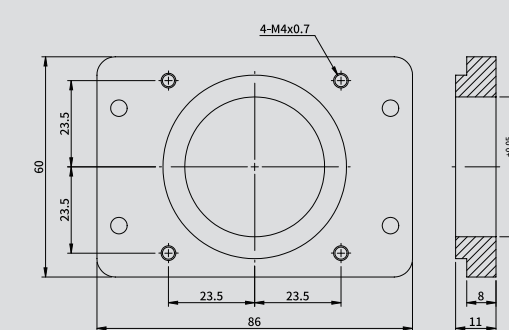
GK46-E40 (GMT, Delta, Mitsubishi 200, 400W Servo motor)



* Applicable coupling FACHL40-8*14

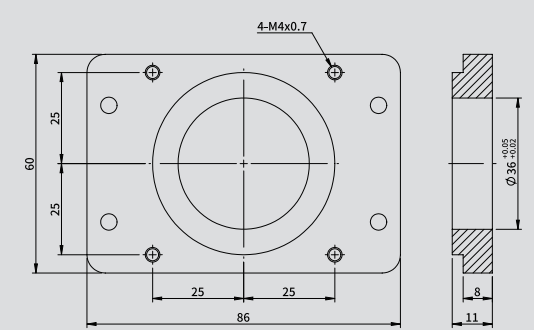
Stepper Motor

GK46-G57 (GMT 57mm Stepper motor)



* Applicable coupling FACHL40-8*6.35

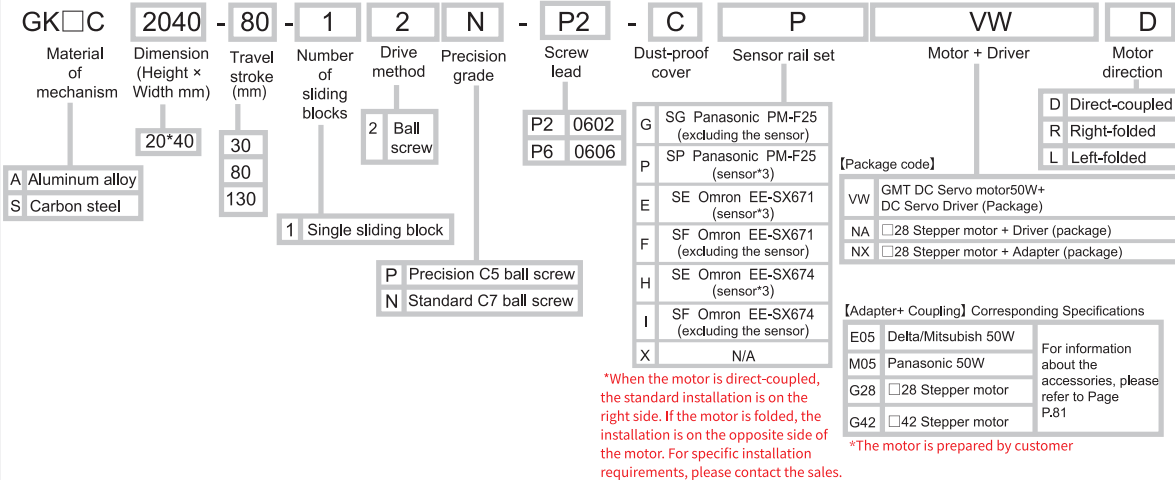
GK46-G60 (60mm Stepper motor)



* Applicable coupling FACHL40-8*8

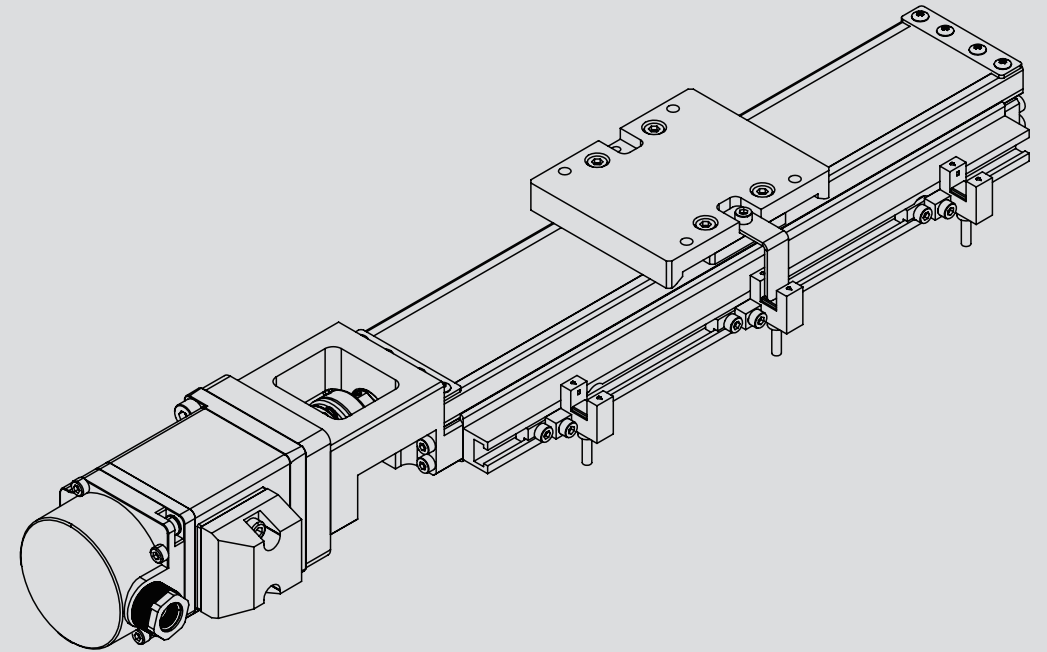
Description

GK□C 2040 Series



Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (DKM) (DC Servo driver) GSV-KM□□MB-□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
NA	GTR22G-D (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

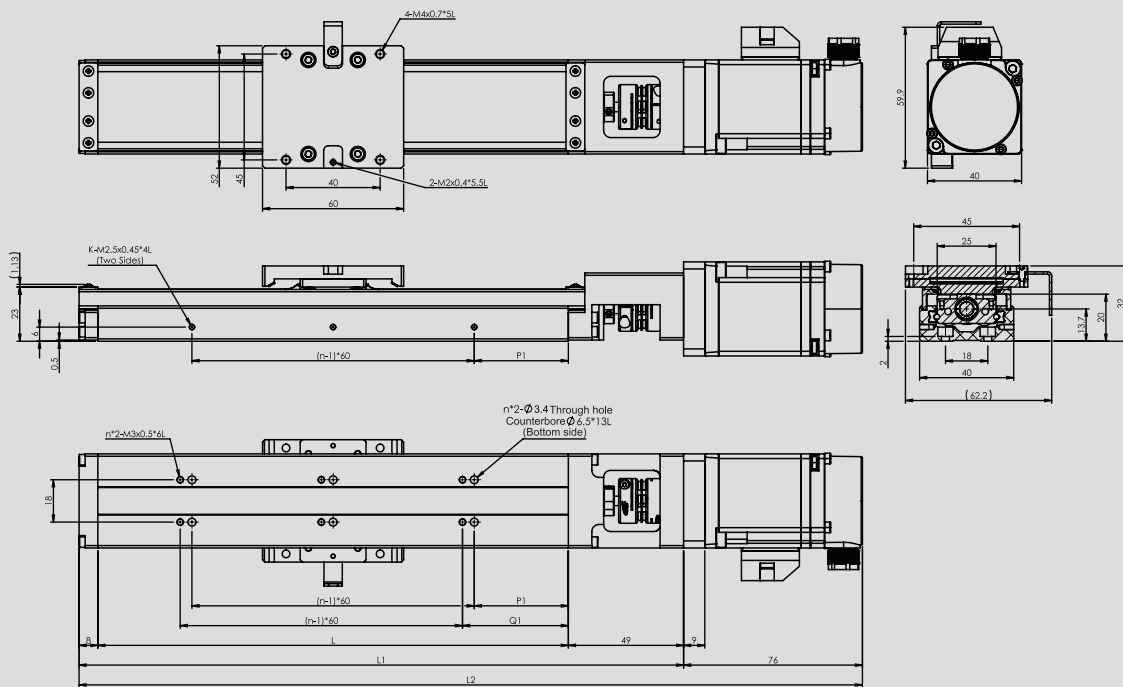


© GKAC2040-130-12N-P2-CPVWD

Model No.		GK□C2040-N						GK□C2040-P							
Mechanical spec.	Dimension (Height x Width) (mm)	20 x 40													
	Stroke (mm)	30	80	130	30	80	130	30	80	130	30	80	130		
	Drive method	Ball screw Ø6													
	Lead (mm)	2			6			2			6				
	Rail	Recirculating linear ball guide													
Precision	Material of mechanism	A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)													
	Maximum speed (mm/s)	*1 Servo motor		100			300			100			300		
		*1 Stepper motor		40			120			40			120		
	Uni-directional positioning accuracy (mm)	-						0.02							
	Repeatability (mm)	±0.005						±0.003							
	Running parallelism (mm)	0.025						0.01							
DC Electrical spec.	Maximum torque (N·cm)	0.5						1.2							
	DC Servo motor	50W : GSVM-D0BMD4													
	DC Servo driver	50W : K-SERVO [GSV-KM0BMR-48DP]													
	Lateral connector of the actuator	Manufacturer:TE Connectivity Power cable:172159-1+170355-1(male)Encoder cable:172161-1+170365-1(male)													
Step electrical spec.	Lateral connector of the transmission cable	Manufacturer:KST Power cable:E1510-RED(European terminal) Manufacturer:JST Encoder cable:PHDR-12VS+SPHD-001T-P0.5(female)													
	Open loop driver	GTR22G-D [□28]													
	Closed loop driver	-													
	Lateral connector of the actuator	15-pin male D-SUB connector													
Lateral connector of the transmission cable	15-pin female D-SUB connector														

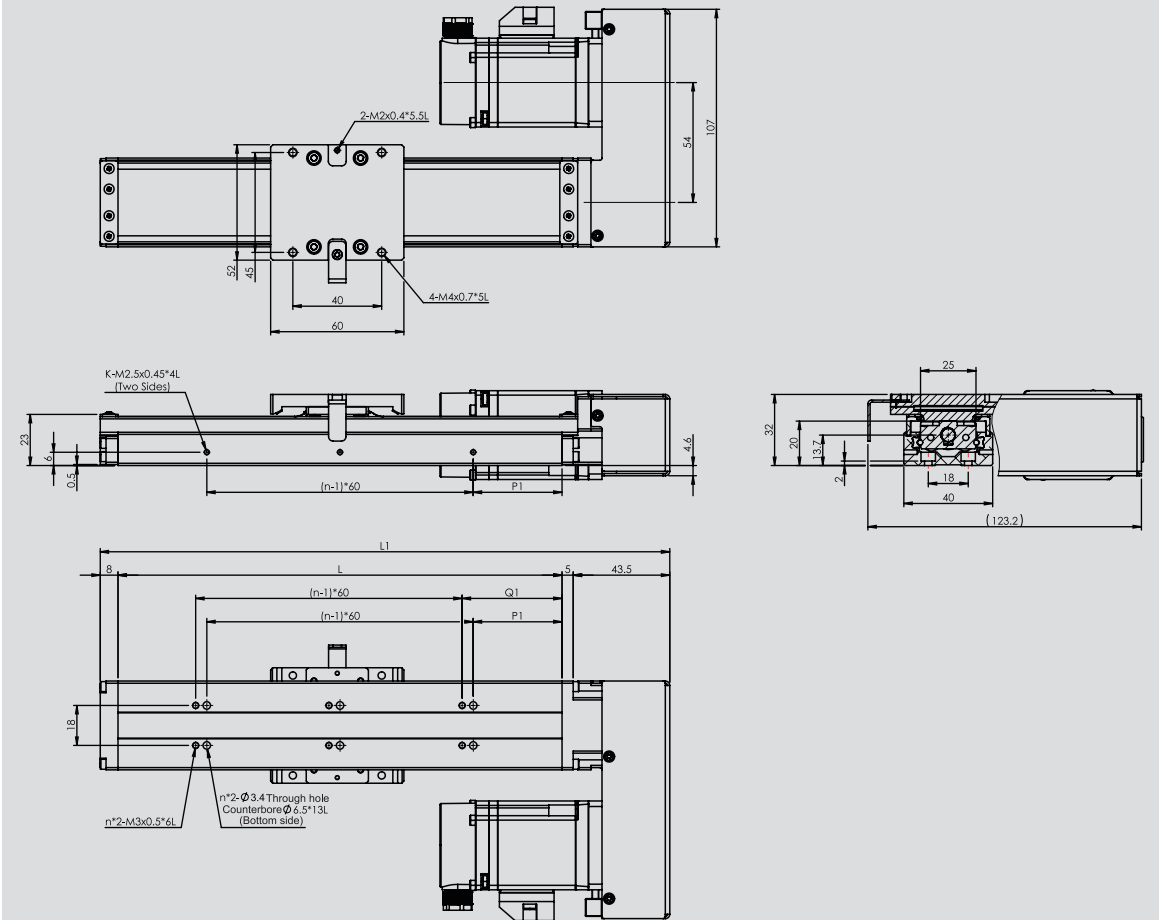
*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
*2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK□C2040 Direct-Coupled DC Servo Motor



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C2040	30	100	157	233	2	2	20	25
	80	150	207	283	3	3	15	20
	130	200	257	333	3	3	40	45

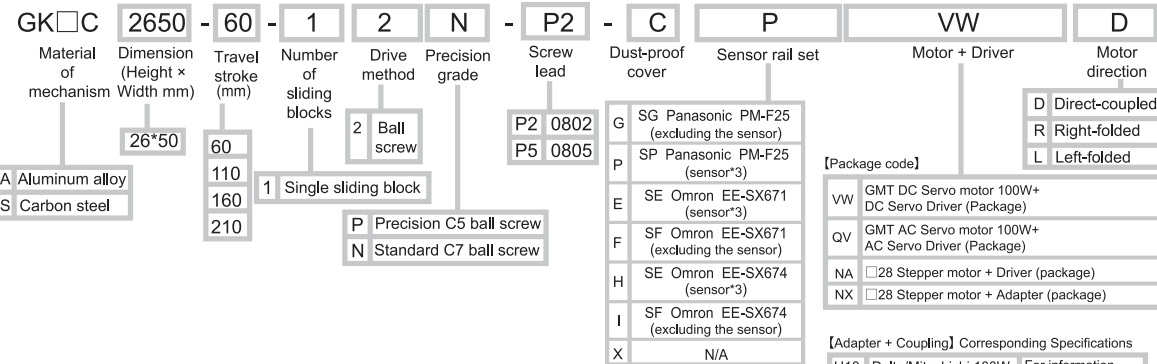
GK□C2040 Folded DC Servo Motor



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C2040	30	100	156.5	2	2	20	25
	80	150	206.5	3	3	15	20
	130	200	256.5	3	3	40	45

Description

GK□C 2650 Series

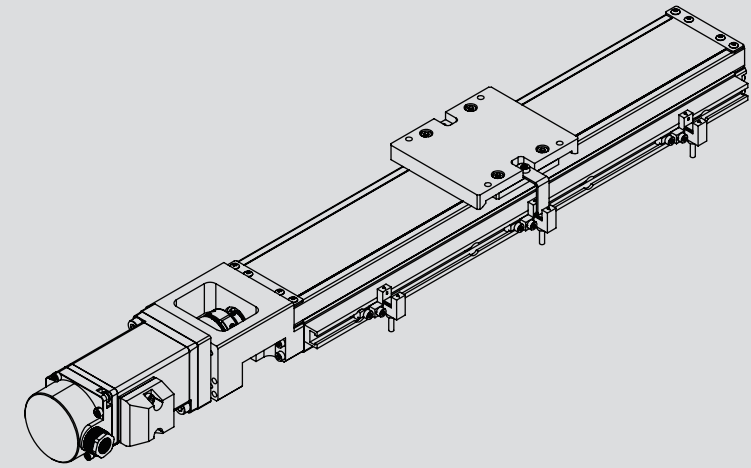


*When the motor is direct-coupled, the standard installation is on the right side. If the motor is folded, the installation is on the opposite side of the motor. For specific installation requirements, please contact the sales.

*The motor is prepared by customer

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU	•	•	•	16	•	—	—
NA	GTR22G-D (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

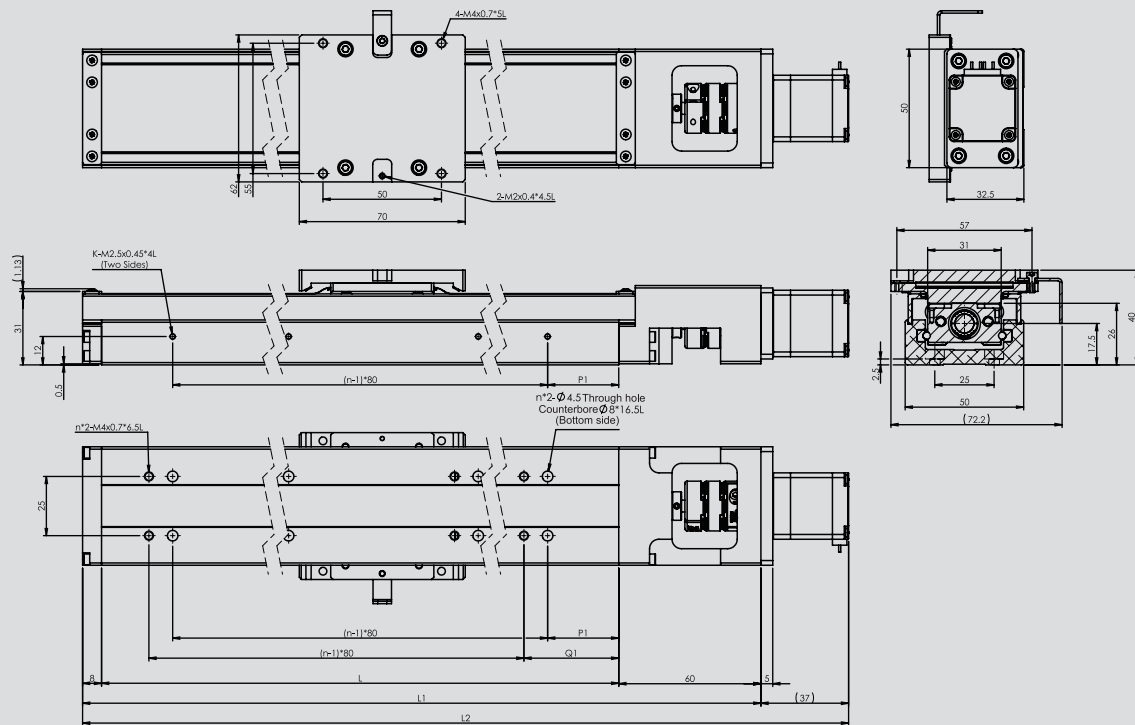


◎ GKAC2650-210-12N-P2-CPVWD

Model No.	GK□C2650-N								GK□C2650-P									
Mechanical spec.	Dimension (Height × Width) (mm)	26 x 50																
	Stroke (mm)	60	110	160	210	60	110	160	210	60	110	160	210	60	110	160	210	
	Drive method	Ball screw Ø8																
	Lead (mm)	2				5				2				5				
	Rail	Recirculating linear ball guide																
Precision	Material of mechanism	A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)																
	Maximum speed (mm/s)	servo motor	100				250				100				250			
		stepper motor	40				100				40				100			
	Uni-directional positioning accuracy (mm)	-								0.02								
	Repeatability (mm)	±0.005								±0.003								
	Running parallelism (mm)	0.025								0.01								
	Maximum torque (N·cm)	1.5								3								
DC Electrical spec.	DC Servo motor	100W : GSV-M-D01MD4																
	DC Servo driver	100W: K-SERVO 【GSV-KM01MR-48DP】																
	Lateral connector of the actuator	Manufacturer:TE Connectivity Power cable:172159-1+170355-1(male)Encoder cable:172161-1+170365-1(male)																
	Lateral connector of the transmission cable	Manufacturer:KST Power cable:E1510-RED(European terminal) Manufacturer:JST Encoder cable:PHDR-12VS+SPHD-001T-P0.5(female)																
AC Electrical spec.	AC Servo motor	100W : GSV-M-A01LC4																
	AC Servo driver	100W : GSV-KE01MB21CP																
	Lateral connector of the actuator	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)																
Step electrical spec.	Open loop driver	GTR22G-D 【□28】																
	Closed loop driver	-																
	Lateral connector of the actuator	15-pin male D-SUB connector																
	Lateral connector of the transmission cable	15-pin female D-SUB connector																

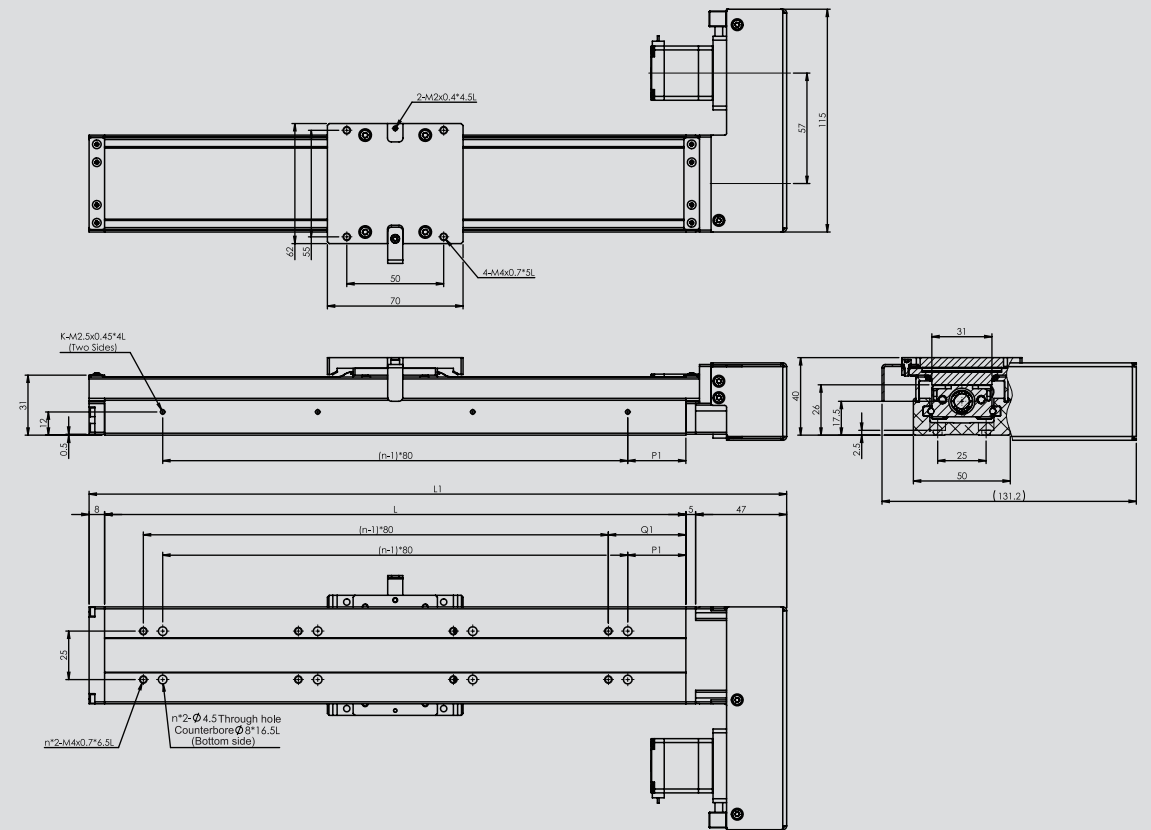
*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
 *2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK□C2650 Direct-Coupled Open Loop Stepper Motor



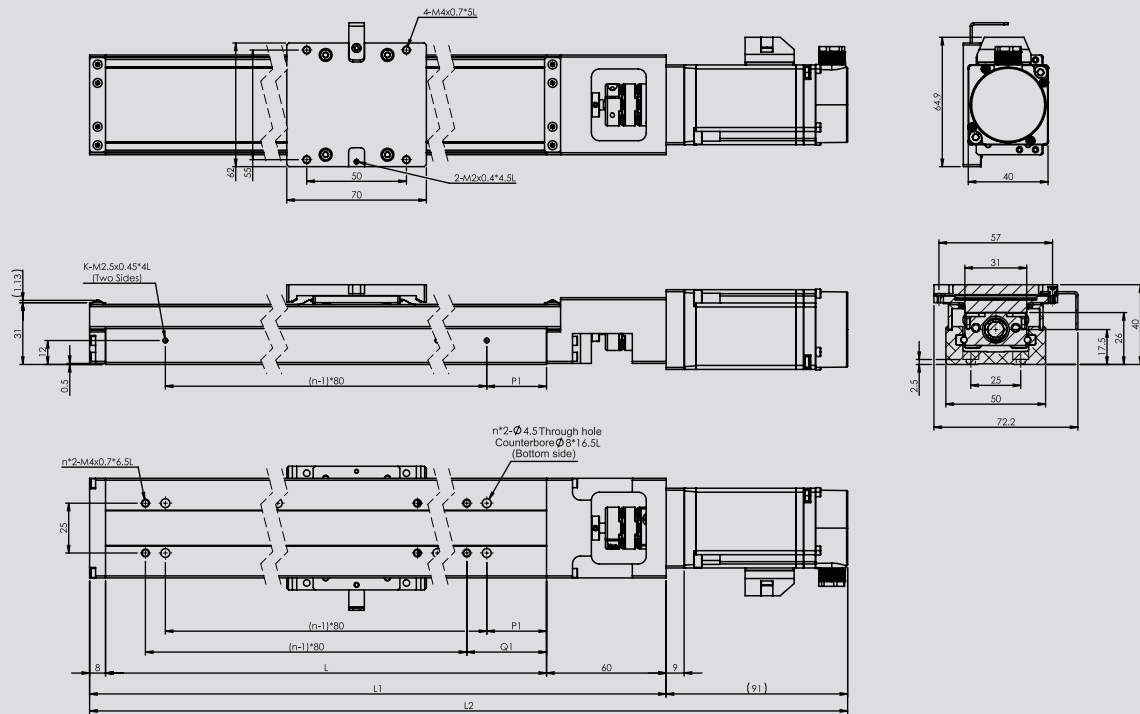
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C2650	60	150	218	255	2	2	35	45
	110	200	268	305	3	3	20	30
	160	250	318	355	3	3	45	55
	210	300	368	405	4	4	30	40

GK□C2650 Folded Open Loop Stepper Motor



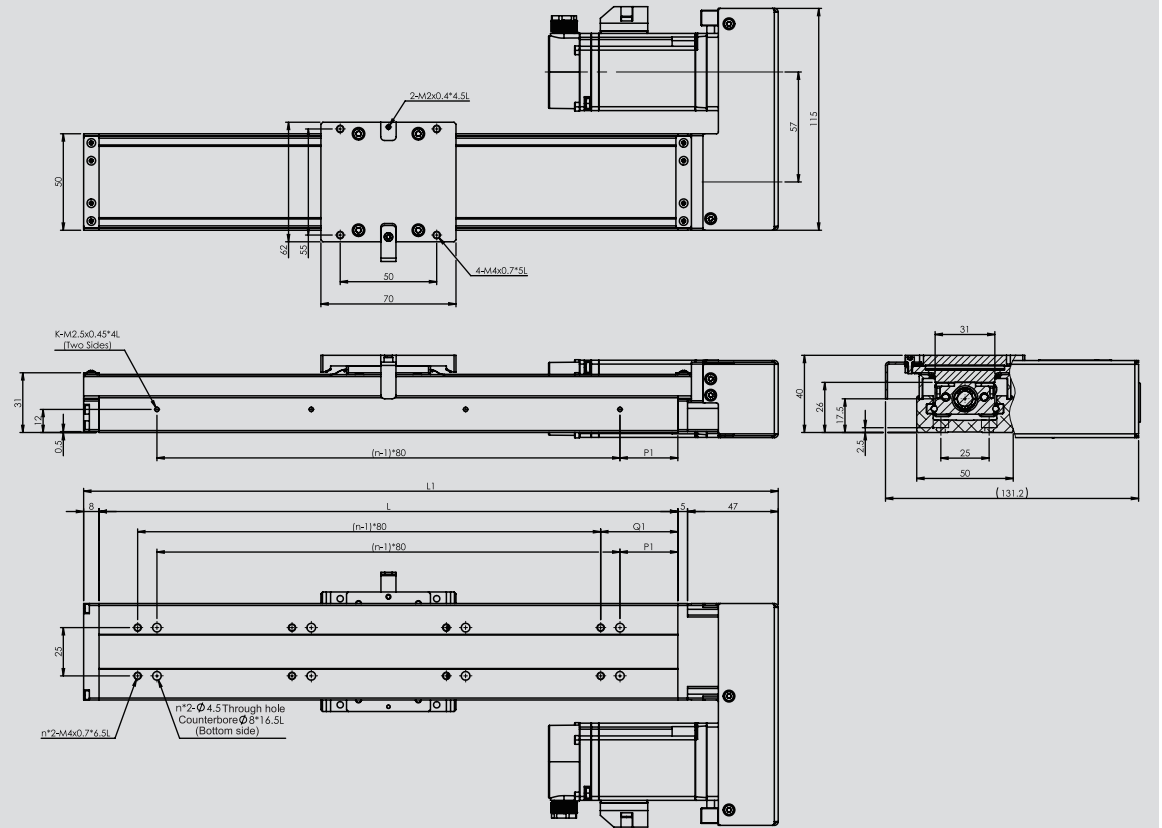
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C2650	60	150	210	2	2	35	45
	110	200	260	3	3	20	30
	160	250	320	3	3	45	55
	210	300	360	4	4	30	40

GK□C2650 Direct-Coupled DC Servo Motor



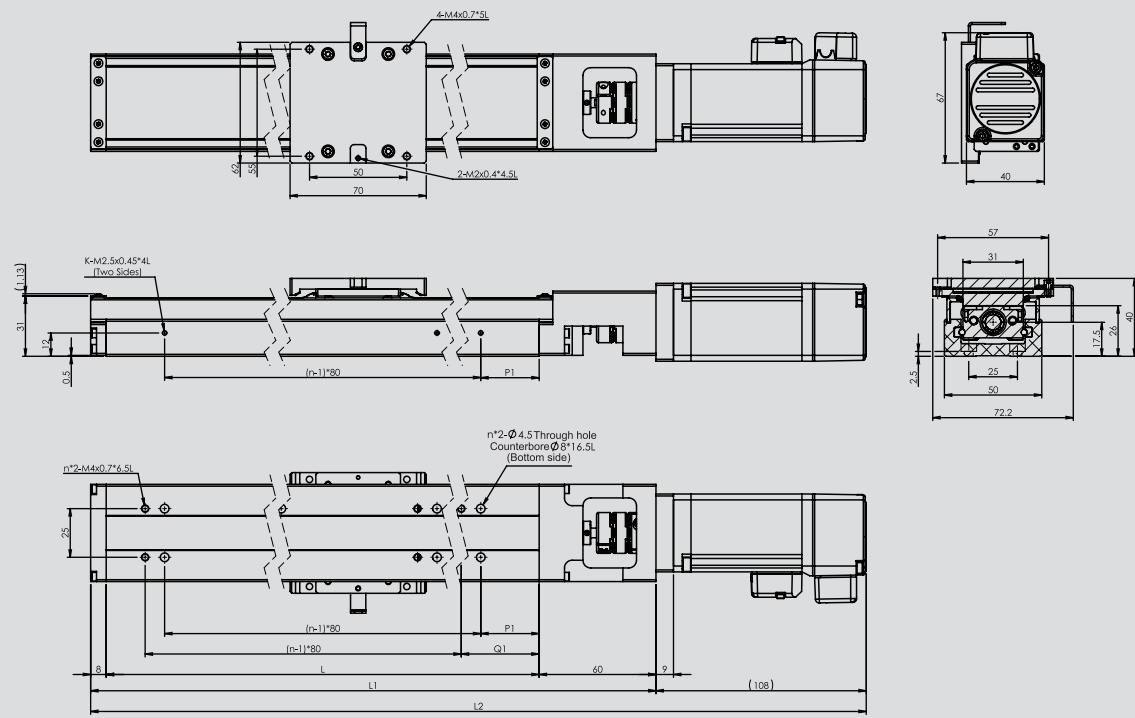
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C2650	60	150	218	309	2	2	35	45
	110	200	268	359	3	3	20	30
	160	250	318	409	3	3	45	55
	210	300	368	459	4	4	30	40

GK□C2650 Folded DC Servo Motor



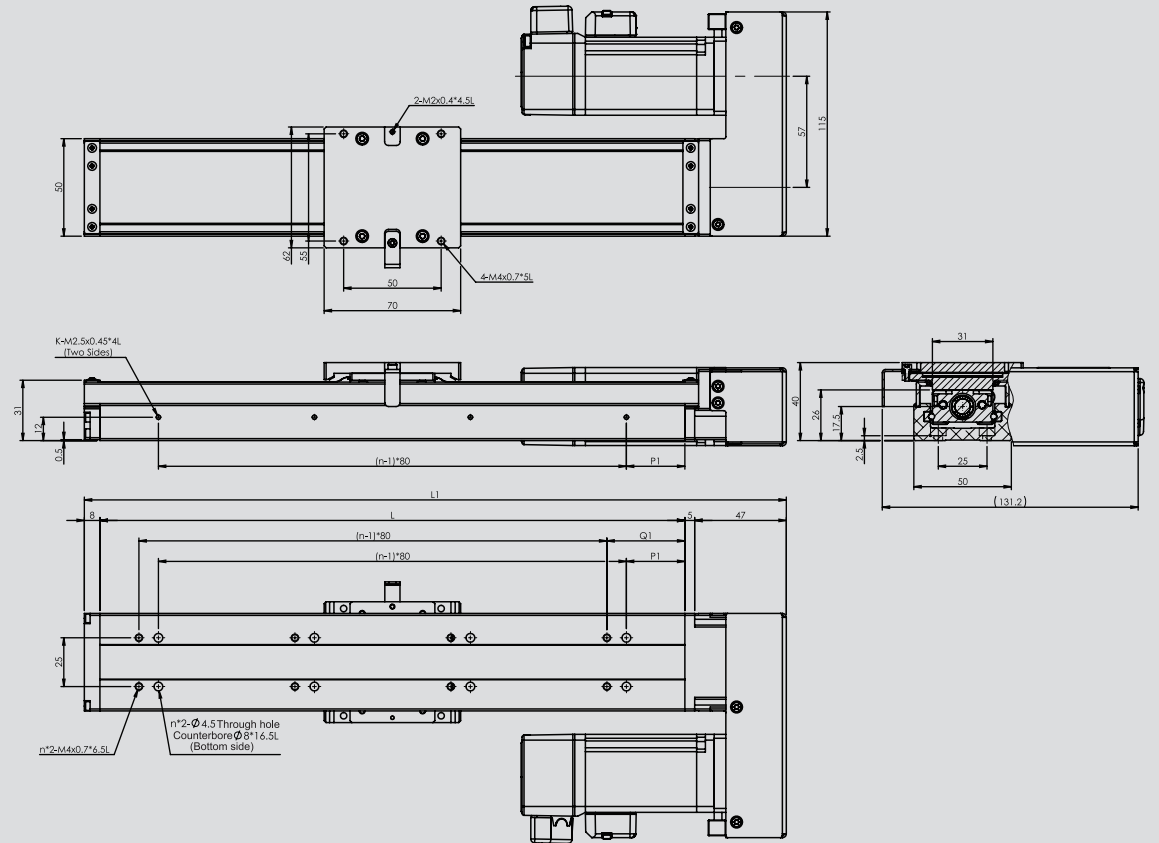
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C2650	60	150	210	2	2	35	45
	110	200	260	3	3	20	30
	160	250	320	3	3	45	55
	210	300	360	4	4	30	40

GK□C2650 Direct-Coupled AC Servo Motor



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C2650	60	150	218	326	2	2	35	45
	110	200	268	376	3	3	20	30
	160	250	318	426	3	3	45	55
	210	300	368	476	4	4	30	40

GK□C2650 Folded AC Servo Motor



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C2650	60	150	210	2	2	35	45
	110	200	260	3	3	20	30
	160	250	320	3	3	45	55
	210	300	360	4	4	30	40

Description

GK□C 3060 series

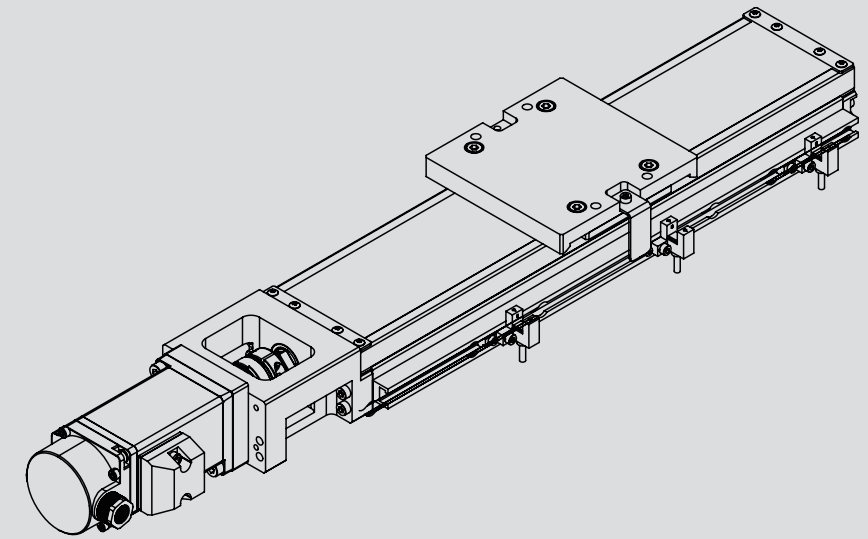
GK□C	3060	-	50	-	1	2	N	-	P5	-	C	P	VW	D		
Material of mechanism	Dimension (Height × Width mm)	Travel stroke (mm)	Number of sliding blocks	Drive method	Precision grade	Screw lead	Dust-proof cover	Sensor rail set	Motor + Driver	Motor direction						
A Aluminum alloy S Carbon steel	30*60	50 100 150 200 300 400 500	1 Single sliding block	2 Ball screw P Precision C5 ball screw N Standard C7 ball screw		P 5 1005 P10 1010		G SG Panasonic PM-F25 (excluding the sensor) P SP Panasonic PM-F25 (sensor*3) E SE Omron EE-SX671 (sensor*3) F SF Omron EE-SX671 (excluding the sensor) H SE Omron EE-SX674 (sensor*3) I SF Omron EE-SX674 (excluding the sensor) X N/A	VW GMT DC Servo motor 100W+ DC Servo Driver (Package) QV GMT AC Servo motor 100W+ AC Servo Driver (Package) NA □42 Stepper motor + Driver (package) NX □42 Stepper motor + Adapter (package)	D Direct-coupled R Right-folded L Left-folded						
											[Package code]					
											[Adapter+ Coupling] Corresponding Specifications					
											H10 Delta/Mitsubishi 100W M10 Panasonic 100W G42 □42 Stepper motor		For information about the accessories, please refer to Page P.101			

*When the motor is direct-coupled, the standard installation is on the right side. If the motor is folded, the installation is on the opposite side of the motor. For specific installation requirements, please contact the sales.

*The motor is prepared by customer

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU	•	•	•	16	•	—	—
NA	GTR22G-D (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

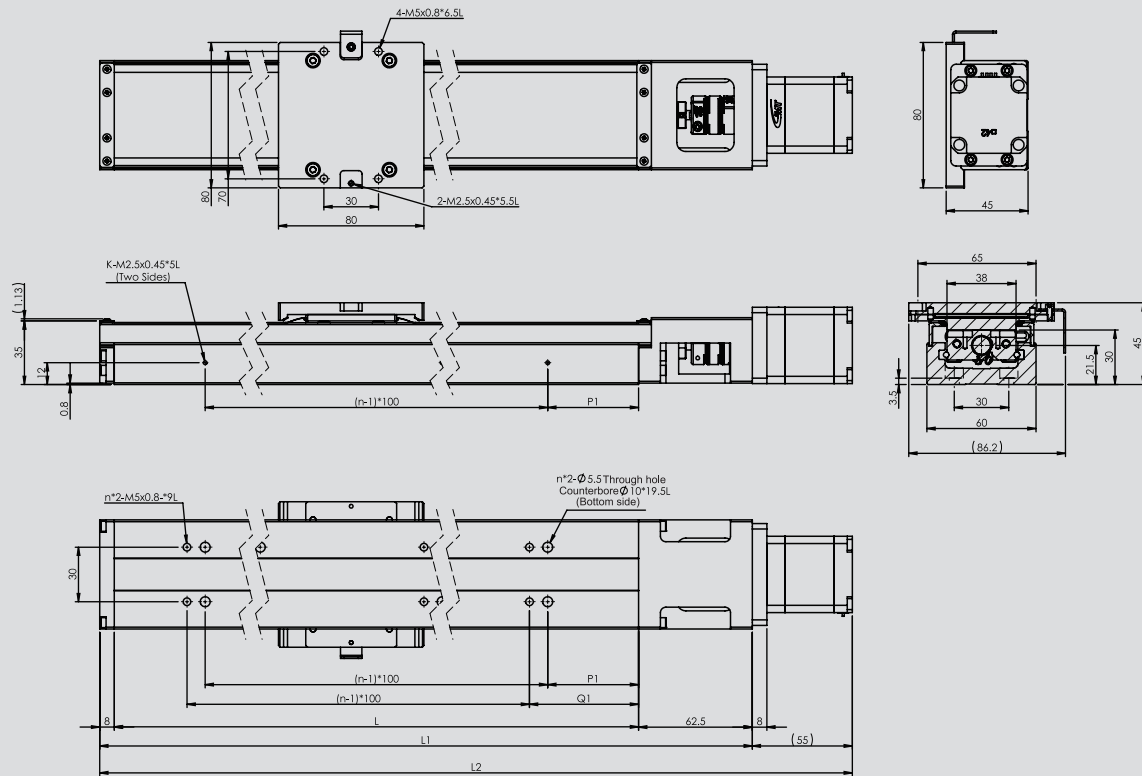


© GKAC3060-150-12N-P5-CPVWD

Model No.		GK□C3060-N				GK□C3060-P			
Mechanical spec.	Dimension (Height × Width) (mm)	30 x 60							
	Stroke (mm)	50/100/150/200/300	400/500	50/100/150/200/300	400/500	50/100/150/200/300	400/500	50/100/150/200/300	400/500
	Drive method	Ball screw Ø10							
	Lead (mm)	5		10		5		10	
	Rail	Recirculating linear ball guide							
	Material of mechanism	A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)							
Precision	Maximum speed (mm/s)	250		500		250		500	
	Uni-directional positioning accuracy (mm)	-		-		0.02		0.04	
	Repeatability (mm)	±0.005							
	Running parallelism (mm)	0.025	0.035	0.025	0.035	0.01	0.015	0.01	0.015
	Maximum torque (N·cm)	7				15			
DC Electrical spec.	DC Servo motor	100W : GSV-M-D01MD4							
	DC Servo driver	100W : K-SERVO 【GSV-KM01MR-48DP】							
	Lateral connector of the actuator	Manufacturer:TE Connectivity Power cable:172159-1+170355-1(male)Encoder cable:172161-1+170365-1(male)							
AC Electrical spec.	Lateral connector of the transmission cable	Manufacturer:KST Power cable:E1510-RED(European terminal) Manufacturer:JST Encoder cable:PHDR-12VS+SPHD-001T-P0.5(female)							
	AC Servo motor	100W : GSV-M-A01LC4							
	AC Servo driver	100W : GSV-KE01MB21CP							
Step electrical spec.	Lateral connector of the actuator	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)							
Step electrical spec.	Open loop driver	GTR22G-D 【□42】							
	Closed loop driver	-							
	Lateral connector of the actuator	15-pin male D-SUB connector							
	Lateral connector of the transmission cable	15-pin female D-SUB connector							

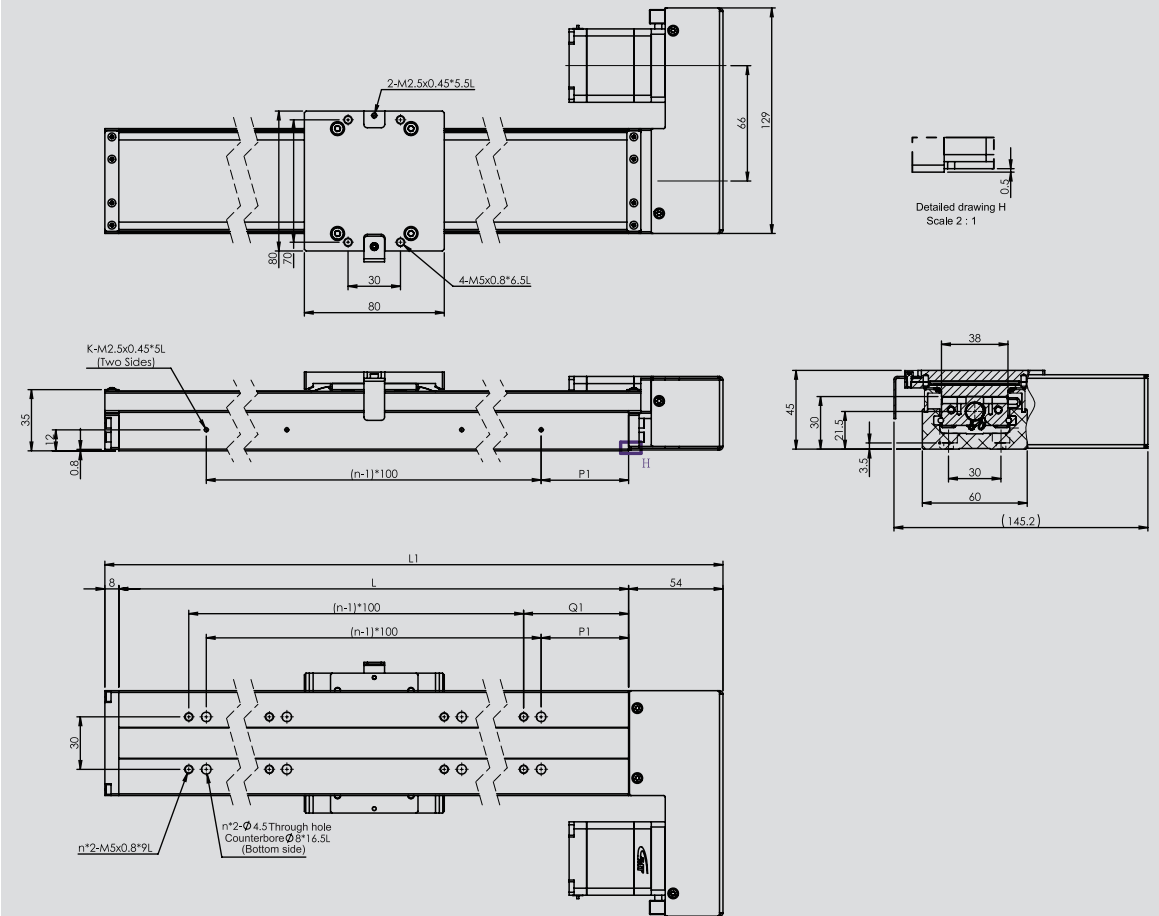
*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
*2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK□C3060 Direct-Coupled Open Loop Stepper Motor



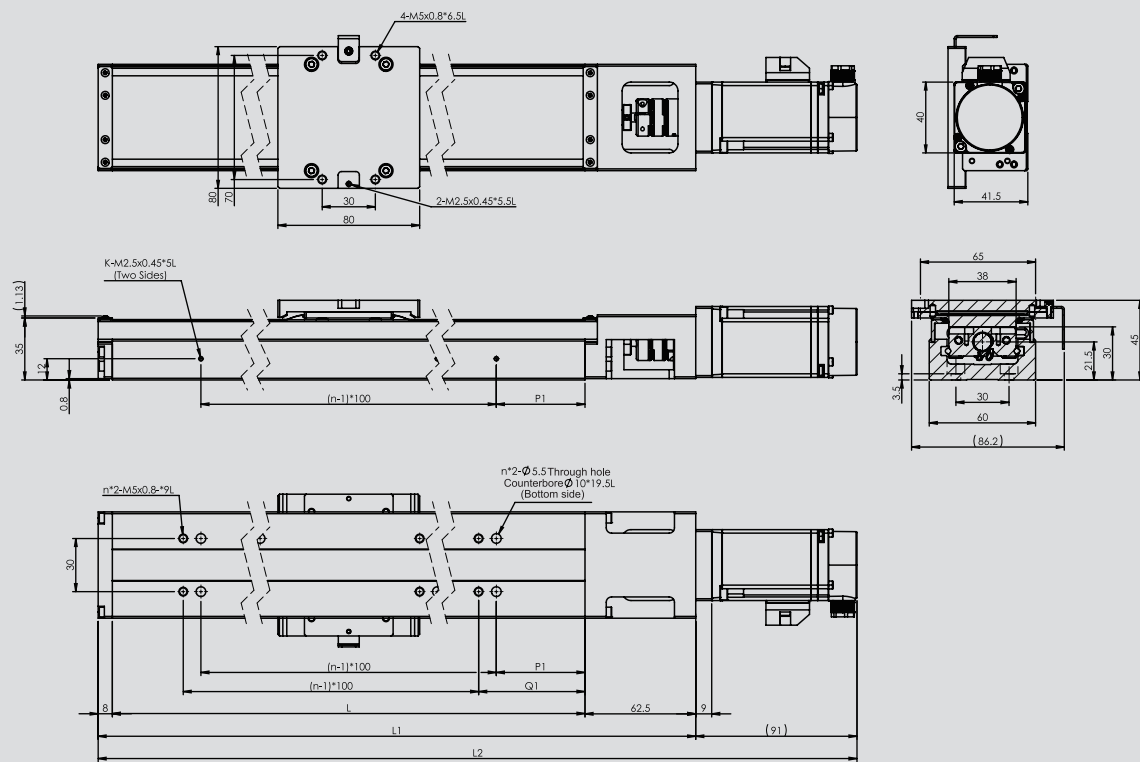
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C3060	50	150	220.5	275.5	2	2	25	35
	100	200	270.5	325.5	2	2	50	60
	150	250	320.5	375.5	3	3	25	35
	200	300	370.5	425.5	3	3	50	60
	300	400	470.5	525.5	4	4	50	60
	400	500	570.5	625.5	5	5	50	60
	500	600	670.5	725.5	6	6	50	60

GK□C3060 Folded Open Loop Stepper Motor



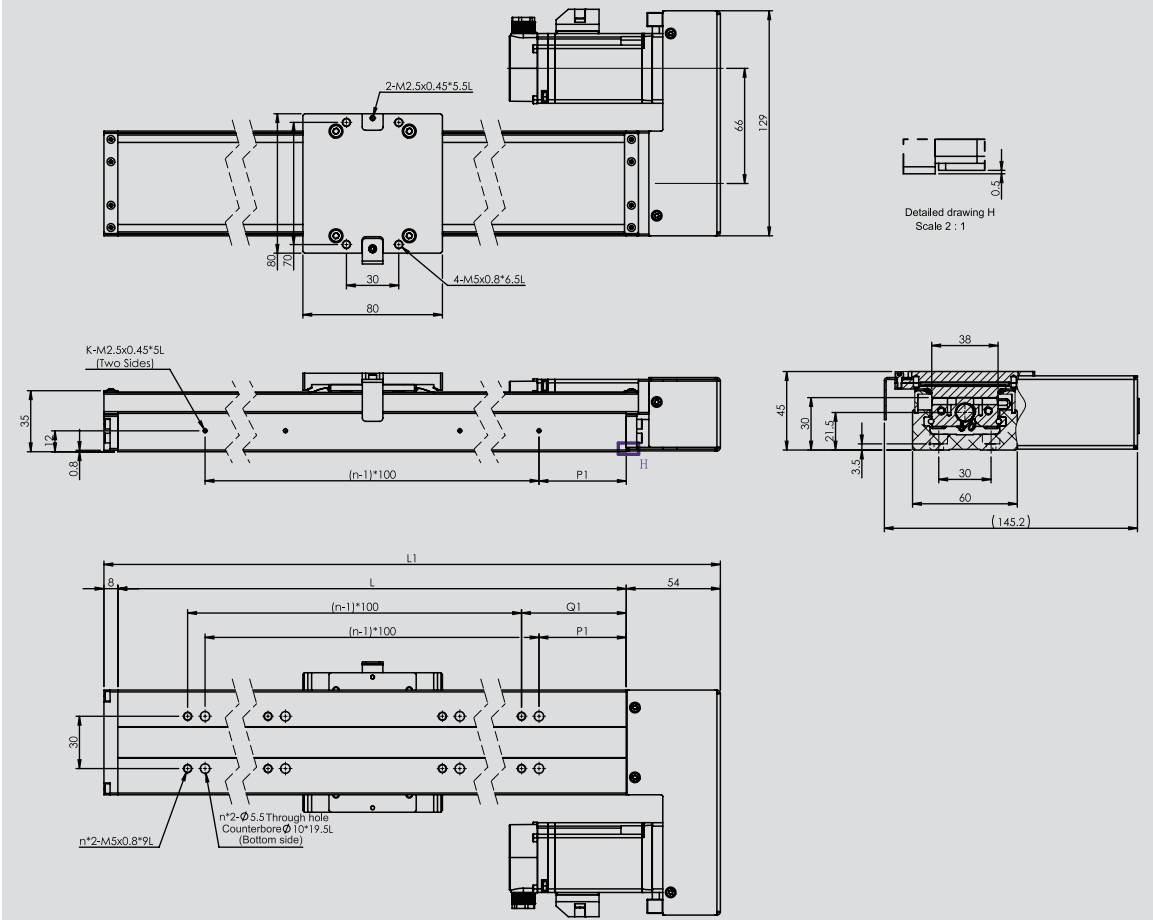
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C3060	50	150	212	2	2	25	35
	100	200	262	2	2	50	60
	150	250	312	3	3	25	35
	200	300	362	3	3	50	60
	300	400	462	4	4	50	60
	400	500	562	5	5	50	60
	500	600	662	6	6	50	60

GK□C3060 Direct-Coupled DC Servo Motor



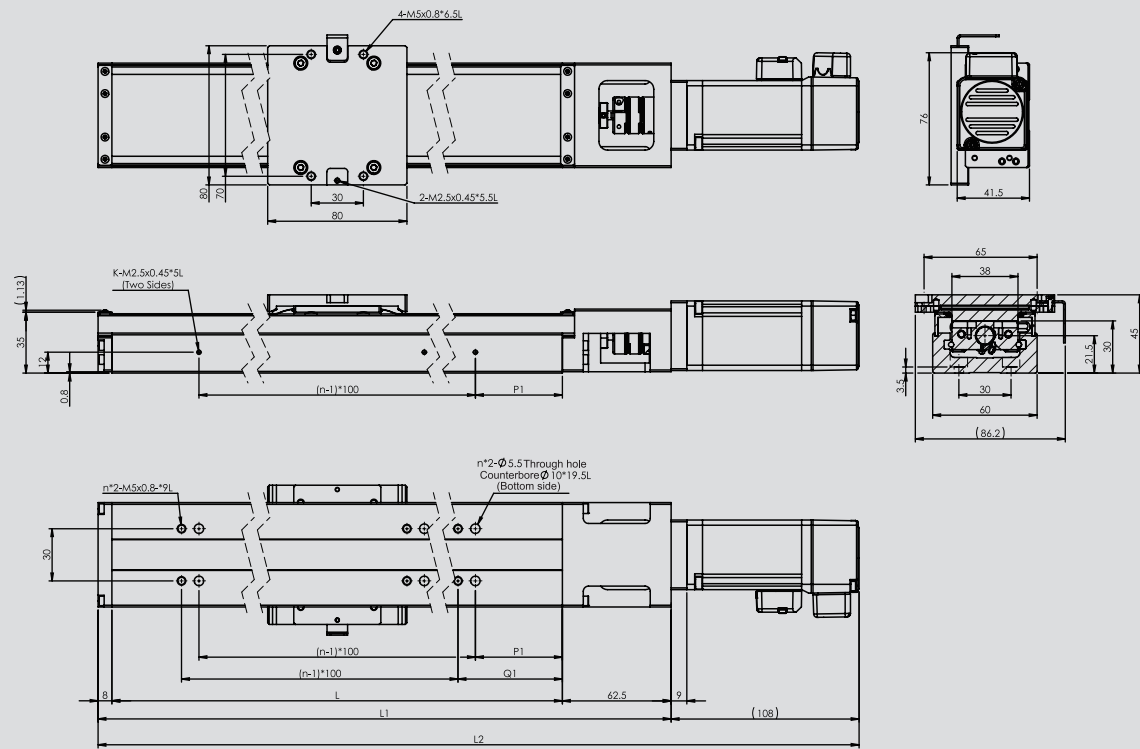
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C3060	50	150	220.5	311.5	2	2	25	35
	100	200	270.5	361.5	2	2	50	60
	150	250	320.5	411.5	3	3	25	35
	200	300	370.5	461.5	3	3	50	60
	300	400	470.5	461.5	4	4	50	60
	400	500	570.5	661.5	5	5	50	60
	500	600	670.5	761.5	6	6	50	60

GK□C3060 Folded DC Servo Motor



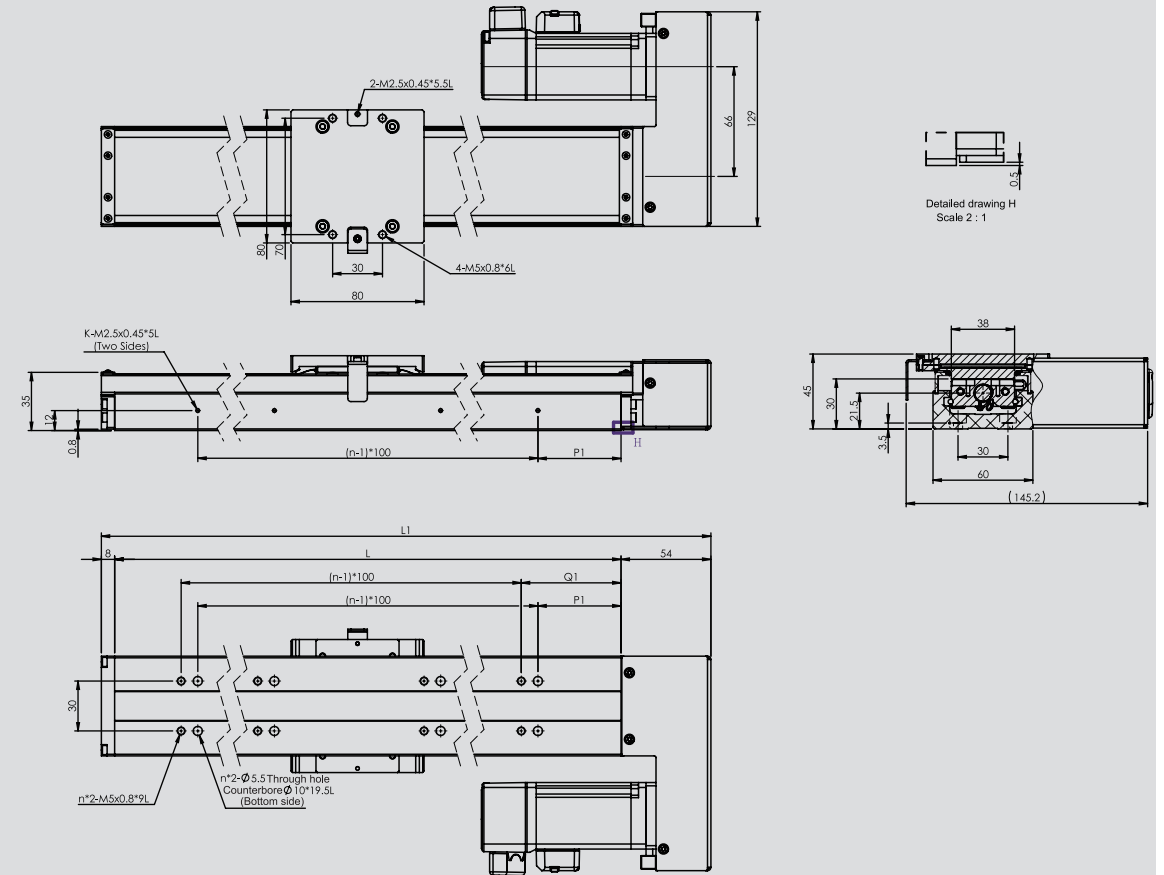
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C3060	50	150	212	2	2	25	35
	100	200	262	2	2	50	60
	150	250	312	3	3	25	35
	200	300	362	3	3	50	60
	300	400	462	4	4	50	60
	400	500	562	5	5	50	60
	500	600	662	6	6	50	60

GK C3060 Direct-Coupled AC Servo Motor



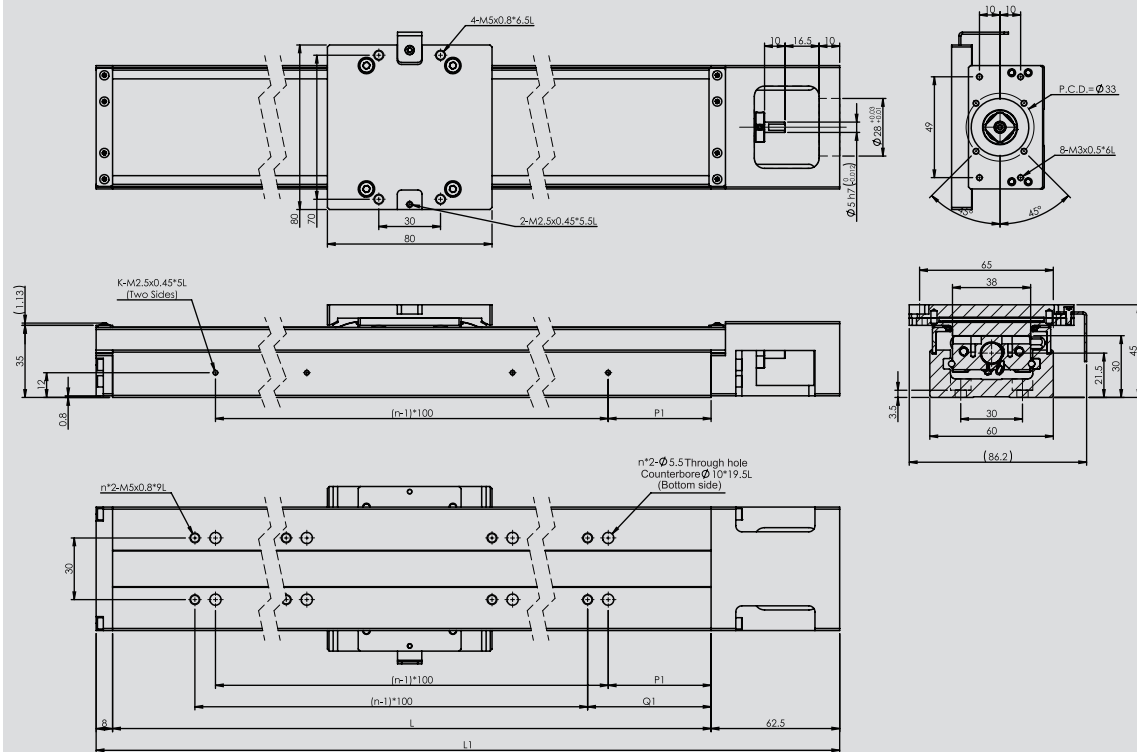
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK C3060	50	150	220.5	328.5	2	2	25	35
	100	200	270.5	378.5	2	2	50	60
	150	250	320.5	428.5	3	3	25	35
	200	300	370.5	478.5	3	3	50	60
	300	400	470.5	578.5	4	4	50	60
	400	500	570.5	678.5	5	5	50	60
	500	600	670.5	778.5	6	6	50	60

GK C3060 Folded AC Servo Motor



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK C3060	50	150	212	2	2	25	35
	100	200	262	2	2	50	60
	150	250	312	3	3	25	35
	200	300	362	3	3	50	60
	300	400	462	4	4	50	60
	400	500	562	5	5	50	60
	500	600	662	6	6	50	60

GK□C3060 No Direct-Coupling Configured

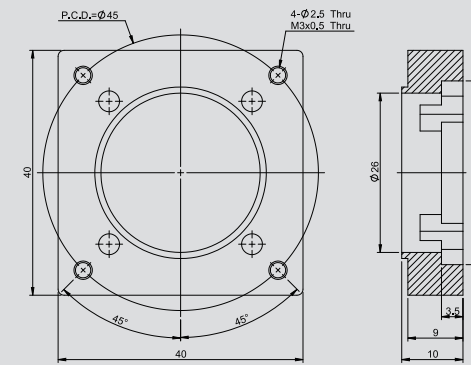


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C3060	50	150	220.5	2	2	25	35
	100	200	270.5	2	2	50	60
	150	250	320.5	3	3	25	35
	200	300	370.5	3	3	50	60
	300	400	470.5	4	4	50	60
	400	500	570.5	5	5	50	60
	500	600	670.5	6	6	50	60

GK□C3060 Motor Adapter

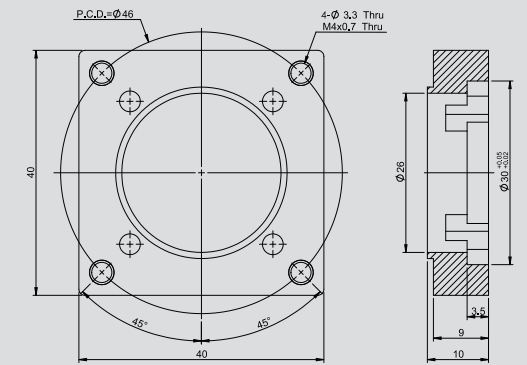
Servo Motor

GK-M10
(Panasonic 50, 100W Servo motor)



* Applicable coupling FACCL21-5*8

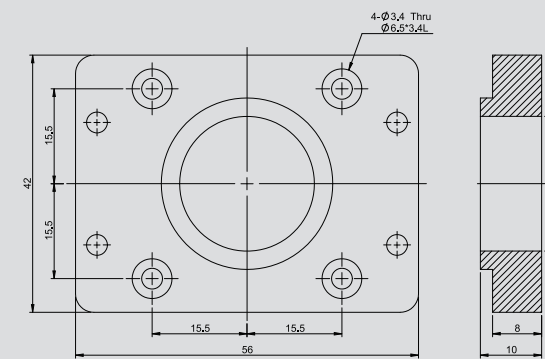
GK-H10
(GMT 100W / Delta, Mitsubishi 50, 100W Servo motor)



* Applicable coupling FACCL21-5*8

Stepper Motor

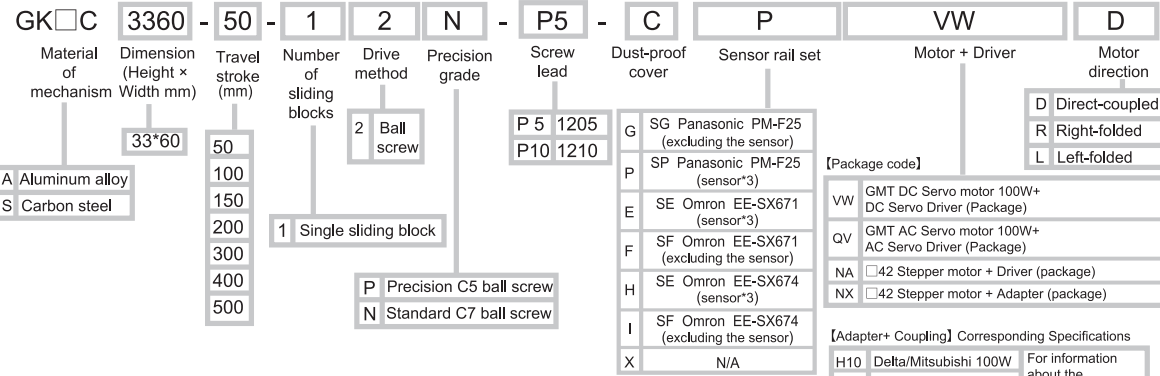
GK-G42 (GMT 42mm Stepper motor)



* Applicable coupling FACCL21-5*5

Description

GK□C 3360 series

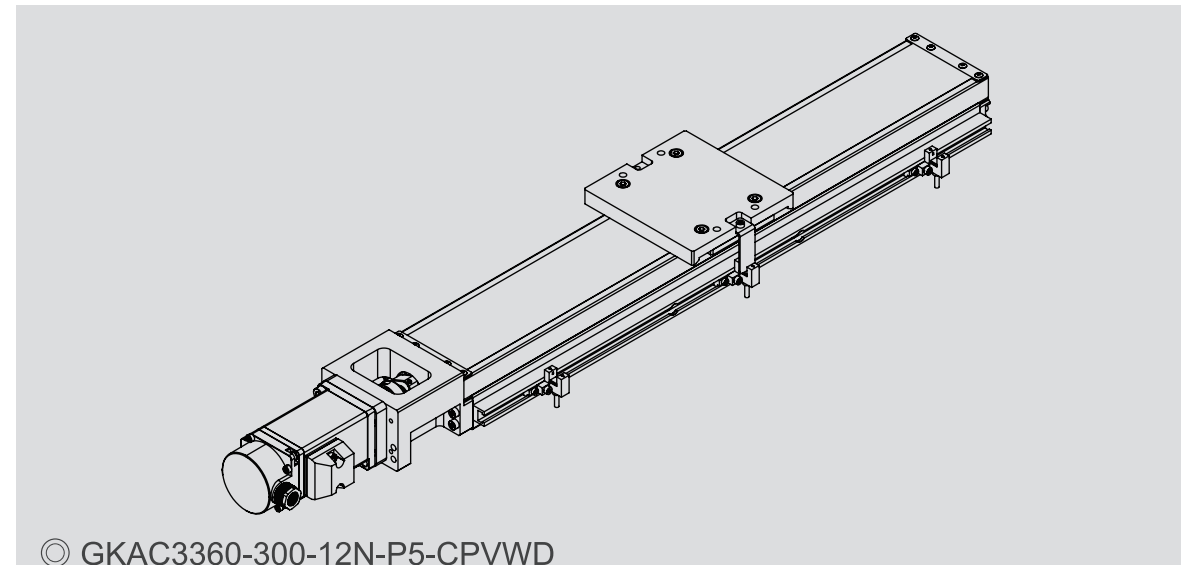


*When the motor is direct-coupled, the standard installation is on the right side. If the motor is folded, the installation is on the opposite side of the motor. For specific installation requirements, please contact the sales.

*The motor is prepared by customer

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU	•	•	•	16	•	—	—
NA	GTR22G-D (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

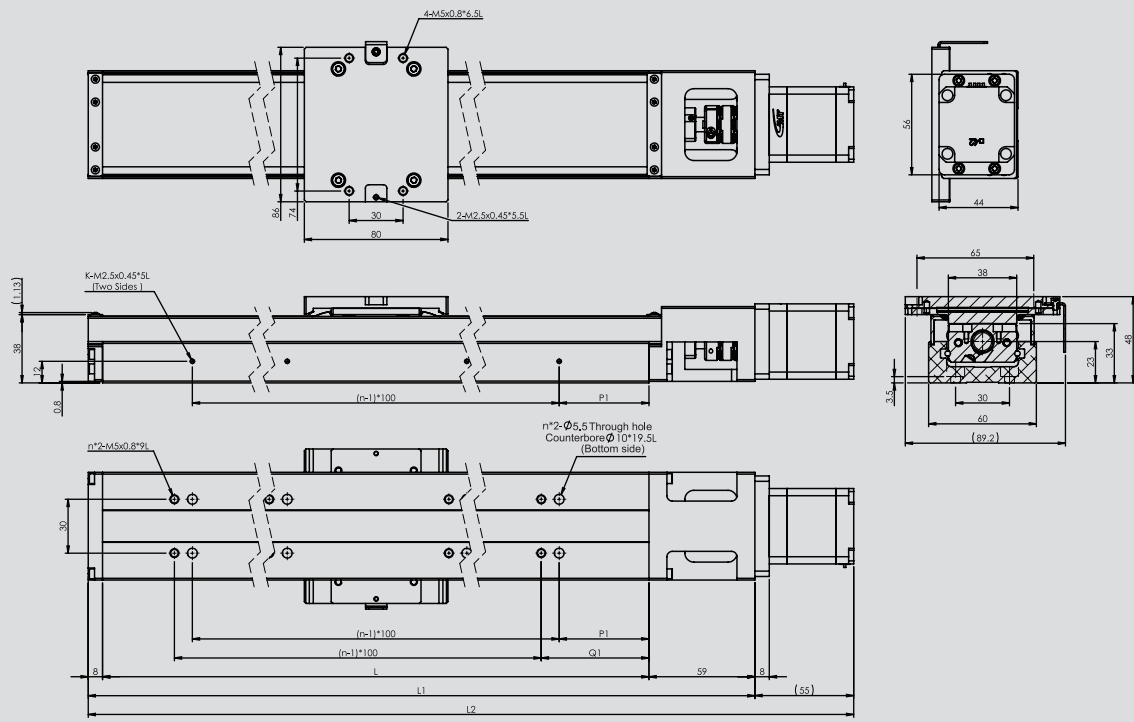


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Model No.		GK□C3360-N				GK□C3360-P							
Mechanical spec.	Dimension (Height × Width) (mm)	33 x 60											
	Stroke (mm)	50/100/150/200/300/400/500	50/100/150/200/300	400/500	50/100/150/200/300	400/500	50/100/150/200/300	400/500	50/100/150/200/300	400/500			
	Drive method	Ball screw Ø12											
	Lead (mm)	5	10	5	10	5	10	5	10				
	Rail	Recirculating linear ball guide											
Precision	Material of mechanism	A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)											
	Maximum speed (mm/s)	*1 Servo motor		250		500		250		500			
		Stepper motor		100		200		100		200			
	Uni-directional positioning accuracy (mm)	-				0.02		0.04		0.02		0.04	
	Repeatability (mm)	±0.005				±0.003							
	Running parallelism (mm)	0.025	0.035	0.025	0.035	0.01	0.015	0.01	0.015				
DC Electrical spec.	Maximum torque (N·cm)	7				15							
	DC Servo motor	100W : GSV-M-D01MD4											
	DC Servo driver	100W : K-SERVO 【GSV-KM01MR-48DP】											
	Lateral connector of the actuator	Manufacturer : TE Connectivity Power cable : 172159-1+170355-1(male) Encoder cable : 172161-1+170365-1(male)											
AC Electrical spec.	Lateral connector of the transmission cable	Manufacturer :KST Power cable : E1510-RED(European terminal) Manufacturer :JST Encoder cable : PHDR-12VS+SPHD-001T-P0.5(female)											
	AC Servo motor	100W : GSV-M-A01LC4											
	AC Servo driver	100W : GSV-KE01MB21CP											
	Lateral connector of the actuator	Manufacturer : Tyco electronics Power cable : 172167-1(male) Encoder cable : 172171-1(male)											
Step electrical spec.	Lateral connector of the transmission cable	Manufacturer : Tyco electronics Power cable : 172159-1(female) Encoder cable : 172163-1(female)											
	Open loop driver	GTR22G-D 【□42】											
	Closed loop driver	-											
	Lateral connector of the actuator	15-pin male D-SUB connector											
Lateral connector of the transmission cable	15-pin female D-SUB connector												

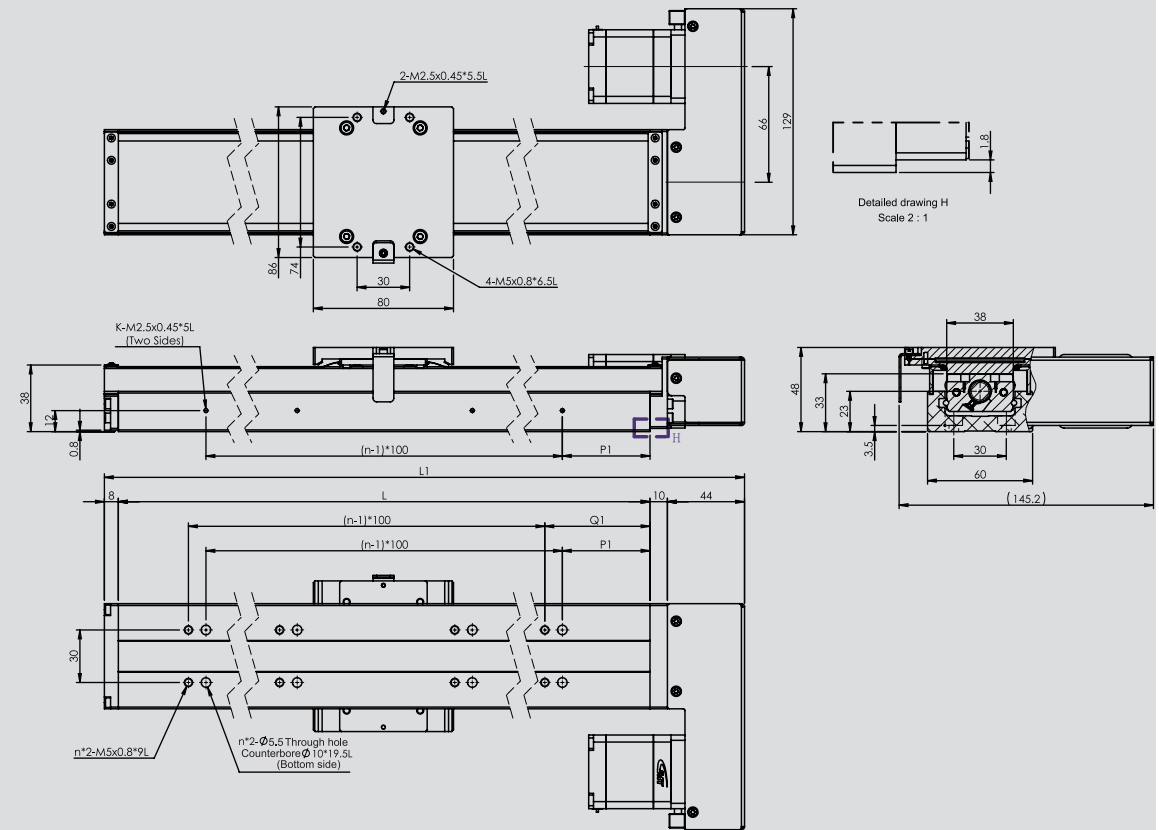
*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
*2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK□C3360 Direct-Coupled Open Loop Stepper Motor



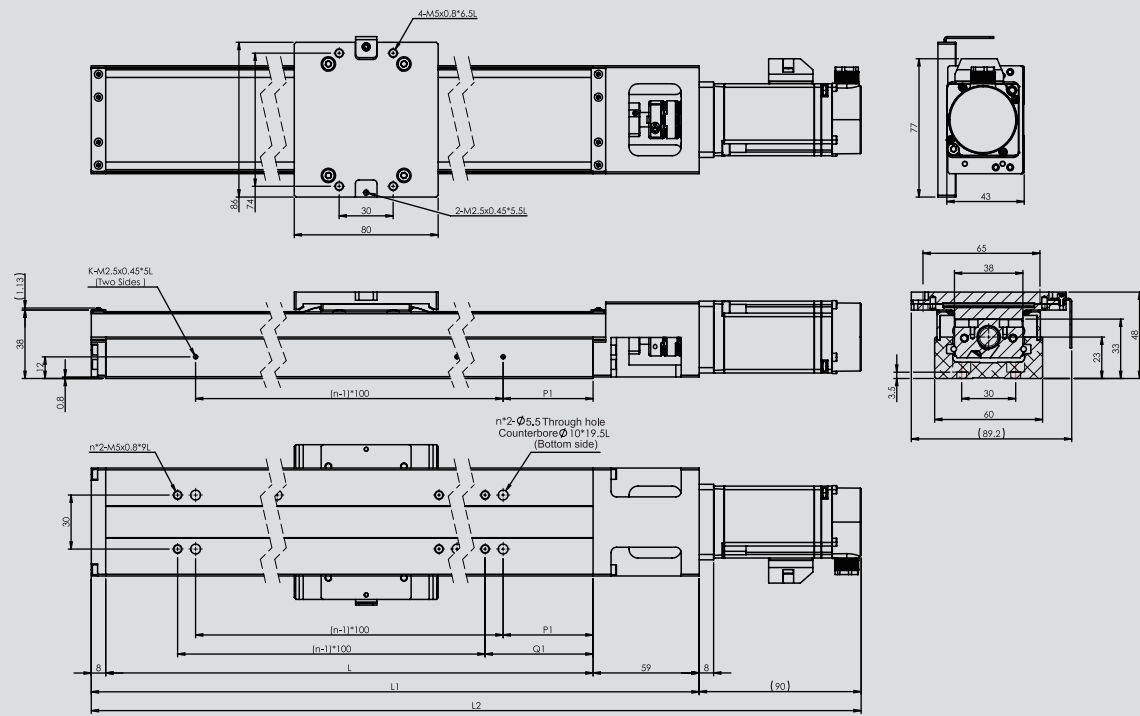
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C3360	50	150	217	272	2	2	25	35
	100	200	267	322	2	2	50	60
	150	250	317	372	3	3	25	35
	200	300	367	462	3	3	50	60
	300	400	467	522	4	4	50	60
	400	500	567	622	5	5	50	60
	500	600	667	722	6	6	50	60

GK□C3360 Folded Open Loop Stepper Motor



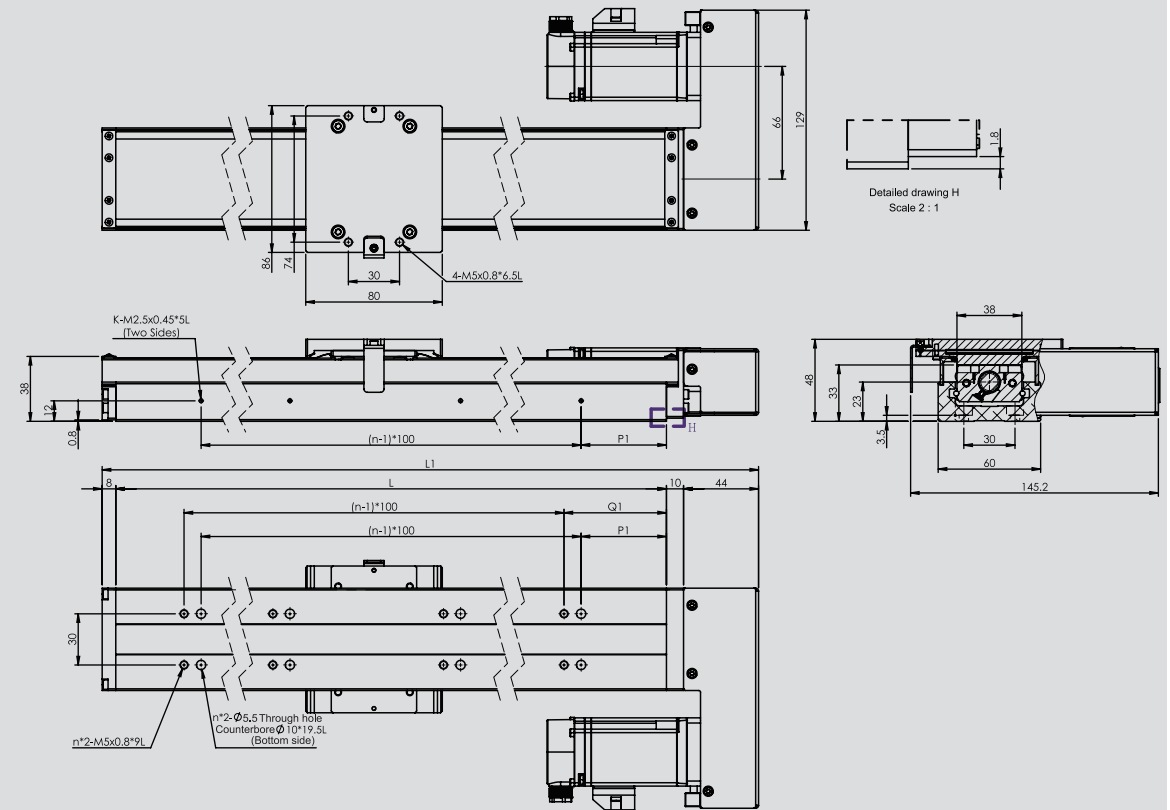
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C3360	50	150	212	2	2	25	35
	100	200	262	2	2	50	60
	150	250	312	3	3	25	35
	200	300	362	3	3	50	60
	300	400	462	4	4	50	60
	400	500	562	5	5	50	60
	500	600	662	6	6	50	60

GK□C3360 Direct-Coupled DC Servo Motor



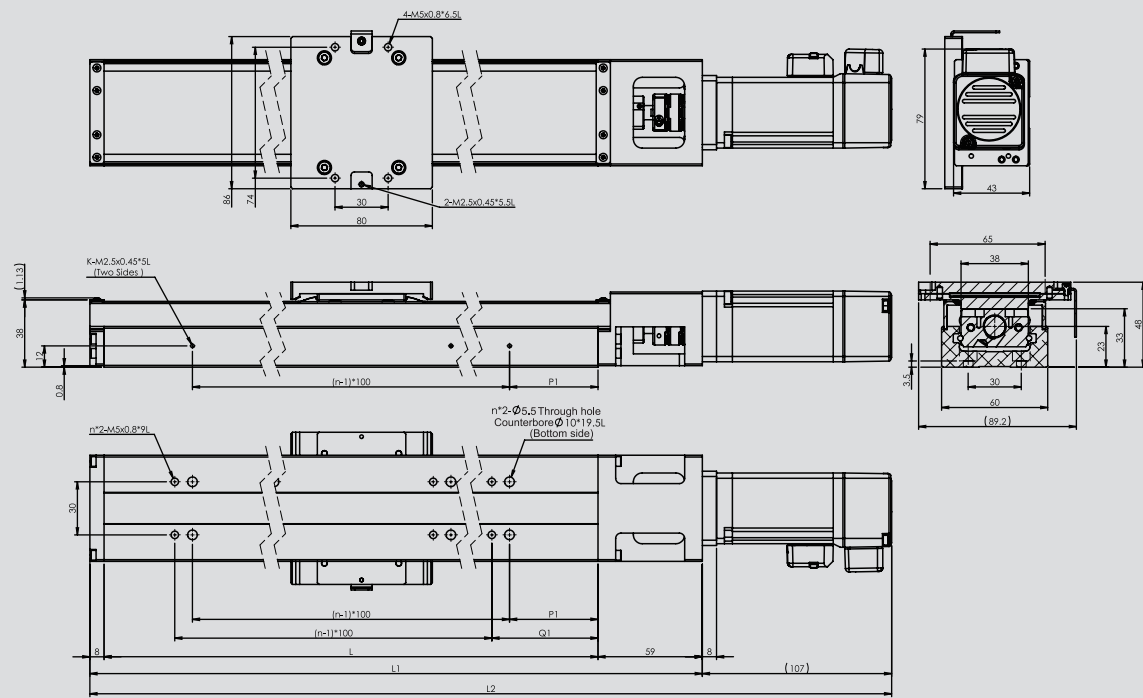
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C3360	50	150	217	307	2	2	25	35
	100	200	267	357	2	2	50	60
	150	250	317	407	3	3	25	35
	200	300	367	457	3	3	50	60
	300	400	467	557	4	4	50	60
	400	500	567	657	5	5	50	60
	500	600	667	757	6	6	50	60

GK□C3360 Folded DC Servo Motor



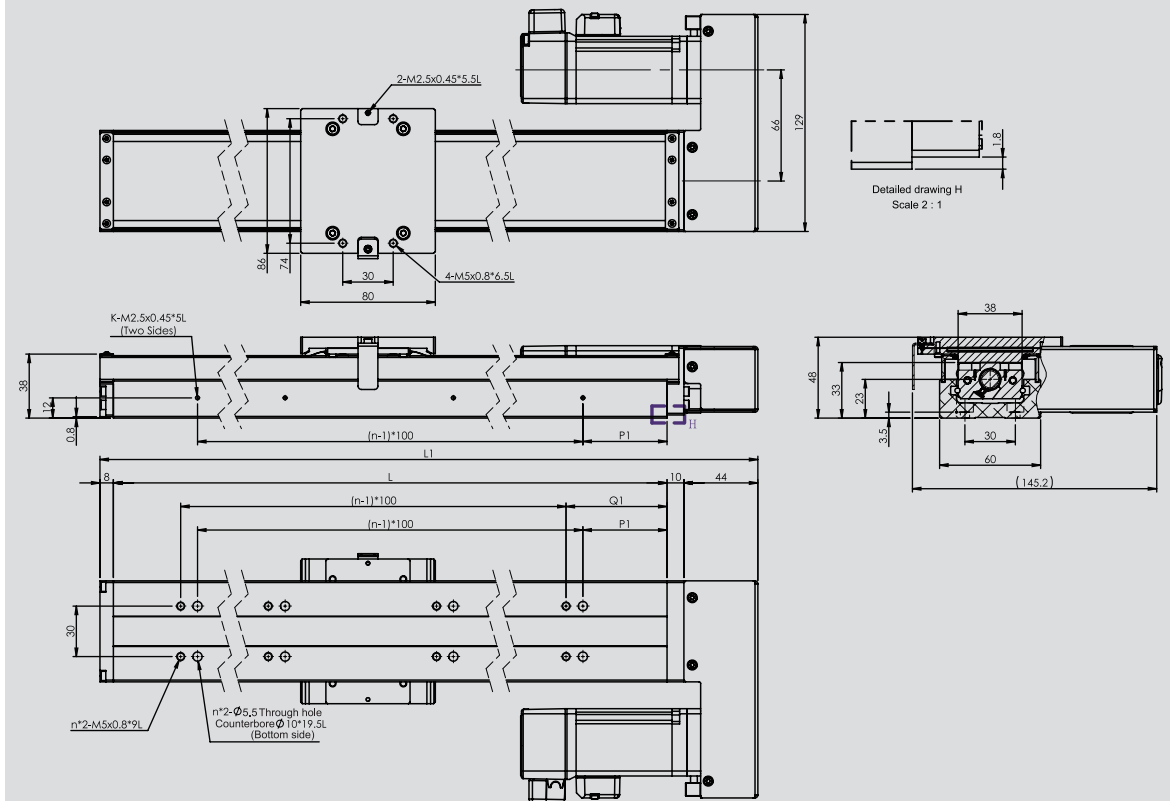
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C3360	50	150	212	2	2	25	35
	100	200	262	2	2	50	60
	150	250	312	3	3	25	35
	200	300	362	3	3	50	60
	300	400	462	4	4	50	60
	400	500	562	5	5	50	60
	500	600	662	6	6	50	60

GK□C3360 Direct-Coupled AC Servo Motor



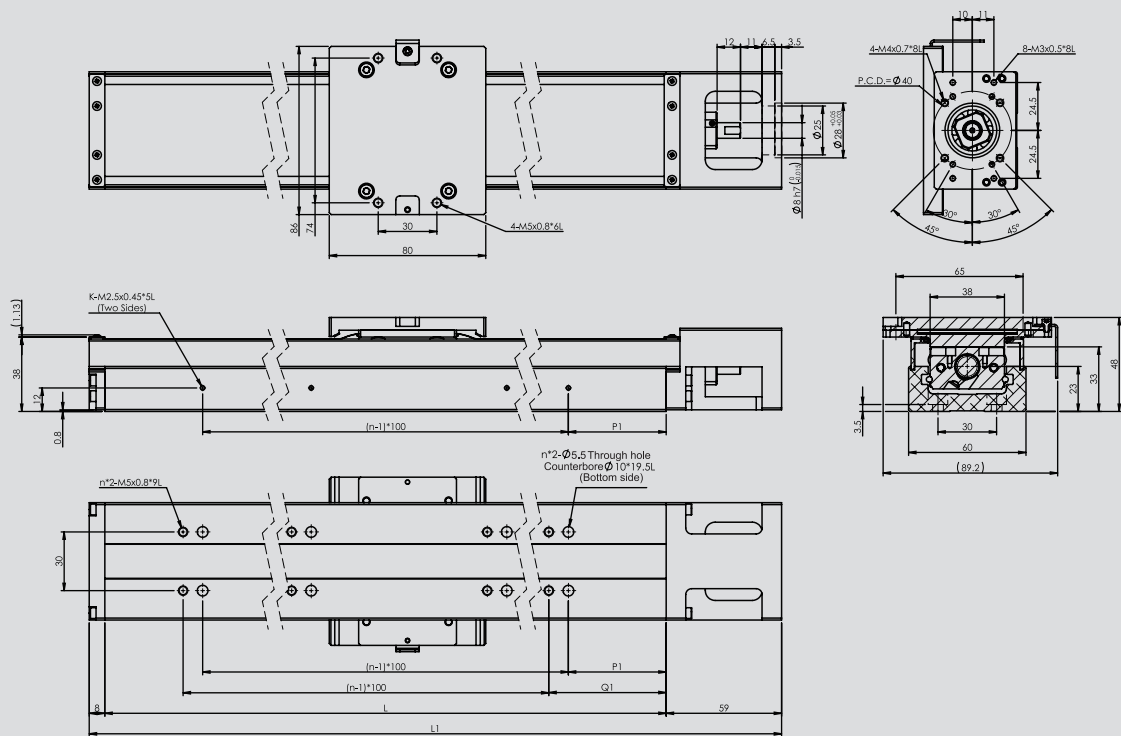
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C3360	50	150	217	324	2	2	25	35
	100	200	267	374	2	2	50	60
	150	250	317	424	3	3	25	35
	200	300	367	474	3	3	50	60
	300	400	467	574	4	4	50	60
	400	500	567	674	5	5	50	60
	500	600	667	774	6	6	50	60

GK□C3360 Folded DC Servo Motor



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C3360	50	150	212	2	2	25	35
	100	200	262	2	2	50	60
	150	250	312	3	3	25	35
	200	300	362	3	3	50	60
	300	400	462	4	4	50	60
	400	500	562	5	5	50	60
	500	600	662	6	6	50	60

GK□C3360 No Direct-Coupling Configured

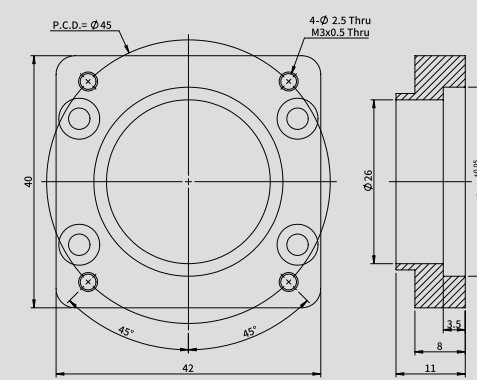


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C3360	50	150	217	2	2	25	35
	100	200	267	2	2	50	60
	150	250	317	3	3	25	35
	200	300	367	3	3	50	60
	300	400	467	4	4	50	60
	400	500	567	5	5	50	60
	500	600	667	6	6	50	60

GK□C3360 Motor Adapter

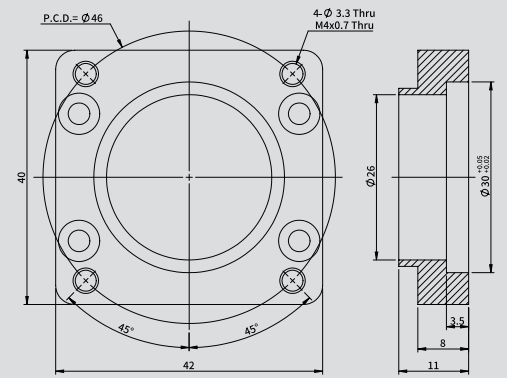
Servo Motor

GK33-M10
(Panasonic 50, 100W Servo motor)



*Applicable coupling FACCL21-8*8

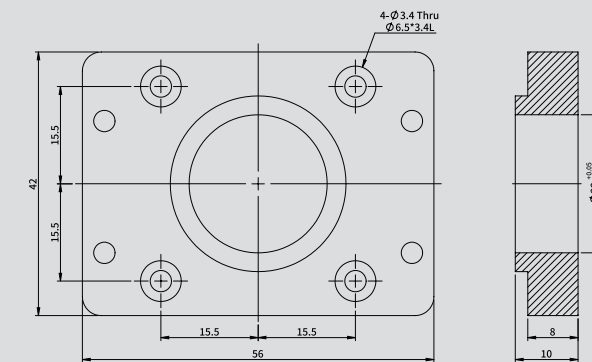
GK33-H10 (GMT 100W / Delta, Mitsubishi 50, 100W Servo motor)



*Applicable coupling FACCL21-8*8

Stepper Motor

GK33-G42 (GMT 42mm Stepper motor)



*Applicable coupling FACCL21-8*5

Description

GK□C 4580 series

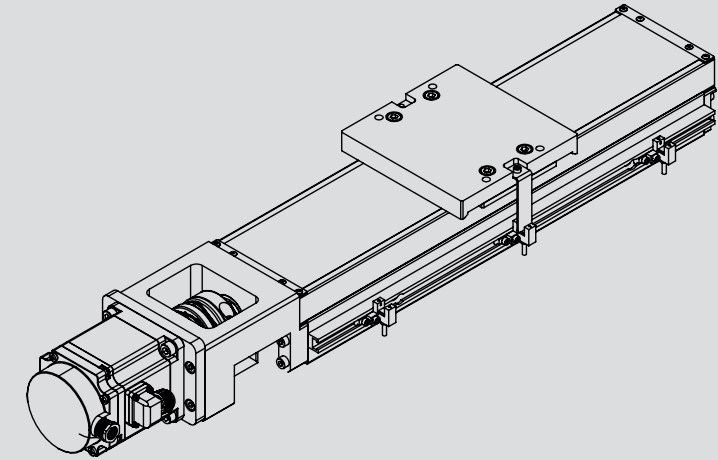
GK□C	4580	-	200	-	1	2	N	-	P10	-	C	P	VW	D
Material of mechanism	Dimension (Height x Width mm)	Travel stroke (mm)	Number of sliding blocks	Drive method	Precision grade	Screw lead	Dust-proof cover	Sensor rail set	Motor + Driver	Motor direction				
A Aluminum alloy S Carbon steel	45*80	200 300 400 500 600 700 800	1 Single sliding block	2 Ball screw P Precision C5 ball screw N Standard C7 ball screw		P10 1610	G SG Panasonic PM-F25 (excluding the sensor) P SP Panasonic PM-F25 (sensor*3) E SE Omron EE-SX671 (sensor*3) F SF Omron EE-SX671 (excluding the sensor) H SE Omron EE-SX674 (sensor*3) I SF Omron EE-SX674 (excluding the sensor) X N/A	[Package code] VW GMT DC Servo motor 200W + DC Servo Driver (Package) QV GMT AC Servo motor 200W, 400W + AC Servo Driver (Package) NA □57 Stepper motor + Driver NX □57 Stepper motor + Adapter (package)		D Direct-coupled R Right-folded L Left-folded				
											[Adapter + Coupling] Corresponding Specifications			
											H10	Delta/ Mitsubishi 100W		
											E40	Delta/ Mitsubishi 200,400W		
											M10	Panasonic 100W		
											M20	Panasonic 200, 400W, GMT 400W		
											G57	□57 Stepper motor		
											G60	□60 Stepper motor		

*When the motor is direct-coupled, the standard installation is on the right side. If the motor is folded, the installation is on the opposite side of the motor. For specific installation requirements, please contact the sales.

*The motor is prepared by customer

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU	•	•	•	16	•	—	—
NA	CVD228B-K (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

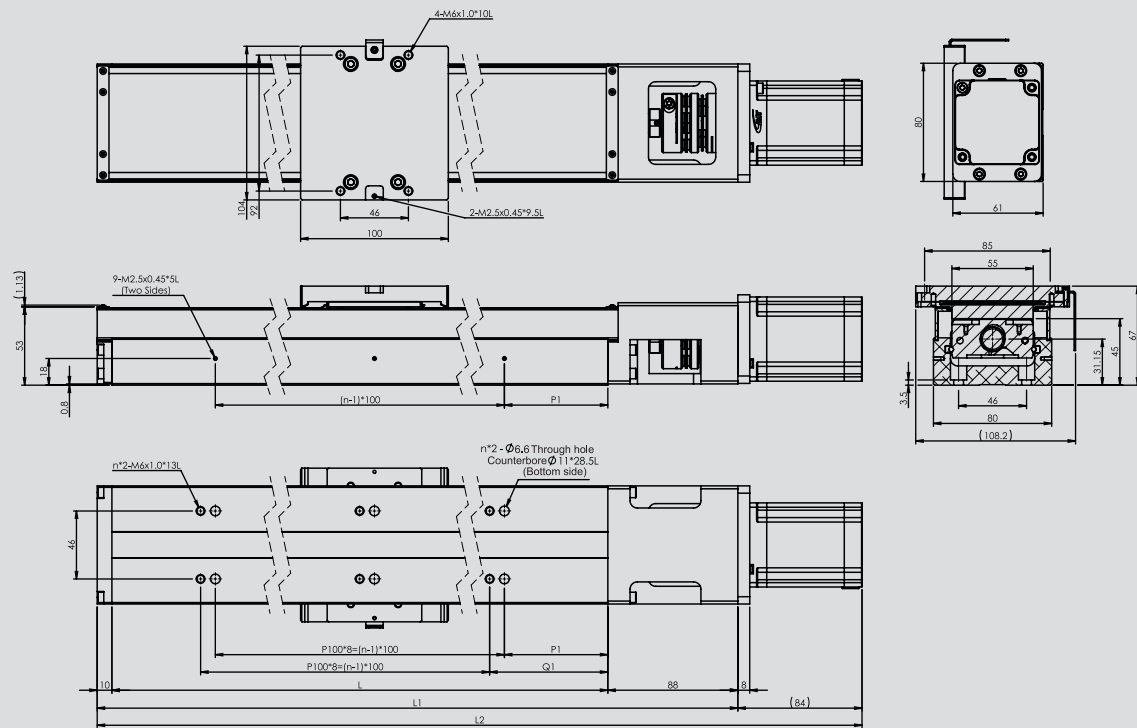


© GKAC4580-200-12N-P10-CPVWD

Model No.		GK□C4580-N				GK□C4580-P			
Mechanical spec.	Dimension (Height x Width) (mm)	45 x 80							
	Stroke (mm)	200~500	600	700~800	200~300	400	500	600	700~800
	Drive method	Ball screw Ø16							
	Lead (mm)	10							
	Rail	Recirculating linear ball guide							
Material of mechanism		A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)							
Precision	Maximum speed (mm/s) *1 Servo motor *2 Stepper motor	500							
	Uni-directional positioning accuracy (mm)	-				0.02	0.04		0.08
	Repeatability (mm)	±0.005				±0.003			
	Running parallelism (mm)	0.035	0.04	0.05	0.015		0.02	0.04	
	Maximum torque (N·cm)	10				12	15		-
DC Electrical spec.	DC Servo motor	200W : GSV-M-D02MD4							
	DC Servo driver	200W : K-SERVO 【GSV-KM02MR-48DP】							
	Lateral connector of the actuator	Manufacturer : TE Connectivity Power cable : 172159-1+170355-1(male) Encoder cable : 172161-1+170365-1(male)							
	Lateral connector of the transmission cable	Manufacturer :KST Power cable : E1510-RED (European terminal) Manufacturer :JST Encoder cable : PHDR-12VS+SPHD-001T-P0.5(female)							
AC Electrical spec.	AC Servo motor	200W : GSV-M-A02LC4							
	AC Servo driver	200W : GSV-KE02MB21CP							
	Lateral connector of the actuator	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)							
Step electrical spec.	Open loop driver	CVD228B-K 【□57】							
	Lateral connector of the actuator	15-pin male D-SUB connector							
	Lateral connector of the transmission cable	15-pin female D-SUB connector							

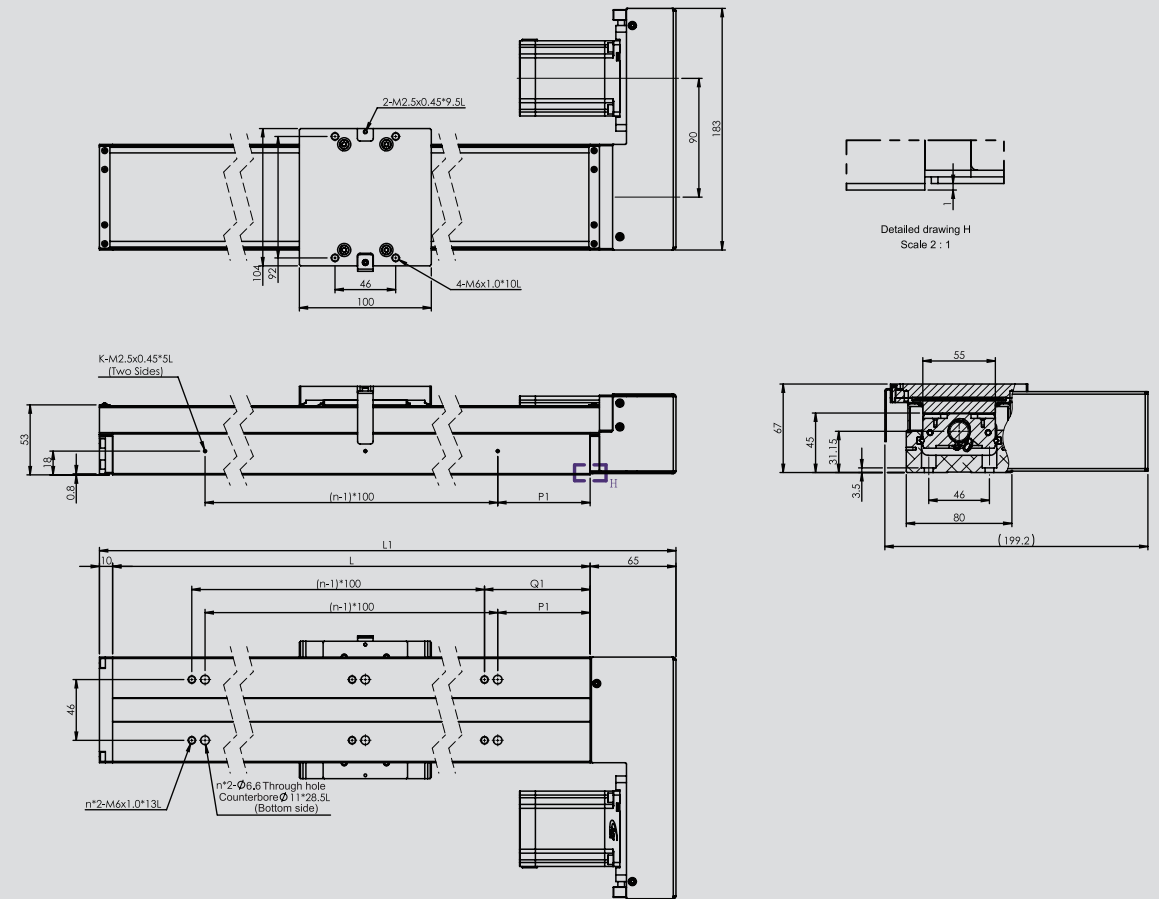
*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
*2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK□C4580 Direct-Coupled Open Loop Stepper Motor



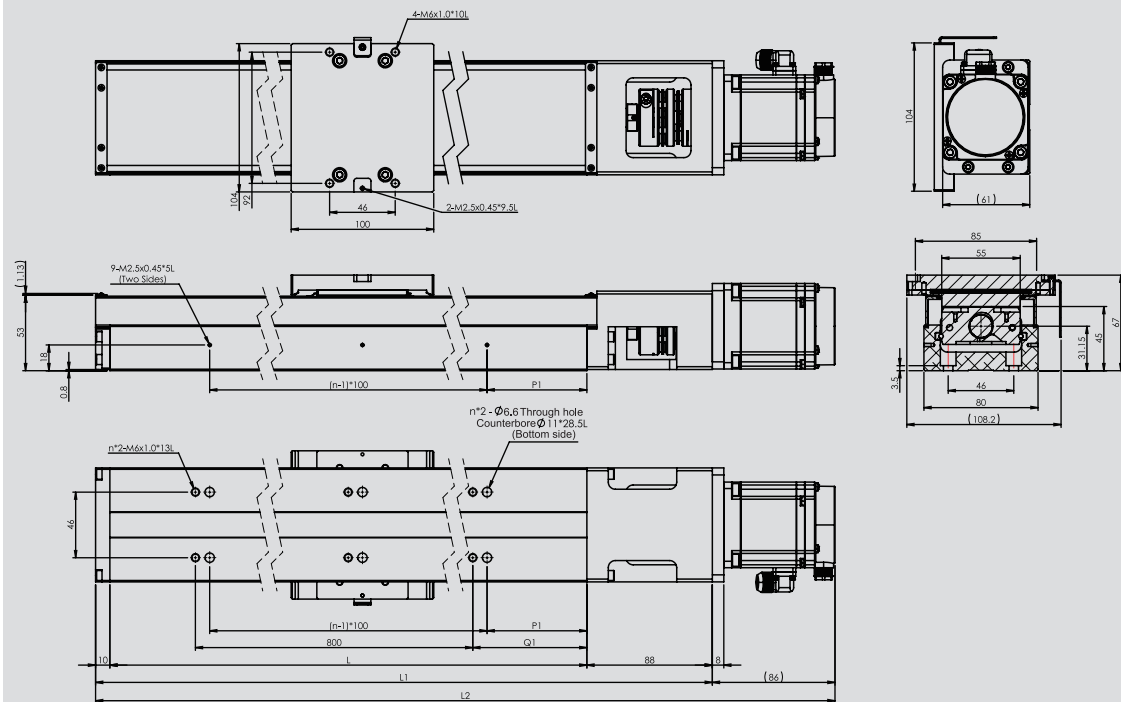
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C4580	200	340	438	524	3	3	70	80
	300	440	538	624	4	4		
	400	540	638	724	5	5		
	500	640	738	824	6	6		
	600	740	838	924	7	7		
	700	840	938	1024	8	8		
	800	940	1038	1124	9	9		

GK□C4580 Folded Open Loop Stepper Motor



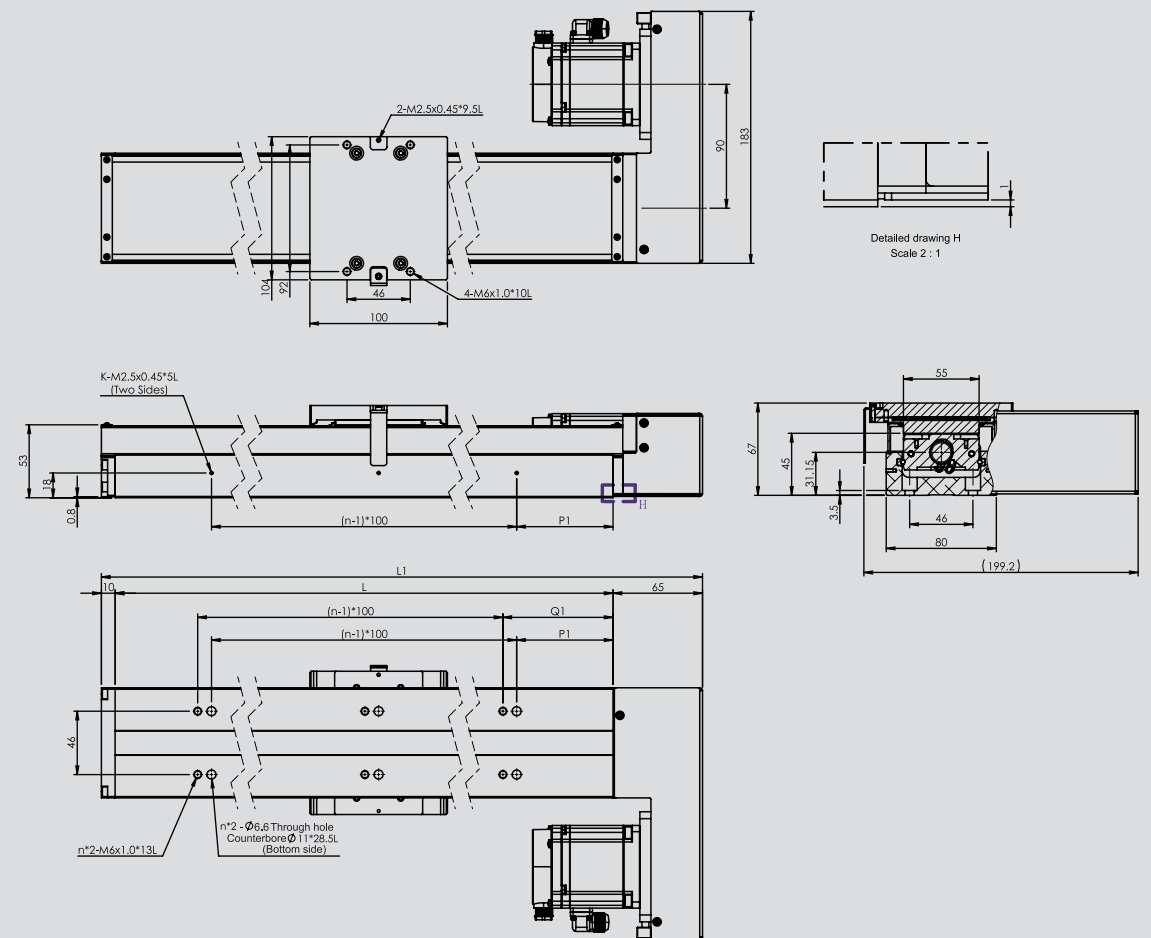
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C4580	200	340	415	3	3	70	80
	300	440	515	4	4		
	400	540	615	5	5		
	500	640	715	6	6		
	600	740	815	7	7		
	700	840	915	8	8		
	800	940	1015	9	9		

GK□C4580 Direct-Coupled DC Servo Motor



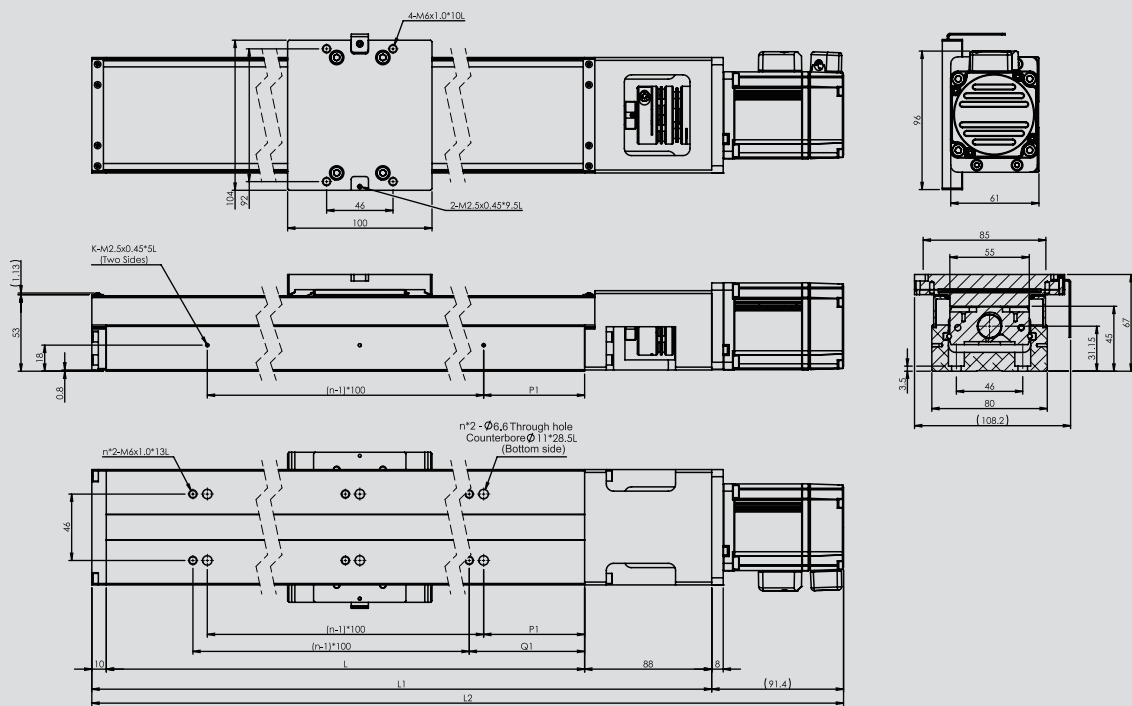
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C4580	200	340	438	524	3	3	70	80
	300	440	538	624	4	4		
	400	540	638	724	5	5		
	500	640	738	824	6	6		
	600	740	838	924	7	7		
	700	840	938	1024	8	8		
	800	940	1038	1124	9	9		

GK□C4580 Folded DC Servo Motor



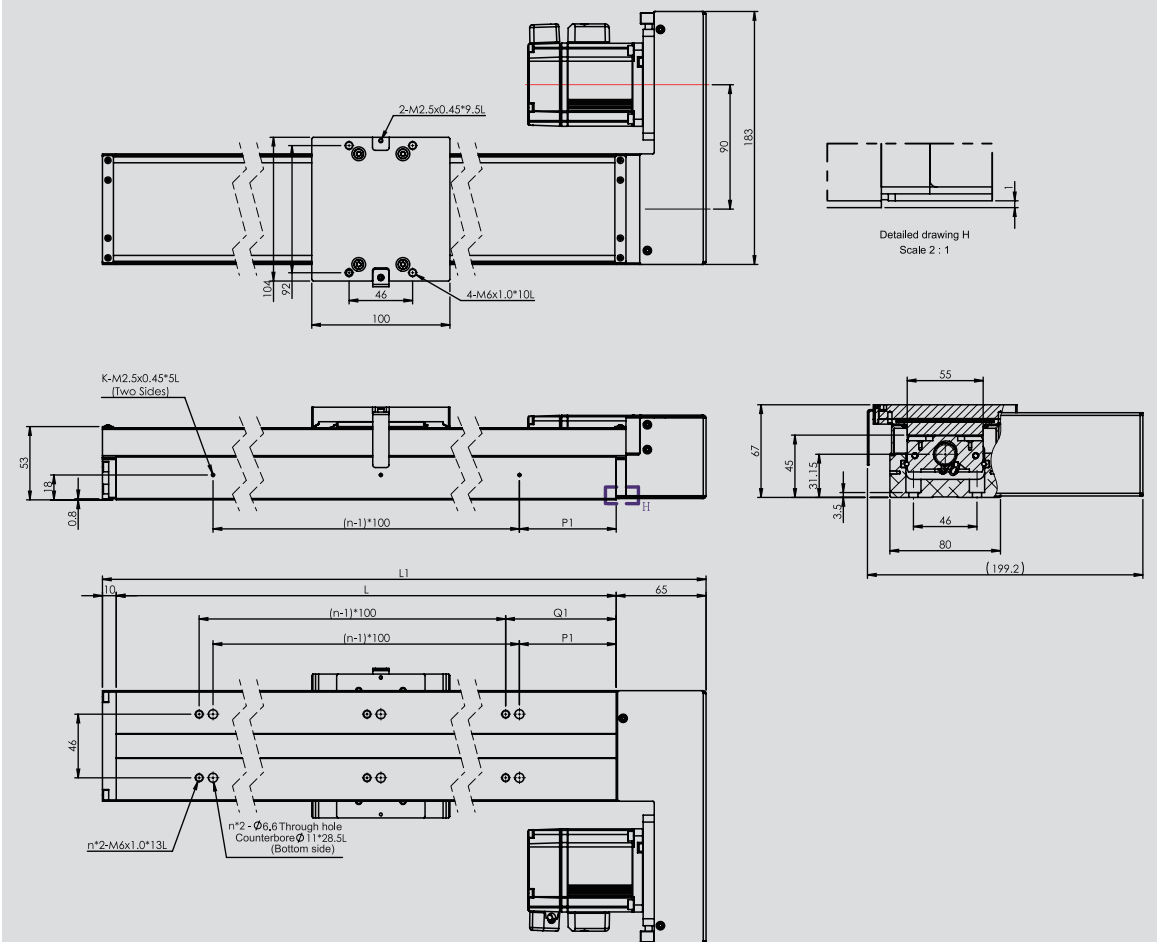
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C4580	200	340	415	3	3	70	80
	300	440	515	4	4		
	400	540	615	5	5		
	500	640	715	6	6		
	600	740	815	7	7		
	700	840	915	8	8		
	800	940	1015	9	9		

GK□C4580 Direct-Coupled AC Servo Motor



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C4580	200	340	438	529.4	3	3	70	80
	300	440	538	629.4	4	4		
	400	540	638	729.4	5	5		
	500	640	738	829.4	6	6		
	600	740	838	929.4	7	7		
	700	840	938	1029.4	8	8		
	800	940	1038	1129.4	9	9		

GK□C4580 Folded DC Servo Motor



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C4580	200	340	415	3	3	70	80
	300	440	515	4	4		
	400	540	615	5	5		
	500	640	715	6	6		
	600	740	815	7	7		
	700	840	915	8	8		
	800	940	1015	9	9		

Description

GK□C 4686 series

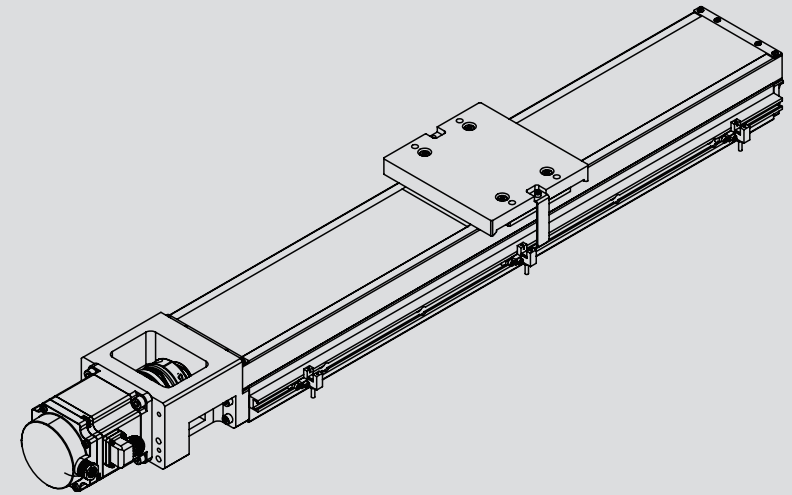
GK□C	4686	-	190	-	1	2	N	-	P10	-	C	P	VW	D
Material of mechanism	Dimension (Height × Width mm)	Travel stroke (mm)	Number of sliding blocks	Drive method	Precision grade	Screw lead	Dust-proof cover	Sensor rail set	Motor + Driver	Motor direction				
A Aluminum alloy S Carbon steel	46*86	190 290 390 490 590 690 790	1 Single sliding block	2 Ball screw P Precision C5 ball screw N Standard C7 ball screw		P10 1610	G SG Panasonic PM-F25 (excluding the sensor) P SP Panasonic PM-F25 (sensor*3) E SE Omron EE-SX671 (sensor*3) F SF Omron EE-SX671 (excluding the sensor) H SE Omron EE-SX674 (sensor*3) I SF Omron EE-SX674 (excluding the sensor) X N/A	[Package code] VW GMT DC Servo motor 200W + DC Servo Driver (Package) QV GMT AC Servo motor 200W, 400W + AC Servo Driver (Package) NA □57 Stepper motor + Driver (package) NX □57 Stepper motor + Adapter (package)	[Adapter + Coupling] Corresponding Specifications H10 Delta/ Mitsubishi 100W E40 Delta/ Mitsubishi 200,400W M10 Panasonic 100W M20 Panasonic 200, 400W, GMT 40W G57 □57 Stepper motor G60 □60 Stepper motor	D Direct-coupled R Right-folded L Left-folded	For information about the accessories, please refer to Page P.131			

*When the motor is direct-coupled, the standard installation is on the right side. If the motor is folded, the installation is on the opposite side of the motor. For specific installation requirements, please contact the sales.

*The motor is prepared by customer

Motor-driver package list

Code	Name of driver	Appearance	No. of axes	Power voltage	Control method			Control mode			Encoder feedback		Optical linear encoder feedback	
					Pulse	I/O	Communication	Location	Speed	Torque	Point	Optical encoder		Magnetic encoder
VW	K-SERVO (KM) (DC Servo driver) GSV-KM□□MB□□DP		16	DC48V	•	•	RS485 Modbus RTU	•	•	•	128	•	—	•
QV	KE-SERVO (AC Servo driver) GSV-KE□□MB21CP		32	AC220V	•	•	RS485 Modbus RTU	•	•	•	16	•	—	—
NA	CVD228B-K (2-phase bipolar micro-stepper driver)		1	DC24V	•	—	—	•	—	—	—	—	—	—

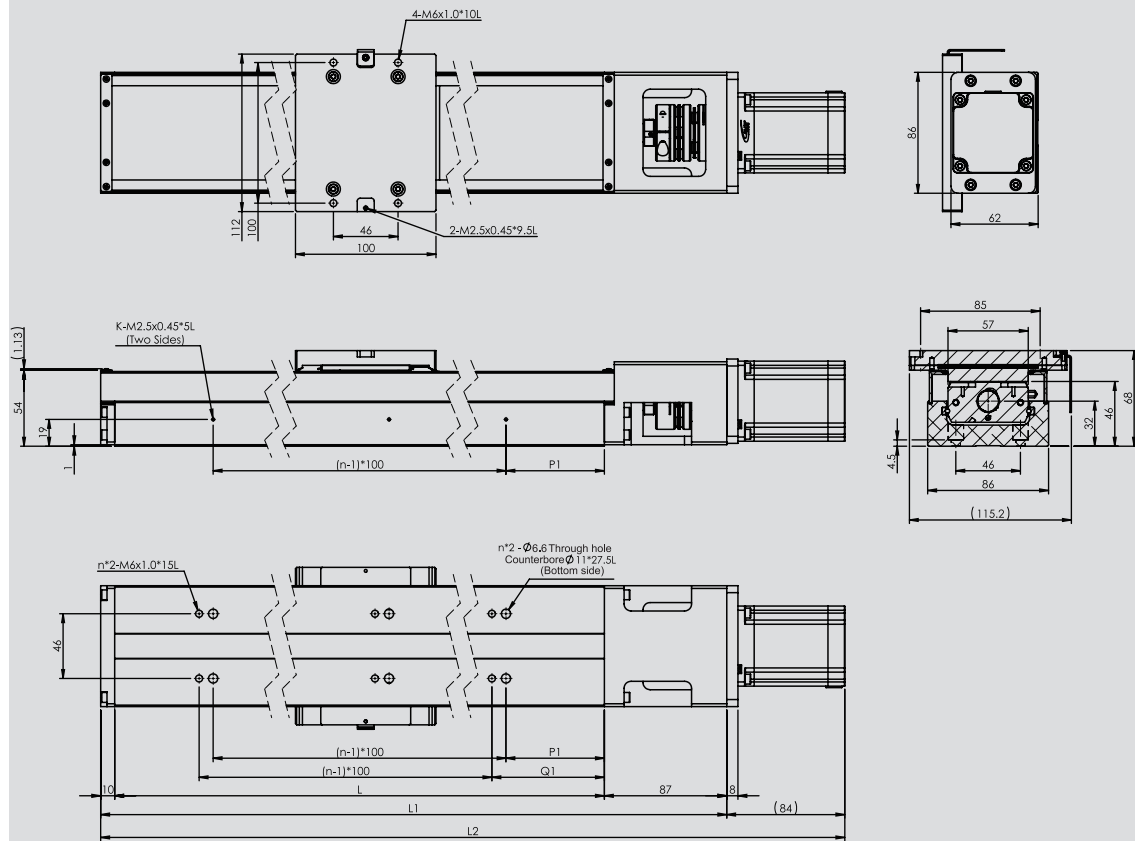


© GKAC4686-390-12N-P10-CPVWD

Model No.		GK□C4686-N				GK□C4686-P			
Mechanical spec.	Dimension (Height × Width) (mm)	46 × 86							
	Stroke (mm)	190~490	590	690~790	190~290	390	490	590	690~790
	Drive method	Ball screw Ø16							
	Lead (mm)	10							
	Rail	Recirculating linear ball guide							
Material of mechanism		A: Aluminum alloy (Anodized) / S: Carbon steel (phosphate coating)							
Precision*	Maximum speed (mm/s)	500 (Servo motor) 200 (Stepper motor)							
	Uni-directional positioning accuracy (mm)	-			0.02	0.04		0.08	
	Repeatability (mm)	±0.005			±0.003				
	Running parallelism (mm)	0.035	0.04	0.05	0.015		0.02	0.04	
	Maximum torque (N·cm)	10			12	15		-	
DC Electrical spec.	DC Servo motor	200W : GSV-M-D02MD4							
	DC Servo driver	200W : K-SERVO 【GSV-KM02MR-48DP】							
	Lateral connector of the actuator	Manufacturer : TE Connectivity Power cable : 172159-1+170355-1(male) Encoder cable : 172161-1+170365-1(male)							
	Lateral connector of the transmission cable	Manufacturer :KST Power cable : E1510-RED (European terminal) Manufacturer :JST Encoder cable : PHDR-12VS+SPHD-001T-P0.5(female)							
AC Electrical spec.	AC Servo motor	200W : GSV-M-A02LC4							
	AC Servo driver	200W : GSV-KE02MB21CP							
	Lateral connector of the actuator	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)							
Step electrical spec.	Open loop driver	CVD228B-K 【□57】							
	Lateral connector of the actuator	15-pin male D-SUB connector							
	Lateral connector of the transmission cable	15-pin female D-SUB connector							

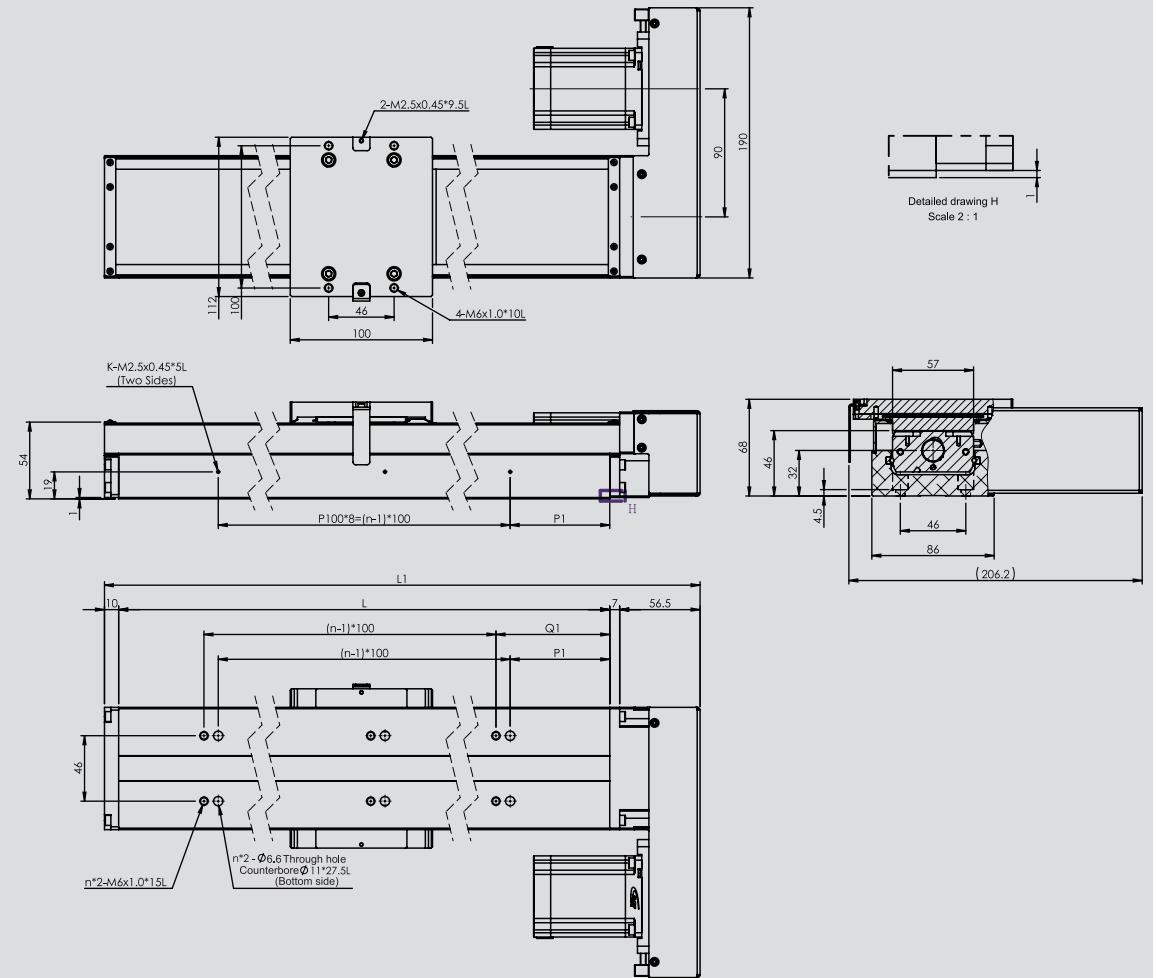
*1 The servo motor's maximum speed is calculated with 3000rpm and the stepper motor's maximum speed is calculated with 1200rpm.
*2 Without the folded parts installed, the accuracy of folded motor is measured when it is directly coupled with an actuator.

GK□C4686 Direct-Coupled Open Loop Stepper Motor



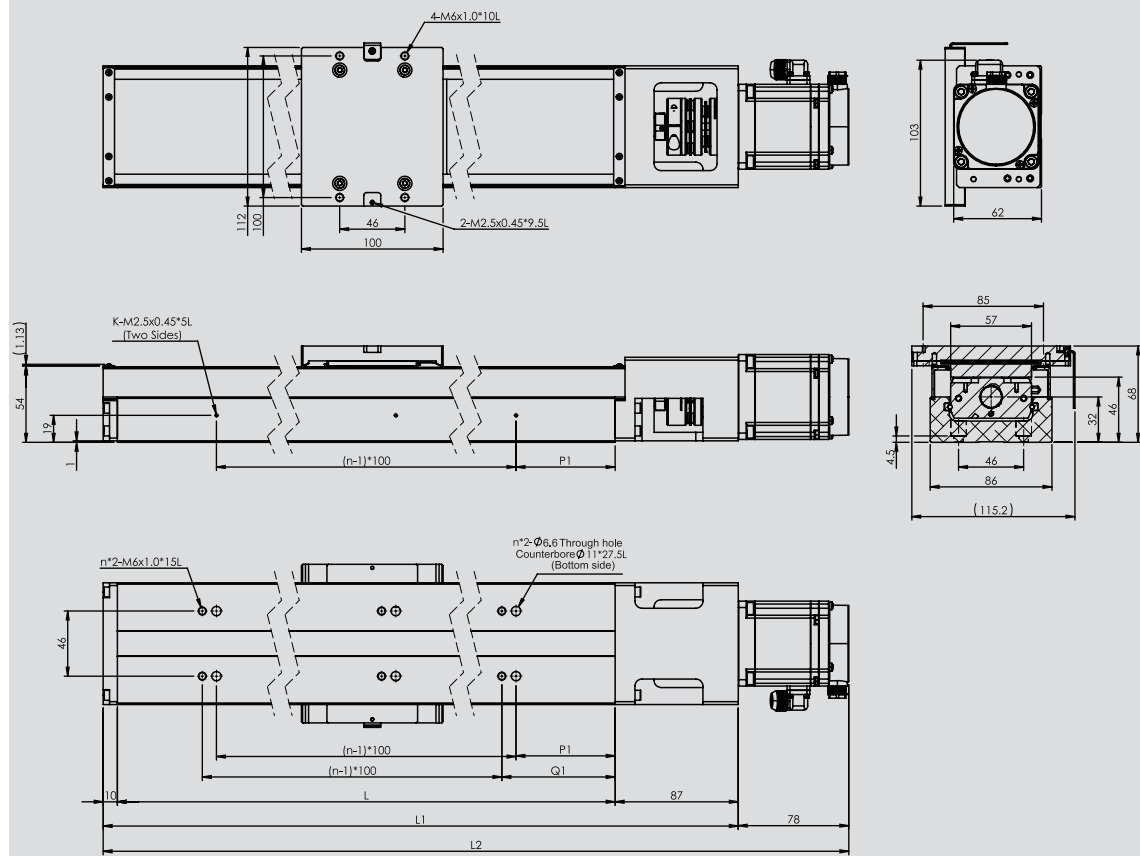
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C4686	190	340	437	521	3	3	70	80
	290	440	537	621	4	4		
	390	540	637	721	5	5		
	490	640	737	821	6	6		
	590	740	837	921	7	7		
	690	840	937	1021	8	8		
	790	940	1037	1121	9	9		

GK□C4686 Folded Open Loop Stepper Motor



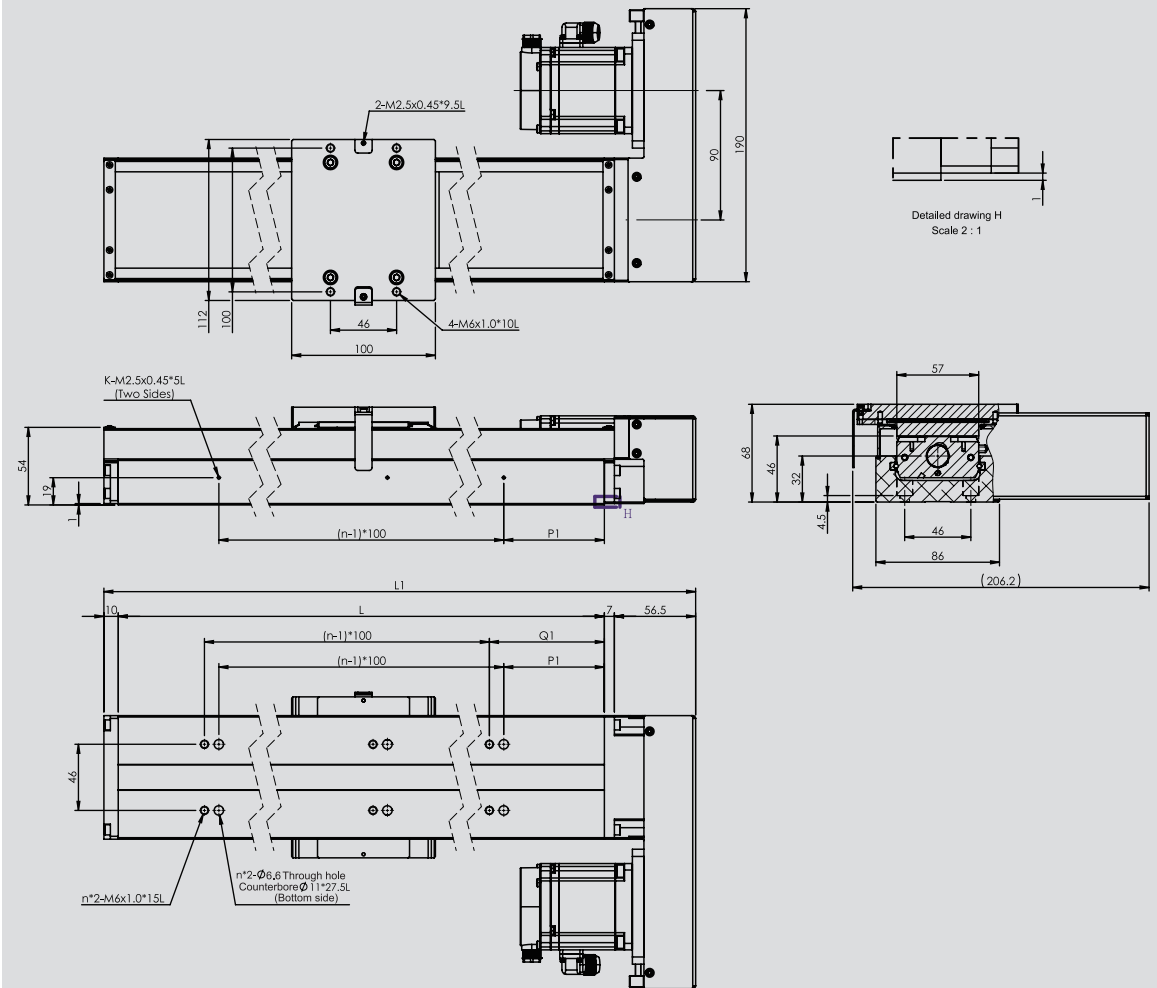
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C4686	190	340	413.5	3	3	70	80
	290	440	513.5	4	4		
	390	540	613.5	5	5		
	490	640	713.5	6	6		
	590	740	813.5	7	7		
	690	840	913.5	8	8		
	790	940	1013.5	9	9		

GK□C4686 Direct-Coupled DC Servo Motor



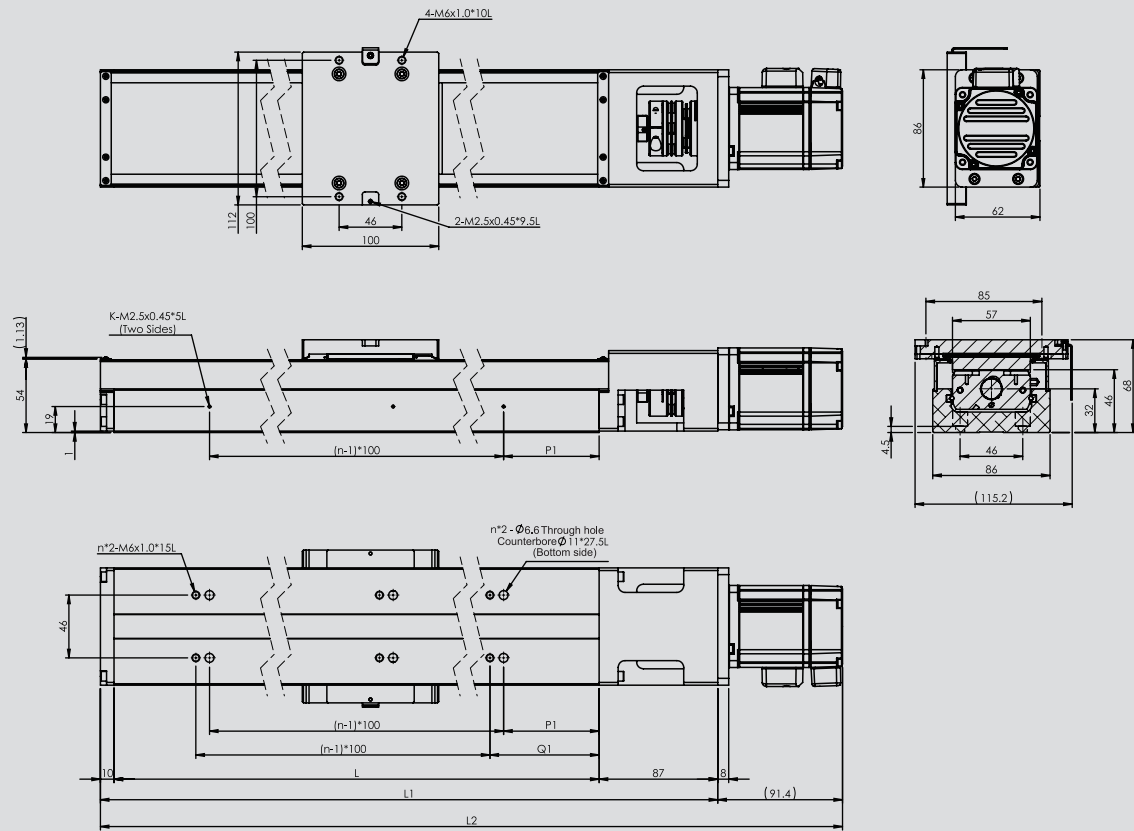
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C4686	190	340	437	515	3	3	70	80
	290	440	537	615	4	4		
	390	540	637	715	5	5		
	490	640	737	895	6	6		
	590	740	837	915	7	7		
	690	840	937	1015	8	8		
	790	940	1037	1115	9	9		

GK□C4686 Folded DC Servo Motor



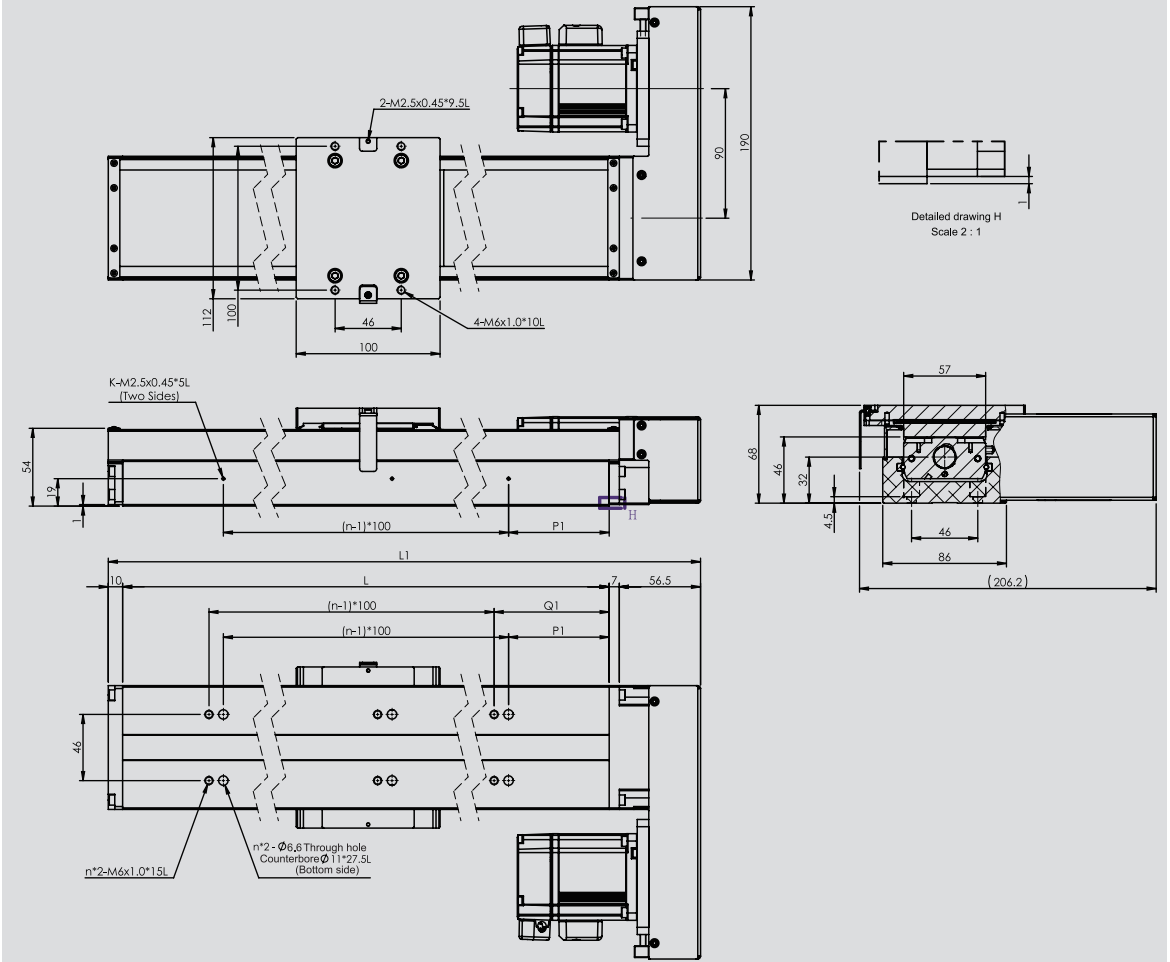
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C4686	190	340	413.5	3	3	70	80
	290	440	513.5	4	4		
	390	540	613.5	5	5		
	490	640	713.5	6	6		
	590	740	813.5	7	7		
	690	840	913.5	8	8		
	790	940	1013.5	9	9		

GK□C4686 Direct-Coupled AC Servo Motor



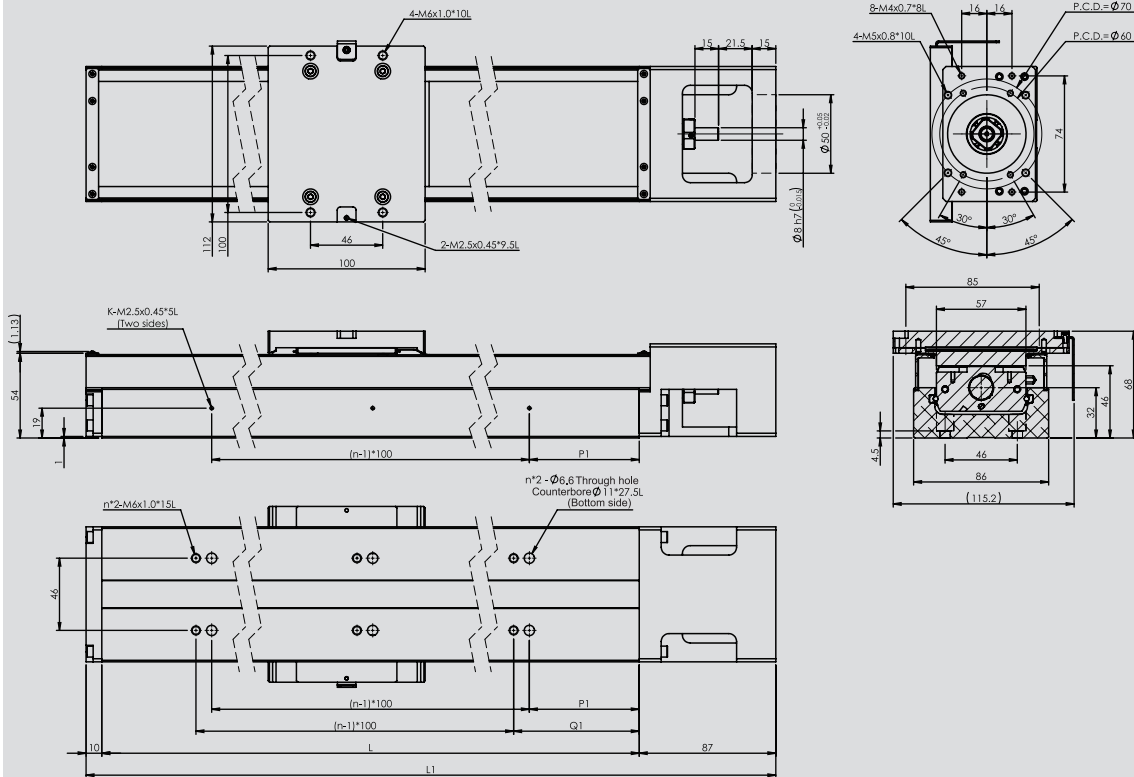
Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	Overall total length L2(mm)	n	k	P1	Q1
GK□C4686	190	340	437	528.4	3	3	70	80
	290	440	537	628.4	4	4		
	390	540	637	728.4	5	5		
	490	640	737	828.4	6	6		
	590	740	837	928.4	7	7		
	690	840	937	1028.4	8	8		
	790	940	1037	1128.4	9	9		

GK□C4686 Folded AC Servo Motor



Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C4686	190	340	413.5	3	3	70	80
	290	440	513.5	4	4		
	390	540	613.5	5	5		
	490	640	713.5	6	6		
	590	740	813.5	7	7		
	690	840	913.5	8	8		
	790	940	1013.5	9	9		

GK□C4686 No Direct-Coupling Configured

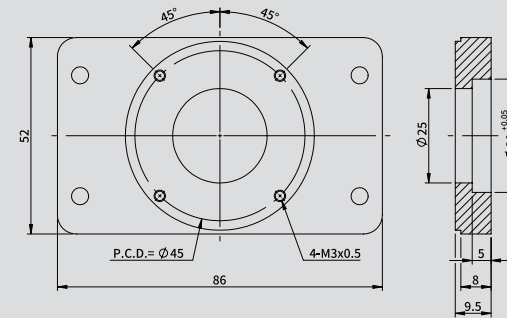


Model No.	Stroke (mm)	Rail length L(mm)	Mechanism length L1(mm)	n	k	P1	Q1
GK□C4686	190	340	437	3	3	70	80
	290	440	537	4	4		
	390	540	637	5	5		
	490	640	737	6	6		
	590	740	837	7	7		
	690	840	937	8	8		
790	940	1037	9	9			

GK□C4686 Motor Adapter

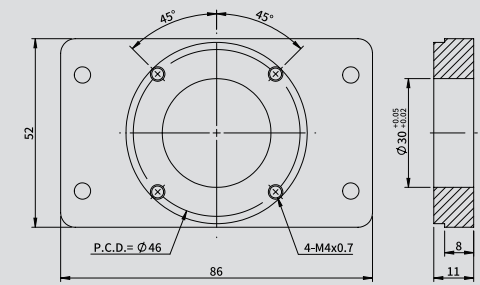
Servo Motor

GK46-M10
(Panasonic 100W Servo motor)



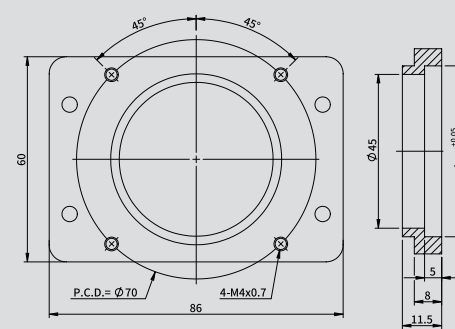
*Applicable coupling FACHL40-8*8

GK46-H10
(GMT, Delta, Mitsubishi 100W Servo motor)



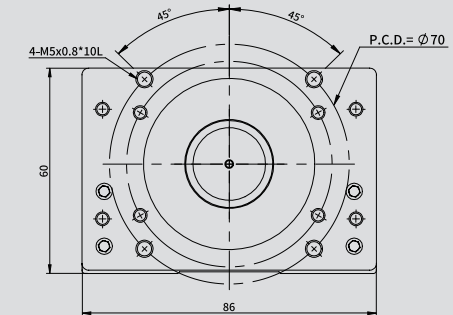
*Applicable coupling FACHL40-8*8

GK46-M20
(GMT, Panasonic 200, 400W Servo motor)



*Applicable coupling
200W~400W: FACHL40-8*11(Panasonic)
200W~400W: FACHL40-8*14(GMT)

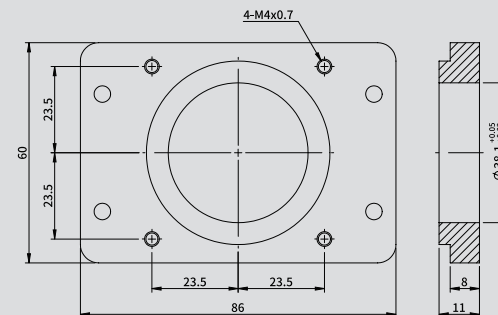
GK46-E40
(GMT, Delta, Mitsubishi 200, 400W Servo motor)



*Applicable coupling FACHL40-8*14

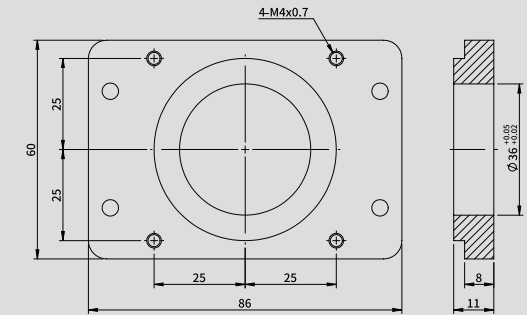
Stepper Motor

GK46-G57 (GMT 57mm Stepper motor)



*Applicable coupling FACHL40-8*6.35

GK46-G60 (60mm Stepper motor)



*Applicable coupling FACHL40-8*8

Inspection method

Laser interferometer

Reference mirror

Detection mirror

GKA/S

Testing equipment : laser interferometer.
The bottom of the stage should be fixed during the operation, only the sliding block is working.

Laser

Positioning Accuracy (μm)
Within a predetermined stroke, set a laser interferometer or CMM for the measurement and start the stage from a target point in one direction. As the motion is done, record the difference has occurred between the actual and target movement values. The difference is referred to as positioning accuracy.

Laser

Repeatability Positioning Precision ($\pm\mu\text{m}$)
At the first half of the test of repeatability precision, the positioning test should have been repeated for seven times. Then record the maximum difference and the path including it to be used to perform the next step. With half value of the difference, test for the other differences at midpoint/both ends of the previous path and thence record the maximum again, which is referred to as a repeatability positioning precision.

Laser

Lost Step (The Losses of Distance Since a Reverse Rotation) (μm)
Within a predetermined stroke, set a laser interferometer or CMM for the measurement and start working a homing linear stage to an unspecified point by giving a command of positive direction, once the movement is completed, record the difference between the actual and target values. Simultaneously, give a same value of movement command of negative direction with which the stage will be moved back, then record another difference as the motion completed, and continue to do the next repetition. After the seven repetitions are done, an average value of all the differences recorded is finally referred to as a missed step.

Inspection method

Micrometer

GKA/S

Testing equipment : a micrometer or Zeiss coordinate measuring machines.
The foundation of the stage should be fixed during the operation, while only the meter is moving at the same time.

Parallelism (μm)
Place the stage onto granite workbench and set a micrometer to measure the maximum height difference at middle of the stage (or use Zeiss coordinate measuring machines), and referred to as parallelism.

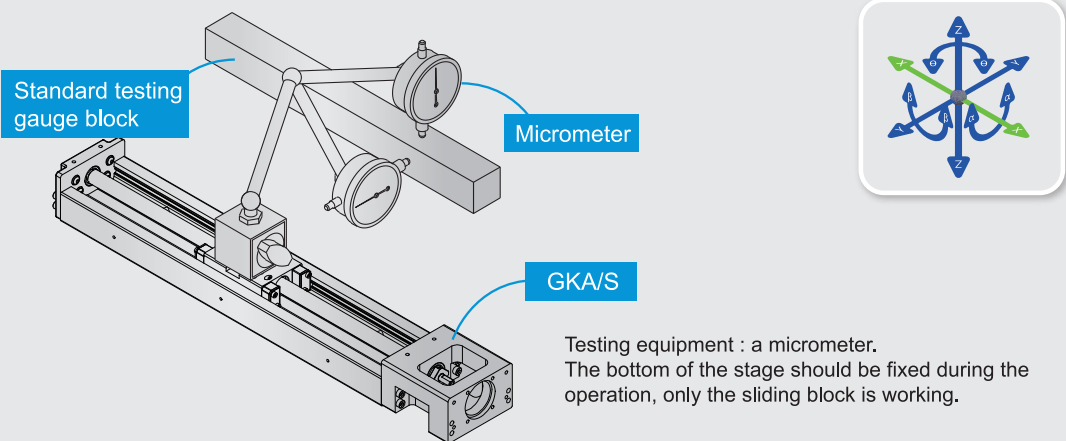
Micrometer

GKA/S

Testing equipment : a micrometer.
The bottom of the stage should be fixed during the operation, only the sliding block is working.

Running Parallelism (μm)
Place the micrometer onto the stage surface to measure the maximum height difference by measuring on the granite workbench while the stage is working, then referred to as running parallelism.

Inspection method




Standard testing gauge block

Micrometer

GKA/S

Testing equipment : a micrometer.
The bottom of the stage should be fixed during the operation, only the sliding block is working.

 **Dynamic Straightness (Unit : μm)**

Within a predetermined stroke, from the starting position of the stage, start working the stage in a specific direction and use standard gauge block to as a basis to measure the differences between the actual and target values of the horizontal and vertical straightness. The maximum difference is referred to as a dynamic straightness.

Order options

Date : Year Month Day (AD)

Agent code		Customer code / Name	
Name		Contact person	
Tel		Fax	
Mobile phone		Line / WeChat	
Address			
E-mail			

Model No.	<input type="checkbox"/> GKA(Aluminum alloy) <input type="checkbox"/> GKS(Carbon steel) <input type="checkbox"/> GKAC(Aluminum alloy-Dust-proof) <input type="checkbox"/> GKSC(Carbon steel-Dust-proof)		
Dimensions	<input type="checkbox"/> 2040 <input type="checkbox"/> 2650 <input type="checkbox"/> 3060 <input type="checkbox"/> 3360 <input type="checkbox"/> 4580 <input type="checkbox"/> 4686		
Travel stroke	mm	Screw lead	P mm
Precision grade	<input type="checkbox"/> Precision type <input type="checkbox"/> Standard		

Optional accessories	
Coupling	<input type="checkbox"/> Not applicable <input type="checkbox"/> Available
Sensor	<input type="checkbox"/> Not applicable <input type="checkbox"/> Available . Quantity () <input type="checkbox"/> only need the guide rail assembly
Dust cover set	<input type="checkbox"/> Not applicable <input type="checkbox"/> Available

Motor Selection	<input type="checkbox"/> Customized . Model No.() <input type="checkbox"/> GMT Purchasing . Model No.()	
2040 Motor Adapter	Stepper Motor	<input type="checkbox"/> GMT 28-frame <input type="checkbox"/> GMT 42-frame <input type="checkbox"/> Sanyo 42-frame <input type="checkbox"/> Oriental 42-frame <input type="checkbox"/> Other_____
	Servo Motor	<input type="checkbox"/> Delta 50W <input type="checkbox"/> Panasonic 50W <input type="checkbox"/> Mitsubishi 50W <input type="checkbox"/> Other_____
2650 Motor Adapter	Stepper Motor	<input type="checkbox"/> GMT 28-frame <input type="checkbox"/> GMT 42-frame <input type="checkbox"/> Sanyo 42-frame <input type="checkbox"/> Oriental 42-frame <input type="checkbox"/> Other_____
	Servo Motor	<input type="checkbox"/> GMT 100W <input type="checkbox"/> Delta 50W 100W <input type="checkbox"/> Panasonic 50W 100W <input type="checkbox"/> Mitsubishi 50W 100W <input type="checkbox"/> Other_____
3060 Motor Adapter	Stepper Motor	<input type="checkbox"/> GMT 42-frame <input type="checkbox"/> Sanyo 42-frame <input type="checkbox"/> Oriental 42-frame <input type="checkbox"/> Other_____
	Servo Motor	<input type="checkbox"/> GMT 100W <input type="checkbox"/> Delta 50W 100W <input type="checkbox"/> Panasonic 50W 100W <input type="checkbox"/> Mitsubishi 50W 100W <input type="checkbox"/> Other_____
3360 Motor Adapter	Stepper Motor	<input type="checkbox"/> GMT 42-frame <input type="checkbox"/> Sanyo 42-frame <input type="checkbox"/> Oriental 42-frame <input type="checkbox"/> Other_____
	Servo Motor	<input type="checkbox"/> GMT 100W <input type="checkbox"/> Delta 50W 100W <input type="checkbox"/> Panasonic 50W 100W <input type="checkbox"/> Mitsubishi 50W 100W <input type="checkbox"/> Other_____
4580 Motor Adapter	Stepper Motor	<input type="checkbox"/> GMT 57-frame <input type="checkbox"/> Sanyo 56-frame <input type="checkbox"/> Oriental 60-frame <input type="checkbox"/> Other_____
	Servo Motor	<input type="checkbox"/> GMT 100W <input type="checkbox"/> GMT 200W 400W <input type="checkbox"/> Delta 100W <input type="checkbox"/> Delta 200W 400W <input type="checkbox"/> Panasonic 100W <input type="checkbox"/> Panasonic 200W 400W <input type="checkbox"/> Mitsubishi 100W <input type="checkbox"/> Mitsubishi 200W 400W <input type="checkbox"/> Other_____
4686 Motor Adapter	Stepper Motor	<input type="checkbox"/> GMT 57-frame <input type="checkbox"/> Sanyo 56-frame <input type="checkbox"/> Oriental 60-frame <input type="checkbox"/> Other_____
	Servo Motor	<input type="checkbox"/> GMT 100W <input type="checkbox"/> GMT 200W 400W <input type="checkbox"/> Delta 100W <input type="checkbox"/> Delta 200W 400W <input type="checkbox"/> Panasonic 100W <input type="checkbox"/> Panasonic 200W 400W <input type="checkbox"/> Mitsubishi 100W <input type="checkbox"/> Other_____

