Fenghua Technology Servo Precision Reducer Products

Planetary Gearbox

RV Reducer

90 Degree Right Angle Gearbox

Fenghua Transmission is committed to offering you quality products
Specializing in R & D and production of various precision
planetary gear transmission products
Free service hotline: 400-8040-668
Click www.3fgearbox.com for CAD, 3D, 2D files of products

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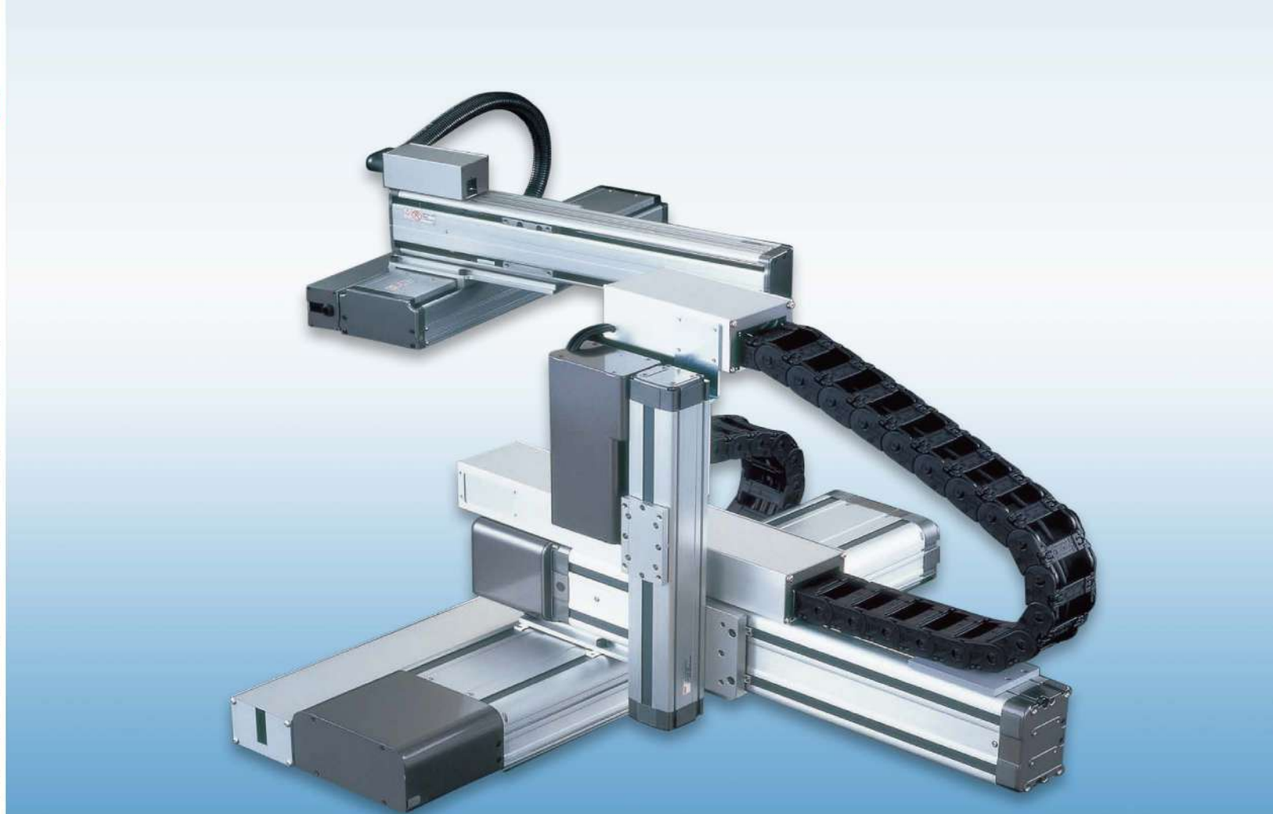
Fenghua Transmission Technology (jiangsu) Co.,Ltd.

2022



Electric cylinder • linear motor
Belt / screw slide module

Taiwan excellent technology/precision transmission solutions expert

FAMED®

Fenghua Transmission Technology (Jiangsu) Co.,Ltd.

FAMED® Company Introduction

Fenghua Transmission Technology Co., Ltd. started from a professional gear manufacturing factory. The factory colleagues and R&D team have more than 20 years of experience in gear manufacturing, R&D and design. In the early days, the factory cooperated with the Taiwan planetary gearbox technical team to set up the planetary gearbox business department, and cooperated to develop the design and manufacturing process of the planetary gearbox series product line. The series of servo-specific precision gearboxes have three characteristics: low backlash (5-8arcmin), low noise (60dAB), and high efficiency (≧95%). The product can be matched with servo motors and stepper motors produced by any factories. The high-precision planetary gearbox has the functions of reducing the speed, increasing the torque, increasing the inertia of the motor rotor, improving the rigidity, shortening the start and stop positioning time, miniaturizing the motor power, improving the stability of the inertial load and reducing the vibration.

In order to upgrade products, and adapt to the applicable range of high precision grade products, the factory launched the whole series of high precision helical planetary gearbox in late stage. With ultra-low backlash (1-3 arcmin) precision grade, the newly developed products can directly replace the sizes of the products produced by Germany and Japan. All product series are completed, and sizes and precision can perfectly match with that of Japanese and Germany. While upgrading planetary gearbox products, the factory insists on the concept of R&D as the development direction of the company. Then the factory successively developed and launched 90 degree precision right angle gearboxes which are suitable for automation with different installation and output requirements , multi-joint robot industry gearboxs (RV high precision pin-wheel gearboxs), and harmonic gearboxs making use of the principle of the wave gear device invented by American genius inventor C. W. Musser, and precision gear & rack products. The factory can also customize the gearbox.

The products are widely used in tool machines (Planning Machine Tools), laser cutting machines, woodworking engraving machines, 3C automation, photovoltaic equipment, lithium battery and other fields of new energy equipment. And Fenghua gearboxes can also be found in fully servo paper towel machines, precision concave-convex printing machines, precision coating machines, servo pipe benders, CNC spring machines and other highly automated equipment.

The factory has a large inventory of standard products. We cooperate with servo motor manufacturers and system integrators to take root in the global market, and determine to serve the global automation industry and robotics field through excellent products, and serve the global robotics business and Industry 4.0 direction.

Manipulator type

2 axis combination

- **Arm type**
  The slider of the Y–axis canmove
- **Moving arm type**
  Y–axis manipulator can move as a whole
- **XZ type**
  Combination of Z–axis for vertical movement relative to X–axis for horizontal movement
  Slider fixed / base movement
  Base fixed / slider movement
- **Support gantry type**
  The front section of the Y–axis of the arm type has a support guide rod
- **Lifting type**
  The slider of the Y–axis can move vertically
- **Dual axis co–moving robot (2 axes)**
  2 axis synchronous drive model
  * Two–axis synchronous robot is a special order model

3 axis combination

- **Z–axis base is fixed, slider is movable**
- **Z–axis silder is fixed, base is movable**
- **Axis up and down**
- **X–Y support + Z–axis**
  Z–axis base is fixed, slider is movable
- **X–Y support + Z–axis**
  (silder is fixed, base is movable)
- **Dual axis co–moving robot (3 axes)**
  * Two–axis synchronous robot is a special order model

4 axis combination

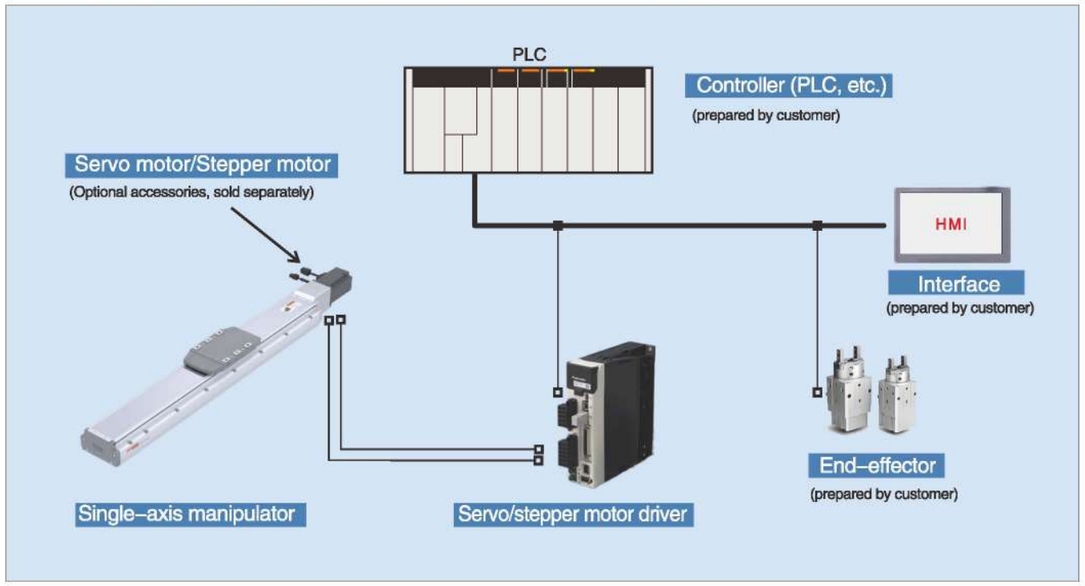
- **Z–axis base is fixed, slider is movable+rotating axis**
- **Z–axis silder is fixed, base is movable+rotating axis**
- **ZR axis integrated type**
- **X–Y support + Z–axis**
  (base is fixed, slider is movable) +rotating axis
- **X–Y support + Z–axis**
  (silder is fixed, base is movable) +rotating axis
- **Dual axis co–moving robot (4 axes)**
  * Two–axis synchronous robot is a specialorder model
- **Support dual Y–axis specifications**

6 axis combination

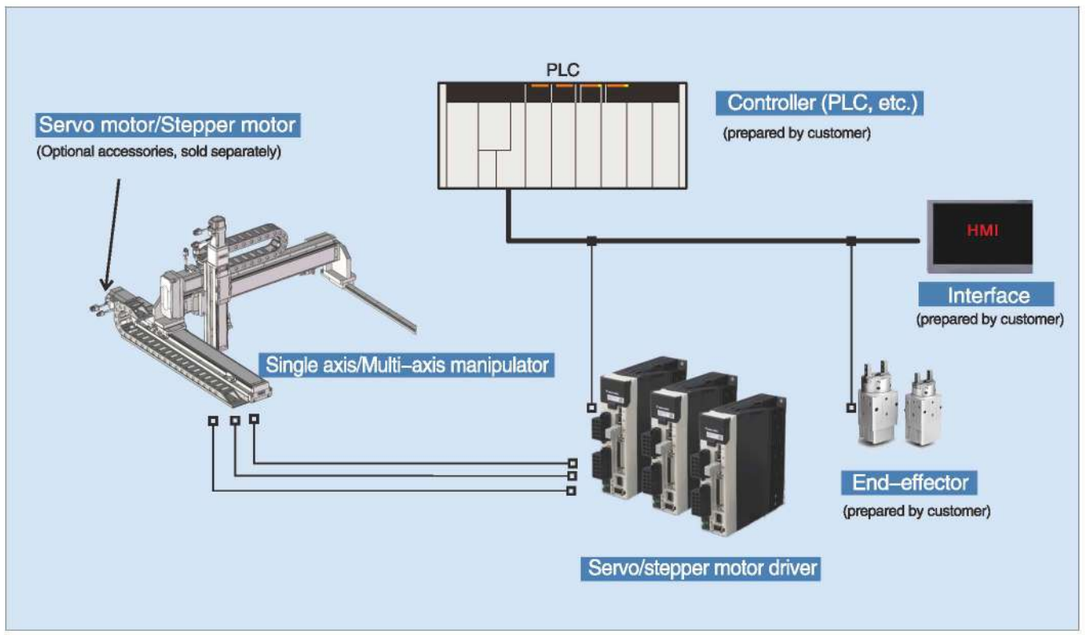
- **Dual Y–axis specifications/ Z–axis base is fixed, slider is movable**
- **Dual Y–axis specifications/ Z–axis silder is fixed, base is movable**

Composition diagram of manipulator system

Single–axis manipulator system composition diagram



Multi–axis manipulator system diagram



Applications Examples–Single Axis

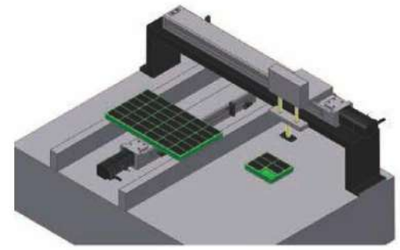
Suitable Industry

IC printer device

- Place the IC device on the electric cylinder. Use the feature: "equal-speed sliding" to execute the laser printing.Actuators are capable to adapt servo motor and stepping motor.

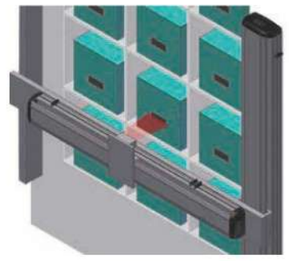
Aligning device for pick–and–place of IC boards

- Install two single electric cylinder to combine a simple IC pick-and-place system.



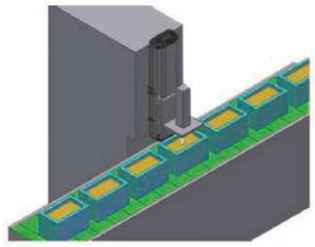
Barcode scanning device

- Install the X-Y multi-axis system to automated warehouse to execute the barcode scanning.



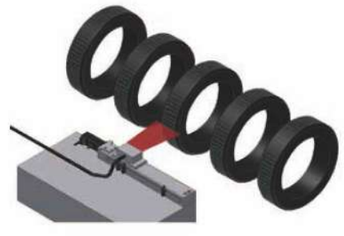
Fillings device

- In order to adapt to filling of different products, we can execute the filling at different height of position by programmable feature.



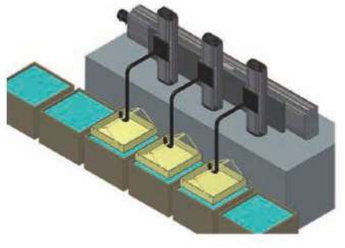
Tire surface inspection machine

- Mount the C.C.D on the electric cylinder. Use the feature: "equal-speed sliding" to check the defects on the tire surface and report to the on-site worker immediately.



Mobile device for surface processing

- Mount the working piece on the electric cylinder and dip it into the solvents. Moving up and down, left and right athigh speed to do the surface treatment processing.

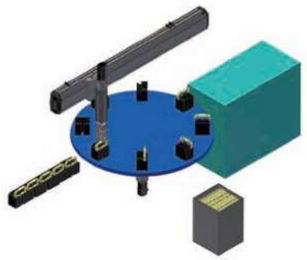


Applications Examples–Single Axis

Suitable Industry

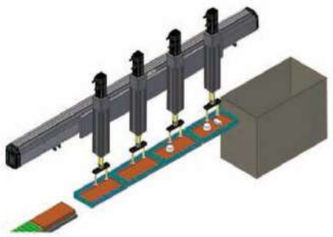
Assembling device on disc machine

- Combine two single actuators to an X-Y system. Then mount it onto the disc machine to do the components assembly.



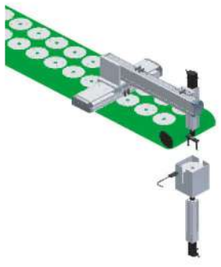
Assembling device for small components

- Use the feature multi-positioning of the electric cylinder to drive the suckers and cylinders to do the assembly of small components.



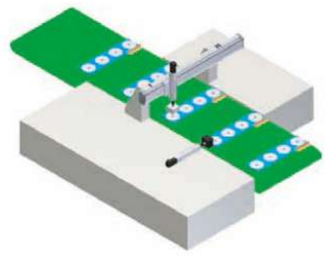
Piling device for compact discs

- Combine three single actuators Into X-Y-Z system, which can be used in receiver mechanism for compact disc assembly lines.



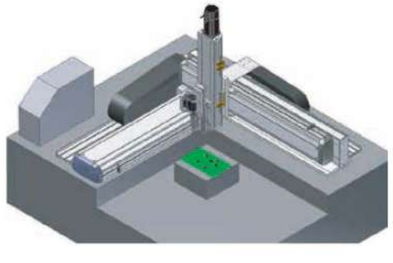
Ultra–violet exposure device for compact discs

- Combine three single actuators into a X-Z system, which can be used in ultra-violett exposure devices for compact discs.



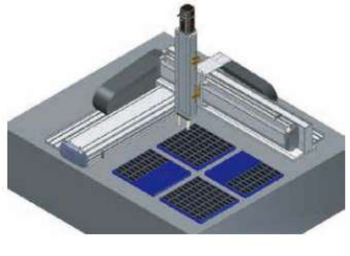
Tire surface inspection machine

- Use the X-Y system for pick-and-place of screws.



Mobile device for surface processing

- Combine three single actuators Into X-Y-Z axes, which can be used in pick-and-place devices for small components.

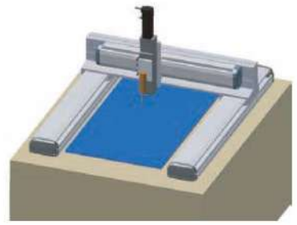


Application example – multi axis

Suitable Industry

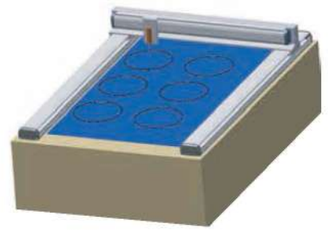
Adhesive dispenser device for large–size LCD glass substrate boards

- Combine two synchronous X-axis actuators and one Y-axis electric cylinders along with Z-axis into one system of high-speed Adhesive dispenser devices for LCD glass substrate boards.



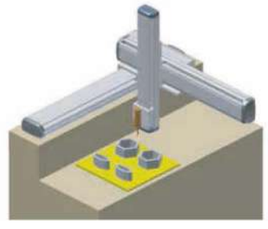
Cutting for Glass Substrate Boards

- Combine two synchronous X-axis actuators with one Y-axis electric cylinders into one package of simple cutting mechanism for glass boards.



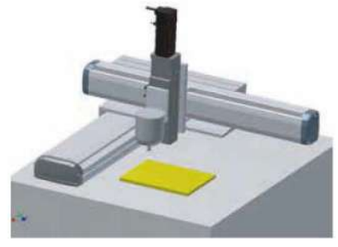
Coating device for various small components

- Combine three uniaxial actuators into a X-Y-Z system that can perform dispensing and rubberizing operations with costs way cheaper than one rubberizing machine and utilize the rubberizing operation on the assembly line.



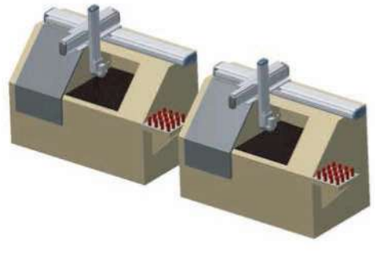
Mobile device for spray coating

- Utilizes X-Y-Z axes to clean or spray coating.



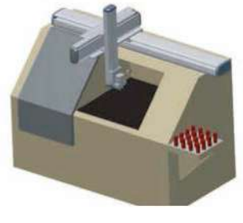
Pick–and–place devices for processed parts from machine tools

- Combine three single actuators into X-Z-Y system,that can be installed onto two or three CNC machine tools as the pick-and-place mechanism for loading and unloading of processed parts from multiple processing.

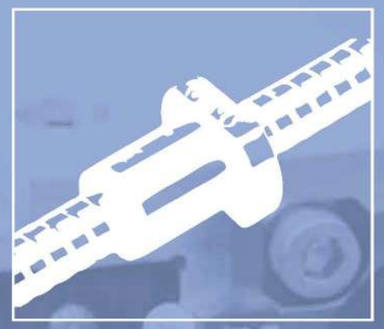


Pick–and–place devices for processed parts from machine tools

- Combine three single actuators into X-Y-Z system that can be installed onto CNC machine tools as the pick-and-place mechanism for loading and unloading of processed parts, which can save more cost than 6-axis mechanical arms.



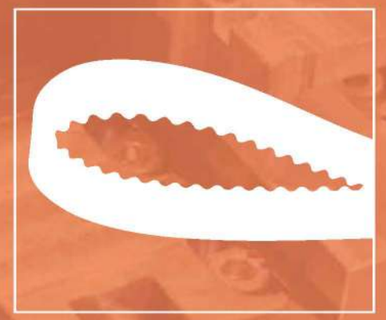
Ball Screw Driven



High Accuracy, High Payload

Ball screw driven module design can provides the high accuracy and steady movement.
Also secure the reliability and quality.
Providing the ± 0.01mm of the repeatability.
This series can support the payload form 5kg to 150kg, which could be applied widely.

Belt Type Driven



Long Stroke, High Speed

Belt driven module design can provides the longer stroke, which can apply in a long distance movement required applications.
Compact structure design resulting in lower cost and time saving.
This series can support the stroke up to 5,000mm, and speed can up to 5,000mm/s maximize your production efficiency.

Ball screw type module

Main usage:

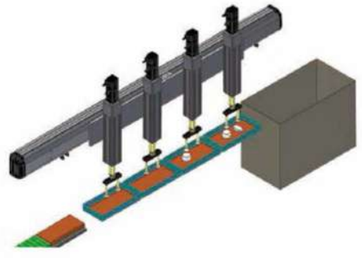
Positioning, pick and place, carrying, press-fitting.

Applications:

- ▲ Electronic device assemble
- ▲ Liquid filling
- ▲ Welding
- ▲ Press-fitting of circuit board and wafer box
- ▲ Unit arrangement.

Industries:

- ■ TFT-LCD
- ■ Semiconductor
- ■ LED
- ■ Solar energy



Belt type module

Main usage:

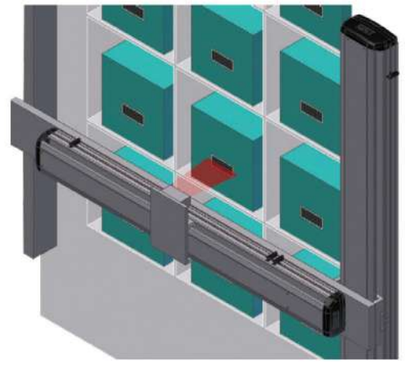
Long distance movement required applications, carrying, printer, adhesive dispenser.

Applications:

- ▲ Parts shifting between production line
- ▲ High speed conveyor
- ▲ T ape cutting device
- ▲ Parts shifting between CNC machine

Industries:

- ■ TFT-LCD
- ■ Solar energy
- ■ Food Industry
- ■ Packing
- ■ CNC Machining



Clean Room Type

Fab

Dust Sealing, Long life

Same performance as ETH/ETB.
Sealing design can prevent dirt and foreign objects from penetrating inside.
Equipped with air fitting device, which can keep the internal component clean.
Clean type can support to clean room grade class 10 (examined by SGS) widely applying in the semiconductor industry and food supply chain.
Effectively minimize the pollution of the actuator and working environment.

Clean room type module

Main usage:

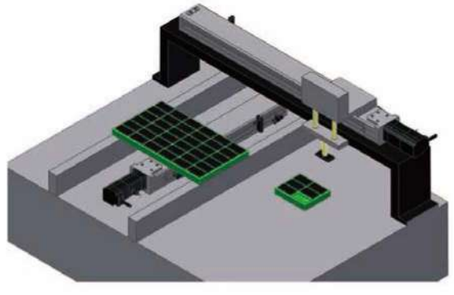
Positioning, pick and place, carrying, press-fitting in clean room environment.

Applications:

- ▲ Surface mount system
- ▲ Packaging
- ▲ Testing
- ▲ Inspection

Industries:

- ■ Semiconductor
- ■ FPD industry



Multi-Axis Type

Easy design

Highly customizable the multi-axis design, like XY, XYZ and/or adding a rotation axis for the applications are possible.
Besides, it can also use two Y axis or two Z axis for the applications.
Multi-axis system change the movement from one dimension to two or three dimensions.
Maximize the application possibilities, and minimize the time of assembly.
Also, can keep the consistency of the appearance.

Multi axis type module

Main usage:

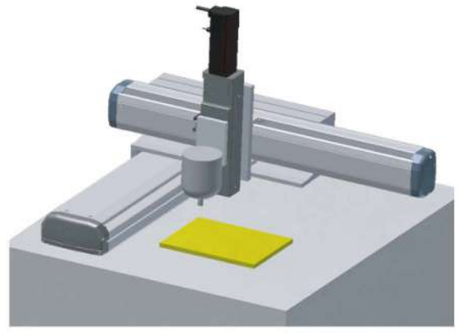
Most common combinations are Gantry type, Arm type, XZ type.
Circular motion and interpolation motion are possible when using with multi-axis controller.

Applications:

- ▲ Adhesive dispenser
- ▲ Electronic component inspection
- ▲ CCD substrate inspection
- ▲ Welding

Industries:

- ■ Semiconductor
- ■ FPD industry
- ■ Solar energy
- ■ Food supply chain
- ■ Packing
- ■ CNC Machining



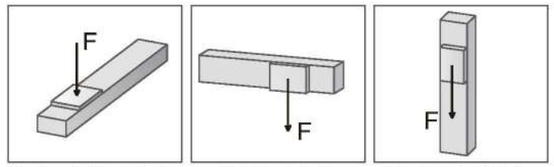
Instructions and notes on use

Names and Terminology

Without special qualification, single-axis manipulator, electric slide table, single-axis robot, electric cylinder and electric actuator refer to the executive actuating unit or module with motor driving function. Common English expressions: Electric Actuator, Single-axis robot, Electric cylinder.
When it is not equipped with a motor, it is also often called a linear module or a linear module.

Installation direction

The installation direction of the single-axis manipulator is generally divided into horizontal installation, wall installation, vertical installation, inclined installation, etc.
<Note>
• When the slider is fixed and the body is moved, it is installed upside down. When installing upside down, the weight of the carriage body must be included in the load.



Horizontal installation　Wall installation　Vertical installation

Speed/acceleration

The maximum operating speed of the single-axis manipulator depends on the lead and motor speed characteristics of the linear motion unit. The magnitude of the acceleration affects the handleable weight. For ball screw type 2, the acceleration is generally set to 0.3G, and when the lead is 5mm, the general acceleration is set to 0.15G (1G=9.8m/sec). Vibration end time when positioning.

Rated thrust

The rated thrust is the thrust value that converts the motor torque into linear motion through ball screw or synchronous toothed belt drive under the running state of rated torque and rated speed. The calculation method is as follows:

$F=2\pi \cdot T \cdot \eta \cdot 10^3 / P$　F: Rated thrust (N)　T: Motor rated torque (N m)　η: Transmission efficiency (usually 0.9)
P: Lead or lead equivalent (mm)

Positioning Accuracy/Repeat Positioning Accuracy

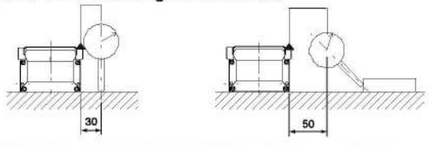
The measurement standards of positioning accuracy generally include positioning accuracy and repeat positioning accuracy.
The positioning accuracy is also called the absolute positioning progress, which refers to the maximum deviation between the actual moving distance and the.
Repeated positioning accuracy refers to the maximum deviation value between the actual moving distance for several times. Generally, positioning and measurement are carried out repeatedly for 7 times in the same direction to the same target point. ± symbol is marked before 1/2 of the maximum difference value of the measurement reading as the measurement value.

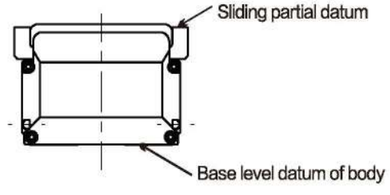
Allowable overhang

Additional torques are generated when the load center of gravity and slide are biased, as well as during acceleration and deceleration.
The allowable protrusion and the allowable bias load are determined by the bearing capacity and life of the linear guide.
In general, it is the allowable value when the life of linear guide is 10000km. When exceeding the allowed range of use, support guide rails must be set separately, or reduce the action conditions, to avoid the overloading operation of the single-axis manipulator line.

Body accuracy

The walking parallelism of the base horizontal datum of the body and the installation datum of the sliding part is less than ±0.05mm/m.
The flatness of the mounting surface should be less than ±0.05mm/m.
See the following figure for obtaining the walking parallelism of the sliding mounting surface and the mounting datum surface.

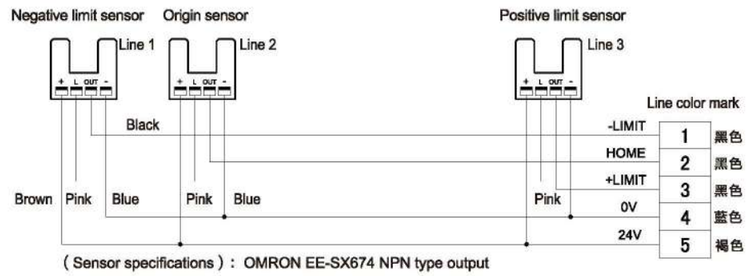




Origin and travel limit switches

Standard product induction switches include origin, positive limit switch and negative limit switch. The origin is set close to the motor side, and the negative limit switch is about 10mm away from the origin

<Note>
• Before turning on the motor, be sure to manually test the working state of the origin and travel switches.
• Before turning on the power, please confirm the rotation angle and speed of the motor and set it to the low speed range.
• Please move the carriage to the middle position of the stroke before power-on operation.
• The cable colors in this manual are for reference only, the cable colors and wiring methods are subject to the wiring instructions provided with the product.



(Sensor specifications) : OMRON EE-SX674 NPN type output

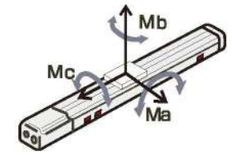
Static/dynamic allowable torque

Static allowable torque is the damage index, which represents the maximum torque that can be applied by the single-axis manipulator in the static state. Static allowable torque refers to the torque that makes the sum of the permanent deformation of the rolling body and the permanent deformation of the rolling surface reach 0.0001 times the diameter of the rolling body at the contact part under the maximum stress, and has a certain size and direction. The static allowable torque is the limit of the static torque.

The basic static rated load refers to the static load that makes the sum of the permanent deformation of the rolling body and the permanent deformation of the rolling surface reach 0.0001 times the diameter of the rolling body and has a certain size and direction on the contact part under the maximum stress.

The basic dynamic load rating refers to the maximum load when the rated life of the linear motion unit is 50km under the condition that the direction and magnitude of the load remain unchanged.

The dynamic allowable torque is a life index, which indicates the torque that makes the walking life of the uniaxial manipulator reach the standard rated life. The company stipulates that when the service life is 10,000km, the maximum torque value that the linear motion unit can bear. When the operating time does not exceed the allowable torque, a longer life can be obtained. Running beyond the allowable torque will reduce the service life of the manipulator.



Torque definition direction

Life/rated life

When the linear motion unit is under load and moving, the bead surface and the steel ball are subjected to the action of cyclic stress. Once the critical value of rolling fatigue is reached, the contact surface will begin to produce fatigue failure, and part of the surface will flake off, this phenomenon is called surface stripping. The life is defined as the total travel distance of the bead surface and the steel ball until the first surface spalling. Rated life refers to the total operating distance of linear moving parts under rated load, 90% of which can be achieved without surface peeling phenomenon.

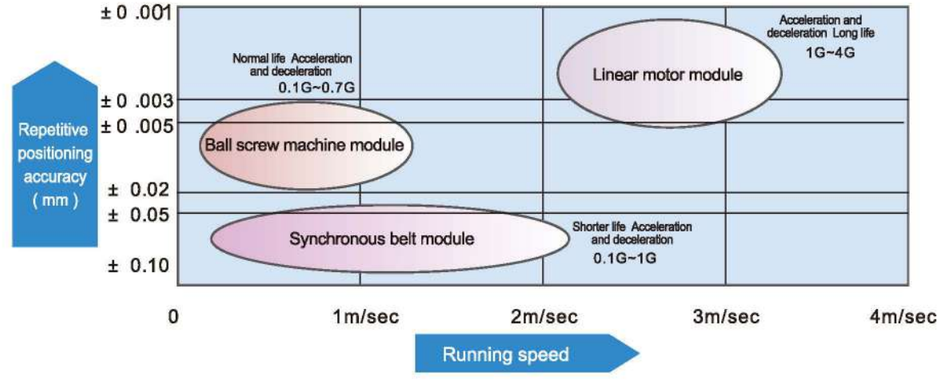
Vertical load protection

In vertical use, the potential hazard of sudden load drop in case of power interruption must be considered.
When selecting a motor, a power-off brake protection device should be designed.
When used vertically, it is necessary to consider overcoming the influence of the self-weight of the load on the driving torque.

The best application range of linear modules

Users can select the optimal product series according to conditions such as repeatability, speed, acceleration, applicable environment, and compactness.

Range of module characteristics

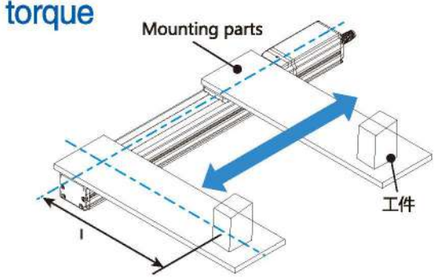


Example of allowable load torque calculation

Calculation method of allowable load torque

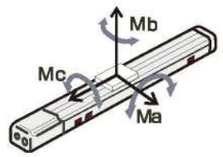
■ Condition data and formulas

a: Acceleration (m/sec2)
m1: Work-piece mass (kg)
m2: Mounting mass (kg)
l1: Distance from the center of the slider to the center of gravity of the work-piece (m)
l2: Distance from the center of the slider to the center of gravity of the mounting piece (m)
l3: Distance from bias reference position to work-piece center of gravity (m)
l4: Distance from bias reference position to center of gravity of mounting part (m)



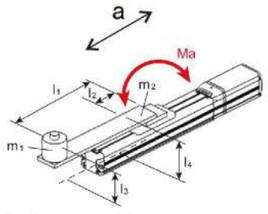
Acting torque M = m × l
m: Load mass (including the mass of work-piece and mounting parts)
l : Load length (including work-piece and mounting parts, to the center of gravity)

M=Mst +Mdy
M: Torque in the specified direction
Mst: Torque generated by gravity at rest
Mdy: During acceleration and deceleration, the generated acceleration and deceleration additional torque (Mdy =ma . l)



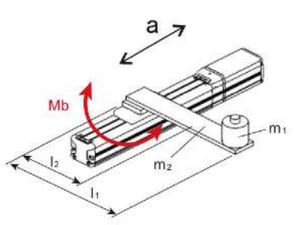
■ Torque calculation method

<When installing horizontally>

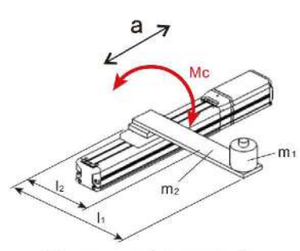


Offset reference position

$M_a=m_1\times g\times l_1+m_2\times g\times l_2+m_1\times a\times l_3+m_2\times a\times l_4$

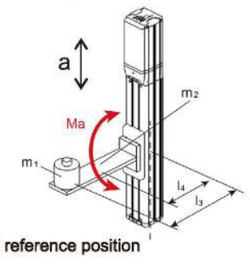


$M_b=m_1\times a\times l_1+m_2\times a\times l_2$



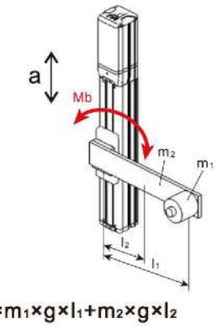
$M_c=m_1\times g\times l_1+m_2\times g\times l_2$

<When installing vertically>

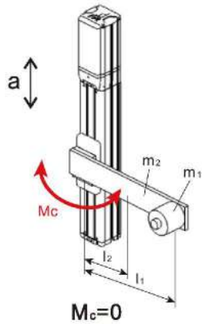


Offset reference position

$M_a=m_1\times g\times l_3+m_2\times g\times l_4+m_1\times a\times l_3+m_2\times a\times l_4$



$M_b=m_1\times g\times l_1+m_2\times g\times l_2+m_1\times a\times l_1+m_2\times a\times l_2$



$M_c=0$

<When combining multiple axes>
When multiple axes are combined, the superimposed acceleration generated by the linkage axis should be considered.
For more technical issues, please contact Fenghua technicians.

Walking life description

■ Walking life calculation method

The walking life of a linear guide refers to the total travel distance that a group of products can reach without 90% of the track surface peeling off when they operate alone under the same conditions.
The calculation method of walking life is as follows:

$$L=\left(\frac{C_M}{M}\right)^3 L_0$$

L: Travel life (km), C M: Dynamic allowable load moment (N.m),
M: Acting moment (N.m), L 0 : Standard rated life (km)

Example: If the dynamic admissible moment Cm of the single-axis manipulator at the rated life of 10000km is 15.6nm and the actual working moment M is 9Nm, then the actual life is:

$$L=\left(\frac{15.6}{9}\right)^3\times 10000=52077\ \text{km}$$

For applications where life may be reduced due to vibration and installation conditions, it is calculated according to the following formula.

$$L=\left(\frac{C_M}{M}\cdot\frac{f_{WS}}{f_W}\cdot\frac{1}{f_\alpha}\right)^3 L_0$$

L: walking life (km) C M: dynamic allowable load moment (N. M), M: acting moment (N. M),
fws : Standard load factor, fw : Load factor, fα : Installation factor, L0 : Standard rating life (km)

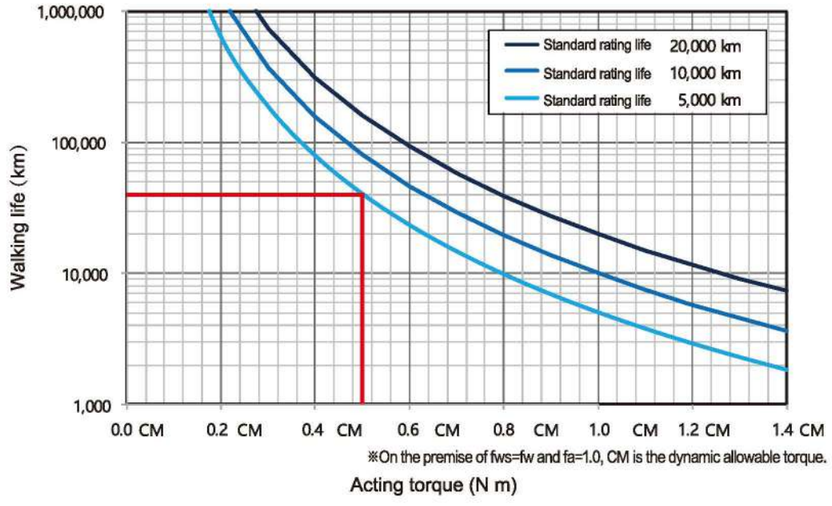
The load factor fw is a factor that takes into account the reduction in life due to running conditions. The standard load factor fws is the standard value of the load factor specified for each model. This factor is 1.2 in principle, and other conditions are shown in the specifications of this model. The installation factor f α is a factor that takes into account the reduction in life due to the installation state of the drive shaft.

Load factor

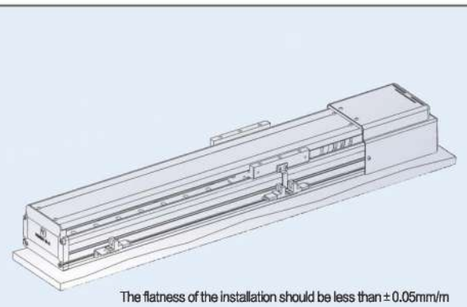
Operating conditions	Load factor fw	Reference for acceleration and deceleration
Less vibration and shock, relatively slow movement	1.0~1.5	1.0G following
Moderate vibration or shock, sudden braking, sudden acceleration	1.5~2.0	1.0G~2.0G
There is a large vibration or shock, accompanied by violent acceleration and deceleration	2.0~3.0	2.0G above

As can be seen from the above formula, the walking life is determined by the acting moment. At light loads, the travel life is longer than the standard rating life. For example, when a torque of 0.5CM (half of the dynamic allowable load moment) is applied to a model with a standard rated life of 5,000 km, the following figure shows that the travel life is 40,000 km, which is 8 times the standard rated life.

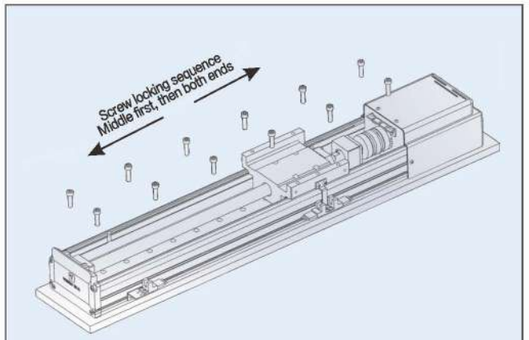
The relationship between the acting moment and the walking life



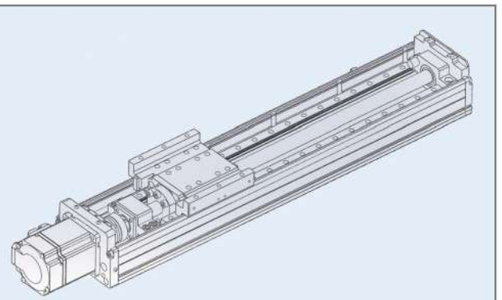
Common problems of single shaft and multi shaft mechanical shaft installation



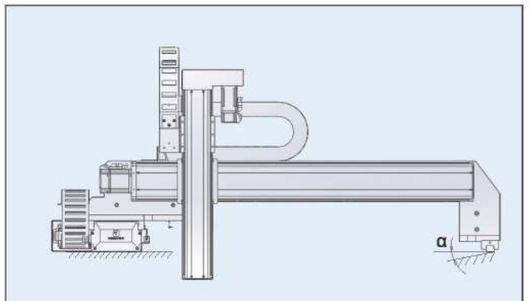
1 The flatness accuracy of the manipulator installation table is not up to standard



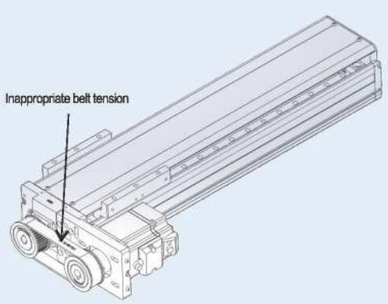
2 The screw fixing sequence on the bottom of the man ipulator is incorrect



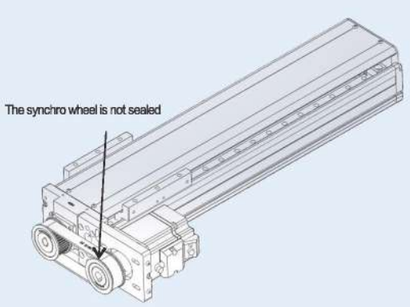
3 The manipulator motor shaft is not concentric with the screw shaft



4 The mounting bottoms on both sides are not on the same plane

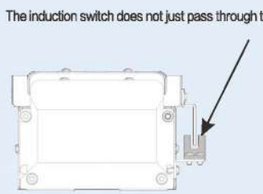


5 Belt tension is too loose or too tight

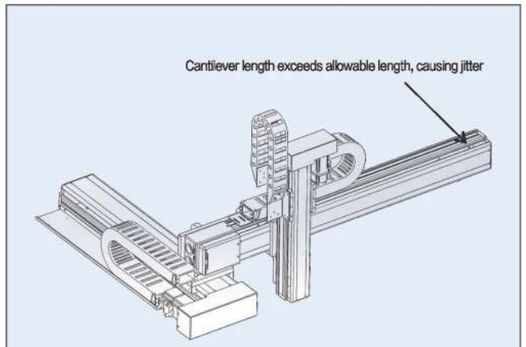


6 The belt is worn and abnormally damaged due to the synchronous wheel is not sealed properly

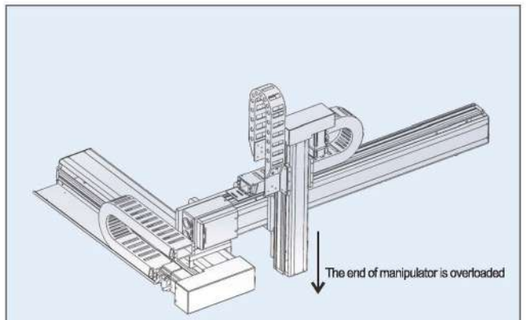
Common problems in the installation of single shaft and multi shaft sliding table



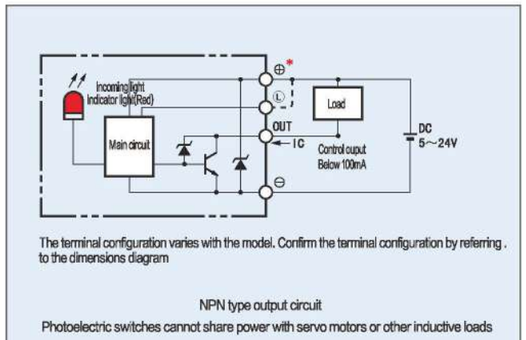
7 The photoelectric switch sensor sheet of the manipulator collided with the photoelectric switch due to deformation



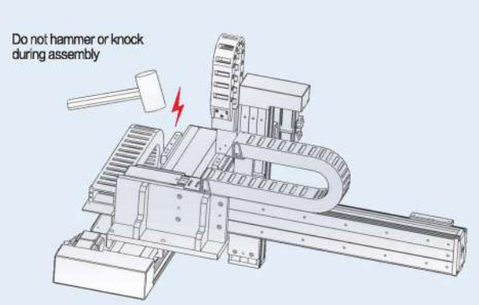
8 Manipulator cantilever length is too long, the speed is too large, resulting in jitter



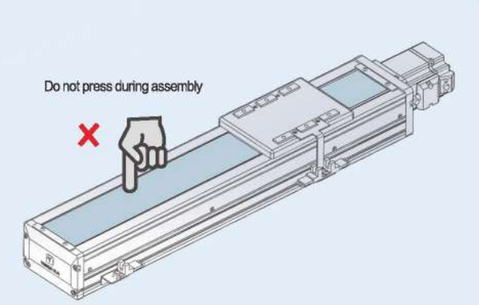
9 The end of the manipulator is overloaded, exceeding the allowable range of the manipulator



10 Photoelectric switch wiring errors or voltage fluctuations cause overvoltage burnout



11 Do not hammer or knock during assembly



12 The fully enclosed dust-proof steel belt cannot be stressed and broken

Product Index

Higher accuracy, various specifications suitable for every industry、every production solution.

The manipulators, electric cylinders, linear motor modules, etc. developed by 3F have powerful functions, complete specifications and the advantages of high quality and low price, and are indispensable products in automation equipment.

1 Linear motor module

精度↗ ±0.005 mm

ZMA-60

Body width 60mm
Maximum stroke 1800mm....08
Maximum load 8kg

ZMA-80

Body width 80mm
Maximum stroke 1700mm....09
Maximum load 15kg

ZMA-120

Body width 125mm
Maximum stroke 1700mm....10
Maximum load 30kg

ZM-150

Body width 150mm
Maximum stroke 3000mm....11
Maximum load 14kg

ZM-180

Body width 180mm
Maximum stroke 4000mm....14
Maximum load 44kg

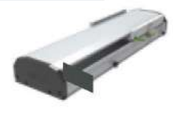
ZM-270

Body width 270mm
Maximum stroke 5000mm....20
Maximum load 200kg

ZDL17

Body width 170mm
Maximum stroke 5000mm....22
Maximum load 52.31kg

ZDL21



Body width 210mm
Maximum stroke 5000mm....24
Maximum load 69.92kg

2 KK screw module

精度↗ ±0.005 mm

KK40

Body width 40mm
Maximum track length 200mm....29
Maximum load 3kg

KK50

Body width 50mm
Maximum track length 300mm....30
Maximum load 12kg

KK60D

Body width 60mm
Maximum track length 600mm....31
Maximum load 20kg

KK86D

Body width 86mm
Maximum track length 940mm....32
Maximum load 50kg

3 GTH Rail embedded screw slide

精度↗ ±0.005 mm

GTH4

Body width 44mm
Maximum stroke 500mm....39
Maximum load 25kg

GTH5

Body width 54mm
Maximum stroke 800mm....42
Maximum load 30kg

GTH8

Body width 82mm
Maximum stroke 1100mm....45
Maximum load 50kg

GTH12

Body width 120mm
Maximum stroke 1250mm 48
Maximum load 110kg

4 Eth standard screw slide series

精度↗ ±0.005 mm

ETH10

Body width 102mm
Maximum stroke 1050mm....51
Maximum load 50kg

ETH12

Body width 102mm
Maximum stroke 1050mn....54
Maximum load 50kg

ETH13

Body width 135mm
Maximum stroke 1050mm....56
Maximum load 70kg

ETH14

Body width 135mm
Maximum stroke 1050mm....58
Maximum load 110kg

ETH17

Body width 170mm
Maximum stroke 1250mm....60
Maximum load 120kg

ETH22

Body width 220mm
Maximum stroke 1500mm....62
Maximum load 150kg

5 ECH dust-free screw slide series

精度↗ ±0.005 mm

ECH10

Body width 102mm
Maximum stroke 1050mm....64
Maximum load 50kg

ECH12

Body width 102mm
Maximum stroke 1050mm....66
Maximum load 50kg

ECH14

Body width 135mm
Maximum stroke 1050mm....68
Maximum load 110kg

ECH17

Body width 170mm
Maximum stroke 1250mm....70
Maximum load 120kg

ECH22

Body width 220mm
Maximum stroke 1500mm....72
Maximum load 150kg

6 ETB standard belt slide series

精度↗ ±0.005 mm

ETB14

Body width 135mm
Maximum stroke 3050mm....74
Maximum load 25kg

ETB17

Body width 170mm
Maximum stroke 3050mm....78
Maximum load 45kg

ETB22

Body width 220mm
Maximum stroke 3500mm....81
Maximum load 85kg

7 EGC European synchronous belt module series

精度↗ ±0.005 mm

EGC70

Body width 69mm
Maximum stroke 5000mm....87
Maximum load 15kg

EGC80

Body width 84mm
Maximum stroke 5000mm....91
Maximum load 20kg

EGC120

Body width 120mm
Maximum stroke 6000mm....95
Maximum load 70kg

EGC125

Body width 124mm
Maximum stroke 6000mm....97
Maximum load 40kg

EGC160

Body width 162mm
Maximum stroke 6000mm....99
Maximum load 100kg

EGC220

Body width 224mm
Maximum stroke 6000mm....101
Maximum load 200kg

8 M European gauge synchronous belt module series

精度↗ ±0.005 mm

M55

Body width 55mm
Maximum stroke 3000mm....104
Maximum load 12kg

M80

Body width 75mm
Maximum stroke 6000mm....106
Maximum load 75kg

M112

Body width 116mm
Maximum stroke 6000mm....109
Maximum load 200kg

9 MK dust free synchronous belt module series

精度↗ ±0.005 mm

MK65

Body width 65mm
Maximum stroke 6000mm....113
Maximum load 60kg

MK85

Body width 85mm
Maximum stroke 6000mm....120
Maximum load 100kg

MK110

Body width 110mm
Maximum stroke 6000mm....127
Maximum load 200kg

10 LEY series compact electric cylinder

精度↗ ±0.005 mm

LEY12

Body width 25.5mm
Maximum stroke 100mm....134
Maximum load 5kg

LEY16

Body width 34mm
Maximum stroke 300mm....136
Maximum load 8kg

LEY25

Body width 44mm
Maximum stroke 400mm....139
Maximum load 20kg

LEY32

Body width 51mm
Maximum stroke 500mm....143
Maximum load 40kg

11 E series standard electric cylinder

精度↗ ±0.005 mm

E40

Body width 53mm
Maximum stroke 500mm 148
Maximum load 40kg

E50

Body width 64mm
Maximum stroke 600mm....150
Maximum load 100kg

E63

Body width 75mm
Maximum stroke 800mm....152
Maximum load 300kg

E80

Body width 95mm
Maximum stroke 800mm....154
Maximum load 800kg

12 A series heavy duty electric cylinder

精度↗ ±0.005 mm

A80

Body width 95mm
Maximum stroke 600mm....157
Maximum load 3T

A125

Body width 134mm
Maximum stroke 600mm....167
Maximum load 6T

PA140

Body width 178mm
Maximum stroke 600mm....172
Maximum load 10T

13 Intelligent servo press mounting system

精度↗ ±0.005 mm

Specification Index–Track embedded screw slide table series

Spec	Motor	Body width mm	Repetitive positioning accuracy	Screw Spec.(C7 grade) Outer Dia.	Lead	Max. carry weight kg Horizontal	Vertical	Max. speed mm/s
GTH4	100W	44	±0.01	10	2	25	8	100
					6	20	8	300
					12	12	3.5	600
GTH5	100W	54	±0.01	12	2	30	10	100
					5	30	10	250
					10	15	5	500
					20	10	2.5	1000
GTH8	200W 400W	82	±0.01	16	5	50	15	250
					10	30	8	500
					20	18	3	1000
GTH12	400W	120	±0.01	16	5	110	33	250
					10	88	22	500
					20	40	10	1000
					32	30	8	1600

Represents the speed The black numbers in the standard stroke represent the maximum safe speed that can be used in this stroke. If the speed is exceeded, the electric cylinder may resonate.

Standard stroke																														Page
50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350				
					100						90	80	70	60	50															39
					300						270	240	210	180	150															
					600						540	480	420	360	300															
						100						90	80	70	60															42
						250						270	200	175	150															
						500						450	400	350	300															
						1000						900	800	700	600															
							250								225	200	175	150	125	100	75									45
							500								450	400	350	300	250	200	150									
							1000								900	800	700	600	500	400	300									
								250								225	200	175	167	158	150	133	125	117						48
								500								450	400	350	333	317	30	267	250	233						
								1000								900	800	700	667	663	600	533	500	467						
								1600								1440	1280	1120	1067	1013	900	853	800	747						

Specification index – European standard belt slide series

Spec	Motor	Body width mm	Repetitive positioning accuracy	Belt lead mm	Max. load kg Horizontal	Side mount	Vertical	Max. speed mm/s
EGC70	400W	67	±0.08mm	78	15	5	-	3900
EGC80	400W	84		90	20	8	-	4500
EGC120	750W	120		125	70	30	-	2080
EGC125	400W	122		100	40	30	-	1666
EGC160	750W	160		125	100	80	-	2080
EGC220	1000W	200		200	200	150	-	2300
M55	400W	55		150	12	3	-	7500
M80	750W	75		150	75	25	-	2500
M112	750W	116		220	200	50	-	2200
MK65	400W	65		110	60	30	-	1833
MK85	750W	85		200	100	40	-	2000
MK110	750W	110		248	200	50	-	1240

Represents the speed The black numbers in the standard stroke represent the maximum safe speed that can be used in this stroke. If the speed is exceeded, the electric cylinder may resonate.

Standard stroke																							Page
100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	2000	2500	3000	3500	4000	4500	5000	6000	
																							87
																							91
																							95
																							97
																							99
																							101
																							104
																							106
																							109
																							113
																							120
																							127

Specification Index–Push Rod Cylinder Series

Spec	Motor	Body width mm	Repetitive positioning accuracy	Screw Spec. mm Diameter	Lead	Max. load kg	Max. speed mm/s
LEY12	3	25.5	±0.02mm	8	2	5	100
LEY16	S28	23		8	2	8	40
				8	6		60
LEY25	S42	43		12	05	10	250
					10		500
LEY32	S57	51		12	05	40	250
					10		500
E40	400W	53		12	05	40	250
					10		500
E50	400W	65		16	05	100	250
					10		500
E63	750W	75		20	05	300	250
					10		500
E80	1000W	93		25	05	800	250
					10		500
A80	可选	93		32	05	1000~3000	167
					10		167
A125	可选	134		50	10	3000~5000	167
PA140	可选	195		63	20	5000-11000	200

Represents the speed The black numbers in the standard stroke represent the maximum safe speed that can be used in this stroke. If the speed is exceeded, the electric cylinder may resonate.

Standard stroke																														Page
50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300					
	100																													134
		40			30																									136
		60			50																									
		250			200	150																								139
		500			400	300																								
		250			200	150																								143
		500			400	300																								
		250			200	150																								148
		500			400	300																								
			250				200		150																					150
			500				400		300																					
			250				200		150		100																			152
			500				400		300		200																			
				250					200		150		100		50															154
				500					400		300		200		100															
				167																										157
				167																										
				167																										167
				200																										172

Specification Index–ETH Slider Series

Spec	Motor	Body width mm	Repetitive positioning accuracy	Screw Spec mm Diameter	Lead	Max. load kg Horizontal	Side mount	Vertical	Max.speed mm/s
ETH10	200W	102	±0.01	16	5	50	50	12	250
					10	30	30	8	500
					16	22	22	5	800
					20	18	18	3	1000
ETH12	200W	102	±0.01	16	5	50	50	12	250
					10	30	30	8	500
					16	22	22	5	800
					20	18	18	3	1000
ETH14	400W	135	±0.01	16	5	110	110	33	250
					10	88	88	22	500
					16	48	48	10	800
					20	40	40	8	1000
ETH17	750W	170	±0.01	20	5	120	120	50	250
					10	95	95	40	500
					20	83	83	25	1000
					40	50	50	12	2000
ETH22	750W	220	±0.01	25	5	150	-	55	250
					10	150	-	45	500
					25	105	-	20	1250

Standard stroke																														Page
100	200	300	400	500	600	700	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800		
						250							225	200	175	150														51
						500							405	400	350	300														
						800							720	640	560	480														
						1000							900	800	700	600														
						250							225	200	175	150														54
						500							450	400	350	300														
						800							720	640	560	480														
						1000							900	800	700	600														
						250							225	200	175	150														58
						500							450	400	350	300														
						800							720	640	560	480														
						1000							900	800	700	600														
								250									225		200		175		150							60
								500									450		400		350		300							
								1000									900		800		700		600							
								2000									1800		1600		1400		1200							
				250						225		200		175		150		125		100										62
				500						450		400		350		300		250		200										
				1250						1120		1000		875		750		625		500										

Represents the stroke The white numbers in the standard stroke represent the maximum safe speed that can be used in this stroke. If this speed is exceeded, the electric cylinder may resonate

Specification Index–ECH Slider Series

Spec	Motor	Body width mm	Repetitive positioning accuracy	Screw Spec mm Diameter	Lead	Max. load kg Horizontal	Side mount	Vertical	Max.speed mm/s
ECH10	200W	102	±0.01	16	5	50	50	12	250
					10	30	30	8	500
					16	22	22	5	800
					20	18	18	3	1000
ECH12	200W	102	±0.01	16	5	50	50	12	250
					10	30	30	8	500
					16	22	22	5	800
					20	18	18	3	1000
ECH14	400W	135	±0.01	16	5	110	110	33	250
					10	88	88	22	500
					16	48	48	10	800
					20	40	40	8	1000
ECH17	750W	170	±0.01	20	5	120	120	50	250
					10	95	95	40	500
					20	83	83	25	1000
					40	50	50	12	2000
ECH22	750W	220	±0.01	25	5	150	-	55	250
					10	150	-	45	500
					25	105	-	20	1250

Standard stroke																														Page
100	200	300	400	500	600	700	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750				
						250							225	200	175	150														64
						500							450	400	350	300														
						800							720	640	560	480														
						1000							900	800	700	600														
						250							225	200	175	150														66
						500							450	400	350	300														
						800							720	640	560	480														
						250							225	200	175	150														68
						500							450	400	350	300														
						800							720	640	560	480														
						1000							900	800	700	600														
										250							225		200		175		150							70
										500							450		400		350		300							
										1000							900		800		700		600							
										2000							1800		1600		1400		1200							
				250							225		200		175		150		125		100									72
				500							450		400		350		300		250		200									
				1250							1125		1000		875		750		625		500									

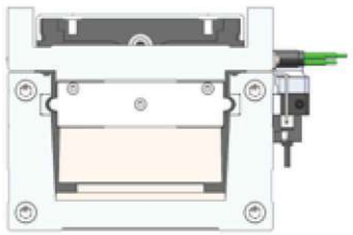
Represents the stroke The white numbers in the standard stroke represent the maximum safe speed that can be used in this stroke. If this speed is exceeded, the electric cylinder may resonate

Linear motor module

Compared with traditional direct drive motor modules, ZMA series has a higher degree of overall design, which can meet the needs of high speed and high precision. ZM and ZDL series direct drive motors can also meet the requirements of high speed and high precision. The maximum continuous inference can reach 3000N. The irect drive motor can realize fast handling, screw locking, product gluing and other processes, and is widely used.

1 High rigidity and compact structure

The ZMA series integrates the sliding seat and the mover, in the form of a guide rail embedded in the aluminum body, and integrates the grating scale for position feedback, so that the entire module size has the characteristics of high compactness and high rigidity, and provides users with specific thrust requirements. Has size-optimized options.



2 Long Stroke

The standard stroke of ZM series is up to 5000mm, and the ultra-long stroke can be customized according to customer needs

3 Multi-mover slide

The whole series of linear motor can be installed with multi-mover slide for separate control.

4 Customized

Linear motors can be customized for different applications of customers, including customized designs such as installation hole position, cable outlet method, appearance color, etc.

ZMA-60

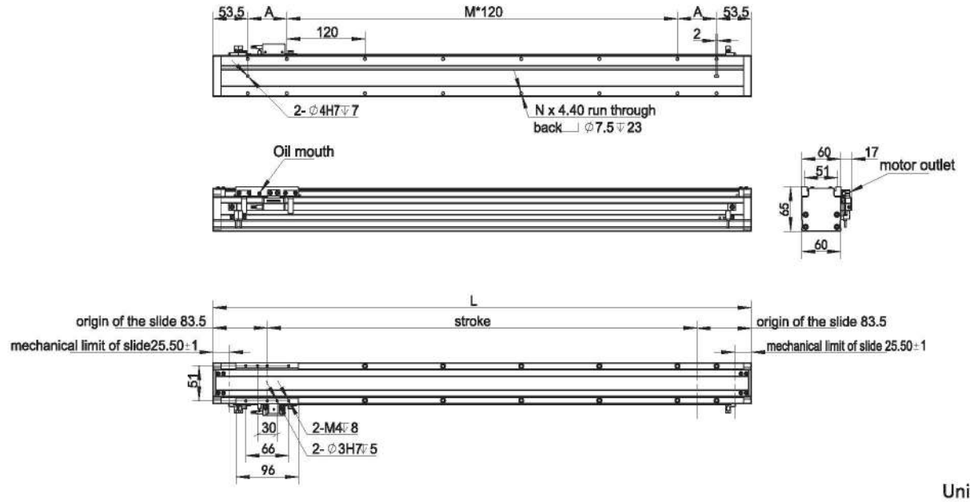
ZMA -	60 -	120 -	A -	D1 -	C1 -	P2 -	S3 -	A001
ZMA: Semi-closed	Wide	Stroke mm	Motor style	Number of slide	C1: Magnetic grid	Resolution	Number of switches	special mark
				D1: one slide D2: two slides		P1: 5 μ m P2: 1 μ m P3: 0.5 μ m PC: other	S1: switch*1 Sn: switch*n	

Performance parameters

Parameters/Motor	A
Resolution (μm) [Max. speed] (m/s)	1[2]; 0.5[1.4]; 0.1[1]
Peak thrust (N)	176
Continuous thrust (N)	44
Max. load※1 (kg)	8
Weight of moving part※2 (kg)	0.6
Repeated accuracy (μm)	±2

*1.Stroke 1000mm,acceleration 1G, dwell time 0.2s, speed 1000mm/s
*2. Includes mover weight

ZMA-60-A



Unit : mm

stroke	60	120	180	240	300	360	420	480	540	600	660	720	780	840
L	227	287	347	407	467	527	587	647	707	767	827	887	947	1007
A	0	30	60	90	120	30	60	90	120	30	60	90	120	30
M	1	1	1	1	1	3	3	3	3	5	5	5	5	7
N	4	8	8	8	8	12	12	12	12	16	16	16	16	20
Kg	2.2	2.52	2.84	3.16	3.48	3.8	4.12	4.44	4.76	5.08	5.4	5.72	6.04	6.36

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMA–80

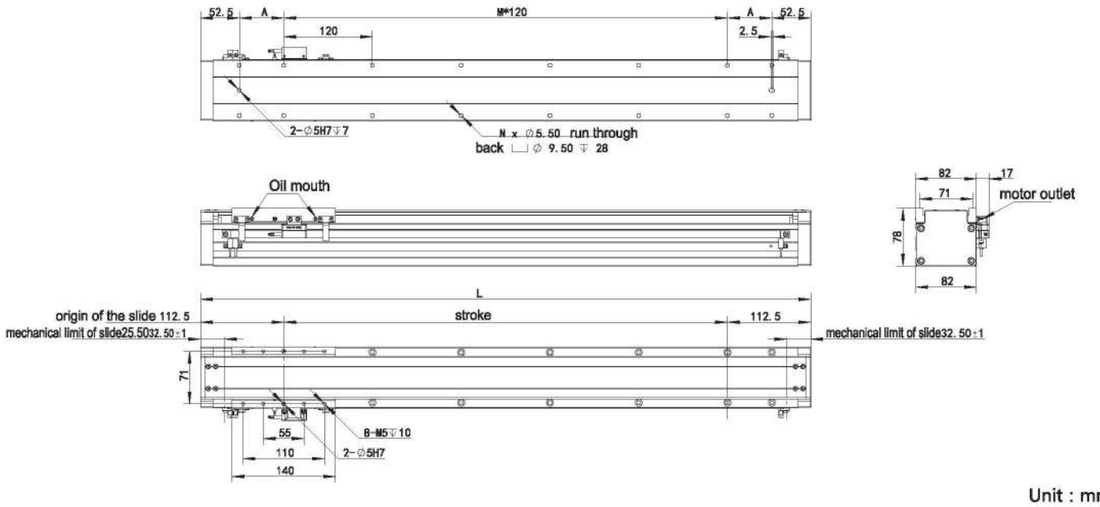
ZMA -	80 -	120 -	A -	D1 -	C1 -	P2 -	S3 -	A001
ZMA: Semi–closed	Wide	Stroke mm	Motor style	Number of slide	C1: Magnetic grid	Resolution	Number of switches	special mark
				D1: one slide D2: two slides		P1: 5 μ m P2: 1 μ m P3: 0.5 μ m PC: other	S1: switch*1 Sn: switch*n	

Performance parameters

Parameters/Motor	A
Resolution (μm) [Max. speed] (m/s)	1[2]; 0.5[1.4]; 0.1[1]
Peak thrust (N)	225
Continuous thrust (N)	75
Max. load※1 (kg)	15
Weight of moving part※2 (kg)	1.7
Repeated accuracy (μm)	±2 (Photoelectric Linear Encoder)

*1.Stroke 1000mm,acceleration 1G, dwell time 0.2s, speed 1000mm/s
*2. Includes mover weight

ZMA-80-A



Unit : mm

Stroke	60	120	180	240	300	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260
L	285	345	405	465	525	585	645	705	765	825	885	945	1005	1065	1125	1185	1245	1305	1365	1425	1485
A	30	60	90	120	30	60	90	120	30	60	90	120	30	60	90	120	30	60	90	120	30
M	1	1	1	2	3	3	3	3	5	5	5	5	7	7	7	7	9	9	9	9	11
N	8	8	8	10	12	12	12	12	16	16	16	16	20	20	20	20	24	24	24	24	28
kg	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMA–120

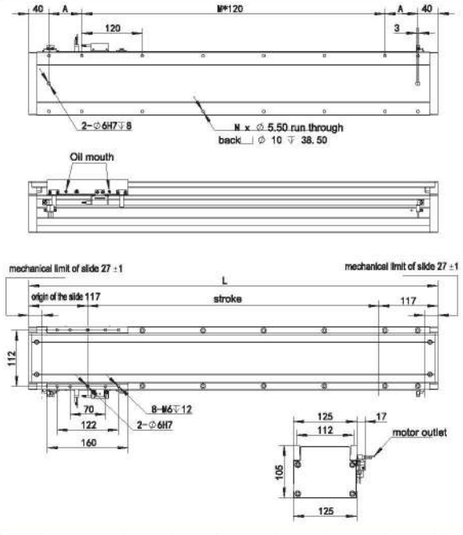
ZMA -	120-	192 -	A -	D1 -	C1 -	P2 -	S3 -	A001
ZMA: Semi–closed	Wide	Stroke mm	Motor style	Number of slide	C1: Magnetic grid	Resolution	Number of switches	special mark
			A B	D1: one slide D2: two slides	C2: grating C3: No	P1: 5 μ m P2: 1 μ m P3: 0.5 μ m PC: other	S1: switch*1 Sn: switch*n	

Performance parameters

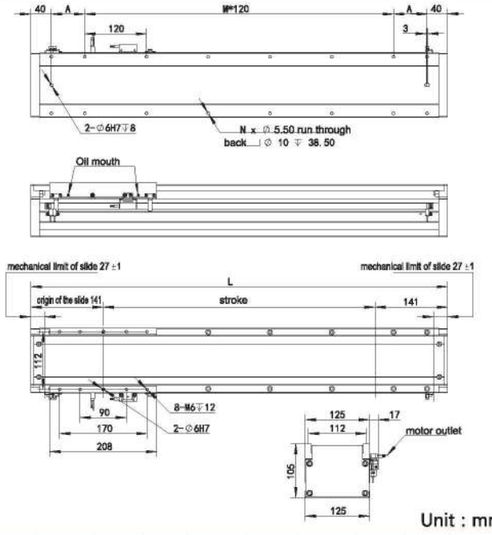
Parameters/Motor	A	B
Resolution (μm) [Max. speed] (m/s)	1[2]; 0.5[1.4]; 0.1[1]	1[2]; 0.5[1.4]; 0.1[1]
Peak thrust (N)	400	600
Continuous thrust (N)	200	300
Max. load※1 (kg)	20	30
Weight of moving part※2 (kg)	4	5.5
Repeated accuracy (μm)	±5 (Magnetic LinearEncoder) ; ±2 (Photoelectric Linear Encoder)	

*1.Stroke 1000mm,acceleration 1G, dwell time 0.2s, speed 1000mm/s
*2. Includes mover weight

ZMA-120-A



LMA-120-B



Unit : mm

	Stroke	96	192	288	384	480	576	672	768	864	960	1056	1152	1248	1344	1440	1536	1632	1728
A	L	330	426	522	618	714	810	906	1002	1098	1194	1290	1386	1482	1578	1674	1770	1866	1962
	A	65	113	41	89	17	65	113	41	89	17	65	113	41	89	17	65	113	41
	M	1	1	3	3	5	5	5	7	7	9	9	9	11	11	13	13	13	15
	N	8	8	12	12	16	16	16	20	20	24	24	24	28	28	32	32	32	36
	kg	8.5	10	11.5	13	14.5	16	17.5	19	20.5	22	23.5	25	26.5	28	29.5	31	32.5	34

	Stroke	48	144	240	336	432	528	624	720	816	912	1008	1104	1200	1296	1392	1488	1584	1680
B	L	330	426	522	618	714	810	906	1002	1098	1194	1290	1386	1482	1578	1674	1770	1866	1962
	A	65	113	41	89	17	65	113	41	89	17	65	113	41	89	17	65	113	41
	M	1	1	3	3	5	5	5	7	7	9	9	9	11	11	13	13	13	15
	N	8	8	12	12	16	16	16	20	20	24	24	24	28	28	32	32	32	36
	kg	10	11.5	13	14.5	16	17.5	19	20.5	22	23.5	25	26.5	28	29.5	31	32.5	34	35.5

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZM–150

ZM - 150 - 100- ACL030C1 - D1 - C1 - P2 - S3 - A001

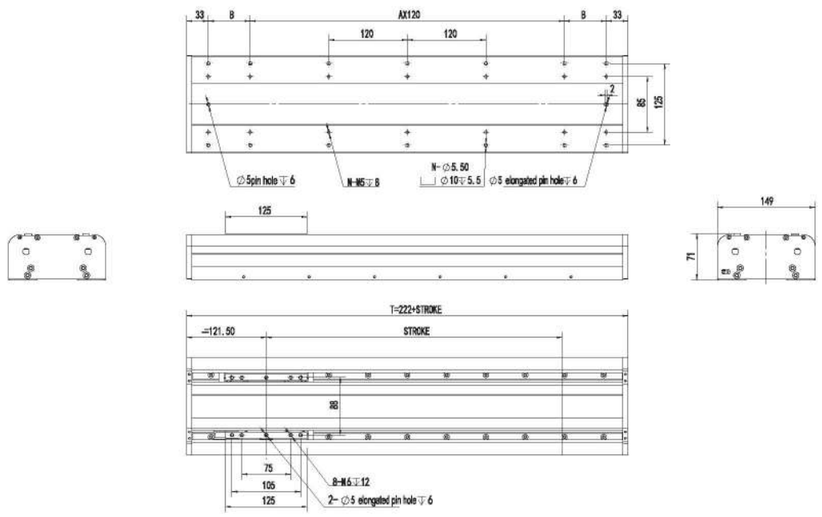
ZM: Semi-enclosed flat motor ZMU: Semi-enclosed U-shaped motor ZMW: Fully enclosed flat motor ZMUW: Fully enclosed U-shaped motor	Wide	Stroke mm	Motor style	Number of slide	C1: Magnetic grid	Resolution	Number of switches	special mark
				D1: one slide D2: two slides	C2: grating C3: No	P1: 5 μ m P2: 1 μ m P3: 0.5 μ m PC: other	S1: switch*1 Sn: switch*n	

Performance parameters

Parameters/Motor	ACL030C1	ACL030C2	AUI0302	AUI0303	ACQ030C1	ACQ030C2
Resolution (μm) [Max. speed] (m/s)	1[2];0.5[1.4];0.1[1]					
Peak thrust (N)	270	540	120	340	242	484
Continuous thrust (N)	86	160	50	87	53	106
Rail Specifications	15					
Number of slide	4					
Max. load※1 (kg)	6	14	6.3	12.2	5	11
Weight of moving part※2 (kg)	2.5	3	2.2	2.8	2.1	1.6
Repeated accuracy (μm)	±5 （Magnetic LinearEncoder） ; ±2 （Photoelectric Linear Encoder）					

*1.Stroke 1000mm,acceleration 1G, dwell time 0.2s, speed 1000mm/s
*2. Includes mover weight

ZM-ACL030C1

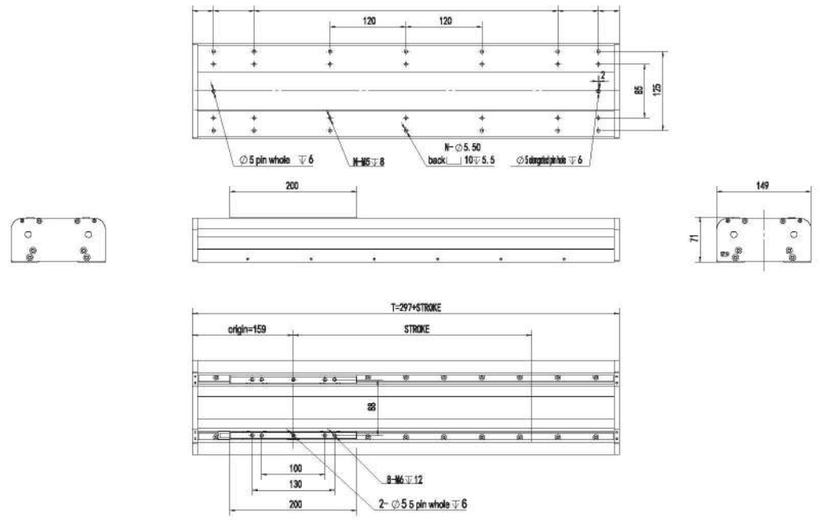


Unit : mm

Stroke	116	212	260	308	356	404	452	500	548	596	644	692	740	788	836	884	932	980	1028
T	338	434	482	530	578	626	674	722	770	818	866	914	962	1010	1058	1106	1154	1202	1250
B	136	184	88	112	136	160	64	88	112	136	160	64	88	112	136	160	64	88	112
A	0	0	2	2	2	2	4	4	4	4	4	6	6	6	6	6	8	8	8
N	6	6	10	10	10	10	14	14	14	14	14	18	18	18	18	18	22	22	22
Weight(kg)	7.9	9	9.6	10.2	10.8	11.4	12	12.6	13.2	13.8	14.4	15	15.6	16.2	16.8	17.4	18	18.6	19.2

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZM-ACL030C2

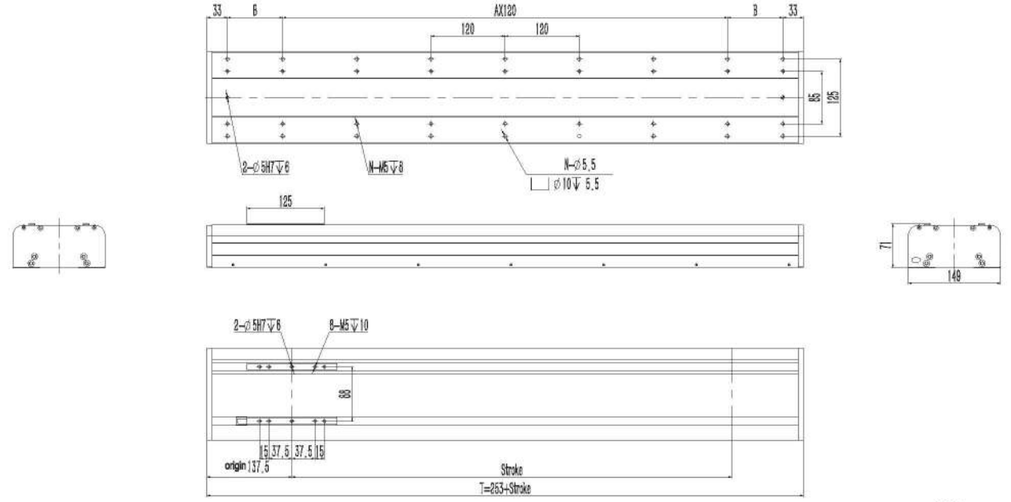


Unit : mm

	137	185	233	281	329	377	425	473	521	569	617	665	713	761	809	857	905	953	1001
T	434	482	530	578	626	674	722	770	818	866	914	962	1010	1058	1106	1154	1202	1250	1298
B	184	88	112	136	160	64	88	112	136	160	64	88	112	136	160	64	88	112	136
A	0	2	2	2	2	4	4	4	4	4	6	6	6	6	6	8	8	8	8
N	6	10	10	10	10	14	14	14	14	14	18	18	18	18	18	22	22	22	22
Weight(kg)	10.4	11	11.6	12.2	12.8	13.4	14	14.6	15.2	15.8	16.4	17	17.6	18.2	18.8	19.4	20	20.6	21.2

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMU-AUI0302

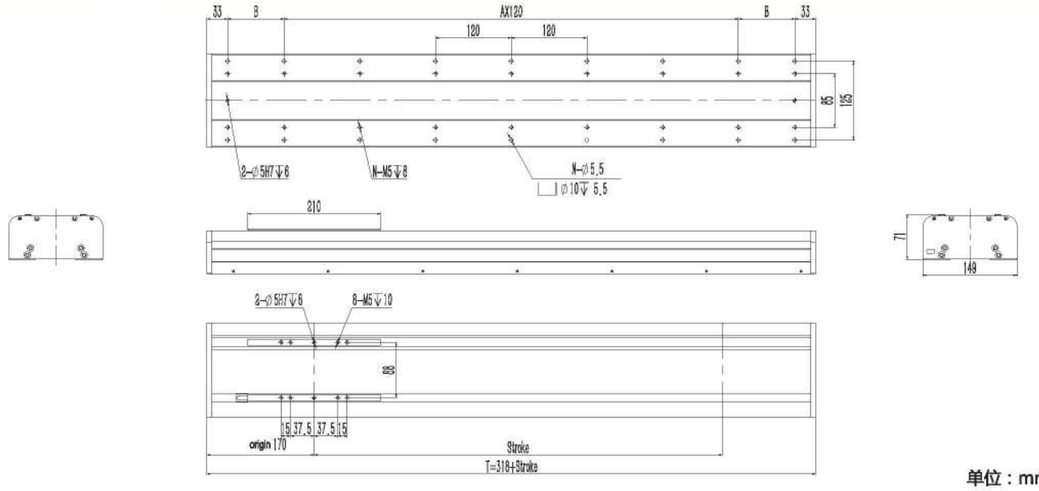


Unit : mm

Stroke	163	224	285	407	468	529	651	712	773	895	956	1017	1139	1200	1261	1383	1444	1505	1627	1688	1749
T	416	477	538	660	721	782	904	965	1026	1148	1209	1270	1392	1453	1514	1636	1697	1758	1880	1941	2002
B	112	85.5	116	177	87.5	118	178	89.5	120	61	91.5	122	63	93.5	124	65	95.5	126	67	97.5	128
A	0	2	2	2	4	4	4	6	6	8	8	8	10	10	10	12	12	12	14	14	14
N	6	10	10	10	14	14	14	18	18	22	22	22	26	26	26	30	30	30	34	34	34
Weight(kg)	8.7	10.0	11.3	13.8	15.1	16.4	18.9	20.2	21.5	24.0	25.3	26.6	29.1	30.4	31.7	34.2	35.5	36.8	39.3	40.6	41.9

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMU-AUI0303

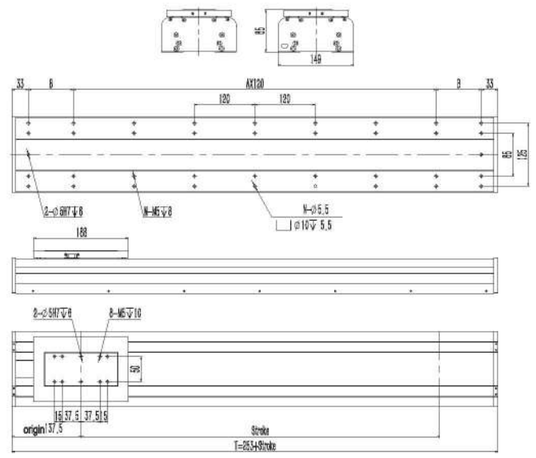


单位：mm

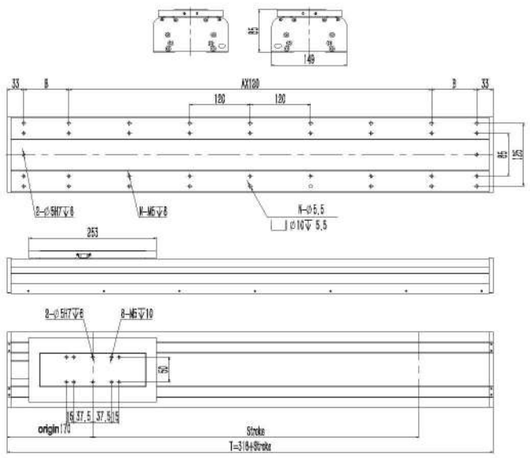
行程 Stroke	98	159	220	342	403	464	586	647	708	830	891	952	1074	1135	1196	1318	1379	1440	1562	1623	1684
T	416	477	538	660	721	782	904	965	1026	1148	1209	1270	1392	1453	1514	1636	1697	1758	1880	1941	2002
B	112	85.5	116	177	87.5	118	178	89.5	120	61	91.5	122	63	93.5	124	65	95.5	126	67	97.5	128
A	0	2	2	2	4	4	4	6	6	8	8	8	10	10	10	12	12	12	14	14	14
N	6	10	10	10	14	14	14	18	18	22	22	22	26	26	26	30	30	30	34	34	34
Weight(kg)	10.1	11.6	13.1	16.0	17.5	19.0	21.9	23.4	24.9	27.9	29.4	30.8	33.8	35.3	36.8	39.7	41.2	42.7	45.6	47.1	48.6

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMUW-AUI0302-A



ZMUW-AUI0303-B



Unit : mm

	Stroke	163	224	285	407	468	529	651	712	773	895	956	1017	1139	1200	1261	1383	1444	1505	1627	1688	1749
A	T	416	477	538	660	721	782	904	965	1026	1148	1209	1270	1392	1453	1514	1636	1697	1758	1880	1941	2002
	B	112	85.5	116	177	87.5	118	178	89.5	120	61	91.5	122	63	93.5	124	65	95.5	126	67	97.5	128
	A	0	2	2	2	4	4	4	6	6	8	8	8	10	10	10	12	12	12	14	14	14
	N	6	10	10	10	14	14	14	18	18	22	22	22	26	26	26	30	30	30	34	34	34
	Weight(kg)	10.3	11.8	13.3	16.3	17.9	19.4	22.4	23.9	25.4	28.4	29.9	31.4	34.5	36.0	37.5	40.5	42.0	43.5	46.5	48.1	49.6

	Stroke	98	159	220	342	403	464	586	647	708	830	891	952	1074	1135	1196	1318	1379	1440	1562	1623	1684
B	T	416	477	538	660	721	782	904	965	1026	1148	1209	1270	1392	1453	1514	1636	1697	1758	1880	1941	2002
	B	112	85.5	116	177	87.5	118	178	89.5	120	61	91.5	122	63	93.5	124	65	95.5	126	67	97.5	128
	A	0	2	2	2	4	4	4	6	6	8	8	8	10	10	10	12	12	12	14	14	14
	N	6	10	10	10	14	14	14	18	18	22	22	22	26	26	26	30	30	30	34	34	34
	Weight(kg)	11.9	13.6	15.4	18.9	20.6	22.4	25.9	27.6	29.3	32.8	34.6	36.3	39.8	41.6	43.3	46.8	48.5	50.3	53.8	55.5	57.3

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZM–180

ZM - 180 - 100- ACL050C1 - D1 - C1 - P2 - S3 - A001

ZM: Semi-enclosed flat motor ZMU: Semi-enclosed U-shaped motor ZMW: Fully enclosed flat motor ZMUW: Fully enclosed U-shaped motor	Wide	Stroke mm	Motor style	Number of slide	C1: Magnetic grid	Resolution	Number of switches	special mark
				D1: one slide D2: two slides	C2: grating C3: No	P1: 5 μm P2: 1 μm P3: 0.5 μm PC: other	S1: switch*1 Sn: switch*n	

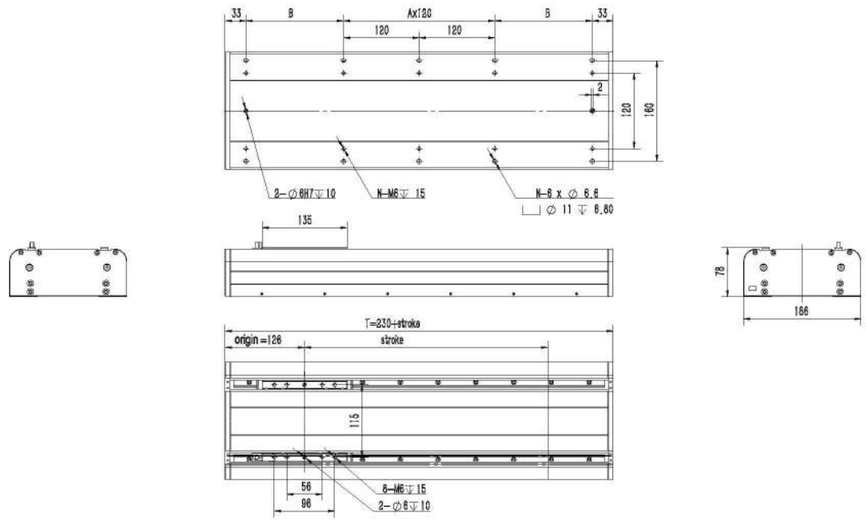
Performance parameters

Parameters/Motor	ACL050C1	ACL050C2	ACL050C3	AUJ0502	AUJ0503	AUJ0504	AUJ0505
Resolution (μm) [Max. speed] (m/s)	1[2];0.5[1.4];0.1[1]						
Peak thrust (N)	415	840	1345	400	600	800	1000
Continuous thrust (N)	128	236	330	90	138	180	220
Rail Specifications	15						
Number of slide	4						
Max. load※1 (kg)	13	28	44	11	19	23	31
Weight of moving part※2 (kg)	3.5	5.5	7.5	4	4	2	6
Repeated accuracy (μm)	±5 (Magnetic LinearEncoder) ; ±2 (Photoelectric Linear Encoder)						

Parameters/Motor	ACQ050C1	ACQ050C2	AUQ030C1	AUQ030C2	AUQ030C3	AUQ030C4
Resolution (μm) [Max. speed] (m/s)	1[2];0.5[1.4];0.1[1]					
Peak thrust (N)	416	831	144	289	433	578
Continuous thrust (N)	91	182	28	57	85	113
Rail Specifications	15					
Number of slide	4					
Max. load※1 (kg)	10	20	4	6	8	12
Weight of moving part※2 (kg)	3.2	4.8	2.2	2.4	2.7	3
Repeated accuracy (μm)	±5 (Magnetic LinearEncoder) ; ±2 (Photoelectric Linear Encoder)					

*1.Stroke 1000mm,acceleration 1G, dwell time 0.2s, speed 1000mm/s
*2. Includes mover weight

ZM-ACL050C1

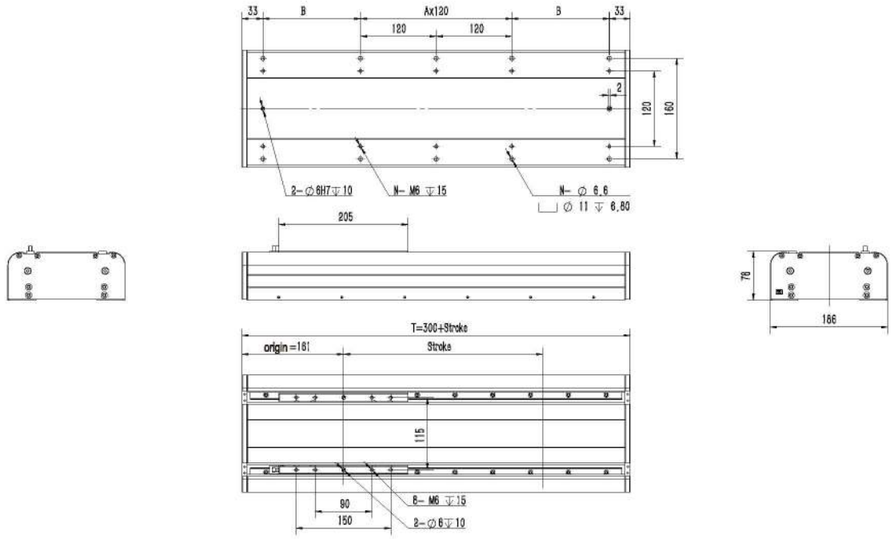


Unit : mm

Stroke	98	146	194	242	290	338	386	434	472	530	578	626	674	722	770	818	866	914	962	1010
T	328	376	424	472	520	568	616	664	702	760	808	856	904	952	1000	1048	1096	1144	1192	1240
B	131	155	179	83	107	131	155	179	83	107	131	155	179	83	107	131	155	179	83	107
A	0	0	0	2	2	2	2	2	4	4	4	4	4	6	6	6	6	6	8	8
N	6	6	6	10	10	10	10	10	14	14	14	14	14	18	18	18	18	18	22	22
Weight(kg)	10.1	11	11.9	12.8	13.7	14.6	15.5	16.4	17.3	18.2	19.1	20	20.9	21.8	22.7	23.6	24.5	25.4	26.3	27.2

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZM-ACL050C2

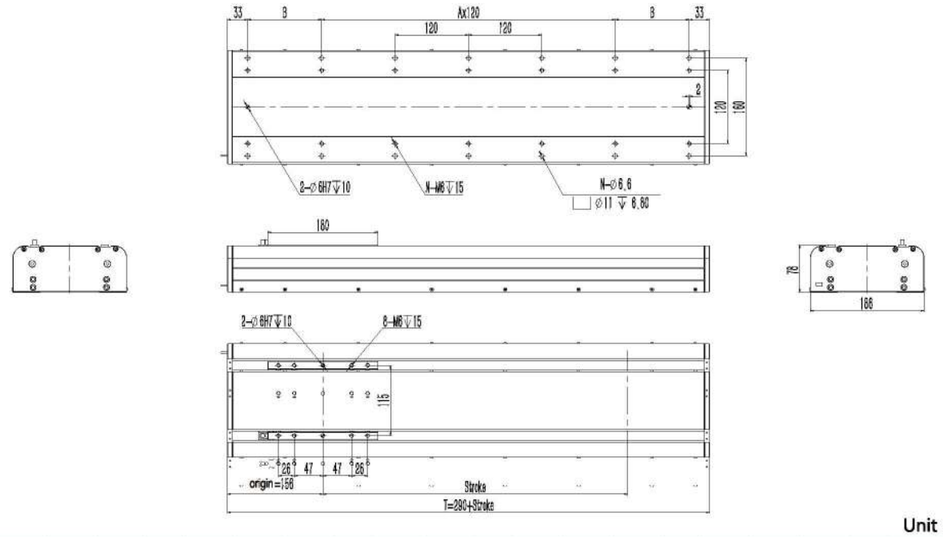


Unit : mm

Stroke	124	172	220	268	316	364	412	460	508	556	604	652	700	748	796	844	892	940	988	1036
T	424	472	520	568	616	664	712	760	808	856	904	952	1000	1048	1096	1144	1192	1240	1288	1336
B	179	83	107	131	155	179	83	107	131	155	179	83	107	131	155	179	83	107	131	155
A	0	2	2	2	2	2	4	4	4	4	4	6	6	6	6	6	8	8	8	8
N	6	10	10	10	10	10	14	14	14	14	14	18	18	18	18	18	22	22	22	22
Weight(kg)	13.9	14.8	15.7	16.6	17.5	18.4	19.3	20.2	21.1	22	22.9	23.8	24.7	25.6	26.5	27.4	28.3	29.2	30.1	31

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMU-AUJ0502

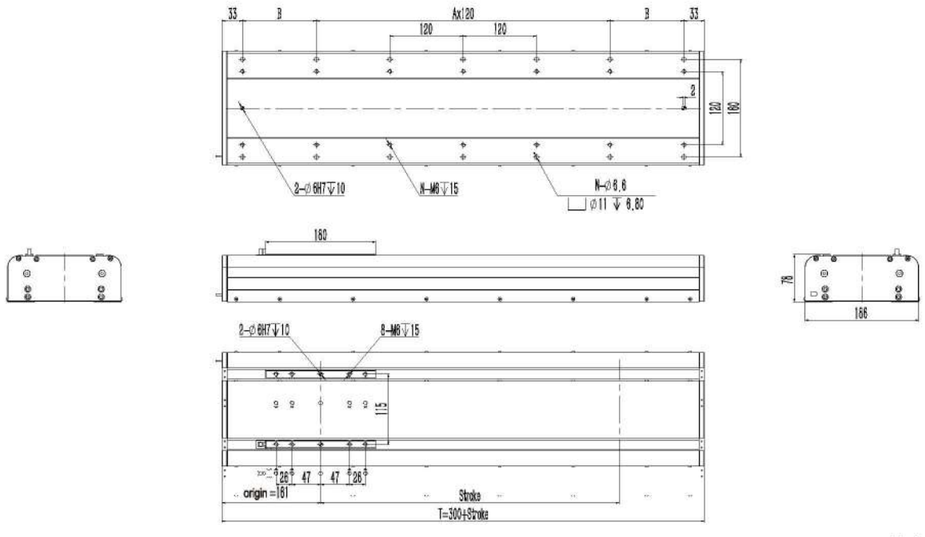


Unit : mm

Stroke	132	193	254	376	437	498	620	681	742	864	925	986	1108	1169	1230	1352	1413	1474	1596	1657	1718
T	422	483	544	666	727	788	910	971	1032	1154	1215	1276	1398	1459	1520	1642	1703	1764	1886	1947	2008
B	178	88.5	119	60	90.5	121	62	92.5	123	64	94.5	125	66	96.5	127	68	98.5	129	70	100.5	131
A	0	2	2	4	4	4	6	6	6	8	8	8	10	10	10	12	12	12	14	14	14
N	6	10	10	14	14	14	18	18	18	22	22	22	26	26	26	30	30	30	34	34	34
Weight(kg)	11.0	12.6	14.2	17.3	18.9	20.5	23.7	25.3	26.8	30.0	31.6	33.2	36.4	38.0	39.5	42.7	44.3	45.9	49.1	50.7	52.2

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMU-AUJ0503

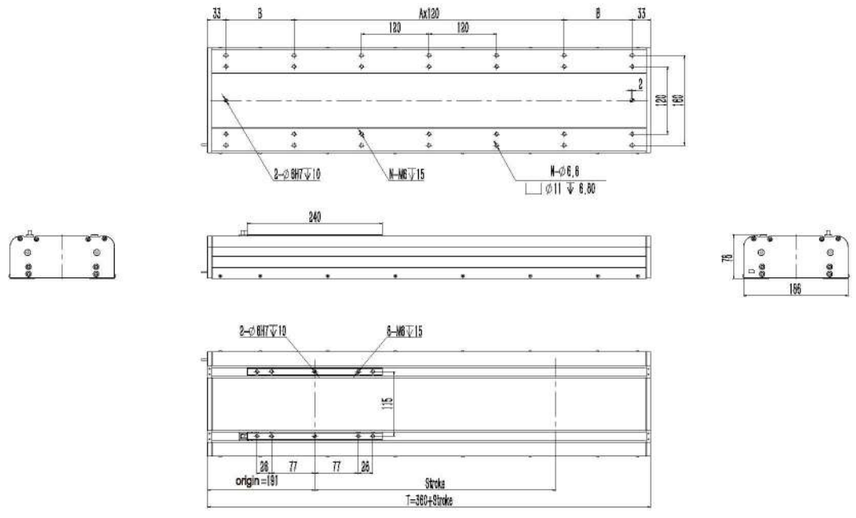


Unit : mm

Stroke	122	183	244	366	427	488	610	671	732	854	915	976	1098	1159	1220	1342	1403	1464	1586	1647	1708
T	422	483	544	666	727	788	910	971	1032	1154	1215	1276	1398	1459	1520	1642	1703	1764	1886	1947	2008
B	178	88.5	119	60	90.5	121	62	92.5	123	64	94.5	125	66	96.5	127	68	98.5	129	70	100.5	131
A	0	2	2	4	4	4	6	6	6	8	8	8	10	10	10	12	12	12	14	14	14
N	6	10	10	14	14	14	18	18	18	22	22	22	26	26	26	30	30	30	34	34	34
Weight(kg)	12.1	13.9	15.6	19.1	20.9	22.6	26.1	27.8	29.6	33.1	34.8	36.6	40.1	41.8	43.6	47.1	48.8	50.6	54.1	55.8	57.6

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMU-AUJ0504

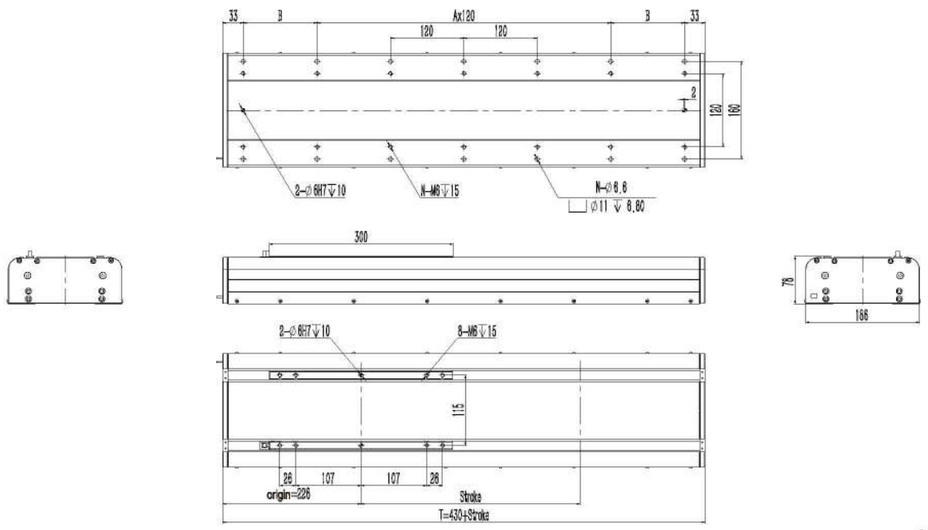


Unit : mm

Stroke	62	123	184	306	367	428	550	611	672	794	855	916	1038	1099	1160	1282	1343	1404	1526	1587	1648
T	422	483	544	666	727	788	910	971	1032	1154	1215	1276	1398	1459	1520	1642	1703	1764	1886	1947	2008
B	178	88.5	119	60	90.5	121	62	92.5	123	64	94.5	125	66	96.5	127	68	98.5	129	70	100.5	131
A	0	2	2	4	4	4	6	6	6	8	8	8	10	10	10	12	12	12	14	14	14
N	6	10	10	14	14	14	18	18	18	22	22	22	26	26	26	30	30	30	34	34	34
Weight(kg)	12.5	14.3	16.2	19.8	21.6	23.4	27.0	28.8	30.6	34.3	36.1	37.9	41.5	43.3	45.1	48.8	50.6	52.4	56.0	57.8	59.6

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMU-AUJ0505

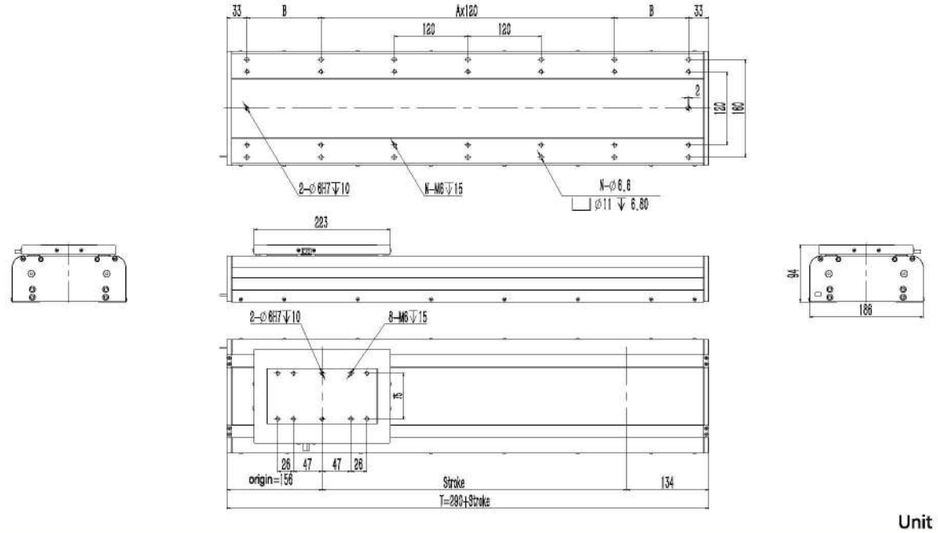


Unit : mm

Stroke	53	114	236	297	358	480	541	602	724	785	856	968	1029	1090	1212	1273	1334	1456	1517	1578	1700
T	483	544	666	727	788	910	971	1032	1154	1215	1286	1398	1459	1520	1642	1703	1764	1886	1947	2008	2130
B	88.5	119	60	90.5	121	62	92.5	123	64	94.5	125	66	96.5	127	68	98.5	129	70	100.5	131	72
A	2	2	4	4	4	6	6	6	8	8	8	10	10	10	12	12	12	14	14	14	16
N	10	10	14	14	14	18	18	18	22	22	22	26	26	26	30	30	30	34	34	34	38
Weight(kg)	14.8	16.7	20.5	22.3	24.2	27.9	29.8	31.7	35.4	37.3	39.5	42.9	44.8	46.7	50.4	52.3	54.2	57.9	59.8	61.7	65.4

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMUW-AUJ0502

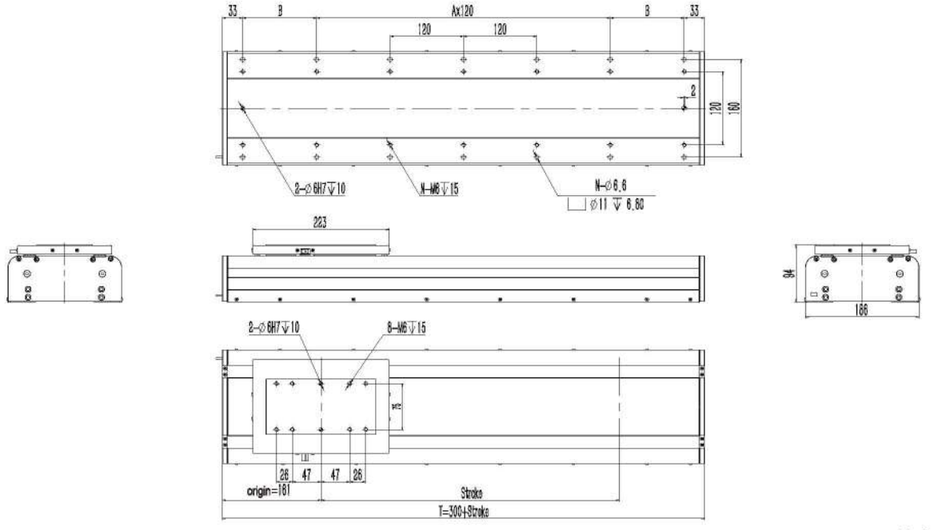


Unit : mm

Stroke	132	193	254	376	437	498	620	681	742	864	925	986	1108	1169	1230	1352	1413	1474	1596	1657	1718
T	422	483	544	666	727	788	910	971	1032	1154	1215	1276	1398	1459	1520	1642	1703	1764	1886	1947	2008
B	178	88.5	119	60	90.5	121	62	92.5	123	64	94.5	125	66	96.5	127	68	98.5	129	70	100.5	131
A	0	2	2	4	4	4	6	6	6	8	8	8	10	10	10	12	12	12	14	14	14
N	6	10	10	14	14	14	18	18	18	22	22	22	26	26	26	30	30	30	34	34	34
Weight(kg)	11.6	13.3	15.0	18.3	20.0	21.7	25.1	26.7	28.4	31.8	33.5	35.1	38.5	40.2	41.9	45.2	46.9	48.6	51.9	53.6	55.3

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMUW-AUJ0503

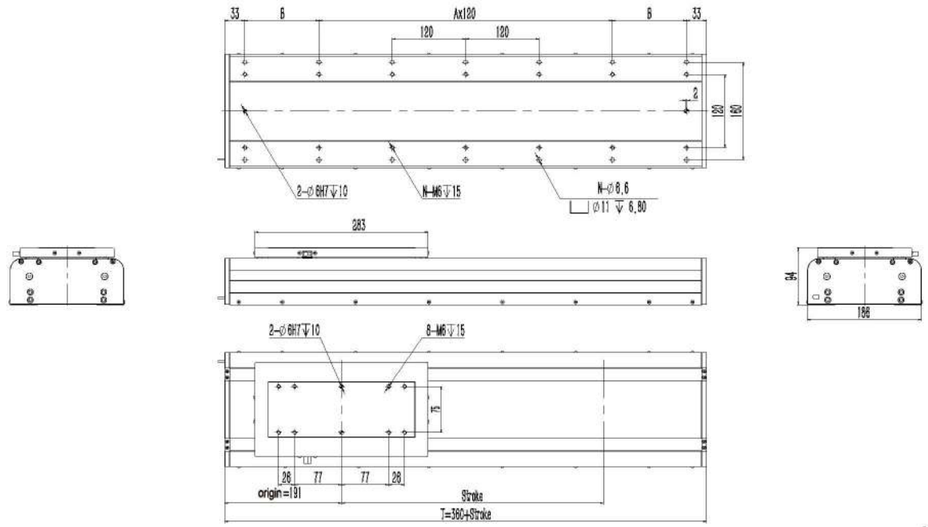


Unit : mm

Stroke	122	183	244	366	427	488	610	671	732	854	915	976	1098	1159	1220	1342	1403	1464	1586	1647	1708
T	422	483	544	666	727	788	910	971	1032	1154	1215	1276	1398	1459	1520	1642	1703	1764	1886	1947	2008
B	178	88.5	119	60	90.5	121	62	92.5	123	64	94.5	125	66	96.5	127	68	98.5	129	70	100.5	131
A	0	2	2	4	4	4	6	6	6	8	8	8	10	10	10	12	12	12	14	14	14
N	6	10	10	14	14	14	18	18	18	22	22	22	26	26	26	30	30	30	34	34	34
Weight(kg)	12.9	14.8	16.6	20.4	22.2	24.1	27.8	29.7	31.6	35.3	37.2	39.0	42.8	44.6	46.5	50.2	52.1	53.9	57.7	59.5	61.4

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMUW-AUJ0504

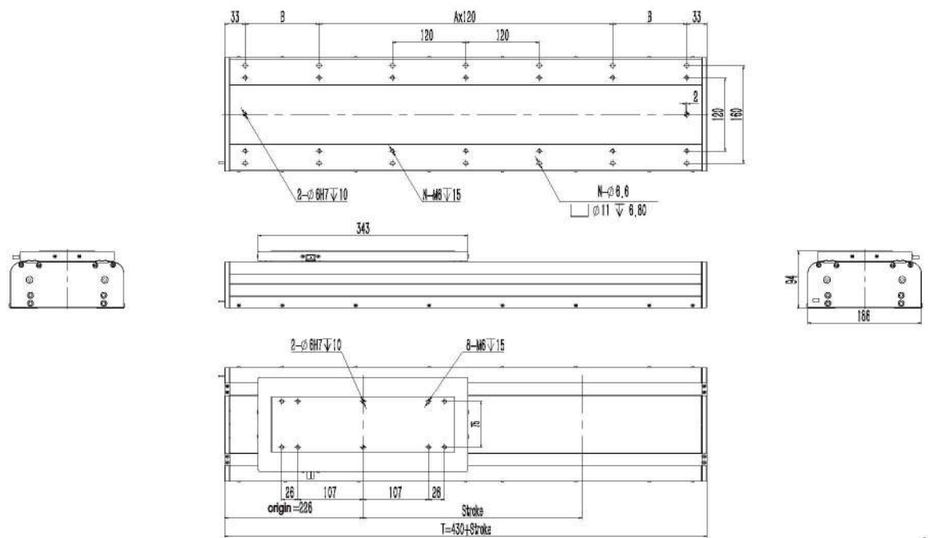


Unit : mm

Stroke	62	123	184	306	367	428	550	611	672	794	855	916	1038	1099	1160	1282	1343	1404	1526	1587	1648
T	422	483	544	666	727	788	910	971	1032	1154	1215	1276	1398	1459	1520	1642	1703	1764	1886	1947	2008
B	178	88.5	119	60	90.5	121	62	92.5	123	64	94.5	125	66	96.5	127	68	98.5	129	70	100.5	131
A	0	2	2	4	4	4	6	6	6	8	8	8	10	10	10	12	12	12	14	14	14
N	6	10	10	14	14	14	18	18	18	22	22	22	26	26	26	30	30	30	34	34	34
Weight(kg)	13.4	15.4	17.3	21.2	23.2	25.1	29.0	30.9	32.9	36.8	38.7	40.6	44.5	46.5	48.4	52.3	54.2	56.2	60.1	62.0	64.0

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZMUW-AUJ0505



Unit : mm

Stroke	53	114	236	297	358	480	541	602	724	785	856	968	1029	1090	1212	1273	1334	1456	1517	1578	1700
T	483	544	666	727	788	910	971	1032	1154	1215	1286	1398	1459	1520	1642	1703	1764	1886	1947	2008	2130
B	88.5	119	60	90.5	121	62	92.5	123	64	94.5	125	66	96.5	127	68	98.5	129	70	100.5	131	72
A	2	2	4	4	4	6	6	6	8	8	8	10	10	10	12	12	12	14	14	14	16
N	10	10	14	14	14	18	18	18	22	22	22	26	26	26	30	30	30	34	34	34	38
Weight(kg)	15.9	17.9	21.9	23.9	25.9	29.9	31.9	33.9	37.9	39.9	42.3	45.9	48.0	50.0	54.0	56.0	58.0	62.0	64.0	66.0	70.0

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZM–270

ZM - 270 - 100- ACL124 - D1 - C1 - P2 - S3 - A001

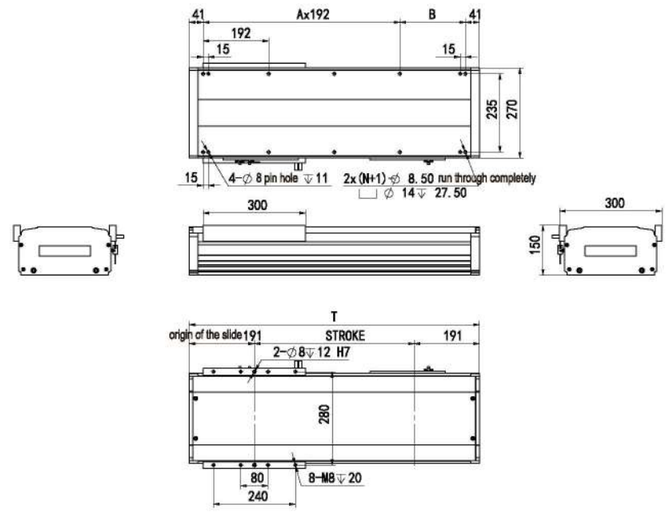
ZM: Semi–enclosed flat motor ZMU: Semi–enclosed U–shaped motor ZMW: Fully enclosed flat motor ZMUW: Fully enclosed U–shaped motor	Wide	Stroke mm	Motor style	Number of slide	C1: Magnetic grid	Resolution	Number of switches	special mark
				D1: one slide D2: two slides	C2: grating C3: No	P1: 5 μm P2: 1 μm P3: 0.5 μm PC: other	S1: switch*1 Sn: switch*n	

Performance parameters

Parameters/Motor	ACL124-12	ACL124-15	ACL124-30
Resolution (μm) [Max. speed] (m/s)	1[2];0.5[1.4];0.1[1]	1[2];0.5[1.4];0.1[1]	1[2];0.5[1.4];0.1[1]
Peak thrust (N)	1680N	2100N	4200N
Continuous thrust (N)	800N	1000N	2000N
Rail Specifications	25	25	25
Number of slide	6	6	6
Max. load※1 (kg)	95kg	110kg	200kg
Weight of moving part※2 (kg)	16kg	20kg	35kg
Repeated accuracy (μm)	±2μm	±2μm	±2μm

*1.Stroke 1000mm,acceleration 1G, dwell time 0.2s, speed 1000mm/s
*2. Includes mover weight

ZM-ACL124-12

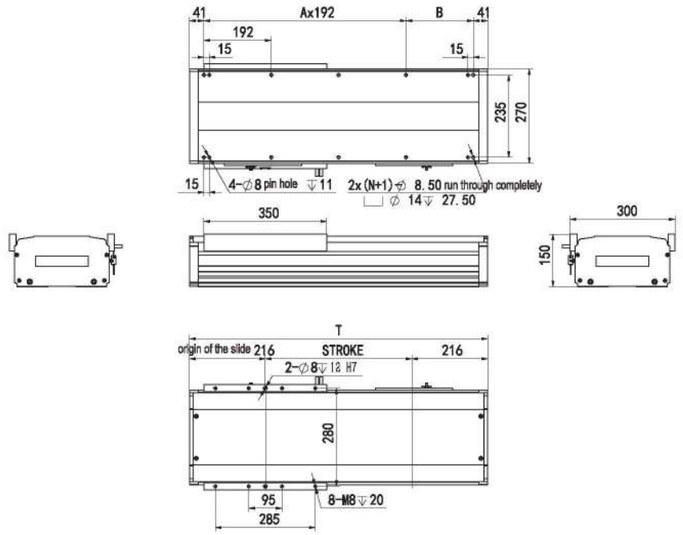


Unit : mm

Stroke	84	276	468	564	660	756	852	948	1044	1140	1236	1332	1428	1524	1620	1716	1812	1908	2004	2100
T	466	658	850	946	1042	1138	1234	1330	1426	1522	1618	1714	1810	1906	2002	2098	2194	2290	2386	2482
B	192	192	192	96	192	96	192	96	192	96	192	96	192	96	192	96	192	96	192	96
N	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Weight(kg)	37.4	48	58.6	63.9	69.2	74.5	79.8	85.1	90.4	95.7	101	106.3	111.6	116.9	122.2	127.5	132.8	138.1	143.4	148.7

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZM-ACL124-15

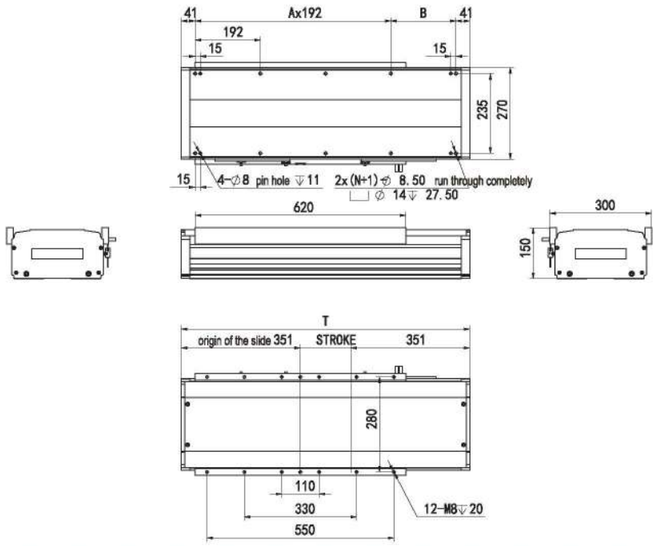


Unit : mm

Stroke	34	226	418	514	610	706	802	898	994	1090	1186	1282	1378	1474	1570	1666	1762	1858	1954	2050
T	466	658	850	946	1042	1138	1234	1330	1426	1522	1618	1714	1810	1906	2002	2098	2194	2290	2386	2482
B	192	192	192	96	192	96	192	96	192	96	192	96	192	96	192	96	192	96	192	96
N	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Weight(kg)	40	50.6	61.2	66.5	71.8	77.1	82.4	87.7	93	98.3	103.6	108.9	114.2	119.5	124.8	130.1	135.4	140.7	146	151.3

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZM-ACL124-30



Unit : mm

Stroke	148	244	340	436	532	628	724	820	916	1012	1108	1204	1300	1396	1492	1588	1684	1780	1876	1972
T	850	946	1042	1138	1234	1330	1426	1522	1618	1714	1810	1906	2002	2098	2194	2290	2386	2482	2578	2674
B	192	96	192	96	192	96	192	96	192	96	192	96	192	96	192	96	192	96	192	96
N	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Weight(kg)	76.1	81.4	86.7	92	97.3	102.6	107.9	113.2	118.5	123.8	129.1	134.4	139.7	145	150.3	155.6	160.9	166.2	171.5	176.8

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZDL17

ZDL17 - 80 - SL8006 - D1 - C2 - P2 - S3

Wide	Stroke mm	Motor style	Number of slide	C1: Magnetic grid	Resolution	Number of switches
			D1: one slide	C2: grating	P1: 5 μm	S1: switch*1
			D2: two slides	C3: No	P2: 1 μm	Sn: switch*n
					P3: 0.5 μm	
					PC: other	

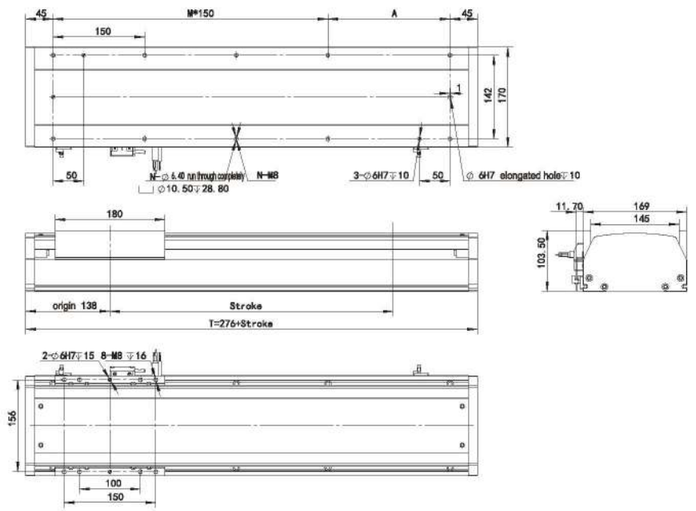
Performance parameters

Parameters/Motor	SL8006	SL8009	SL80012
Resolution (μm) [Max. speed] (m/s)	1[2];0.5[1.4];0.1[1]	1[2];0.5[1.4];0.1[1]	1[2];0.5[1.4];0.1[1]
Peak thrust (N)	400	600	800
Continuous thrust (N)	200	300	400
Rail Specifications	15	15	15
Number of slide	4	4	6
Max. load※1 (kg)	20	35	50
Weight of moving part※2 (kg)	4	5	6.5
Repeated accuracy (μm)	±2	±2	±2

*1.Stroke 1000mm,acceleration 1G, dwell time 0.2s, speed 1000mm/s

*2. Includes mover weight

ZDL17-8006

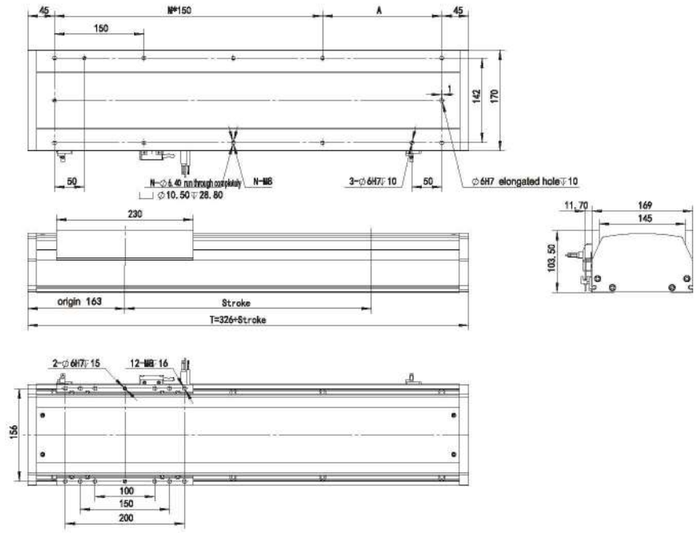


Unit : mm

Stroke	80	176	272	368	464	560	656	752	848	944	1040	1136	1232	1328	1424	1520	1616	1712	1808	1904	2000	2096	2192
L	356	452	548	644	740	836	932	1028	1124	1220	1316	1412	1508	1604	1700	1796	1892	1988	2084	2180	2276	2372	2468
A	116	62	158	104	200	146	92	188	134	80	176	122	218	164	110	206	152	98	194	140	86	182	128
M	1	2	2	3	3	4	5	5	6	7	7	8	8	9	10	10	11	12	12	13	14	14	15
N	6	8	8	10	10	12	14	14	16	18	18	20	20	22	24	24	26	28	28	30	32	32	34
kg	11.22	12.99	14.79	16.57	18.37	20.16	21.96	23.74	25.52	27.31	29.11	30.91	32.69	34.47	36.26	38.06	39.86	41.64	43.41	45.21	47.01	48.81	50.58

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZDL17-8009

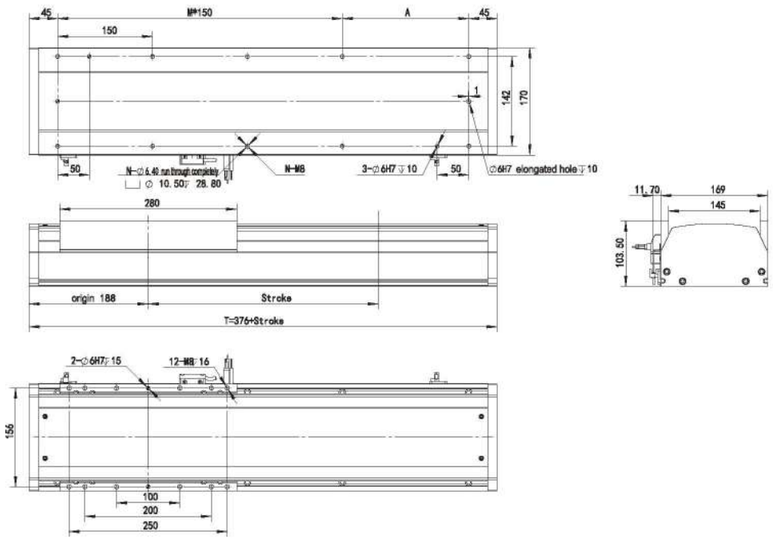


Unit : mm

Stroke	126	222	318	414	510	606	702	798	894	990	1086	1182	1278	1374	1470	1566	1662	1758	1854	1950	2046	2142
L	452	548	644	740	836	932	1028	1124	1220	1316	1412	1508	1604	1700	1796	1892	1988	2084	2180	2276	2372	2468
A	62	158	104	200	146	92	188	134	80	176	122	218	164	110	206	152	98	194	140	86	182	128
M	2	2	3	3	4	5	5	6	7	7	8	8	9	10	10	11	12	12	13	14	14	15
N	8	8	10	10	12	14	14	16	18	18	20	20	22	24	24	26	28	28	30	32	32	34
(kg)	13.75	15.55	17.33	19.13	20.92	22.72	24.50	26.28	28.07	29.87	31.67	33.45	35.22	37.02	38.82	40.62	42.39	44.17	45.97	47.77	49.56	51.34

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZDL17-8012



Unit : mm

Stroke	76	172	268	364	460	556	652	748	844	940	1036	1132	1228	1324	1420	1516	1612	1708	1804	1900	1996	2092
L	452	548	644	740	836	932	1028	1124	1220	1316	1412	1508	1604	1700	1796	1892	1988	2084	2180	2276	2372	2468
A	62	158	104	200	146	92	188	134	80	176	122	218	164	110	206	152	98	194	140	86	182	128
M	2	2	3	3	4	5	5	6	7	7	8	8	9	10	10	11	12	12	13	14	14	15
N	8	8	10	10	12	14	14	16	18	18	20	20	22	24	24	26	28	28	30	32	32	34
(kg)	14.72	16.52	18.30	20.09	21.89	23..69	25.47	27.24	29.04	30.84	32.64	34.41	36.19	37.99	39.79	41.58	43.36	45.14	46.94	48.73	50.53	52.31

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZDL21

ZDL21 - 76 - SL8012 - D1 - C2 - P2 - S3

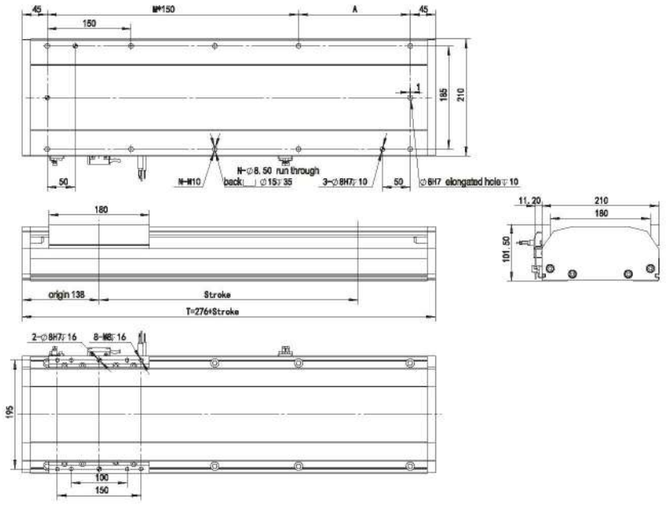
Wide	Stroke mm	Motor style	Number of slide	C1: Magnetic grid	Resolution	Number of switches
			D1: one slide D2: two slides	C2: grating C3: No	P1: 5 μm P2: 1 μm P3: 0.5 μm PC: other	S1: switch*1 Sn: switch*n

Performance parameters

Parameters/Motor	SL8006	SL8009	SL80012
Resolution (μm) [Max. speed] (m/s)	1[2];0.5[1.4];0.1[1]	1[2];0.5[1.4];0.1[1]	1[2];0.5[1.4];0.1[1]
Peak thrust (N)	400	600	800
Continuous thrust (N)	200	300	400
Rail Specifications	20	20	20
Number of slide	4	6	6
Max. load※1 (kg)	30	45	60
Weight of moving part※2 (kg)	5	6	8
Repeated accuracy (μm)	±2	±2	±2

*1.Stroke 1000mm,acceleration 1G, dwell time 0.2s, speed 1000mm/s
*2. Includes mover weight

ZDL21-8006

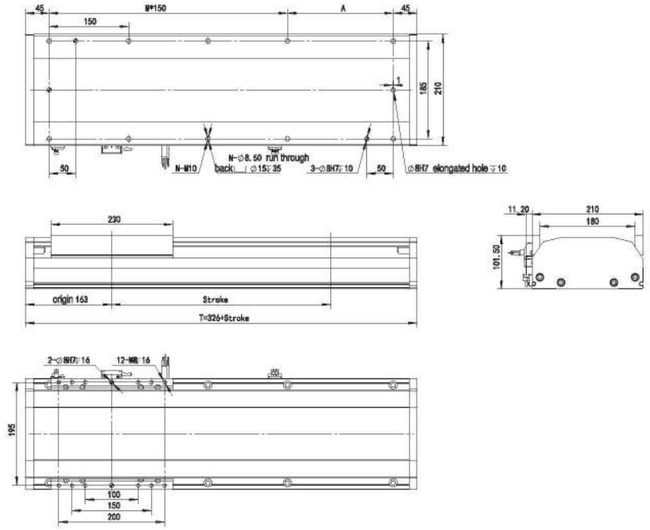


Unit : mm

Stroke	80	176	272	368	464	560	656	752	848	944	1040	1136	1232	1328	1424	1520	1616	1712	1808	1904	2000	2096	2192
L	356	452	548	644	740	836	932	1028	1124	1220	1316	1412	1508	1604	1700	1796	1892	1988	2084	2180	2276	2372	2468
A	116	62	158	104	200	146	92	188	134	80	176	122	218	164	110	206	152	98	194	140	86	182	128
M	1	2	2	3	3	4	5	5	6	7	7	8	8	9	10	10	11	12	12	13	14	14	15
N	6	8	8	10	10	12	14	14	16	18	18	20	20	22	24	24	26	28	28	30	32	32	34
kg	14.10	16.52	18.96	21.39	23.83	26.28	28.72	31.14	33.57	36.01	38.46	40.90	43.33	45.75	48.19	50.64	53.08	55.51	57.93	60.37	62.82	65.26	67.69

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZDL21-8009

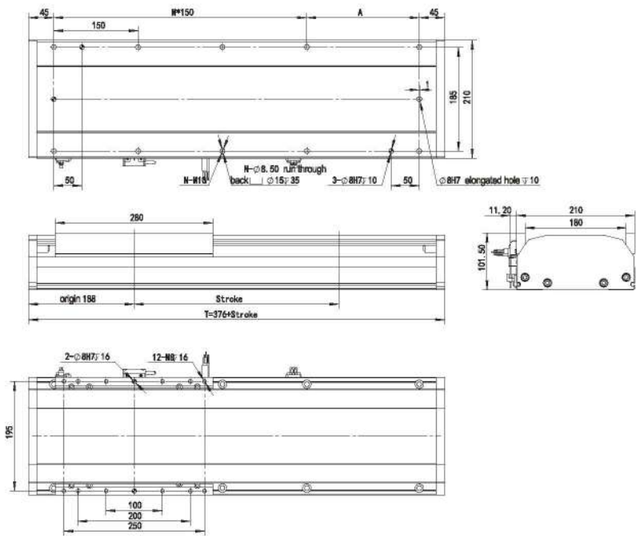


Unit : mm

Stroke	126	222	318	414	510	606	702	798	894	990	1086	1182	1278	1374	1470	1566	1662	1758	1854	1950	2046	2142
L	452	548	644	740	836	932	1028	1124	1220	1316	1412	1508	1604	1700	1796	1892	1988	2084	2180	2276	2372	2468
A	62	158	104	200	146	92	188	134	80	176	122	218	164	110	206	152	98	194	140	86	182	128
M	2	2	3	3	4	5	5	6	7	7	8	8	9	10	10	11	12	12	13	14	14	15
N	8	8	10	10	12	14	14	16	18	18	20	20	22	24	24	26	28	28	30	32	32	34
kg	17.61	20.06	22.48	24.92	27.37	29.81	32.24	34.66	37.11	39.55	41.99	44.42	46.84	49.29	51.73	54.17	56.60	59.02	61.47	63.91	66.36	68.78

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ZDL21-8012



Unit : mm

Stroke	76	172	268	364	460	556	652	748	844	940	1036	1132	1228	1324	1420	1516	1612	1708	1804	1900	1996	2092
L	452	548	644	740	836	932	1028	1124	1220	1316	1412	1508	1604	1700	1796	1892	1988	2084	2180	2276	2372	2468
A	65	158	104	200	146	92	188	134	80	176	122	218	164	110	206	152	98	194	140	86	182	128
M	2	2	3	3	4	5	5	6	7	7	8	8	9	10	10	11	12	12	13	14	14	15
N	8	8	10	10	12	14	14	16	18	18	20	20	22	24	24	26	28	28	30	32	32	34
kg	18.75	21.20	23.62	26.07	28.51	30.96	33.38	35.80	38.25	40.69	43.14	45.56	47.98	50.43	52.87	55.32	57.74	60.16	62.61	65.05	67.50	69.92

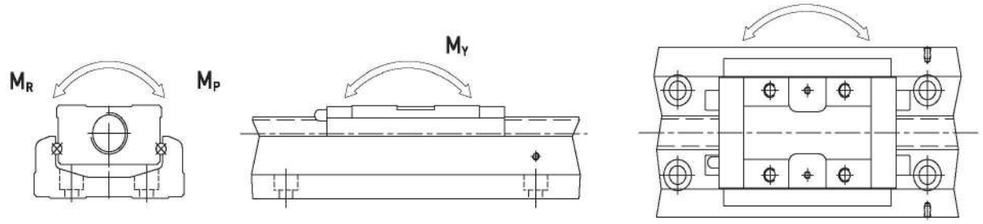
This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

KK screw module

KK | **60** | **10** | **P** - **400** | **A** | **1** - **FO** | **C** | **SO**

- **KK**: KK series
- **60**: Size (mm) 40, 50, 60D, 86D
- **10**: Ball screw lead (mm)
  - KK40 : 2.5
  - KK50 : 2.5
  - KK60D: 5, 10
  - KK86D : 5.10.16.20
- **P**: Precision grade — P: precision; C: common
- **400**: Rail length (mm)
  - KK40 : 100, 150, 200
  - KK50 : 150, 200, 250, 300
  - KK60D: 150, 200, 300, 400, 500, 600
  - KK86D: 340, 440, 540, 640, 740, 940
- **A**: Slide type — A: Standard type
- **1**: Number of slide: 1
- **FO**: Motor connection flange — FE: special processing
- **C**: C: aluminum cover; No mark: No cover
- **SO**: Include limit switch: S0: only limit track; S1: PG15NL; S2: PG15NY; No mark: blank

Load specification



Model		Ball screw				Linear slide											
		Screw outer dia (mm)	Lead (mm)	Basic dynamic load rating (N)	Basic static load ating (N)	Basic dynamic load rating (N)		Basic static load rating (N)		Allowable static moment							
										Pitch M_P(N-m)				Deflect M_Y(N-m)			
						slide A	slide S	slide A	slide S	slide A1	slide A2	slide A1	slide A2	slide A1	slide A2	slide S1	slide S2
KK4001	precision	8	1	735	1538	3920	-	6468	-	33	182	-	-	33	182	-	-
	common			676	1284												
KK5002	precision	8	2	2136	3489	8007	-	12916	-	116	545	-	-	116	545	-	-
	common			1813	2910												
KK6005	precision	12	5	3744	6243	13230	7173	21462	11574	152	760	72	367	152	760	72	367
	common			3377	5625												
KK6010	precision	12	10	2410	3743	13230	7173	21462	11574	152	760	72	367	152	760	72	367
	common			2107	3234												
KK8610	precision	15	10	7144	12642	31458	21051	50764	29475	622	3050	228	1309	622	3050	228	1309
	common			6429	11387												
KK8620	precision	15	20	4645	7655	31458	21051	50764	29475	622	3050	228	1309	622	3050	228	1309
	common			4175	6889												

Scroll M_R(N-m)			
slide A1	slide A2	slide S1	slide S2
81	162	-	-
222	444	-	-
419	838	241	482
419	838	241	482
1507	3014	847	1694
1507	3014	847	1694

Precision grade

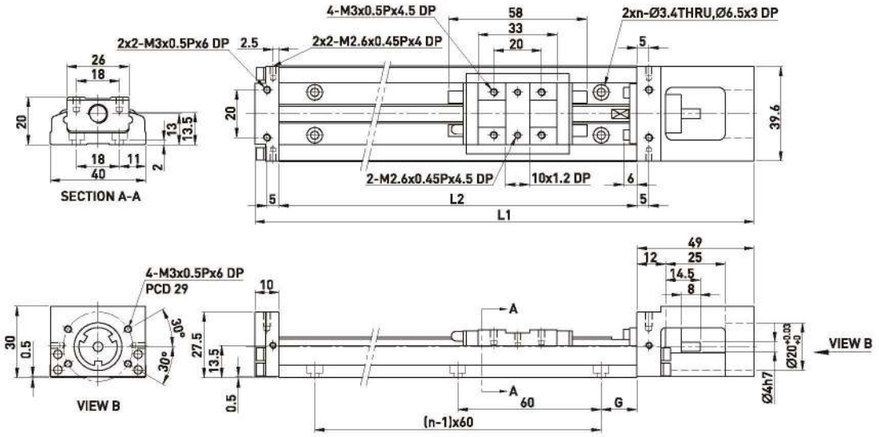
Model	Rail length	Location reproducibility		Positioning accuracy		Walking parallelism		Maximum starting torque (N-cm)	
		Precision	Common	Precision	Common	Precision	Common	Precision	Common
KK40	100	±0.003	±0.01	0.020	-	0.010	-	1.2	0.8
	150								
	200								
KK50	150	±0.003	±0.01	0.020	-	0.010	-	4	2
	200								
	250								
	300								
KK60	150	±0.003	±0.01	0.020	-	0.010	-	15	7
	200								
	300								
	400								
	500	±0.003	±0.01	0.025	-	0.015	-	15	7
	600								
KK86	340	±0.003	±0.01	0.025	-	0.015	-	15	10
	440								
	540								
	640								
	740	±0.003	±0.01	0.030	-	0.020	-	17	10
	940	±0.003	±0.01	0.040	-	0.030	-	25	10

Maximum speed

Model	Ball screw lead (mm)	Rail length 12 (mm)	Speed (mm/sec)	
			Precision	Common
KK40	01	100	190	190
		150	190	190
		200	190	190
KK50	02	150	270	270
		200	270	270
		250	270	270
		300	270	270
KK60	05	150	550	390
		200	550	390
		300	550	390
		400	550	390
		500	550	390
		600	340	340
	10	150	1100	790
		200	1100	790
		300	1100	790
		400	1100	790
		500	1100	790
		600	670	670
KK86	10	340	740	520
		440	740	520
		540	740	520
		640	740	520
		740	740	520
		940	610	430
	20	340	1480	1050
		440	1480	1050
		540	1480	1050
		640	1480	1050
		740	1480	1050
		940	1220	870

KK screw module

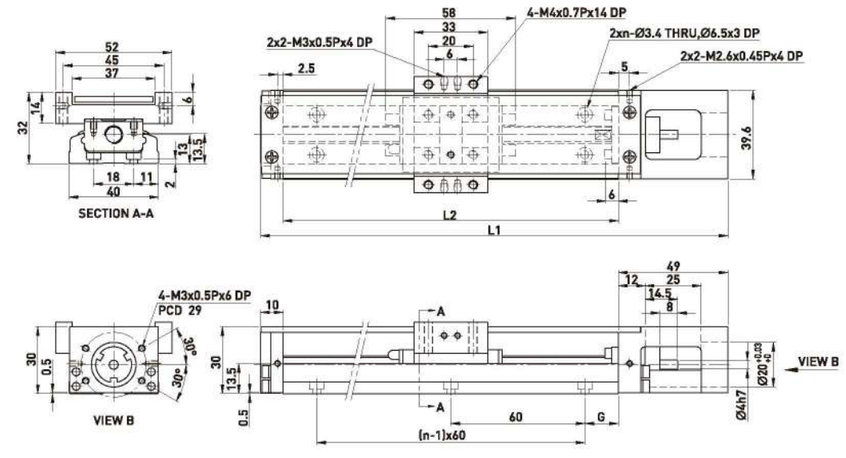
KK40 without cover



Unit : mm

Rail length L2 (mm)	Full length L1 (mm)	Maximum stroke (mm)		G (mm)	N	Weight (kg)	
		A1 slide	A2 slide			A1 slide	A2 slide
100	159	36	-	20	2	0.48	-
150	209	86	34	15	3	0.6	0.67
200	259	136	84	40	3	0.72	0.79

KK40 with cover

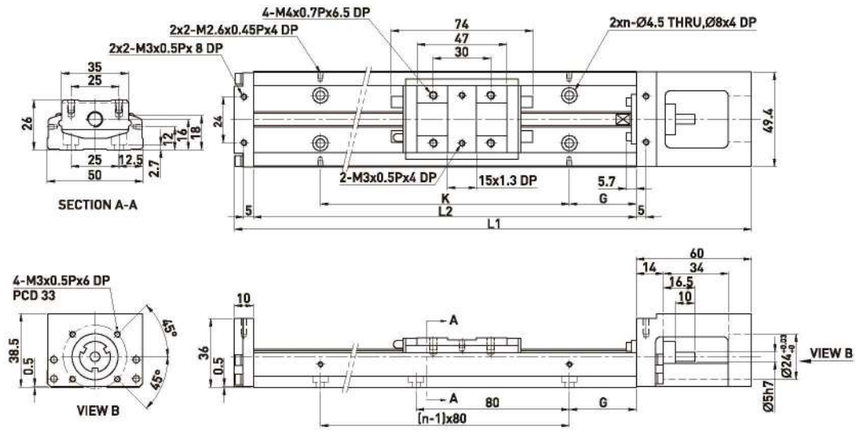


Unit : mm

Rail length L2 (mm)	Full length L1 (mm)	Maximum stroke (mm)		G (mm)	N	Weight (kg)	
		A1 slide	A2 slide			A1 slide	A2 slide
100	159	36	-	20	2	0.55	-
150	209	86	34	15	3	0.68	0.76
200	259	136	84	40	3	0.82	0.89

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

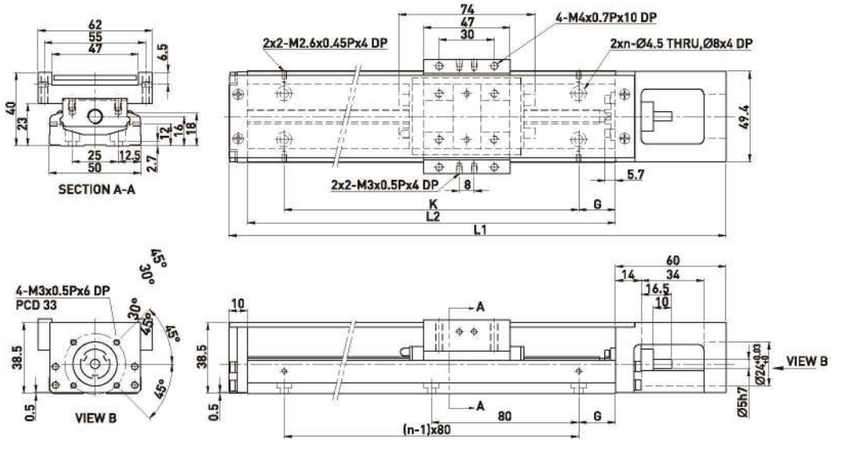
KK50 without cover



Unit : mm

Rail length L2 (mm)	Full length L1 (mm)	Maximum stroke (mm)		G (mm)	K(mm)	N	Weight (kg)	
		A1 slide	A2 slide				A1 slide	A2 slide
150	220	70	-	35	80	2	1	-
200	270	120	55	20	160	3	1.2	1.4
250	320	170	105	45	160	3	1.4	1.6
300	370	220	155	30	240	4	1.6	1.8

KK50 with cover

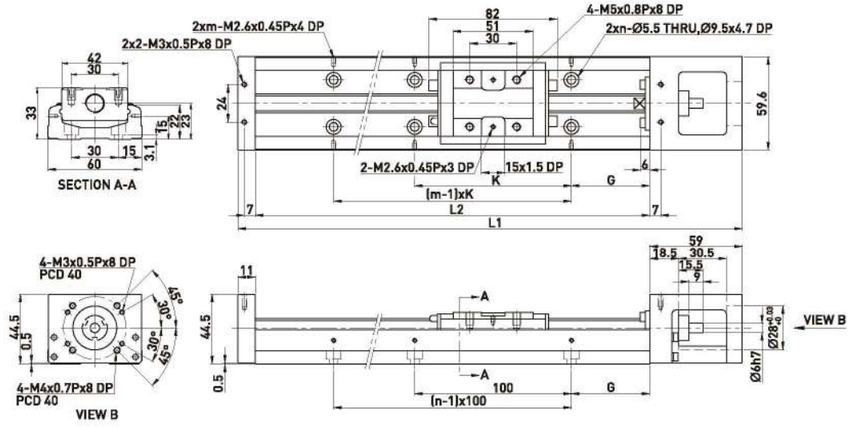


Unit : mm

Rail length L2 (mm)	Full length L1 (mm)	Maximum stroke (mm)		G (mm)	K(mm)	N	Weight (kg)	
		A1 slide	A2 slide				A1 slide	A2 slide
150	220	70	-	35	80	2	1.1	-
200	270	120	55	20	160	3	1.3	1.5
250	320	170	105	45	160	3	1.6	1.8
300	370	220	155	30	240	4	1.8	2.0

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

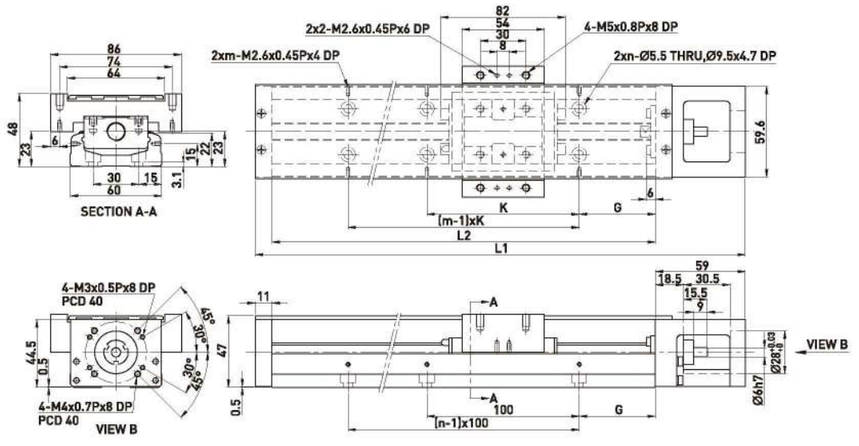
KK60D without cover



Unit : mm

Rail length L2 (mm)	Full length L1 (mm)	Maximum stroke (mm)		G (mm)	k(mm)	N	M	Weight (kg)	
		A1 slide	A2 slide					A1 slide	A2 slide
150	220	60	-	25	100	2	2	1.5	-
200	270	110	-	50	100	2	2	1.8	-
300	370	210	135	50	200	3	2	2.4	2.7
400	470	310	235	50	100	4	4	3	3.3
500	570	410	335	50	200	5	3	3.6	3.9
600	670	510	435	50	100	6	6	4.2	4.6

KK60D with cover

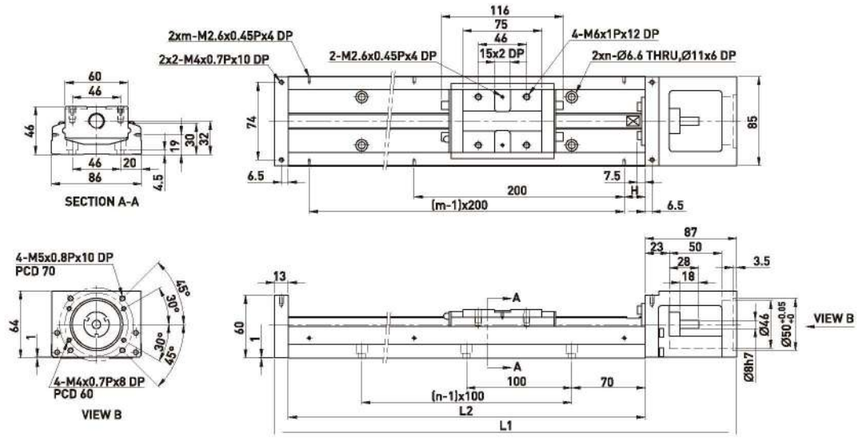


Unit : mm

Rail length L2 (mm)	Full length L1 (mm)	Maximum stroke (mm)		G (mm)	K(mm)	N	M	Weight (kg)	
		A1 slide	A2 slide					A1 slide	A2 slide
150	220	60	-	25	100	2	2	1.7	-
200	270	110	-	50	100	2	2	2.1	-
300	370	210	135	50	200	3	2	2.7	3.0
400	470	310	235	50	100	4	4	3.3	3.6
500	570	410	335	50	200	5	3	3.9	4.2
600	670	510	435	50	100	6	6	4.6	5.0

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

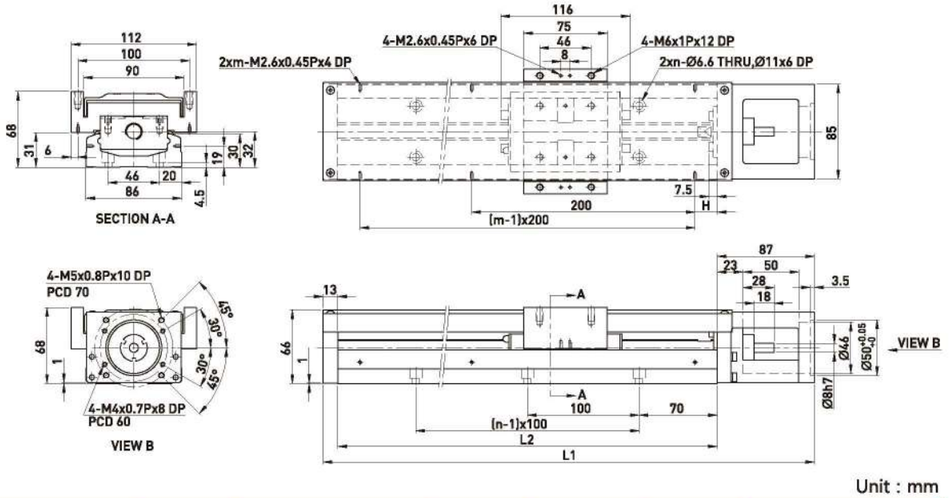
KK86D without cover



Unit : mm

Rail length L2 (mm)	Full length L1 (mm)	Maximum stroke (mm)		H (mm)	N	M	Weight (kg)	
		A1 slide	A2 slide				A1 slide	A2 slide
340	440	216.5	108.5	70	3	2	5.7	6.5
440	540	316.5	208.5	20	4	3	6.9	7.7
540	640	416.5	308.5	70	5	3	8.0	8.8
640	740	516.5	408.5	20	6	4	9.2	10.0
740	840	616.5	508.5	70	7	4	10.4	11.2
940	1040	816.5	708.5	70	9	5	11.6	12.4

KK86D with cover



Unit : mm

Rail length L2 (mm)	Full length L1 (mm)	Maximum stroke (mm)		H (mm)	N	M	Weight (kg)	
		A1 slide	A2 slide				A1 slide	A2 slide
340	440	216.5	108.5	70	3	2	6.5	7.3
440	540	316.5	208.5	20	4	3	7.8	8.6
540	640	416.5	308.5	70	5	3	9.0	9.8
640	740	516.5	408.5	20	6	4	10.3	11.3
740	840	616.5	508.5	70	7	4	11.6	12.4
940	1040	816.5	708.5	70	9	5	13.0	13.8

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

Motor base and motor connecting flange

Mitsubishi servo motor

Output power	Motor	Weight (kg)	Applicable flange				With brake (kg)	Driver	Weight (kg)	Note
			kk40	KK50	KK60D	KK86D				
50W	HF-KP053	0.35	F1	F1	F1	F2	0.75	MR-J3S-10A	0.8	220V
100W	HF-KP13	0.56	F1	F1	F1	F2	0.89	MR-J3S-10A	0.8	220V
200W	HF-KP23	0.94	-	-	-	F0	1.6	MR-J3S-20A	0.8	220V
400W	HF-KP43	1.5	-	-	-	F0	2.1	MR-J3S-40A	1	220V
750W	HF-KP73	2.9	-	-	-	-	4	MR-J3S-70A	1.4	220V

Panasonic servo motor

Output power	Motor	Weight (kg)	Applicable flange				With brake (kg)	Driver	Weight (kg)	Note
			kk40	KK50	KK60D	KK86D				
50W	MSMD5AZP1	0.32	F2	F2	F2	F3	0.53	MADDT1105	0.8	110V
50W	MSMD5AZP1	0.32	F2	F2	F2	F3	0.53	MADDT1205	0.8	220V
100W	MSMD011P1	0.47	F2	F2	F2	F3	0.68	MADDT1107	0.8	110V
100W	MSMD012P1	0.47	F2	F2	F2	F3	0.68	MADDT1205	0.8	220V
200W	MSMD021P1	0.82	-	-	-	F1	1.3	MADDT2110	1.1	110V
200W	MSMD022P1	0.82	-	-	-	F1	1.3	MADDT1207	0.8	220V
400W	MSMD041P1	1.2	-	-	-	F1	1.7	MADDT3120	1.5	110V
400W	MSMD042P1	1.2	-	-	-	F1	1.7	MADDT2210	1.1	220V
750W	MSMD082S1	2.3	-	-	-	F4	3.1	MADDT3520	1.5	220V

Yaskawa servo motor

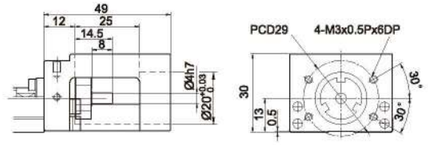
Output power	Motor	Weight (kg)	Applicable flange				With brake (kg)	Driver	Weight (kg)	Note
			kk40	KK50	KK60D	KK86D				
50W	SGMAV-A5ADA61	0.3	F1	F1	F1	F2	-	SGDV-R70A01A	0.9	有鍵
50W	SGMAV-A5ADA2C	0.3	F1	F1	F1	F2	-	SGDV-R70A01A	0.9	无鍵
50W	SGMAV-A5ADA21	0.3	F1	F1	F1	F2	0.75	SGDV-R70A01A	0.9	中惯量
100W	SGMAV-01ADA64	0.4	F1	F1	F1	F2	0.89	SGDV-R90A01A	0.9	
200W	SGMAV-02ADA65	0.9	-	-	-	F0	1.6	SGDV-1R6A01A	0.9	
400W	SGMAV-04ADA66	1.2	-	-	-	F0	2.1	SGDV-2R8A01A	1	
750W	SGMAV-08ADA67	2.6	-	-	-		4	SGDV-5R5A01A	1.5	

KK screw module

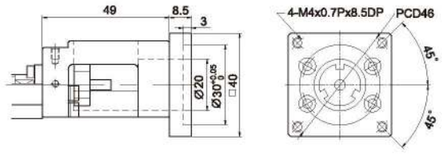
Motor base and motor connecting flange

● KK40

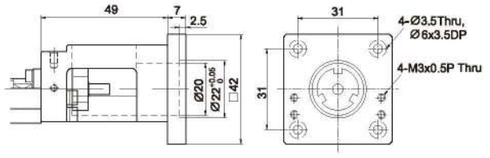
Motor base F0



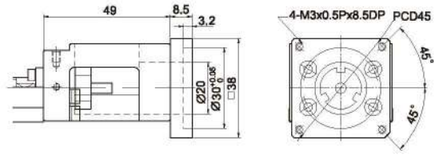
Motor connecting flange F1



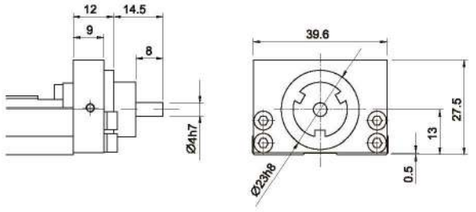
Motor connecting flange F3



Motor connecting flange F2

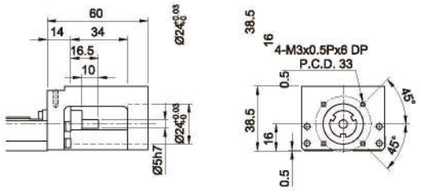


Adapter seat H0

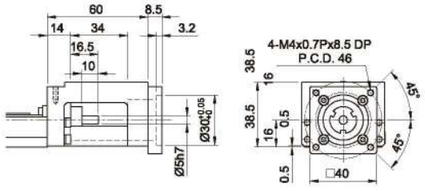


● KK50

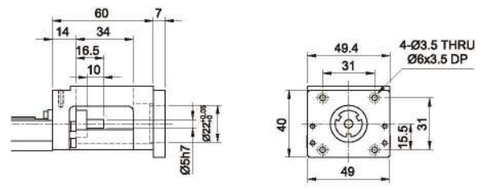
Motor base F0



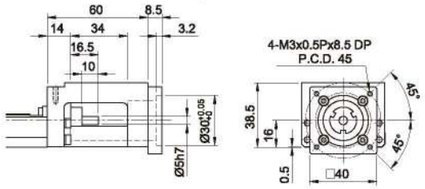
Motor connecting flange F1



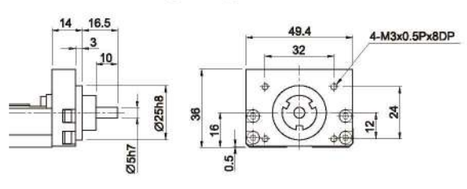
Motor connecting flange F3



Motor connecting flange F1



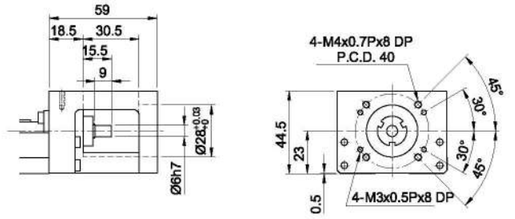
Motor connecting flange F3



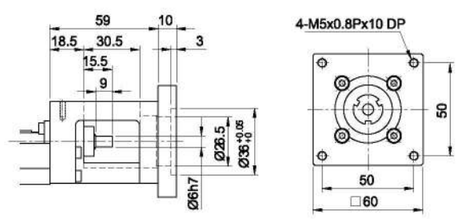
Motor base and motor connecting flange

● KK60D

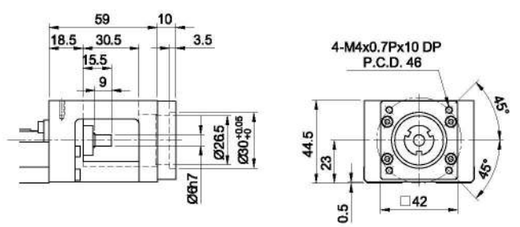
Motor base F0



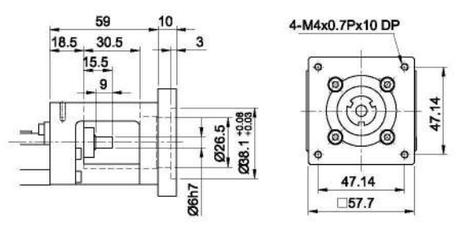
Motor connecting flange F3



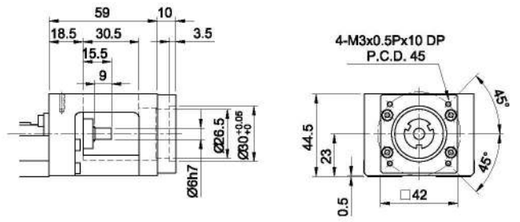
Motor connecting flange F1



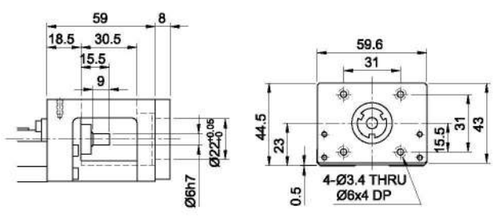
Motor connecting flange F4



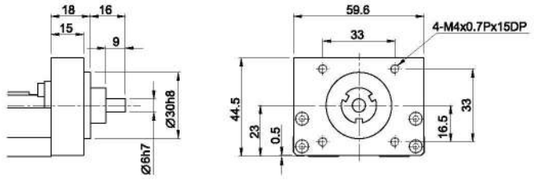
Motor connecting flange F2



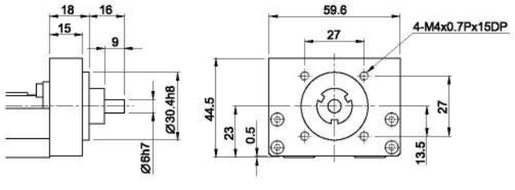
Motor connecting flange F5



Adapter seat H0



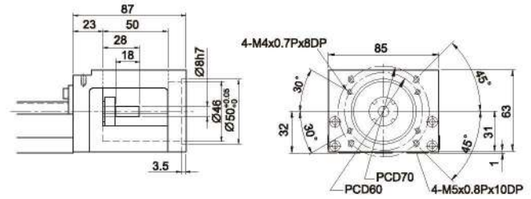
Adapter seat H1



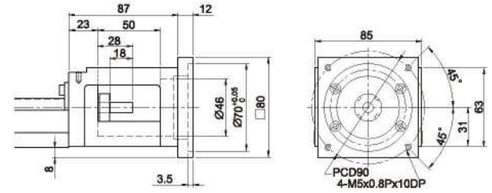
Motor base and motor connecting flange

● KK86D

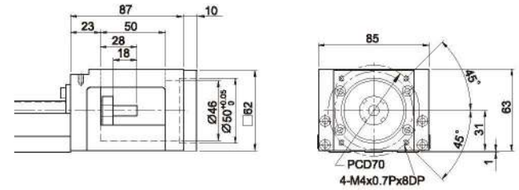
Motor base F0



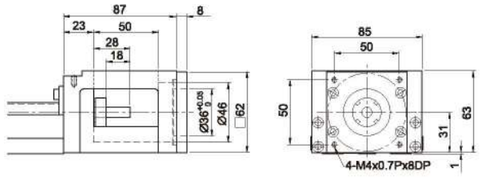
Motor connecting flange F4



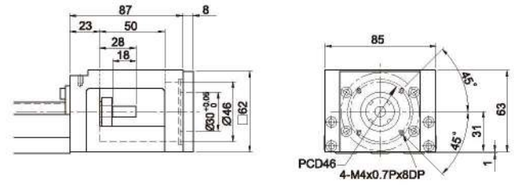
Motor connecting flange F1



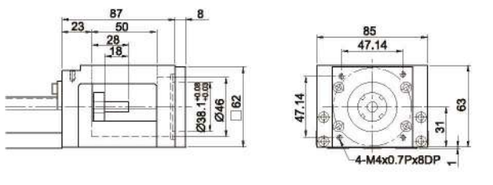
Motor connecting flange F5



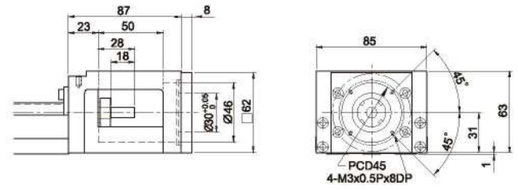
Motor connecting flange F2



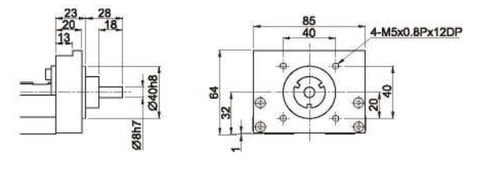
Motor connecting flange F6



Motor connecting flange F3

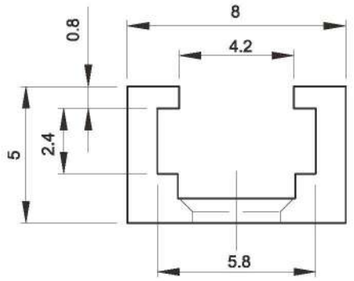


Adapter seat H0

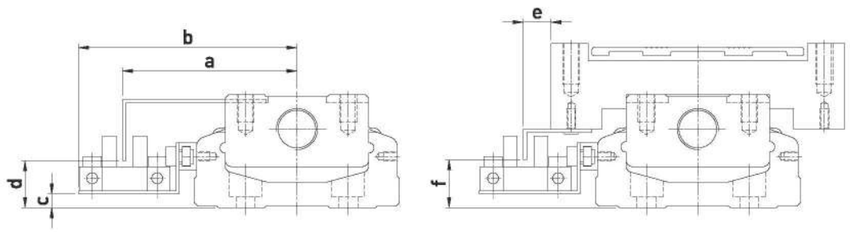


Limit switch

● Limit rail

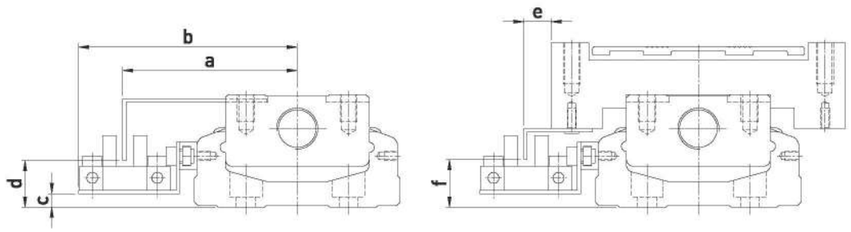


● Sensor



Size	A	B	C	D	E	F
KK40	41.5	54.1	0.5	10.8	15.3	12
KK50	45.5	59	1	10	15	11
KK60D	51	63.8	4	14.5	8	13
KK86D	63.5	76.7	8	18	8	18

C S1 : Omron EE-SX671



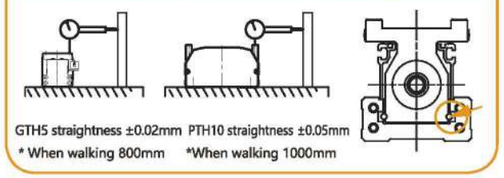
Size	A	B	C	D	E	F
KK40	36.5	44.3	1	9.8	10.5	12
KK50	41.3	48	1	10.5	10.2	11
KK60D	46.2	52.8	4	14	3.2	13
KK86D	59	65.7	8	18	3	18

Limit switch S2 : Omron EE-SX674

GTH Rail embedded screw slide

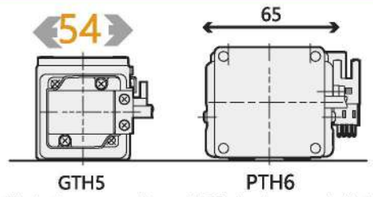
Rail embedded, constant height straightness greatly improved

Constant height straightness



* The longest stroke is 1050mm
* Repeated accuracy
* No need to remove the cover, easy to assemble
* More stronger rigidity

Smaller size Smaller width allows less space for installation



* Under the same conditions, with 30kg load, compared with the ETH series

Strengthen rigidity

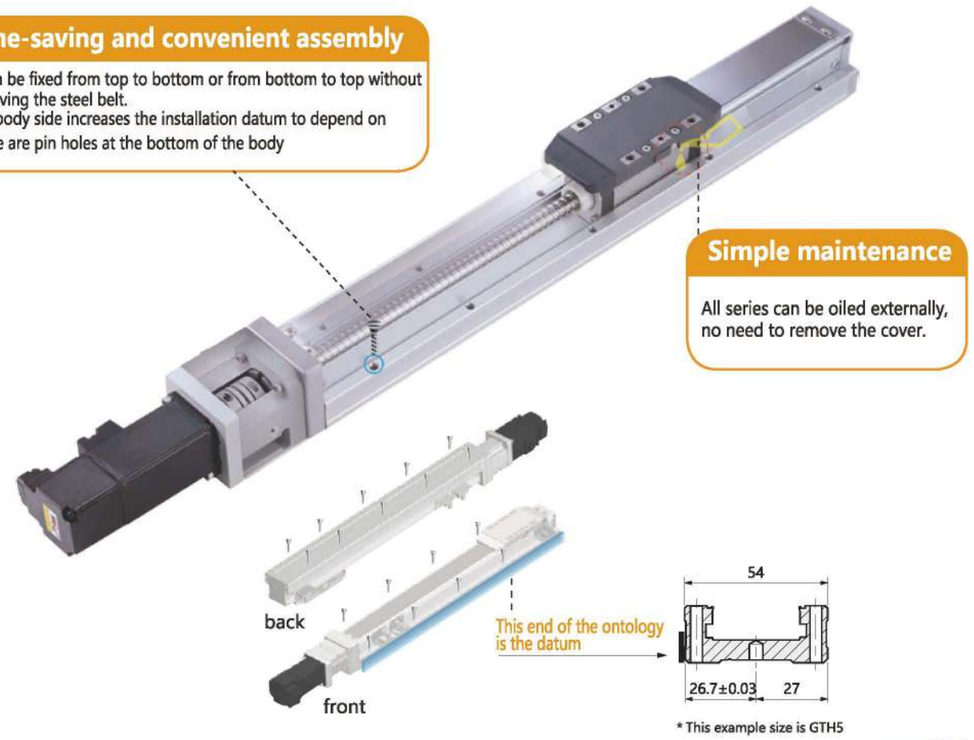
The body and the sliding seat are integrally formed of steel, which improves the problem of poor rigidity of the original aluminum

Special steel belt design, not easy to generate dust

Special steel belt design to reduce dust generation
Can be used in clean room environment

Time-saving and convenient assembly

① It can be fixed from top to bottom or from bottom to top without removing the steel belt.
② The body side increases the installation datum to depend on
③ There are pin holes at the bottom of the body



Simple maintenance

All series can be oiled externally, no need to remove the cover.

* This example size is GTH5

GTH4

GTH4 - L2 - 100 - BC - M05B - C 4 - 0001

Body model

Stroke
50-800mm
50 interval
Only 2 groups of photoelectric can be installed with a stroke of 50

Screw lead (mm)
02 2mm
06 6mm
12 12mm

Motor position
BC : Motor exposed
BM : Motor folded down
BL: Motor folded to the left
BR: Motor folded to the right

Motor brand, power

M: Mitsubishi	50	50W	B
P: Panasonic	10	-	
Y: Yaskawa	20	-	
T: Delta	40	-	

Origin sensor : Plug-in type
C Motor side
D Anti-motor side
No sensor
E No sensor

※ 選擇行程 50 時，有以下限制：
1. 無法選用 C4;D4 規格。
2. 原點與極限感應放置於不同側。
3. 滑座左右兩側皆需安裝感應片。

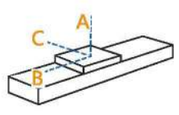
Endpoint limit sensor Plug-in type
3 one piece
4 Two pieces
No sensor
5 No sensor

Basic style

Specification	Repetitive positioning accuracy (mm)		±0.005		
	Screw lead (mm)		2	6	12
	Max. speed (mm/S)		100	300	600
	Max. load weight (kg)	horizontal use	25	20	12
		vertical use	8	5	2
	Freeze thrust (N)		424	141	71
	Standard stoke (mm)		50-800mm/50 interval		
Parts	AC servo motor capacity W		50		
	Roller screw outer diameter (mm)		C7 φ 10		
	Coupling (mm)		7x8		
	Origin sensor	Plug-in	PM-Y45(NPN)		

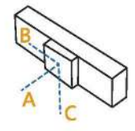
Allowable load torque table

(Unit : mm)



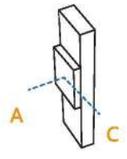
Horizontal installation		A	B	C
Lead 2	12kg	1000	55	80
	18kg	750	35	50
	25kg	500	23	32
Lead 6	10kg	550	53	70
	15kg	350	32	45
	20kg	250	22	31
Lead 12	8kg	305	59	75
	10kg	240	45	57
	12kg	195	37	47

(Unit : mm)



Side hanging installation		A	B	C
Lead 2	12kg	80	55	1000
	18kg	50	35	750
	25kg	32	23	500
Lead 6	10kg	72	52	550
	15kg	45	32	345
	20kg	31	22	250
Lead 12	8kg	75	59	300
	10kg	58	45	240
	12kg	47	37	190

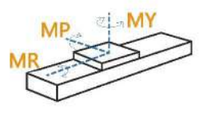
(Unit : mm)



Vertical installation		A	C
Lead 2	4kg	200	200
	8kg	100	100
	-	-	-
Lead 6	3kg	200	200
	5kg	120	120
	-	-	-
Lead 12	1.5kg	350	350
	2kg	260	260
	-	-	-

Static allowable load inertia

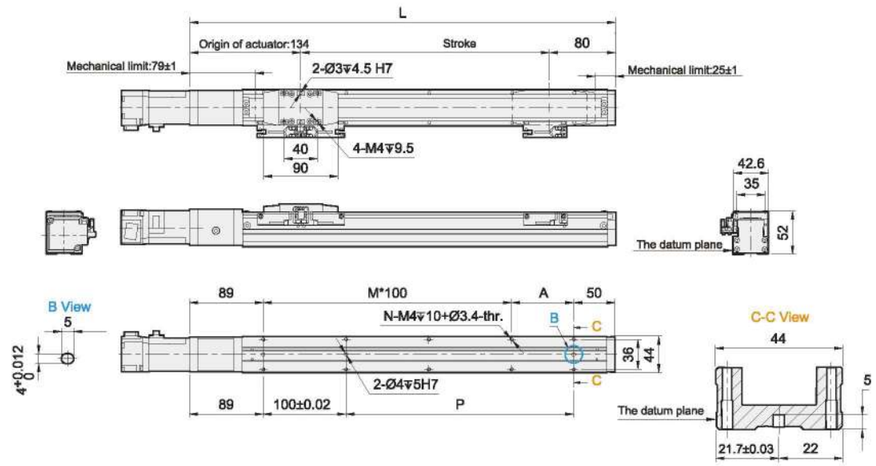
(Unit : N.m)



MY	79
MP	79
MR	116

* The data represented by the moment, representing the center of gravity
* Under normal use in line with catalog specifications, the guaranteed life is 10,000 kilometers.
* Standard specifications cannot be applied for upside-down use. If you have any needs, please consult our salesman

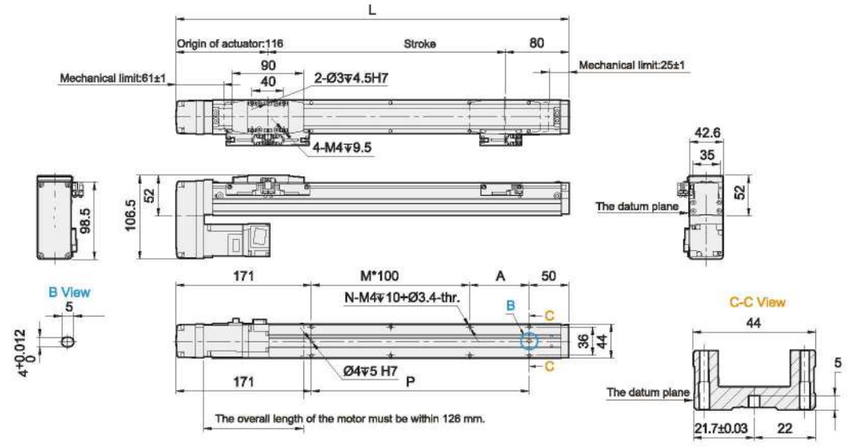
Motor exposed



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	0.95	1.12	1.29	1.47	1.65	1.83	2.01	2.19	2.37	2.55	2.73	2.91	3.09	3.27	3.45	3.63

Motor folded down

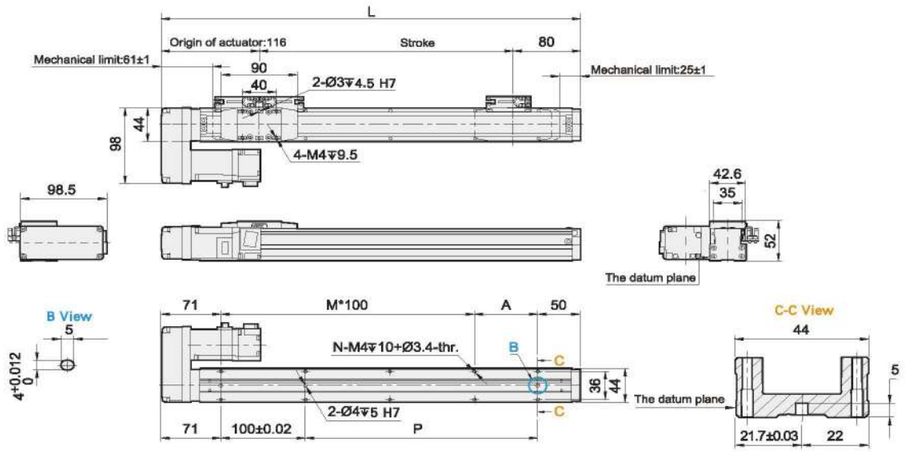


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

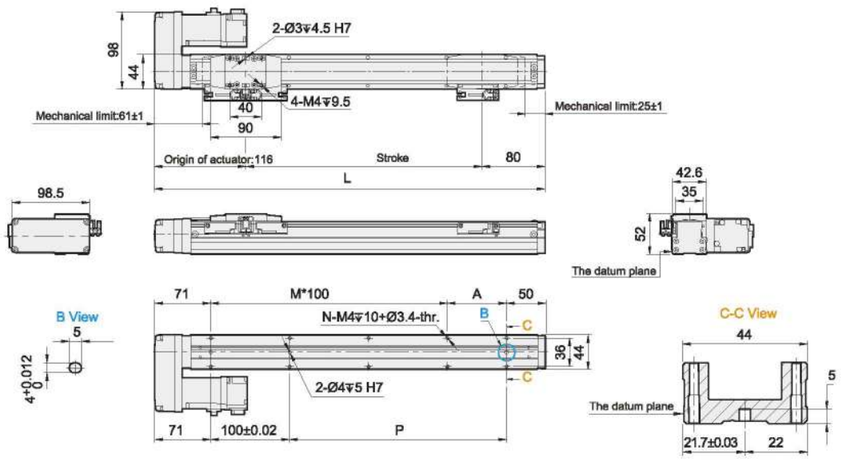
Motor folded to the left



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

Motor folded to the right



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

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GTH5

GTH5 - L5 - 100 - BC - M10B - C 4 - 0001

Body model

Screw lead (mm)
- 05 5mm
- 10 10mm
- 20 20mm

Stroke
50-800mm
50 interval
Only 2 groups of photoelectric can be installed with a stroke of 50

Motor position
- BC : Motor exposed
- BM : Motor folded down
- BL: Motor folded to the left
- BR: Motor folded to the right

Motor brand, power

M: Mitsubishi	50	-	B
P: Panasonic	10	100W	
Y: Yaskawa	20	-	
T: Delta	40	-	

Origin sensor : Plug-in type
- C Motor side
- D Anti-motor side

No sensor
- E No sensor

※ 選擇行程 50 時，有以下限制：
1. 無法選用 C4:D4 規格。
2. 原點與極限實放置於不同側。
3. 滑座左右兩側皆需安裝感應片。

Endpoint limit sensor Plug-in type
- 3 one piece
- 4 Two pieces

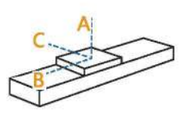
No sensor
- 5 No sensor

Basic style

Specification	Repetitive positioning accuracy (mm)		±0.005		
	Screw lead (mm)		5	10	20
	Max. speed (mm/S)		250	500	1000
	Max. load weight (kg)	horizontal use	30	15	10
		vertical use	10	5	2.5
	Freeze thrust (N)		341	170	85
	Standard stoke (mm)		50-800mm/50 interval		
Parts	AC servo motor capacity W		100		
	Roller screw outer diameter (mm)		C7 φ 12		
	Coupling (mm)		7x8		
	Origin sensor	Plug-in	PM-Y45(NPN)		

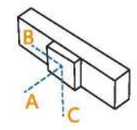
Allowable load torque table

(Unit : mm)



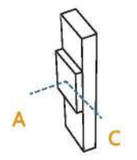
Horizontal installation		A	B	C
Lead 05	10kg	650	75	100
	20kg	440	32	45
	30kg	270	19	25
Lead 10	5kg	600	145	185
	10kg	370	70	85
	15kg	250	42	52
Lead 20	5kg	320	120	130
	8kg	220	70	80
	10kg	175	55	60

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	10kg	100	75	650
	20kg	45	32	420
	30kg	25	19	260
Lead 10	5kg	180	145	600
	10kg	85	68	370
	15kg	52	42	250
Lead 20	5kg	130	120	320
	8kg	75	70	220
	10kg	60	55	170

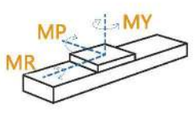
(Unit : mm)



Vertical installation		A	C
Lead 05	6kg	145	145
	8kg	110	110
	10kg	90	90
Lead 10	1kg	800	800
	3kg	260	260
	5kg	155	155
Lead 20	1kg	600	600
	2kg	300	300
	2.5kg	250	250

Static allowable load inertia

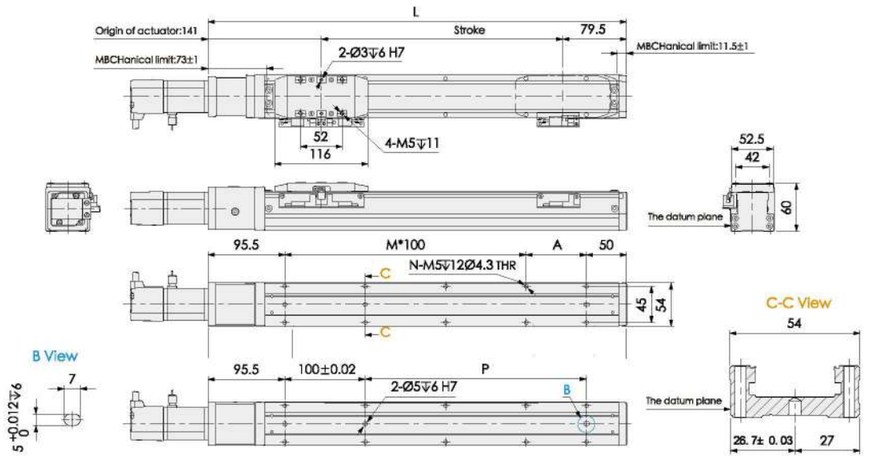
(Unit : N.m)



MY	103
MP	103
MR	144

* The data represented by the moment, representing the center of gravity
* Under normal use in line with catalog specifications, the guaranteed life is 10,000 kilometers.
* Standard specifications cannot be applied for upside-down use. If you have any needs, please consult our salesman

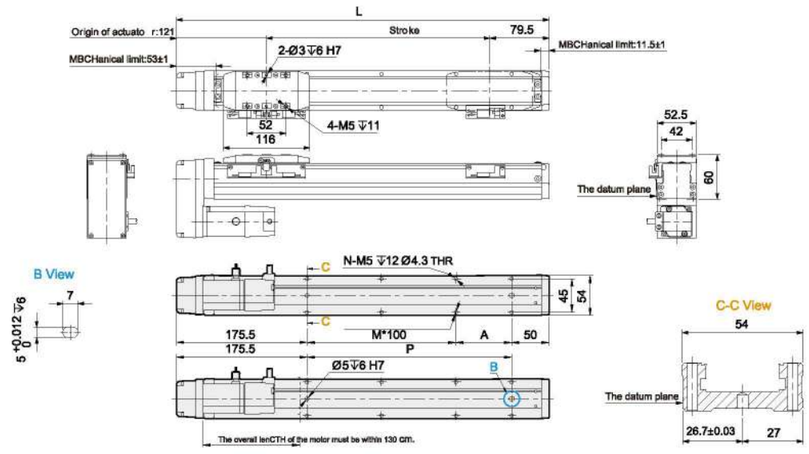
Motor exposed



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	270.5	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.65	1.79	1.92	2.11	2.39	2.50	2.52	2.75	2.86	2.95	3.15	3.28	3.44	3.58	3.71	4.09

Motor folded down

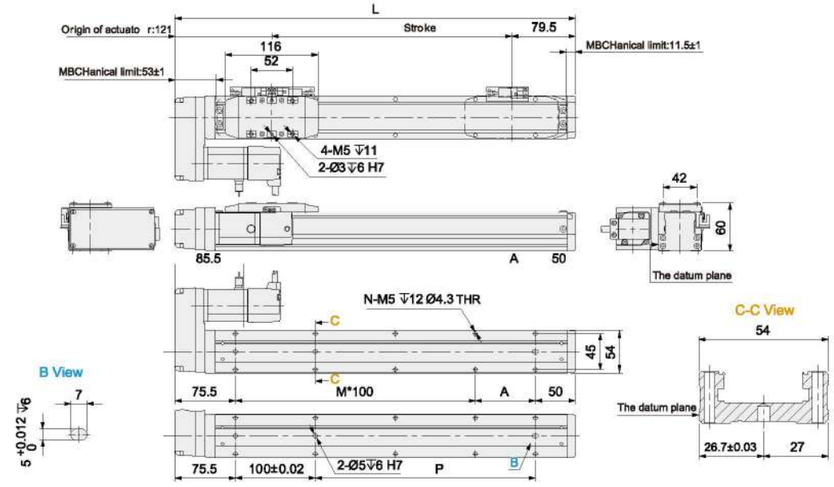


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.68	1.80	2.03	2.14	2.42	2.53	2.58	2.78	2.89	2.98	3.18	3.31	3.47	3.60	3.74	4.12

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

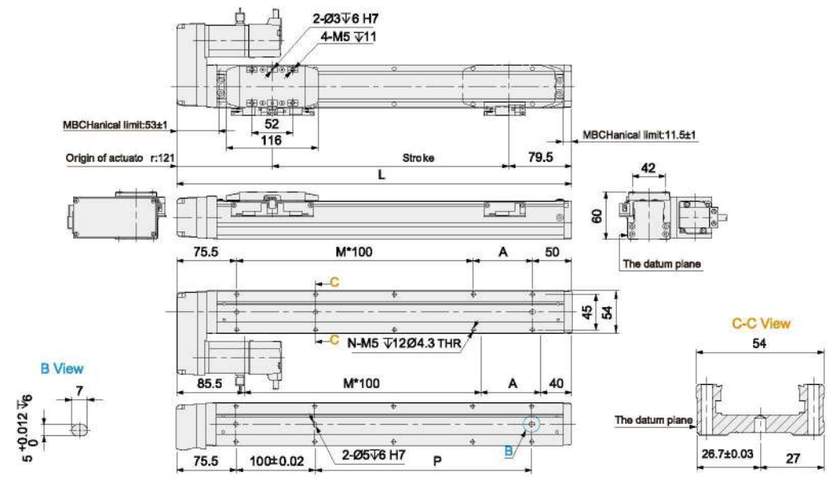
Motor folded to the left



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.68	1.80	2.03	2.14	2.42	2.53	2.58	2.78	2.89	2.98	3.18	3.31	3.47	3.60	3.74	4.12

Motor folded to the right



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.68	1.80	2.03	2.14	2.42	2.53	2.58	2.78	2.89	2.98	3.18	3.31	3.47	3.60	3.74	4.12

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

GTH8

GTH8 - L10 - 100 - BC - M20B - C 4 - 0001

Body model

Stroke
50-800mm
50 interval
Only 2 groups of photoelectric can be installed with a stroke of 50

Screw lead (mm)
05 5mm
10 10mm
20 20mm

Motor position
BC : Motor exposed
BM : Motor folded down
BL: Motor folded to the left
BR: Motor folded to the right

Motor brand, power

M: Mitsubishi	50	-	B
P: Panasonic	10	100W	
Y: Yaskawa	20	-	
T: Delta	40	-	

Origin sensor :
Plug-in type
C Motor side
D Anti-motor side
No sensor
E No sensor

※選擇行程 50 時，有以下限制:
1. 無法選用 C4;D4 規格。
2. 原點與極限距離放置於不同側。
3. 滑座左右兩側皆需安裝感應片。

Endpoint limit sensor
Plug-in type
3 one piece
4 Two pieces
No sensor
5 No sensor

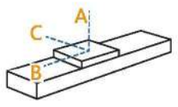
Basic style

Specification	Repetitive positioning accuracy (mm)		±0.005		
	Screw lead (mm)		5	10	20
	Max. speed (mm/S)		250	500	1000
	Max. load weight (kg)	horizontal use	50	30	18
		vertical use	15	8	3
	Freeze thrust (N)		683	341	174
	Standard stoke (mm)		50-1100mm/50 interval		
Parts	AC servo motor capacity W		200		
	Roller screw outer diameter (mm)		C7 φ 16		
	Coupling (mm)		10x14/11 注		
	Origin sensor	Plug-in	PM-Y45(NPN)		

*When the stroke exceeds 750,the screw deflection will occur,at this time, please reduce the speed.
*Motor acceleration is set to 0.02seconds.
Note 1: When using Panasonic 200W motor, the motor axis is 11; the motor axis of other brands is 14.

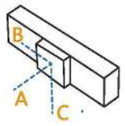
Allowable load torque table

(Unit : mm)



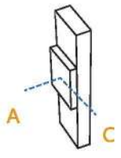
Horizontal installation		A	B	C
Lead 05	20kg	1560	153	237
	35kg	890	81	126
	50kg	550	53	82
Lead 10	10kg	1730	286	412
	20kg	839	136	196
	30kg	541	86	124
Lead 20	6kg	1213	403	493
	9kg	800	264	323
	18kg	592	194	238

(Unit : mm)



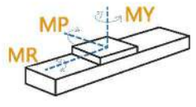
Side hanging installation		A	B	C
Lead 05	20kg	214	153	1435
	35kg	113	81	845
	50kg	74	53	506
Lead 10	10kg	370	286	1400
	20kg	176	136	800
	30kg	112	86	495
Lead 20	6kg	444	403	760
	9kg	292	264	650
	18kg	214	194	544

(Unit : mm)



Vertical installation		A	C
Lead 05	10kg	331	331
	15kg	220	220
	-	-	-
Lead 10	5kg	589	589
	8kg	368	368
	-	-	-
Lead 20	3kg	935	935
	-	-	-
	-	-	-

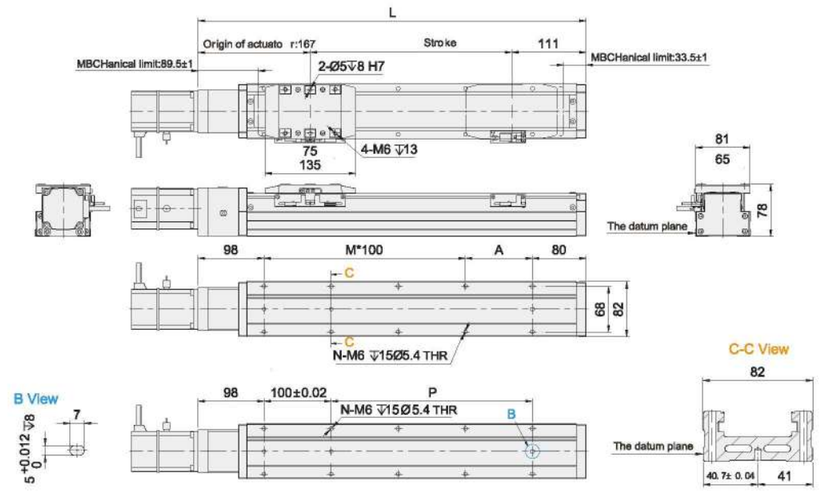
(Unit : N.m)



MY	318
MP	318
MR	626

* The data represented by the moment, representing the center of gravity
* Under normal use in line with catalog specifications, the guaranteed life is 10,000 kilometers.
* Standard specifications cannot be applied for upside-down use. If you have any needs, please consult our salesman

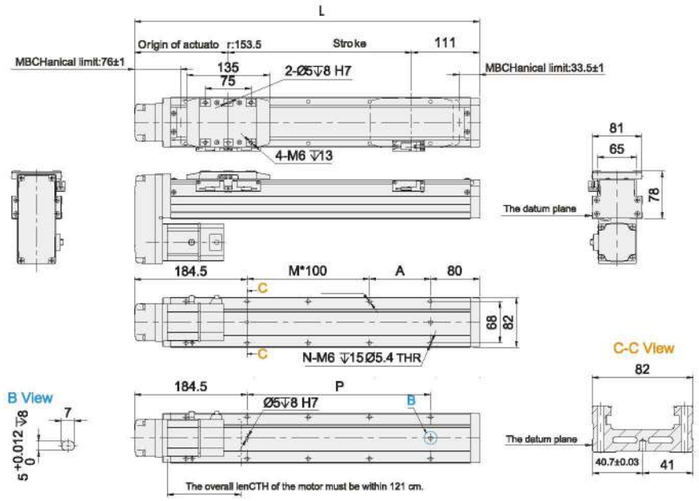
Motor exposed



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.91	4.29	4.70	5.00	5.35	5.68	6.00	6.35	6.64	697	7.41	7.71	8.12	8.41	8.65	8.96	9.37	9.62	10.01	10.28	10.70	11.12

Motor folded down

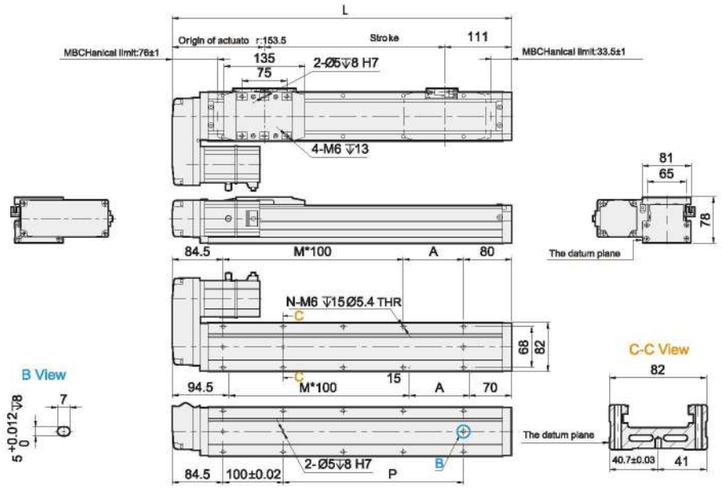


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

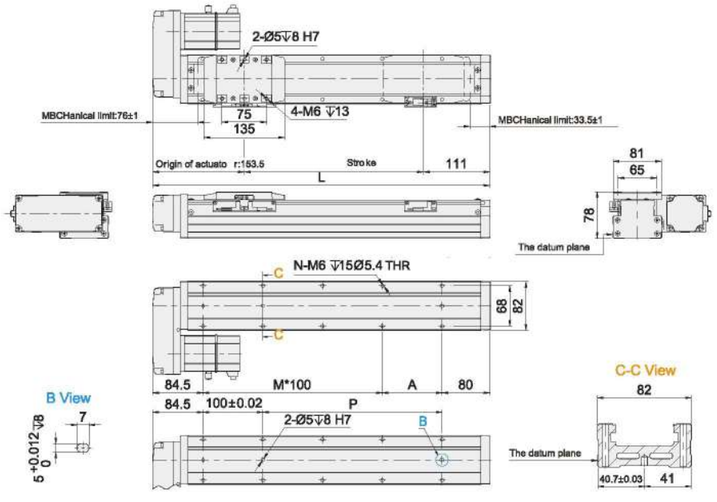
Motor folded to the left



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

Motor folded to the right



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

Rail embedded screw slide

GTH12

GTH12 - L5 - 100 - BC - M40B - C 4 - 0001

Body model

Screw lead (mm)
- 05 5mm
- 10 10mm
- 20 20mm
- 32 32mm

Stroke
50-800mm
50 interval
Only 2 groups of photoelectric can be installed with a stroke of 50

Motor position
- BC : Motor exposed
- BM : Motor folded down
- BL: Motor folded to the left
- BR: Motor folded to the right

Motor brand, power

M: Mitsubishi	50	-	B
P: Panasonic	10	100W	
Y: Yaskawa	20	-	
T: Delta	40	-	

Origin sensor : Plug-in type
- C Motor side
- D Anti-motor side

No sensor
- E No sensor

※ 選擇行程 50 時，有以下限制:
1. 無法選用 C4;D4 規格。
2. 原點與極限需放置於不同側。
3. 海座左右兩側皆需安裝感應片。

Endpoint limit sensor Plug-in type
- 3 one piece
- 4 Two pieces

No sensor
- 5 No sensor

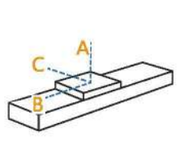
Special style

Basic style

Specification	Repetitive positioning accuracy (mm)		±0.005			
	Screw lead (mm)		5	10	20	32
	Max. speed (mm/S)		250	500	1000	1600
	Max. load weight (kg)	horizontal use	110	88	40	30
		vertical use	33	22	10	8
	Freeze thrust (N)		1388	694	347	218
	Standard stoke (mm)		50-1250mm/50 interval			
Parts	AC servo motor capacity W		400			
	Roller screw outer diameter (mm)		C7φ16			
	Coupling (mm)		10×14			
	Origin sensor	Plug-in	PM-Y45(NPN)			

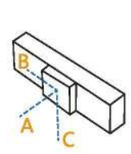
Allowable load torque table

(Unit : mm)



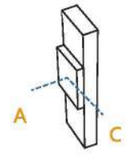
Horizontal installation		A	B	C
Lead 05	60kg	2850	250	340
	80kg	2100	180	250
	110kg	1500	120	170
Lead 10	30kg	2850	490	600
	50kg	1700	280	350
	88kg	950	140	190
Lead 20	10kg	3400	1250	1400
	22kg	1650	550	620
	40kg	900	290	330
Lead 32	15kg	1100	570	550
	25kg	620	330	320
	30kg	520	270	260

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	55kg	280	280	3300
	75kg	200	195	2400
	110kg	130	125	1550
Lead 10	35kg	400	410	2500
	55kg	245	250	1550
	88kg	150	150	950
Lead 20	12kg	900	1070	3000
	20kg	550	630	1800
	40kg	260	300	900
Lead 32	15kg	440	570	1050
	30kg	210	270	520
	-	-	-	-

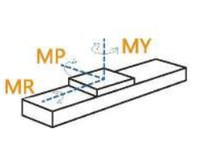
(Unit : mm)



Vertical installation		A	C
Lead 05	15kg	1200	1200
	22kg	820	820
	33kg	550	550
Lead 10	10kg	1600	1600
	14kg	1150	1150
	22kg	730	730
Lead 20	7kg	1800	1800
	10kg	1250	1250
	-	-	-
Lead 32	5kg	1600	1600
	8kg	1000	1000
	-	-	-

Static allowable load inertia

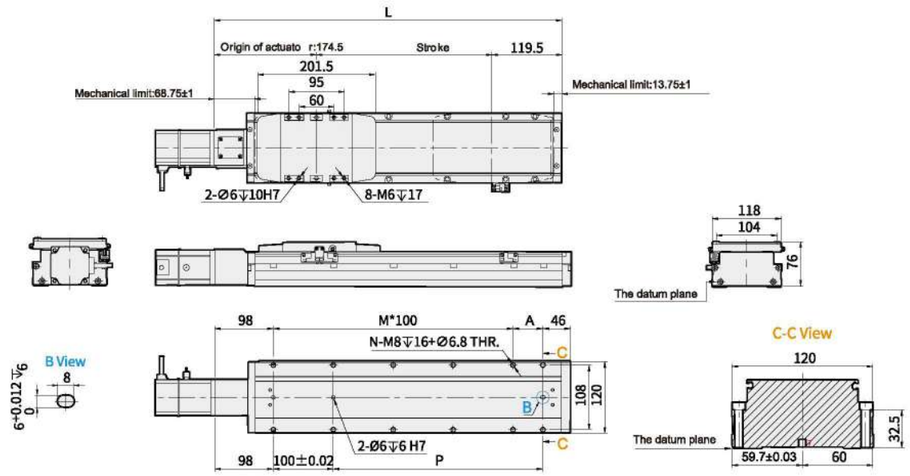
(Unit : N.m)



MY	606
MP	606
MR	1168

* The data represented by the moment, representing the center of gravity
* Under normal use in line with catalog specifications, the guaranteed life is 10,000 kilometers.
* Standard specifications cannot be applied for upside-down use. If you have any needs, please consult our salesman

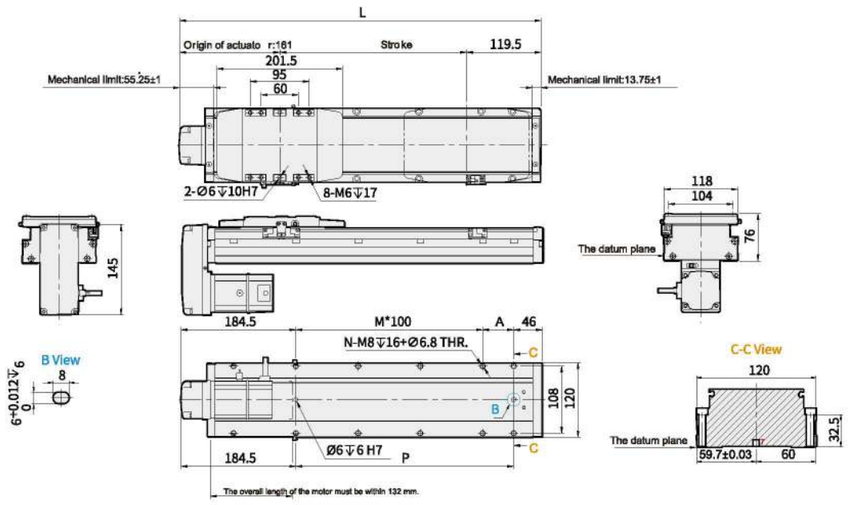
Motor exposed



Unit : mm

行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094	1144	1194	1244	1294	1344	1394	1444	1494	1544
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.05	5.4	5.75	6.1	6.45	6.8	7.15	7.5	7.85	8.2	8.55	8.9	9.25	9.6	9.95	10.3	10.65	11	11.35	11.7	12.05	12.4	12.75	13.1	13.45

Motor folded down



Unit : mm

行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	330.5	380.5	430.5	480.5	530.5	580.5	630.5	680.5	730.5	780.5	830.5	880.5	930.5	980.5	1030.5	1080.5	1130.5	1180.5	1230.5	1280.5	1330.5	1380.5	1430.5	1480.5	1530.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12
N	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.21	5.56	5.91	6.26	6.61	6.96	7.31	7.66	8.01	8.36	8.71	9.06	9.41	9.76	10.11	10.46	10.81	11.16	11.51	11.86	12.21	12.56	12.91	13.26	13.61

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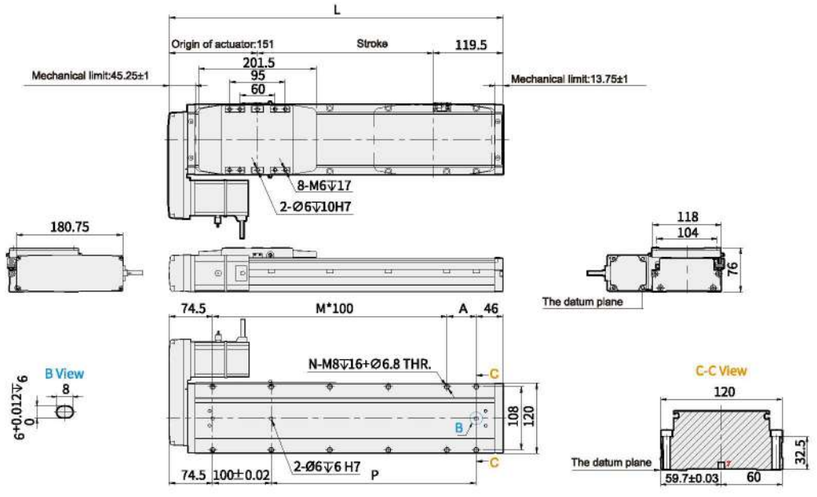
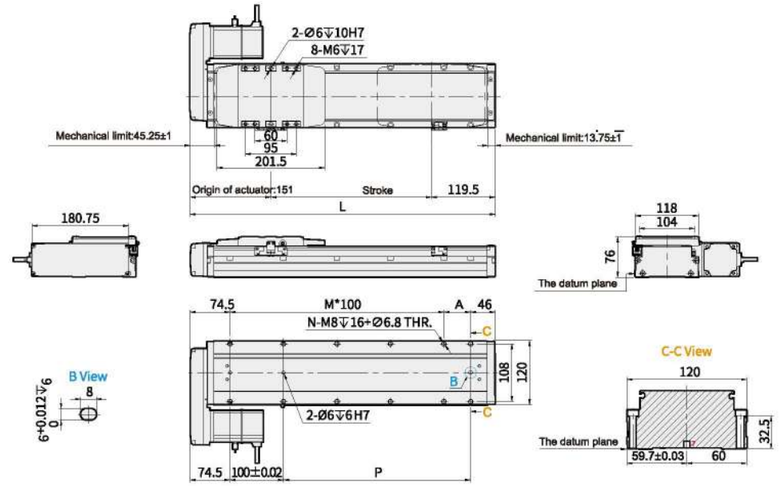
Motor folded to the left



Unit : mm

行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.25	5.6	5.95	6.3	6.65	7	7.35	7.7	8.05	8.4	8.75	9.1	9.45	9.8	10.15	10.85	11.2	11.55	11.9	12.25	12.6	12.56	12.91	13.26	13.61

Motor folded to the right



Unit : mm

行程 Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5	1070.5	1120.5	1170.5	1220.5	1270.5	1320.5	1370.5	1420.5	1470.5	1520.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
KG	5.25	5.6	5.95	6.3	6.65	7	7.35	7.7	8.05	8.4	8.75	9.1	9.45	9.8	10.15	10.85	11.2	11.55	11.9	12.25	12.6	12.56	12.91	13.26	13.61

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ETH standard screw slide series

ETH10

ETH10 - L 5 - 100 - BC - M20 - B - C 4 - 0001

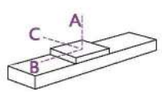
- **Body model**
- **Screw brand**: L Standard Taiwan
- **Screw lead**: 05 5mm; 10 10mm; 16 16mm; 20 20mm
- **Stroke**: 100-1050mm; 50 interval 50mm Ptch
- **Motor position**: BC: Motor exposed; BR: Motor folded to the left; BL: Motor folded to the right
- **Motor brand,power**: M: Mitsubishi 10 -; P: Panasonic 20 200W; Y: Yaskawa 40 400W; T: Delta 75 -
- **Brake**: B: With brake; Blank here means no brake
- **Origin sensor**: Built-in type: A Motor side, B Anti-motor side; Plug-in type: C Motor type, D Anti-motor side; No sensor: E No sensor
- **Endpoint limit sensor**: Built-in type: 1 1 piece, 2 2 pieces; Plug-in type: 3 1 piece, 4 2 pieces; No sensor: 5 No sensor
- **01 : single slide; 02 : double slide; No mark: single slide**

Basic style

Specifications	Standard motor power (W)		200W		
	Repetitive positioning accuracy (mm)		±0.01		
	Screw Specifications		1605	1610	1616	1620
	Max. speed (mm/s)		250	500	800	1000
	Rated thrust (N)		683	341	213	174
	Max. load weight (Kg)	horizontal use	50	30	22	18
		vertical use	12	8	5	3
	Max. stroke (mm)		1050			
Parts	Roller Screw Specifications		1605/1610/1616/1620(Slenderness ratio 1:62.5)			
	Screw grade		C7 rolling			
	High rigidity linear slide		W20×H18			
	Coupling		34-27-10-14			
	Photoelectric switch		PM-T45(NPN)			

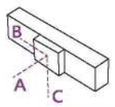
Allowable load torque table

(Unit : mm)



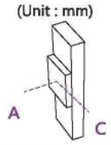
Horizontal installation		A	B	C
Lead 05	30kg	547	42	42
	40kg	391	29	29
	50kg	298	22	22
Lead 10	15kg	521	84	80
	25kg	298	47	44
	30kg	242	34	35
Lead 16	5kg	937	282	259
	10kg	487	121	116
	22kg	236	40	44
Lead 20	5kg	675	224	193
	10kg	330	107	93
	18kg	175	55	48

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	25kg	52	53	670
	35kg	35	45	455
	50kg	21	22	298
Lead 10	10kg	124	131	770
	20kg	58	61	382
	30kg	35	37	242
Lead 16	5kg	116	58	605
	10kg	24	26	253
	22kg	0	0	0
Lead 20	6kg	160	185	562
	12kg	76	88	272
	18kg	48	55	175

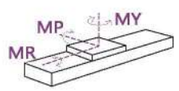
(Unit : mm)



Vertical installation		A	C
Lead 05	5kg	310	310
	8kg	192	192
	12kg	129	129
Lead 10	4kg	335	335
	6kg	220	220
	8kg	172	172
Lead 16	1kg	620	620
	2kg	680	680
	5kg	310	310
Lead 20	1kg	580	580
	2kg	645	645
	3kg	310	310

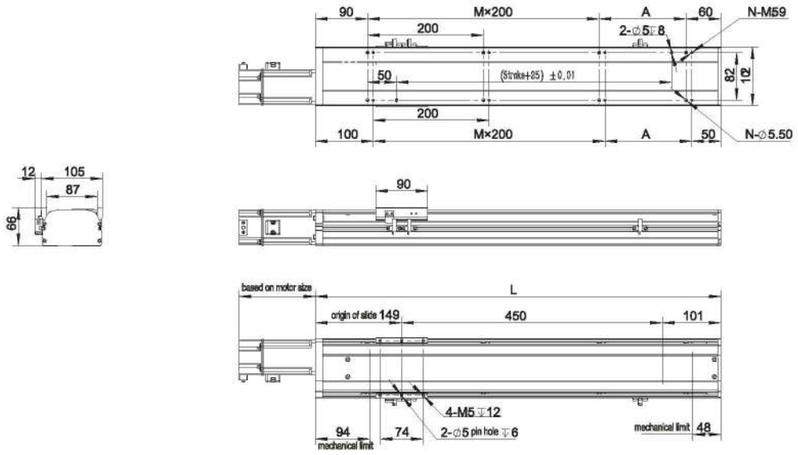
Static allowable load inertia

(Unit : N.m)



MY	110
MP	110
MR	120

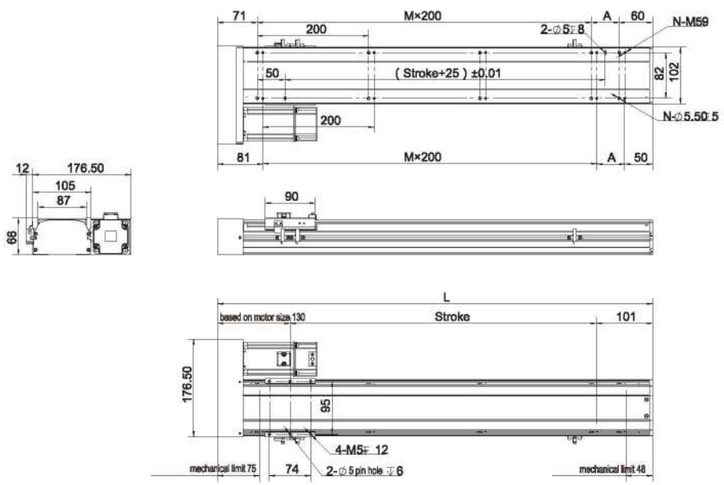
Motor exposed-01



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	5.5	5.8	6.2	6.6	7	7.4	7.8	8.2	8.5	8.9	9.3	9.7	10.1	10.5	10.9	11.2	11.6	12	12.4	12.8

Motor folded to the right-01



Note: The motor left fold is symmetrical with this drawing

Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	331	381	431	481	531	581	631	681	731	781	831	881	931	981	1031	1081	1131	1181	1231	1281
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	5.5	5.8	6.2	6.6	7	7.4	7.8	8.2	8.5	8.9	9.3	9.7	10.1	10.5	10.9	11.2	11.6	12	12.4	12.8

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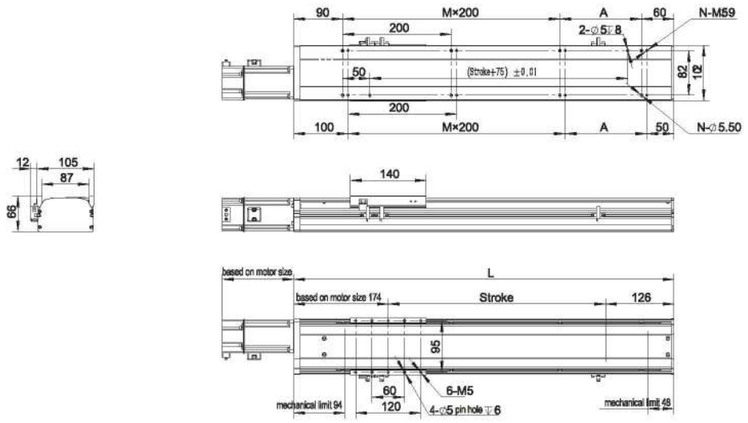
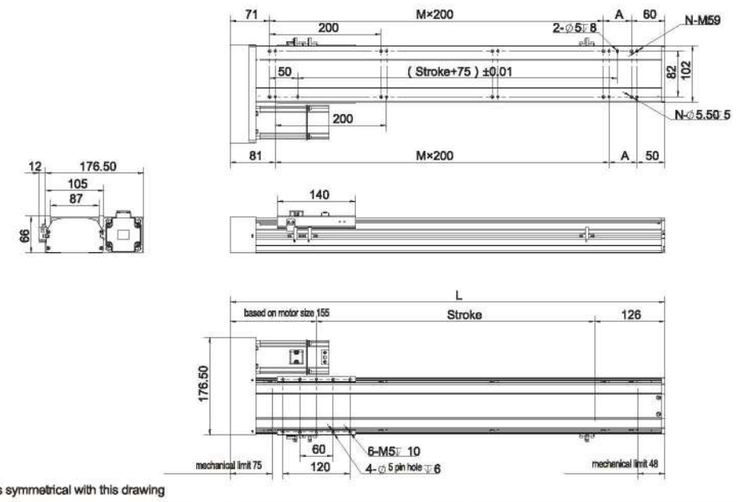
Motor exposed-02



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	5.8	6.2	6.6	7	7.4	7.8	8.2	8.5	8.9	9.3	9.7	10.1	10.5	10.9	11.2	11.6	12	12.4	12.8	13.2

Motor folded to the right-02



Note: The motor left fold is symmetrical with this drawing

Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	381	431	481	531	581	631	681	731	781	831	881	931	981	1031	1081	1131	1181	1231	1281	1331
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	5.8	6.2	6.6	7	7.4	7.8	8.2	8.5	8.9	9.3	9.7	10.1	10.5	10.9	11.2	11.6	12	12.4	12.8	13.2

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ETH12

ETH12 - L 16 - 100 - BC - M20 - B - C 4 - 0001

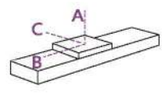
- **Body model**
- **Screw brand**: L Standard Taiwan
- **Screw lead**: 05 5mm; 10 10mm; 16 16mm; 20 20mm
- **Stroke**: 100-1050mm; 50 interval 50mm Ptch
- **Motor position**: BC : Motor exposed; BM: Motor folded down; BR : Motor folded to the left; BL : Motor folded to the right
- **Motor brand,power**: M: Mitsubishi 10 -; P: Panasonic 20 200W; Y: Yaskawa 40 -; T: Delta 75 -
- **Brake**: B: With brake; Blank here means no brake
- **Origin sensor: Built-in type**: A Motor side; B Anti-motor side; **Plug-in type**: C Motor type; D Anti-motor side; **No sensor**: E No sensor
- **Endpoint limit sensor Built-in type**: 1 1 piece; 2 2 pieces; **Plug-in type**: 3 1 piece; 4 2 pieces; **No sensor**: 5 No sensor
- **Special style**

Basic style

Specifications	Standard motor power (W)		200W		
	Repetitive positioning accuracy (mm)		±0.01		
	Screw Specifications		1605	1610	1616	1620
	Max. speed (mm/s)		250	500	800	1000
	Rated thrust (N)		683	341	218	170
	Max. load weight (Kg)	horizontal use	50	30	22	18
		vertical use	12	8	5	3
	Max. stroke (mm)		1050			
Parts	Roller Screw Specifications		1605/1610/1616/1620(Slenderness ratio 1:62.5)			
	Screw grade		C7 rolling			
	High rigidity linear slide		W12×H7.5			
	Coupling		34-27-10-14			
	Photoelectric switch		PM-T45(NPN)			

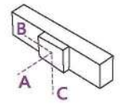
Allowable load torque table

(Unit : mm)



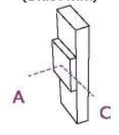
Horizontal installation		A	B	C
Lead 05	30kg	882	65	78
	40kg	606	43	51
	50kg	437	29	35
Lead 10	15kg	875	138	157
	25kg	485	73	83
	30kg	386	56	64
Lead 16	5kg	2150	1365	982
	10kg	1190	462	427
	22kg	1270	242	291
Lead 20	5kg	1160	384	386
	10kg	516	180	181
	18kg	288	88	99

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	10kg	126	60	800
	20kg	70	30	600
	30kg	50	15	476
Lead 10	10kg	246	180	700
	20kg	150	80	515
	30kg	72	32	422
Lead 16	5kg	1068	976	1579
	10kg	405	278	776
	22kg	220	107	680
Lead 20	5kg	958	875	1420
	10kg	361	248	696
	15kg	107	95	610

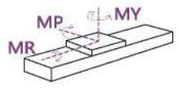
(Unit : mm)



Vertical installation		A	C
Lead 05	5kg	412	398
	10kg	394	356
	12kg	357	355
Lead 10	4kg	711	578
	6kg	534	414
	8kg	411	376
Lead 16	1kg	1210	1210
	2kg	1174	1174
	5kg	650	650
Lead 20			
	3kg	1030	802

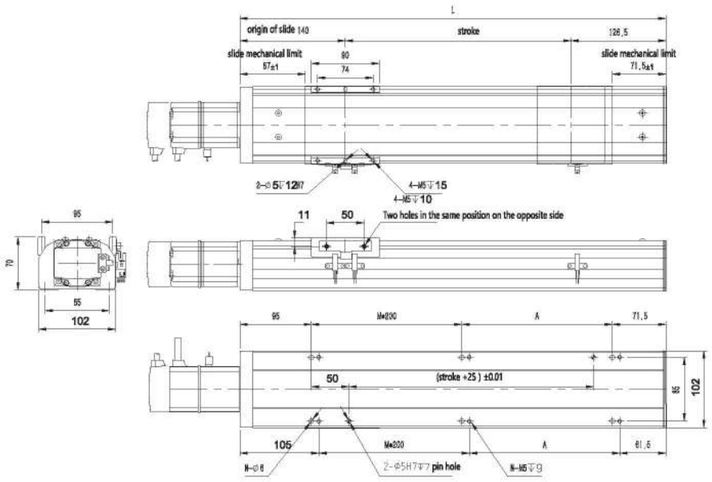
Static allowable load inertia

(Unit : N.m)



MY	110
MP	110
MR	120

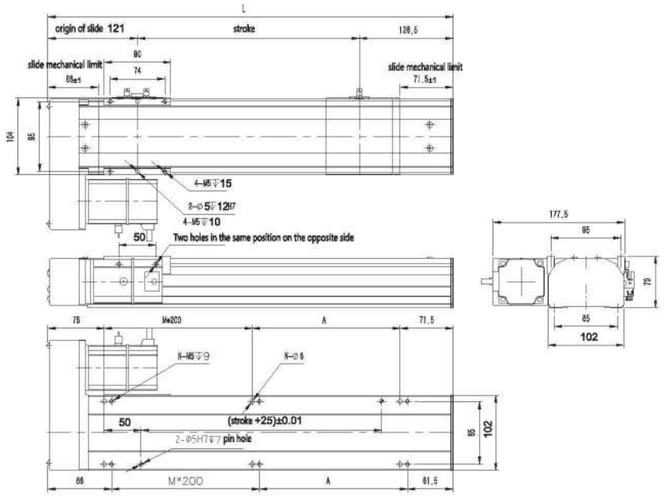
Motor exposed



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	366.5	416.5	466.5	516.5	566.5	616.5	666.5	716.5	766.5	816.5	866.5	916.5	966.5	1016.5	1066.5	1116.5	1166.5	1216.5	1266.5	1316.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	6.6	7	7.4	8.8	8.2	8.6	9	9.4	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.4	12.8	13.2	13.6	14

Motor folded to the left



Note: The motor left fold is symmetrical with this drawing

Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	347.5	397.5	447.5	497.5	547.5	597.5	647.5	697.5	747.7	797.5	847.5	897.5	947.5	997.5	1047.5	1097.5	1147.5	1197.5	1247.5	1297.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	6.6	7	7.4	8.8	8.2	8.6	9	9.4	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.4	12.8	13.2	13.6	14

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ETH13

ETH13 - L 5 - 100 - BC - M40 - B - C 4 - 0001

- **Body model**
- **Screw brand**: L Standard Taiwan
- **Screw lead**: 05 5mm; 10 10mm; 16 16mm; 20 20mm
- **Stroke**: 100-1050mm; 50 interval 50mm Ptch
- **Motor position**: BC : Motor exposed; BM: Motor folded down; BR : Motor folded to the left; BL : Motor folded to the right
- **Motor brand,power**: M: Mitsubishi 10 -; P: Panasonic 20; Y: Yaskawa 40 400W; T: Delta 75 -
- **Brake**: B: With brake; Blank here means no brake
- **Origin sensor**: Built-in type — A Motor side, B Anti-motor side; Plug-in type — C Motor type, D Anti-motor side; No sensor — E No sensor
- **Endpoint limit sensor**: Built-in type — 1 1 piece, 2 2 pieces; Plug-in type — 3 1 piece, 4 2 pieces; No sensor — 5 No sensor
- **Special style**

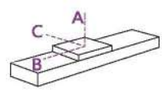
Basic style

Specifications	Standard motor power (W)		400W		
	Repetitive positioning accuracy (mm)		±0.01		
	Screw Specifications		1605	1610	1616	1620
	Max. speed (mm/s) *1		250	500	800	1000
	Rated thrust (N)		1318	694	433	347
	Max. load weight (Kg)	horizontal use	70	47	30	24
		vertical use	17	12	6	4
	Max. stroke (mm)*2		1050			
Parts	Roller Screw Specifications		1605/1610/1616/1620(Slenderness ratio 1:62.5)			
	Screw grade		C7 rolling			
	High rigidity linear slide		W15×H12.5			
	Coupling		34-27-10-14			
	Photoelectric switch		PM-T45(NPN)			

* 1.Motor acceleration and deceleration set to 0.2 seconds
* 2.When the stroke exceeds 750, the screw deflection will occur, at this time, please reduce the speed

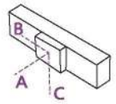
Allowable load torque table

(Unit : mm)



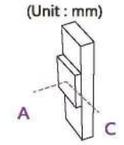
Horizontal installation		A	B	C
Lead 05	40kg	795	63	225
	55kg	558	43	155
	70kg	422	32	115
Lead 10	25kg	588	95	276
	35kg	410	65	190
	47kg	295	46	135
Lead 16	10kg	1800	1400	800
	20kg	1100	700	450
	30kg	1047	445	324
Lead 20	5kg	1068	355	710
	15kg	416	136	275
	24kg	252	81	166

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	30kg	310	88	1068
	50kg	172	49	620
	70kg	115	32	422
Lead 10	20kg	351	122	743
	30kg	225	78	484
	47kg	135	46	294
Lead 16	10kg	461	372	1410
	20kg	264	178	1027
	30kg	148	69	832
Lead 20	5kg	852	428	1227
	12kg	345	173	522
	24kg	166	81	253

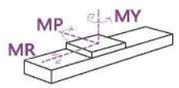
(Unit : mm)



Vertical installation		A	C
Lead 05	5kg	580	580
	11kg	264	264
	17kg	170	170
Lead 10	4kg	644	644
	8kg	322	322
	12kg	215	215
Lead 16	2kg	997	997
	5kg	398	398
	10kg	199	199
Lead 20	3kg	667	667
	6kg	335	335
	-	-	-

Static allowable load inertia

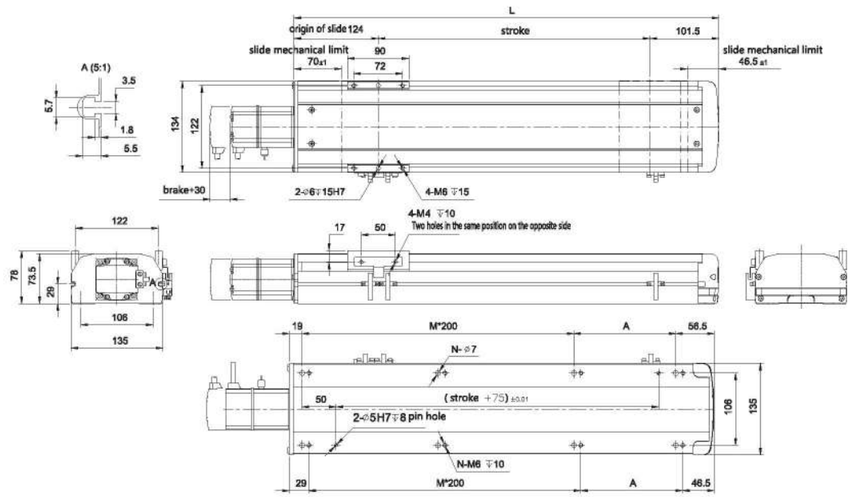
(Unit : N.m)



MY	174
MP	175
MR	153

* The data represented by the moment,representing the center of gravity.
* Under normal use in line with catalog specifications, the guaranteed life is 1,000 kilometers.
* Standard specifications cannot be applied for upside -down use. If you have any needs, please consult our salesman.

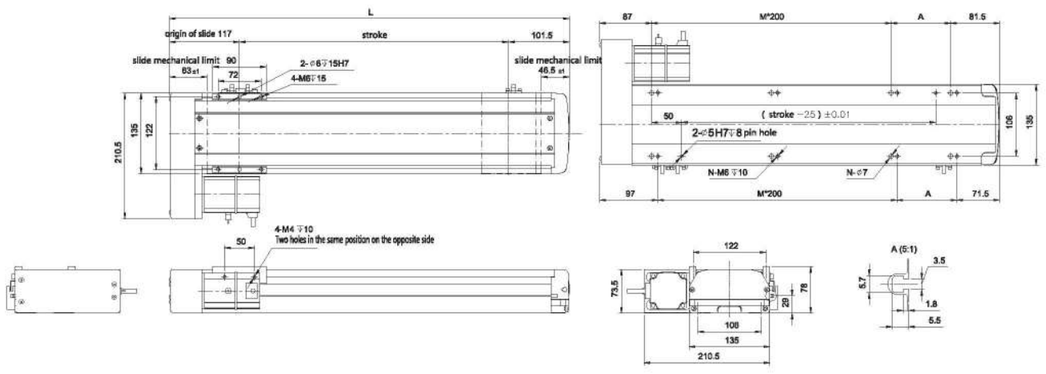
Motor exposed



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	325.5	375.5	425.5	475.5	525.5	575.5	625.5	675.5	725.5	775.5	825.5	875.5	925.5	975.5	1025.5	1075.5	1125.5	1175.5	1225.5	1275.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	7.4	7.8	8.3	8.8	9.3	9.8	10.2	10.8	11.2	11.8	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.1	16.7

Motor folded to the left



Note: The motor left fold is symmetrical with this drawing

Unit : mm

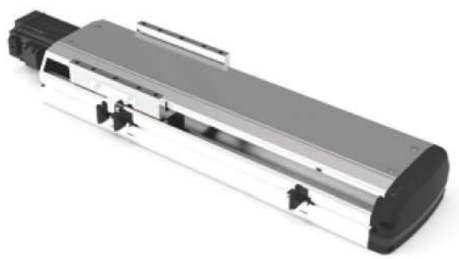
Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	318.5	368.5	418.5	468.5	518.5	568.5	618.5	668.5	718.5	768.5	818.5	868.5	918.5	968.5	1018.5	1068.5	1118.5	1168.5	1218.5	1268.5
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5
N	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14
KG	7.4	7.8	8.3	8.8	9.3	9.8	10.2	10.8	11.2	11.8	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.1	16.7

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ETH14

ETH14 - L 5 - 100 - BC - M40 - B - C 4 - 0001

- **ETH14** — Body model
- **L** — Screw brand: L Standard Taiwan
- **5** — Screw lead: 05 5mm; 10 10mm; 16 16mm; 20 20mm
- **100** — Stroke: 100-1050mm; 50 interval 50mm Ptch
- **BC** — Motor position: BC : Motor exposed; BM: Motor folded down; BR : Motor folded to the left; BL : Motor folded to the right
- **M40** — Motor brand,power: M: Mitsubishi 10 -; P: Panasonic 20; Y: Yaskawa 40 400W; T: Delta 75 -
- **B** — Brake: B: With brake; Blank here means no brake
- **C** — Origin sensor: Built-in type: A Motor side; B Anti-motor side; Plug-in type: C Motor type; D Anti-motor side; No sensor: E No sensor
- **4** — Endpoint limit sensor: Built-in type: 1 1 piece; 2 2 pieces; Plug-in type: 3 1 piece; 4 2 pieces; No sensor: 5 No sensor
- **0001** — Special style



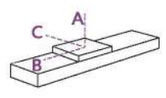
Basic style

Specifications	Standard motor power (W)		400W		
	Repetitive positioning accuracy (mm)		±0.01		
	Screw Specifications		1605	1610	1616	1620
	Max. speed (mm/s)*1		250	500	800	1000
	Rated thrust (N)		1388	694	433	347
	Max. load weight (Kg)	horizontal use	110	88	48	40
		vertical use	33	22	10	8
	Max. stroke (mm)*2		1050			
	Roller Screw Specifications		1605/1610/1616/1620(Slenderness ratio 1:62.5)			
Parts	Screw grade		C7 rolling			
	High rigidity linear slide		W15×H12.5			
	Coupling		34-27-10-14			
	Photoelectric switch		PM-T45(NPN)			

* 1.Motor acceleration and deceleration set to 0.2 seconds
* 2.When the stroke exceeds 750, the screw deflection will occur, at this time, please reduce the speed

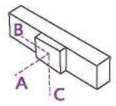
Allowable load torque table

(Unit : mm)



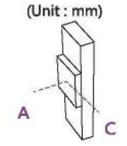
Horizontal installation		A	B	C
Lead 05	60kg	2512	242	232
	80kg	1811	172	164
	110kg	1284	114	108
Lead 10	30kg	2727	470	430
	50kg	1577	266	242
	88kg	854	134	122
Lead 16	10kg	2265	1674	961
	20kg	1402	855	537
	48kg	1047	445	324
Lead 20	10kg	2304	1222	1028
	22kg	1443	540	451
	40kg	860	277	233

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	55kg	257	269	2883
	75kg	178	186	2000
	110kg	108	114	1284
Lead 10	35kg	363	395	2368
	55kg	218	238	1445
	88kg	123	134	854
Lead 16	10kg	461	372	1410
	20kg	264	178	1027
	48kg	148	69	832
Lead 20	12kg	854	1019	2552
	20kg	500	596	1588
	40kg	233	277	860

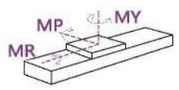
(Unit : mm)



Vertical installation		A	C
Lead 05	15kg	1118	1118
	22kg	770	770
	33kg	513	513
Lead 10	10kg	1500	1500
	15kg	1000	1000
	22kg	682	682
Lead 16	2kg	1067	1067
	4kg	997	997
	10kg	747	747
Lead 20	7kg	1700	1700
	10kg	1188	1188
	-	-	-

Static allowable load inertia

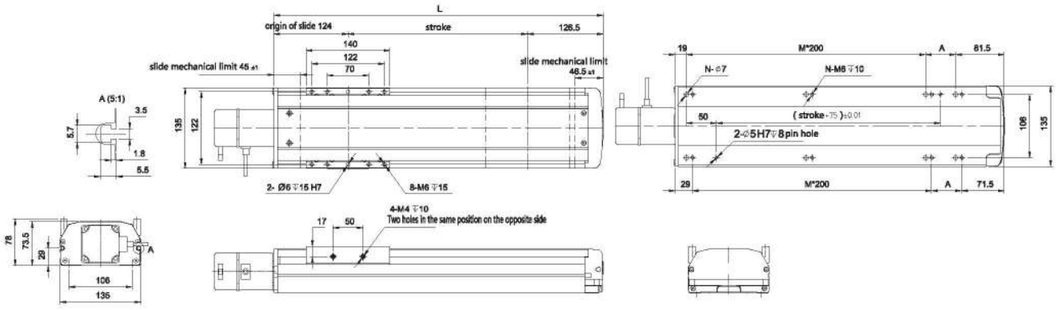
(Unit : N.m)



MY	551
MP	552
MR	485

* The data represented by the moment,representing the center of gravity.
* Under normal use in line with catalog specifications, the guaranteed life is 1,000 kilometers.
* Standard specifications cannot be applied for upside -down use. If you have any needs, please consult our salesman.

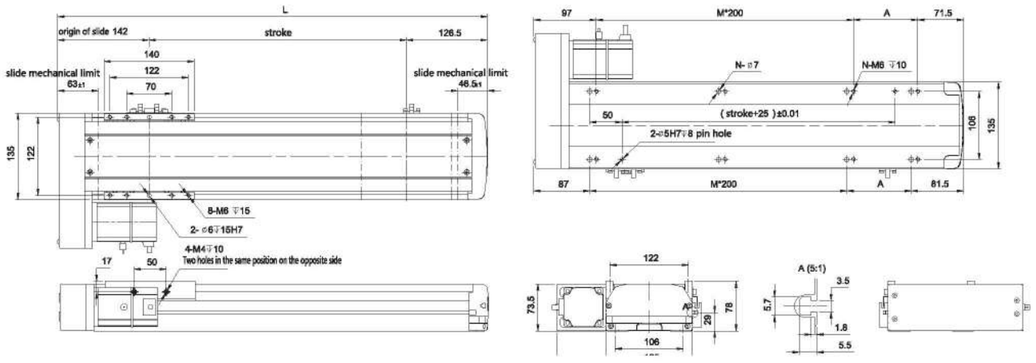
Motor exposed



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	350.5	400.5	450.5	500.5	550.5	600.5	650.5	700.5	750.5	800.5	850.5	900.5	950.5	1000.5	1050.5	1100.5	1150.5	1200.5	1250.5	1300.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	7.6	8	8.5	9	9.5	10	10.4	11	11.4	12	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.3	16.9

Motor folded to the left



Note: The motor left fold is symmetrical with this drawing

Unit : mm

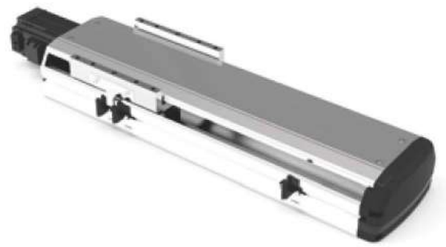
Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	368.5	418.5	468.5	518.5	568.5	618.5	668.5	718.5	768.5	818.5	868.5	918.5	968.5	1018.5	1068.5	1118.5	1168.5	1218.5	1268.5	1318.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	7.6	8	8.5	9	9.5	10	10.4	11	11.4	12	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.3	16.9

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ETH17

ETH17 - L 5 - 100 - BC - M75 - B - C 4 - 0001

- **Body model**: ETH17
- **Screw brand**: L Standard Taiwan
- **Screw lead**: 05 5mm; 10 10mm; 16 16mm; 20 20mm
- **Stroke**: 100-1050mm; 50 interval 50mm Ptch
- **Motor position**: BC : Motor exposed; BM: Motor folded down; BR : Motor folded to the left; BL : Motor folded to the right
- **Motor brand,power**: M: Mitsubishi 10 -; P: Panasonic 20 -; Y: Yaskawa 40 -; T: Delta 75 750W
- **Brake**: B: With brake; Blank here means no brake
- **Origin sensor: Built-in type**: A Motor side; B Anti-motor side; **Plug-in type**: C Motor type; D Anti-motor side; **No sensor**: E No sensor
- **Endpoint limit sensor Built-in type**: 1 1 piece; 2 2 pieces; **Plug-in type**: 3 1 piece; 4 2 pieces; **No sensor**: 5 No sensor
- **Special style**: 0001



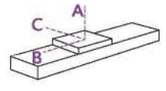
Basic style

Specifications	Standard motor power (W)		750W		
	Repetitive positioning accuracy (mm)		±0.01		
	Screw Specifications		2005	2010	2020	2040
	Max. speed (mm/s) *1		250	500	1000	2000
	Rated thrust (N)		2563	1281	640	320
	Max. load weight (Kg)	horizontal use	120	95	83	43
		vertical use	50	40	25	12
	Max. stroke (mm)*2		1250			
Parts	Roller Screw Specifications		2005/2010/2020/2040(Slenderness ratio 1 : 70)			
	Screw grade		C7 rolling			
	High rigidity linear slide		W20×H15			
	Coupling		44-34-12-19			
	Photoelectric switch		PM-T45(NPN)			

* 1.Motor acceleration and deceleration set to 0.2 seconds
* 2.When the stroke exceeds 750, the screw deflection will occur, at this time, please reduce the speed

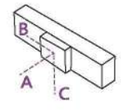
Allowable load torque table

(Unit : mm)



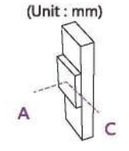
Horizontal installation		A	B	C
Lead 05	70kg	3235	349	408
	90kg	2482	263	306
	120kg	1861	187	218
Lead 10	65kg	1911	338	373
	85kg	1445	248	276
	120kg	1000	164	182
Lead 16	35kg	1666	547	538
	55kg	1030	331	328
	83kg	654	206	204
Lead 20	15kg	1126	740	577
	22kg	755	491	384
	43kg	366	231	183

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	75kg	377	322	2988
	95kg	288	246	2333
	120kg	218	187	1850
Lead 10	60kg	408	368	2092
	80kg	296	266	1554
	120kg	182	164	1002
Lead 16	30kg	633	644	1961
	50kg	365	369	1143
	83kg	204	206	656
Lead 20	12kg	729	936	1417
	22kg	384	491	755
	43kg	183	231	366

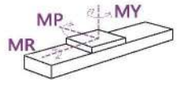
(Unit : mm)



Vertical installation		A	C
Lead 05	20kg	1368	1368
	30kg	911	911
	50kg	546	546
Lead 10	15kg	1618	1618
	25kg	970	970
	40kg	607	607
Lead 16	10kg	1922	1922
	14kg	1377	1377
	25kg	769	769
Lead 20	7kg	1356	1356
	12kg	790	790
	-	-	-

Static allowable load inertia

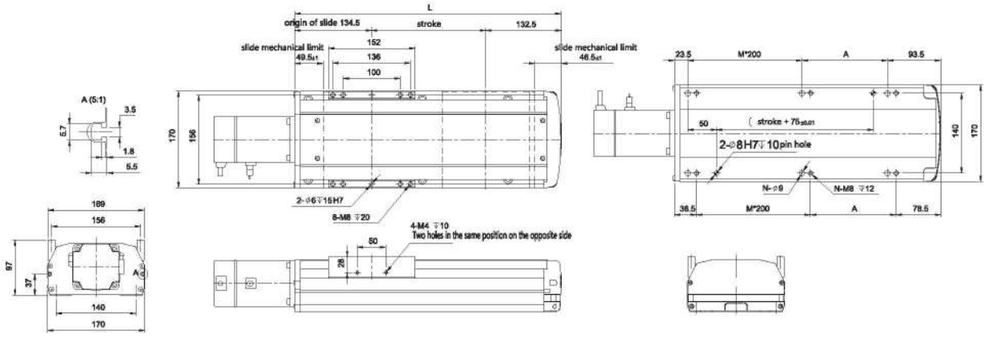
(Unit : N.m)



MY	1032
MP	1034
MR	908

* The data represented by the moment,representing the center of gravity.
* Under normal use in line with catalog specifications, the guaranteed life is 1,000 kilometers.
* Standard specifications cannot be applied for upside -down use. If you have any needs, please consult our salesman.

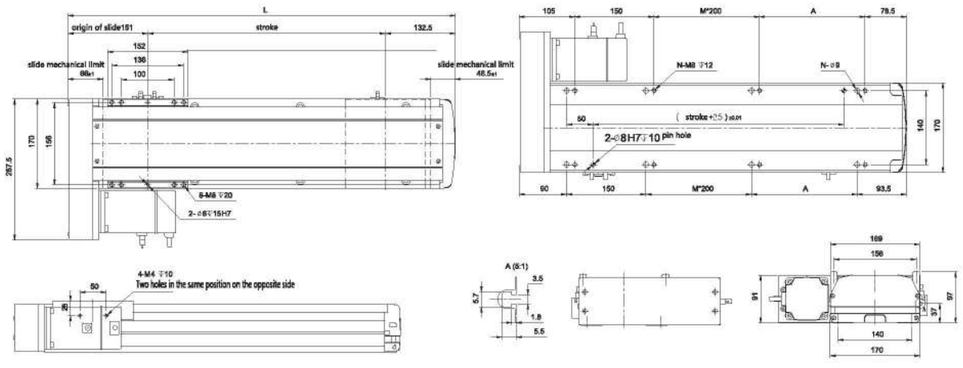
Motor exposed



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	1417	1467	1517
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
KG	11.8	12.6	13.4	14.2	14.9	15.7	16.5	17.3	18	18.8	19.6	20.4	21.1	21.9	22.7	23.5	24.2	25	25.8	26.6	27.4	28.2	29	29.8

Motor folded to the left



Note: The motor left fold is symmetrical with this drawing

Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	383.5	433.5	483.5	533.5	583.5	633.5	683.5	733.5	783.5	833.5	883.5	933.5	983.5	1033.5	1083.5	1133.5	1183.5	1233.5	1283.5	1333.5	1383.5	1433.5	1483.5	1533.5
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
KG	11.8	12.6	13.4	14.2	14.9	15.7	16.5	17.3	18	18.8	19.6	20.4	21.1	21.9	22.7	23.5	24.2	25	25.8	26.6	27.4	28.2	29	29.8

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ETH22

ETH22 - L 5 - 100 - BC - M75 - B - C 4 - 0001

Body model

Screw brand
L Standard Taiwan

Screw lead
05 5mm
10 10mm
16 16mm
20 20mm

Stroke
100-1050mm
50 interval 50mm Ptch

Motor position
BC : Motor exposed
BM: Motor folded down
BR : Motor folded to the left
BL : Motor folded to the right

Motor brand,power
M: Mitsubishi 10 -
P: Panasonic 20 -
Y: Yaskawa 40 -
T: Delta 75 750W

Brake
B: With brake
Blank here means no brake

Origin sensor:
Built-in type
A Motor side
B Anti-motor side
Plug-in type
C Motor type
D Anti-motor side
No sensor
E No sensor

Endpoint limit sensor
Built-in type
1 1 piece
2 2 pieces
Plug-in type
3 1 piece
4 2 pieces
No sensor
5 No sensor

Special style

Basic style

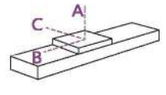
Repetitive positioning accuracy (mm)		±0.01		
Screw lead (mm)		2505	2510	2525
Max. speed (mm/s)		250	500	1250
Rated thrust (N)		2563	1281	640
Max. load weight (Kg)	horizontal use	150	150	105
	vertical use	55	45	20
Standard stroke (mm)		50-1500mm/50 interval		
AC servo motor capacity		750		
Ball screw outer diameter		C7Ø25		
High rigidity linear slide		W23×H18		
Coupling		17X19		
Origin sensor	Plug-in type	PM-T45(NPN)		
	Built-in type	PM-Y45(NPN)		

Specifications / Parts

* 1.Motor acceleration and deceleration set to 0.2 seconds
* 2.When the stroke exceeds 750, the screw deflection will occur, at this time, please reduce the speed

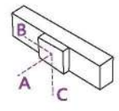
Allowable load torque table

(Unit : mm)



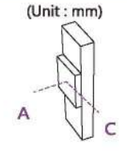
Horizontal installation		A	B	C
Lead 05	100kg	5000	633	557
	125kg	3880	491	431
	150kg	3357	396	347
Lead 10	100kg	3220	563	474
	125kg	2554	434	367
	150kg	2113	349	295
Lead 25	65kg	1522	614	458
	85kg	1136	451	336
	105kg	893	350	262
Lead 40	18kg	2445	1616	1052
	30kg	1436	938	613
	43kg	978	630	412

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	110kg	500	569	4500
	130kg	412	469	3711
	150kg	347	396	3357
Lead 10	110kg	427	503	2900
	130kg	351	414	2444
	150kg	295	349	2113
Lead 25	70kg	420	564	1404
	90kg	315	420	1066
	105kg	262	350	893
Lead 40	15kg	1272	1955	2948
	24kg	778	1190	1813
	43kg	412	630	978

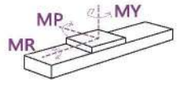
(Unit : mm)



Vertical installation		A	C
Lead 05	30kg	2355	2355
	40kg	1768	1768
	55kg	1288	1288
Lead 10	25kg	2505	2505
	35kg	1795	1795
	45kg	1396	1396
Lead 25	15kg	2711	2711
	20kg	2033	2033
	-	-	-
Lead 40	7kg	3511	3511
	12kg	2055	2055
	-	-	-

Static allowable load inertia

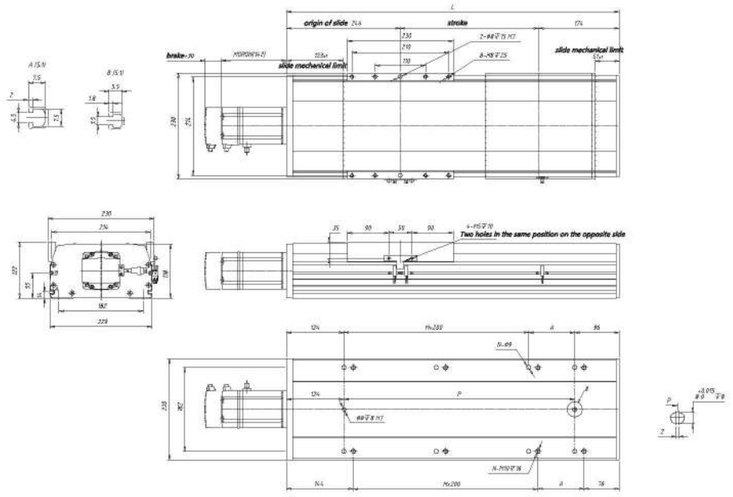
(Unit : N.m)



MY	2052
MP	2052
MR	1810

* The data represented by the moment,representing the center of gravity.
* Under normal use in line with catalog specifications, the guaranteed life is 1,000 kilometers.
* Standard specifications cannot be applied for upside -down use. If you have any needs, please consult our salesman.

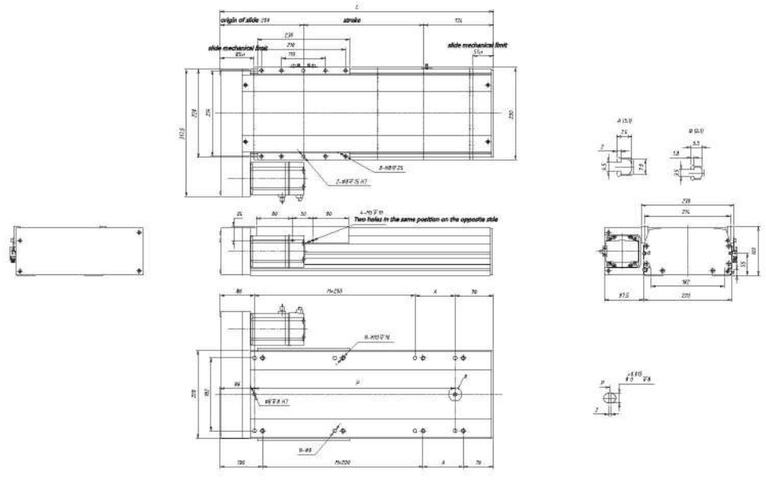
Motor exposed



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	25.4	26.86	28.32	29.78	31.24	32.7	34.16	35.62	37.08	38.54	40	41.46	42.92	44.38	45.84	47.3	48.76	50.22	51.68	53.14	54.6	56.06	57.52	58.98	60.44	61.9	63.36	64.82	66.28	67.74

Motor folded to the left



Note: The motor left fold is symmetrical with this drawing

Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	432	482	532	582	632	682	732	782	832	882	932	982	1032	1082	1132	1182	1232	1282	1332	1382	1432	1482	1532	1582	1632	1682	1732	1782	1832	1882
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	24.2	25.66	27.12	28.58	30.04	31.5	32.96	34.42	35.88	37.34	38.8	40.26	41.72	43.18	44.64	46.1	47.56	49.02	50.48	51.94	53.4	54.86	56.32	57.78	59.24	60.7	62.16	63.62	65.08	66.54

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ECH dust–free screw slide series

ECH10

ECH10 - L 5 - 100 - BC - M20 - B - C 4 - 0001

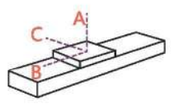
- **Body model**: ECH10
- **Screw brand**: L Standard Taiwan
- **Screw lead**: 05 5mm; 10 10mm; 16 16mm; 20 20mm
- **Stroke**: 100-1050mm; 50 interval 50mm Ptch
- **Motor position**: BC: Motor exposed; BR: Motor folded to the left; BL: Motor folded to the right
- **Motor brand,power**: M: Mitsubishi 10 -; P: Panasonic 20 200W; Y: Yaskawa 40 -; T: Delta 75 -
- **Brake**: B: With brake; Blank here means no brake
- **Origin sensor: Built-in type**: A Motor side; B Anti-motor side; **Plug-in type**: C Motor type; D Anti-motor side; **No sensor**: E No sensor
- **Endpoint limit sensor: Built-in type**: 1 1 piece; 2 2 pieces; **Plug-in type**: 3 1 piece; 4 2 pieces; **No sensor**: 5 No sensor
- **Special style**: 0001

Basic style

Specifications	Standard motor power (W)		200W		
	Repetitive positioning accuracy (mm)		±0.01		
	Screw Specifications		1605	1610	1616	1620
	Max. speed (mm/s)		250	500	800	1000
	Rated thrust (N)		341	170	106	85
	Max. load weight (Kg)	horizontal use	50	30	22	18
		vertical use	12	8	5	3
	Max. stroke (mm)		1050			
Parts	Roller Screw Specifications		1605/1610/1616/1620(Slenderness ratio 1:62.5)			
	Screw grade		C7 rolling			
	High rigidity linear slide		W20×H18			
	Coupling		34-27-10-14			
	Photoelectric switch		PM-T45(NPN)			

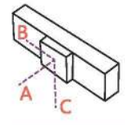
Allowable load torque table

(Unit : mm)



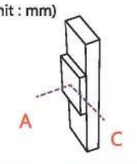
Horizontal installation		A	B	C
Lead 05	30kg	547	42	42
	40kg	391	29	29
	50kg	298	22	21
Lead 10	15kg	521	84	80
	25kg	298	47	44
	30kg	242	37	35
Lead 16	5kg	937	282	259
	10kg	487	121	116
	22kg	236	40	44
Lead 20	5kg	675	224	193
	10kg	330	107	93
	18kg	175	55	48

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	25kg	52	53	670
	35kg	35	35	455
	50kg	115	32	422
Lead 10	10kg	124	131	770
	20kg	58	61	382
	30kg	35	37	242
Lead 16	5kg	116	58	605
	10kg	50	26	253
	20kg	24	-	110
Lead 20	6kg	160	185	562
	12kg	76	88	272
	18kg	48	55	175

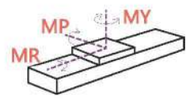
(Unit : mm)



Vertical installation		A	C
Lead 05	5kg	310	310
	8kg	192	192
	17kg	170	170
Lead 10	4kg	344	344
	6kg	172	172
	8kg	100	100
Lead 16	1kg	620	620
	2kg	680	680
	5kg	310	310
Lead 20	1kg	580	580
	2kg	645	645
	3kg	310	310

Static allowable load inertia

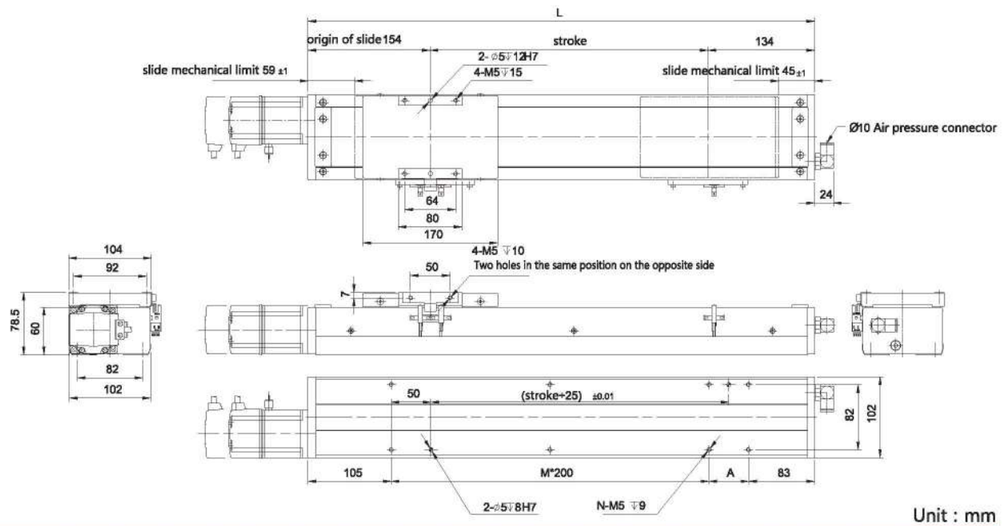
(Unit : N.m)



MY	110
MP	110
MR	120

* The data represented by the moment,representing the center of gravity.
* Under normal use in line with catalog specifications, the guaranteed life is 1,000 kilometers.
* Standard specifications cannot be applied for upside -down use. If you have any needs, please consult our salesman.

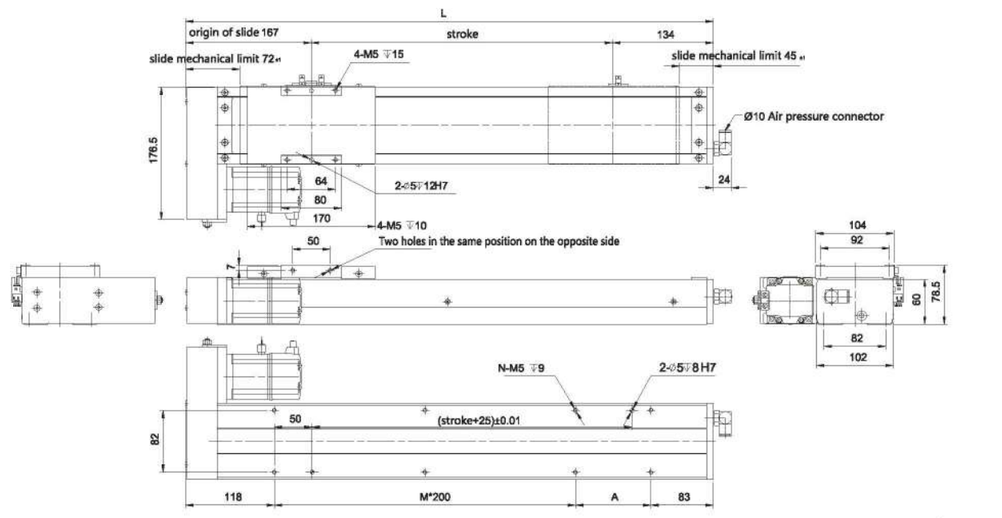
Motor exposed



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	8.5	8.8	9.2	9.6	10	10.4	10.8	11.2	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.2	14.6	15	15.4	15.8

Motor folded to the left



Note: The motor left fold is symmetrical with this drawing

Unit : mm

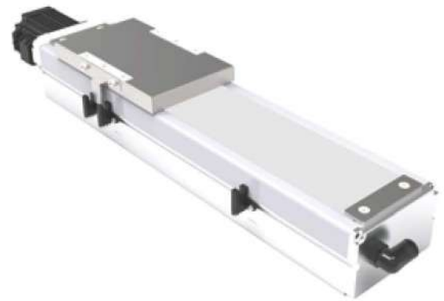
Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	401	451	501	551	601	651	701	751	801	851	901	951	1001	1051	1101	1151	1201	1251	1301	1351
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	8.5	8.8	9.2	9.6	10	10.4	10.8	11.2	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.2	14.6	15	15.4	15.8

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ECH12

ECH12 - L 5 - 100 - BC - M10 - B - C 4 - 0001

- **Body model**: ECH12
- **Screw brand**: L Standard Taiwan
- **Screw lead**: 05 5mm; 10 10mm; 16 16mm; 20 20mm
- **Stroke**: 100-1050mm; 50 interval 50mm Ptch
- **Motor position**: BC : Motor exposed; BM: Motor folded down; BR : Motor folded to the left; BL : Motor folded to the right
- **Motor brand,power**: M: Mitsubishi 10 200W; P: Panasonic 20 -; Y: Yaskawa 40 -; T: Delta 75 -
- **Brake**: B: With brake; Blank here means no brake
- **Origin sensor: Built-in type**: A Motor side; B Anti-motor side; **Plug-in type**: C Motor type; D Anti-motor side; **No sensor**: E No sensor
- **Endpoint limit sensor Built-in type**: 1 1 piece; 2 2 pieces; **Plug-in type**: 3 1 piece; 4 2 pieces; **No sensor**: 5 No sensor
- **Special style**: 0001



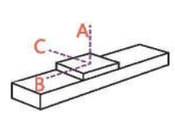
Basic style

Specifications	Standard motor power (W)		200W		
	Repetitive positioning accuracy (mm)		±0.01		
	Screw Specifications		1605	1610	1616	1620
	Max. speed (mm/s)		250	500	800	1000
	Rated thrust (N)		341	170	106	85
	Max. load weight (Kg)	horizontal use	50	30	22	18
		vertical use	12	8	5	3
	Max. stroke (mm)		1050			
Parts	Roller Screw Specifications		1605/1610/1616/1620(Slenderness ratio 1:62.5)			
	Screw grade		C7 rolling			
	High rigidity linear slide		W12×H7.5			
	Coupling		34-27-8-10			
	Photoelectric switch		PM-T45(NPN)			

* 1.Motor acceleration and deceleration set to 0.2 seconds
* 2.When the stroke exceeds 750, the screw deflection will occur, at this time, please reduce the speed

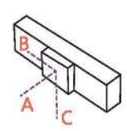
Allowable load torque table

(Unit : mm)



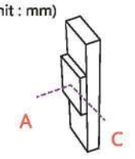
Horizontal installation		A	B	C
Lead 05	30kg	882	65	78
	40kg	606	43	51
	50kg	437	29	35
Lead 10	15kg	875	138	157
	25kg	485	73	83
	30kg	386	56	64
Lead 16	5kg	2150	1365	982
	10kg	1190	462	427
	22kg	1270	242	291
Lead 20	5kg	1160	384	386
	10kg	561	180	181
	18kg	288	88	89

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	25kg	100	84	1102
	35kg	63	52	725
	50kg	35	29	433
Lead 10	10kg	250	221	1311
	20kg	110	97	633
	30kg	64	56	385
Lead 16	5kg	1068	976	1579
	10kg	405	278	776
	22kg	220	107	680
Lead 20	6kg	317	316	955
	12kg	147	144	455
	18kg	89	88	288

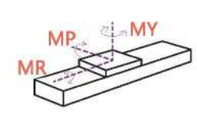
(Unit : mm)



Vertical installation		A	C
Lead 05	5kg	544	544
	8kg	341	341
	12kg	227	227
Lead 10	4kg	606	606
	6kg	454	454
	8kg	303	303
Lead 16	1kg	1210	1210
	2kg	1174	1174
	5kg	650	650
Lead 20	-	-	-
	2kg	961	961
	3kg	639	639

Static allowable load inertia

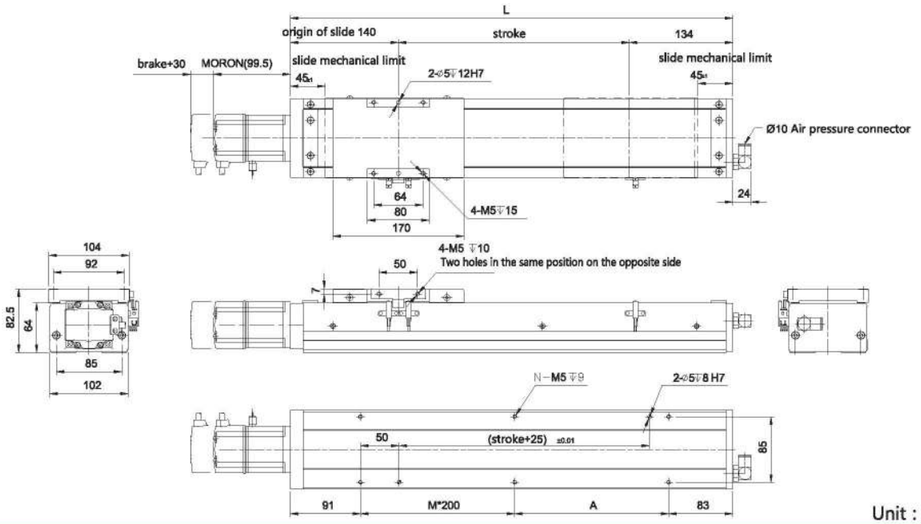
(Unit : N.m)



MY	150
MP	150
MR	130

* The data represented by the moment,representing the center of gravity.
* Under normal use in line with catalog specifications, the guaranteed life is 1,000 kilometers.
* Standard specifications cannot be applied for upside -down use. If you have any needs, please consult our salesman.

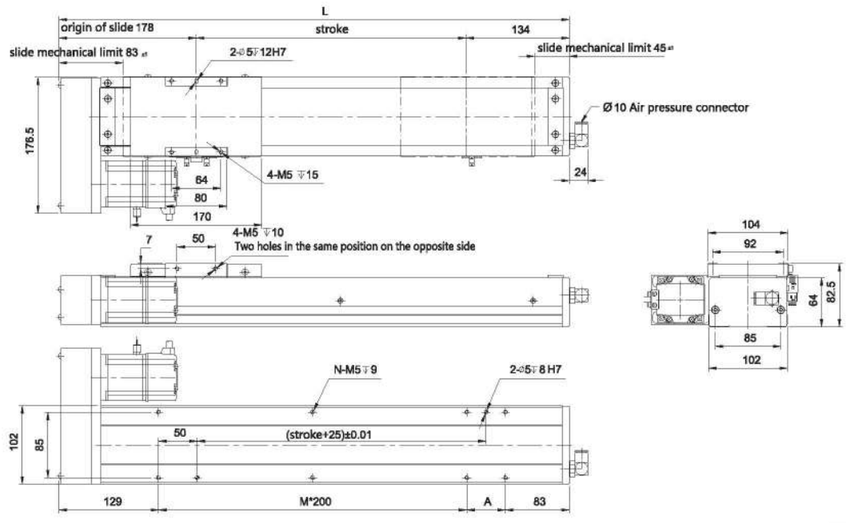
Motor exposed



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	374	424	474	527	574	624	674	724	774	824	874	924	974	1024	1074	1124	1174	1224	1274	1324
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	6.77	7.2	7.62	8.04	8.47	8.89	9.31	9.73	10.16	10.58	11	11.43	11.85	12.27	12.7	13.12	13.54	13.96	14.39	14.81

Motor folded to the left



Note: The motor left fold is symmetrical with this drawing

Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	412	462	512	562	612	662	712	762	812	862	912	962	1012	1062	1112	1162	1212	1262	1312	1362
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	6.77	7.2	7.62	8.04	8.47	8.89	9.31	9.73	10.16	10.58	11	11.43	11.85	12.27	12.7	13.12	13.54	13.96	14.39	14.81

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ECH14

ECH14 - L 5 - 100 - BC - M40 - B - C 4 - 0001

- **Body model**: ECH14
- **Screw brand**: L Standard Taiwan
- **Screw lead**: 05 5mm; 10 10mm; 16 16mm; 20 20mm
- **Stroke**: 100-1050mm; 50 interval 50mm Ptch
- **Motor position**: BC : Motor exposed; BM: Motor folded down; BR : Motor folded to the left; BL : Motor folded to the right
- **Motor brand,power**: M: Mitsubishi 10 -; P: Panasonic 20 -; Y: Yaskawa 40 400W; T: Delta 75 -
- **Brake**: B: With brake; Blank here means no brake
- **Origin sensor**: Built-in type: A Motor side, B Anti-motor side; Plug-in type: C Motor type, D Anti-motor side; No sensor: E No sensor
- **Endpoint limit sensor**: Built-in type: 1 1 piece, 2 2 pieces; Plug-in type: 3 1 piece, 4 2 pieces; No sensor: 5 No sensor
- **Special style**: 0001

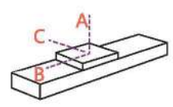
Basic style

Specifications	Standard motor power (W)		400W		
	Repetitive positioning accuracy (mm)		±0.01		
	Screw Specifications		1605	1610	1616	1620
	Max. speed (mm/s)		250	500	800	1000
	Rated thrust (N)		1388	694	433	347
	Max. load weight (Kg)	horizontal use	95	75	48	35
		vertical use	27	18	10	7
	Max. stroke (mm)		1050			
Parts	Roller Screw Specifications		1605/1610/1616/1620(Slenderness ratio 1:62.5)			
	Screw grade		C7 rolling			
	High rigidity linear slide		W15×H12.5			
	Coupling(Outer Diameter-Height-D1-D2)		34-27-10-14			
	Photoelectric switch		PM-T45(NPN)			

* 1.Motor acceleration and deceleration set to 0.2 seconds
* 2.When the stroke exceeds 750, the screw deflection will occur, at this time, please reduce the speed

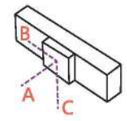
Allowable load torque table

(Unit : mm)



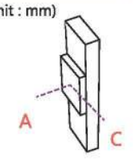
Horizontal installation		A	B	C
Lead 05	60kg	2512	242	232
	80kg	1811	172	164
	110kg	1284	114	108
Lead 10	30kg	2727	470	430
	50kg	1577	266	242
	88kg	854	134	122
Lead 16	10kg	2265	1674	961
	20kg	1402	855	537
	48kg	1047	445	324
Lead 20	10kg	2304	1222	1028
	22kg	1443	540	451
	40kg	860	277	233

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	55kg	257	269	2883
	75kg	178	186	2000
	110kg	108	114	1284
Lead 10	35kg	363	395	2368
	55kg	218	238	1445
	88kg	123	134	854
Lead 16	10kg	461	372	1410
	20kg	264	178	1027
	48kg	148	69	832
Lead 20	12kg	854	1019	2552
	20kg	500	596	1588
	40kg	233	277	860

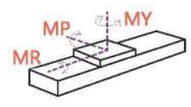
(Unit : mm)



Vertical installation		A	C
Lead 05	15kg	1118	1118
	22kg	770	770
	33kg	513	513
Lead 10	10kg	1500	1500
	15kg	1000	1000
	22kg	682	682
Lead 16	2kg	1067	1067
	4kg	997	997
	10kg	747	747
Lead 20	4kg	1503	1503
	7kg	944	944
	-	-	-

Static allowable load inertia

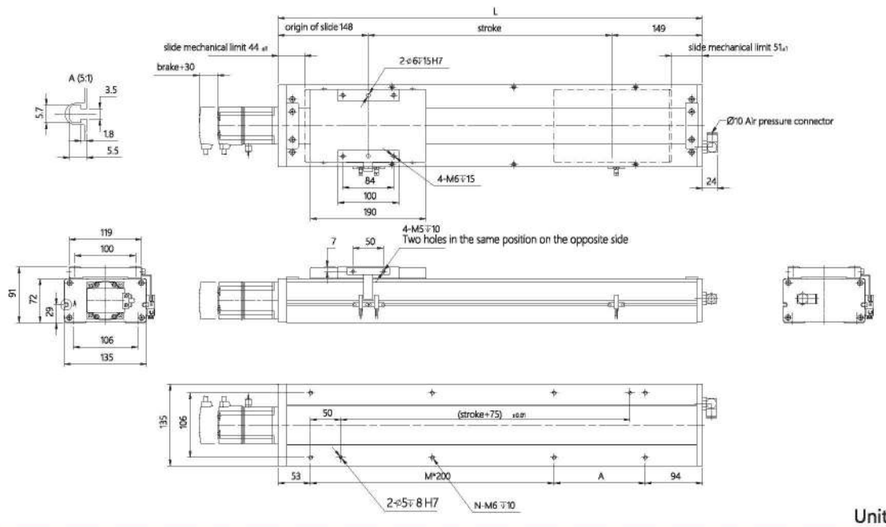
(Unit : N.m)



MY	551
MP	552
MR	485

* The data represented by the moment,representing the center of gravity.
* Under normal use in line with catalog specifications, the guaranteed life is 1,000 kilometers.
* Standard specifications cannot be applied for upside -down use. If you have any needs, please consult our salesman.

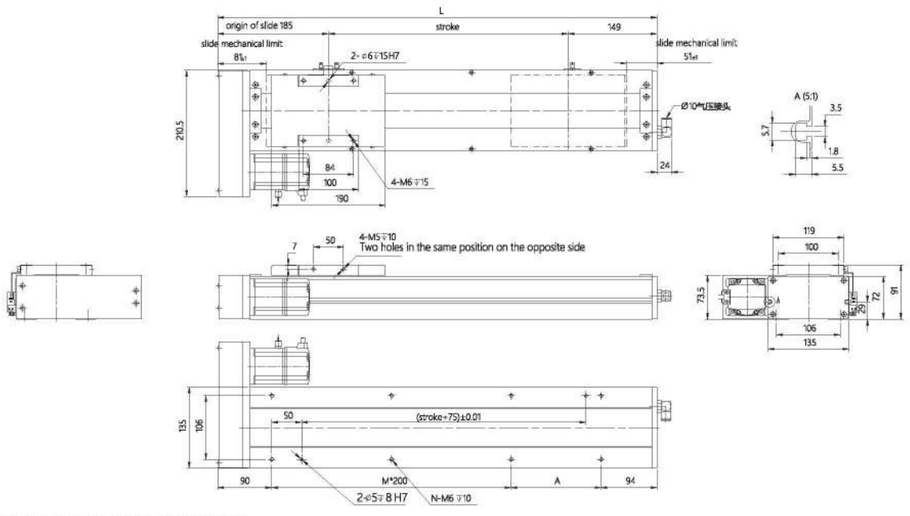
Motor exposed



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	397	447	497	547	597	647	697	747	797	847	897	947	997	1047	1097	1147	1197	1247	1297	1347
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	10.6	11	11.5	12	12.5	13	13.4	14	14.4	15	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.3	19.9

Motor folded to the left



Note: The motor left fold is symmetrical with this drawing

Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134	1184	1234	1284	1334	1384
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	10.6	11	11.5	12	12.5	13	13.4	14	14.4	15	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.3	19.9

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ECH17

ECH17 - L 5 - 100 - BC - M75 - B - C 4 - 0001

- **Body model**: ECH17
- **Screw brand**: L Standard Taiwan
- **Screw lead**: 05 5mm; 10 10mm; 16 16mm; 20 20mm
- **Stroke**: 100-1050mm; 50 interval 50mm Ptch
- **Motor position**: BC : Motor exposed; BM: Motor folded down; BR : Motor folded to the left; BL : Motor folded to the right
- **Motor brand,power**: M: Mitsubishi 10 -; P: Panasonic 20 -; Y: Yaskawa 40 -; T: Delta 75 750W
- **Brake**: B: With brake; Blank here means no brake
- **Origin sensor: Built-in type**: A Motor side; B Anti-motor side; **Plug-in type**: C Motor type; D Anti-motor side; **No sensor**: E No sensor
- **Endpoint limit sensor Built-in type**: 1 1 piece; 2 2 pieces; **Plug-in type**: 3 1 piece; 4 2 pieces; **No sensor**: 5 No sensor
- **Special style**: 0001

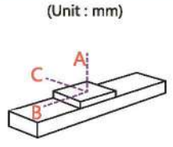
Basic style

Specifications	Standard motor power (W)		750W		
	Repetitive positioning accuracy (mm)		±0.01		
	Screw Specifications		2005	2010	2020	2040
	Max. speed (mm/s)		250	500	1000	2000
	Rated thrust (N)		1388	694	347	174
	Max. load weight (Kg)	horizontal use	120	110	75	22
		vertical use	40	30	14	7
	Max. stroke (mm)		1250			
Parts	Roller Screw Specifications		2005/2010/2020/2040(Slenderness ratio 1: 70)			
	Screw grade		C7 rolling			
	High rigidity linear slide		W20×H15			
	Coupling(Outer Diameter-Height-D1-D2)		44-34-12-19			
	Photoelectric switch		PM-T45(NPN)			

* 1.Motor acceleration and deceleration set to 0.2 seconds
* 2.When the stroke exceeds 750, the screw deflection will occur, at this time, please reduce the speed

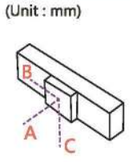
Allowable load torque table

(Unit : mm)



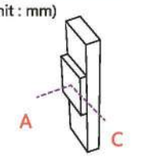
Horizontal installation		A	B	C
Lead 05	70kg	3235	349	406
	90kg	2482	263	306
	120kg	1861	187	218
Lead 10	65kg	1911	338	373
	85kg	1445	248	276
	120kg	1000	164	182
Lead 20	35kg	1666	547	538
	55kg	1030	331	328
	83kg	654	206	204
Lead 40	15kg	1126	740	577
	22kg	755	491	384
	50kg	366	231	183

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	75kg	377	322	2988
	95kg	288	246	2333
	120kg	218	187	1850
Lead 10	60kg	408	368	2092
	80kg	296	266	1554
	120kg	182	164	1000
Lead 20	30kg	633	644	1961
	50kg	365	369	1143
	83kg	204	206	656
Lead 40	12kg	729	936	1417
	22kg	384	491	755
	50kg	183	231	366

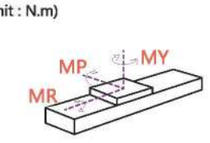
(Unit : mm)



Vertical installation		A	C
Lead 05	20kg	1368	1368
	30kg	911	911
	50kg	546	546
Lead 10	15kg	1618	1618
	25kg	970	970
	40kg	607	607
Lead 20	10kg	1922	1922
	14kg	1377	1377
	25kg	769	769
Lead 40	7kg	1356	1356
	12kg	790	790
	-	-	-

Static allowable load inertia

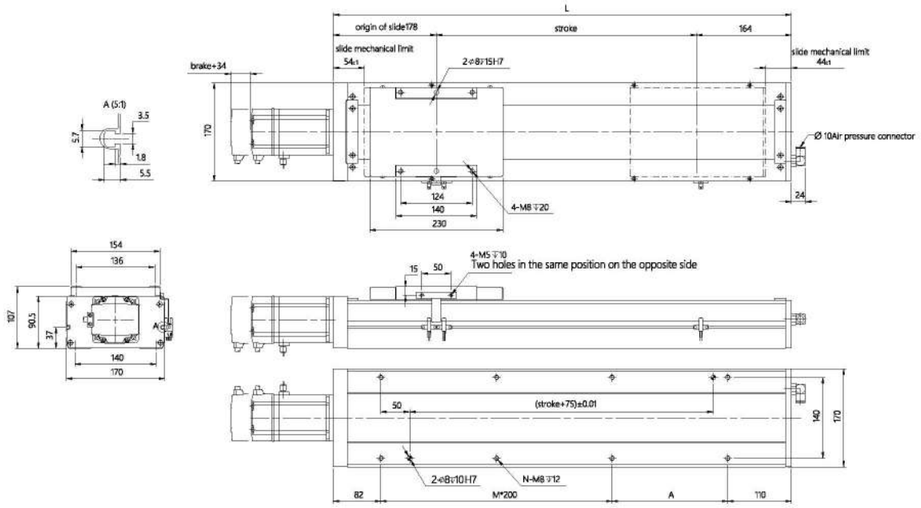
(Unit : N.m)



MY	1032
MP	1034
MR	908

* The data represented by the moment,representing the center of gravity.
* Under normal use in line with catalog specifications, the guaranteed life is 1,000 kilometers.
* Standard specifications cannot be applied for upside -down use. If you have any needs, please consult our salesman.

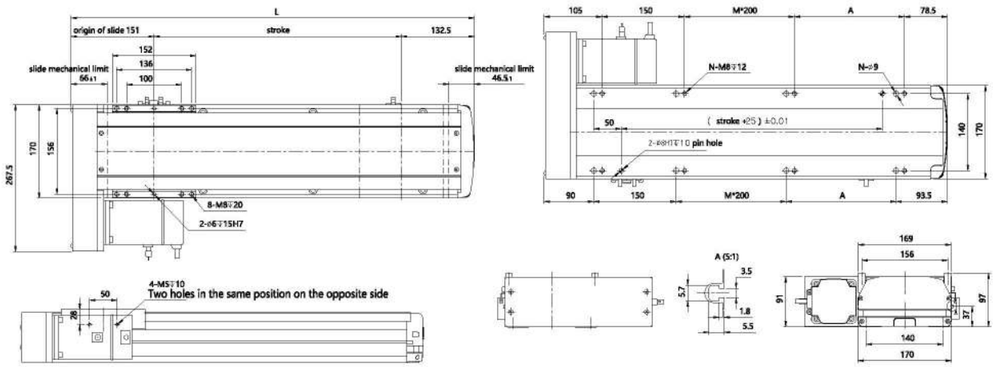
Motor exposed



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	442	492	542	592	642	692	742	792	842	892	942	992	1042	1092	1142	1192	1242	1292	1342	1392	1442	1492	1542	1592
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
KG	14.8	15.6	16.4	17.2	17.9	18.7	19.5	20.3	21	21.8	22.6	23.4	24.1	24.9	25.7	26.5	27.2	28	28.8	29.6	30.4	31.2	32	32.8

Motor folded to the left



Note: The motor left fold is symmetrical with this drawing

Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	477	527	577	627	677	727	777	827	877	927	977	1027	1077	1127	1177	1227	1277	1327	1377	1427	1477	1527	1577	1627
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
KG	14.8	15.6	16.4	17.2	17.9	18.7	19.5	20.3	21	21.8	22.6	23.4	24.1	24.9	25.7	26.5	27.2	28	28.8	29.6	30.4	31.2	32	32.8

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ECH22

ECH22 - L 5 - 100 - BC - M75 - B - C 4 - 0001

- **Body model**: ECH22
- **Screw brand**: L Standard Taiwan
- **Screw lead**: 05 5mm; 10 10mm; 16 16mm; 20 20mm
- **Stroke**: 100-1050mm; 50 interval 50mm Ptch
- **Motor position**: BC : Motor exposed; BM: Motor folded down; BR : Motor folded to the left; BL : Motor folded to the right
- **Motor brand,power**: M: Mitsubishi 10 -; P: Panasonic 20 -; Y: Yaskawa 40 -; T: Delta 75 750W
- **Brake**: B: With brake; Blank here means no brake
- **Origin sensor: Built-in type**: A Motor side; B Anti-motor side; **Plug-in type**: C Motor type; D Anti-motor side; **No sensor**: E No sensor
- **Endpoint limit sensor Built-in type**: 1 1 piece; 2 2 pieces; **Plug-in type**: 3 1 piece; 4 2 pieces; **No sensor**: 5 No sensor
- **Special style**

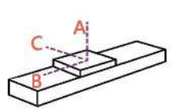
Basic style

Specifications				
Standard motor power (W)		750W		
Repetitive positioning accuracy		±0.01		
Ball screw outer diameter (mm)		25 ball screw(C7 grade)		
Screw Specifications		2505	2510	2525
Max. speed (mm/s)		250	500	1250
Rated thrust (N)		2565	1281	640
Max. load weight (Kg)	horizontal use	150	150	105
	vertical use	55	45	20
Max. stroke (mm)		100~1500 (50 interval)		

* 1.Motor acceleration and deceleration set to 0.2 seconds
* 2.When the stroke exceeds 750, the screw deflection will occur, at this time, please reduce the speed

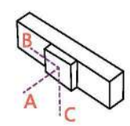
Allowable load torque table

(Unit : mm)



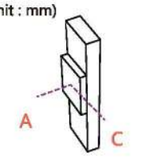
Horizontal installation		A	B	C
Lead 05	100kg	5000	633	557
	125kg	3880	491	431
	150kg	3357	396	347
Lead 10	100kg	3220	563	474
	125kg	2554	434	367
	150kg	2113	349	295
Lead 20	65kg	1522	614	458
	85kg	1136	451	336
	105kg	893	350	262
Lead 40	18kg	2445	1616	1052
	30kg	1436	938	613
	43kg	978	630	412

(Unit : mm)



Side hanging installation		A	B	C
Lead 05	110kg	500	569	4500
	130kg	412	469	3711
	150kg	347	396	3357
Lead 10	110kg	427	503	2900
	130kg	351	414	2444
	150kg	295	349	2113
Lead 20	70kg	420	564	1404
	90kg	315	420	1066
	105kg	262	350	893
Lead 40	15kg	1272	1955	2948
	24kg	778	1190	1813
	43kg	412	630	978

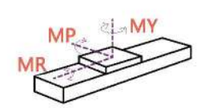
(Unit : mm)



Vertical installation		A	C
Lead 05	30kg	2355	2355
	40kg	1768	1768
	55kg	1288	1288
Lead 10	25kg	2505	2505
	35kg	1795	1795
	45kg	1396	1396
Lead 20	150kg	2711	2711
	20kg	2033	2033
	-	-	-
Lead 40	7kg	3511	3511
	12kg	2055	2055
	-	-	-

Static allowable load inertia

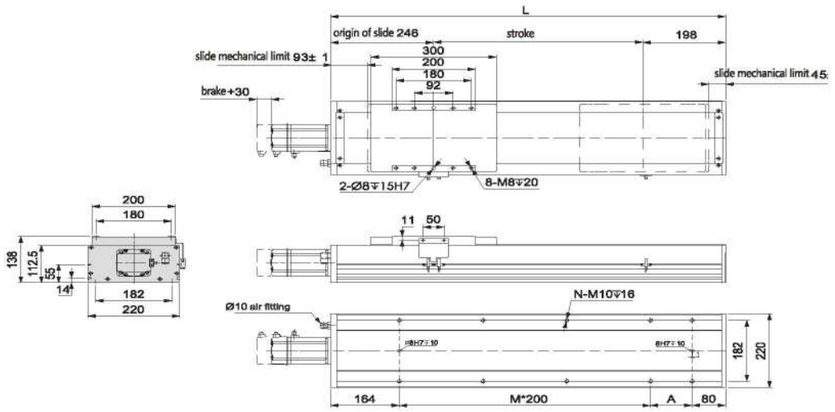
(Unit : N.m)



MY	205
MP	205
MR	181

* The data represented by the moment,representing the center of gravity.
* Under normal use in line with catalog specifications, the guaranteed life is 1,000 kilometers.
* Standard specifications cannot be applied for upside -down use. If you have any needs, please consult our salesman.

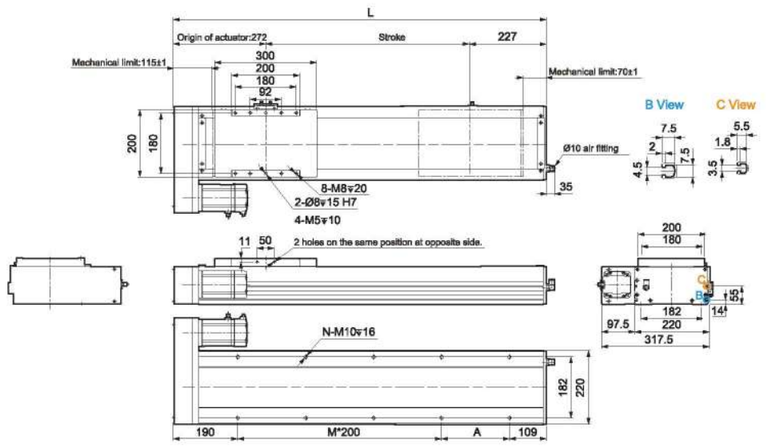
Motor exposed



Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	544	594	644	694	744	794	844	894	944	994	1044	1094	1144	1194	1244	1294	1344	1394	1444	1494	1544	1594	1644	1694
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7
N	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
KG	28.96	30.42	31.88	33.34	34.8	36.26	37.72	39.18	40.64	42.1	43.56	45.02	46.48	47.94	49.4	50.86	52.32	53.78	55.24	56.7	58.16	59.62	61.08	62.54

Motor folded to the left



Note: The motor left fold is symmetrical with this drawing

Unit : mm

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	599	649	699	749	799	849	899	949	999	1049	1099	1149	1199	1249	1299	1349	1399	1449	1499	1549	1599	1649	1699	1749
A	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7
N	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
KG	30.06	31.52	32.98	34.44	35.9	37.36	38.82	40.28	41.74	43.2	44.66	46.12	47.58	49.04	50.5	51.96	53.42	54.88	56.34	57.8	59.26	60.72	62.18	63.64

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ETB standard belt slide series

ETB14

ETB14 - L 40 - 100 - L - M 20 - C 4 - 0001

- **Body model**
- **Belt type** L: Dust free belt; X: rubber belt
- **Belt lead** 40 : 40mm
- **Stroke** 50-3050mm, 50 Interval
- **Motor position** L: Motor folded to the left; LU: Motor folded to upper left; LD: Motor folded to down left; R: Motor folded to the right; RU: Motor folded to upper right; RD: Motor folded to down right
- **Motor brand,power** P: Panasonic 20 200W; T: Delta 75 -; M: Mitsubishi 10 -; Y: Yaskawa 40 -
- **Origin sensor** Plug-in type: C Motor type; D Anti-motor side; No sensor: E No sensor
- **Endpoint limit sensor** Plug-in type: 3 1 piece; 4 2 pieces; No sensor: 5 No sensor
- **Special style**

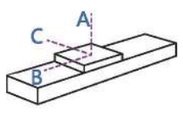
Basic style

Specifications	Lead (mm)		40
	Max. speed (mm/s)		2000
	Maximum carry weight (Kg)	horizontal use	25
		vertical use	-
	Freeze thrust (N)		100
	Standard stroke (mm)		20-3050mm/50 interval
Parts	AC servo motor capacity		200
	Belt width		25
	High rigidity linear slide		W15×H12.5
	Origin sensor Plug-in		PM-T45(NPN)

*1.Motor acceleration and deceleration set to 0.4 seconds.

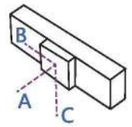
Allowable load torque table

(Unit : mm)



Horizontal installation	A	B	C
10kg	1794	688	538
20kg	858	324	253
25kg	670	251	197

(Unit : mm)

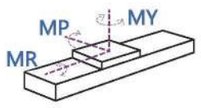


Side hanging installation	A	B	C
15kg	348	446	1170
18kg	285	365	961
25kg	197	251	670

* *The data represented by the moment, representing the center of gravity
* Under normal use in line with catalog specifications, the guaranteed life is 10,000 kilometers
* Standard specifications cannot be applied for upside-down use. If you have any needs, please consult our salesman

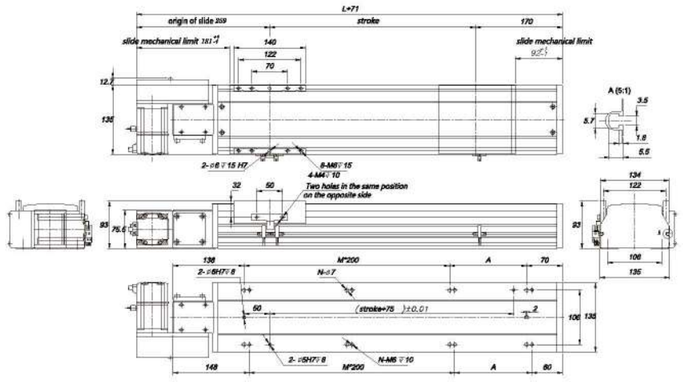
Static allowable load inertia

(Unit : N.m)



MY	551
MP	552
MR	485

Motor folded to the left

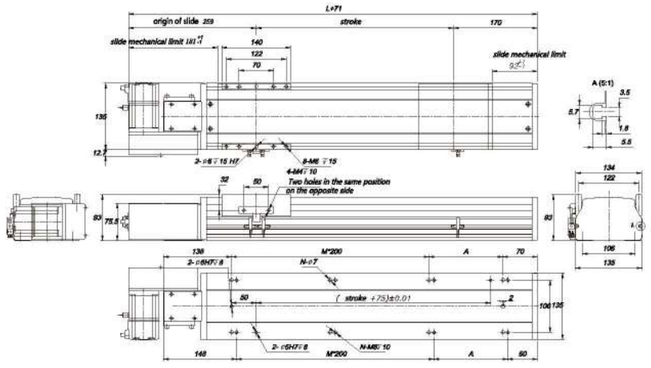


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	1208	1258	1308	1358	1408	1458	1508	1558	1608	1658	1708	1758	1808	1858	1908
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	8.2	8.6	9	9.5	10	10.5	11	11.4	12	12.4	13	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1958	2008	2058	2108	2158	2208	2258	2308	2358	2408	2458	2508	2558	2608	2658	2708	2758	2808	2858	2908	2958	3008	3058	3108	3158	3208	3258	3308	3358	3408
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	419

Motor folded to the right



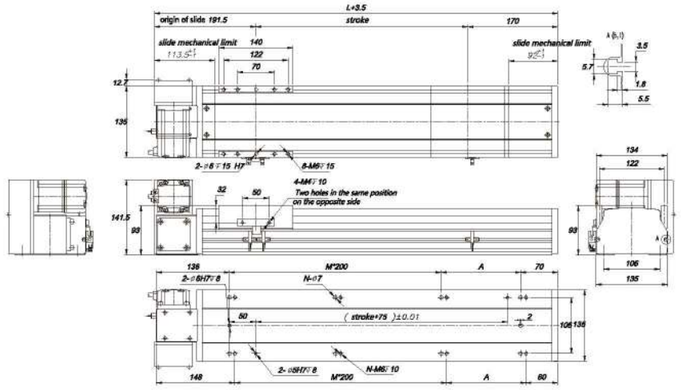
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	1208	1258	1308	1358	1408	1458	1508	1558	1608	1658	1708	1758	1808	1858	1908
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	8.2	8.6	9	9.5	10	10.5	11	11.4	12	12.4	13	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1958	2008	2058	2108	2158	2208	2258	2308	2358	2408	2458	2508	2558	2608	2658	2708	2758	2808	2858	2908	2958	3008	3058	3108	3158	3208	3258	3308	3358	3408
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	419

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

Motor folded to upper left

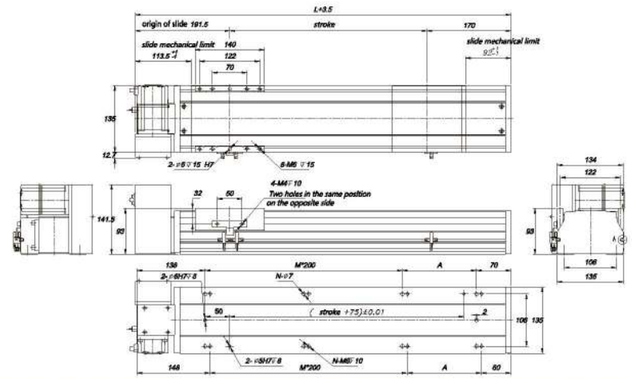


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	1208	1258	1308	1358	1408	1458	1508	1558	1608	1658	1708	1758	1808	1858	1908
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	8.2	8.6	9	9.5	10	10.5	11	11.4	12	12.4	13	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1958	2008	2058	2108	2158	2208	2258	2308	2358	2408	2458	2508	2558	2608	2658	2708	2758	2808	2858	2908	2958	3008	3058	3108	3158	3208	3258	3308	3358	3408
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	419

Motor folded to upper right



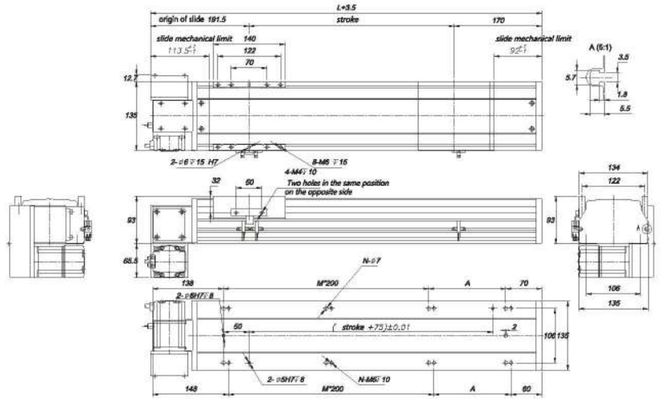
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	1208	1258	1308	1358	1408	1458	1508	1558	1608	1658	1708	1758	1808	1858	1908
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	8.2	8.6	9	9.5	10	10.5	11	11.4	12	12.4	13	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1958	2008	2058	2108	2158	2208	2258	2308	2358	2408	2458	2508	2558	2608	2658	2708	2758	2808	2858	2908	2958	3008	3058	3108	3158	3208	3258	3308	3358	3408
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	419

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

Motor folded to upper left

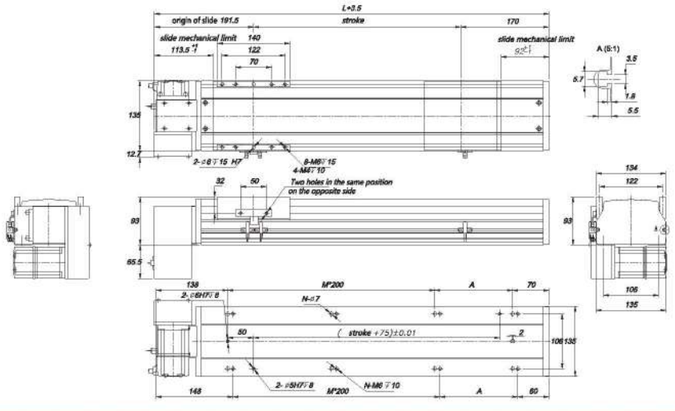


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	1208	1258	1308	1358	1408	1458	1508	1558	1608	1658	1708	1758	1808	1858	1908
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	8.2	8.6	9	9.5	10	10.5	11	11.4	12	12.4	13	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1958	2008	2058	2108	2158	2208	2258	2308	2358	2408	2458	2508	2558	2608	2658	2708	2758	2808	2858	2908	2958	3008	3058	3108	3158	3208	3258	3308	3358	3408
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	419

Motor folded to down right



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	1208	1258	1308	1358	1408	1458	1508	1558	1608	1658	1708	1758	1808	1858	1908
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	8.2	8.6	9	9.5	10	10.5	11	11.4	12	12.4	13	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9

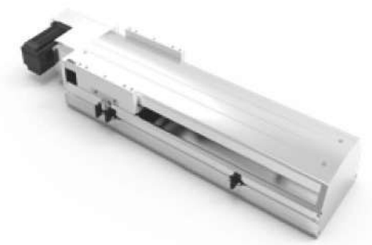
Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1958	2008	2058	2108	2158	2208	2258	2308	2358	2408	2458	2508	2558	2608	2658	2708	2758	2808	2858	2908	2958	3008	3058	3108	3158	3208	3258	3308	3358	3408
A	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	419

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ETB17

ETB17 - L 40 - 50 - L - M 40 - C 4 - 0001

- **Body model**
- **Belt type**: L: Dust free belt; X: rubber belt
- **Belt lead**: 40 : 40mm
- **Stroke**: 50-3050mm, 50 interval
- **Motor position**: L: Motor folded to the left; LU: Motor folded to upper left; LD: Motor folded to down left; R: Motor folded to the right; RU: Motor folded to upper right; RD: Motor folded to down right
- **Motor brand,power**: P: Panasonic 20 -; T: Delta 75 -; M: Mitsubishi 10 -; Y: Yaskawa 40 400W
- **Origin sensor Plug-in type**: C Motor type; D Anti-motor side; **No sensor**: E No sensor
- **Endpoint limit sensor Plug-in type**: 3 1 piece; 4 2 pieces; **No sensor**: 5 No sensor
- **Special style**



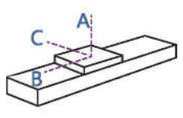
Basic style

Specifications	Position repetition accuracy	±0.04
	Lead (mm)	40
	Max. speed (mm/s)	2000
	Maximum carry weight (Kg) horizontal use	45
	Maximum carry weight (Kg) vertical use	-
	Freeze thrust (N)	204
	Standard stroke (mm)	20-3050mm/50 interval
Parts	AC servo motor capacity	400
	Belt width	30
	High rigidity linear slide	W20×H15
	Origin sensor Plug-in	PM-T45(NPN)

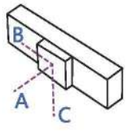
*1.Motor acceleration and deceleration set to 0.4 seconds.

Allowable load torque table

(Unit : mm)



(Unit : mm)

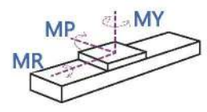


Horizontal installation	A	B	C
10kg	2942	1133	1033
20kg	1430	547	498
30kg	926	350	320
45kg	588	219	201

Side hanging installation	A	B	C
15kg	676	742	1933
25kg	390	428	1127
35kg	269	294	781
45kg	201	219	588

Static allowable load inertia

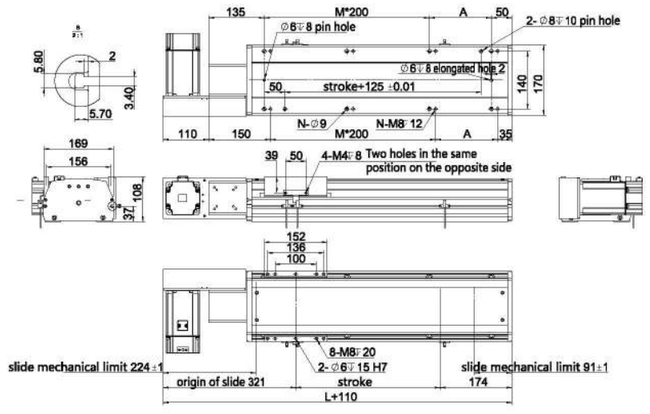
(Unit : N.m)



MY	1032
MP	1034
MR	908

* *The data represented by the moment, representing the center of gravity
* Under normal use in line with catalog specifications, the guaranteed life is 10,000 kilometers
* Standard specifications cannot be applied for upside-down use. If you have any needs, please consult our salesman

Motor folded to the left

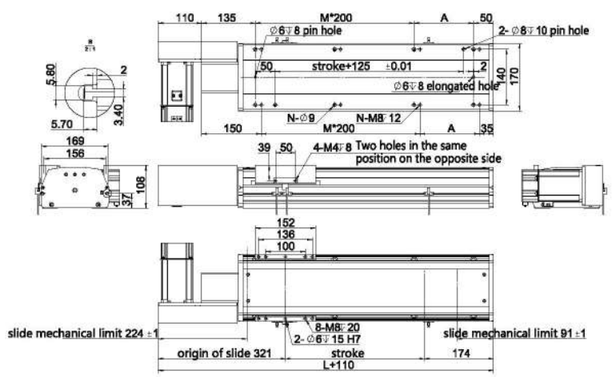


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	435	485	535	585	635	685	735	785	835	885	935	985	1035	1085	1135	1185	1235	1285	1335	1385	1435	1485	1535	1585	1635	1685	1735	1785	1835	1885	1935
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	10.2	12	13.8	14.6	15.4	16.1	16.9	17.7	18.5	19.2	20	20.8	21.6	22.3	23.1	23.9	24.7	25.4	26.2	27	27.8	28.6	29.4	30.2	31	31.8	32.6	33.4	34.2	35	35.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1985	2035	2085	2135	2185	2235	2285	2335	2385	2435	2485	2535	2585	2635	2685	2735	2785	2835	2885	2935	2985	3035	3085	3135	3185	3235	3285	3335	3385	3435
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	30	32	32	32	32	34	34	34	36
KG	36.6	37.4	38.2	39	39.8	40.6	41.4	42.2	43	43.8	44.6	45.4	46.2	47	47.8	48.6	49.4	50.2	51	51.8	52.6	53.4	54.2	55	55.8	56.6	57.4	58.2	59	59.8

Motor folded to the right



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	435	485	535	585	635	685	735	785	835	885	935	985	1035	1085	1135	1185	1235	1285	1335	1385	1435	1485	1535	1585	1635	1685	1735	1785	1835	1885	1935
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	10.2	12	13.8	14.6	15.4	16.1	16.9	17.7	18.5	19.2	20	20.8	21.6	22.3	23.1	23.9	24.7	25.4	26.2	27	27.8	28.6	29.4	30.2	31	31.8	32.6	33.4	34.2	35	35.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1985	2035	2085	2135	2185	2235	2285	2335	2385	2435	2485	2535	2585	2635	2685	2735	2785	2835	2885	2935	2985	3035	3085	3135	3185	3235	3285	3335	3385	3435
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	30	32	32	32	32	34	34	34	36
KG	36.6	37.4	38.2	39	39.8	40.6	41.4	42.2	43	43.8	44.6	45.4	46.2	47	47.8	48.6	49.4	50.2	51	51.8	52.6	53.4	54.2	55	55.8	56.6	57.4	58.2	59	59.8

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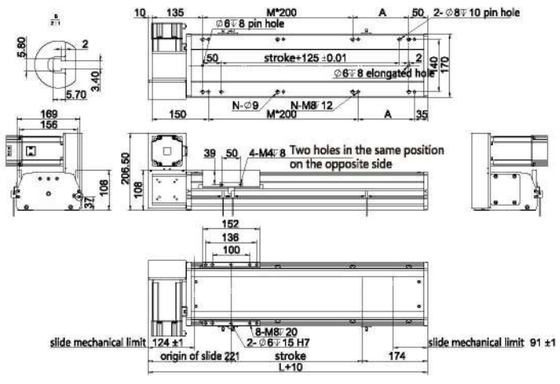
Motor folded to upper left

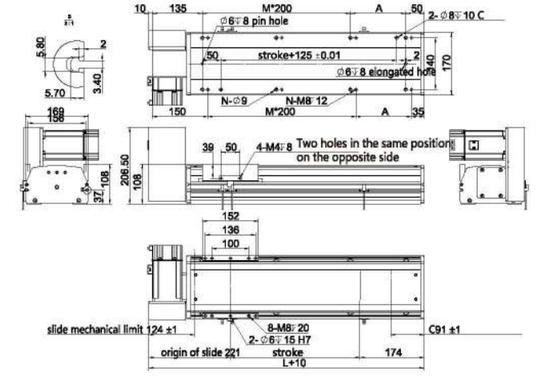


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	435	485	535	585	635	685	735	785	835	885	935	985	1035	1085	1135	1185	1235	1285	1335	1385	1435	1485	1535	1585	1635	1685	1735	1785	1835	1885	1935
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	10.2	12	13.8	14.6	15.4	16.1	16.9	17.7	18.5	19.2	20	20.8	21.6	22.3	23.1	23.9	24.7	25.4	26.2	27	27.8	28.6	29.4	30.2	31	31.8	32.6	33.4	34.2	35	35.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1985	2035	2085	2135	2185	2235	2285	2335	2385	2435	2485	2535	2585	2635	2685	2735	2785	2835	2885	2935	2985	3035	3085	3135	3185	3235	3285	3335	3385	3435
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	36.6	37.4	38.2	39	39.8	40.6	41.4	42.2	43	43.8	44.6	45.4	46.2	47	47.8	48.6	49.4	50.2	51	51.8	52.6	53.4	54.2	55	55.8	56.6	57.4	58.2	59	59.8

Motor folded to upper right



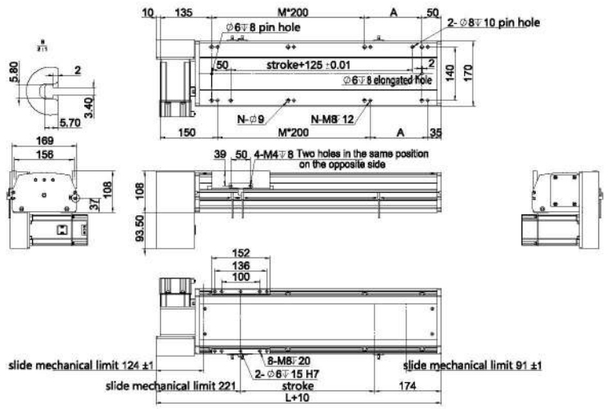
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	435	485	535	585	635	685	735	785	835	885	935	985	1035	1085	1135	1185	1235	1285	1335	1385	1435	1485	1535	1585	1635	1685	1735	1785	1835	1885	1935
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	10.2	12	13.8	14.6	15.4	16.1	16.9	17.7	18.5	19.2	20	20.8	21.6	22.3	23.1	23.9	24.7	25.4	26.2	27	27.8	28.6	29.4	30.2	31	31.8	32.6	33.4	34.2	35	35.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1985	2035	2085	2135	2185	2235	2285	2335	2385	2435	2485	2535	2585	2635	2685	2735	2785	2835	2885	2935	2985	3035	3085	3135	3185	3235	3285	3335	3385	3435
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	36.6	37.4	38.2	39	39.8	40.6	41.4	42.2	43	43.8	44.6	45.4	46.2	47	47.8	48.6	49.4	50.2	51	51.8	52.6	53.4	54.2	55	55.8	56.6	57.4	58.2	59	59.8

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

Motor folded to down left

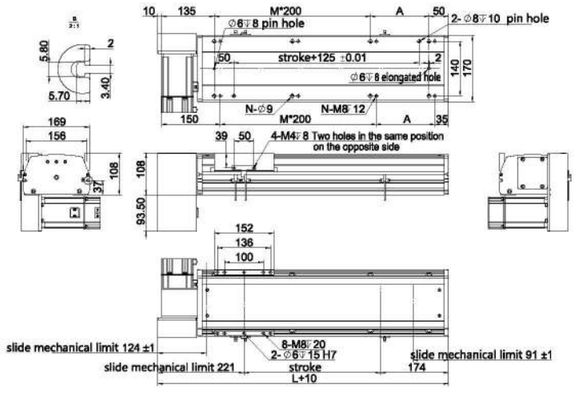


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	435	485	535	585	635	685	735	785	835	885	935	985	1035	1085	1135	1185	1235	1285	1335	1385	1435	1485	1535	1585	1635	1685	1735	1785	1835	1885	1935
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	10.2	12	13.8	14.6	15.4	16.1	16.9	17.7	18.5	19.2	20	20.8	21.6	22.3	23.1	23.9	24.7	25.4	26.2	27	27.8	28.6	29.4	30.2	31	31.8	32.6	33.4	34.2	35	35.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1985	2035	2085	2135	2185	2235	2285	2335	2385	2435	2485	2535	2585	2635	2685	2735	2785	2835	2885	2935	2985	3035	3085	3135	3185	3235	3285	3335	3385	3435
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	36.6	37.4	38.2	39	39.8	40.6	41.4	42.2	43	43.8	44.6	45.4	46.2	47	47.8	48.6	49.4	50.2	51	51.8	52.6	53.4	54.2	55	55.8	56.6	57.4	58.2	59	59.8

Motor folded to down right



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	435	485	535	585	635	685	735	785	835	885	935	985	1035	1085	1135	1185	1235	1285	1335	1385	1435	1485	1535	1585	1635	1685	1735	1785	1835	1885	1935
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	10.2	12	13.8	14.6	15.4	16.1	16.9	17.7	18.5	19.2	20	20.8	21.6	22.3	23.1	23.9	24.7	25.4	26.2	27	27.8	28.6	29.4	30.2	31	31.8	32.6	33.4	34.2	35	35.8

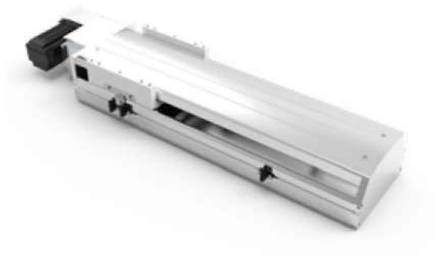
Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	1985	2035	2085	2135	2185	2235	2285	2335	2385	2435	2485	2535	2585	2635	2685	2735	2785	2835	2885	2935	2985	3035	3085	3135	3185	3235	3285	3335	3385	3435
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	36.6	37.4	38.2	39	39.8	40.6	41.4	42.2	43	43.8	44.6	45.4	46.2	47	47.8	48.6	49.4	50.2	51	51.8	52.6	53.4	54.2	55	55.8	56.6	57.4	58.2	59	59.8

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

ETB22

ETB22 - L 40 - 100 - L - M 75 - C 4 - 0001

- **Body model**: ETB22
- **Belt type**: L: Dust free belt; X: rubber belt
- **Belt lead**: 40 : 40mm
- **Stroke**: 50-3050mm, 50 interval
- **Motor position**: L: Motor folded to the left; LU: Motor folded to upper left; LD: Motor folded to down left; R: Motor folded to the right; RU: Motor folded to upper right; RD: Motor folded to down right
- **Motor brand,power**: P: Panasonic 20 -; T: Delta 75 750W; M: Mitsubishi 10; Y: Yaskawa 40 -
- **Origin sensor**: Plug-in type — C Motor type; D Anti-motor side; No sensor — E No sensor
- **Endpoint limit sensor**: Plug-in type — 3 1 piece; 4 2 pieces; No sensor — 5 No sensor
- **Special style**: 0001



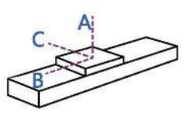
Basic style

Specifications	Position repetition accuracy		±0.04
	Lead (mm)		40
	Max. speed (mm/s)		2000
	Maximum carry weight (Kg)	horizontal use	85
		vertical use	-
	Freeze thrust (N)		367
	Standard stroke (mm)		20-3500mm/50 interval
Parts	AC servo motor capacity		750
	Belt width		45
	High rigidity linear slide		W23×H18
	Origin sensor Plug-in		PM-T45(NPN)

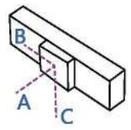
*1.Motor acceleration and deceleration set to 0.4 seconds.

Allowable load torque table

(Unit : mm)



(Unit : mm)



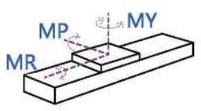
Horizontal installation	A	B	C
45kg	1588	600	349
65kg	1052	328	285
85kg	768	281	206

Side hanging installation	A	B	C
40kg	500	685	1805
60kg	315	430	1152
85kg	206	281	768

* *The data represented by the moment, representing the center of gravity
* Under normal use in line with catalog specifications, the guaranteed life is 10,000 kilometers
* Standard specifications cannot be applied for upside-down use. If you have any needs, please consult our salesman

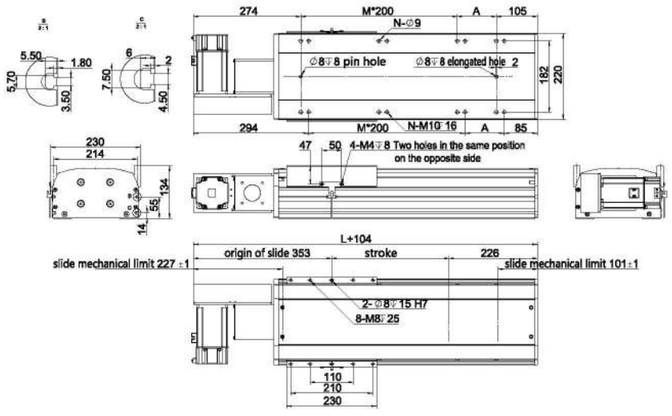
Static allowable load inertia

(Unit : N.m)



MY	2052
MP	2052
MR	1810

Motor folded to the left

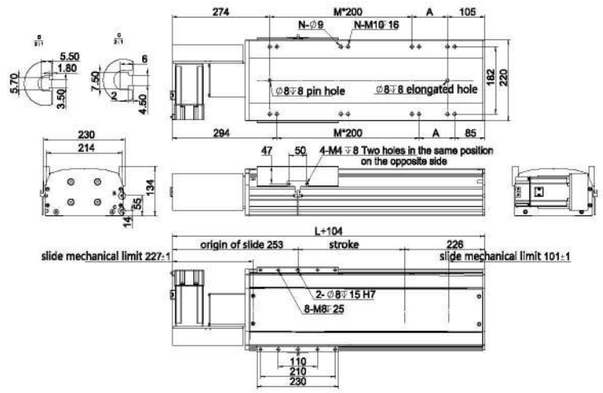


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	59.2	59.8	60	61.2	62.4	63.6	64.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2075	2125	2175	2225	2275	2325	2375	2425	2475	2525	2575	2625	2675	2725	2775	2825	2875	2925	2975	3025	3075	3125	3175	3225	3275	3325	3375	3425	3475	3525
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

Motor folded to the right



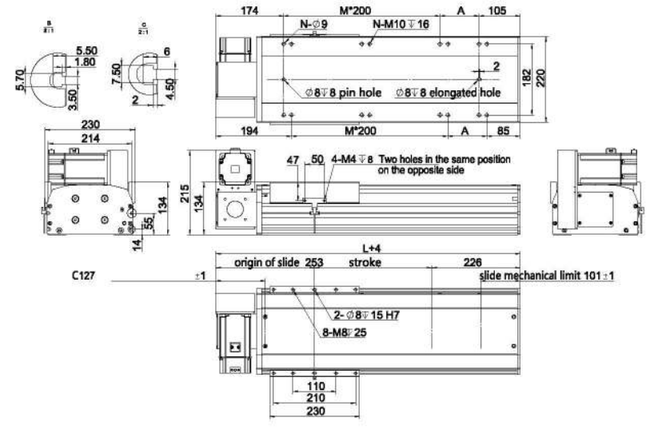
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	59.2	59.8	60	61.2	62.4	63.6	64.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2075	2125	2175	2225	2275	2325	2375	2425	2475	2525	2575	2625	2675	2725	2775	2825	2875	2925	2975	3025	3075	3125	3175	3225	3275	3325	3375	3425	3475	3525
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

Motor folded to upper left

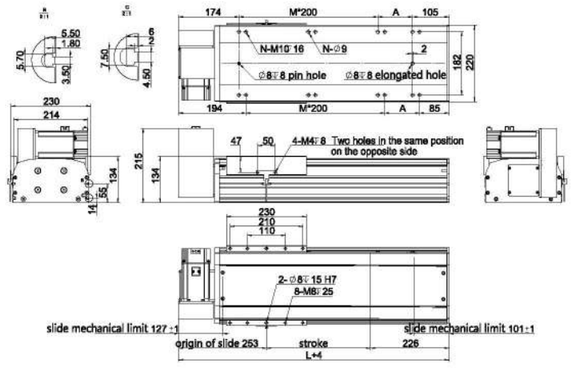


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	59.2	59.8	60	61.2	62.4	63.6	64.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2075	2125	2175	2225	2275	2325	2375	2425	2475	2525	2575	2625	2675	2725	2775	2825	2875	2925	2975	3025	3075	3125	3175	3225	3275	3325	3375	3425	3475	3525
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

Motor folded to upper right

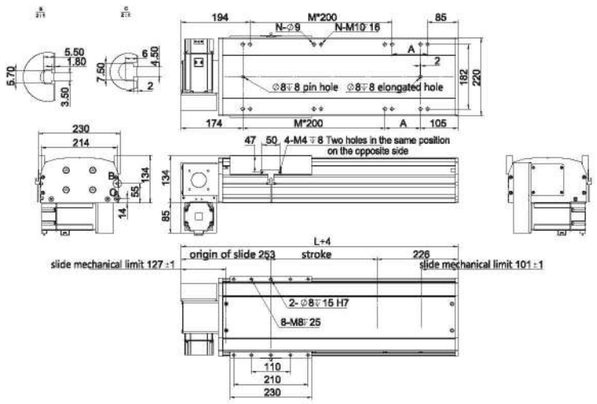


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	59.2	59.8	60	61.2	62.4	63.6	64.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2075	2125	2175	2225	2275	2325	2375	2425	2475	2525	2575	2625	2675	2725	2775	2825	2875	2925	2975	3025	3075	3125	3175	3225	3275	3325	3375	3425	3475	3525
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

Motor folded to down left

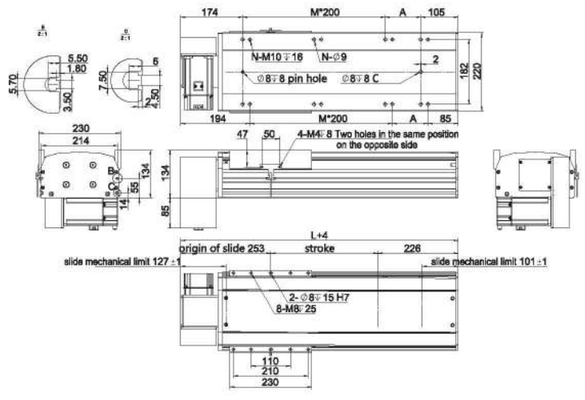


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	59.2	59.8	60	61.2	62.4	63.6	64.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2075	2125	2175	2225	2275	2325	2375	2425	2475	2525	2575	2625	2675	2725	2775	2825	2875	2925	2975	3025	3075	3125	3175	3225	3275	3325	3375	3425	3475	3525
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

Motor folded to down right



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
L	525	575	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375	1425	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
KG	28.8	30	31.2	32.4	33.6	34.8	36	37.2	38.4	39.6	40.8	42	43.2	44.4	45.6	46.8	48	49.2	50.4	51.6	52.8	54	55.2	56.4	59.2	59.8	60	61.2	62.4	63.6	64.8

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
L	2075	2125	2175	2225	2275	2325	2375	2425	2475	2525	2575	2625	2675	2725	2775	2825	2875	2925	2975	3025	3075	3125	3175	3225	3275	3325	3375	3425	3475	3525
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
M	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16
N	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36
KG	66	67.2	68.4	69.6	70.8	72	73.2	74.4	75.6	76.8	78	79.2	80.4	81.6	82.8	84	85.2	86.4	87.6	88.8	90	91.2	92.4	93.6	94.8	96	97.2	98.4	99.6	100.8

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

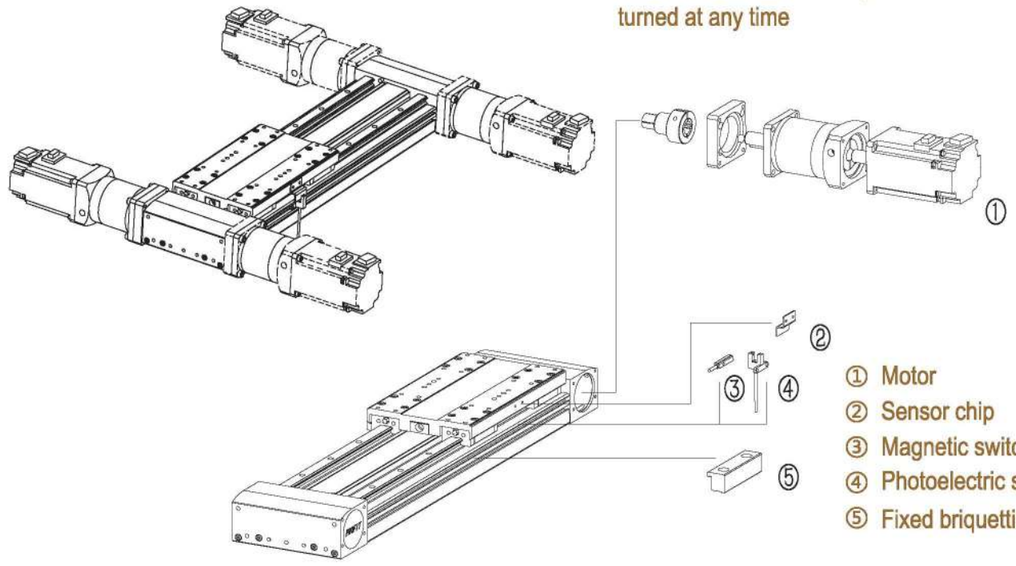
EGC European synchronous belt module series

★ New heavy-duty rail
--Withstands max. load and torques
--High feed force and speed
--Long service life

--Double guide rails guide accurately, strong load capacity
--Suitable as base axis for linear gantry and cantilever axes
--In addition to technical parameters, the tooth-shaped belt electric cylinder is also a cost-effective product

★ Space-saving position sensing, proximity switch can be installed in profile slot

★ Flexible motor installation
The motor can be installed on any side of the four sides of the electric cylinder, and can be turned at any time



① Motor
② Sensor chip
③ Magnetic switch
④ Photoelectric switch
⑤ Fixed briquetting

EGC70

EGC70 - 400 - R - D - M 200W - O - S 3

Body model	Stroke mm	Direction of output shaft	Motor connection	Motor brand	Motor power	Induction switch	Number of switch
EGC70		L: Left output shaft	D: Direct installation	M: Mitsubishi		O: Photoelectric switch	S1: Switch*1
EGC70L		R: Right output shaft		Y: Yaskawa		I: Magnetic reed switch	Sn: Switch*n
		B: Double output shaft		T: Delta			无: Blank: No switch
				P: Panasonic			
				O: Others			

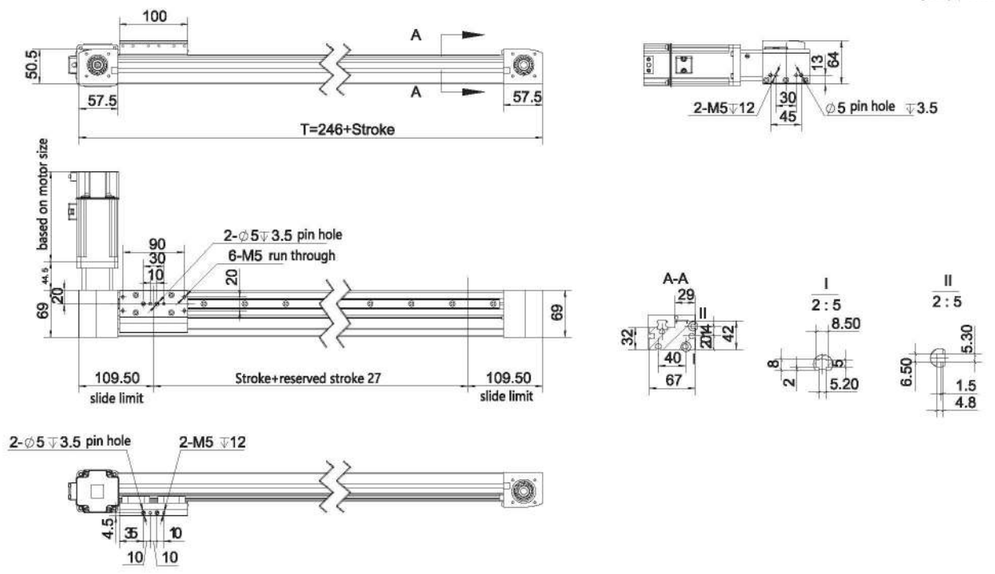
Performance parameter

Standard motor output (W)		200			400		
Rated torque (N.m)		0.64			1.27		
Repetitive positioning accuracy (mm)		±0.08					
Max. stroke (mm)		100-5000mm/ interval 50mm					
Synchronous belt specifications		15×3 (Lead 78mm)					
Reduction ratio		无	3:1	/	无	3:1	/
Max. speed (mm/s)		3900	1300	/	3900	1300	/
Max. horizontal load (kg)		4	12	/	8	15	/
Max. structural load (kg)	EGT70	12					
	EGT70L	15					
Basic weight (0mm stroke kg)		EGT70:3.67			EGT70L:4.08		
Weight increase (Every 100mm stroke kg)		0.34					
Magnetic reed switch		CS1-D-1M Contact type, wire length 1m /CS1-DN-3M Non-contact transistor NPN type, wire length 3m /CS1-DP-3M Non-contact transistor PNP type, wire length 3m					
Photoelectric switch		PM-T45			NPN type wire length is 1M		
		PM-T45-P			PNP type wire length is 1M		

Note:
1、Belt thrust formula
F= (Pw x x1020 x η) / V
F: output thrust, unit is N; Pw: motor power, unit is KW; η: efficiency, generally take 0.85; V: transfer speed, unit is m/s(rated speed)

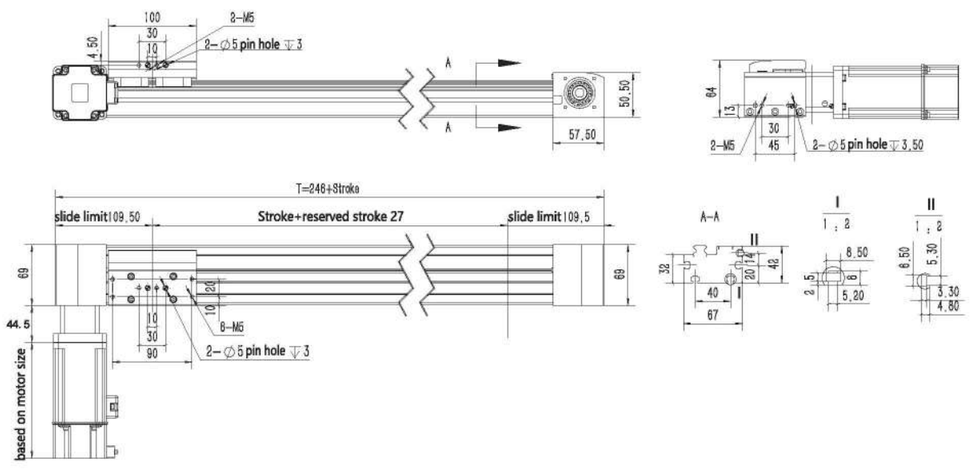
EGC70-L-D

Unit : mm



EGC70-R-D

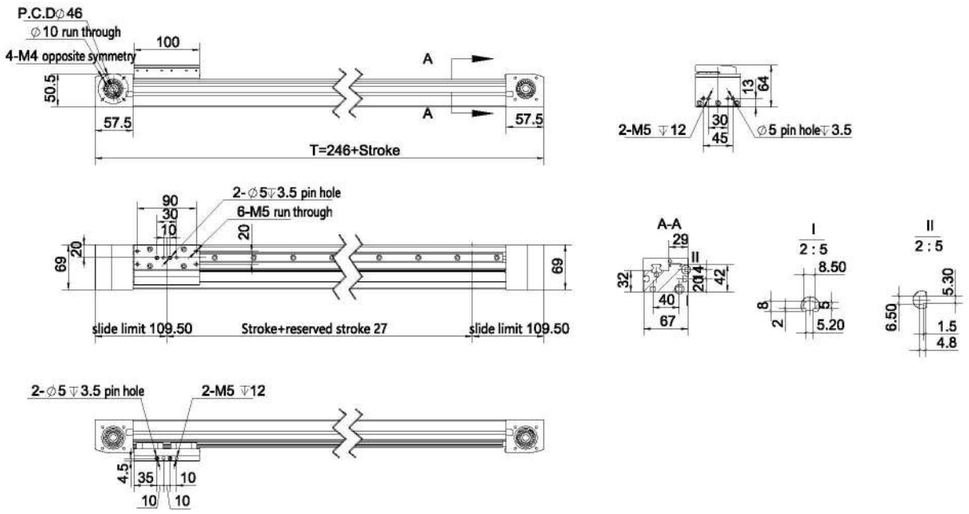
Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

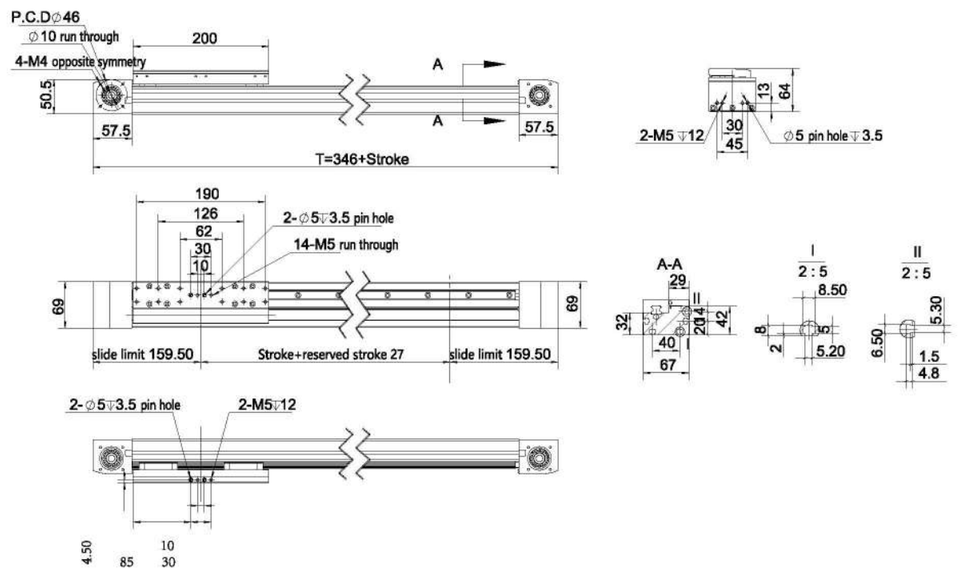
EGC70 Bare cylinder

Unit : mm



EGC70L Bare cylinder

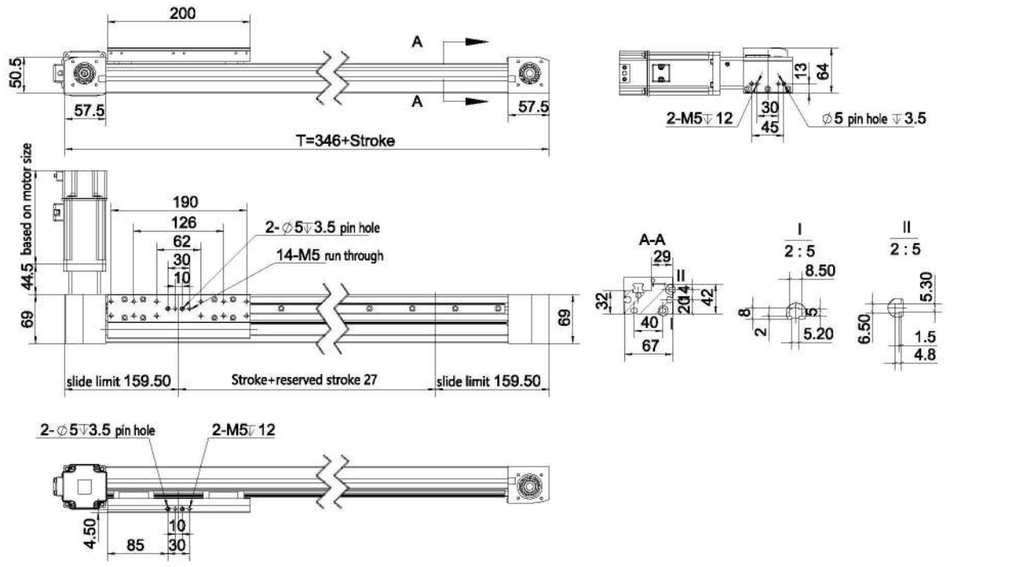
Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

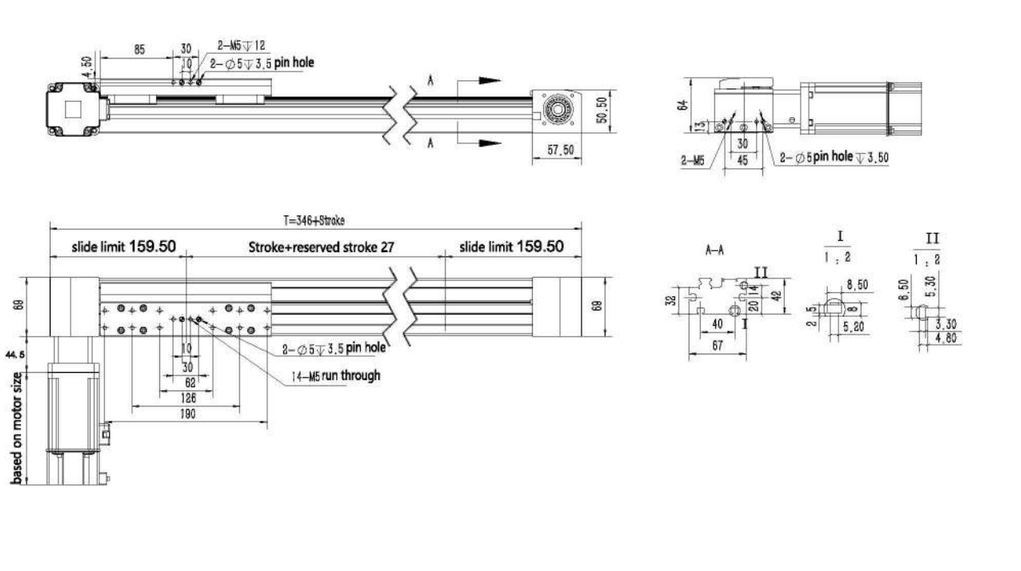
EGC70L-L-D

Unit : mm



EGC70L-R-D

Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

EGC80

EGC80 - 400 - R - D - M 400W - O - S 3

Body model	Stroke mm	Direction of output shaft	Motor connection	Motor brand	Motor power	Induction switch	Number of switch
EGC 80		L: Left output shaft	D: Direct installation	M: Mitsubishi		O: Photoelectric switch	S1: Switch*1
EGC 80L		R: Right output shaft		Y: Yaskawa		I: Magnetic reed switch	Sn: Switch*n
		B: Double output shaft		T: Delta			无: Blank: No switch
				P: Panasonic			
				O: Others			

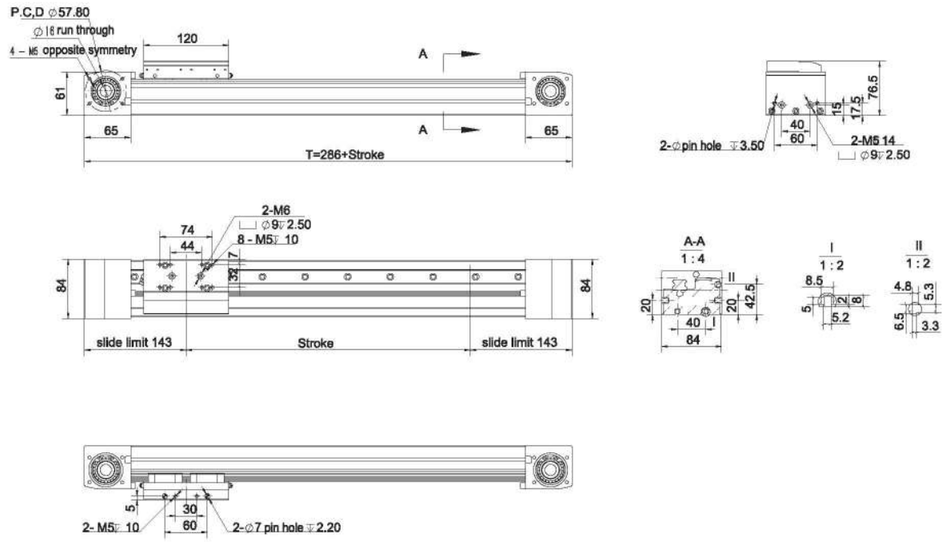
Performance parameter

Standard motor output (W)		200			400		
Rated torque (N.m)		0.64			1.27		
Repetitive positioning accuracy (mm)		±0.08					
Max. stroke (mm)		100-5000mm/ interval 50mm					
Synchronous belt specifications		20×3（Lead 90mm）					
Reduction ratio		无	3:1	5:1	无	3:1	/
Max. speed (mm/s)		4500	1500	900	4500	1500	/
Max. horizontal load (kg)		4	11	15	8	20	/
Max. structural load (kg)	EGT70	15					
	EGT70L	20					
Basic weight (0mm stroke kg)		EGT80:4.36			EGT80L:5.08		
Weight increase (Every 100mm stroke kg)		0.52					
Magnetic reed switch		CS1-D-1M Contact type, wire length 1m /CS1-DN-3M Non-contact transistor NPN type, wire length 3m /CS1-DP-3M Non-contact transistor PNP type, wire length 3m					
Photoelectric switch		PM-T45			NPN type wire length is 1M		
		PM-T45-P			PNP type wire length is 1M		

Note:
1、Belt thrust formula
F= (Pw x x1020 x η) / V
F: output thrust, unit is N; Pw: motor power, unit is KW; η: efficiency, generally take 0.85; V: transfer speed, unit is m/s(rated speed)

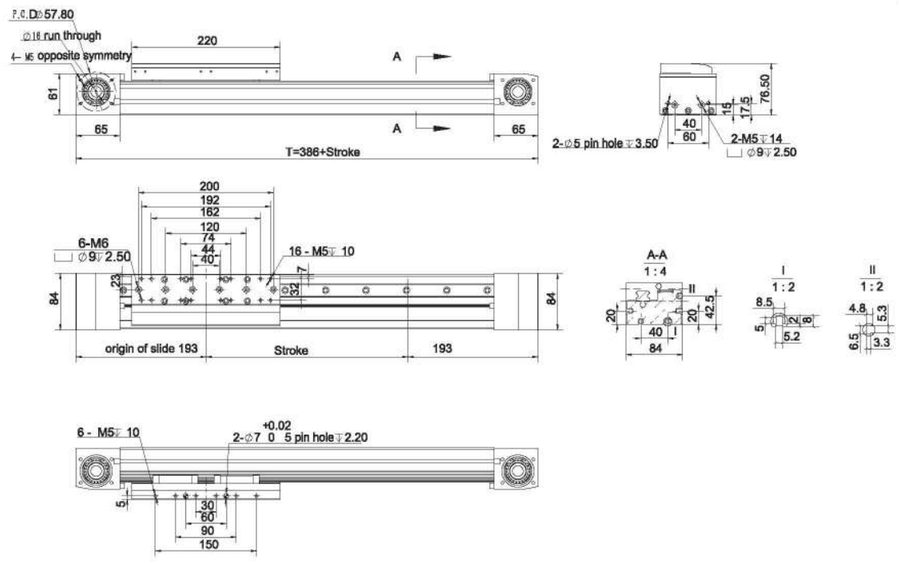
EGC80 Bare cylinder

Unit : mm



EGC80L Bare cylinder

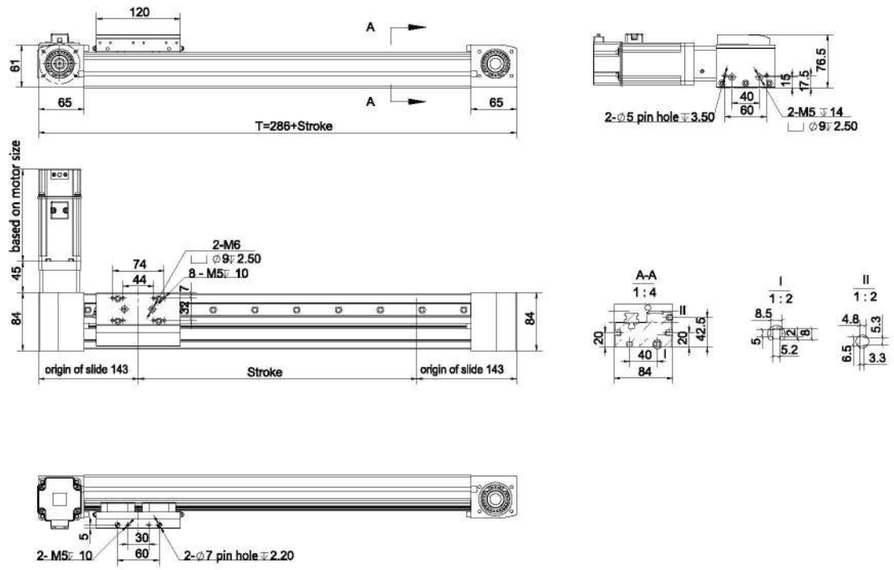
Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

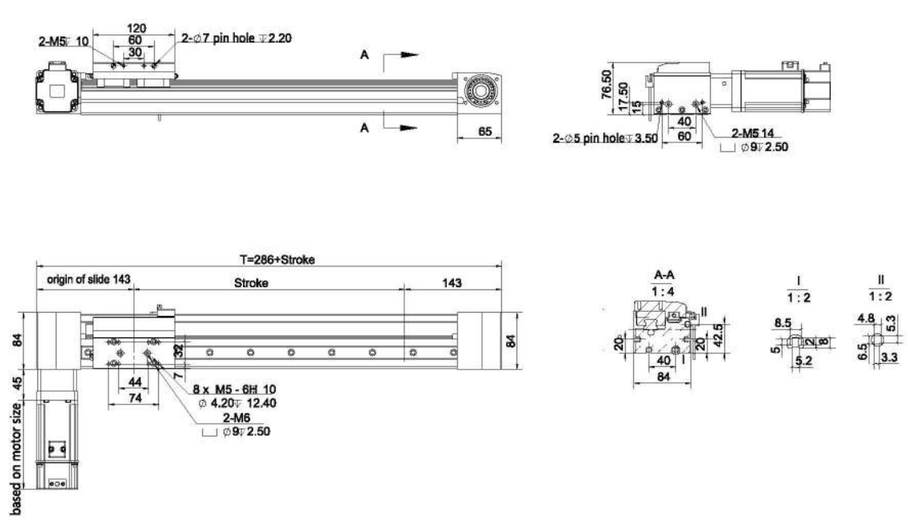
EGC80-L-D

Unit : mm



EGC80-R-D

Unit : mm



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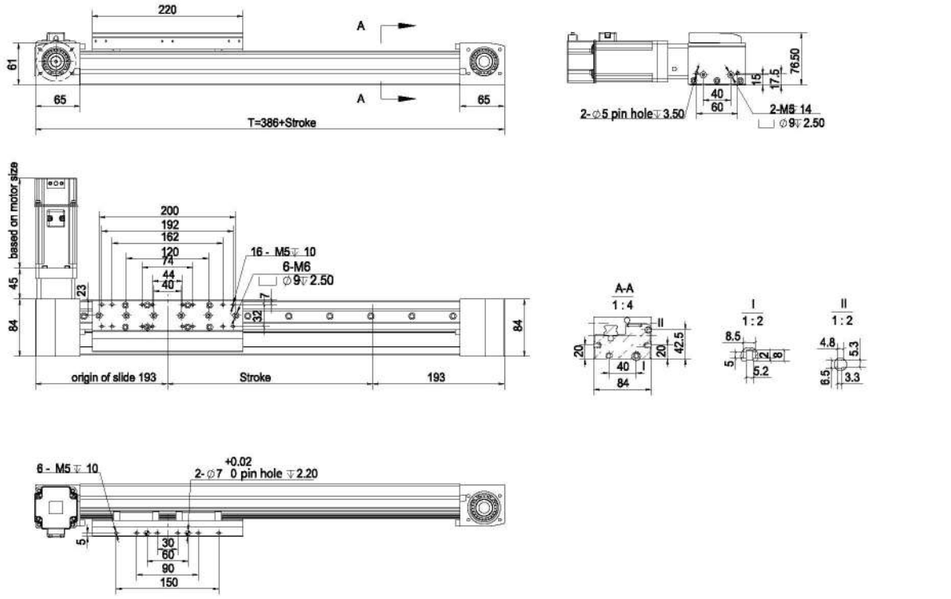
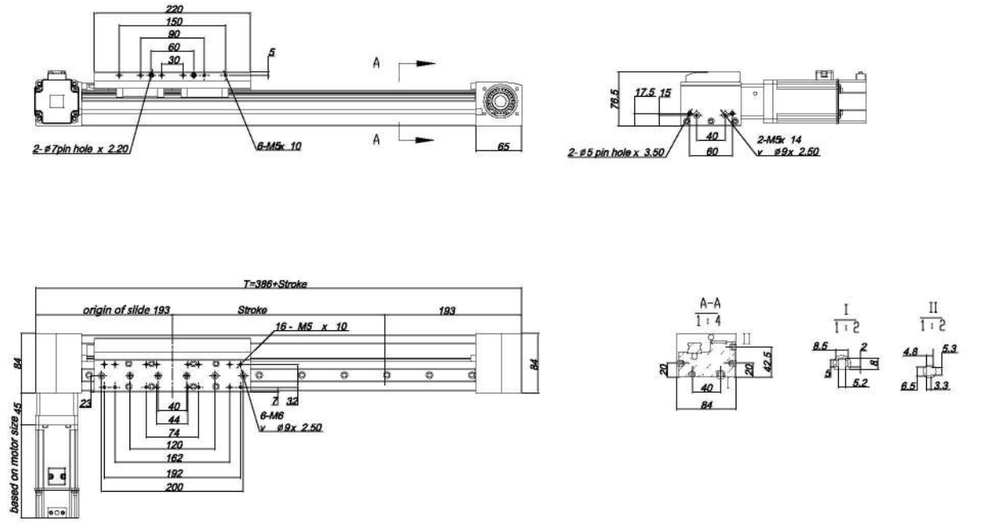
EGC80L-L-D

Unit : mm



EGC80L-R-D

Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

EGC120

EG120 - 400 - R - D - K3 - M - 750W - S 3

Body model	Stroke mm	Direction of output shaft	Motor connection	Ratio	Motor brand	Motor power	Number of switch
EGC 120		L: Left output shaft	D: Direct installation	3	M: Mitsubishi		S1: Switch*1
		R: Right output shaft		5	Y: Yaskawa		Sn: Switch*n
		B: Double output shaft		7	T: Delta		无: Blank: No switch
				10	P: Panasonic		
					O: Others		

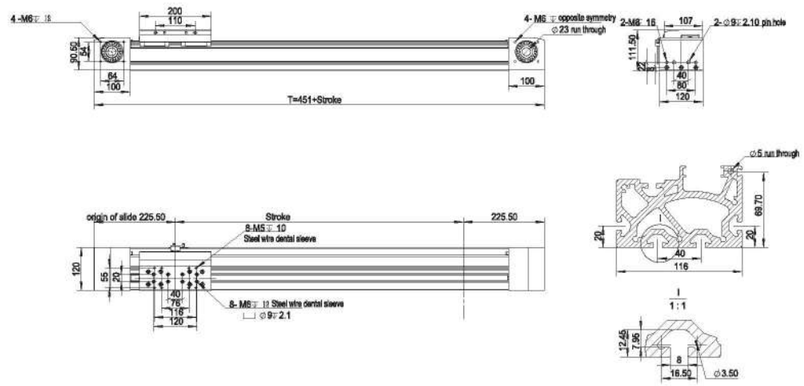
Performance parameter

Standard motor output (W)	750W			
Rated torque (N.m)	2.4			
Repetitive positioning accuracy (mm)	±0.08			
Max. stroke (mm)	100-6000mm / interval 50mm			
Synchronous belt specifications	45×5 (Lead 125mm)			
Reduction ratio	3:1	5:1	7:1	10:1
Max. speed (mm/s)	2080	1250	890	625
Max. load (kg)	30	50	70	100
Basic weight (0mm stroke kg)	12.7			
Weight increase (Every 100mm stroke kg)	1.5			
Magnetic reed switch	CS1-D-1M Contact type, wire length 1m /CS1-DN-3M Non-contact transistor NPN type, wire length 3m /CS1-DP-3M Non-contact transistor PNP type, wire length 3m			
Photoelectric switch	PM-T45	NPN type wire length is 1M		
	PM-T45-P	PNP type wire length is 1M		

Note:
1、Belt thrust formula
F= (Pw x x1020 x η) / V
F: output thrust, unit is N; Pw: motor power, unit is KW; η: efficiency, generally take 0.85; V: transfer speed, unit is m/s(rated speed)

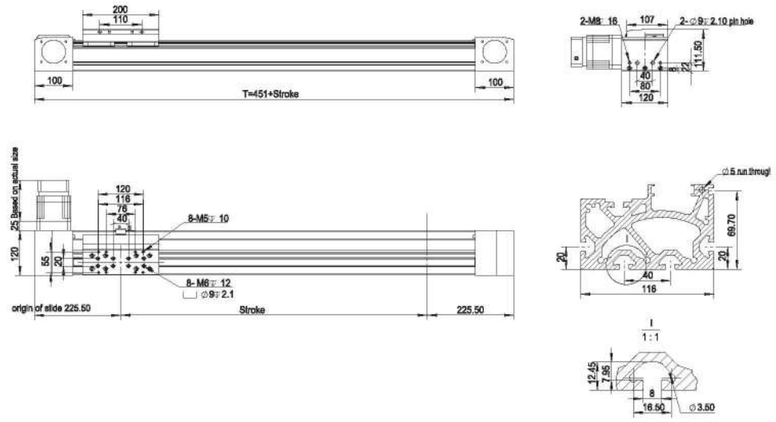
EGC120 Bare cylinder

Unit : mm



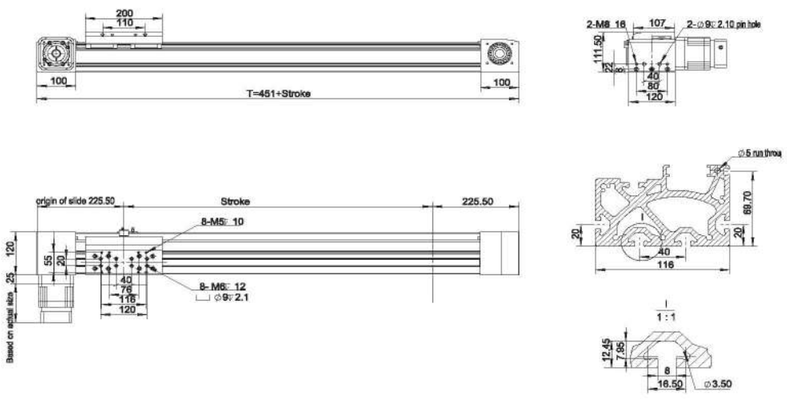
EGC120-L-D

Unit : mm



EGC120-R-D

Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

European synchronous belt module series

EGC125

EG125 - 400 - R - D - K3 - M - 400W O - S 3

Body model	Stroke mm	Direction of output shaft	Motor connection	Ratio	Motor brand	Motor power	Induction switch	Number of switch
EGC 125		L: Left output shaft	D: Direct installation	3	M: Mitsubishi		O: Photoelectric switch	S1: Switch*1
		R: Right output shaft		5	Y: Yaskawa		I: Magnetic reed switch	Sn: Switch*n
		B: Double output shaft		7	T: Delta			无: Blank: No switch
				10	P: Panasonic			
					O: Others			

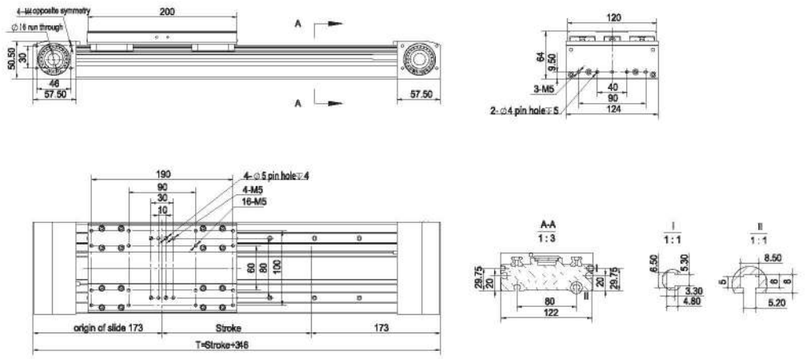
Performance parameter

Standard motor output (W)	400			
Rated torque (N.m)	1.27			
Repetitive positioning accuracy (mm)	±0.08			
Max. stroke (mm)	100-6000mm/ interval 50mm			
Synchronous belt specifications	30×5 (Lead 100mm)			
Reduction ratio	3:1	5:1	7:1	/
Max. speed (mm/s)	1666	1000	714	/
Max. horizontal load (kg)	20	34	40	/
Max. structural load (kg)	40			
Basic weight (0mm stroke kg)	7.6			
Weight increase (Every 100mm stroke kg)	0.8			
Magnetic reed switch	CS1-D-1M Contact type, wire length 1m /CS1-DN-3M Non-contact transistor NPN type, wire length 3m /CS1-DP-3M Non-contact transistor PNP type, wire length 3m			
Photoelectric switch	PM-T45	NPN type wire length is 1M		
	PM-T45-P	PNP type wire length is 1M		

Note:
1、Belt thrust formula
F= (Pw x x1020 x η) / V
F: output thrust, unit is N; Pw: motor power, unit is KW; η: efficiency, generally take 0.85; V: transfer speed, unit is m/s(rated speed)

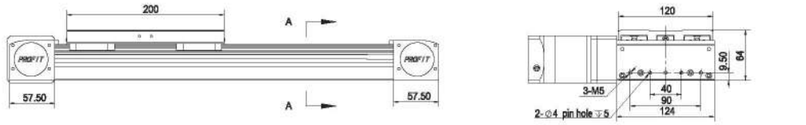
EGC125 Bare cylinder

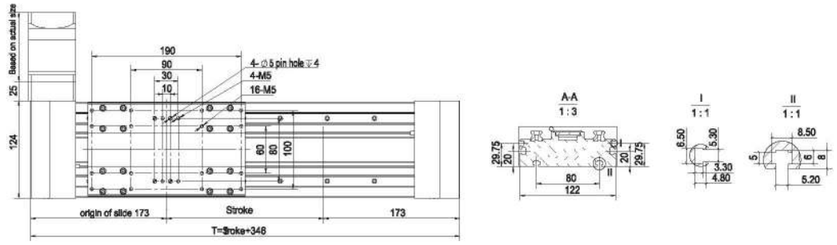
Unit : mm



EGC125-L-D

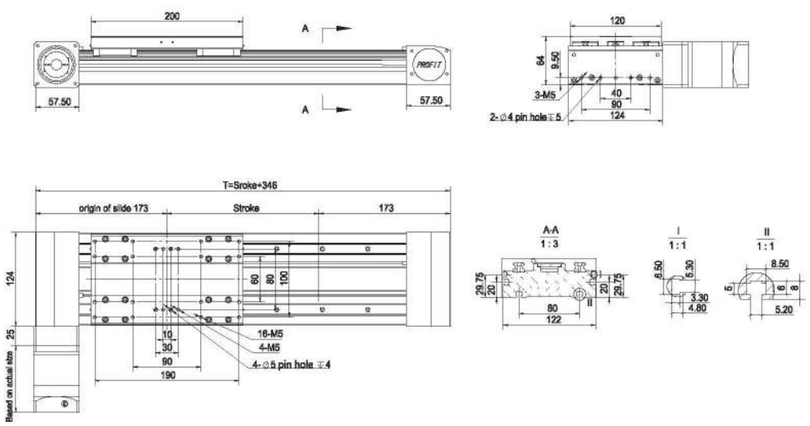
Unit : mm





EGC125-R-D

Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

European synchronous belt module series

EGC160

EG160 - 400 - R - D - K3 - M - 750W O - S 3

Body model	Stroke mm	Direction of output shaft	Motor connection	Ratio	Motor brand	Motor power	Induction switch	Number of switch
EGC 160		L: Left output shaft	D: Direct installation	3	M: Mitsubishi		O: Photoelectric switch	S1: Switch*1
		R: Right output shaft		5	Y: Yaskawa		I: Magnetic reed switch	Sn: Switch*n
		B: Double output shaft		7	T: Delta			无: Blank: No switch
				10	P: Panasonic			
					O: Others			

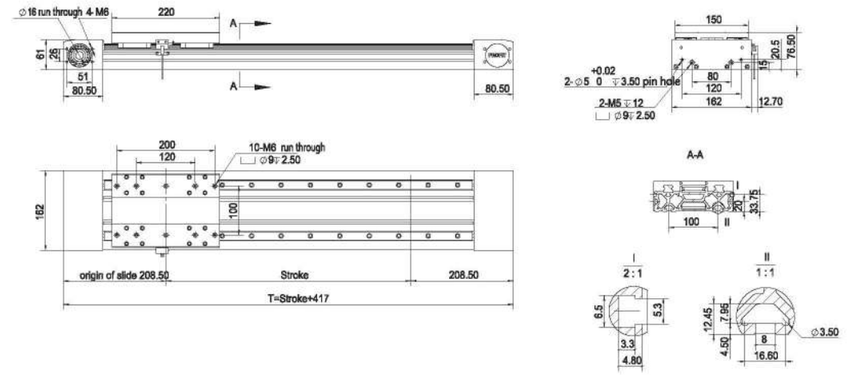
Performance parameter

Standard motor output (W)	750			
Rated torque (N.m)	2.4			
Repetitive positioning accuracy (mm)	±0.08			
Max. stroke (mm)	100-6000mm/ interval 50mm			
Synchronous belt specifications	45×5 (Lead 125mm)			
Reduction ratio	3:1	5:1	7:1	10:1
Max. speed (mm/s)	2080	1250	890	625
Max. horizontal load (kg)	30	50	70	100
Max. structural load (kg)	100			
Basic weight (0mm stroke kg)	10.2			
Weight increase (Every 100mm stroke kg)	1.2			
Magnetic reed switch	CS1-D-1M Contact type, wire length 1m /CS1-DN-3M Non-contact transistor NPN type, wire length 3m /CS1-DP-3M Non-contact transistor PNP type, wire length 3m			
Photoelectric switch	PM-T45	NPN type wire length is 1M		
	PM-T45-P	PNP type wire length is 1M		

Note:
1、Belt thrust formula
F= (Pw x x1020 x η) / V
F: output thrust, unit is N; Pw: motor power, unit is KW; η: efficiency, generally take 0.85; V: transfer speed, unit is m/s(rated speed)

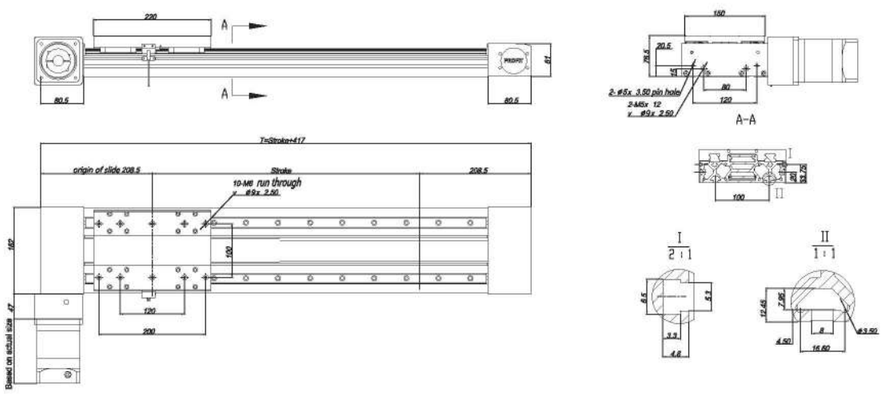
EGC160 Bare cylinder

Unit : mm



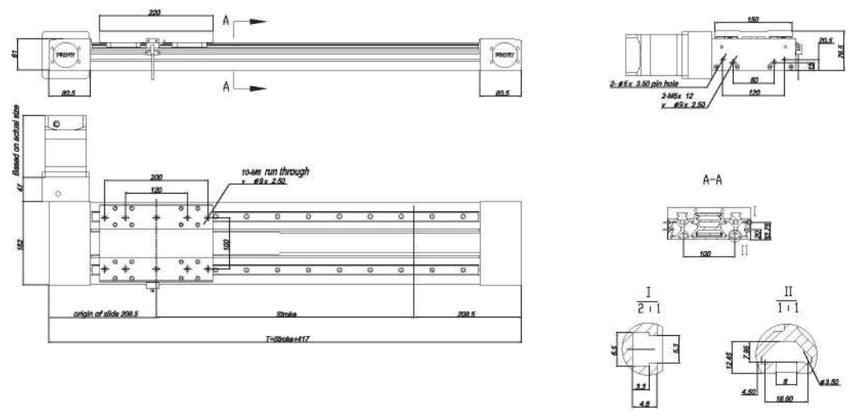
EGC160-R-D

Unit : mm



EGC160-L-D

Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

European synchronous belt module series

EGC220

EG220 - 400 - R - D - K3 - M - 1000W O - S 3

Body model	Stroke mm	Direction of output shaft	Motor connection	Ratio	Motor brand	Motor power	Induction switch	Number of switch
EGC 220		L: Left output shaft	D: Direct installation	3	M: Mitsubishi		O: Photoelectric switch	S1: Switch*1
		R: Right output shaft		5	Y: Yaskawa		I: Magnetic reed switch	Sn: Switch*n
		B: Double output shaft		7	T: Delta			无: Blank: No switch
				10	P: Panasonic			
					O: Others			

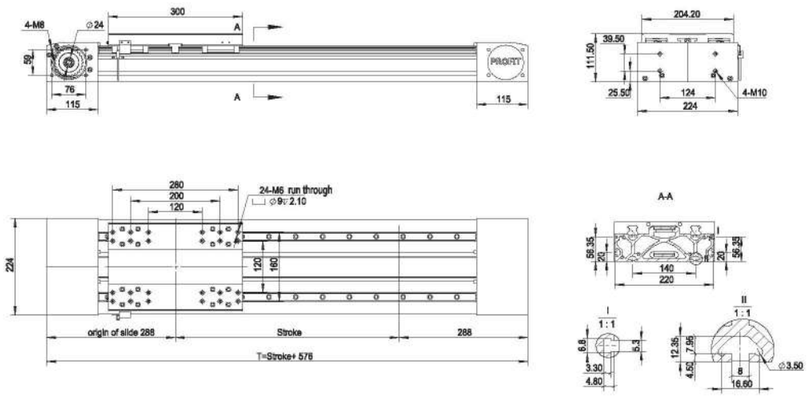
Performance parameter

Standard motor output (W)	1500			
Rated torque (N.m)	7.16			
Repetitive positioning accuracy (mm)	±0.08			
Max. stroke (mm)	100-6000mm/interval 50mm			
Synchronous belt specifications	45×8 (Lead 208mm)			
Reduction ratio	3:1	5:1	7:1	10:1
Max. speed (mm/s)	2300	1380	990	690
Max. horizontal load (kg)	55	90	130	180
Max. structural load (kg)	200			
Basic weight (0mm stroke kg)	25.8			
Weight increase (Every 100mm stroke kg)	2.1			
Magnetic reed switch	CS1-D-1M Contact type, wire length 1m /CS1-DN-3M Non-contact transistor NPN type, wire length 3m /CS1-DP-3M Non-contact transistor PNP type, wire length 3m			
Photoelectric switch	PM-T45	NPN type wire length is 1M		
	PM-T45-P	PNP type wire length is 1M		

Note:
1、Belt thrust formula
F= (Pw x x1020 x η) / V
F: output thrust, unit is N; Pw: motor power, unit is KW; η: efficiency, generally take 0.85; V: transfer speed, unit is m/s(rated speed)

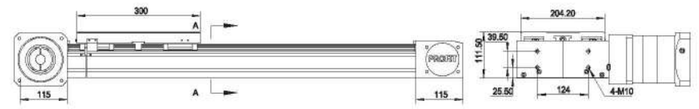
EGC220 Bare cylinder

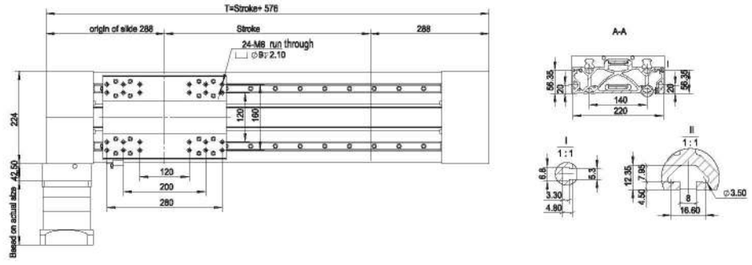
Unit : mm



EGC220-R-D

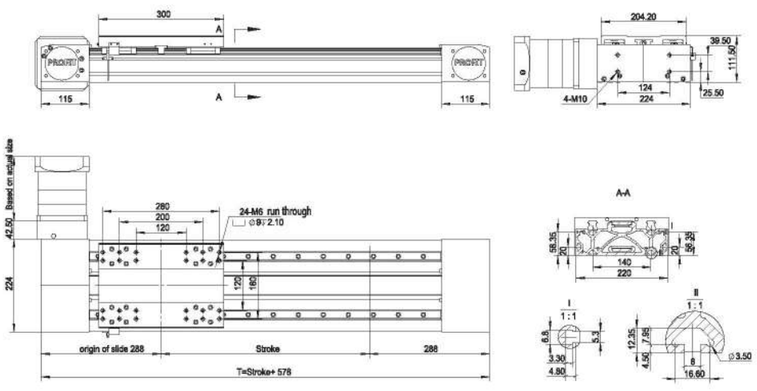
Unit : mm





EGC220-L-D

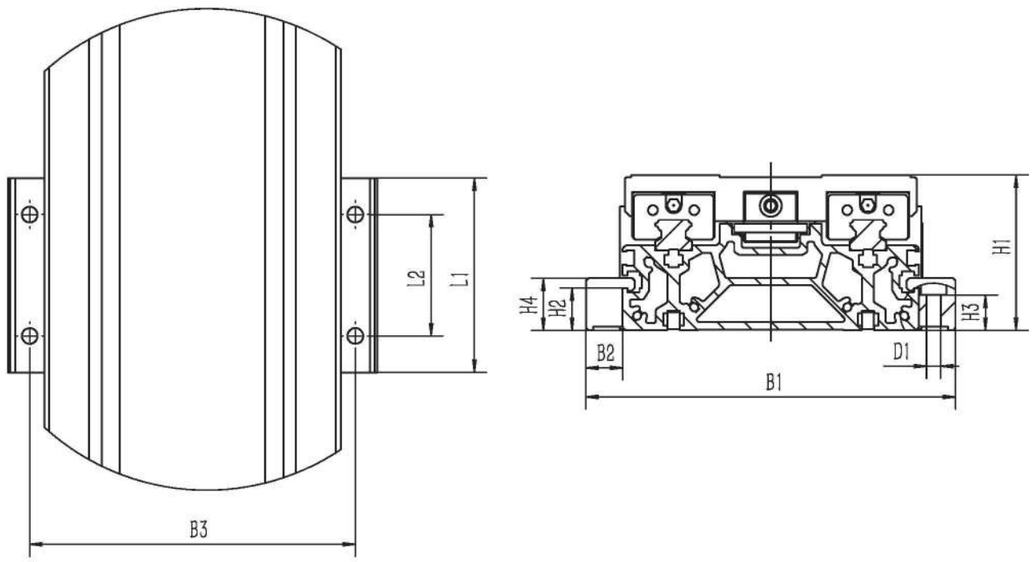
Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

European synchronous belt module series

Fixed briquetting



Model	Application	B1	B2	B3	φD1	H1	H2	H3	H4	L1	L2
YKEGT70	EGC70	97	15	79	6.5	64	17.4	14.5	21.5	80	50
	EGC80	110	15	92	6.5	76.5	17.4	14.5	21.5	80	50
	EGC125	152	15	134	6.5	64	17.4	14.5	21.5	80	50
	EGC160	190	15	172	6.5	76.5	17.4	14.5	21.5	80	50
YKEGT220	EGC120	262	21	238	8.5	111.5	15.9	13.5	21.9	100	70
	EGC220	262	21	238	8.5	111.5	15.9	13.5	21.9	100	70

M European gauge synchronous belt module series

M55

M55 - 400 - R - D - K3 - M 200W - N - S 3

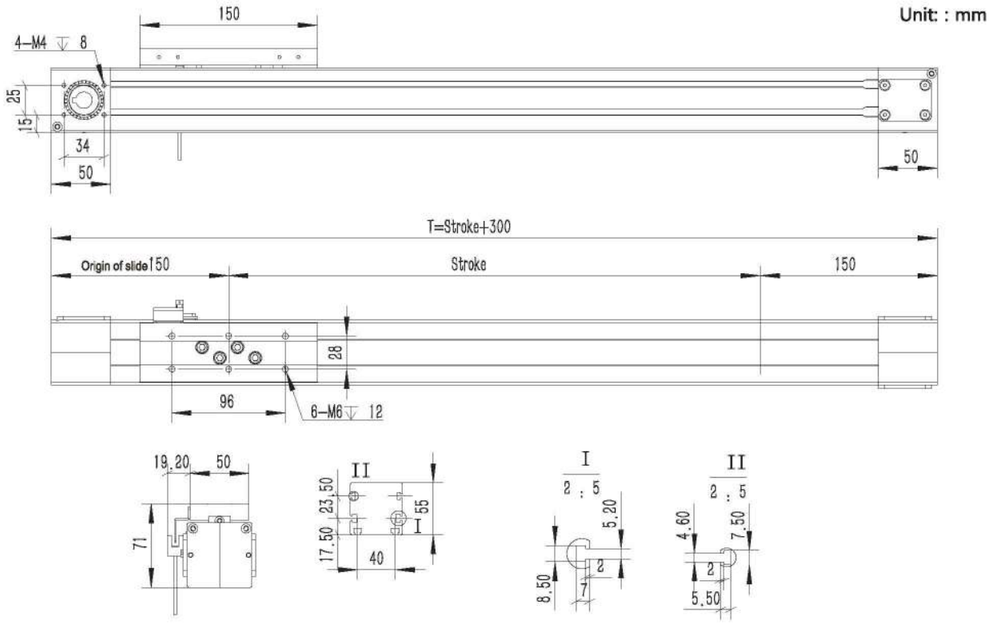
Body model	Stroke mm	Direction of output shaft	Motor connection	Ratio	Motor brand	Motor brand	Photoelectric switch	Number of photoelectric switch
M55		L: Left output shaft	D: Direct installation	3	M: Mitsubishi		N: NPN type	S1: Switch*1
		R: Right output shaft		5	Y: Yaskawa		P: NPN type	Sn: Switch*n
				7	T: Delta		无: Blank:photoelectric switch	
				10	P: Panasonic			
				...	O: Others			

Performance parameter

Standard motor output (W)	200W			400W		
Rated torque (N.m)	0.64			1.3		
Repetitive positioning accuracy (mm)	±0.1					
Rated thrust (N)	45			89		
Max. stroke (mm)	100-3000mm / interval 100mm					
Synchronous belt specifications	25×5 (Lead 150mm)					
Reduction ratio	1:1	3:1	5:1	1:1	3:1	5:1
Max. speed (mm/s)	7500	2500	1500	7500	2500	1500
Max. load (kg)	3	5	8	5	8	12
Basic weight (0mm stroke kg)	3					
Weight increase (Every 100mm stroke kg)	0.45					
Photoelectric switch	PM-T45			NPN type wire length is 1M		
	PM-T45-P			PNP type wire length is 1M		

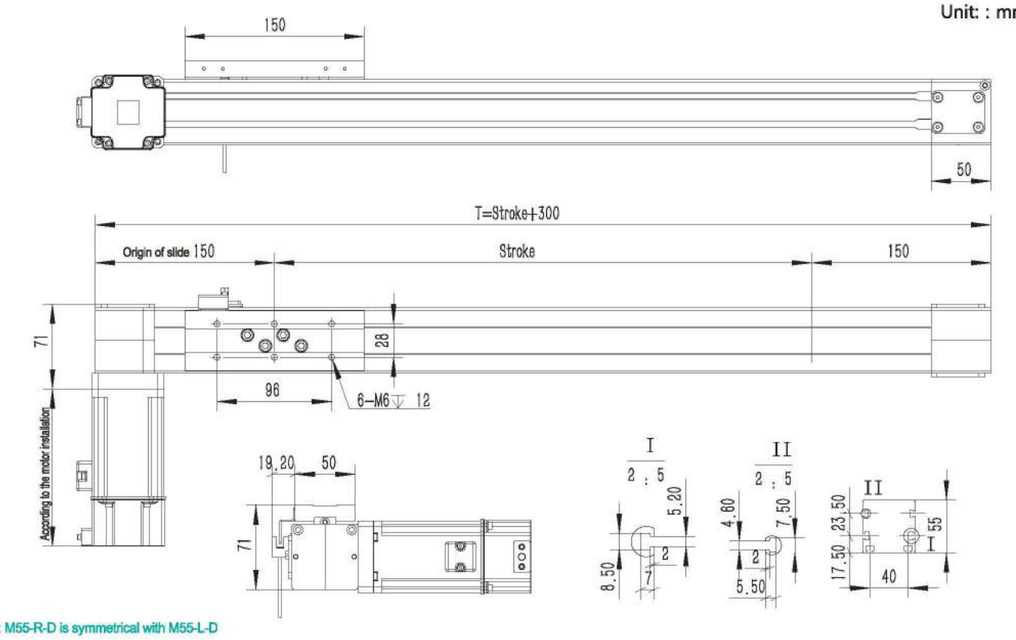
M55 Bare cylinder

Unit: : mm



M55-R-D

Unit: : mm



Note: M55-R-D is symmetrical with M55-L-D

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

M80

M80 - 400 - R - D - K3 - P 750W - N - S 3

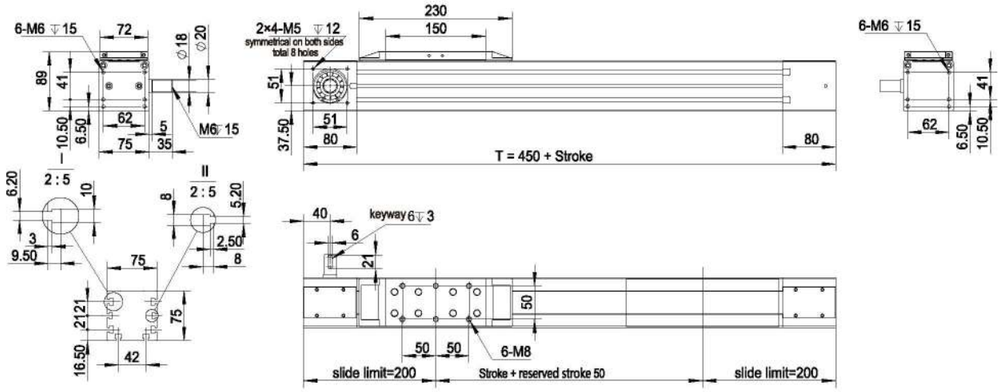
Body model	Stroke mm	Direction of output shaft	Motor connection	Ratio	Motor brand	Motor brand	Photoelectric switch	Number of photoelectric switch
M80		L: Left output shaft	D: Direct installation	3	M: Mitsubishi		N: NPN type	S1: Switch*1
		R: Right output shaft	P: Indirect installation	5	Y: Yaskawa		P: NPN type	Sn: Switch*n
		B: Double output shaft	DP: Motor folded down	7	T: Delta			
		BL: Left side of double output shaft motor	FP: Motor folded forward	10	P: Panasonic			
		BR: Right side of double output shaft motor		...	O: Others			

Performance parameter

Standard motor output (W)		400W				750W			
Rated torque (N.m)		1.3				2.4			
Repetitive positioning accuracy (mm)		±0.1							
Rated thrust (N)		180				340			
Max. stroke (mm)		100-6000mm / interval 100mm							
Synchronous belt specifications		25×5 (Lead 150mm)							
Reduction ratio		3:1	5:1	7:1	10:1	3:1	5:1	7:1	10:1
Max. speed (mm)		2500	1500	1071	750	2500	1500	1071	750
Max. load (kg)	horizontal	18	30	45	60	28	40	53	75
	vertical	5	9	13	17	8	12	16	23
Basic weight (0mm stroke kg)		11.64							
Weight increase (Every 100mm stroke kg)		0.72							
Photoelectric switch		PM-T45				NPN type wire length is 1M			
		PM-T45-P				PNP type wire length is 1M			

M80-L

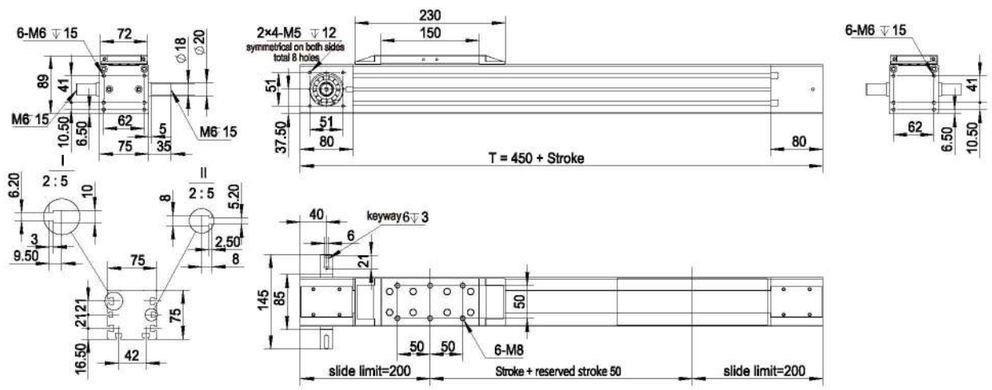
Unit: : mm



Note: M80-R is symmetrical with M80-L

M80-B

Unit: : mm



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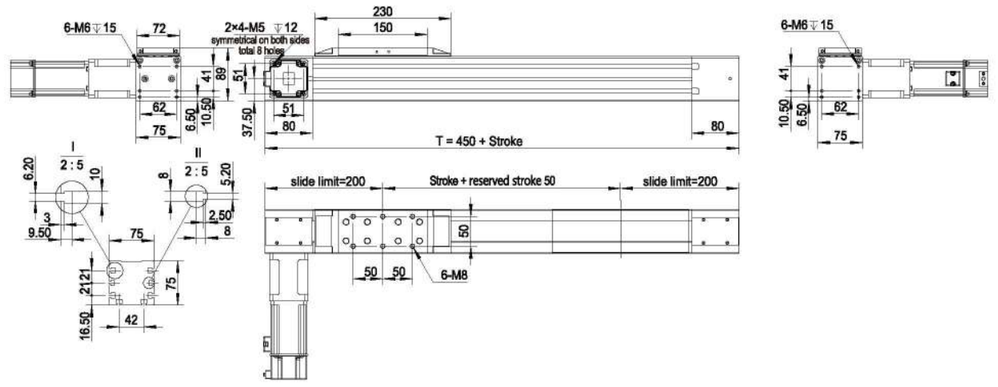
M80-R-D

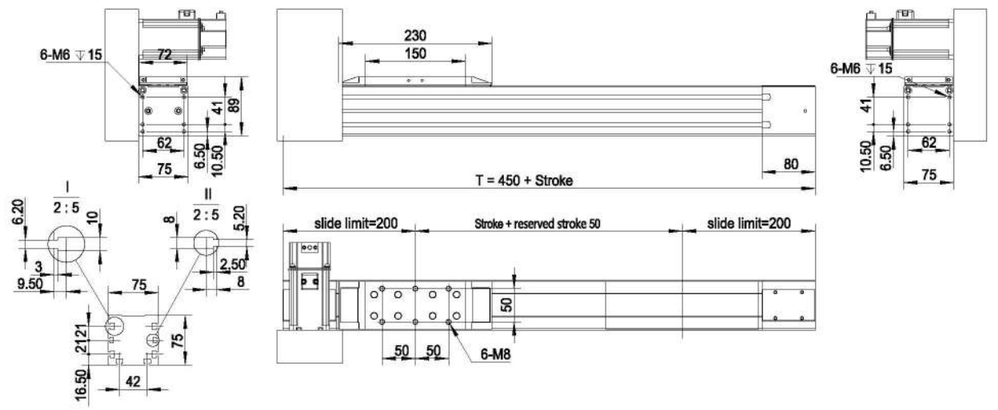
Unit: : mm



Note: M80-L-D is symmetrical with M80-R-D

M80-R-P

Unit: : mm



Note: M80-L-P is symmetrical with M80-R-P

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

M112

M112-400 - R - D - K3 - P 750W - N - S 3

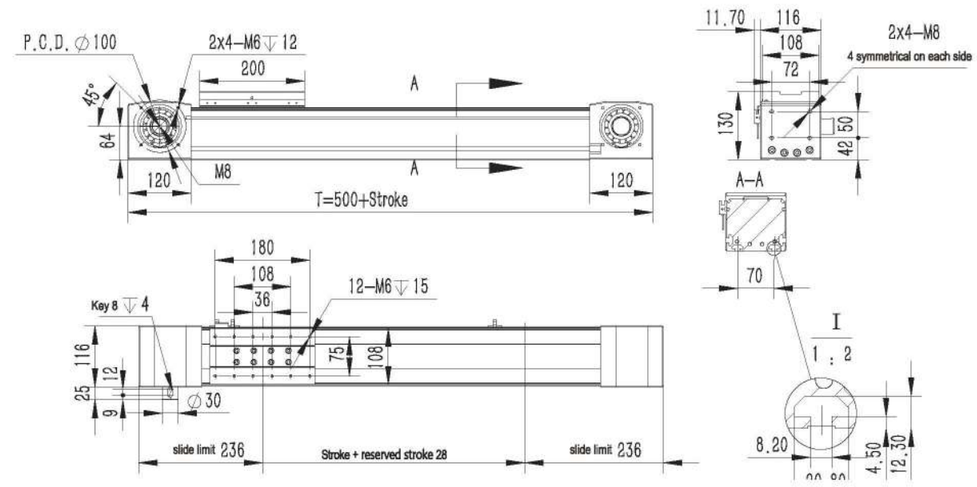
Body model	Stroke mm	Direction of output shaft	Motor connection	Ratio	Motor brand	Motor brand	Photoelectric switch	Number of photoelectric switch
M112		L: Left output shaft	D: Direct installation	3	M: Mitsubishi		N: NPN type	S1: Switch*1
		R: Right output shaft	P: Indirect installation	5	Y: Yaskawa		P: NPN type	Sn: Switch*n
		B: Double output shaft	DP: Motor folded down	7	T: Delta			
		BL: Left side of double output shaft motor	FP: Motor folded forward	10	P: Panasonic			
		BR: Right side of double output shaft motor		...	O: Others			

Performance parameter

Standard motor output (W)		750W			
Rated torque (N.m)		2.4			
Repetitive positioning accuracy (mm)		±0.1			
Rated thrust (N)		765			
Max. stroke (mm)		100-6000mm / interval 100mm			
Synchronous belt specifications		45×5 (Lead 220mm)			
Reduction ratio		7:1	10:1	15:1	20:1
Max. speed (mm)		1571	1100	733	550
Max. load (kg)	horizontal	70	100	150	200
	vertical	15	23	36	50
Basic weight (0mm stroke kg)		19.85			
Weight increase (Every 100mm stroke kg)		0.94			
Photoelectric switch		PM-T45	NPN type wire length is 1M		
		PM-T45-P	PNP type wire length is 1M		

M112-R

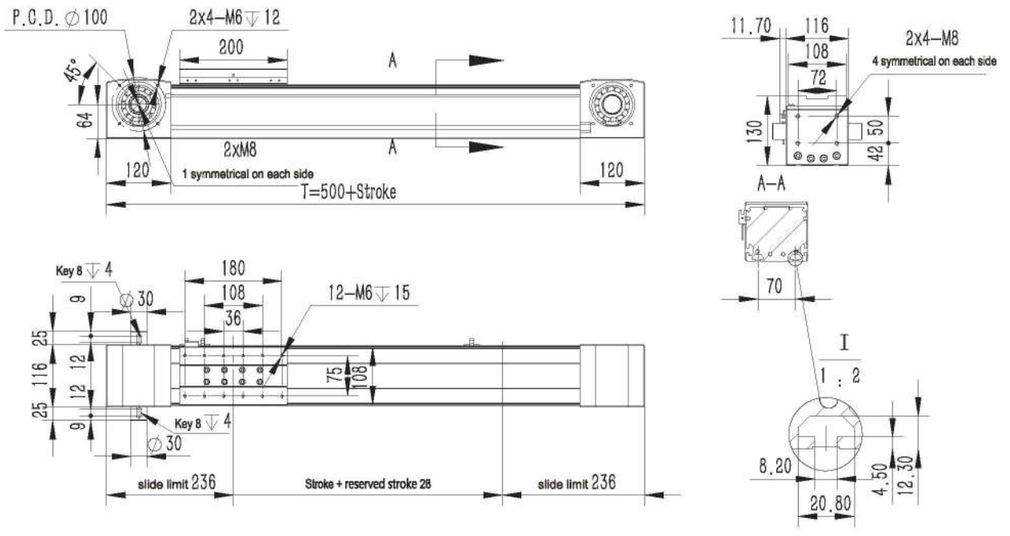
Unit: : mm



Note: M112-L is symmetrical with this drawing

M112-B

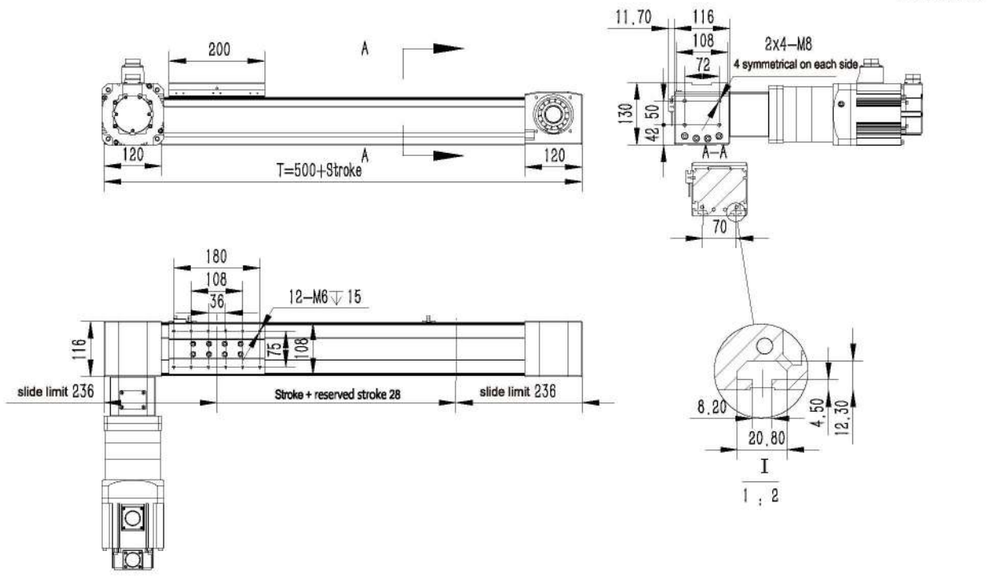
Unit: : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided. The appearance and specifications of the product are subject to change without prior notice.

M112-R-D

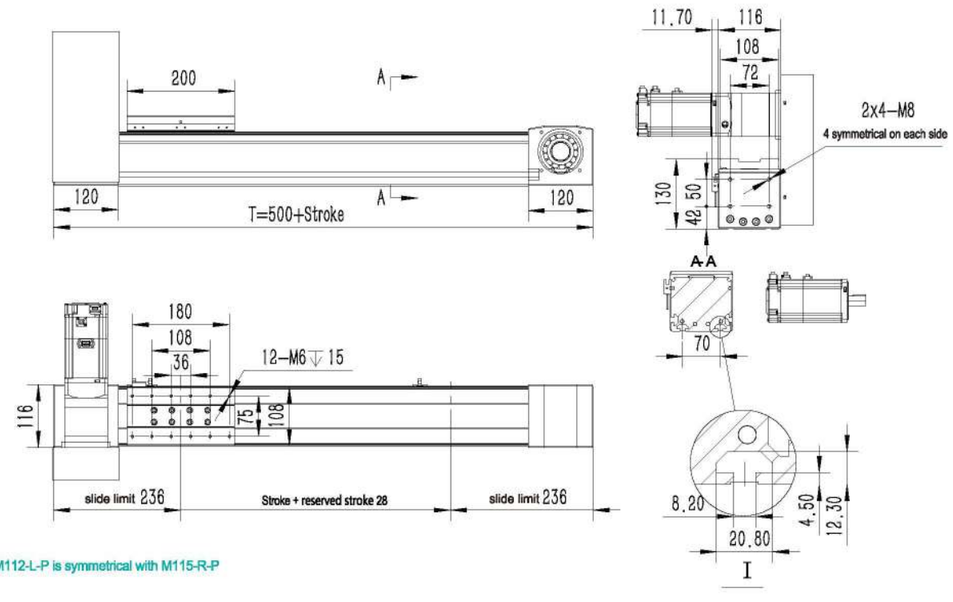
Unit: : mm



Note: M112-L-D is symmetrical with M115-R-D

M112-R-P

Unit: : mm



Note: M112-L-P is symmetrical with M115-R-P

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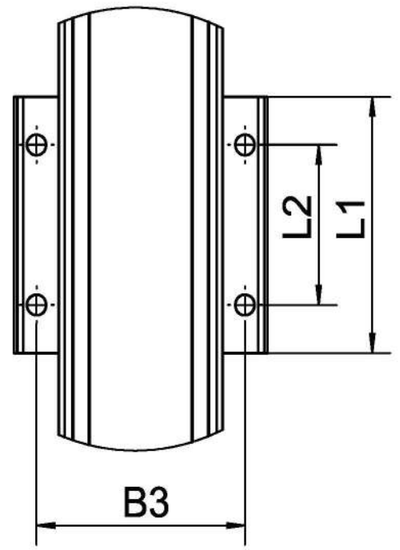
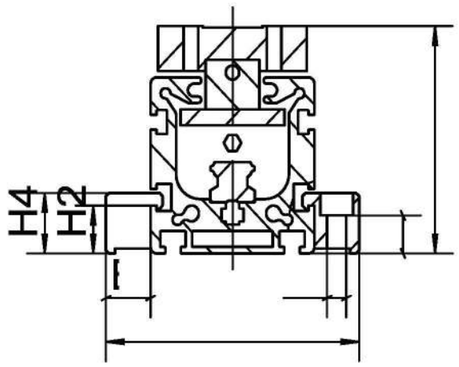
Fixed briquetting

Unit: : mm





Model	Application	B1	B2	B3	φD1	H1	H2	H3	H4	L1	L2
YKM55	M55	85	15	70	6.5	71	14.9	11.9	18.9	80	50
YKM80	M80	105	15	87	6.5	89	13.4	10.9	17.9	80	50
YKM112	M112	154	21	130	8.5	130	16.6	16	23	100	70

MK dust free synchronous belt module series

MK65

MK65 - 2000 - L - M4B - C 4 - 10 - A001

Body model

Stroke
100-6000mm
100 interval

Motor fixed size
M4: servo PCD70-M5-Shaft 14
P4: servo PCD70-M4-Shaft 14
* No indication if there is no brake

Special style

Motor position

L: Motor folded to the left	R: Motor folded to the right
LU: Motor folded to upper left	RU: Motor folded to upper right
LD: Motor folded to down left	RD: Motor folded to down right
LT: Motor folded directly to the left	RT: Motor folded directly to the right
LL: Motor shaft is folded to the left	RR: motor shaft is folded to the right

Origin sensor
Plug-in type
C: Motor side
D: Anti-motor side
No sensor
E : No sensor

Endpoint limit sensor:
Plug-in type
3: 1 pc
4: 2 pcs
No sensor
5: No sensor

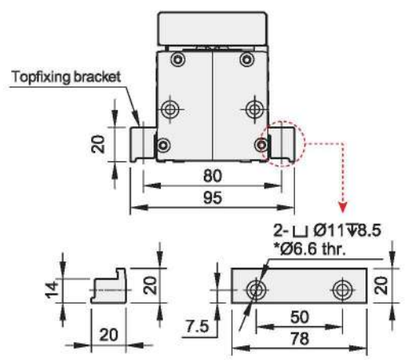
Reduction ratio
3:3 ratio
5:5 ratio
7:7 ratio
10:10 ratio
N: No gearbox
Only LL/RR can choose N

Basic style

			3:1	5:1	7:1	10:1
Specifications	Motor speed (rpm/min)					
	Max. speed (mm/s) *1		1833	1100	785	550
	Max.carry weight (kg)	horizontal use	30	45	55	60
		vertical use *2	9	15	16	17
	Position repetition accuracy (mm)		±0.1			
	Freeze thrust (N)		220			
	Standard stoke (mm) *3		100-6000mm/100 interval100mm Pitch			
Parts	AC servo motor capacity		400			
	Belt width (mm)		30			
	High rigidity linear slide (mm)		W15XH12.5			
	Origin sensor	Plug-in	PM-T45(NPN)			

* 1.Motor acceleration and deceleration set to 0.4 seconds.
* 2.When used vertically, if the belt is broken, the load will be in danger of falling, please pay attention
* 3.When the slide table is not equipped with a gearbox, the lead is 110

Installation Diagram & Installation Dimensions



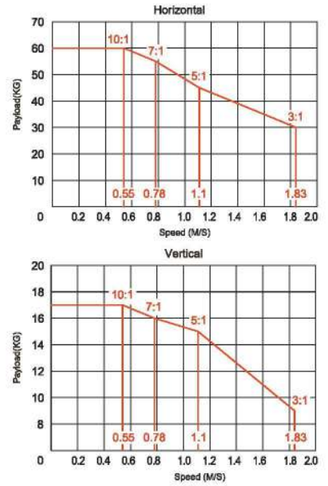
* The locking type fixing plate is not a standard product, if you need it, please purchase it separately

Number of slide fixing nuts

Number of M5 rear nuts for each stroke			
Valid stroke	Number	Valid stroke	Number
100-500	4	2600-3000	14
600-1000	6	3100-3500	16
1100-1500	8	3600-4000	18
1600-2000	10	4100-4500	20
2100-2500	12	4600-5000	22

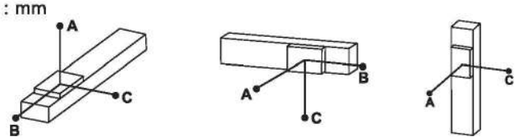
* The standard fixing method of the sliding table is the down-lock type, which is fixed with the M5 rear-loading nut.

Speed-load curve



Allowable load torque table

Unit : mm



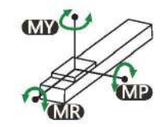
Horizontal installation		A	B	C
3:1	10KG	950	250	42
	20KG	420	105	18
	30KG	250	55	10
5:1	25KG	950	140	24
	35KG	625	90	15
	45KG	450	55	10
7:1	28KG	1300	145	25
	40KG	850	90	15
	55KG	550	50	10
10:1	30KG	1850	145	25
	45KG	1250	90	15
	60KG	800	50	10

Side hanging installation		A	B	C
3:1	10KG	42	250	950
	20KG	19	110	450
	30KG	10	60	260
5:1	25KG	25	140	950
	35KG	15	90	600
	45KG	10	60	450
7:1	28KG	25	145	1300
	40KG	15	90	850
	55KG	10	60	850
10:1	30KG	25	140	1950
	45KG	15	90	1150
	60KG	10	60	800

Vertical installation		A	C
3:1	3KG	900	900
	6KG	450	450
	9KG	300	300
5:1	5KG	900	900
	10KG	450	450
	15KG	300	300
7:1	6KG	900	900
	12KG	450	450
	16KG	300	300
10:1	6KG	900	900
	13KG	450	450
	17KG	330	300

Static allowable load inertia

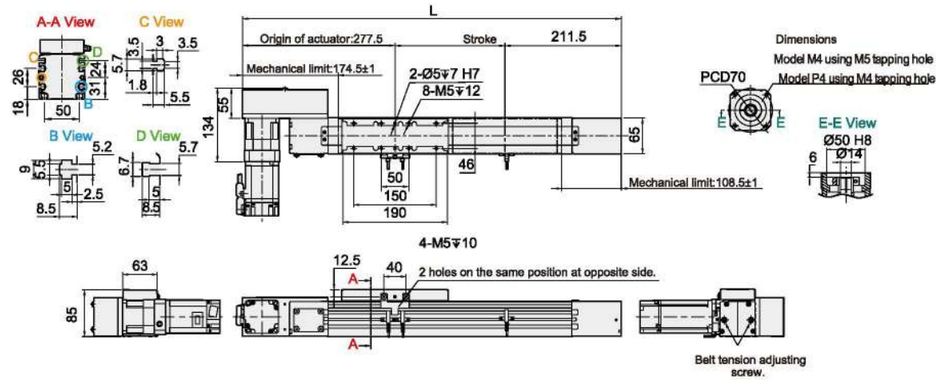
Unit : mm



MY	338
MP	338
MR	59

* The data represented by the moment, representing the center of gravity
* Under normal use in line with catalog specifications, the guaranteed life is 10,000 kilometers
* The total length is more than 1000mm, and the steel has the risk of deformation, so avoid wall-mounted use
* Standard specifications cannot be applied for upside-down use. If you have any needs, please consult our salesman.

Motor folded to the left

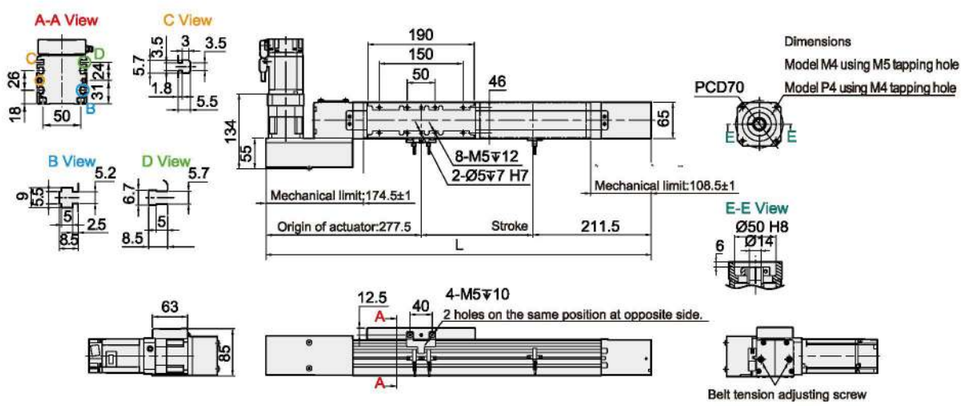


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	589	689	789	889	989	1089	1189	1289	1389	1489	1589	1689	1789	1889	1989	2089	2189	2289	2389	2489	2589	2689	2789	2889	2989
KG	7.87	8.43	8.99	9.55	10.11	10.67	11.23	11.79	12.35	12.91	13.47	14.03	14.59	15.15	15.71	16.27	16.83	17.39	17.95	18.51	19.07	19.63	20.19	20.75	21.31

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3089	3189	3289	3389	3489	2589	3689	3789	3889	3989	4089	4189	4289	4389	4489	4589	4689	4789	4889	4989	5089	5189	5289	5389	5489
KG	21.87	22.43	22.99	23.55	24.11	24.67	25.23	25.79	26.35	26.91	27.47	28.03	28.59	29.15	29.71	30.27	30.83	31.39	31.95	32.51	33.07	33.63	34.19	34.75	35.31

Motor folded to the right

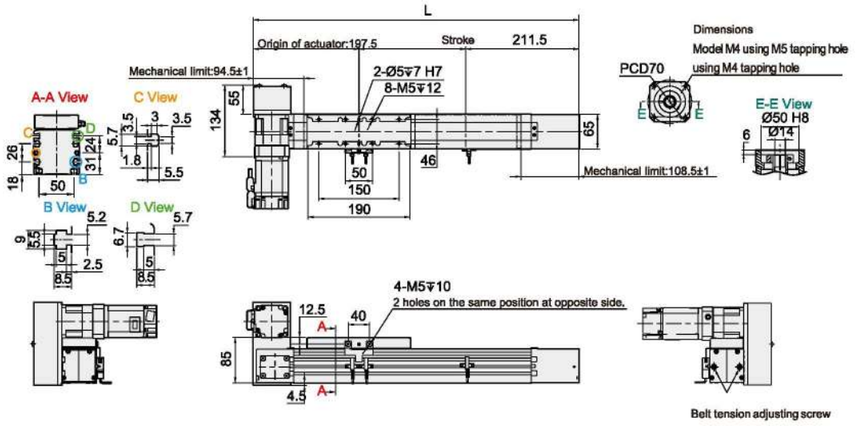


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	589	689	789	889	989	1089	1189	1289	1389	1489	1589	1689	1789	1889	1989	2089	2189	2289	2389	2489	2589	2689	2789	2889	2989
KG	7.87	8.43	8.99	9.55	10.11	10.67	11.23	11.79	12.35	12.91	13.47	14.03	14.59	15.15	15.71	16.27	16.83	17.39	17.95	18.51	19.07	19.63	20.19	20.75	21.31

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3089	3189	3289	3389	3489	2589	3689	3789	3889	3989	4089	4189	4289	4389	4489	4589	4689	4789	4889	4989	5089	5189	5289	5389	5489
KG	21.87	22.43	22.99	23.55	24.11	24.67	25.23	25.79	26.35	26.91	27.47	28.03	28.59	29.15	29.71	30.27	30.83	31.39	31.95	32.51	33.07	33.63	34.19	34.75	35.31

Motor folded to upper left

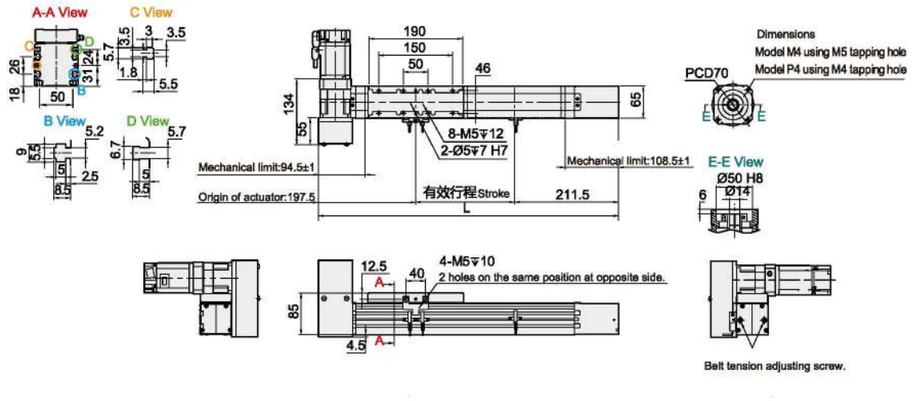


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	509	609	709	809	909	1009	1109	1209	1309	1409	1509	1609	1709	1809	1909	2009	2109	2209	2309	2409	2509	2609	2709	2809	2909
KG	7.87	8.43	8.99	9.55	10.11	10.67	11.23	11.79	12.35	12.91	13.47	14.03	14.59	15.15	15.71	16.27	16.83	17.39	17.95	18.51	19.07	19.63	20.19	20.75	21.31

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3009	3109	3209	3309	3409	3509	3609	3709	3809	3909	4009	4109	4209	4309	4409	4509	4609	4709	4809	4909	5009	5109	5209	5309	5409
KG	21.87	22.43	22.99	23.55	24.11	24.67	25.23	25.79	26.35	26.91	27.47	28.03	28.59	29.15	29.71	30.27	30.83	31.39	31.95	32.51	33.07	33.63	34.19	34.75	35.31

Motor folded to upper right

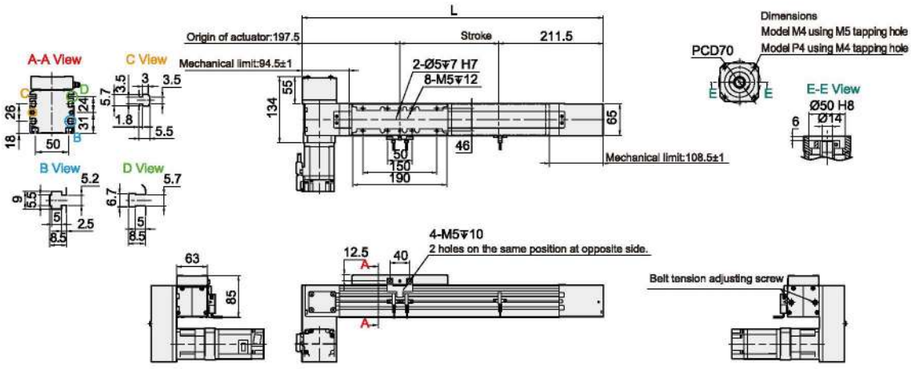


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	509	609	709	809	909	1009	1109	1209	1309	1409	1509	1609	1709	1809	1909	2009	2109	2209	2309	2409	2509	2609	2709	2809	2909
KG	7.87	8.43	8.99	9.55	10.11	10.67	11.23	11.79	12.35	12.91	13.47	14.03	14.59	15.15	15.71	16.27	16.83	17.39	17.95	18.51	19.07	19.63	20.19	20.75	21.31

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3009	3109	3209	3309	3409	3509	3609	3709	3809	3909	4009	4109	4209	4309	4409	4509	4609	4709	4809	4909	5009	5109	5209	5309	5409
KG	21.87	22.43	22.99	23.55	24.11	24.67	25.23	25.79	26.35	26.91	27.47	28.03	28.59	29.15	29.71	30.27	30.83	31.39	31.95	32.51	33.07	33.63	34.19	34.75	35.31

Motor folded to down left

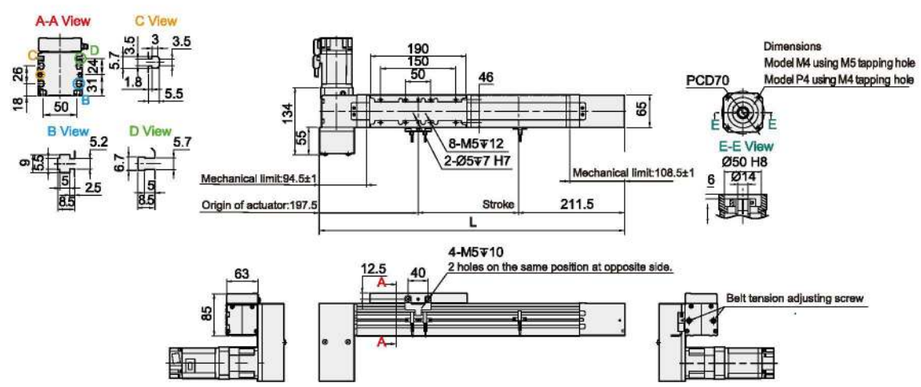


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	509	609	709	809	909	1009	1109	1209	1309	1409	1509	1609	1709	1809	1909	2009	2109	2209	2309	2409	2509	2609	2709	2809	2909
KG	7.87	8.43	8.99	9.55	10.11	10.67	11.23	11.79	12.35	12.91	13.47	14.03	14.59	15.15	15.71	16.27	16.83	17.39	17.95	18.51	19.07	19.63	20.19	20.75	21.31

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3009	3109	3209	3309	3409	3509	3609	3709	3809	3909	4009	4109	4209	4309	4409	4509	4609	4709	4809	4909	5009	5109	5209	5309	5409
KG	21.87	22.43	22.99	23.55	24.11	24.67	25.23	25.79	26.35	26.91	27.47	28.03	28.59	29.15	29.71	30.27	30.83	31.39	31.95	32.51	33.07	33.63	34.19	34.75	35.31

Motor folded to down right



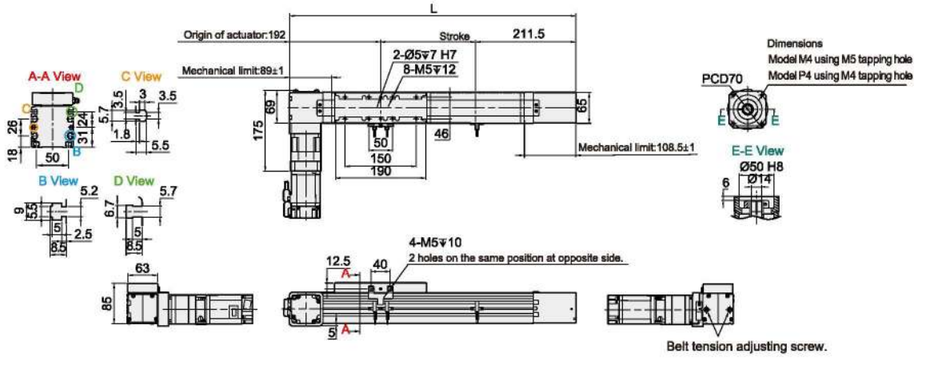
Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	509	609	709	809	909	1009	1109	1209	1309	1409	1509	1609	1709	1809	1909	2009	2109	2209	2309	2409	2509	2609	2709	2809	2909
KG	7.87	8.43	8.99	9.55	10.11	10.67	11.23	11.79	12.35	12.91	13.47	14.03	14.59	15.15	15.71	16.27	16.83	17.39	17.95	18.51	19.07	19.63	20.19	20.75	21.31

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3009	3109	3209	3309	3409	3509	3609	3709	3809	3909	4009	4109	4209	4309	4409	4509	4609	4709	4809	4909	5009	5109	5209	5309	5409
KG	21.87	22.43	22.99	23.55	24.11	24.67	25.23	25.79	26.35	26.91	27.47	28.03	28.59	29.15	29.71	30.27	30.83	31.39	31.95	32.51	33.07	33.63	34.19	34.75	35.31

Dust free synchronous belt module series

Motor folded directly to the left

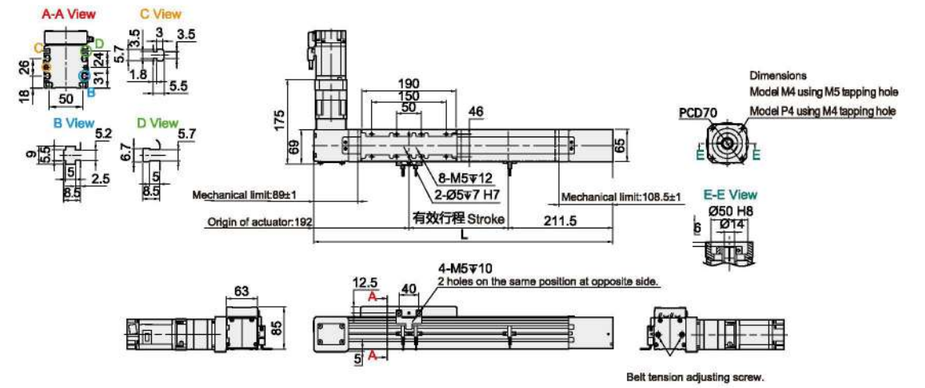


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	503.5	603.5	703.5	803.5	903.5	1003.5	1103.5	1203.5	1303.5	1403.5	1503.5	1603.5	1703.5	1803.5	1903.5	2003.5	2103.5	2203.5	2303.5	2403.5	2503.5	2603.5	2703.5	2803.5	2903.5
KG	6.87	7.39	7.91	8.43	8.95	9.47	9.99	10.51	11.03	11.55	12.07	12.59	13.11	13.63	14.15	14.67	15.19	15.71	16.23	16.75	17.27	17.79	18.31	18.83	19.35

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3003.5	3103.5	3203.5	3303.5	3403.5	3503.5	3603.5	3703.5	3803.5	3903.5	4003.5	4103.5	4203.5	4303.5	4403.5	4503.5	4603.5	4703.5	4803.5	4903.5	5003.5	5103.5	5203.5	5303.5	5403.5
KG	19.87	20.39	20.91	21.43	21.95	22.47	22.99	23.51	24.03	24.55	25.07	25.59	26.11	26.63	27.15	27.67	28.19	28.71	29.23	29.75	30.27	30.79	31.31	31.83	32.25

Motor folded directly to the right

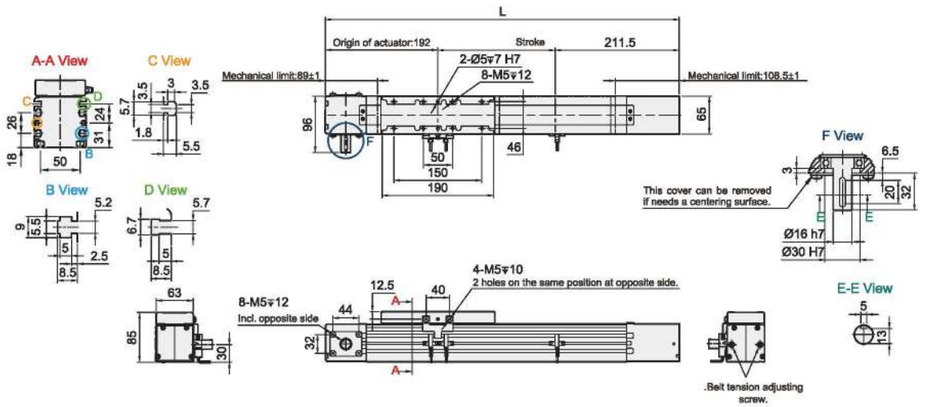


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	503.5	603.5	703.5	803.5	903.5	1003.5	1103.5	1203.5	1303.5	1403.5	1503.5	1603.5	1703.5	1803.5	1903.5	2003.5	2103.5	2203.5	2303.5	2403.5	2503.5	2603.5	2703.5	2803.5	2903.5
KG	6.87	7.39	7.91	8.43	8.95	9.47	9.99	10.51	11.03	11.55	12.07	12.59	13.11	13.63	14.15	14.67	15.19	15.71	16.23	16.75	17.27	17.79	18.31	18.83	19.35

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3003.5	3103.5	3203.5	3303.5	3403.5	3503.5	3603.5	3703.5	3803.5	3903.5	4003.5	4103.5	4203.5	4303.5	4403.5	4503.5	4603.5	4703.5	4803.5	4903.5	5003.5	5103.5	5203.5	5303.5	5403.5
KG	19.87	20.39	20.91	21.43	21.95	22.47	22.99	23.51	24.03	24.55	25.07	25.59	26.11	26.63	27.15	27.67	28.19	28.71	29.23	29.75	30.27	30.79	31.31	31.83	32.25

Motor shaft is folded to the left

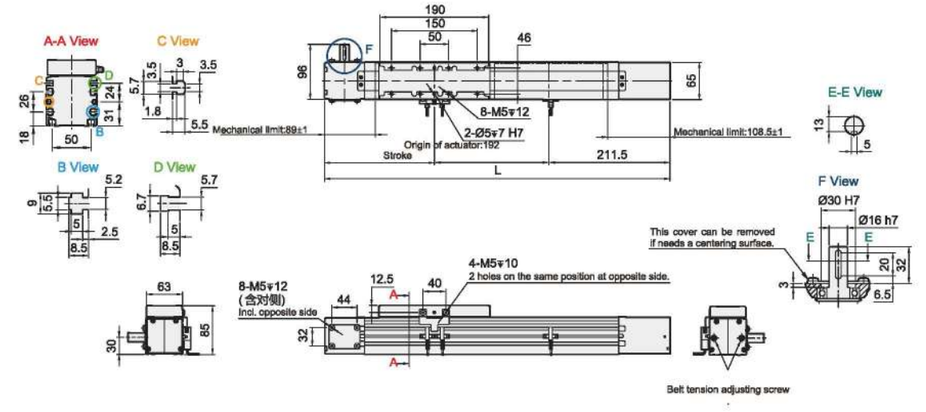


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	503.5	603.5	703.5	803.5	903.5	1003.5	1103.5	1203.5	1303.5	1403.5	1503.5	1603.5	1703.5	1803.5	1903.5	2003.5	2103.5	2203.5	2303.5	2403.5	2503.5	2603.5	2703.5	2803.5	2903.5
KG	4.36	4.9	5.44	5.98	6.52	7.06	7.6	8.14	8.68	9.22	9.76	10.3	10.84	11.38	11.92	12.46	13	13.54	14.08	14.62	15.16	15.7	16.24	16.78	17.32

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3003.5	3103.5	3203.5	3303.5	3403.5	3503.5	3603.5	3703.5	3803.5	3903.5	4003.5	4103.5	4203.5	4303.5	4403.5	4503.5	4603.5	4703.5	4803.5	4903.5	5003.5	5103.5	5203.5	5303.5	5403.4
KG	17.86	18.4	18.94	19.48	20.02	20.56	21.1	21.64	22.18	22.72	23.26	23.8	24.34	24.88	25.42	25.96	26.5	27.04	27.58	28.12	28.66	29.2	29.74	30.28	30.82

Motor shaft is folded to the right



Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	503.5	603.5	703.5	803.5	903.5	1003.5	1103.5	1203.5	1303.5	1403.5	1503.5	1603.5	1703.5	1803.5	1903.5	2003.5	2103.5	2203.5	2303.5	2403.5	2503.5	2603.5	2703.5	2803.5	2903.5
KG	4.36	4.9	5.44	5.98	6.52	7.06	7.6	8.14	8.68	9.22	9.76	10.3	10.84	11.38	11.92	12.46	13	13.54	14.08	14.62	15.16	15.7	16.24	16.78	17.32

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3003.5	3103.5	3203.5	3303.5	3403.5	3503.5	3603.5	3703.5	3803.5	3903.5	4003.5	4103.5	4203.5	4303.5	4403.5	4503.5	4603.5	4703.5	4803.5	4903.5	5003.5	5103.5	5203.5	5303.5	5403.4
KG	17.86	18.4	18.94	19.48	20.02	20.56	21.1	21.64	22.18	22.72	23.26	23.8	24.34	24.88	25.42	25.96	26.5	27.04	27.58	28.12	28.66	29.2	29.74	30.28	30.82

MK85

MK85 - 2000 - L - M7B - C 4 - 10 - A001

Body model

Stroke
100-6000mm
100 interval

Motor fixed size
M4: servo PCD70-M5-Shaft 14
P4: servo PCD70-M4-Shaft 14
* No indication if there is no brake

Motor position

L: Motor folded to the left	R: Motor folded to the right
LU: Motor folded to upper left	RU: Motor folded to upper right
LD: Motor folded to down left	RD: Motor folded to down right
LT: Motor folded directly to the left	RT: Motor folded directly to the right
LL: Motor shaft is folded to the left	RR: motor shaft is folded to the right

Origin sensor
Plug-in type
C: Motor side
D: Anti-motor side
No sensor
E: No sensor

Endpoint limit sensor:
Plug-in type
3: 1 pc
4: 2 pcs
No sensor
5: No sensor

Reduction ratio
3:3 ratio
5:5 ratio
7:7 ratio
10:10 ratio
N: No gearbox
Only LL/RR can choose N

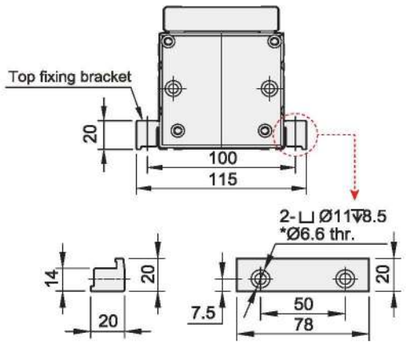
Special style

Basic style

			5:1	7:1	10:1
Specifications	Motor speed (rpm/min)				
	Max. speed (mm/s) *1		2000	1428	1000
	Max.carry weight (kg)	horizontal use	40	60	100
		vertical use *2	14	21	24
	Position repetition accuracy (mm)		±0.1		
	Freeze thrust (N)		340		
	Standard stoke (mm) *3		100-6000mm/100 interval 100mm Pitch		
Parts	AC servo motor capacity		750		
	Belt width (mm)		45		
	High rigidity linear slide (mm)		W20XH15		
	Origin sensor	Plug-in	PM-T45(NPN)		

* 1.Motor acceleration and deceleration set to 0.4 seconds.
* 2.When used vertically, if the belt is broken, the load will be in danger of falling, please pay attention
* 3.When the slide table is not equipped with a gearbox, the lead is 110

Installation Diagram & Installation Dimensions



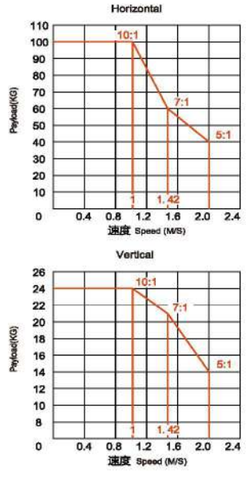
* The locking type fixing plate is not a standard product, if you need it, please purchase it separately

Number of slide fixing nuts

Number of M5 rear nuts for each stroke			
Valid stroke	Number	Valid stroke	Number
100-500	4	2600-3000	14
600-1000	6	3100-3500	16
1100-1500	8	3600-4000	18
1600-2000	10	4100-4500	20
2100-2500	12	4600-5000	22

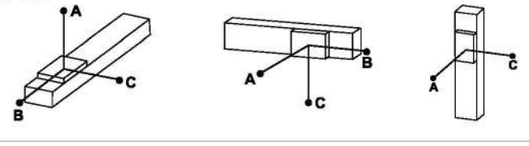
* The standard fixing method of the sliding table is the down-lock type, which is fixed with the M5 rear-loading nut.

Speed-load curve



Allowable load torque table

Unit : mm



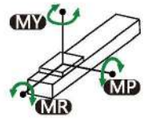
Horizontal installation		A	B	C
5:1	20KG	900	280	40
	30KG	550	160	22
	40KG	400	110	15
7:1	40KG	750	160	22
	50KG	575	115	16
	60KG	420	85	12
10:1	60KG	900	140	20
	80KG	700	105	15
	100KG	550	75	10

Side hanging installation		A	B	C
5:1	20KG	40	280	900
	30KG	22	160	600
	40KG	15	110	400
7:1	40KG	22	160	750
	50KG	15	110	575
	60KG	12	80	450
10:1	60KG	20	140	1950
	80KG	15	105	750
	100KG	10	75	600

Vertical installation		A	C
5:1	5KG	1250	1250
	10KG	650	650
	14KG	450	450
7:1	15KG	600	600
	18KG	480	480
	21KG	400	400
10:1	18KG	550	550
	20KG	450	450
	24KG	330	350

Static allowable load inertia

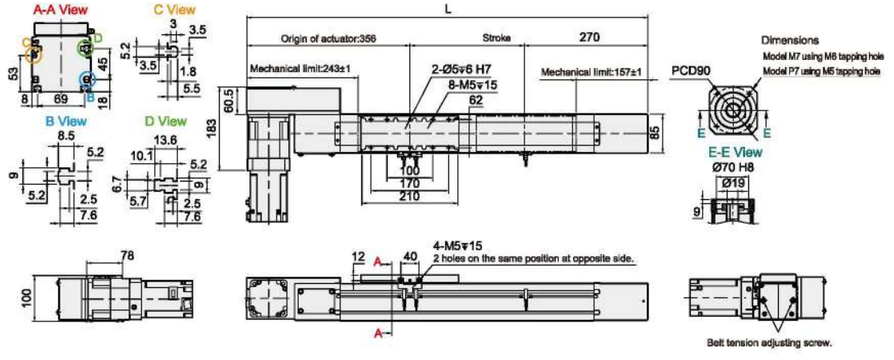
Unit : mm



MY	868
MP	868
MR	123

* The data represented by the moment, representing the center of gravity
* Under normal use in line with catalog specifications, the guaranteed life is 10,000 kilometers
* The total length is more than 1000mm, and the steel has the risk of deformation, so avoid wall-mounted use
* Standard specifications cannot be applied for upside-down use. If you have any needs, please consult our salesman.

Motor folded to the left

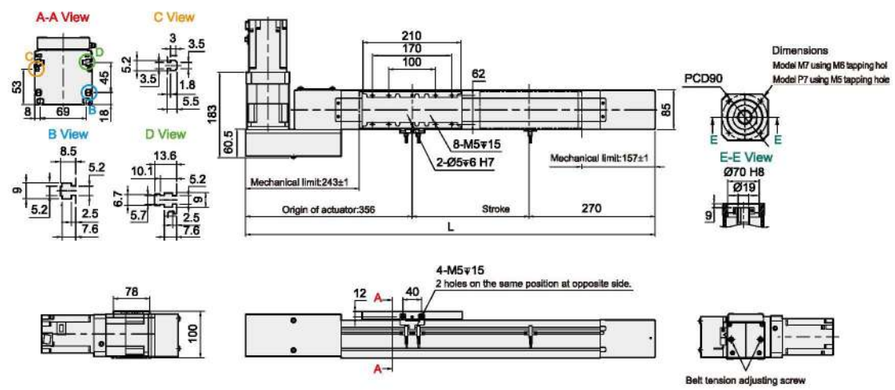


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	726	826	926	1026	1126	1226	1326	1426	1526	1626	1726	1826	1926	2026	2126	2226	2326	2426	2526	2626	2726	2826	2926	3026	3126
KG	14.81	15.65	16.49	17.33	18.17	19.01	19.85	20.69	21.53	22.37	23.21	24.05	24.89	25.73	26.57	27.41	28.25	29.09	29.93	30.77	31.61	32.45	33.29	34.13	34.97

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3226	3326	3426	3526	3626	3726	3826	3926	4026	4126	4226	4326	4426	4526	4626	4726	4826	4926	5026	5126	5226	5326	5426	5526	5626
KG	35.81	36.65	37.49	38.33	39.17	40.01	40.85	41.69	42.53	43.37	44.21	45.05	45.89	46.73	47.57	48.41	49.25	50.09	50.93	51.77	52.61	53.45	54.29	55.13	55.97

Motor folded to the right

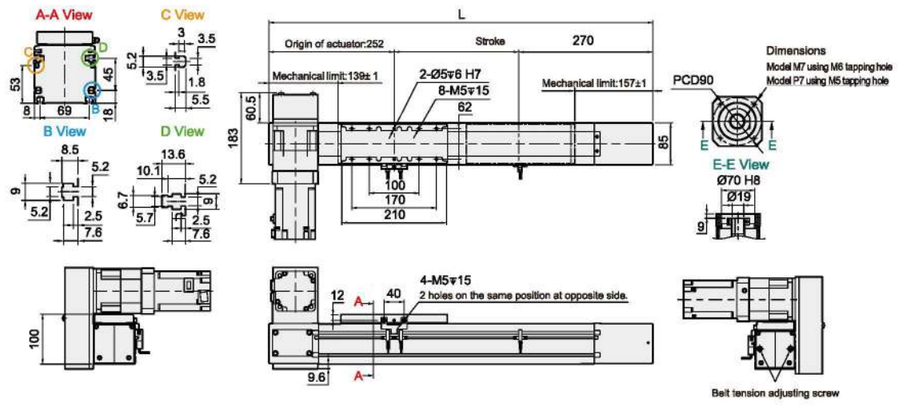


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	726	826	926	1026	1126	1226	1326	1426	1526	1626	1726	1826	1926	2026	2126	2226	2326	2426	2526	2626	2726	2826	2926	3026	3126
KG	14.81	15.65	16.49	17.33	18.17	19.01	19.85	20.69	21.53	22.37	23.21	24.05	24.89	25.73	26.57	27.41	28.25	29.09	29.93	30.77	31.61	32.45	33.29	34.13	34.97

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3226	3326	3426	3526	3626	3726	3826	3926	4026	4126	4226	4326	4426	4526	4626	4726	4826	4926	5026	5126	5226	5326	5426	5526	5626
KG	35.81	36.65	37.49	38.33	39.17	40.01	40.85	41.69	42.53	43.37	44.21	45.05	45.89	46.73	47.57	48.41	49.25	50.09	50.93	51.77	52.61	53.45	54.29	55.13	55.97

Motor folded to upper left

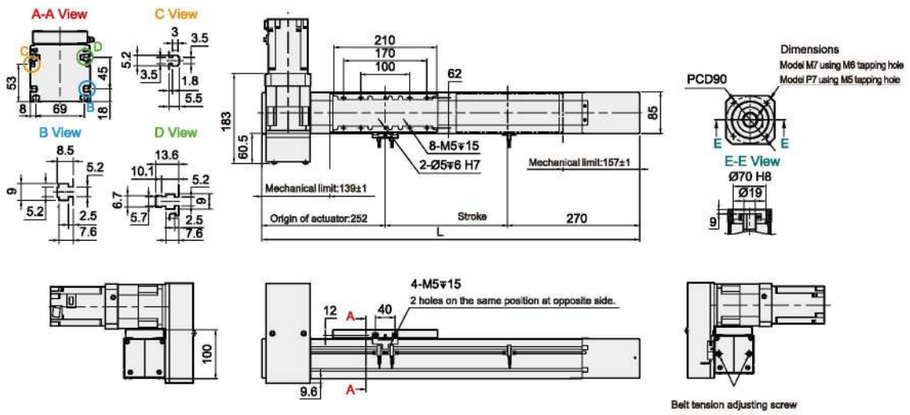


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	622	722	822	922	1022	1122	1222	1322	1422	1522	1622	1722	1822	1922	2022	2122	2222	2322	2422	2522	2622	2722	2822	2922	3022
KG	14.81	15.65	16.49	17.33	18.17	19.01	19.85	20.69	21.53	22.37	23.21	24.05	24.89	25.73	26.57	27.41	28.25	29.09	29.93	30.77	31.61	32.45	33.29	34.13	34.97

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3122	3222	3322	3422	3522	3622	3722	3822	3922	4022	4122	4222	4322	4422	4522	4622	4722	4822	4922	5022	5122	5222	5322	5422	5522
KG	35.81	36.65	37.49	38.33	39.17	40.01	40.85	41.69	42.53	43.37	44.21	45.05	45.89	46.73	47.57	48.41	49.25	50.09	50.93	51.77	51.61	53.45	54.29	551.13	55.97

Motor folded to upper right

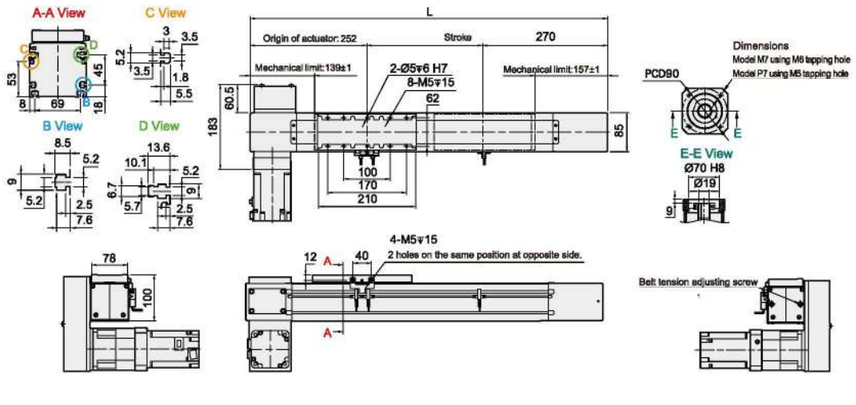


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	622	722	822	922	1022	1122	1222	1322	1422	1522	1622	1722	1822	1922	2022	2122	2222	2322	2422	2522	2622	2722	2822	2922	3022
KG	14.81	15.65	16.49	17.33	18.17	19.01	19.85	20.69	21.53	22.37	23.21	24.05	24.89	25.73	26.57	27.41	28.25	29.09	29.93	30.77	31.61	32.45	33.29	34.13	34.97

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3122	3222	3322	3422	3522	3622	3722	3822	3922	4022	4122	4222	4322	4422	4522	4622	4722	4822	4922	5022	5122	5222	5322	5422	5522
KG	35.81	36.65	37.49	38.33	39.17	40.01	40.85	41.69	42.53	43.37	44.21	45.05	45.89	46.73	47.57	48.41	49.25	50.09	50.93	51.77	51.61	53.45	54.29	551.13	55.97

Motor folded to down left

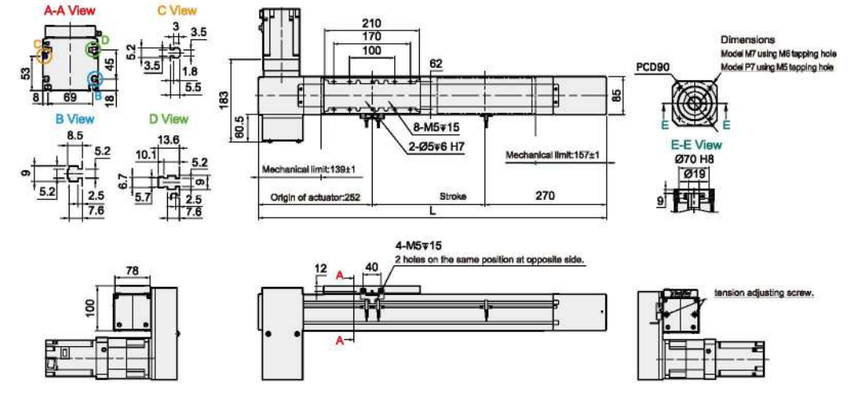


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	622	722	822	922	1022	1122	1222	1322	1422	1522	1622	1722	1822	1922	2022	2122	2222	2322	2422	2522	2622	2722	2822	2922	3022
KG	14.81	15.65	16.49	17.33	18.17	19.01	19.85	20.69	21.53	22.37	23.21	24.05	24.89	25.73	26.57	27.41	28.25	29.09	29.93	30.77	31.61	32.45	33.29	34.13	34.97

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3122	3222	3322	3422	3522	3622	3722	3822	3922	4022	4122	4222	4322	4422	4522	4622	4722	4822	4922	5022	5122	5222	5322	5422	5522
KG	35.81	36.65	37.49	38.33	39.17	40.01	40.85	41.69	42.53	43.37	44.21	45.05	45.89	46.73	47.57	48.41	49.25	50.09	50.93	51.77	51.61	53.45	54.29	551.13	55.97

Motor folded to down right

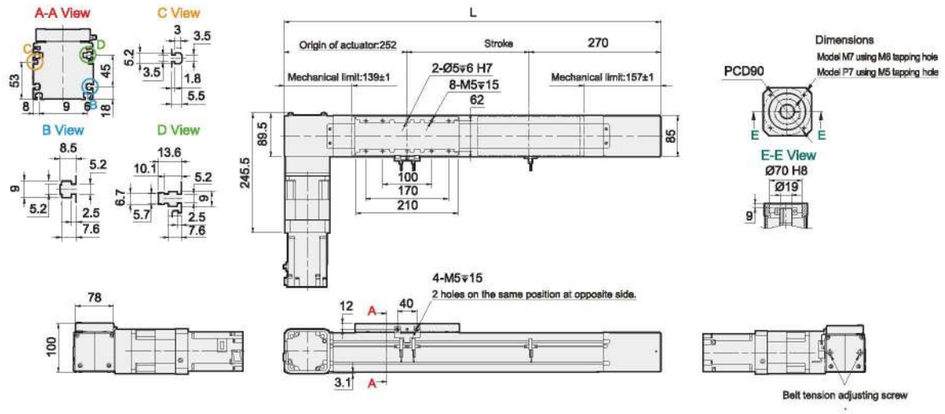


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	622	722	822	922	1022	1122	1222	1322	1422	1522	1622	1722	1822	1922	2022	2122	2222	2322	2422	2522	2622	2722	2822	2922	3022
KG	14.81	15.65	16.49	17.33	18.17	19.01	19.85	20.69	21.53	22.37	23.21	24.05	24.89	25.73	26.57	27.41	28.25	29.09	29.93	30.77	31.61	32.45	33.29	34.13	34.97

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3122	3222	3322	3422	3522	3622	3722	3822	3922	4022	4122	4222	4322	4422	4522	4622	4722	4822	4922	5022	5122	5222	5322	5422	5522
KG	35.81	36.65	37.49	38.33	39.17	40.01	40.85	41.69	42.53	43.37	44.21	45.05	45.89	46.73	47.57	48.41	49.25	50.09	50.93	51.77	51.61	53.45	54.29	551.13	55.97

Motor folded directly to the left

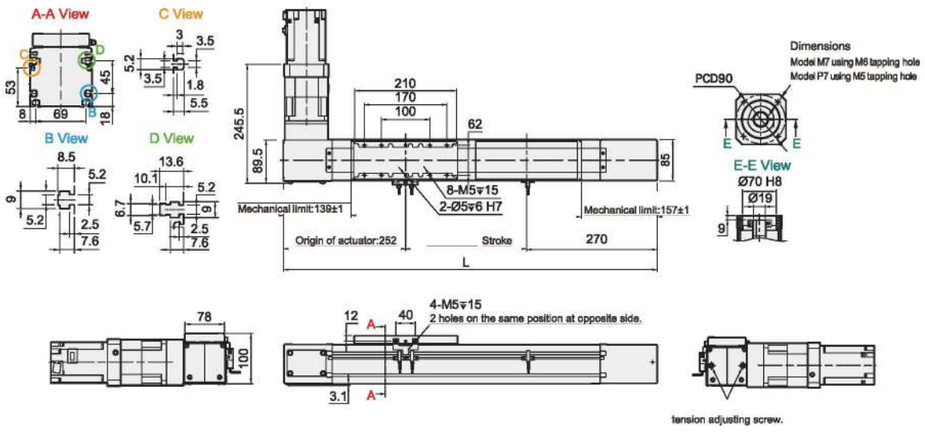


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	622	722	822	922	1022	1122	1222	1322	1422	1522	1622	1722	1822	1922	2022	2122	2222	2322	2422	2522	2622	2722	2822	2922	3022
KG	13.06	13.88	14.7	15.52	16.34	17.16	17.98	18.8	19.62	20.44	21.26	22.08	22.9	23.72	24.54	25.36	26.18	27	27.82	28.64	29.46	30.28	31.1	31.92	32.7

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3122	3222	3322	3422	3522	3622	3722	3822	3922	4022	4122	4222	4322	4422	4522	4622	4722	4822	4922	5022	5122	5222	5322	5422	5522
KG	33.56	34.38	35.2	36.02	36.84	37.66	38.48	39.3	40.12	40.94	41.76	42.58	43.4	44.22	45.04	45.86	46.68	47.5	48.32	49.14	49.96	50.78	51.6	52.42	53.24

Motor folded directly to the right

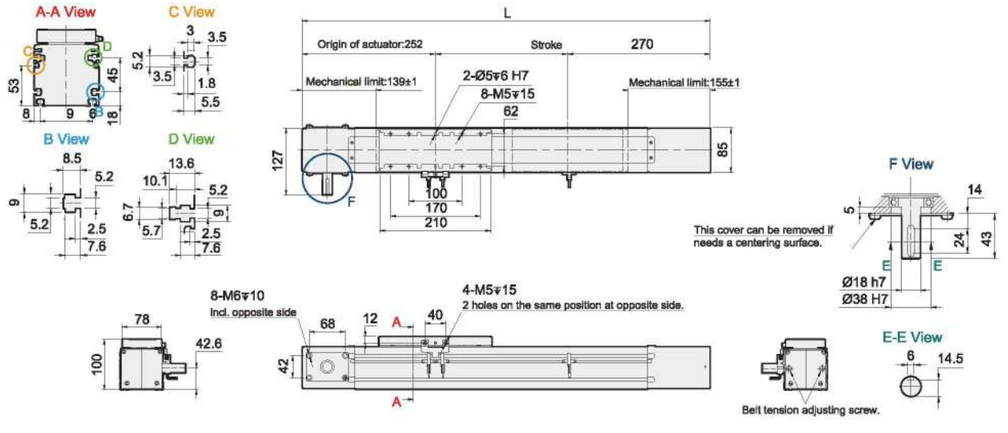


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	622	722	822	922	1022	1122	1222	1322	1422	1522	1622	1722	1822	1922	2022	2122	2222	2322	2422	2522	2622	2722	2822	2922	3022
KG	13.06	13.88	14.7	15.52	16.34	17.16	17.98	18.8	19.62	20.44	21.26	22.08	22.9	23.72	24.54	25.36	26.18	27	27.82	28.64	29.46	30.28	31.1	31.92	32.7

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3122	3222	3322	3422	3522	3622	3722	3822	3922	4022	4122	4222	4322	4422	4522	4622	4722	4822	4922	5022	5122	5222	5322	5422	5522
KG	33.56	34.38	35.2	36.02	36.84	37.66	38.48	39.3	40.12	40.94	41.76	42.58	43.4	44.22	45.04	45.86	46.68	47.5	48.32	49.14	49.96	50.78	51.6	52.42	53.24

Motor shaft is folded to the left

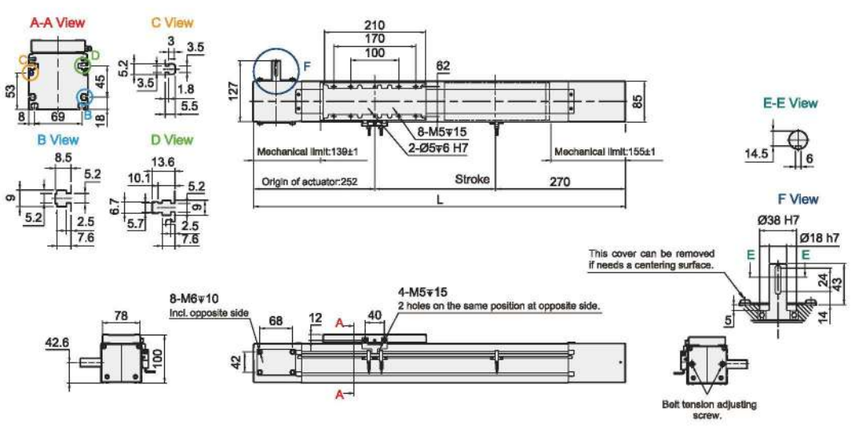


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	622	722	822	922	1022	1122	1222	1322	1422	1522	1622	1722	1822	1922	2022	2122	2222	2322	2422	2522	2622	2722	2822	2922	3022
KG	10.55	11.37	12.19	13.01	13.83	14.65	15.47	16.29	17.11	17.93	18.75	19.57	20.39	21.21	22.03	22.85	23.67	24.49	25.31	26.13	26.95	27.77	28.59	29.41	30.23

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3122	3222	3322	3422	3522	3622	3722	3822	3922	4022	4122	4222	4322	4422	4522	4622	4722	4822	4922	5022	5122	5222	5322	5422	5522
KG	31.05	31.87	32.69	33.51	34.33	35.15	35.97	36.79	37.61	38.43	39.25	40.07	40.89	41.71	42.53	43.35	44.17	44.99	45.81	46.63	47.45	48.27	49.09	49.91	50.73

Motor shaft is folded to the right



Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	622	722	822	922	1022	1122	1222	1322	1422	1522	1622	1722	1822	1922	2022	2122	2222	2322	2422	2522	2622	2722	2822	2922	3022
KG	10.55	11.37	12.19	13.01	13.83	14.65	15.47	16.29	17.11	17.93	18.75	19.57	20.39	21.21	22.03	22.85	23.67	24.49	25.31	26.13	26.95	27.77	28.59	29.41	30.23

Stroke	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000
L	3122	3222	3322	3422	3522	3622	3722	3822	3922	4022	4122	4222	4322	4422	4522	4622	4722	4822	4922	5022	5122	5222	5322	5422	5522
KG	31.05	31.87	32.69	33.51	34.33	35.15	35.97	36.79	37.61	38.43	39.25	40.07	40.89	41.71	42.53	43.35	44.17	44.99	45.81	46.63	47.45	48.27	49.09	49.91	50.73

MK110

MK110 - 2000 - L - M7B - C 4 - 10 - A001

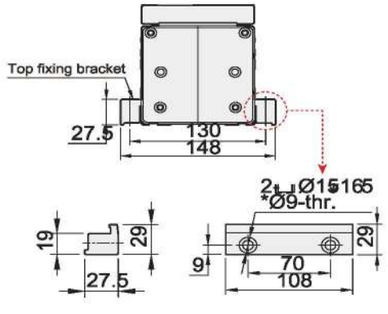
- **Body model**
- **Stroke**: 100-6000mm, 100 interval
- **Motor fixed size**: M4: servo PCD70-M5-Shaft 14; P4: servo PCD70-M4-Shaft 14; * No indication if there is no brake
- **Special style**
- **Motor position**: L: Motor folded to the left; LU: Motor folded to upper left; LD: Motor folded to down left; LT: Motor folded directly to the left; LL: Motor shaft is folded to the left; R: Motor folded to the right; RU: Motor folded to upper right; RD: Motor folded to down right; RT: Motor folded directly to the right; RR: motor shaft is folded to the right
- **Origin sensor**: Plug-in type; C: Motor side; D: Anti-motor side; No sensor; E : No sensor
- **Endpoint limit sensor:** Plug-in type; 3: 1 pc; 4: 2 pcs; No sensor; 5: No sensor
- **Reduction ratio**: 3:3 ratio; 5:5 ratio; 7:7 ratio; 10:10 ratio; N: No gearbox; Only LL/RR can choose N

Basic style

Specifications	Motor speed (rpm/min)		10:1	15:1	20:1
	Max. speed (mm/s) *1		1240	826	620
	Max.carry weight (kg)	horizontal use	100	150	200
		vertical use *2	23	36	50
	Position repetition accuracy (mm)		±0.1		
	Freeze thrust (N)		765		
	Standard stoke (mm) *3		100-6000mm/100 interval 100mm Pitch		
Parts	AC servo motor capacity		750		
	Belt width (mm)		45		
	High rigidity linear slide (mm)		W23XH18		
	Origin sensor	Plug-in	PM-T45(NPN)		

* 1.Motor acceleration and deceleration set to 0.4 seconds.
* 2.When used vertically, if the belt is broken, the load will be in danger of falling, please pay attention
* 3.When the slide table is not equipped with a gearbox, the lead is 110

Installation Diagram & Installation Dimensions



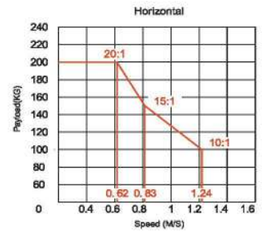
* The locking type fixing plate is not a standard product, if you need it, please purchase it separately

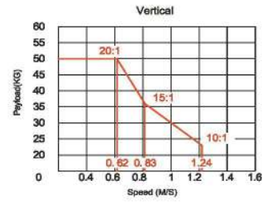
Number of slide fixing nuts

Number of M6 rear nuts for each stroke			
Valid stroke	Number	Valid stroke	Number
100-500	4	2600-3000	14
600-1000	6	3100-3500	16
1100-1500	8	3600-4000	18
1600-2000	10	4100-4500	20
2100-2500	12	4600-5000	22

* The standard fixing method of the sliding table is the down-lock type, which is fixed with the M6 rear-loading nut.

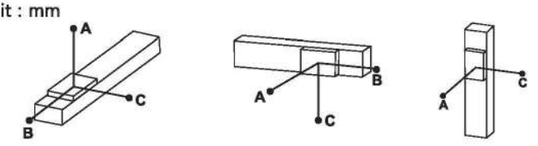
Speed-load curve





Allowable load torque table

Unit : mm



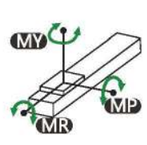
Horizontal installation		A	B	C
10:1	60KG	1110	195	25
	80KG	750	126	16
	100KG	550	85	11
15:1	90KG	1400	160	20
	120KG	940	100	13
	150KG	650	63	8
20:1	120KG	1400	115	15
	160KG	900	65	8
	200KG	550	35	5

Side hanging installation		A	B	C
10:1	20KG	25	195	1110
	30KG	16	126	750
	40KG	11	85	550
15:1	40KG	20	160	1400
	50KG	13	100	940
	60KG	8	63	650
20:1	60KG	15	115	1400
	80KG	8	65	900
	100KG	5	35	550

Vertical installation		A	C
10:1	12KG	1300	1300
	18KG	870	870
	23KG	680	680
15:1	14KG	1480	1480
	25KG	830	830
	36KG	575	575
20:1	30KG	750	750
	40KG	560	560
	50KG	450	450

Static allowable load inertia

Unit : mm

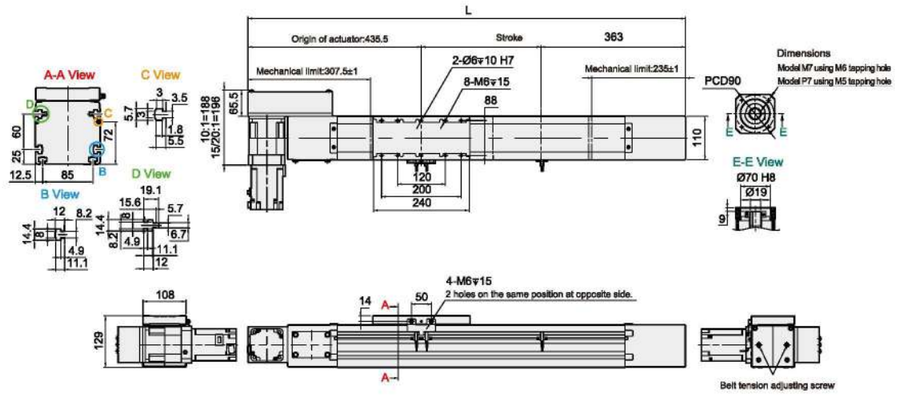


MY	1479
MP	1479
MR	190

* The data represented by the moment, representing the center of gravity
* Under normal use in line with catalog specifications, the guaranteed life is 10,000 kilometers
* The total length is more than 1000mm, and the steel has the risk of deformation, so avoid wall-mounted use
* Standard specifications cannot be applied for upside-down use. If you have any needs, please consult our salesman.

Dust free synchronous belt module series

Motor folded to the left-

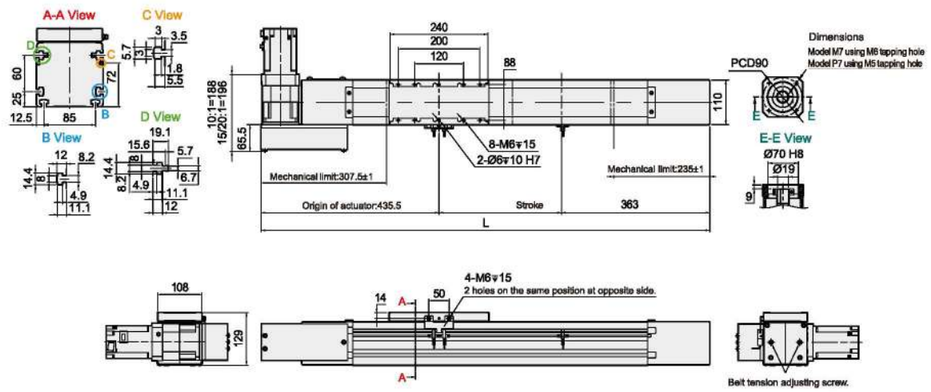


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
L	898.5	998.5	1098.5	1198.5	1298.5	1398.5	1498.5	1598.5	1698.5	1798.5	1898.5	1998.5	2098.5	2198.5	2298.5	2398.5	2498.5	2598.5	2698.5	2798.5	2898.5	2998.5	3098.5	3198.5
KG	24.09	25.33	26.57	27.81	29.05	30.29	31.53	32.77	34.01	35.25	36.49	37.73	38.97	40.21	41.45	42.69	43.93	45.17	46.41	47.65	48.89	50.13	51.37	52.61

Stroke	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800
L	3298.5	3398.5	3498.5	3598.5	3698.5	3798.5	3898.5	3998.5	4098.5	4198.5	4298.5	4398.5	4498.5	4598.5	4698.5	4798.5	4898.5	4998.5	5098.5	5198.5	5298.5	5398.5	5498.5	5598.5
KG	53.85	55.09	56.33	57.57	58.81	60.05	61.29	62.53	63.77	65.01	66.25	67.49	68.73	69.97	71.21	72.45	73.69	74.93	76.17	77.41	78.65	79.89	81.13	82.37

Motor folded to the right

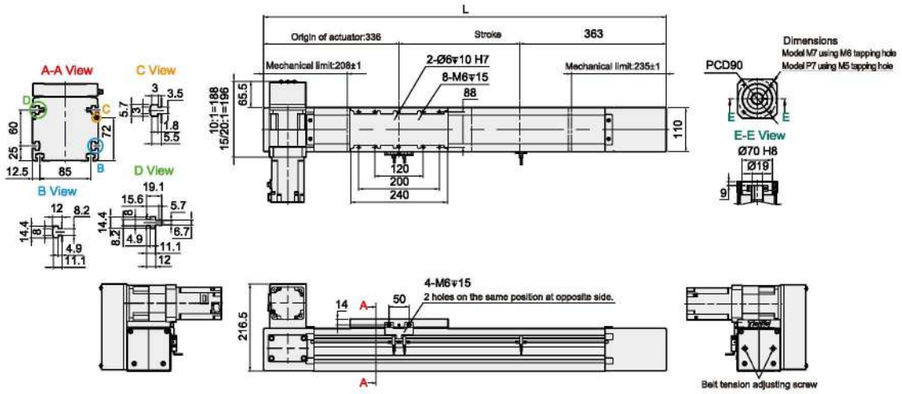


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
L	898.5	998.5	1098.5	1198.5	1298.5	1398.5	1498.5	1598.5	1698.5	1798.5	1898.5	1998.5	2098.5	2198.5	2298.5	2398.5	2498.5	2598.5	2698.5	2798.5	2898.5	2998.5	3098.5	3198.5
KG	24.09	25.33	26.57	27.81	29.05	30.29	31.53	32.77	34.01	35.25	36.49	37.73	38.97	40.21	41.45	42.69	43.93	45.17	46.41	47.65	48.89	50.13	51.37	52.61

Stroke	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800
L	3298.5	3398.5	3498.5	3598.5	3698.5	3798.5	3898.5	3998.5	4098.5	4198.5	4298.5	4398.5	4498.5	4598.5	4698.5	4798.5	4898.5	4998.5	5098.5	5198.5	5298.5	5398.5	5498.5	5598.5
KG	53.85	55.09	56.33	57.57	58.81	60.05	61.29	62.53	63.77	65.01	66.25	67.49	68.73	69.97	71.21	72.45	73.69	74.93	76.17	77.41	78.65	79.89	81.13	82.37

Motor folded to upper left

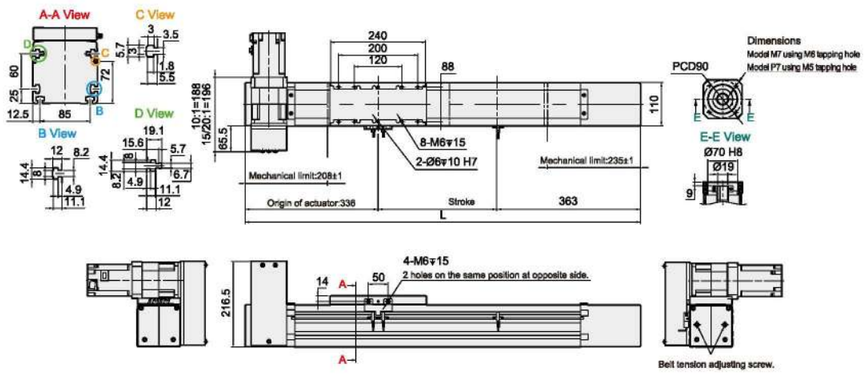


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
L	799	899	999	1099	1199	1299	1399	1499	1599	1699	1799	1899	1999	2099	2199	2299	2399	2499	2599	2699	2799	2899	2999	3099
KG	24.09	25.33	26.57	27.81	29.05	30.29	31.53	32.77	34.01	35.25	36.49	37.73	38.97	40.21	41.45	42.69	43.93	45.17	46.41	47.65	48.89	50.13	51.37	52.61

Stroke	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800
L	3199	3299	3399	3499	3599	3699	3799	3899	3999	4099	4199	4299	4399	4499	4599	4699	4799	4899	4999	5099	5199	5299	5399	5499
KG	53.85	55.09	56.33	57.57	58.81	60.05	61.29	62.53	63.77	65.01	66.25	67.49	68.73	69.97	71.21	72.45	73.69	74.93	76.17	77.41	78.65	79.89	81.13	82.37

Motor folded to upper right

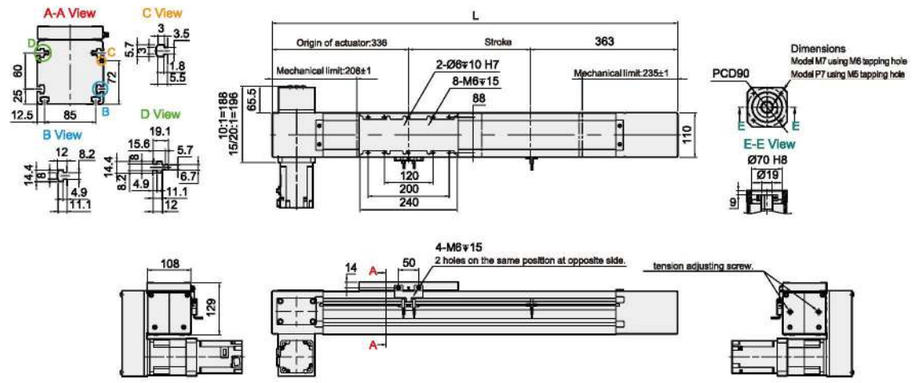


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
L	799	899	999	1099	1199	1299	1399	1499	1599	1699	1799	1899	1999	2099	2199	2299	2399	2499	2599	2699	2799	2899	2999	3099
KG	24.09	25.33	26.57	27.81	29.05	30.29	31.53	32.77	34.01	35.25	36.49	37.73	38.97	40.21	41.45	42.69	43.93	45.17	46.41	47.65	48.89	50.13	51.37	52.61

Stroke	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800
L	3199	3299	3399	3499	3599	3699	3799	3899	3999	4099	4199	4299	4399	4499	4599	4699	4799	4899	4999	5099	5199	5299	5399	5499
KG	53.85	55.09	56.33	57.57	58.81	60.05	61.29	62.53	63.77	65.01	66.25	67.49	68.73	69.97	71.21	72.45	73.69	74.93	76.17	77.41	78.65	79.89	81.13	82.37

Motor folded to down left

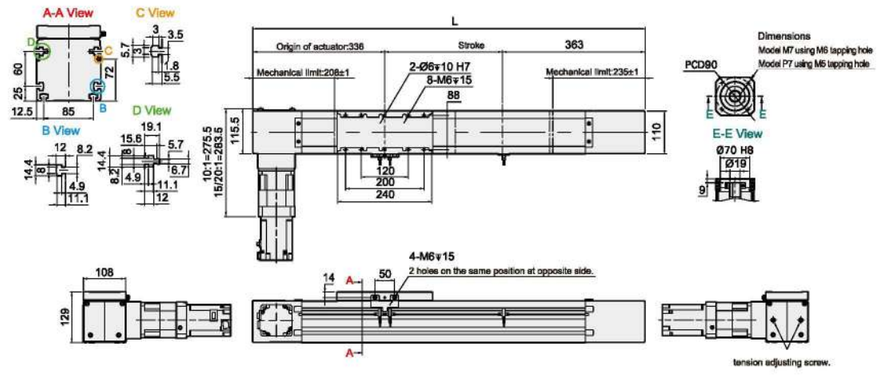


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
L	799	899	999	1099	1199	1299	1399	1499	1599	1699	1799	1899	1999	2099	2199	2299	2399	2499	2599	2699	2799	2899	2999	3099
KG	24.09	25.33	26.57	27.81	29.05	30.29	31.53	32.77	34.01	35.25	36.49	37.73	38.97	40.21	41.45	42.69	43.93	45.17	46.41	47.65	48.89	50.13	51.37	52.61

Stroke	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800
L	3199	3299	3399	3499	3599	3699	3799	3899	3999	4099	4199	4299	4399	4499	4599	4699	4799	4899	4999	5099	5199	5299	5399	5499
KG	53.85	55.09	56.33	57.57	58.81	60.05	61.29	62.53	63.77	65.01	66.25	67.49	68.73	69.97	71.21	72.45	73.69	74.93	76.17	77.41	78.65	79.89	81.13	82.37

Motor folded directly to the left

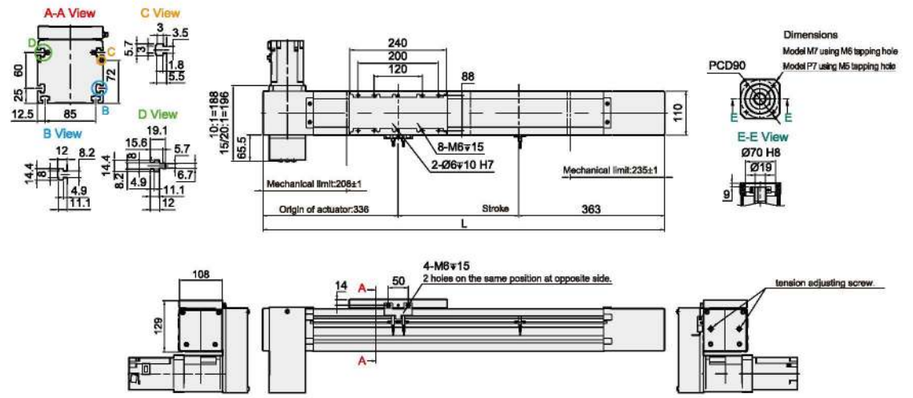


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
L	799	899	999	1099	1199	1299	1399	1499	1599	1699	1799	1899	1999	2099	2199	2299	2399	2499	2599	2699	2799	2899	2999	3099
KG	21.33	22.57	23.81	25.05	26.29	27.53	28.77	30.01	31.25	32.49	33.73	34.97	36.21	37.45	38.69	39.93	41.17	42.41	43.65	44.89	46.13	47.37	48.61	49.85

Stroke	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800
L	3199	3299	3399	3499	3599	3699	3799	3899	3999	4099	4199	4299	4399	4499	4599	4699	4799	4899	4999	5099	5199	5299	5399	5499
KG	51.09	52.33	53.57	54.81	56.05	57.29	58.53	59.77	61.01	62.25	63.49	64.73	65.97	67.21	68.45	69.69	70.93	72.17	73.41	74.65	75.89	77.13	78.37	79.61

Motor folded to down right

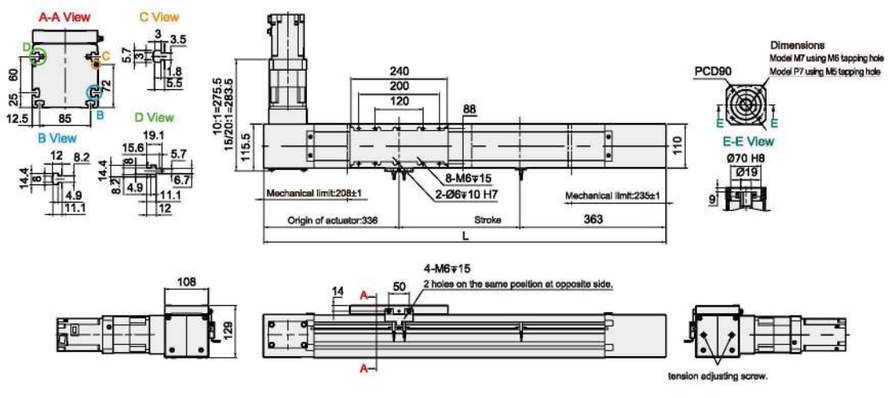


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
L	799	899	999	1099	1199	1299	1399	1499	1599	1699	1799	1899	1999	2099	2199	2299	2399	2499	2599	2699	2799	2899	2999	3099
KG	24.09	25.33	26.57	27.81	29.05	30.29	31.53	32.77	34.01	35.25	36.49	37.73	38.97	40.21	41.45	42.69	43.93	45.17	46.41	47.65	48.89	50.13	51.37	52.61

Stroke	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800
L	3199	3299	3399	3499	3599	3699	3799	3899	3999	4099	4199	4299	4399	4499	4599	4699	4799	4899	4999	5099	5199	5299	5399	5499
KG	53.85	55.09	56.33	57.57	58.81	60.05	61.29	62.53	63.77	65.01	66.25	67.49	68.73	69.97	71.21	72.45	73.69	74.93	76.17	77.41	78.65	79.89	81.13	82.37

Motor folded directly to the right

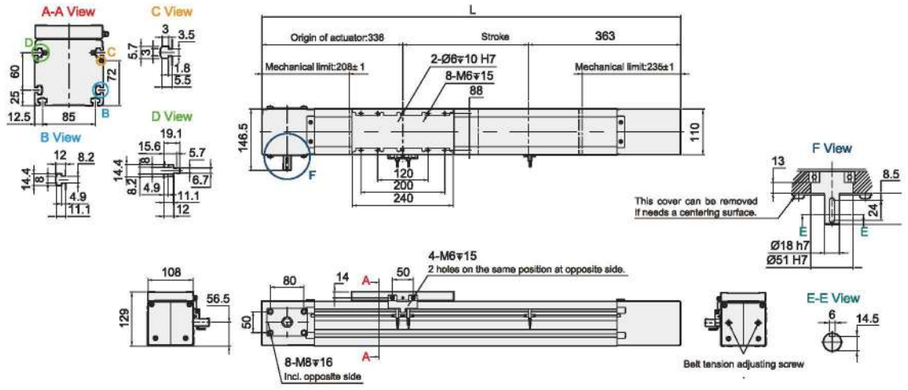


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
L	799	899	999	1099	1199	1299	1399	1499	1599	1699	1799	1899	1999	2099	2199	2299	2399	2499	2599	2699	2799	2899	2999	3099
KG	21.33	22.57	23.81	25.05	26.29	27.53	28.77	30.01	31.25	32.49	33.73	34.97	36.21	37.45	38.69	39.93	41.17	42.41	43.65	44.89	46.13	47.37	48.61	49.85

Stroke	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800
L	3199	3299	3399	3499	3599	3699	3799	3899	3999	4099	4199	4299	4399	4499	4599	4699	4799	4899	4999	5099	5199	5299	5399	5499
KG	51.09	52.33	53.57	54.81	56.05	57.29	58.53	59.77	61.01	62.25	63.49	64.73	65.97	67.21	68.45	69.69	70.93	72.17	73.41	74.65	75.89	77.13	78.37	79.61

Motor shaft is folded to the left

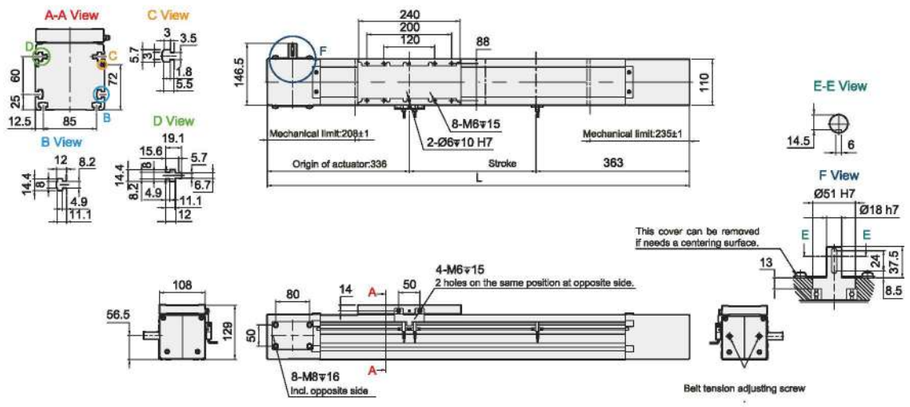


Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
L	799	899	999	1099	1199	1299	1399	1499	1599	1699	1799	1899	1999	2099	2199	2299	2399	2499	2599	2699	2799	2899	2999	3099
KG	18.86	20.1	21.34	22.58	23.82	25.06	26.3	27.54	28.78	30.02	31.26	32.5	33.74	34.98	36.22	37.46	38.7	39.94	41.18	42.42	43.66	44.9	46.14	47.38

Stroke	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800
L	3199	3299	3399	3499	3599	3699	3799	3899	3999	4099	4199	4299	4399	4499	4599	4699	4799	4899	4999	5099	5199	5299	5399	5499
KG	48.62	49.86	51.1	52.34	53.58	54.82	56.06	57.3	58.54	59.78	61.02	62.26	63.5	64.74	65.98	67.22	68.46	69.7	70.94	72.18	73.42	74.66	75.9	77.14

Motor shaft is folded to the right



Unit : mm

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
L	799	899	999	1099	1199	1299	1399	1499	1599	1699	1799	1899	1999	2099	2199	2299	2399	2499	2599	2699	2799	2899	2999	3099
KG	18.86	20.1	21.34	22.58	23.82	25.06	26.3	27.54	28.78	30.02	31.26	32.5	33.74	34.98	36.22	37.46	38.7	39.94	41.18	42.42	43.66	44.9	46.14	47.38

Stroke	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800
L	3199	3299	3399	3499	3599	3699	3799	3899	3999	4099	4199	4299	4399	4499	4599	4699	4799	4899	4999	5099	5199	5299	5399	5499
KG	48.62	49.86	51.1	52.34	53.58	54.82	56.06	57.3	58.54	59.78	61.02	62.26	63.5	64.74	65.98	67.22	68.46	69.7	70.94	72.18	73.42	74.66	75.9	77.14

LEY series compact electric cylinder

LEY12

LEY 12 - 100 - P02 - D - H 30W - S1

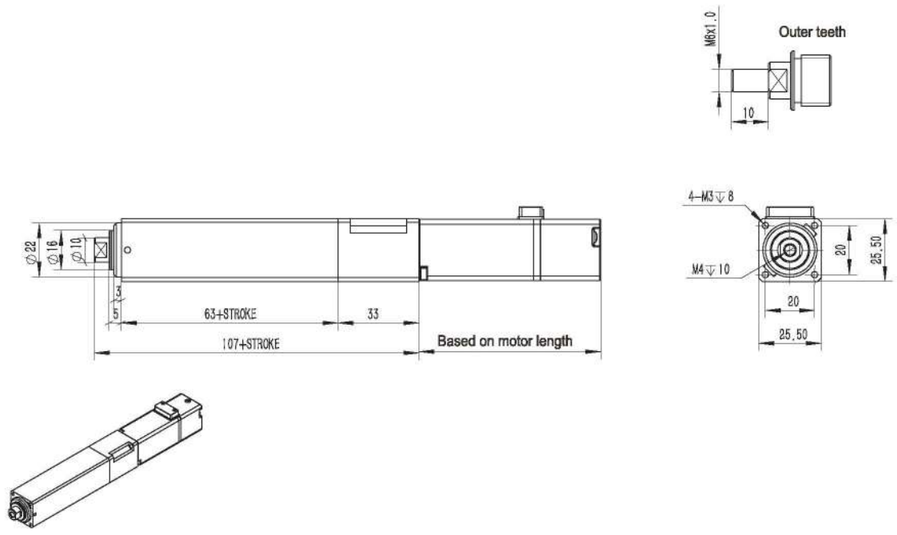
Specification	Cylinder Diameter	Stroke mm	Lead	Motor installation method	Motor brand	Motor power	Number of reed switch
			02	D: Direct installation	H: Inovance		S3: Switch*n
				P: Indirect installation	O: Others		Sn: Switch*n

Performance parameter

Standard motor output (W)	30W
Rated torque (N.m)	0.095
Repetitive positioning accuracy (mm)	±0.02
Screw specification	0802
Max. thrust (N)	250
Max. speed (mm/s)	100
Max. stroke (mm)	100
Max. load mass (kg)	5
Screw grade	C7 rolling grade 0802 (slenderness ratio 1:50)
Rotation Angle of piston rod	±0.7 度
Max. drive torque (Nm)	0.5
Basic weight (0mm stroke) kg	0.3
Weight increase (Every 100mm stroke) kg	0.1
Magnetic switch	无

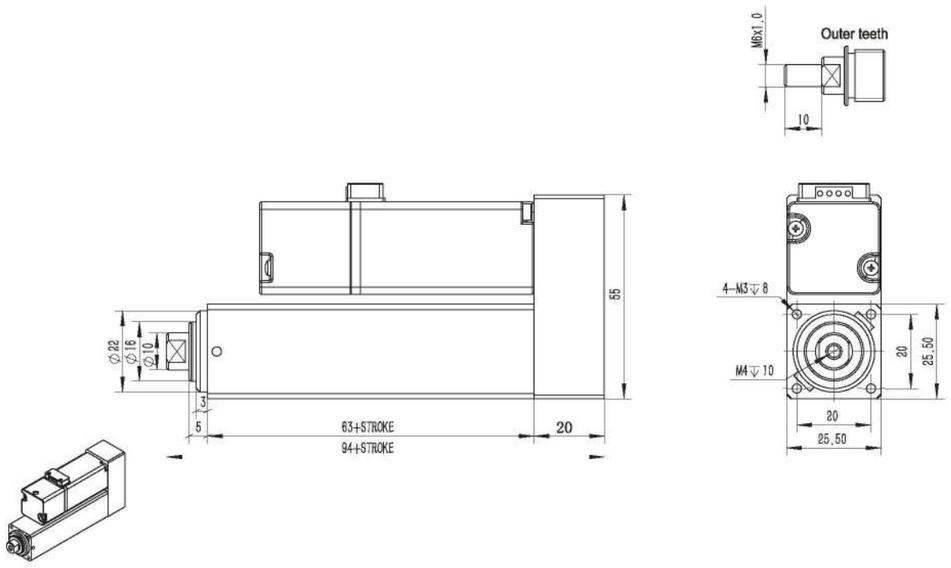
LEY12-D

Unit : mm



LEY12-P

Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

LEY16

LEY 16 - 100 - P02 - D - S - 28 - A - S1 - L

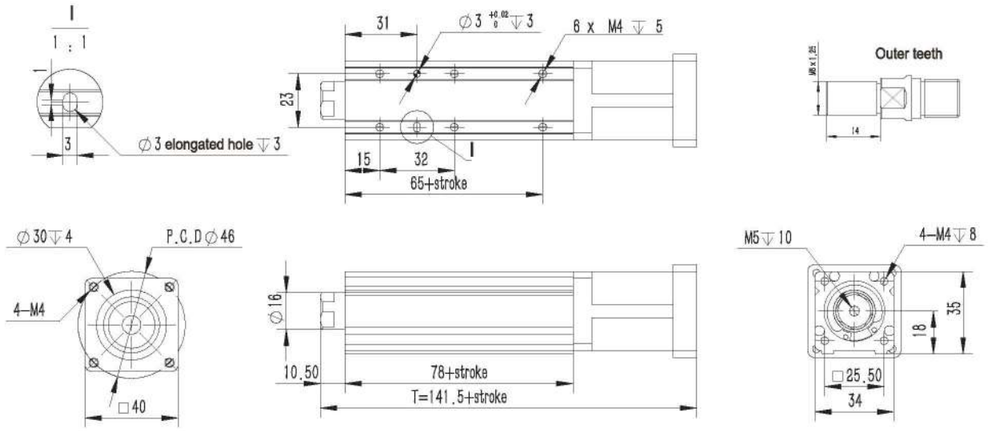
Specification	Cylinder diameter	Stroke mm	Lead	Motor installation method	Motor brand	Motor power	Tooth type	Number of reed switch	Special structure
			02	D: Direct installation	M: Mitsubishi		A:Outer teeth M8x1.25	S3: Switch*n	L: Rail guide bracket
				P: Indirect installation	P: Panasonic		Blank:inner teeth M5x0.8	Sn: Switch*n	无: Standard cylinder
					Y: Yaskawa				
					T: Delta				
					O: Others				
					S: Stepper 42				

Performance parameter

Standard motor output (W)	50W	Stepper 28
Rated torque (N.m)	0.16	0.09
Repetitive positioning accuracy (mm)	±0.02	
Screw specification	802	802
Max. thrust (N)	400	220
Max. speed (mm/s)	100	40
Max. stroke (mm)	300	
Max. load mass (kg)	8	
Screw grade	C7 rolling grade 0802 (slenderness ratio 1:50)	
Rotation Angle of piston rod	±0.7 degree	
Max. drive torque (Nm)	0.5	
Basic weight (0mm stroke) kg	0.248	
Weight increase (Every 100mm stroke) kg	0.274	
Magnetic switch	CS1-H-1M	Contact Reed Switch Wire Length 1M
	CS1-HN-3M	Contactless Transistor NPN type Wire Length 3M
	CS1-HP-3M	Contactless Transistor PNP type Wire Length 3M

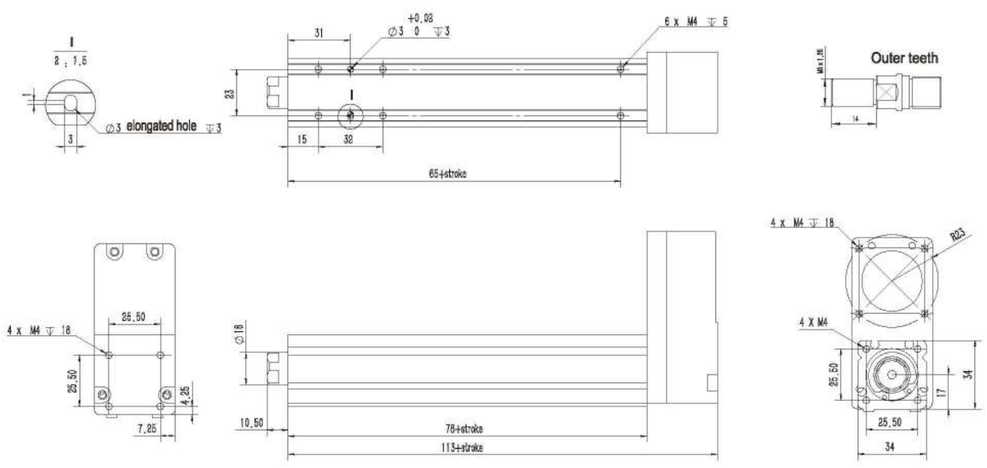
LEY16-D

Unit : mm



LEY16-P

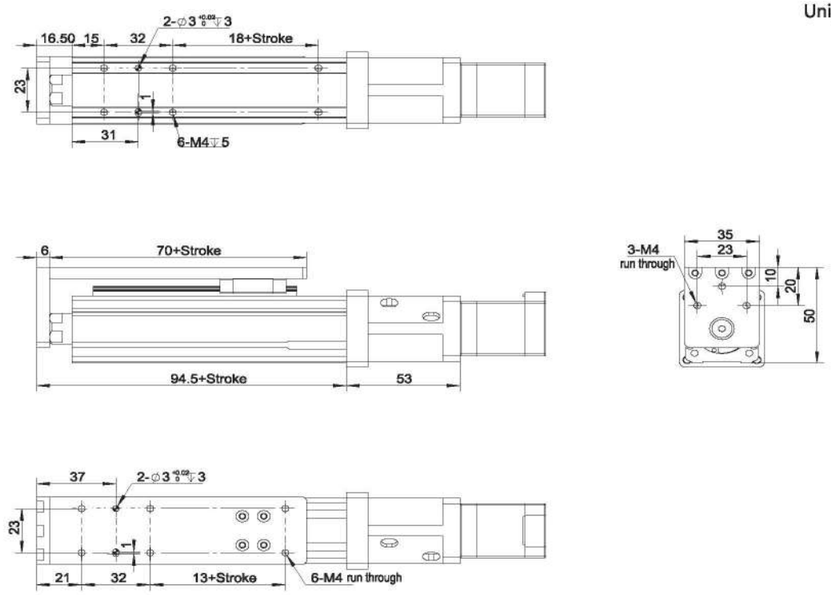
Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

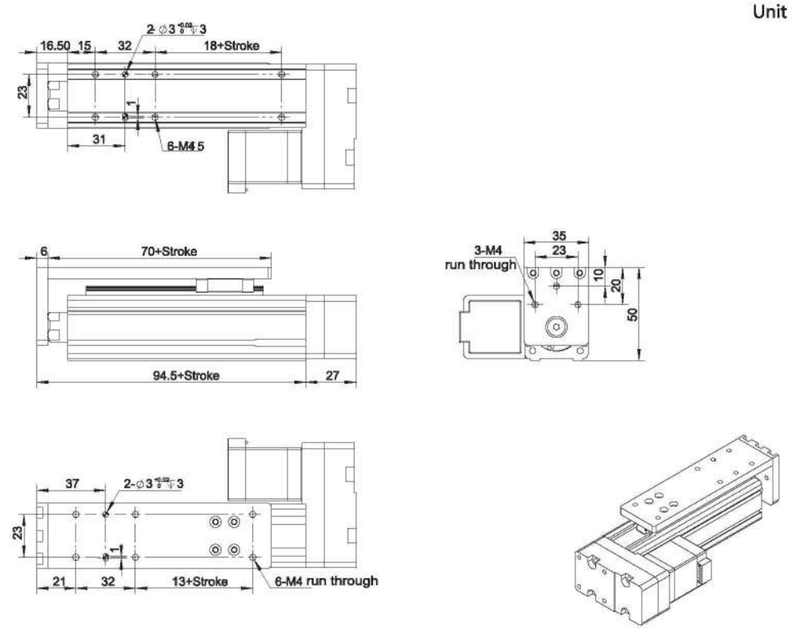
LEY16-L-D

Unit : mm



LEY16-L-P

Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

LEY series compact electric cylinder

LEY25

LEY 25 - 100 - P10 - D - S - 42 - A - S1 - R

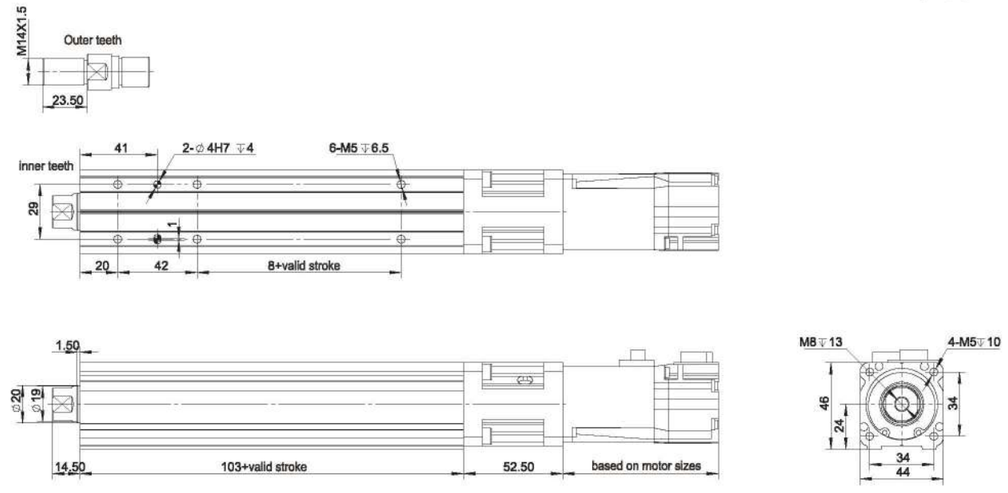
Specification	Cylinder diameter	Stroke mm	Lead	Motor installation method	Motor brand	Motor power	Tooth type	Number of reed switch	Special structure
			05/10	D: Direct installation	M: Mitsubishi		A:Outer teeth M14x1.–5	S3: Switch*n	R: Smooth shaft guide bracket
				P: Indirect installation	P: Panasonic		Blank:inner teeth M8x1.25	Sn: Switch*n	L: Rail guide bracket
					Y: Yaskawa				Blank: Standard cylinder
					T: Delta				
					O: Others				
					S: Stepper 42				

Performance parameter

Standard motor output (W)	100W		Stepper 42	
Rated torque (N.m)	0.32		0.25	
Repetitive positioning accuracy (mm)	±0.02			
Screw specification	1210	1205	1210	1205
Max. thrust (N)	170	340	125	250
Max. speed (mm/s)	500	250	100	50
Max. stroke (mm)	Standard cylinder:400 smooth shaft guide and rail guide cylinder:250			
Max. load mass (kg)	20			
Screw grade	C5 grinding grade 1205/1210 (slenderness ratio 1:52.5)			
Rotation Angle of piston rod	Standard cylinder: ±0.7 degree smooth shaft guide and rail guide cylinder:±0.6 degree			
Max. drive torque (Nm)	0.8			
Basic weight (0mm stroke) kg	Standard cylinder: 0.587			
Weight increase (Every 100mm stroke) kg	Standard cylinder: 0.485			
Magnetic switch	CS1-H-1M	Contact Reed Switch Wire Length 1M		
	CS1-HN-3M	Contactless Transistor NPN type Wire Length 3M		
	CS1-HP-3M	Contactless Transistor PNP type Wire Length 3M		

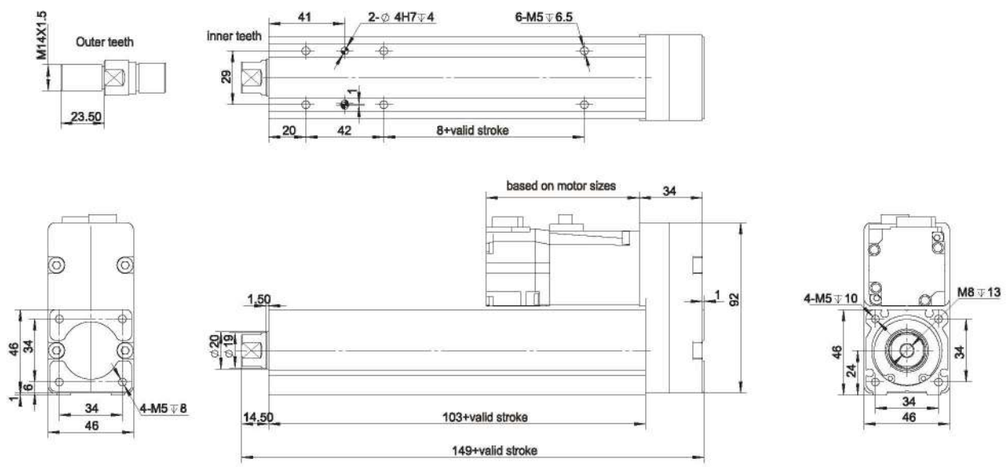
LEY25-D

Unit : mm



LEY25-P

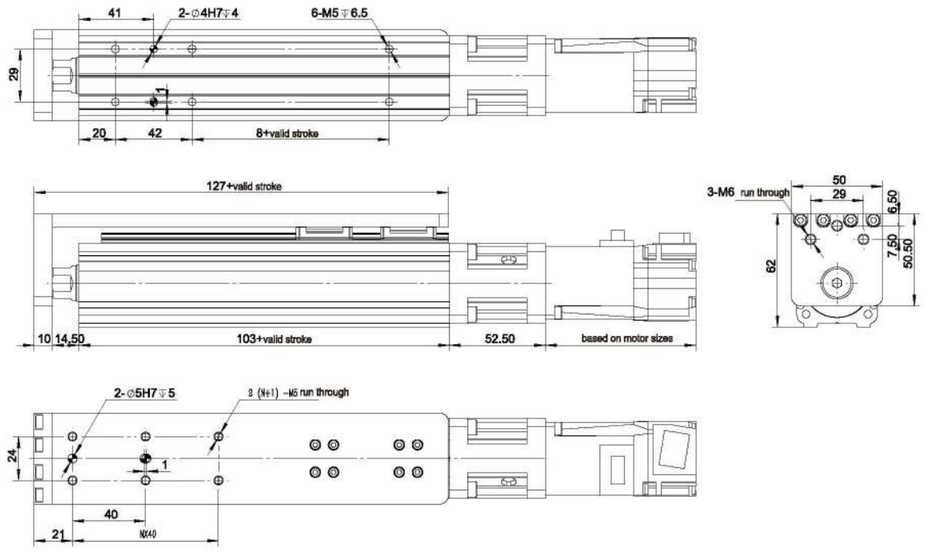
Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

LEY25-D-L

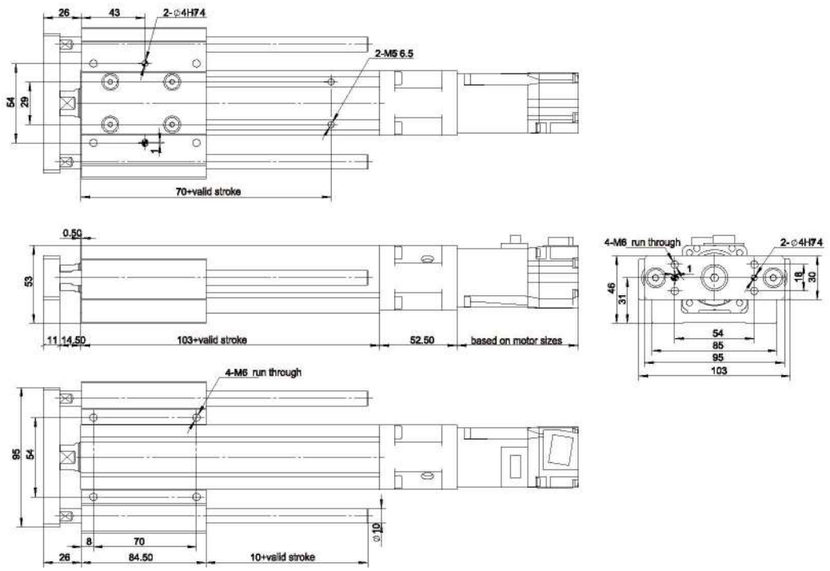
Unit : mm



注：N=INT(Stroke/40)

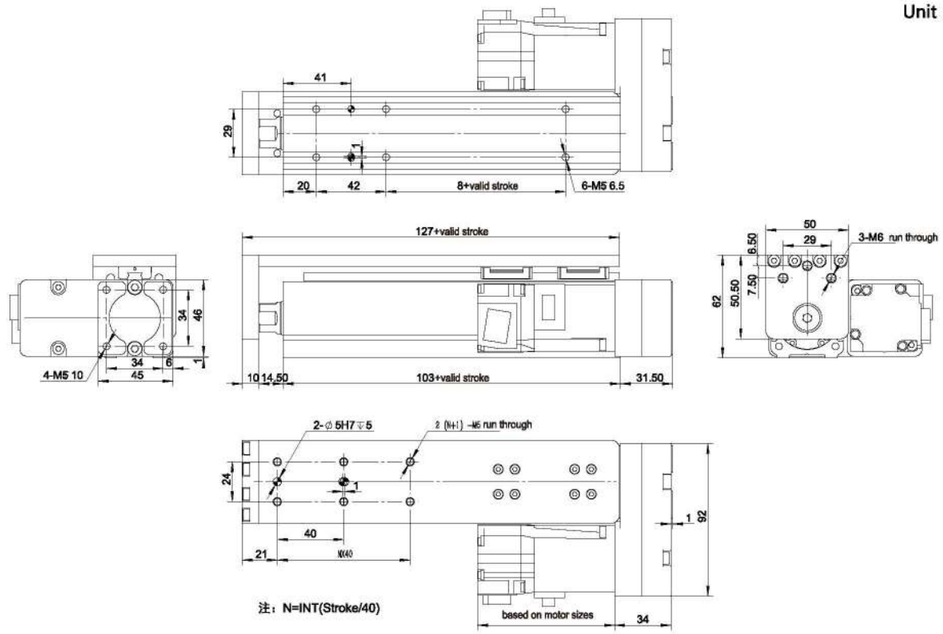
LEY25-D-R

Unit : mm



LEY25-P-L

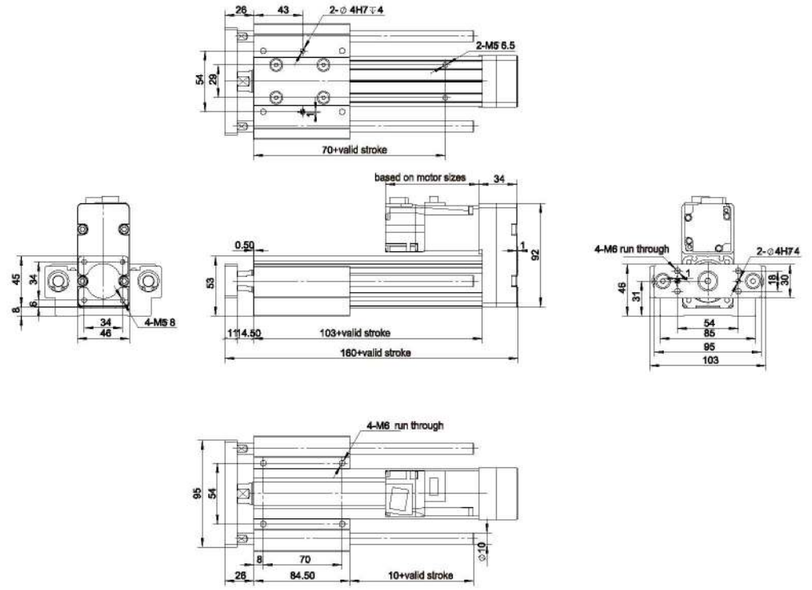
Unit : mm



注：N=INT(Stroke/40)

LEY25-P-R

Unit : mm



This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
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LEY series compact electric cylinder

LEY32

LEY 32 - 100 - P10 - D - S - 57 - A - S1 - R

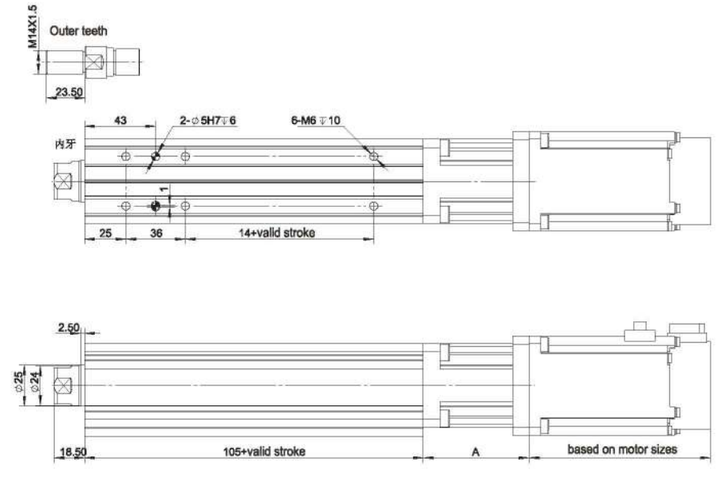
Specification	Cylinder diameter	Stroke mm	Lead	Motor installation method	Motor brand	Motor power	Tooth type	Number of reed switch	Special structure
			05/10	D: Direct installation	M: Mitsubishi		A:Outer teeth M14x1.5	S3: Switch*n	R: Smooth shaft guide bracket
				P: Indirect installation	P: Panasonic		Blank:inner teeth M8x1.25	Sn: Switch*n	L: Rail guide bracket
					Y: Yaskawa				Blank: Standard cylinder
					T: Delta				
					O: Others				
					S: Stepper 42				

Performance parameter

Standard motor output (W)	200W		Stepper 57	
Rated torque (N.m)	0.64		0.3	
Repetitive positioning accuracy (mm)	±0.02			
Screw specification	1205	1210	1205	1210
Max. thrust (N)	690	350	300	150
Max. speed (mm/s)	250	500	100	200
Max. stroke (mm)	Standard cylinder:500 smooth shaft guide and rail guide cylinder:300			
Max. load mass (kg)	40			
Screw grade	C5 grinding grade 1205/1210 (slenderness ratio 1:52.5)			
Rotation Angle of piston rod	±0.7 度			
Max. drive torque (Nm)	1.8			
Basic weight (0mm stroke) kg	0.869			
Weight increase (Every 100mm stroke) kg	0.629			
Magnetic switch	CS1-H-1M	Contact Reed Switch Wire Length 1M		
	CS1-HN-3M	Contactless Transistor NPN type Wire Length 3M		
	CS1-HP-3M	Contactless Transistor PNP type Wire Length 3M		

LEY32-D

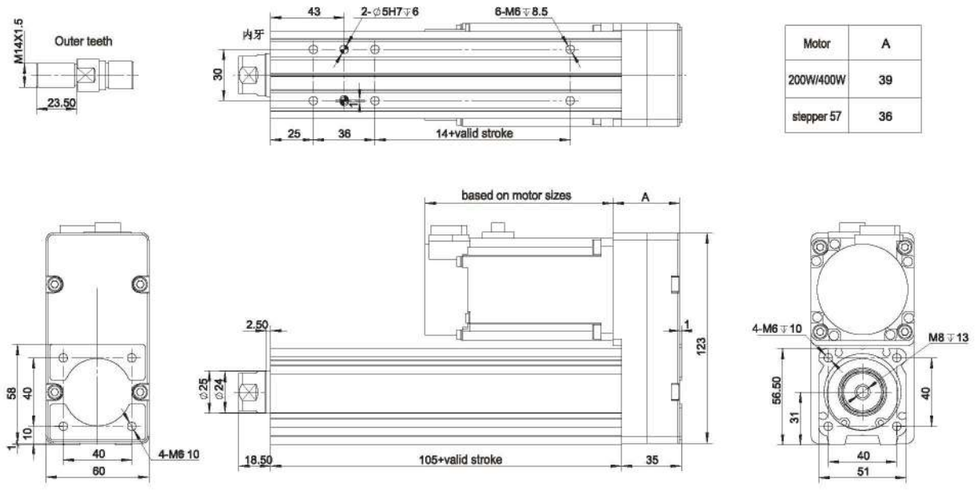
Unit : mm



Motor	A
200W/400W	64
stepper 57	55

LEY32-P

Unit : mm



Motor	A
200W/400W	39
stepper 57	36

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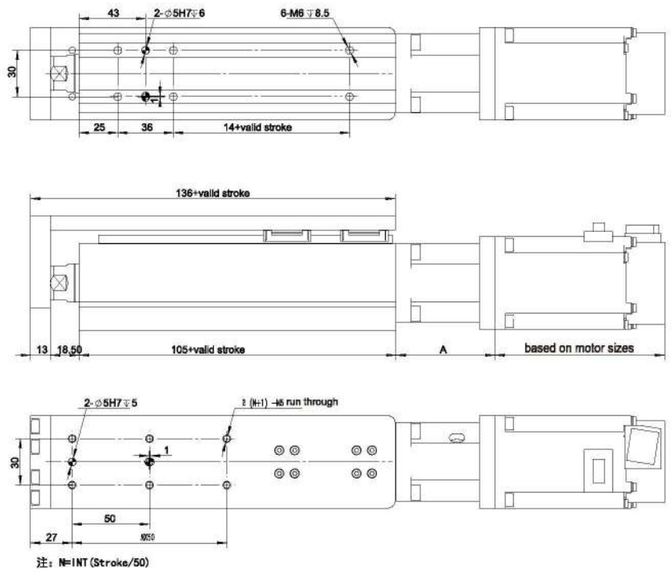
LEY32-D-L

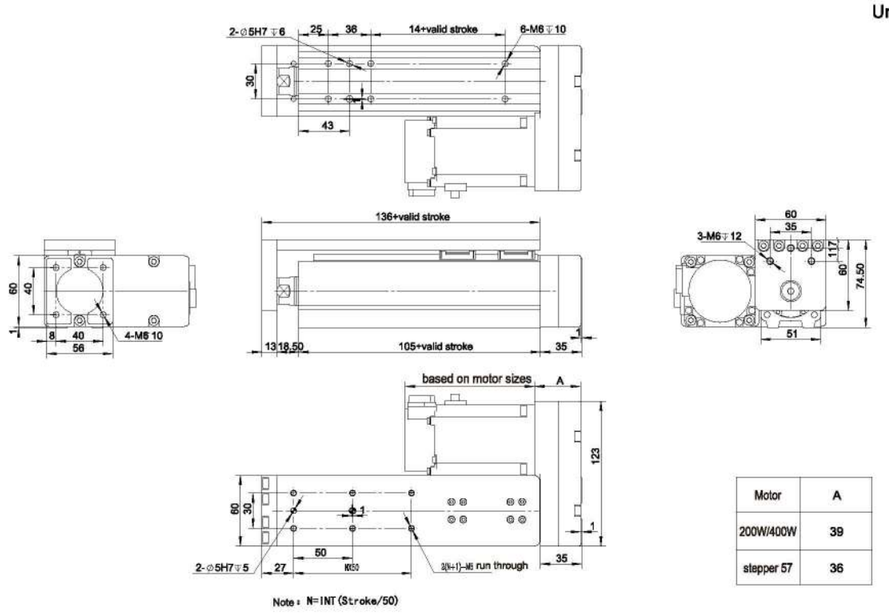
Unit : mm



Motor	A
200W/400W	64
stepper 57	55

LEY32-P-L

Unit : mm



Motor	A
200W/400W	39
stepper 57	36

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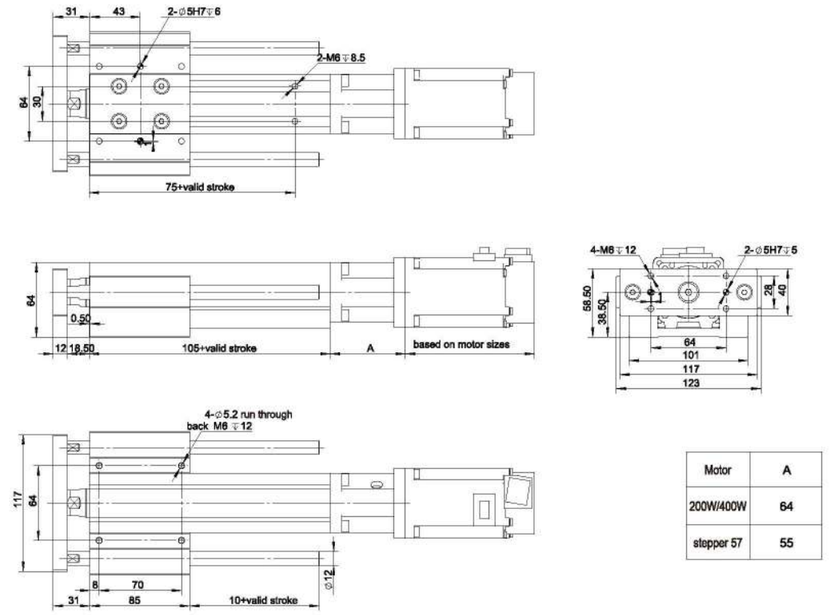
The appearance and specifications of the product are subject to change without prior notice.

LEY32-D-R

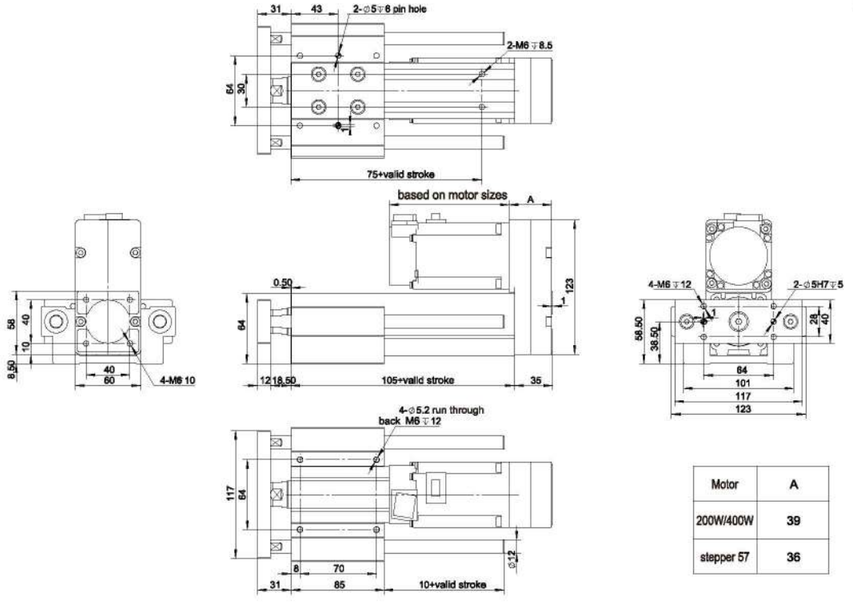
Unit : mm



Motor	A
200W/400W	64
stepper 57	55

LEY32-P-R

Unit : mm

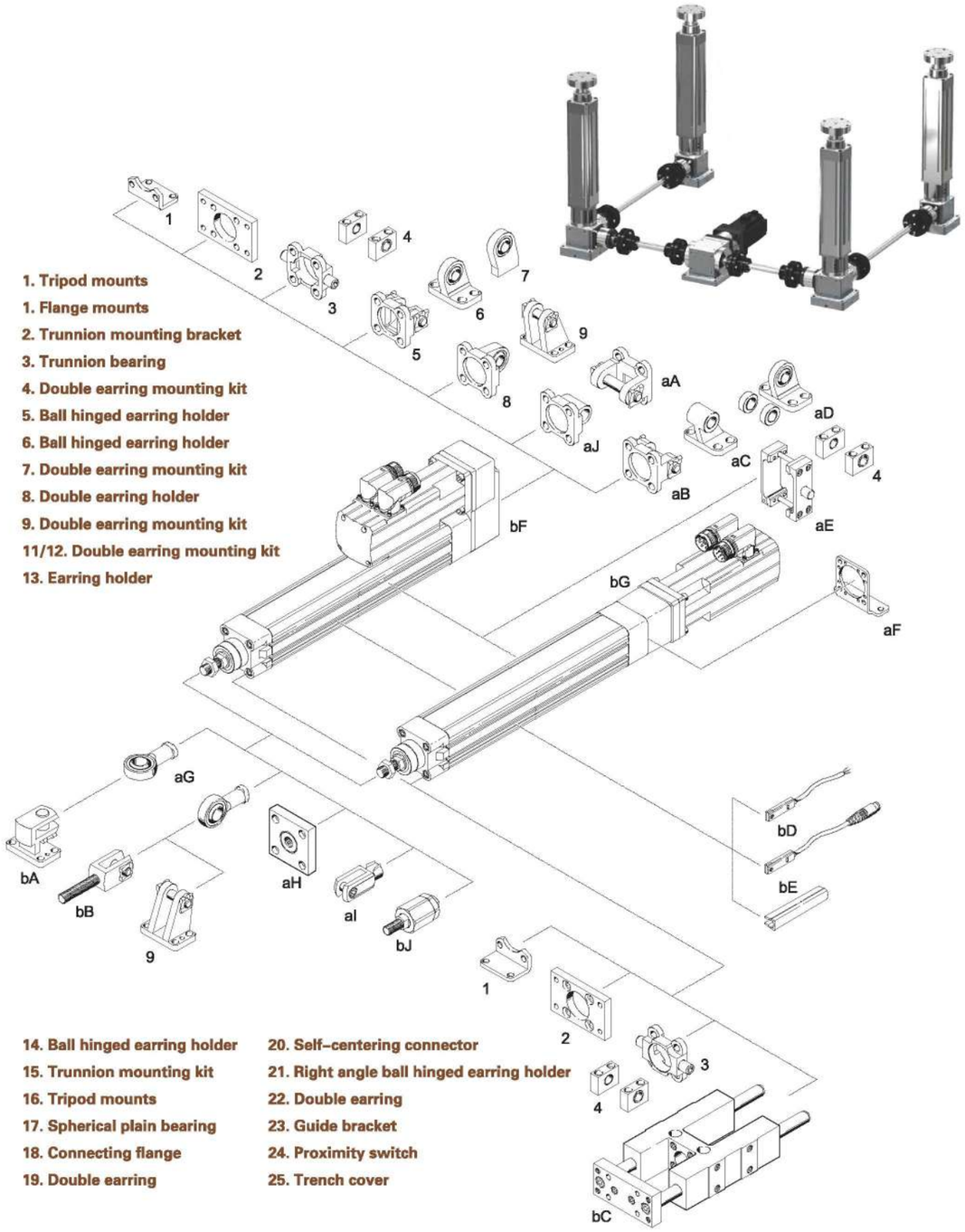


Motor	A
200W/400W	39
stepper 57	36

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

LEY series compact electric cylinder

E series standard electric cylinder



1. Tripod mounts
1. Flange mounts
2. Trunnion mounting bracket
3. Trunnion bearing
4. Double earring mounting kit
5. Ball hinged earring holder
6. Ball hinged earring holder
7. Double earring mounting kit
8. Double earring holder
9. Double earring mounting kit
11/12. Double earring mounting kit
13. Earring holder
14. Ball hinged earring holder
15. Trunnion mounting kit
16. Tripod mounts
17. Spherical plain bearing
18. Connecting flange
19. Double earring
20. Self-centering connector
21. Right angle ball hinged earring holder
22. Double earring
23. Guide bracket
24. Proximity switch
25. Trench cover

E40

E	40	- 100	- P10	- D	- M	- 400W	- A	- S1
Specification	Cylinder diameter	Stroke mm	Lead	Motor installation method	Motor brand	Motor power	Tooth type	Number of reed switch
			05/10	D: Direct installation	M: Mitsubishi		A: M16x1.5	S3: Switch*n
				P: Indirect installation	P: Panasonic		I: M12x1.25	Sn: Switch*n
				PJ: Reinforced base	Y: Yaskawa			
					T: Delta			
					O: Others			
					S: Stepper 42			

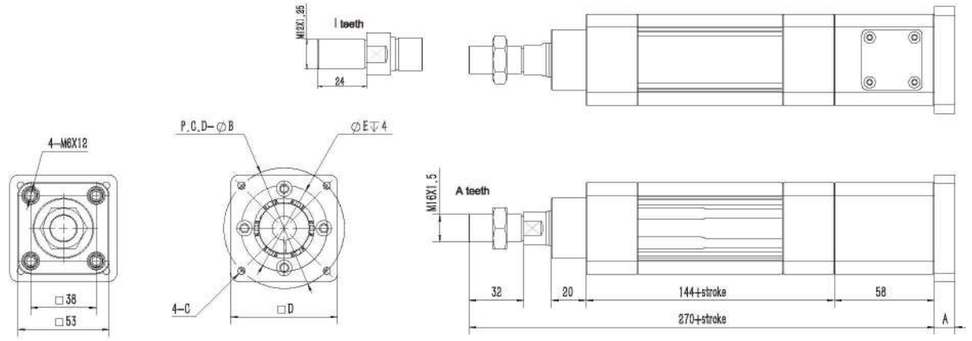
Performance parameter

Standard motor output (W)	100W		200W		400W	
Rated torque (N.m)	0.32		0.64		1.27	
Repetitive positioning accuracy (mm)	±0.02					
Screw specification	1205	1210	1205	1210	1205	1210
Max. thrust (N)	340	170	690	340	1280	690
Max. speed (mm/s)	250	500	250	500	250	500
Max. stroke (mm)	500					
Max. load mass (kg)	40					
Screw grade	C7 grinding grade 1205/1210 (slenderness ratio 1:52.5)					
Rotation Angle of piston rod	±0.7 degree					
Max. drive torque (Nm)	1.8					
Basic weight (0mm stroke) kg	1.35					
Weight increase (Every 100mm stroke) kg	0.47					
Magnetic switch	CS1-D-1M	Contact Reed Switch Wire Length 1M				
	CS1-DN-3M	Contactless Transistor NPN type Wire Length 3M				
	CS1-DP-3M	Contactless Transistor PNP type Wire Length 3M				

Screw diameter 25 is suitable for load thrust within 500KG; screw diameter 32 is suitable for load thrust between 500-1000KG.

E40-D

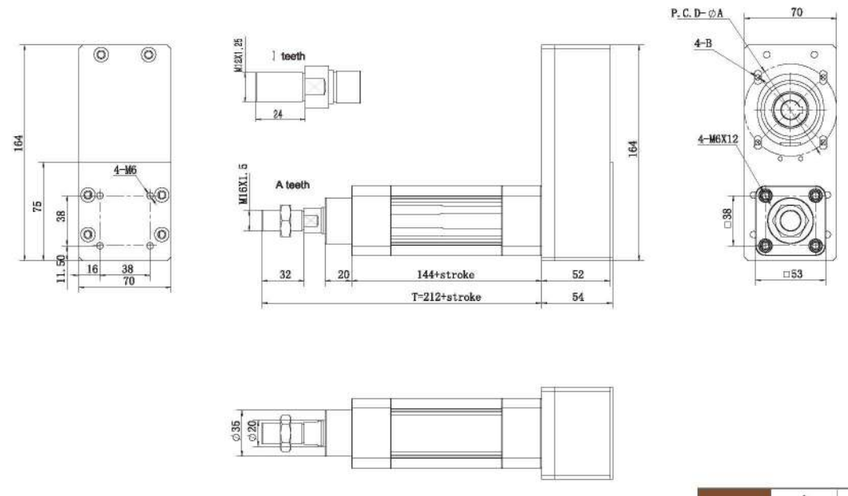
Unit : mm



	A	B	C	D	E
100W	8	46	M4	60	30
200W	12	70	M5	62	50

E40-PJ

Unit : mm



	A	B
100W	46	M4
400W	70	M5

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product -are subject to change without prior notice.

E50

E 50 - 100 - P10 - D - M - 400W - A - S1

Specification	Cylinder diameter	Stroke mm	Lead	Motor installation method	Motor brand	Motor power	Tooth type	Number of reed switch
			05/10	D: Direct installation	M: Mitsubishi		A: M20x1.5	S3: Switch*n
				P: Indirect installation	P: Panasonic		I: M16x1.5	Sn: Switch*n
				PJ: Reinforced base	Y: Yaskawa			
					T: Delta			
					O: Others			
					S: Stepper 42			

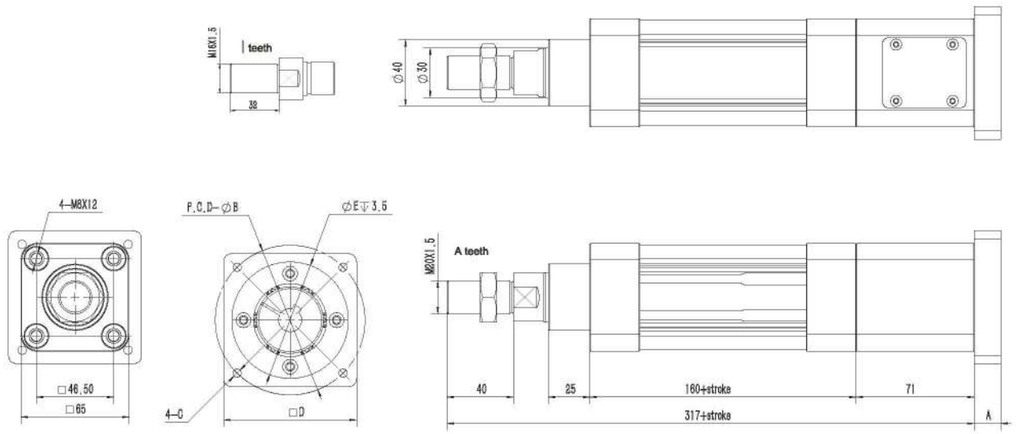
Performance parameter

Standard motor output (W)	400W		750W	
Rated torque (N.m)	1.32		2.4	
Repetitive positioning accuracy (mm)	±0.02			
Screw specification	1605	1610	1605	1610
Max. thrust (N)	1280	690	2560	1280
Max. speed (mm/s)	250	500	250	500
Max. stroke (mm)	600			
Max. load mass (kg)	100			
Screw grade	C7 grinding grade 1605/1610 (slenderness ratio 1:52.5)			
Rotation Angle of piston rod	±0.7 degree			
Max. drive torque (Nm)	6			
Basic weight (0mm stroke) kg	2.1			
Weight increase (Every 100mm stroke) kg	0.62			
Magnetic switch	CS1-D-1M	Contact Reed Switch Wire Length 1M		
	CS1-DN-3M	Contactless Transistor NPN type Wire Length 3M		
	CS1-DP-3M	Contactless Transistor PNP type Wire Length 3M		

Screw diameter 25 is suitable for load thrust within 500KG; screw diameter 32 is suitable for load thrust between 500-1000KG.

E50-D

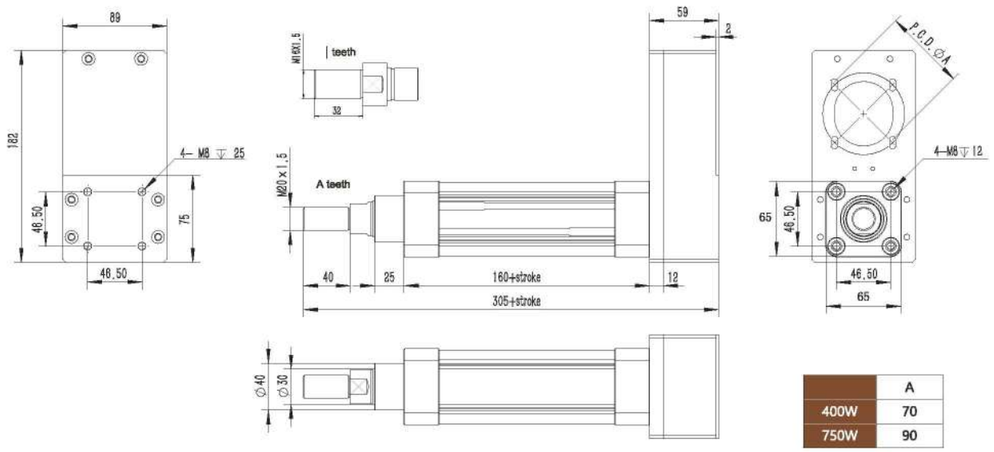
Unit : mm



	A	B	C	D	E
400W	12	70	M5	70	50
750W	16	90	M6	80	70

E50-PJ

Unit : mm



	A
400W	70
750W	90

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The appearance and specifications of the product -are subject to change without prior notice.

E63

E 63 - 100 - P10 - D - M - 750W - A - S1

Specification	Cylinder diameter	Stroke mm	Lead	Motor installation method	Motor brand	Motor power	Tooth type	Number of reed switch
			05/10	D: Direct installation	M: Mitsubishi		A: M27x2.0	S3: Switch*n
				P: Indirect installation	P: Panasonic		I: M16x1.5	Sn: Switch*n
				PJ: Reinforced base	Y: Yaskawa			
					T: Delta			
					O: Others			
					S: Stepper 42			

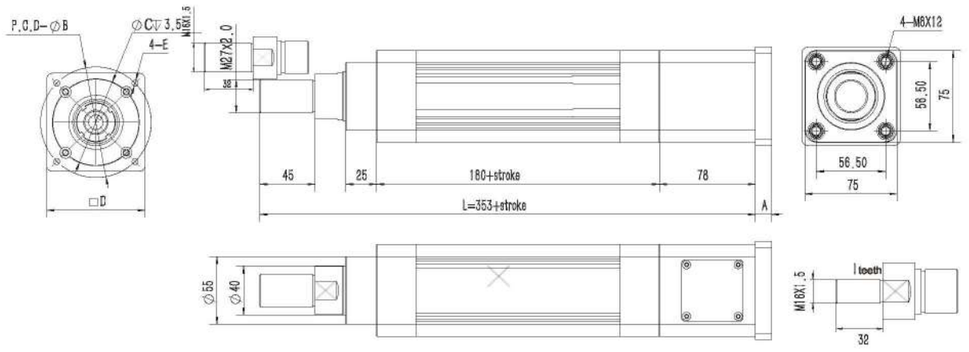
Performance parameter

Standard motor output (W)	750W	
Rated torque (N.m)	2.4	
Repetitive positioning accuracy (mm)	±0.02	
Screw specification	2005	2010
Max. thrust (N)	2560	1280
Max. speed (mm/s)	250	500
Max. stroke (mm)	800	
Max. load mass (kg)	300	
Screw grade	C7 grinding grade 2505/2510 (slenderness ratio 1:72)	
Rotation Angle of piston rod	±0.7 degree	
Max. drive torque (Nm)	12	
Basic weight (0mm stroke) kg	3.01	
Weight increase (Every 100mm stroke) kg	0.82	
Magnetic switch	CS1-D-1M	Contact Reed Switch Wire Length 1M
	CS1-DN-3M	Contactless Transistor NPN type Wire Length 3M
	CS1-DP-3M	Contactless Transistor PNP type Wire Length 3M

Screw diameter 25 is suitable for load thrust within 500KG; screw diameter 32 is suitable for load thrust between 500-1000KG.

E63-D

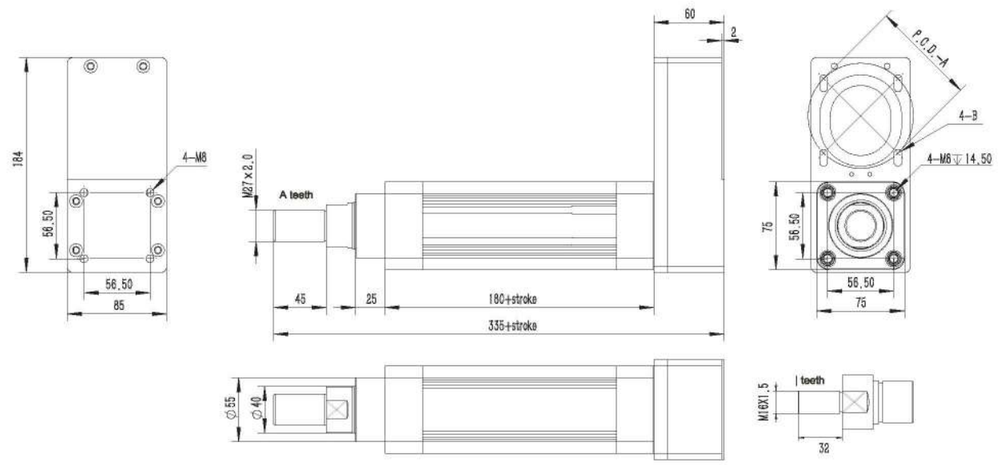
Unit : mm



	A	B	C	D	E
400W	5	70	50	75	M5
750W	13	90	70	80	M6

E63-PJ

Unit : mm



	A	B
400W	70	M5
750W	90	M6

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product -are subject to change without prior notice.

E80

E 80 - 100 - 25 - P10 - D - M - 1000W - A - S1

Specification	Cylinder diameter	Stroke mm	Screw diameter	Screw lead	Motor installation method	Motor brand	Motor power	Tooth type	Number of reed switch
			25	05/10/25	D: Direct installation	M: Mitsubishi		A: M36x2.0	S3: Switch*n
			32	05/10/20/32	P: Indirect installation	P: Panasonic		I: M20x1.5	Sn: Switch*n
					PJ: Reinforced base	Y: Yaskawa			
						T: Delta			
						O: Others			
						S: Stepper 42			

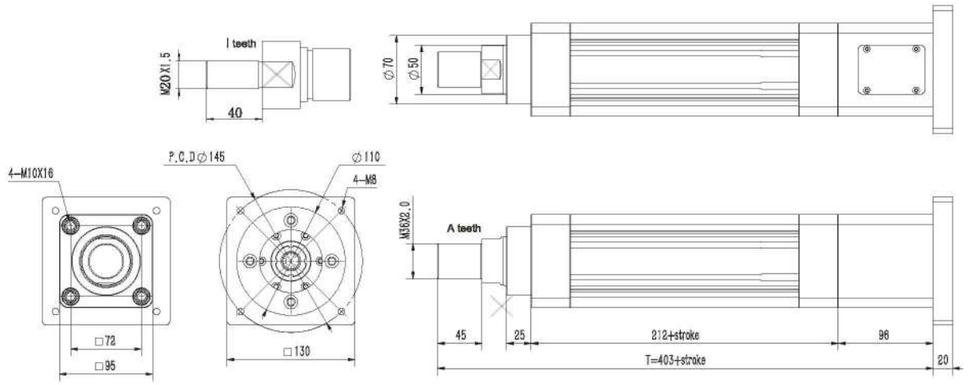
Performance parameter

Standard motor output (W)	1000		1500	
Rated torque (N.m)	4.78		7.16	
Repetitive positioning accuracy (mm)	±0.02			
Screw specification	2505	2510	2505	2510
Max. thrust (N)	5100	2550	7650	3820
Max. speed (mm/s)	166	333	166	333
Max. stroke (mm)	800			
Max. load mass (kg)	800			
Screw grade	C7 grinding grade 2505/2510 (slenderness ratio 1:72)			
Rotation Angle of piston rod	±0.7 degree			
Max. drive torque (Nm)	50			
Basic weight (0mm stroke) kg	7.4			
Weight increase (Every 100mm stroke) kg	1.5			
Magnetic switch	CS1-D-1M	Contact Reed Switch Wire Length 1M		
	CS1-DN-3M	Contactless Transistor NPN type Wire Length 3M		
	CS1-DP-3M	Contactless Transistor PNP type Wire Length 3M		

Screw diameter 25 is suitable for load thrust within 500KG; screw diameter 32 is suitable for load thrust between 500-1000KG.

E80-D

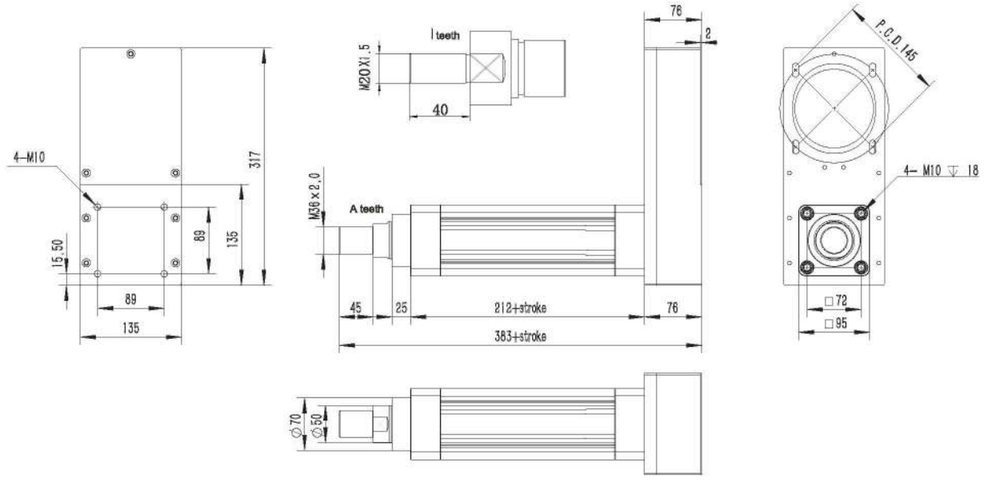
Unit : mm



	A	B	C	D	E
400W	5	70	50	75	M5
750W	13	90	70	80	M6

E80-PJ

Unit : mm



	A	B
400W	70	M5
750W	90	M6

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The appearance and specifications of the product -are subject to change without prior notice.

A series heavy duty electric cylinder

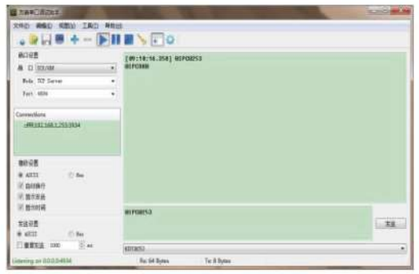
Large thrust servo electric cylinder system integrated screw drive A80/A125/PA140 series

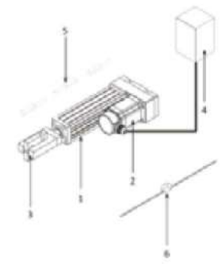
High thrust servo electric cylinder is a linear electric cylinder with piston rod, drive element servo motor series, transmission element screw, wire and bearing structure.

■ Function of system

- Pressure control, the control accuracy can reach one thousandth (determined by the pressure sensor)
- Position Control and Regulation
- Speed Control and Regulation

■ High thrust servo electric cylinder system integration





■ System Components

1. Electric cylinder mechanical body
2. Servo motor and drive
3. PC control system
4. Torque/Pressure Sensor (Optional)
5. Sensor assembly (optional)
6. Optical ruler (optional)
7. System programming and debugging software TPV1.1

■ Electric cylinder mechanical body

■ Servo motor + Drive

■ PC control system

- Programmable controller PLC
- Industrial control computer
- Other programmable devices

■ Programming and debugging software

- Host computer debugging and setting functions: system parameter modification, user parameter configuration, online dynamic test, data monitoring, user programming and debugging, offline and offline operation;
- Panel debugging, modification, testing, monitoring bacteria;
- I/0 path planning, control function;
- Communication parameter modification, path control function: plaintext communication, MODUS communication: system parameter modification API, user parameter configuration API, online dynamic test API, data monitoring API, user programming and debugging API, offline and offline operation API;
- Teach pendant debugging, secret recipe, testing, monitoring functions;

A80–P05

A80 - 350 - P05 - FF - D - P1500W - S3 - FB0001

- **Cylinder Diameter**
- **Stroke** 50-600mm
- **Screw lead** P10 10mm
- **Installation method**
  - FF : Front flange
  - LB : Side bearing
- **Motor installation method**
  - D : Direct installation
  - P : Indirect installation
- **Motor brand, power**
  - P: Panasonic 1500W
  - T: Delta 2000W
  - M: Mitsubishi 3000W
  - Y : Yaskawa
  - O: Others
- **Magnetic ring switch**
  - S1 1 switch
  - S2 2 switches
  - S3 3 switches
  - Blank: no switch
- **Special style**

Basic parameters

Basic parameters		
	Repetitive positioning parameter	±0.02
	Lead	5
	Max. speed (mm/s)	166
	Rated load (KN)	15
	Max. load (KN)	20
	Standard stroke	50-600mm/50 interval
	AC servo motor	1500w/2000w/3000w
	Motor speed (rpm/min)	2000

* 1. If the stroke is greater than 600mm, please contact the manufacturer
* 2. For special styles, please contact the manufacturer

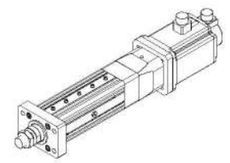
Servo Electric Cylinder Parameter Performance Table - Servo Motor Speed is 2000rpm.

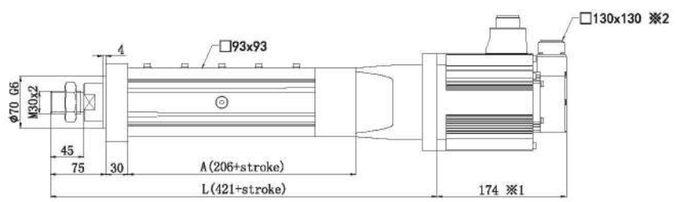
A80	Model	A80- □ -P05- □ - □ -K □ - □ 1500W-S3
	Lead (mm)	5
	Ratio	1
	Rated output (kn)	7.6
	Rated speed (mm/s)	166.6

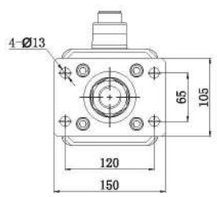
A80	Model	A80- □ -P05- □ - □ -K □ - □ 2000W-S3
	Lead (mm)	5
	Ratio	1
	Rated output (kn)	10.0
	Rated speed (mm/s)	166.6

A80	Model	A80- □ -P05- □ - □ -K □ - □ 3000W-S3
	Lead (mm)	5
	Ratio	1
	Rated output (kn)	15.0
	Rated speed (mm/s)	166.6

A80–P05–FF–D– □ 1500W/2000W/3000W





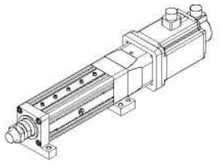


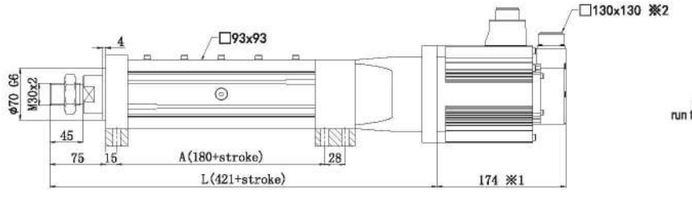
Unit : mm

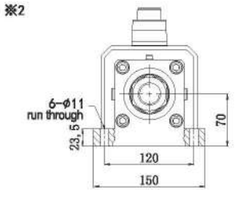
Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	471	521	571	621	671	721	771	821	871	921	971	1021
A	256	306	356	406	456	506	556	606	656	706	756	806
Weight(kg)	20	21	22	23	24	25	26	27	28	29	30	31

1. Length varies by motor
2. Applicable motor dimensions 130mm*130mm

A80–P05–LB–D– □ 1500W/2000W/3000W







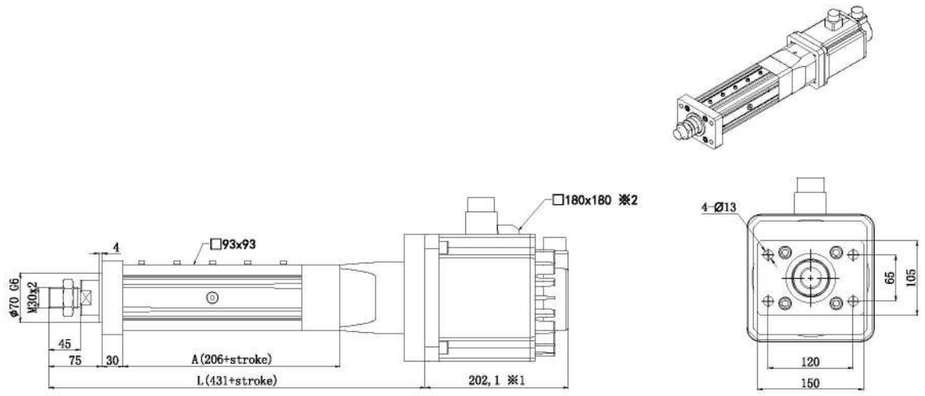
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	471	521	571	621	671	721	771	821	871	921	971	1021
A	230	280	330	380	430	480	530	580	630	680	730	780
Weight(kg)	21	22	23	24	25	26	27	28	29	30	31	32

1. Length varies by motor
2. Applicable motor dimensions 130mm*130mm

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

A80-P05-FF-D- □ 3000W

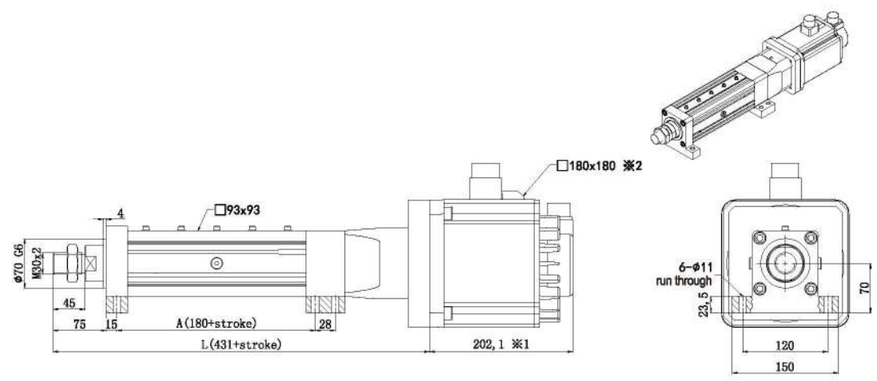


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	481	531	581	631	681	731	781	831	881	831	981	1031
A	256	306	356	406	456	506	556	606	656	706	756	806
Weight(kg)	23	24	25	26	27	28	29	30	31	32	33	34

1. Length varies by motor
2. Applicable motor dimensions 180mm*180mm

A80-P05-LB-D- □ 3000W



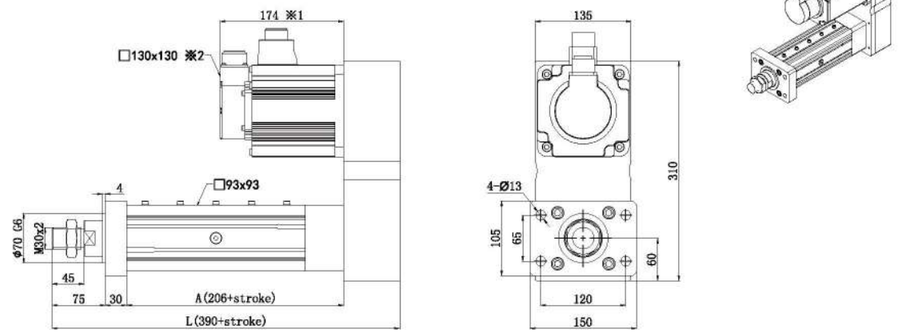
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	481	531	581	631	681	731	781	831	881	831	981	1031
A	230	280	330	380	430	480	530	580	630	680	730	780
Weight(kg)	24	25	26	27	28	29	30	31	32	33	34	35

1. Length varies by motor
2. Applicable motor dimensions 180mm*180mm

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

A80-P05-FF-D- □ 1500W/2000W/3000W

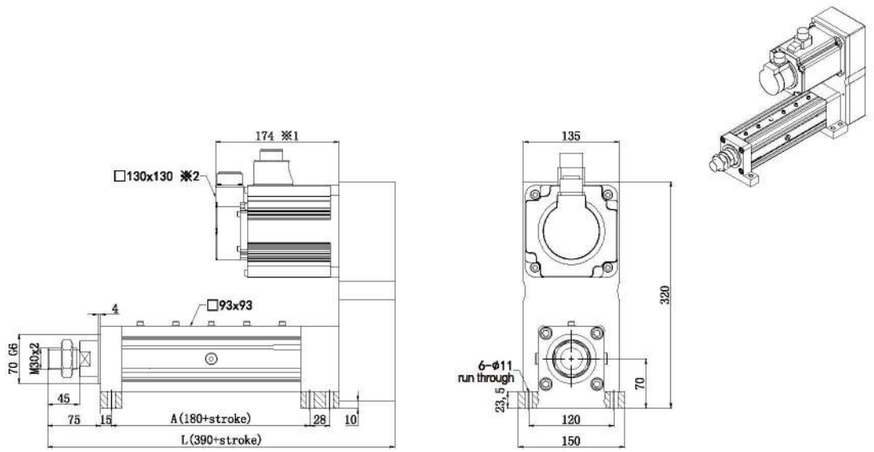


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	440	490	540	590	640	690	740	790	840	890	940	990
A	256	306	356	406	456	506	556	606	656	706	756	806
Weight(kg)	23	24	25	26	27	28	29	30	31	32	33	34

1. Length varies by motor
2. Applicable motor dimensions 130mm*130mm

A80-P05-LB-D- □ 1500W/2000W/3000W



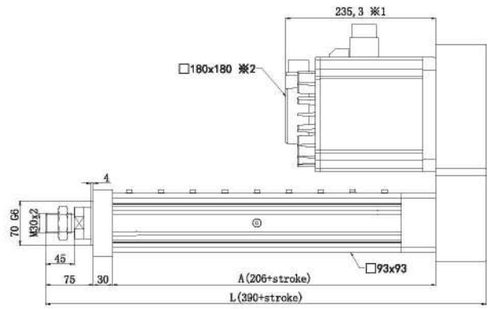
Unit : mm

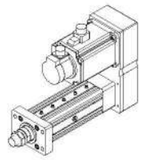
Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	440	490	540	590	640	690	740	790	840	890	940	990
A	230	280	330	380	430	480	530	580	630	680	730	780
Weight(kg)	24	25	26	27	28	29	30	31	32	33	34	35

1. Length varies by motor
2. Applicable motor dimensions 130mm*130mm

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

A80–P05–FF–D– □ 3000W



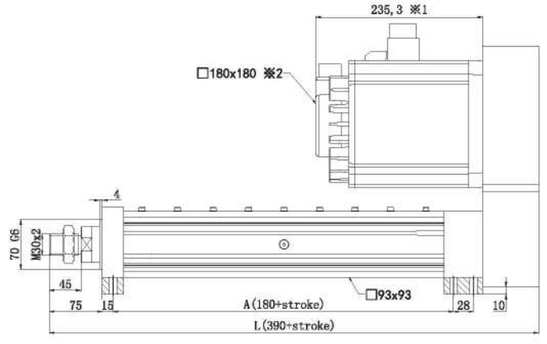


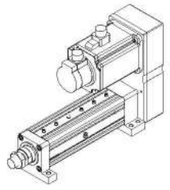
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	440	490	540	590	640	690	740	790	840	890	940	990
A	256	306	356	406	456	506	556	606	656	706	756	806
Weight(kg)	28	29	30	31	32	33	34	35	36	37	38	39

1. Length varies by motor
2. Applicable motor dimensions 130mm*130mm

A80–P05–LB–D– □ 3000W





Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	440	490	540	590	640	690	740	790	840	890	940	990
A	230	280	330	380	430	480	530	580	630	680	730	780
Weight(kg)	29	30	31	32	33	34	35	36	37	38	39	40

1. Length varies by motor
2. Applicable motor dimensions 130mm*130mm

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The appearance and specifications of the product are subject to change without prior notice.

A80–P10

A80 - 350 - P10 - FF - D - K3 - P1500W - S3 - FB0001

- **Cylinder Diameter**
- **Stroke** 50-600mm
- **Screw lead** P10 10mm
- **Installation method** FF : Front flange; LB : Side bearing
- **Motor installation method** D : Direct installation; P : Indirect installation
- **Reduction ratio** K3 ratio 3; K4 ratio 4; K5 ratio 5; K8 ratio 8; K10 ratio 10; Blank: no reduction ratio
- **Motor brand, power** P: Panasonic 1500W; T: Delta 2000W; M: Mitsubishi 3000W; Y : Yaskawa; O: Others
- **Magnetic ring switch** S1 1 switch; S2 2 switches; S3 3 switches; Blank: no switch
- **Special style**

Basic parameters

Basic parameters	
Repetitive positioning parameter	±0.02
Lead	10
Max. speed (mm/s)	333
Rated load (KN)	30
Max. load (KN)	35
Standard stroke	50-600mm/50 interval
AC servo motor	1500w/2000w/3000w
Motor speed (rpm/min)	2000

* 1. If the stroke is greater than 600mm, please contact the manufacturer
* 2. For special styles, please contact the manufacturer

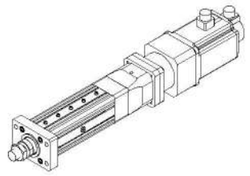
Servo Electric Cylinder Parameter Performance Table - Servo Motor Speed is 2000rpm.

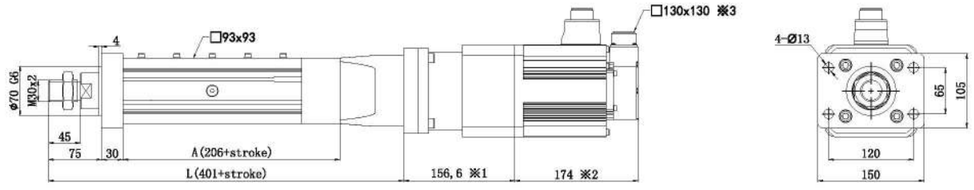
A80	Model	A80- □ -P10- □ - □ -K □ - □ 1500W-S3				
	Lead (mm)	10				
	Ratio	3	4	5	8	10
	Rated output (kn)	11.5	15.0	19.0	30.0	38.0
	Rated speed (mm/s)	111.1	83.3	66.6	41.6	33.3

A80	Model	A80- □ -P10- □ - □ -K □ - □ 2000W-S3				
	Lead (mm)	10				
	Ratio	3	4	5	8	10
	Rated output (kn)	15.0	20.0	25.5	40.0	51.0
	Rated speed (mm/s)	111.1	83.3	66.6	41.6	33.3

A80	Model	A80- □ -P10- □ - □ -K □ - □ 3000W-S3				
	Lead (mm)	10				
	Ratio	3	4	5	8	10
	Rated output (kn)	22.0	30.0	38.0	61.0	76.0
	Rated speed (mm/s)	111.1	83.3	66.6	41.6	33.3

A80–P10–FF–D–K □ – □ 1500W/2000W/3000W



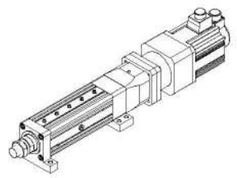


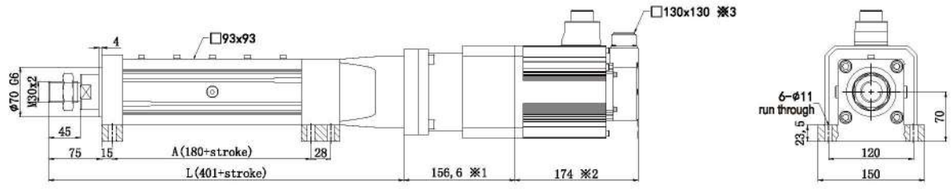
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	451	501	551	601	651	701	751	801	851	901	951	1001
A	256	306	356	406	456	506	556	606	656	706	756	806
Weight(kg)	26	27	28	29	30	31	32	33	34	35	36	37

1. Length varies by motor
2. Applicable motor dimensions 130mm*130mm

A80–P10–LB–D–K □ – □ 1500W/2000W/3000W





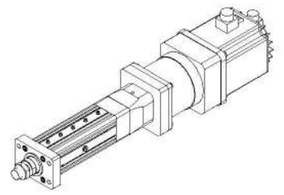
Unit : mm

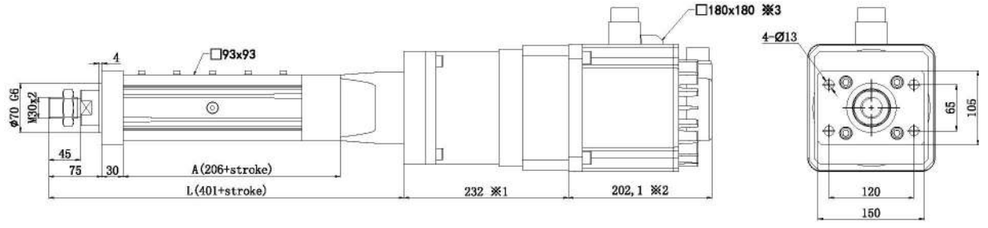
Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	451	501	551	601	651	701	751	801	851	901	951	1001
A	230	280	330	380	430	480	530	580	630	680	730	780
Weight(kg)	27	28	29	30	31	32	33	34	35	36	37	38

1. Length varies by motor
2. Applicable motor dimensions 130mm*130mm

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

A80–P10–FF–D–K □ – □ 3000W



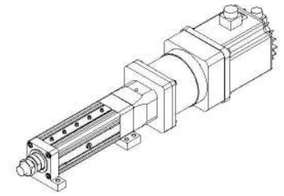


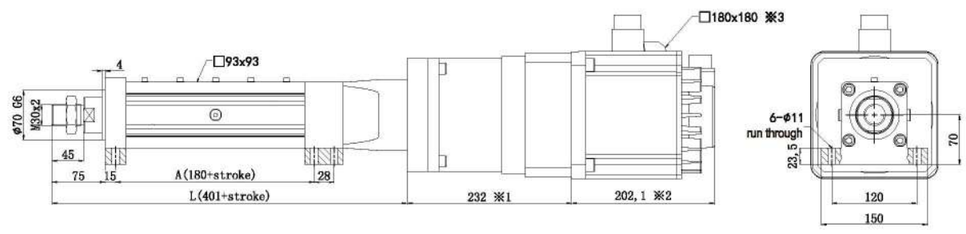
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	451	501	551	601	651	701	751	801	851	901	951	1001
A	256	306	356	406	456	506	556	606	656	706	756	806
Weight(kg)	41	42	43	44	45	46	47	48	49	50	51	52

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 180mm*180mm

A80–P10–LB–D–K □ – □ 3000W





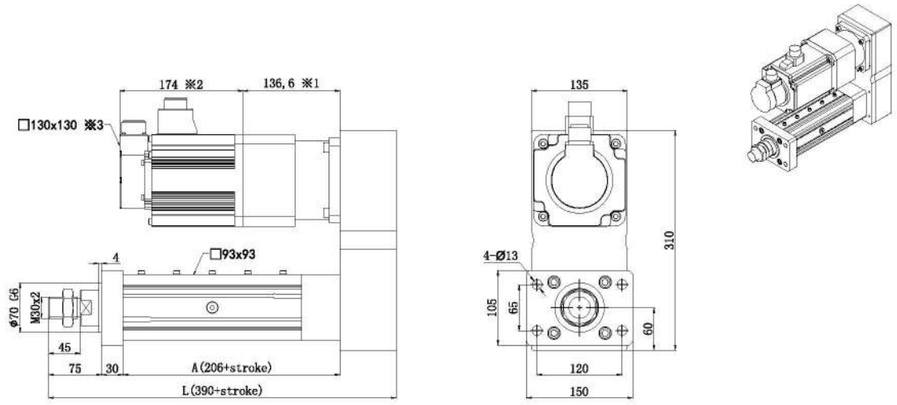
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	451	501	551	601	651	701	751	801	851	901	951	1001
A	230	280	330	380	430	480	530	580	630	680	730	780
Weight(kg)	42	43	44	45	46	47	48	49	50	51	52	53

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 180mm*180mm

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

A80–P10–FF–P–K □ – □ 1500W/2000W/3000W

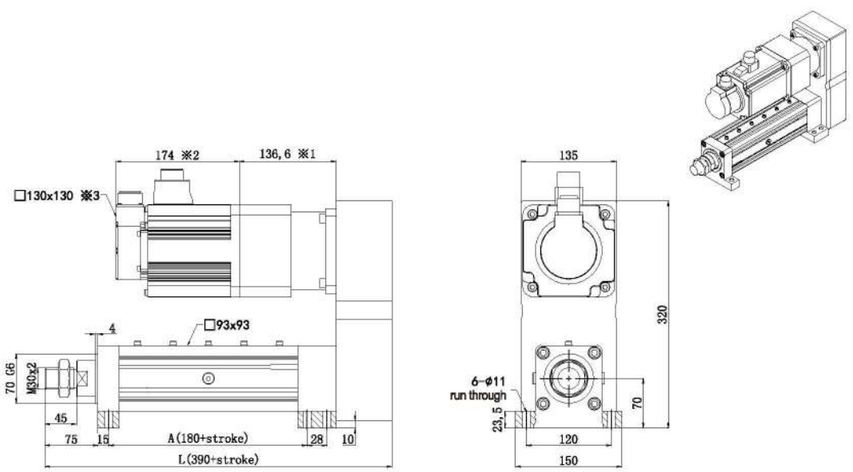


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	440	490	540	590	640	690	740	790	840	890	940	990
A	256	306	356	406	456	506	556	606	656	706	756	806
Weight(kg)	29	30	31	32	33	34	34	35	36	37	38	39

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 130mm*130mm

A80–P10–LB–P–K □ – □ 1500W/2000W/3000W



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	440	490	540	590	640	690	740	790	840	890	940	990
A	230	280	330	380	430	480	530	580	630	680	730	780
Weight(kg)	30	31	32	33	34	34	35	36	37	38	39	40

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 130mm*130mm

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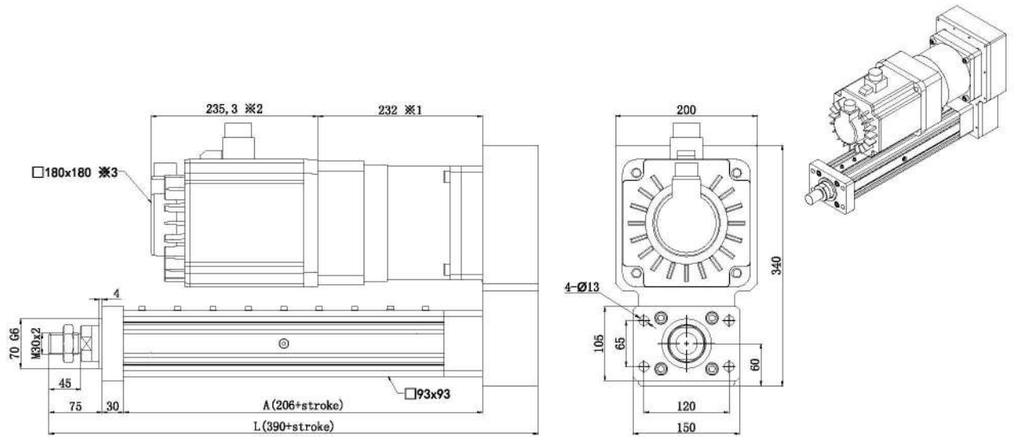
The appearance and specifications of the product are subject to change without prior notice.

A80–P10–FF–P–K □ – □ 3000W

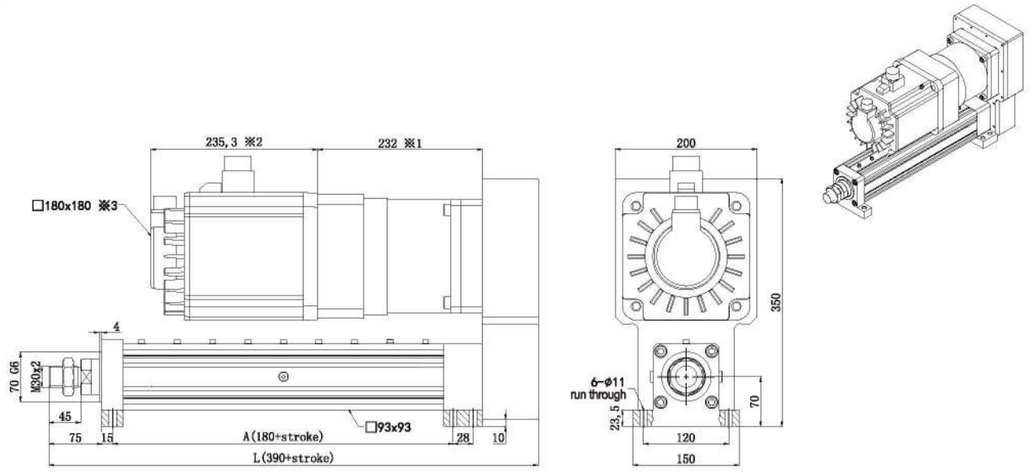


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	440	490	540	590	640	690	740	790	840	890	940	990
A	256	306	356	406	456	506	556	606	656	706	756	806
Weight(kg)	46	47	48	49	50	51	52	53	54	55	56	57

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 180mm*180mm

A80–P10–LB–P–K □ – □ 3000W



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	440	490	540	590	640	690	740	790	840	890	940	990
A	230	280	330	380	430	480	530	580	630	680	730	780
Weight(kg)	47	48	49	50	51	52	53	54	55	56	57	58

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 180mm*180mm

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

A125

A125 - 350 - P10 - FF - D - K3 - P1500W - S3 - FB0001

- **Cylinder Diameter**
- **Stroke** 50-600mm
- **Screw lead** P10 10mm
- **Installation method**
  - FF : Front flange
  - LB : Side bearing
- **Motor installation method**
  - D : Direct installation
  - P : Indirect installation
- **Reduction ratio**
  - K3 ratio 3
  - K4 ratio 4
  - K5 ratio 5
  - K8 ratio 8
  - K10 ratio 10
  - Blank: no reduction ratio
- **Motor brand, power**
  - P: Panasonic 1500W
  - T: Delta 2000W
  - M: Mitsubishi 3000W
  - Y : Yaskawa
  - O: Others
- **Magnetic ring switch**
  - S1 1 switch
  - S2 2 switches
  - S3 3 switches
  - Blank: no switch
- **Special style**

Basic parameters

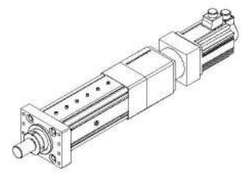
Basic parameters		
	Repetitive positioning parameter	±0.02
	Lead	10
	Max. speed (mm/s)	333
	Rated load (KN)	50
	Max. load (KN)	60
	Standard stroke	50-600mm/50 interval
	AC servo motor	1500w/2000w/3000w/ 3500w/4000w
	Motor speed (rpm/min)	2000

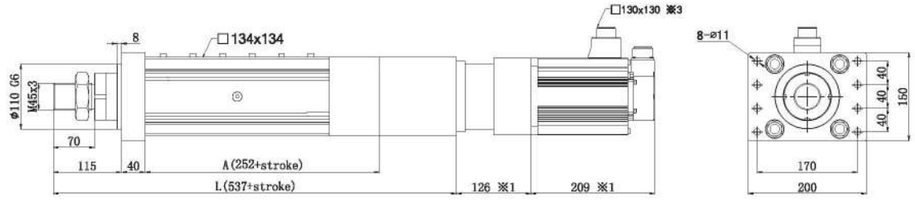
* 1. If the stroke is greater than 600mm, please contact the manufacturer
* 2. For special styles, please contact the manufacturer

Servo Electric Cylinder Parameter Performance Table - Servo Motor Speed is 2000rpm

A125	Model	A125- □ -P10- □ - □ -K □ - □ 1500W-S3				
	Lead (mm)	10				
	Ratio	3	4	5	8	10
	Rated output (kn)	11.5	15.0	19.0	30.0	38.0
	Rated speed (mm/s)	111.1	83.3	66.6	41.6	33.3
A125	Model	A125- □ -P10- □ - □ -K □ - □ 2000W-S3				
	Lead (mm)	10				
	Ratio	3	4	5	8	10
	Rated output (kn)	15.0	20.0	25.5	40.0	51.0
	Rated speed (mm/s)	111.1	83.3	66.6	41.6	33.3
A125	Model	A125- □ -P10- □ - □ -K □ - □ 3000W-S3				
	Lead (mm)	10				
	Ratio	3	4	5	8	10
	Rated output (kn)	22.0	30.0	38.0	60.0	76.0
	Rated speed (mm/s)	111.1	83.3	66.6	41.6	33.3
A125	Model	A125- □ -P10- □ - □ -K □ - □ 3500W-S3				
	Lead (mm)	10				
	Ratio	3	4	5	8	10
	Rated output (kn)	26.0	35.0	44.0	70.0	89.0
	Rated speed (mm/s)	111.1	83.3	66.6	41.6	33.3
A125	Model	A125- □ -P10- □ - □ -K □ - □ 4000W-S3				
	Lead (mm)	10				
	Ratio	3	4	5	8	10
	Rated output (kn)	30.0	40.0	50.0	81.0	100.0
	Rated speed (mm/s)	111.1	83.3	66.6	41.6	33.3

A125–P10–FF–D–K □ – □ 1500W/2000W/3000W



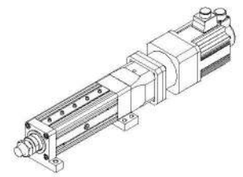


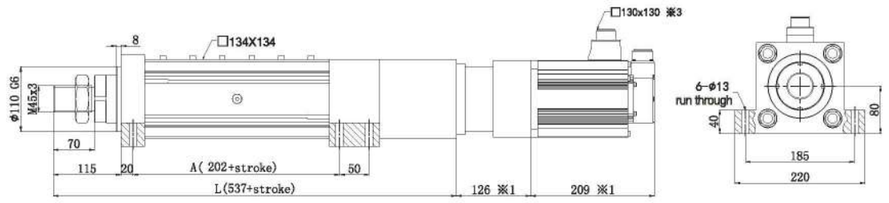
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	582	632	682	732	782	832	882	932	982	1032	1082	1132
A	297	347	394	447	497	547	597	647	697	747	797	847
Weight(kg)	57	59.5	62	64.5	67	69.5	72	74.5	77	79.5	82	84.5

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 130mm*130mm

A125–P10–LB–D–K □ – □ 1500W/2000W/3000W





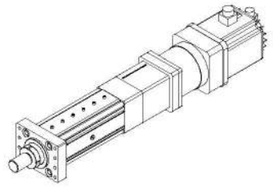
Unit : mm

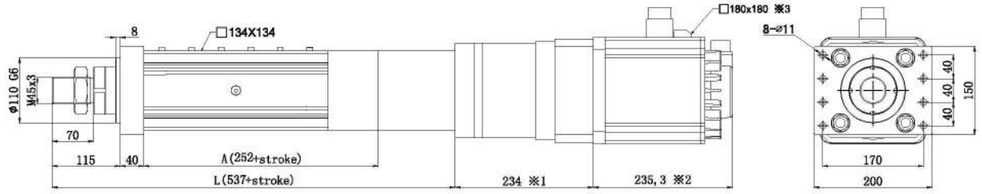
Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	582	632	682	732	782	832	882	932	982	1032	1082	1132
A	249.5	299.5	349.5	399.5	449.5	499.5	549.5	599.5	649.5	699.5	749.5	799.5
Weight(kg)	59	61.5	64	66.5	69	71.5	74	76.5	79	81.5	84	86.5

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 130mm*130mm

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

A125–P10–FF–D–K □ – □ 3000W/3500W/4000W



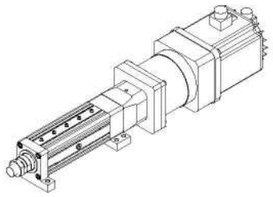


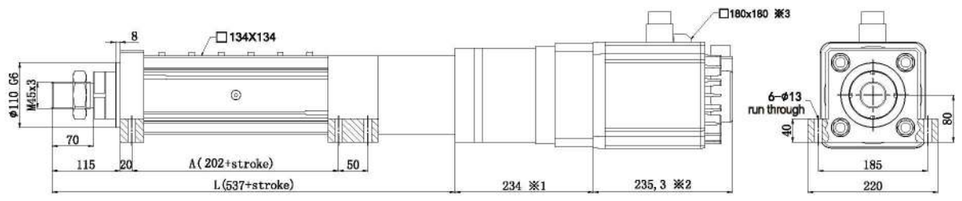
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	582	632	682	732	782	832	882	932	982	1032	1082	1132
A	297	347	397	447	497	549	597	647	697	747	797	847
Weight(kg)	70.5	73	75.5	78	80.5	83	85.5	88	90.5	93	95.5	98

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 180mm*180mm

A125–P10–LB–D–K □ – □ 3000W/3500W/4000W





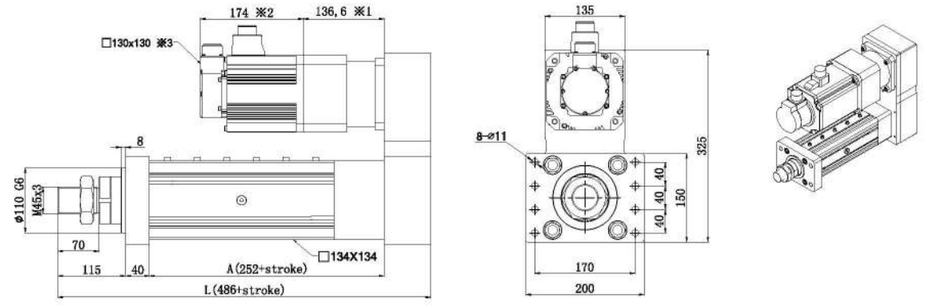
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	582	632	682	732	782	832	882	932	982	1032	1082	1132
A	249.5	299.5	349.5	399.5	449.5	499.5	549.5	599.5	649.5	699.5	749.5	799.5
Weight(kg)	72.5	75	77.5	80	82.5	85	87.5	90	92.5	95	97.5	100

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 180mm*180mm

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

A125–P10–FF–P–K □ – □ 1500W/2000W/3000W

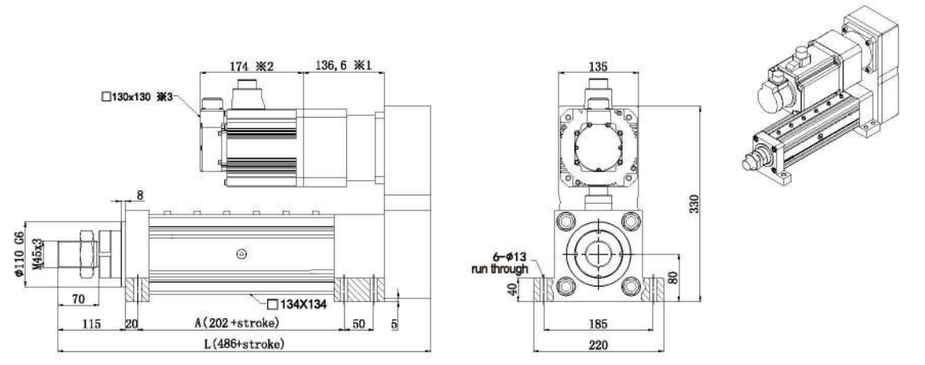


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	531	581	631	681	731	781	831	881	931	981	1031	1081
A	297	347	397	447	497	547	597	647	697	747	797	847
Weight(kg)	55	57.5	60	62.5	65	67.5	70	72.5	75	77.5	80	82.5

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 130mm*130mm

A125–P10–LB–P–K □ – □ 1500W/2000W/3000W



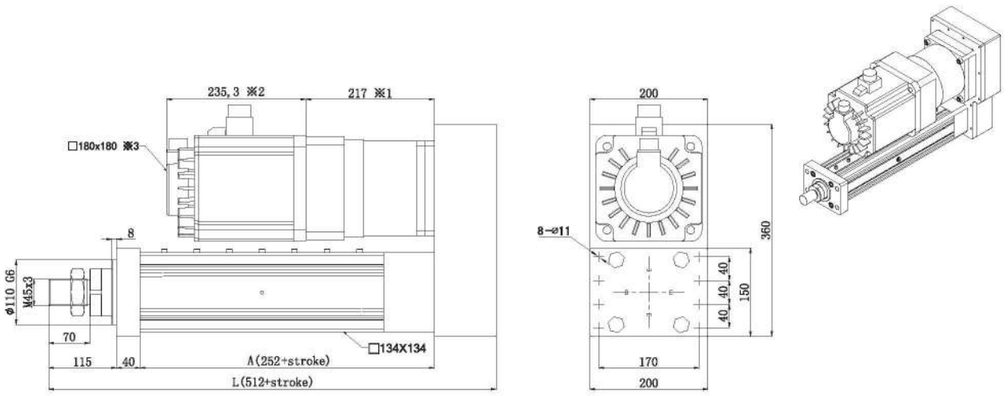
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	531	581	631	681	731	781	831	881	931	981	1031	1081
A	249.5	299.5	349.5	399.5	449.5	499.5	549.5	599.5	649.5	699.5	749.5	799.5
Weight(kg)	57	59.5	62	64.5	67	69.5	72	74.5	77	79.5	82	84.5

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 130mm*130mm

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

A125–P10–FF–P–K □ – □ 3000W/3500W/4000W

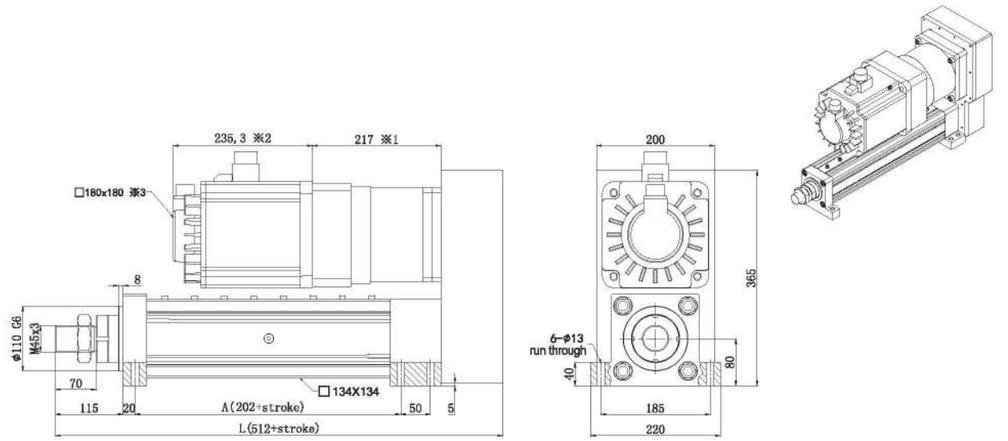


Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	557	607	657	707	757	807	857	907	957	1007	1057	1107
A	297	347	397	447	497	547	597	647	697	747	797	847
Weight(kg)	75	77.5	80	82.5	85	87.5	90	92.5	95	97.5	100	102.5

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 180mm*180mm

A125–P10–LB–P–K □ – □ 3000W/3500W/4000W



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	557	607	657	707	757	807	857	907	957	1007	1057	1107
A	249.5	299.5	349.5	399.5	449.5	499.5	549.5	599.5	649.5	699.5	749.5	799.5
Weight(kg)	77	79.5	82	84.5	87	89.5	92	94.5	97	99.5	102	104.5

1.The user specifies other brands of reducer, and the length changes according to the reducer
2. Length varies by motor
3. Applicable motor dimensions 180mm*180mm

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

PA140

A140 - 350 - P20 - FF - D - K3 - P3000W - S3 - FB0001

- **Cylinder Diameter**
- **Stroke** 50-600mm
- **Screw lead** P20 20mm
- **Installation method** FF : Front flange; LB : Side bearing
- **Motor installation method** D : Direct installation; P : Indirect installation
- **Reduction ratio** K3 ratio 3; K4 ratio 4; K5 ratio 5; K8 ratio 8; K10 ratio 10; Blank: no reduction ratio
- **Motor brand, power** P: Panasonic 1500W; T: Delta 2000W; M: Mitsubishi 3000W; Y : Yaskawa; O: Others
- **Magnetic ring switch** S1 1 switch; S2 2 switches; S3 3 switches; Blank: no switch
- **Special style**

Basic parameters

Basic parameters	
Repetitive positioning parameter	±0.02
Lead	20
Max. speed (mm/s)	666
Rated load (KN)	100
Max. load (KN)	110
Standard stroke	50-600mm/50 interval
AC servo motor	3KW/3.5KW/4KW/4.5KW/ 5KW/5.5KW/7KW/7.5KW
Motor speed (rpm/min)	1500/2000

Servo Electric Cylinder Parameter Performance Table - Servo Motor Speed is 2000rpm

PA140	Model	PA140- □ -P20- □ - □ -K □ - □ 3000W-S3				
	Lead (mm)	20				
	Ratio	3	4	5	8	10
	Rated output (kn)	15.3	20.4	25.5	40.8	51.0
	Rated speed (mm/s)	166.7	125.0	100.0	62.5	50.0

PA140	Model	PA140- □ -P20- □ - □ -K □ - □ 4500W-S3				
	Lead (mm)	20				
	Ratio	3	4	5	8	10
	Rated output (kn)	22.9	30.6	38.2	61.2	76.5
	Rated speed (mm/s)	166.7	125.0	100.0	62.5	50.0

PA140	Model	PA140- □ -P20- □ - □ -K □ - □ 5500W-S3				
	Lead (mm)	20				
	Ratio	3	4	5	8	10
	Rated output (kn)	28.0	37.4	46.7	74.8	93.4
	Rated speed (mm/s)	166.7	125.0	100.0	62.5	50.0

PA140	Model	PA140- □ -P20- □ - □ -K □ - □ 7500W-S3				
	Lead (mm)	20				
	Ratio	3	4	5	8	10
	Rated output (kn)	38.2	51.0	63.7	101.9	-
	Rated speed (mm/s)	166.7	125.0	100.0	62.5	50.0

■ Servo Electric Cylinder Parameter Performance Table - Servo Motor Speed is 2000rpm

PA140	Model	PA140- □ -P20- □ - □ -K □ - □ 3000W-S3				
	Lead (mm)	20				
	Ratio	3	4	5	8	10
	Rated output (kn)	11.5	15.3	19.1	30.6	38.2
	Rated speed (mm/s)	222.2	166.7	133.3	83.3	66.7

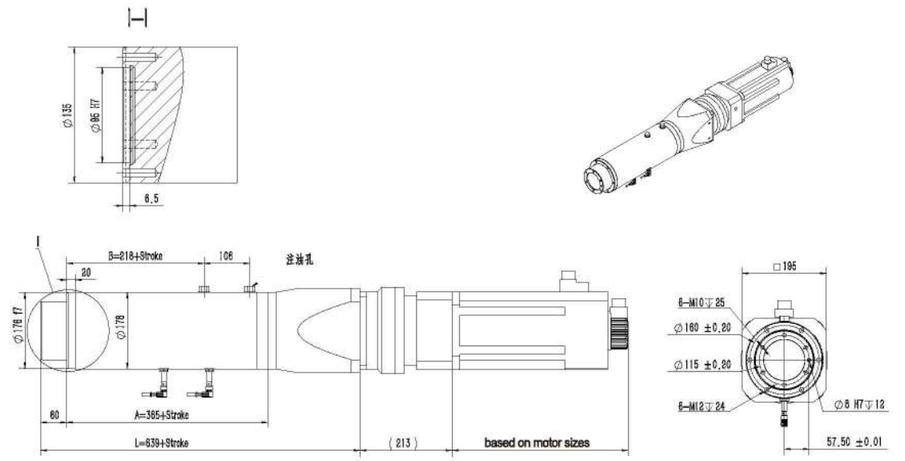
PA140	Model	PA140- □ -P20- □ - □ -K □ - □ 3500W-S3				
	Lead (mm)	20				
	Ratio	3	4	5	8	10
	Rated output (kn)	13.4	17.8	22.3	35.7	44.6
	Rated speed (mm/s)	222.2	166.7	133.3	83.3	66.7

PA140	Model	PA140- □ -P20- □ - □ -K □ - □ 4000W-S3				
	Lead (mm)	20				
	Ratio	3	4	5	8	10
	Rated output (kn)	15.3	20.4	25.5	40.8	51.0
	Rated speed (mm/s)	222.2	166.7	133.3	83.3	66.7

PA140	Model	PA140- □ -P20- □ - □ -K □ - □ 5000W-S3				
	Lead (mm)	20				
	Ratio	3	4	5	8	10
	Rated output (kn)	19.1	25.5	31.9	51.0	63.7
	Rated speed (mm/s)	222.2	166.7	133.3	83.3	66.7

PA140	Model	PA140- □ -P20- □ - □ -K □ - □ 7000W-S3				
	Lead (mm)	20				
	Ratio	3	4	5	8	10
	Rated output (kn)	26.8	35.7	44.6	71.4	89.2
	Rated speed (mm/s)	222.2	166.7	133.3	83.3	66.7

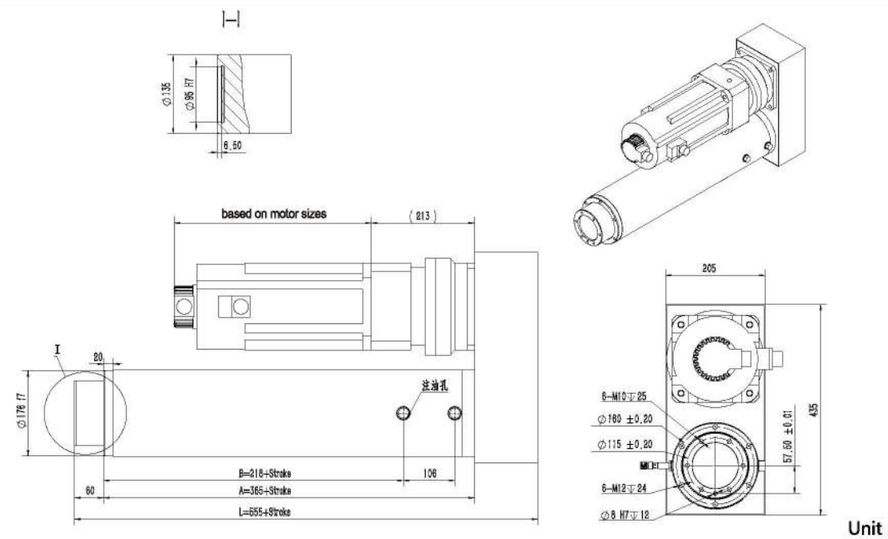
PA140–P20–D



Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	689	739	789	839	889	939	989	1039	1089	1139	1189	1239
A	415	465	515	565	615	665	715	765	815	865	915	965
B	268	318	368	418	468	518	568	618	668	718	768	818
Weight(kg)	119	127	135	143	151	159	167	175	183	191	199	207

PA140–P20–P



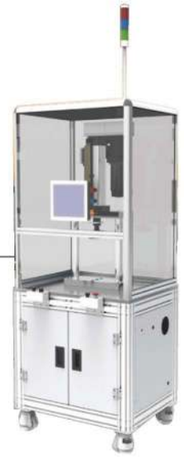
Unit : mm

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	605	655	705	755	805	855	905	955	1005	1055	1105	1155
A	415	465	515	565	615	665	715	765	815	865	915	965
B	268	318	368	418	468	518	568	618	668	718	768	818
Weight(kg)	118	126	134	142	150	158	166	174	182	190	198	206

This drawing is for reference only. The actual size is subject to the 2D/3D drawings provided.
The appearance and specifications of the product are subject to change without prior notice.

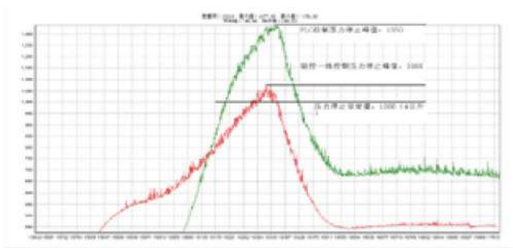
A series heavy duty electric cylinder

Intelligent servo press mounting system



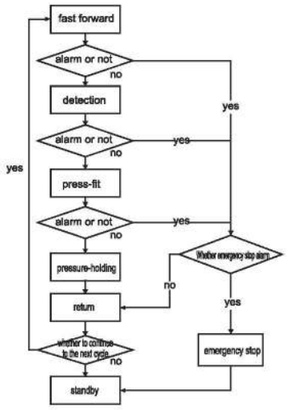
■ Intelligent driver for precision force control equipment

- Highly integrated drive and control integrated intelligent control unit;
- Position, pressure fully closed loop;
- Real-time display of position, pressure, speed, current;
- A variety of quality judgment modes, real-time accurate quality inspection;
- Real-time automatic storage and transmission of data;

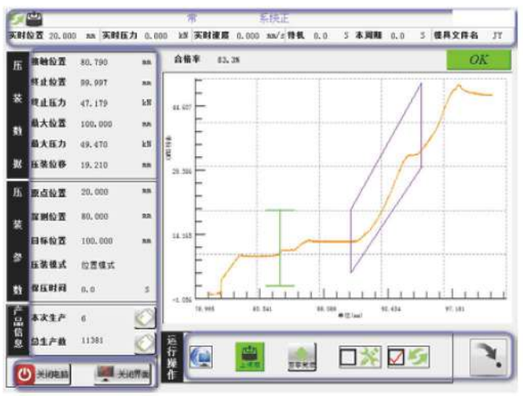


■ Process flow

- The press-fitting process of the press-fitting machine usually consists of five actions: fast- forward, detection, press-fit, pressure-holding,and return. The specific process flow chart is as follows

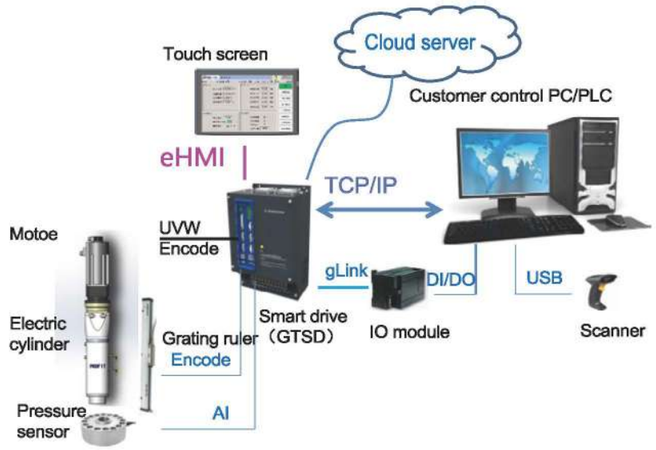


■ Main interface



■ Process parameters

■ Force and position control unit based on GTSD



Precise position pressure closed loop control

- Position accuracy <±0.01mm
- Displacement accuracy <±0.01mm
- Full closed-loop pressure control, the pressure starting curve can be planned, and the accuracy is <±0.2%FS.

Network and Cloud Server

- Support local PC remote mass storage and control
- Support cloud server

Multiple real-time judgment modes

- Point judgment, envelope judgment, window judgment, etc.

Extreme-speed press-fitting curve collection

- Support the fastest 125μs real-time data sampling
- Press-fit curve, real-time display of quality judgment curve
- Local maximum 2G storage space

■ Control unit technical parameters

Functional unit	Specification item	Technical indicators
Computer performance	CPU	800MHz
	RAM	500M
	Hard disk	4GB
	Operating system	WinCE 6.0
Main circuit power supply	Rated voltage	three phase:380V, fluctuation range323V~418V. Or single phase: 220V, fluctuation range198V~242V.
	Rated frequency	50Hz~60Hz, fluctuation range±5%
IO interface power supply	Input voltage	12V~24V
	Allowable voltage fluctuation	-10%~10%
	Power capacity(ma)	More than 500mA (the 24V power supply of this machine only provides 200mA current)
Output characteristics	Applicable motors(kW)	see ordering information
	Rated output current(A)	see ordering information
	Output voltage(V)	3-phase output under rated conditions, 0V~rated input voltage
	Output frequency(Hz)	0~1000Hz
	Overload characteristics	HD: 120% rated current for 30 seconds, 300% rated current for 0.5 seconds
IO interface	Digital input	13-way optocoupler isolated inputs
	Digital output	2-way optocoupler isolation output (each output ≤ 10mA)
	MOS output	5-way MOS outputs (each output ≤ 0.5A)
	Analog input	4-way analog inputs: -10V~+10V 1-way analog input: -10V~+10V voltage or 4mA~20mA current input
	Extended IO	A single IO expansion module station contains 16 channels of DI, 16 channels of DO, NPN type, and supports up to 16 slave stations in cascade.
	Safety protection	Safe torque off
Encoder interface	Support resolver, incremental encoder, sine and cosine encoder, absolute encoder, Hall encoder	
Communication Interface	CANopen、USB2.0、Ethernet、RS-232、gLink-II	
Protective function	Alarm content: overvoltage, undervoltage, overcurrent, driver overheating, encoder disconnection, phase loss detection	
Display interface	eHMI(optional): 1-way, includesLVDS、PS/2、RS232、USB、gLink-II sigal	

Intelligent servo press mounting system

■ Press fit parameters

In the press-fitting parameter setting interface, the user can select the press-fitting mode during the press-fitting process, including the position press-fitting mode, which is the precise position stop; the pressure press-fitting mode, which is the precise pressure stop; and the displacement press-fitting mode, which is the precise displacement stop. In addition, set the process parameters, including fast forward speed, detection speed and corresponding position and pressure protection parameters.

Name	Function description
Location mode	Press-fit working mode 1, which uses speed control to precisely position in-position stop
Target location	In position mode, the absolute position of the end point of the press-fitting stage is also the absolute position of the end point of the probe stage.
Pressure mode	Press fit working mode 2, in this mode, the precise pressure control is used to stop in place.
Target pressure	The target pressure value of the press-fitting process, valid in the pressure mode
Location protection	The position protection value in the pressure mode, that is, once the feedback position of the indenter exceeds the position return setting value during the press-fitting process, it will stop the movement and switch to the position mode.
Displacement protection	The movement displacement protection value in the pressure mode, that is, once the feedback displacement of the indenter exceeds the displacement return setting value in the press-fitting stage, the system will stop the movement and switch to the position mode.
Displacement mode	Press-fit working mode 3, this mode uses speed control, precise position stop.
Pressure protection	When the current feedback pressure exceeds this protection value for a period of time, the system will stop moving.
Target displacement	The relative displacement of the press-fitting process relative to the movement of the starting point of the press-fitting process, this value is valid in displacement mode.
Fast forward speed	Speed of fast-forward stages in automatic/semi-automatic mode
Detection speed	Speed of detection phase in automatic/semi-automatic mode
Pressing speed	Speed of the press-fit stage in automatic/semi-automatic mode
Return speed	Speed of return phase in automatic/semi-automatic mode
Manual speed	Speed of each movement in manual mode
Origin position	The setting value of the starting point position at the beginning of each press-fitting
Detection position	The position setting value at the beginning of the detection phase, which is usually set closer to the upper surface of the pressed product
Pressure holding time	The set value of the execution process time in the pressure holding phase
Pre-pressing position	The pre-pressing stage after entering the press-fitting stage
Pre-pressing speed	The speed of entering the pre-pressing stage

■ Quality inspection - point inspection

The detection methods include point detection, area detection and window detection, and the three detection methods can participate in quality detection at the same time.

The above picture is point detection

In the "Condition" area on the right, you can check whether the 5 detection points are involved in the detection. Select "Displacement Mode" or "Pressure Mode" for each point via the selection box.

Name	Function description
Detection value	The detection value corresponding to the detection point on the real-time curve. It is automatically generated, and the user does not need to set it.
Reference value	Query the detection value of the corresponding detection point on the reference curve. Automatically generated, users do not need to set
Pressure upper/lower limit	In the position mode, the pressure setting range of the detection point, unit: kN/kgf.
Position upper/lower limit	In the pressure mode, the setting range of the effective detection point position, unit: mm.

Intelligent servo press mounting system

■ Quality Judgment - Point Judgment

a、Location mode

b、Pressure mode

Settings for location mode point detection :
1. Select the position detection value reasonably to ensure that the position detection value is reasonable and effective.
2. Set the corresponding lower pressure limit and upper pressure limit according to the press fitting curve

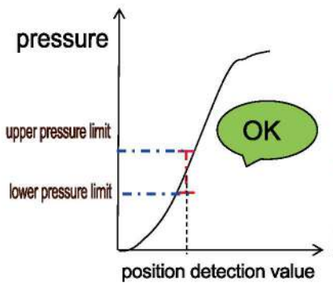


Figure 3.1 Point Detection - Position Mode

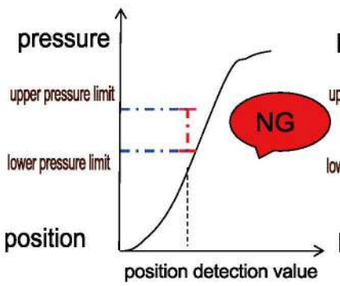


Figure 3.2 Point Detection - Position Mode

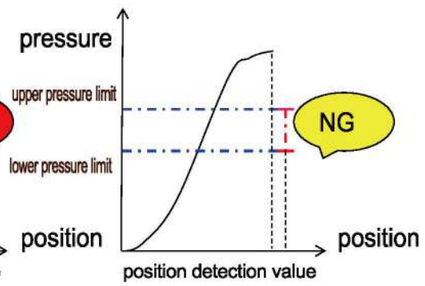


Figure 3.3 Point Detection - Position Mode

a、Location mode

b、Pressure mode

Settings Settings for pressure mode point detection:
1. Reasonably select the pressure detection value to ensure that the pressure detection value is reasonable and effective
2. Set the corresponding lower limit and upper limit of the position according to the pressing curve

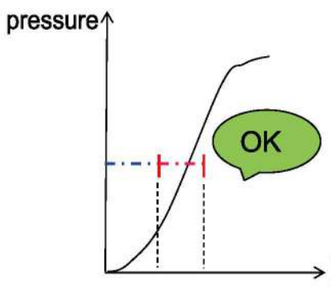


Figure 3.4 Point Detection - Position Mode

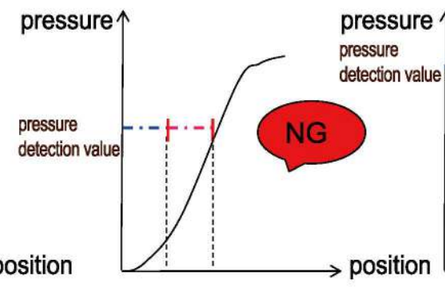


Figure 3.5 Point Detection - Position Mode

■ Quality Inspection - Area Inspection

The above picture shows the area detection

Area detection is divided into position mode and pressure mode.
The specific parameter settings of area detection are shown in the figure.

Area start value/end value	In the position mode, the area start value/end value is used to set the area plus measurement position range, unit: mm; in the pressure mode, the area start value/end value is used to set the area detection pressure range, unit: kN/kgf.
Deviation under pressure Deviation up	In position mode, set the detection pressure lower deviation/ up deviation, unit: kN/kgf
Minimum maximum deviation value	(Position mode) The minimum/maximum position difference between the detection reference curve and the real-time curve, unit: mm; (Pressure mode) Detection of the minimum/maximum pressure difference between the reference curve and the real-time curve, unit: kN/kgf

Intelligent servo press mounting system

Measuring tools

1. Parallelism Testing / Height Testing


Measuring Tools :
Dial Gauge、Dial Indicator

MeasuringMethods :
1. Fix the actuator on granite.
2. Fix the measuring tools on the actuator's slider.
3. As photo display.
4. Record it as a reference.

2. Absolute Straightness Accuracy Testing


Measuring Tools :
Laser Interferometer Detection

MeasuringMethods :
1. Fix the actuator on granite.
2. Fix the measuring tools on the actuator's slider.
3. As photo display.
4. Print the test report as a recoder.

3. Absolute Straightness Accuracy Testing


Measuring Tools :
Position Detection

MeasuringMethods :
1. Fix the actuator on granite.
2. Use laser to align the slider's side to the detect the repeatability accuracy .
3. As photo display.
4. Record it as a reference.

4. Power Drive Situation Testing by Motor Electric Current

Measuring Tools :
Servo Driver 100W、200W、400W、750W

MeasuringMethods :
1. Fix the actuator on granite.
2. Fix the measuring tools on the actuator' s slider.
3. As photo display.
4. Record it as a reference.

5. Smoothness Testing

Measuring Tools :
Tension Gauge

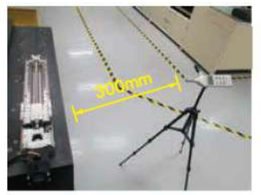
MeasuringMethods :
1. Fix the actuator on granite.
2. Push the slider useing pull tension gauge .
3. As photo display.
4. Record it as a reference.

6. Belt Tension Testing

Measuring Tools :
Tension Gauge

MeasuringMethods :
1. Fix the actuator on granite.
2. Use belt tension gauge to test the vibration of the belt.
3. As photo display.
4. Record it on shipping testing.

7. Decibel Testing



Measuring Tools :
Meter

MeasuringMethods :
1. Fix the actuator on granite.
2. 300mm Decibel meter put at the distance of 300mm.
3. Use motor to drive actuator in high speed.
4. As photo display.
5. Record it on shipping testing.

8. Measuring Tool: Granite Platform


Specifications :
1.Size:1295mm*600mm*140mm
2.Size:4020mm*800mm*300mm

9. Material Tools



Measuring Tools :
1. 3D Inspection Testing Machine
2. Electronic vernier caliper, Vernier caliper
3. Inside micrometer, Outside micrometer
4. Altimeter, Vertical meter
5. Electronic level meter
6. Dial Gauge、Dial Indicator
7. Steel tape、Steel ruler

Tools calibration standards:
Block gauge, ring gauge (regularly qualified)

Room :
1. Control temperature and humidity to keep the stability of the measurement.
2. Measuring tools calibrate regularly.

Warranty period and scope

Warranty Period

The warranty period includes the following three items.
Whichever comes first shall be taken as the basis of the warranty period.

This warranty is effective for a period of :

- 18 months (one and a half years) after shipment from Taiwan factory,or
- One year after installation or
- 2,500 hours of actual operation whichever comes first.

Exceptions to the Warranty

This warranty will not apply in the following cases :

- Fatigue arising due to the passage of time, natural wear and tear occurring during operation (natural fading of panited or plated surfaces, deterioration of parts subject to wear).
- Minor natural phenomena which do not effect the capabilities of the robot (noise from computers, motors,etc.).
- Damage due to earthquakes, stroms, floods,thunderbolt,fire or any otfer natural or man-made calamities.
- Troubles caused by procedures prohibited in this manual.
- Modifications to the robot not approced by TOYO or TOYO sales representatives.
- Use of any other than genuine parts and specified lubricant and grease.
- Insufficicntcy or errors in maintenance and inspection.
- Repairs by other than authorized dealers.

In addition. we response for the failure of our own goods repair, but are not responsible for other losses caused due to.

Services Coverage

We provide customers with the following services :

- Guide to installation and trial operation.
- Guide to maintenance.
- Guide to wiring technical operation and training.
- Guide to technical programming.

Safety precautions for use

Product Safety Information

To ensure correct and safe use of industrial robots, carefully read this maunal and make yourself well acquainted with the contents. FOLLOW THE WARNINGS, CAUTIONS AND INSTRECTIONS INCLUDED IN THIS MANUAL. Warning information in this maunal is shown classified into the following items.

1 Safety Records

Industrial robots are highly mechanical devices that provide a large degree of freedom when performing various manipulative tasks.Failure to take necessarysafety measures or mishandling due to not following the instructions in this manual may result in trouble or damage to the robot and injury to personnel (robot operator or service personnel) including fatal accidents.

DANGER

Failure to follow DANGER instructions will result in severe injury or death to the robot operator,bystanders or persons inspecting or repairing the robot.

WARNING

Failure to follow WARNING instructions could result in severe injury or death to the robot operator,bystanders or persons inspecting or repairing the robot.

CAUTION

Failure to follow CAUTION instructions may result in injury to the robot operator, bystanders or persons inspecting or repairing the robot,or damage to the robot and or robot controller.

POINTS

Key points of the sequence of operations of the Electric Slide.

2 Particularly Important Considerations

The following are important precautions for the operation instructions of the electric slide. In addition, the precautions related to installation, operation, inspection and maintenance are recorded in each chapter. Please strictly observe these precautions.

(—) Observe the following cautions during automatic operation.

- Install a safeguard (protective enclosure) to keep any person from entering within the movement range of the robot and suffering injury due to being struck by moving parts.
- Install a safety interlock that triggers emergency stop when the door or panel is opened.
- Install safeguards so that no one can enter inside except from doors or panels equipped with safety interlocks.

DANGER

- Serious injury or death will result from impact with moving robot.
- Keep outside of guard during operation.
- Lock out power brfore approaching robot.

(二) Attention to hand sandwiched.

■ Use caution to prevent hands or fingers from being pinched or crushed.

WARNING

Moving parts can pinch or crush.
Keep hands away from robot arms.

(三) Follow the instructions on listed on warning labels and in this manual.

■ Be sure to read the warning labels and this manual carefully and make sure you thoroughly understand their contents before attempting installation and oper-ation of the robot.
■ Before starting robot operation, be sure to reread the procedures and cautions relating to your work as well as descriptions in this chapter ("TOYO product Safety Information").
■ Never install, adjust, inspect or service the robot in any manner that does not comply with the instructions in this manual.

WARNING

Improper installation or operation can result in serious injury or death.
Read the owner's manual and all warning labels before operation.

(四) Do not use the robot in environments containing inflammable gas, etc.

WARNING

■ This robot was not designed for operation in environments where inflammable or explosive substances are present.
■ Do not use the robot in environments containing inflammable gas, dust or liquids. Explosions or fire might otherwise result.

(五) o not use the robot in locations possibly subject to electromagnetic interference, etc.

WARNING

Avoid using the robot in locations subject to electromagnetic interference, electrostatic discharge or radio frequency interference.
Malfunctions mightotherwise occur.

(六) Use caution when releasing the brake of a vertical use robot.

WARNING

■ The vertical axis will slide down when the brake is released, causing a hazardous situation.
■ Press the emergency stop button and prop up the vertical axis with a support stand before releasing the brake.
■ Be careful not to let your body get caught between the vertical axis and installation base when releasing the brake to perform direct teach.

(七) Use caution when removing the motor. (Vertical use robots)

WARNING

■ The vertical axis will slide down when the motor is released, causing a hazardous situation.
■ Turn off the robot controller and prop up the vertical axis with a support stand before removing the motor. Be careful not to let your body get caught
■ between the vertical axis parts and installation base.

(八) Take the following safety precautions during inspection of controller.

WARNING

■ When you need to touch the terminals or connectors on the outside of the controller during inspection, always first turn off the
■ controller power switch and also the power source in order to prevent possible electrical shock.
■ Never touch any internal parts of the controller.

(九) Consult with us for corrective action when the robot is damaged or malfunctions occur.

WARNING

■ If any part of the robot is damaged or any malfunction occurs,continuing the operation may be very dangerous. Please consult with
■ your sales office or dealer for corrective action.
■ Steel strip, roller and lubricant are consumables. We suggest to replace once a year.

(十) Be careful not to touch the motor or speed reduction gear casing when hot.

WARNING

The motor and speed reduction gear casing are extremely hot after automatic operation, so burns may occur if these are touched. Before handling these parts during inspection or servicing, turn off the controller, wait for a while and check that the part has cooled.

(十一) Do not remove, alter or stain the warning labels.

WARNING

■ Do not remove, alter or stain the warning labels on the robot.
■ Do not allow the warning labels to be hidden by devices installed onto the robot by the user.
■ Provide proper lighting so that the symbols and instructions on the warning labels can be clearly seen even from outside the safeguard enclosure.

(十二) Protective bonding.

WARNING

Be sure to ground the robot and controller to prevent electrical.

(十三) Be sure to make correct parameter settings.

WARNING

The robot must be operated with correct tolerable moment of inertia and acceleration coefficients according to the manipulator tip mass and moment of inertia. If these are not correct, drive unit service life may end prematurely, and damage to robot parts or residual vibration during positioning may result.

3 Robot Safety Functions

(一) Overload detection.

This function detects an overload applied to the motor and shuts off the servo power.

(二) SENSOR Soft limits.

Soft limits can be set on each axis to limit the working envelope in manual operation after return-to-origin and during automatic operation.
Note: The working envelope is the area limited by soft limits.

(三) Mechanical stoppers.

If the servo power is suddenly shut off during high-speed operation by emergency stop or safety functions, these mechanical stoppers prevent the axis from exceeding the movement range. No mechanical stopper is provided on the rotating axis.
Note: The movement range is the area limited by mechanical stoppers.

WARNING

Axis movement will not stop immediately after the servo power supply is shut off by emergency stop or other safety functions.

(四) Vertical axis brake.

An electromagnetic brake is installed on the vertical use robot to prevent the vertical axis from sliding down when servo power is turned off. This brake isworking when the controller is off or the vertical axis servo power is off even when the controller is on. The vertical axis brake can be released by means of the programming unit or by a command in the program when the controller is on.

WARNING

The vertical axis will slide down when the brake is released, creating a hazardous situation.
Press the emergency stop button and prop the vertical axis with a support stand before releasing the brake.
Use caution not to let your body get caught between the vertical axis and installation base when releasing the brake to perform direct teach.

4 Safety Measures for the System

Since the robot is commonly used in conjunction with an automated system, dangerous situations are more likely to occur from the automated system than from the robot itself. Accordingly, appropriate safety measures must be taken on the part of the system manufacturer according to the individual system. The system manufacturer should provide a proper instruction manual for safe, correct operation and servicing of the system.

5 Trial Operation

After making installations, adjustments, inspections, or maintenance or repairs to the robot, make a trial run using the following procedures.

(一) If a safeguard enclosure has not yet been provided right after installation of the robot.

If a safeguard enclosure has not yet been provided right after installation of the robot, rope off or chain off around the movement area of the manipulator in place of the safeguard, and observe the following points.
1 .Use sturdy, stable posts which will not fall over easily.
2 .The rope or chain should be easily visible by everyone around the robot.
3 .Place a sign to keep the operator or other personnel from entering the movement range of the manipulator.

(二) Check the following points before turning on the controller.

1 .Is the robot securely and correctly installed?
2 .Are the electrical connections to the robot correct?
3 .Are items such as air pressure correctly supplied?
4 .Is the robot correctly connected to peripheral equipment?
5 .Have safety measures (safeguard enclosure, etc.) been taken?
6 .Does the installation environment meet the specified standards.

(三) After the controller is turned on, check the following points from outside the safeguard enclosure.

After the controller is turned on, check the following points from outside the safeguard enclosure.
1 .Does the robot start and stop as intended? Can the operation mode be selected correctly?
2 .Does each axis move as intended within the soft limits?
3 .Does the end effector move as intended?
4 .Are the signal transmissions to the end effector and peripheral equipment correct?
5 .Does emergency stop work?
6 .Are the teaching and playback functions normal?
7 .Are the safeguard enclosure and interlock working as intended?
8 .Does the robot move correctly during automatic operation?

6 Work Within the Safeguard Enclosure

(一) Work within the safeguard enclosure.

When work is required inside the safeguard enclosure, always turn off the controller and place a sign indicating that the robot is being adjusted or serviced in order to keep any other person from touching the controller switch or operation panel, except for the following cases.
1)Soft limit settings
2)Teaching
For item 1), follow the precautions and procedure for each section. To perform item 2), refer to the description in (2)below.

(二) Teaching

When performing teaching within the safeguard enclosure, comply with the instructions listed below.

Check or perform the following points from outside the safeguard enclosure.

1.Make sure that no hazards are present within the safeguard enclosure by a visual check.

2.Check that the programming unit MPB or DPB operates correctly.

3.Check that no failures are found in the robot.

4.Check that emergency stop works correctly.

5.Select teaching mode and prohibit automatic operation.

7 Automatic Operation

(一) Automatic operation described here includes all operations in AUTO mode.

Never enter the movement range of the manipulator while within the safeguard enclosure.

(1) Check the following before starting automatic operation.

1.No one is within the safeguard enclosure.

2.The programming unit and tools are in their specified locations.

3.The alarm or error lamps on the robot and peripheral equipment do not flash.

4.The safeguard enclosure is securely installed with safety interlocks actuated.

(二) Observe the following during automatic operation or in cases where an error occurs.

1) After automatic operation has started, check the operation status and warning lamp to ensure that the robot is in automatic operation.

2) Never enter the safeguard enclosure during automatic operation.

3) If an error occurs in the robot or peripheral equipment, observe the following procedure before entering the safeguard enclosure.

1.Press the emergency stop button to set the robot to emergency stop.

2.Place a sign on the start switch, indicating that the robot is being inspected in order to keep any other person from touching the start switch and rcfarting the robot.

8 Adjustment and Inspection

Do not attempt any installation, adjustment, inspection or maintenance unless it is described in this manual.

9 Repair and Modification

Do not attempt any repair, parts replacement and modification unless described in this manual. These works require technical knowledge and skill, and may also involve work hazards.

Support Fax Form

2D CAD 3D CAD Drawings can be downloaded from www.fht.tw

Customer Support Contact Number 400-8040-668

Request date:
Reply date:

If you need technical assistance or choose a product application that suits you, please fax directly to our customer support center, and professional engineers will serve you quickly.

Name:

Job title: **Industry:**

Company:

Address:

Country: **Postal code:**

Tel: **Extension:** **Fax:**

E-mail:

If you fill in the email, you will receive the latest product news and special offers

■ To expedite our handling of your issue, please provide the following information.

1. What kind of machine are you using? ? _____
2. Annual demand ? _____
3. If not for new product development, what product slides do you currently use?_____

■ Product

□ General environment

Single axis ○Screw ○Belt ○Linear motor ○Belt type linear drive module
Multi-axis ○Cantilever type ○Gantry type ○Polar type ○ Cross type

□ Three-axis dispensing mechanism

□ Dust-free environment

Single axis ○Screw ○Belt ○Linear motor
○ Belt type linear drive module
Multi-axis ○Cantilever type ○Gantry type ○ Polar type
○ Cross type

■ Service

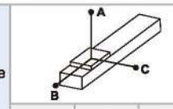
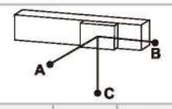
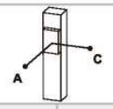
○Catalog ○ Product display ○Application assistance ○Quotation ○Others_____

■ Problem description/application diagram

Please copy and fax this page

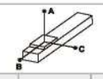
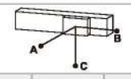
Single axis specification selection table

Single-axis Actuator Inquiry Sheet

Customer			Register Date		Register Person					
Needs	Stroke (mm) : Speed (mm/s) : Payload (kg) : Repeatability Accuracy (mm) : ☐ ±0.005 ☐ ±0.01 ☐ ±0.04 ☐ ±0.1									
	Work Piece Moment (mm)									
		A	B	C	A	B	C	A	C	
Motor Brand					Motor Model No.					
Combination Motor	Ball Screw	☐ M 	☐ BC 	☐ BR 	☐ BL 	☐ BM 				
	Belt	☐ L 	☐ LU 	☐ LD 	☐ LT 	☐ LL 				
		☐ R 	☐ RU 	☐ RD 	☐ RT 	☐ RR 				
SENSOR Connect Method	☐ Inside ☐ Outside									
Application	☐ Pick&Place						Figure			
	C C D Testing	☐ Position Test								
		☐ Moving Test								
	☐ Processing Work									
	☐ Screw Fastening									
	☐ Dispenser									
	☐ Other									
Usage Environment	☐ Clean Room (Class)			Class 10	Class 100	Class 1000	Remarks			
	☐ General Environmen									
Equipment For:	☐ Mass Production ☐ Trial Run									
Remarks :										

Multi axis specification selection table

Multi-axis Actuator Inquiry Sheet

Customer			Register Date		Register Person					
Needs	Stroke (mm) : X_____ Y_____ Z_____ Speed (mm/s) : X_____ Y_____ Z_____ Payload (kg) : Repeatability Accuracy(Multia-xial) (mm) : ☐ ±0.005 ☐ ±0.01 ☐ ±0.04 ☐ ±0.1									
	Work Piece Moment (mm)									
		A	B	C	A	B	C	A	C	
Combination Types	A Type 	☐ A1 	☐ A2 	☐ A3 	☐ A4 					
	G Type 	☐ G1 	☐ G2 	☐ G3 	☐ G4 					
	P Type 	☐ P1 	☐ P2 							
	F Type 	☐ F1 	☐ F2 							
Motor Brand					Motor Model No.					
Combination Motor	X Axis	Ball Screw	☐ M 	☐ BC 	☐ BR 	☐ BL 	☐ BM 			
		Belt	☐ L 	☐ LU 	☐ LD 					
			☐ R 	☐ RU 	☐ RD 					
	Y Axis	Ball Screw	☐ M 	☐ BC 	☐ BR 	☐ BL 	☐ BM 			
		Belt	☐ L 	☐ LU 	☐ LD 					
			☐ R 	☐ RU 	☐ RD 					
	Z Axis	Ball Screw	☐ M 	☐ BC	☐ BR	☐ BL	☐ BM			
SENSOR Connect Method	☐ Inside ☐ Outside									
Application	☐ Pick&Place		☐ Position Test		☐ Processing Work					
	☐ CCD Testing		☐ Moving Test		☐ Screw Fastening					
					☐ Dispenser					
If Y-axis is longer than stroke 350mm, support is suggested to add.										
Usage Environment	☐ General Environmen		☐ Clean Room (Class)			Class 10	Class 100	Class 1000		
	☐ Dusty Environmen									
Equipment For:	☐ Mass Production ☐ Trial Run									
Remarks :										

Class C information collection form

Information collection form - Class C synchronous mechanism scheme			Year	Month	Day
Dealer		Customer			
Contact person		Contact person			
Tel		Tel			
Email		Email			
Category	☐ Push rod lifting mechanism ☐ Slider lifting mechanism ☐ Others				
2.Lifting mechanism application (electric push rod):					
運動方式	☐ Single axis lift ☐ Simultaneous movement of two axes ☐ Simultaneous movement of four axes				
	☐ Others				
	Center span of lifting mechanism:_____				
使用馬達	☐ Servo motor ☐ Others	* Motor Spec. and Brand: Mitsubishi 1000W			
	* Motor power	* Add brake: ☐ Yes ☐ No			

1. Push rod form

Single axis lift

Simultaneous movement of two axes

Simultaneous movement of four axes

2. Slider form

Single axis lift

Simultaneous movement of two axes

Simultaneous movement of four axes

	* Lifting stroke:		
	* Institutional load:		
	* Repetitive positioning accuracy:		
	* Span L:		
	* Span W:		
	Audit:	Date:	

For more detailed product information, please visit the company's website www.fht.tw or call: 400–8040–668

Class D information collection form

Information collection form - Class D Servo press solution			Year	Month	Day
Dealer		Customer			
Contact person		Contact person			
Tel		Tel			
Email		Email			
Category	☐ XYZ module ☐ Others				

1. Module selection parameter requirements:

Customer request	Motor brand:
	Motor installation method: ☐ Direct installation ☐ Turn installation
	Press output maximum pressure:_____KN
	Press output maximum stroke:_____mm
	Press output maximum speed:_____mm/s
	Repetitive positioning accuracy:_____mm
	Upper and lower template opening size:_____mm
	Tooling fixture time:_____mm
	Dwell time at maximum pressure:_____s
	Minimum interval time between equipment operation:
	Display form: ☐ Touch screen ☐ Computer screen
	Whether to configure a pressure sensor: ☐ Yes ☐ No
	Whether to configure the displacement grating ruler: ☐ Yes ☐ No
	What security measures are required: ☐ safety light curtain ☐ Two–hand start button ☐ Security Fence Protection ☐ Manually operate the safety door ☐ Automatic safety door
	number of product processes to be switched:
	What accessories need to be configured: ☐ Electric control cabinet ☐ Electrical installation plate ☐ Rack ☐ Display ☐ Sensor ☐ Others

If you cannot specify the working rhythm and interval of the device, describe the pressing task in detail

Step	Operation mode	Running stroke (mm)	Running speed(mm/s)	Press-fit pressure (KN)	Others
1	Rapid feed				
2	Slow work				
3	Precision press fitting				
4	Pressure holding				
5	Quick return				
6	Delay waiting				

Remark:

	Audit:	Date:

For more detailed product information, please visit the company's website www.fht.tw or call: 400–8040–668

Linear motor information acquisition table

Linear Motor Information Collection Form				
			No.	
Company Name			Contact person	
Company Address			Postal code	
Tel			Fax	
Website			Email	
Project Name			Enterprise scale/nature	
Industry			Main product	
Project requirements				
Usage requirements	Effective stroke(mm)			
	Operating load (kg)			
	Position repetition accuracy (mm)			
	Movement distance (mm)			
	Movement time (s)			
	Movement speed (mm/s)			
	Acceleration (m/s/s)			
	Residence time (s)			
	Walking parallelism:			
	Eccentricity between load and center of linear motor X/Y/Z axis:: X-axis: mm; Y-axis: mm; Z-axis: mm			
	Other environmental requirements (such as temperature, dust, oil, etc.)			
	Linear motor installation method ☐ Horizontal ☐ Hang upside down ☐ Vertical			
	Others			
	Audit:		Date:	
Position feedback				
Stator series	☐ Grating ☐ Magnetic grid ☐ Others			
Remark	☐ Flat ☐ U type			
	Audit:		Date:	
For more detailed product information, please visit the company's website www.fht.tw or call: 400-8040-668				

Application acquisition table of electric cylinder

Electric cylinder application requirement form			
		No.	
Company Name		Contact person	
Company Address		Postal code	
Tel		Fax	
Website		Email	
Project Name		Enterprise scale/nature	
Industry		Main product	
Project requirements			
Basic Parameters	1、Thrust N		
	2、Stroke mm		
	3、Speed mm/s		
	4、Push rod position accuracy requirements: repetitive positioning accuracy mm		
Mechanical interface	5、Cylinder installation and fixing method: ☐ front flange ☐ rear flange ☐ double incline shaft ☐ base ☐ front and rear hinged ☐ side hole ☐ front pull rod		
	6、Cylinder installation direction: ☐ horizontal ☐ straight up ☐ straight down ☐ fixed angle tilt (degree) ☐ variable angle tilt (degree to degree)		
	7、Electric cylinder force output direction: ☐ pull ☐ press ☐ Bidirectional (pull and press)		
	8、Does the servo motor need electromagnetic brake: ☐ need ☐ no need		
	9、Rod end mechanical connection: ☐ internal thread ☐ external thread ☐ universal ball joint ☐ fisheye connector ☐ floating connector		
	10、Whether an additional guide mechanism is required? ☐ need ☐ no need		
	11、Whether the cylinder block needs to be installed proximity switch? ☐ need (Qty: pcs) ☐ no need		
	12、Is there a requirement for compact size of electric cylinder? ☐ Yes(axis mm, section mm, others) ☐ no		
	13、Does the putter need to withstand large lateral forces? ☐ Yes, the inclination is about N ☐ no		
	14、Do you also need the following options: ☐ Screw preload mechanism ☐ Push rod dust cover ☐ Built-in pressure sensor ☐ Manual drive ☐ Food grade coating ☐ Stainless steel housing ☐ Linear displacement sensor (Precision , Ouput signal: ☐ voltage、 ☐ current、 ☐ digital signal) ☐ Others		
Servo electrical interface	15、Servo motor: ☐ direct connection ☐ foldback		
	16、Servo motor position feedback form (whether internal motor or external motor is used, please provide information):		
	17、Whether you need to use a specified brand of drive or external servo motor: ☐ need, the brand is , no need. , ☐ no need.		
	18、Are there special work environment requirements? ☐ Yes(Temp. ℃ to ℃ Vibration g mechanical shock g) ☐ no		
	19、Is there a requirement for long, continuous, high frequency, reciprocating motion? ☐ Yes(One full cycle stroke mm; frequency Hz ; work hours/day; work days/year; life years) ☐ no		
	20、Other requirements:		
Remarks			
	Audit:	Date:	
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