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PrimoPal Motor Co., Ltd. is a joint-venture manufacturing, engineering and trading company, located at the free-trade zone of Shanghai, China. PrimoPal specializes in development, production and selling of various high-quality and cost-effective precision motor and motion control products, including Hybrid stepper motors, PM stepper motors, Linear actuators, Close-loop stepper motors, Brushless DC motors, Brushless servo motors, AC servo motors, PM DC motors, AC induction motors, Synchronous motors, Gear motors, Stepper drives, Brushless DC drives, Hybrid servo drives, AC servo drives, Brushless servo drives, Brush servo drives, Encoders, Spur gearboxes, Planetary gearheads, Brakes, Power supplies, Accessories, and so on.

Since establishment, PrimoPal is committed to providing outstanding quality, economical solutions, impeccable support and after-sales service for every client. Our manufacturing bases are equipped with advanced quality testing devices, precise injection molding machines, auto high-speed punches, auto winding machines and other advanced manufacturing equipment. It makes us have the ability of continuously providing products with superior quality. Besides, we have an engineering team with many years of experience in motor design and application engineering. This ability of offering custom products often gives our customers the great benefit.

For PrimoPal, the customer is not only a buyer, but also a long-term business partner. We work not only to meet their expectations, but also to exceed them through continuous cycles of learning. We believe it is the key to a successful business relationship that understanding our customer's goals, delivering what our customers need and when they need it. To demonstrate our commitment to all our customers, PrimoPal has adopted "Bringing out the Best in Motion" as our official slogan, which means our ultimate goal is to become one of the world's top level companies in the industry of precision motor and motion control system. The pursuit of excellence encourages all PrimoPal employees to forge ahead into improving our business processes and increasing our management efficiency. We have no doubt that our endeavors enable us to maintain strong presence in the competitive market.

Now, let us help you find the right solution for your motor and motion control systems.

CONTENTS

THE MAIN STRUCTURE AND WORKING PRINCIPLE OF THE MINIATURE LINEAR ACTUATOR

In the process of selecting and using the micro linear actuator, it needs to be effectively selected according to its application to effectively meet the different needs of its customers. The motors and actuators and other accessories in the equipment can be combined in any way. The application fields and functions of the miniature linear actuator are different.

In the process of use, the miniature linear actuator can effectively realize its simple push and pull objects under normal circumstances. It can be used directly on occasions where accuracy is not required. The equipment is very economical to use and the requirements for the surrounding environment are not high. Equipment installation and maintenance are also more convenient.

The miniature linear actuator is an electric drive device that converts the rotating motion of the motor, and then, directly into the linear reciprocating motion of the actuator. The equipment can be directly used as its executive machine during the use process and is used in household medical fitness equipment, Many massage beds are used. There must be no corrosive media and flammable and explosive materials in the environment where the miniature linear actuator is used. The power supply in the equipment needs to adopt its three-phase four-wire system with a power of 50 Hz and a voltage of 380 volts. The stroke control mechanism of the equipment effectively uses a counter. The use of the counter effectively enables the actuator to stop at any position within the maximum stroke range, The equipment also has a certain overload protection mechanism during use. When the push-pull load in the equipment exceeds the rated load, it's overloaded, The protection mechanism will automatically cut off its power. In this way, the working system and motor of its miniature linear actuator can be well protected. The power supply voltage and the use of electrical circuits in the equipment need to meet the requirements of its regulations. The fasteners in the equipment need to be firm and reliable, and the control mechanism formed in the equipment needs to be able to work normally.

THE USE CHARACTERISTICS AND APPLICATION OF LOCK

The actuator lock is very sturdy in its own structure during use. It will effectively prevent outsiders from entering its interior without its permission during use. The actuator lock allows internal personnel to go out in an emergency without passing through. A high-decibel alarm sound may be emitted when permitted to use. The actuator lock can only be stopped and restored with a special control key during the working process. The product has a channel port lock entry configuration position which can be effectively equipped with a channel entry lock according to its own requirements. There is an electronic lock configuration of the access control system which can be equipped according to user needs to facilitate the user to use the access control device to swipe the card to enter from the outside, without the need to activate the alarm device. The actuator lock only requires the user to use the hand or any part of the body to push the open bar to open the door lock, which will solve the long-standing conflict between emergency escape and anti-theft in the fire channel to a certain extent. The actuator lock is printed with a light-storing self-luminous display logo on the front of them.

Opening bar so that even if the power is cut off in the building, it can still directly guide its personnel to effectively find the exact position of the escape door lock and then escape. During use, the actuator lock will automatically lock each time the door is closed. It is very suitable for controlling the flow of people when using it effectively preventing it from leaving without authorization and preventing theft which effectively prevents unauthorized entry people enter the interior of the building from the escape channel which ensures that the people in the building can easily enter the escape channel.

HOW TO SELECT THE MOTOR OF LINEAR ACTUATOR?

The motor is equivalent to the heart of the linear actuator and is an indispensable core component in the production process of the linear actuator. A good motor is indispensable for the quality of the linear actuator.

So how to choose the right motor in the production process:

① Motors are divided into ordinary motors and variable frequency motors;

Ordinary motors are tried to be used for ordinary actuators such as electro-hydraulic actuators and DY-type small actuators because their frequency is about 60HZ in frequency conversion, but heavy-duty actuators DTT type in large equipment used by construction companies such as mining machinery,adopt a variable frequency motor with better heat dissipation and a variable frequency of 100HZ.

② The power supply of the motor is divided into single-phase, three-phase, and direct current;

Direct current is suitable for small and micro linear actuators that consume power, one-way electricity is generally used for household linear actuators, and enterprise units generally choose three-phase electric motor products.

③ Linear actuators used in some special environments still need to use special motors such as moisture resistance,high-temperature, resistance chemical resistance, and dust resistance.

PRODUCT NUMBER CODE

PLAR □ □ - □ □

① ② ③ ④ ⑤

① PLAR: PRIMOPAL LINEAR ACTUATOR

② I: INDUSTRIAL

M: MEDICAL

H: HOUSEHOLD

S: SOLAR ENERGY

③ PUSH ROD SHAPE:

L type I type

U type

④ BASE SIZE:

151:151mm

⑤ MOTOR TYPE:

BLANK:Brushed DC Motor HB:Hybrid Stepper Motor

BL:Brushless DC Motor AS:Servo Motor

IMPORTANT PARAMETERS

Voltage	Thrust	Speed	Stroke	Shortest distance
12/24/36/48V	customizable	customizable	customizable	customizable

Thrust is inversely proportional to speed: the greater the thrust, the slower the speed; the faster the speed, the smaller the thrust

The shortest installation distance: L

Stroke: S

Constant: A

L=A+S

L=A+S

Customers can select models in our product catalogs according to their needs for these parameters

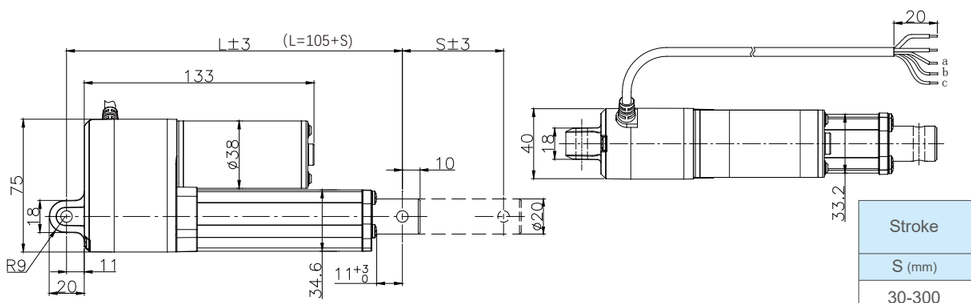
INDUSTRIAL APPLICATION

Industrial series electric actuators have strong corrosion resistance, high sealing and water resistance, and can be used for long-term use in harsh environments.

Industrial Application

Model		PLARIU-75
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max1200
Travel Speed	(mm/s)	5.5 to 80
Limit Switch		Integrated
Duty Cycle		25% (2 min continous moving)
IP Rating		IP65
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	800
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	Self-locking force	Reduction ratio	Screw pitch	Speed±10% (mm/s)		Max.Stroke w/Hall Sensor	Max.Stroke w/Potentiometer
	(N)	(N)		(mm)	No load	load	(mm)	(mm)
A	200	300	5:1	3.17	40	22	500	200
B	100	150	5:1	5	60	45	600	300
C	50	100	5:1	7.5	80	65	600	450
D	600	900	20:1	3.17	10.5	7.0	300	200
E	500	800	20:1	5	16.5	12	300	300
F	250	400	20:1	7.5	25	20	400	450
G	1000	1500	30:1	3.17	7.2	5.0	300	200
H	700	1000	30:1	5	11.5	8.5	300	300
I	400	600	30:1	7.5	17	13.5	400	450
J	1200	1700	40:1	3.17	5.5	4.0	200	200
K	800	1200	40:1	5	8.5	6.5	300	300
L	450	700	40:1	7.5	13	10	300	450

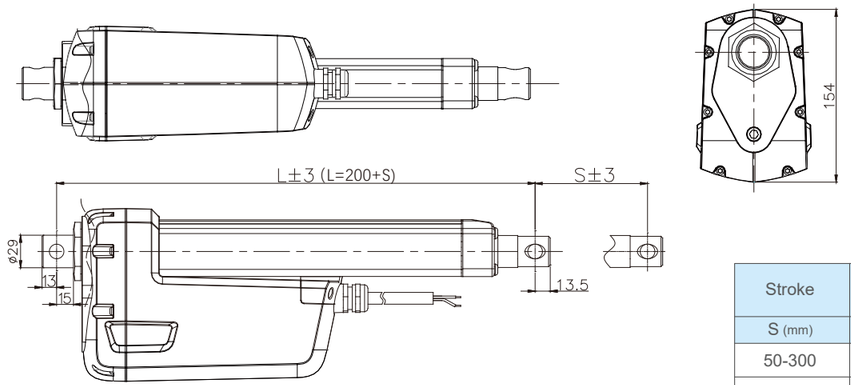


Stroke	Installation distance
S (mm)	L (mm)
30-300	+0
301-400	+30
401-600	+50

Industrial Application

Model		PLARIU-154
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 1000
Load Capacdty	(N)	Max12000
Travel Speed	(mm/s)	6.5 to 38
Limit Switch		External and Adjustable
Duty Cycle		25% (4 min continous moving)
IP Rating		IP66
Operating Temp	(℃)	-40to 65
Cable Length	(mm)	600
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	Self-locking force	Reduction ratio	Screw pitch	Speed±10% (mm/s)		Max.Stroke w/Hall Sensor	Max.Stroke w/Potentiometer
	(N)	(N)		(mm)	No load	load	(mm)	(mm)
A	12000	15000	43:1	4	6.0	4.0	1000	175
B	11000	12000	31:1	4	8.0	5.2	1000	175
C	7500	9000	21:1	4	12.0	8.0	1000	175
D	10000	12000	43:1	8	12.0	7.0	1000	350
E	7000	8000	31:1	8	17.0	9.5	1000	350
F	5000	6000	21:1	8	25.0	14.0	1000	350
G	6500	8000	43:1	12	18.5	11.0	1000	530
H	4500	5500	31:1	12	25.0	13.0	1000	530
I	3200	4000	21:1	12	37.0	23.0	1000	530

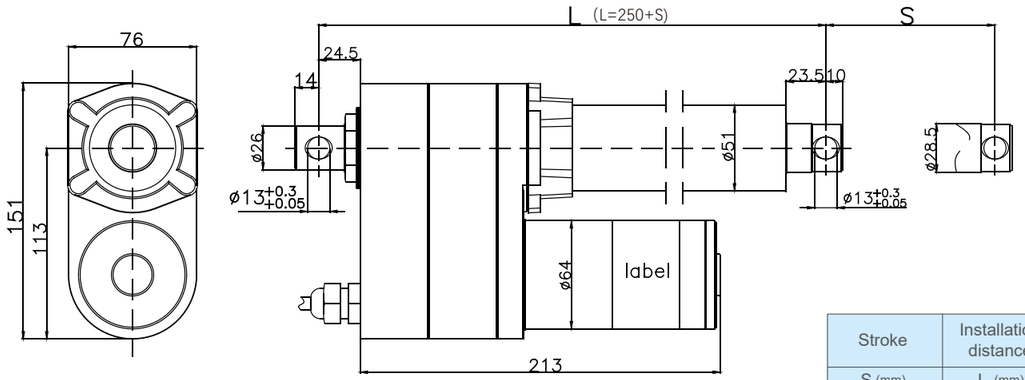


Stroke	Installation distance
S (mm)	L (mm)
50-300	+0
301-600	+50
601-1000	+100

Industrial Application

Model		PLARIU-151
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max7000
Travel Speed	(mm/s)	5.5 to 35
Limit Switch		Integrated
Duty Cycle		25% (4 min continous moving)
IP Rating		IP65
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	400
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Max.Stroke w/o Sensor	Resolution	Reduction ratio	Dynamic Load	Speed±10%		Max.Stroke w/Hall Sensor	Max.Stroke w/Potentiometer
					(mm/s)			
	(mm)	(pulse/mm)		(N)	No load	load	(mm)	(mm)
A	300	52.16	40:1	7000	5.5	4.0	300	300
B	300	33.07	40:1	7000	8.5	7.0	300	300
C	400	25.24	20:1	5000	11.0	9.5	400	380
D	500	16.00	20:1	4000	17.0	14.0	500	500
E	400	12.22	10:1	3000	22.0	18.0	400	380
F	600	7.75	10:1	2000	35.0	28.5	600	600

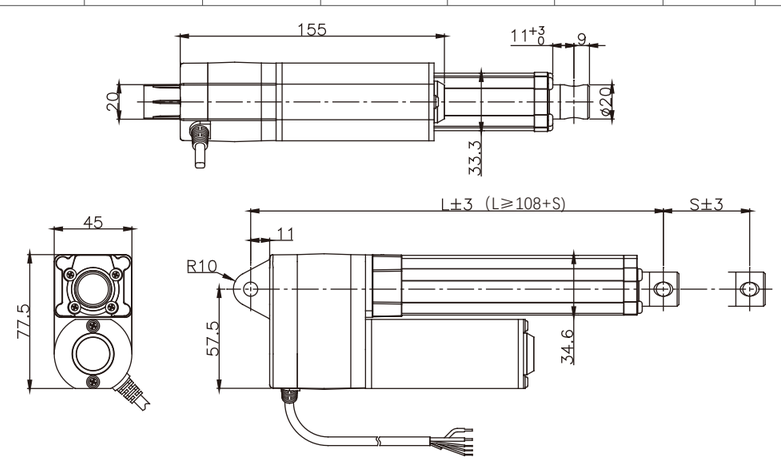


Stroke	Installation distance
S (mm)	L (mm)
50-400	+0
401-600	+50

Industrial Application

Model		PLARIU-78
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max2000
Travel Speed	(mm/s)	5 to 55
Limit Switch		Integrated
Duty Cycle		25% (2 min continous moving)
IP Rating		IP65
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	500
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	Self-locking force	Reduction ratio	Screw pitch	Speed±10%		Max.Stroke w/Hall Sensor	Max.Stroke w/Potentiometer
					(mm/s)			
	(N)	(N)	(mm)	(mm)	No load	load	(mm)	(mm)
A	2000	3000	40:1	3.17	5	4	500	200
B	1600	2200	30:1	3.17	7	5.5	500	200
C	1200	1600	20:1	3.17	10	8	500	200
D	700	900	10:1	3.17	20	14	500	200
E	300	400	5:1	3.17	40	30	500	200
F	1200	1600	40:1	5	8	6	500	300
G	800	1100	30:1	5	10.5	8	500	300
H	600	800	20:1	5	15	11	500	300
I	400	600	10:1	5	30	22	500	300
J	200	300	5:1	5	60	45	500	300

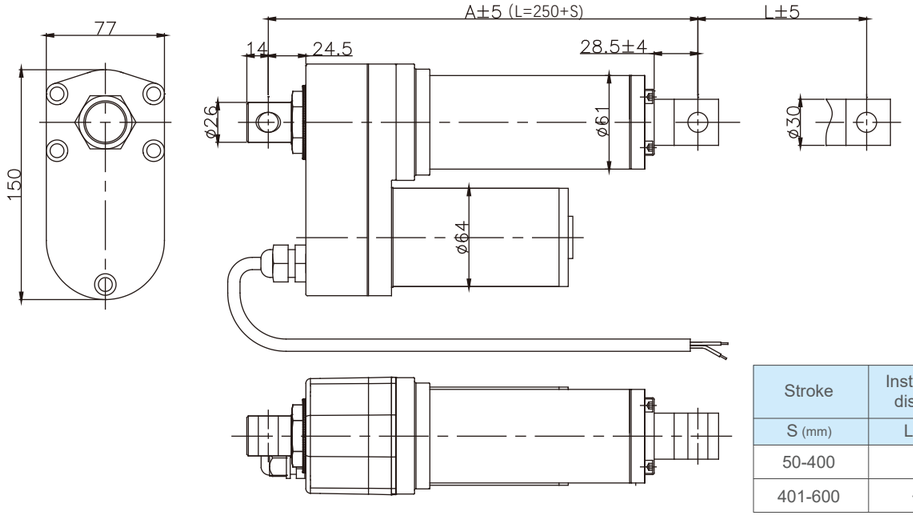


Stroke	Installation distance
S (mm)	L (mm)
50-300	+0
301-500	+12
501-600	+22

Industrial Application

Model		PLARIU-150
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max6000
Travel Speed	(mm/s)	8.5 to 12
Limit Switch		Integrated
Duty Cycle		25% (4 min continous moving)
IP Rating		IP65
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	400
Signal Feedback		Hall Sensor(optional)

Transmission code	Maximum dynamic load	Self-locking force	Reduction ratio	Screw pitch	Speed±10% (mm/s)		Max.Stroke w/Hall Sensor
	(N)	(N)		(mm)	No load	load	(mm)
A	4000	5000	40:1	3.17	5.5	4.0	300
B	3500	5000	40:1	5	8.5	7.0	300
C	3000	4000	20:1	3.17	11.0	9.5	400
D	2500	3500	20:1	5	17.0	14.0	500
E	2000	2500	10:1	3.17	22.0	18.0	500
F	1000	2000	10:1	5	35.0	28.5	600

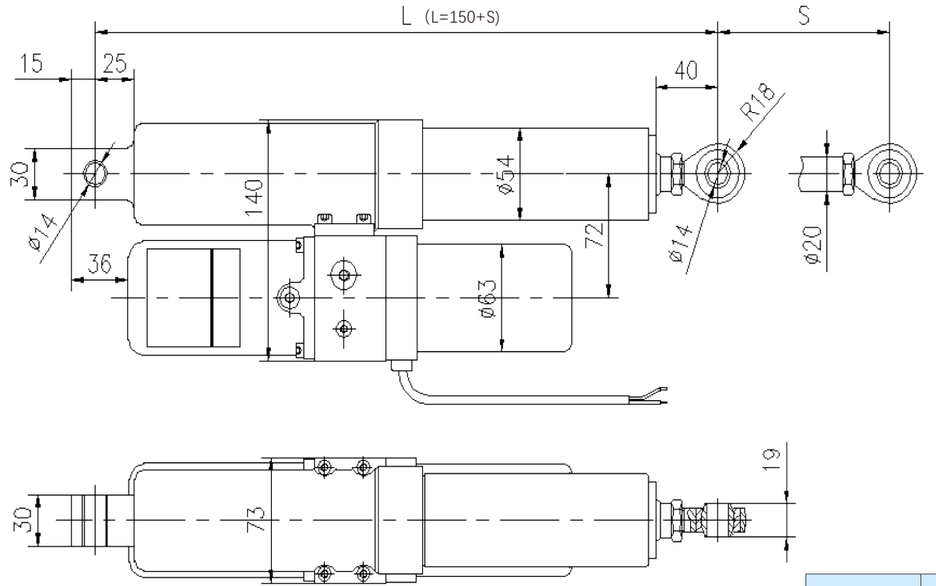


Stroke	Installation distance
S (mm)	L (mm)
50-400	+0
401-600	+50

Industrial Application

Model		PLARIU-140
Maximum stroke	(mm)	12 or 24
IP Rating		IP65
Rated thrust	(N)	8000
Maximum static load	(N)	15000
Input Voltage	(VDC)	12 or 24

Rotating speed	Specified load	Speed mm/s ±10%		Basic current A (Normal temperature)							
				12V		24V		36V		48V	
(N)	N	No load	load	No load	load	No load	load	No load	load	No load	load
4200	8000	15	8	6	30	6	17				
	6000	15	10	6	22	6	14				
	5000	15	12	6	18	6	12				
	4000	15	13	6	15	6	10				
	3000	15	14	6	13	6	9				

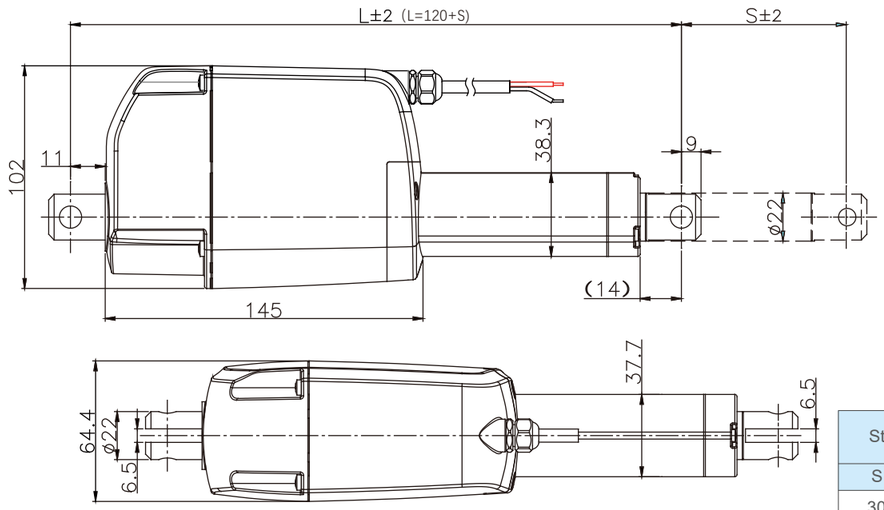


Stroke	Installation distance
S (mm)	L (mm)
150-350	+0

Industrial Application

Model		PLARIU-102B
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max2500
Travel Speed	(mm/s)	2.5 to 22
Limit Switch		Integrated
Duty Cycle		25% (2 min continous moving)
IP Rating		IP66
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	Self-locking force	Reduction ratio	Screw pitch	Speed±10% (mm/s)		Maximum stroke
	(N)	(N)		(mm)	No load	load	(mm)
A	2500	3500	86.6:1	3.17	2.5	1.8	500
B	2000	3000	86.6:1	5	4.0	3.0	600
C	1500	2500	86.6:1	7.5	6.0	4.0	600
D	1200	2000	43.6:1	5	8.0	6.0	300
E	1000	1500	43.6:1	7.5	12.0	8.0	300
F	500	700	43.6:1	15	22.0	17.0	400

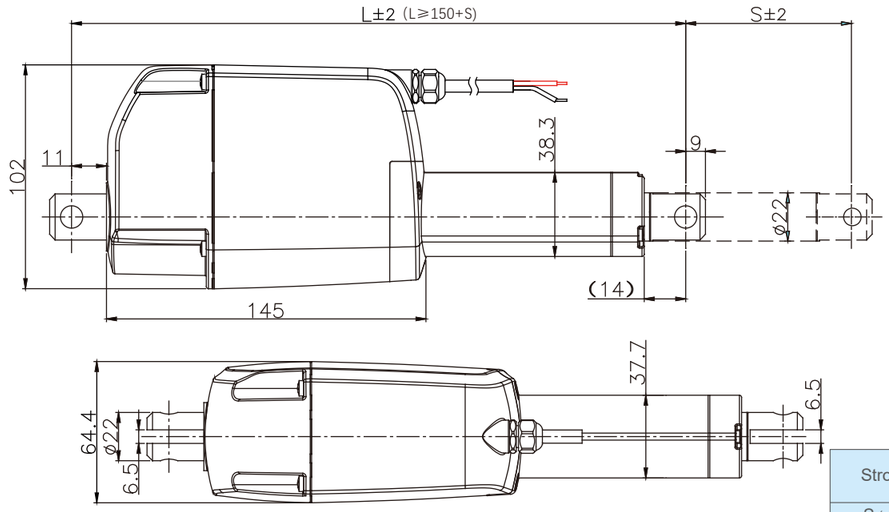


Stroke	Installation distance
S (mm)	L (mm)
30-300	+0
301-400	+30
401-600	+50

Industrial Application

Model		PLARIU-102
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 1000
Load Capacdty	(N)	Max1500
Travel Speed	(mm/s)	26 to 133
Limit Switch		Adjustable
Duty Cycle		25% (4 min continous moving)
IP Rating		IP66
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Specified load	Speed mm/s ±10%		Basic current A (Normal temperature)			
				12V		24V	
	N	No load	load	No load	load	No load	load
A	500	53	30	0.6	4.0	0.3	2.0
B	250	133	70	0.6	4.0	0.3	2.0
C	1000	26	17	0.6	4.0	0.3	2.0
D	400	66	35	0.6	4.0	0.3	2.0

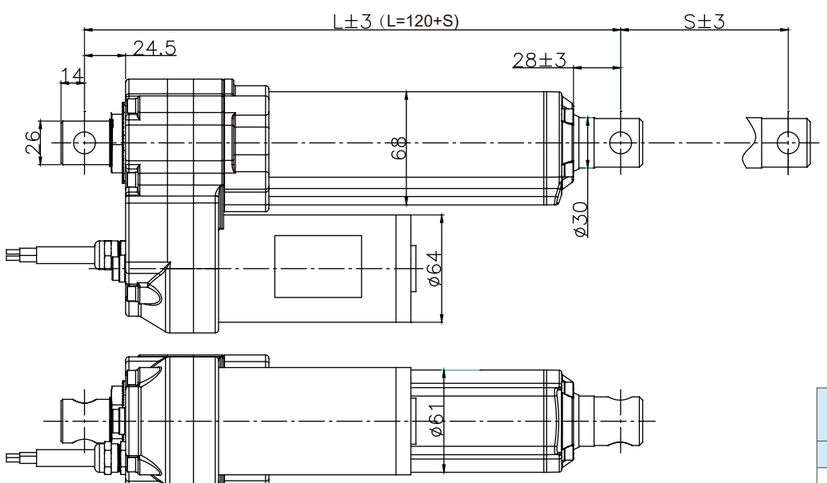


Stroke	Installation distance
S (mm)	L (mm)
15-300	+0
300-400	+30
400-600	+50

Industrial Application

Model		PLARIU-73
Input Voltage	(VDC)	12 or 24 or 36 or 48
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max7000
Travel Speed	(mm/s)	5.5 to 35
Limit Switch		Adjustable
Duty Cycle		25% (2 min continous moving)
IP Rating		IP65
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	Self-locking force	Reduction ratio	Screw pitch	Speed±10% (mm/s)		Max.Stroke w/Hall Sensor
	(N)	(N)		(mm)	No load	Fully load	(mm)
A	7000	10000	40:1	3.17	5.5	4.0	300
B	7000	10000	40:1	5	8.5	7.0	300
C	5000	8000	20:1	3.17	11.0	9.5	400
D	4000	7000	20:1	5	17.0	14.0	500
E	3000	5000	10:1	3.17	22.0	18.0	500
F	2000	4000	10:1	5	35.0	28.5	600

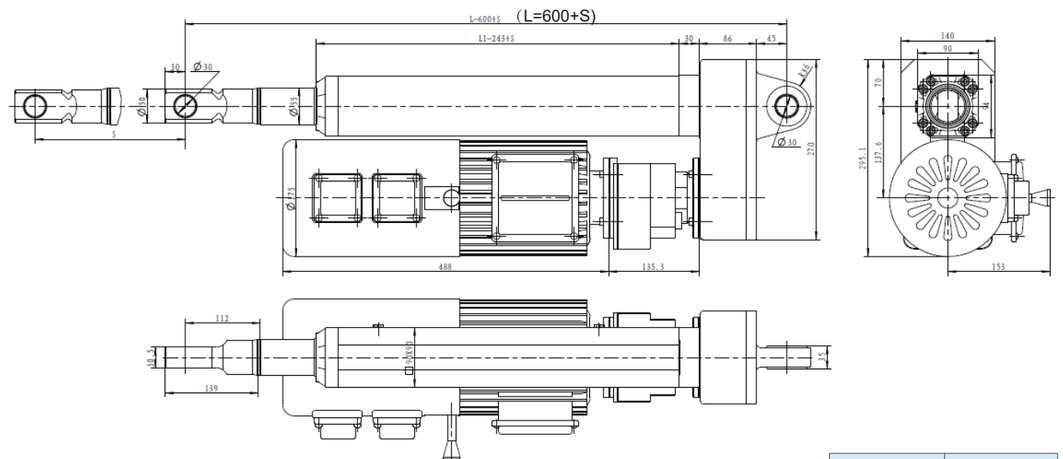


Stroke	Installation distance
S (mm)	L (mm)
50-400	+0
401-600	+50

Industrial Application

Model		PLARIU-295
Input Voltage	(VDC)	12 or 24 or 36 or 48
Stroke Length	(mm)	50 to 1000
Load Capacdty	(N)	Max20000
Travel Speed	(mm/s)	22 to 88
Limit Switch		Adjustable
Duty Cycle		25% (2 min continous moving)
IP Rating		IP55
Operating Temp	(℃)	-15 to 40
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Timing pulley speed ratio	Reducer Speed ratio	No load speed	Fully loaded speed	Maximum movement State load	Maximum self Locking force	No load Current	Fully loaded Current	Ball Screw	Three-phase AC frequency conversion Motor configuration
			mm/s	mm/s	N	N	A	A		
A	27:34	1:4.51	22	21	20000	22000	0.4	1.8	GQ3205	380V AC 0.75KW 50Hz 4 poles 1500 rpm Frequency conversion range 30-70Hz
B	27:34	1:4.51	44	42	10000	12000	0.4	1.8	GQ3210	
C	27:34	1:4.51	88	84	5000	7000	0.4	1.8	GQ3220	



Stroke	Installation distance
S (mm)	L (mm)
300-1000	+0

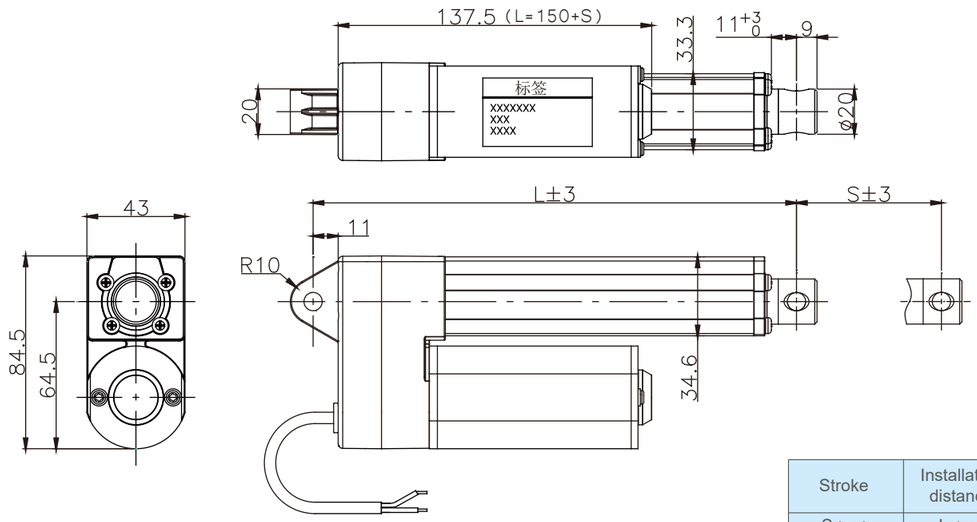
MEDICAL APPLICATION

Using worm gear type transmission, the product is easy to install, long service life, low noise, and maintenance-free. It is widely used in medical beds, operating beds, nursing beds, dental chairs, wheelchairs, etc.

Medical Application

Model		PLARMU-85	
Input Voltage	(VDC)	12 or 24 or 36 or 48	
Stroke Length	(mm)	50 to 600	
Load Capacdty	(N)	Max2000	
Travel Speed	(mm/s)	5.5 to 80	
Limit Switch		Integrated	
Duty Cycle		20% (2 min continous moving)	
IP Rating		IP66	
Operating Temp	(℃)	-40 to 65	
Cable Length	(mm)	Customizable	
Signal Feedback		Potentiometer or Hall Sensor	

Transmission code	Maximum dynamic load	Self-locking force	Reduction ratio	Screw pitch	Speed±10% (mm/s)		Max.Stroke w/Hall Sensor
	(N)	(N)		(mm)	No load	load	(mm)
A	2000	3000	32.6:1	3.17	6.0	5.0	300
B	1500	2500	32.6:1	5	10.0	7.0	300
C	1000	1500	32.6:1	3.17	15.0	11.0	400

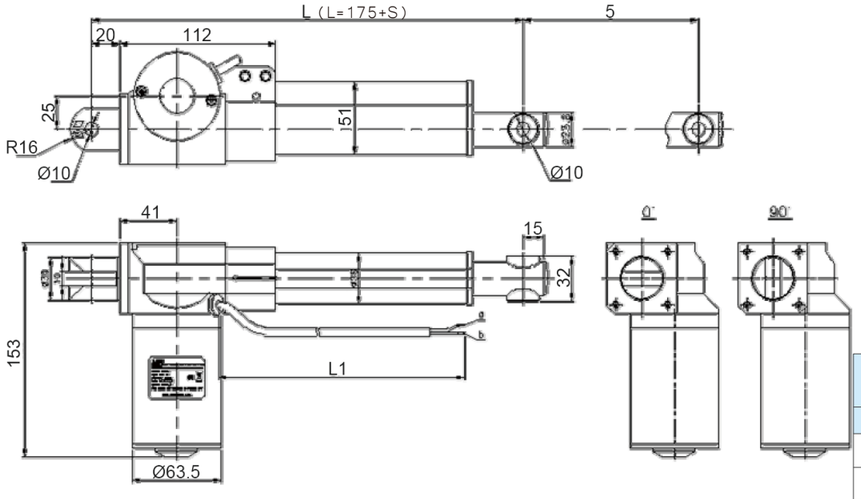


Stroke	Installation distance
S (mm)	L (mm)
50-300	+0
301-500	+30
501-600	+60

Medical Application

Model		PLARML-153
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max6000
Travel Speed	(mm/s)	4-25
Limit Switch		Built-in
Duty Cycle		10% (2 min continous moving)
IP Rating		IP43
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code (24V)	Maximum dynamic load	No-load current	Load current	Speed±10%	
				(mm/s)	
	(N)	(A)	(A)	No load	load
A	6000	0.3-0.4	3.6	4.7	3.2
B	4000	0.4-0.6	3.0	5.8	4.3
C	3000	0.4-0.6	3.0	8.8	6.5
D	2000	0.4-0.6	3.2	11.7	8.1
E	1500	0.3-0.5	3.1	17.5	11.7
F	800	0.8-0.9	3.2	28	19.2

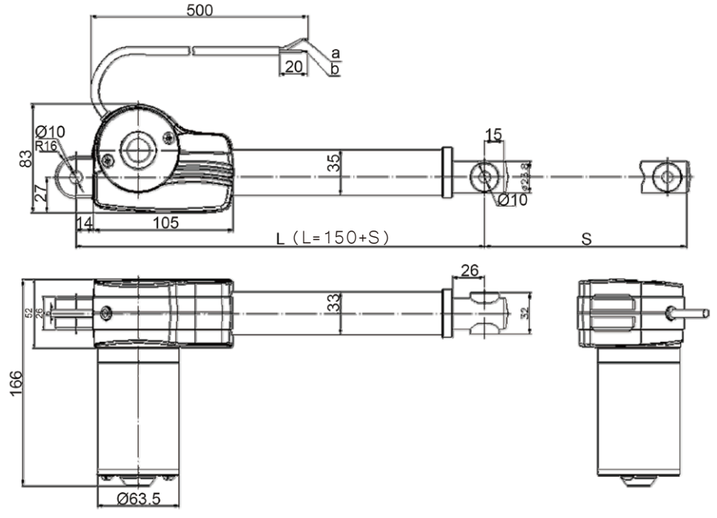


Stroke	Installation distance
S (mm)	L (mm)
20-400	+0
400-600	+25
600-800	+75
800+	+175

Medical Application

Model		PLAML-64
Input Voltage	(VDC)	12 or 24 or 36 or 48
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max4000
Travel Speed	(mm/s)	5 to 32
Limit Switch		Built-in
Duty Cycle		10% (2 min continous moving)
IP Rating		IP43
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	No-load speed	No-load current(A)		Load current	Load speed
	(N)	(mm/s)	Putter stretch	Putter down	(A)	(mm/s)
A	4000	5	<0.6	<1.2	<3.5	5.0
B	3000	7	<0.6	<1.2	<3.5	7.0
C	2500	10	<0.6	<1.2	<3.5	11.0
D	2000	13	<0.6	<1.2	<3.5	5.0
E	1500	16	<0.8	<1.5	<3.5	7.0
F	1000	20	<0.8	<1.5	<3.5	11.0
G	800	32	<0.8	<1.5	<3.5	5.0

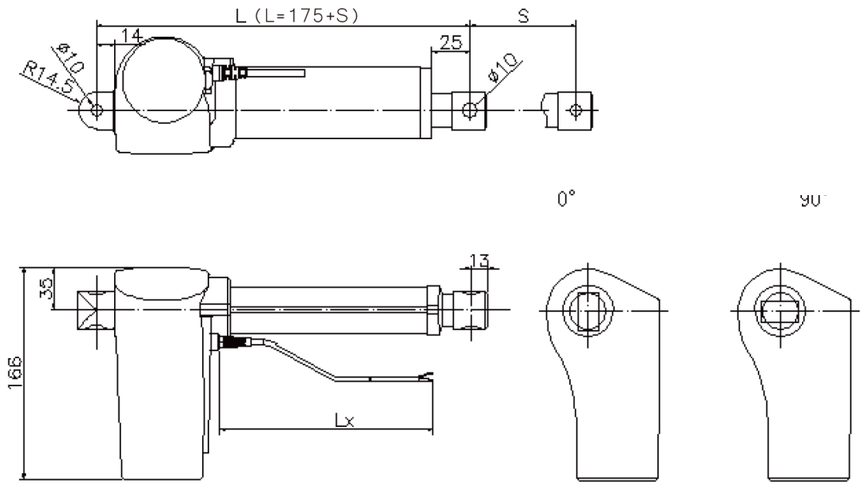


Stroke	Installation distance
S (mm)	L (mm)
20-450	+0
450-600	+25
600-800	+75
800+	+150

Medical Application

Model		PLARML-166
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max6000
Travel Speed	(mm/s)	5-16
Limit Switch		Built-in
Duty Cycle		10% (2 min continous moving)
IP Rating		IP54
Operating Temp	(℃)	-15 to 45
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	No-load speed	No-load current	Load speed	Load current	Lead screw	Hall pulse displacement ratio
(24V)	(N)	(mm/s)	(A)	(mm/s)	(A)	(mm)	(pulse/mm)
A	6000	5	0.8-1.0	4.3	≤4.5	4.0	3.2
B	4000	6.5	0.6-0.8	5.0	≤4.2	5.0	4.3
C	3000	10	0.6-0.8	7.4	≤4.0	7.5	6.5
D	1500	16	0.9-1.0	12.0	≤3.9	12.0	8.1

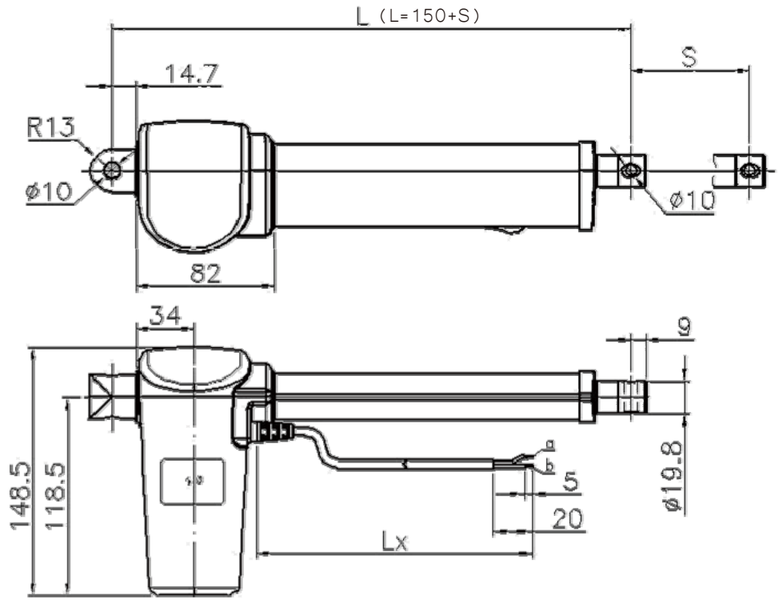


Stroke	Installation distance
S (mm)	L (mm)
50-300	+0

Medical Application

Model		PLARML-155
Input Voltage	(VDC)	12 or 24 or 36 or 48
Stroke Length	(mm)	50 to 200
Load Capacdty	(N)	Max2000
Travel Speed	(mm/s)	6 to 15
Limit Switch		Built-in
Duty Cycle		10% (2 min continous moving)
IP Rating		IP54
Operating Temp	(℃)	-15 to 45
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	No-load speed	No-load current	Load speed	Load current	Lead screw	Hall pulse displacement ratio
(24V)	(N)	(mm/s)	(A)	(mm/s)	(A)	(mm)	(pulse/mm)
A	2000	6	0.5-0.6	4.8	≤3	3.2	
B	1000	9.5	0.5-0.6	7.6	≤3	5.0	
C	500	14	0.5-0.6	11.5	≤3	7.5	
D							



Stroke	Installation distance
S (mm)	L (mm)
25-200	+0
200-400	+25

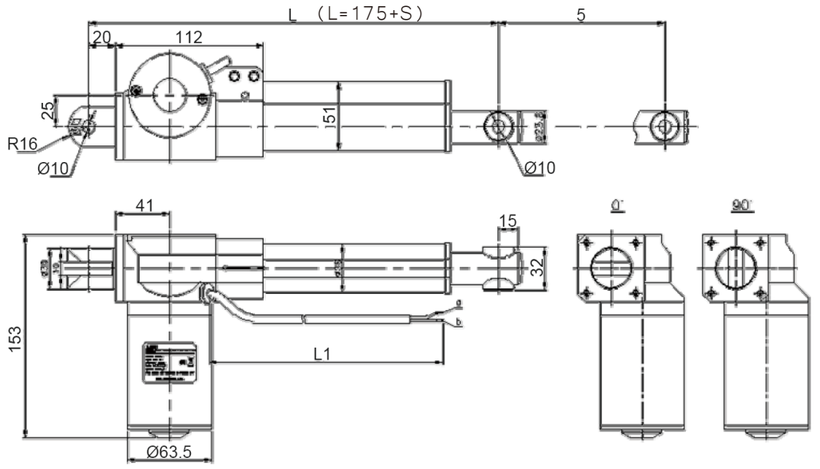
HOUSEHOLD APPLICATION

It adopts worm gear type or slider type drive, which has the characteristics of low noise, maintenance-free, stable product quality and long service life. The products can be widely used in massage chairs, multifunctional sofas, TV lifts and other fields.

Household Application

Model		PLARHL-153
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max6000
Travel Speed	(mm/s)	4-25
Limit Switch		Built-in
Duty Cycle		10% (2 min continous moving)
IP Rating		IP43
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code (24V)	Maximum dynamic load	No-load current	Load current	Speed±10%	
				(mm/s)	
	(N)	(A)	(A)	No load	load
A	6000	0.3-0.4	3.6	4.7	3.2
B	4000	0.4-0.6	3.0	5.8	4.3
C	3000	0.4-0.6	3.0	8.8	6.5
D	2000	0.4-0.6	3.2	11.7	8.1
E	1500	0.3-0.5	3.1	17.5	11.7
F	800	0.8-0.9	3.2	28	19.2

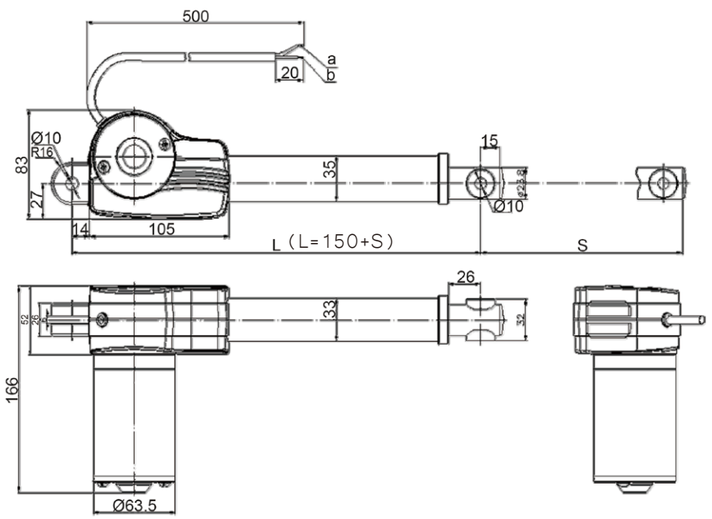


Stroke	Installation distance
S (mm)	L (mm)
20-400	+0
400-600	+25
600-800	+75
800+	+175

Household Application

Model		PLARHL-64
Input Voltage	(VDC)	12 or 24 or 36 or 48
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max4000
Travel Speed	(mm/s)	5 to 32
Limit Switch		Built-in
Duty Cycle		10% (2 min continous moving)
IP Rating		IP43
Operating Temp	(℃)	-40 to 65
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	No-load speed	No-load current(A)		Load current	Load speed
	(N)	(mm/s)	Putter stretch	Putter down	(A)	(mm/s)
A	4000	5	<0.6	<1.2	<3.5	5.0
B	3000	7	<0.6	<1.2	<3.5	7.0
C	2500	10	<0.6	<1.2	<3.5	11.0
D	2000	13	<0.6	<1.2	<3.5	5.0
E	1500	16	<0.8	<1.5	<3.5	7.0
F	1000	20	<0.8	<1.5	<3.5	11.0
G	800	32	<0.8	<1.5	<3.5	5.0

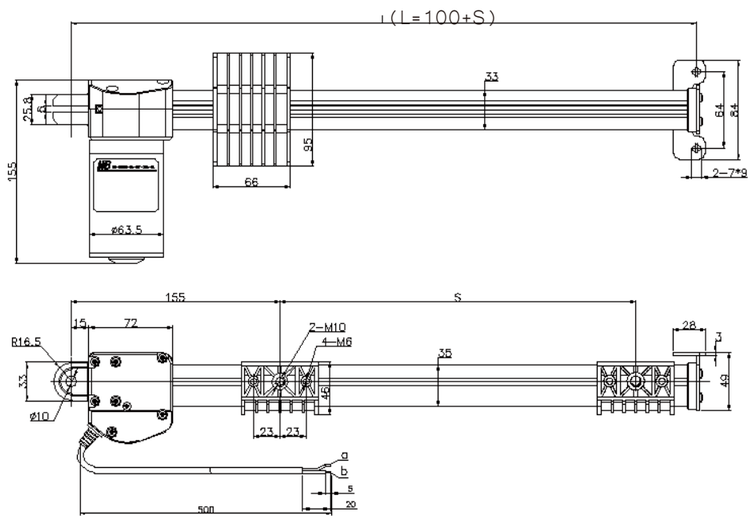


Stroke	Installation distance
S (mm)	L (mm)
20-450	+0
450-600	+25
600-800	+75
800+	+150

Household Application

Model		PLARHL-155
Input Voltage	(VDC)	24
Stroke Length	(mm)	150
Load Capacdty	(N)	Max1500
Travel Speed	(mm/s)	16 to 32
Limit Switch		Built-in
Duty Cycle		10% (2 min continous moving)
IP Rating		IP20
Operating Temp	(℃)	5 to 40
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code (24V)	Maximum dynamic load	No-load speed	No-load current(A)		Load current	Load speed
	(N)	(mm/s)	Putter stretch	Putter down	(A)	(mm/s)
A	1500	16	<0.8	<1.5	<3.5	15.0
B	800	32	<0.8	<1.5	<3.5	30
(12V)						
A	1500	16	<1	<1.5	<5.5	15.0
B	800	32	<1	<1.5	<5.5	30

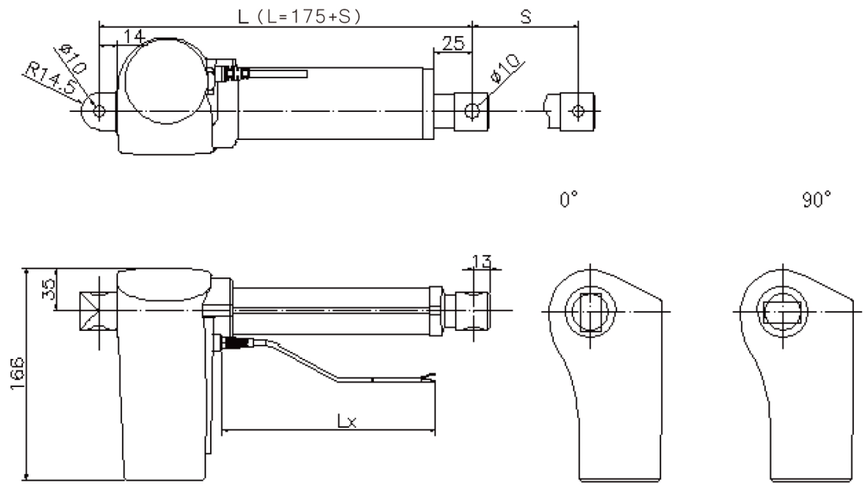


Stroke	Installation distance
S (mm)	L (mm)
0-600	+0

Household Application

Model		PLARHL-166
Input Voltage	(VDC)	12 or 24
Stroke Length	(mm)	50 to 600
Load Capacdty	(N)	Max6000
Travel Speed	(mm/s)	5-16
Limit Switch		Built-in
Duty Cycle		10% (2 min continous moving)
IP Rating		IP54
Operating Temp	(℃)	-15 to 45
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	No-load speed	No-load current	Load speed	Load current	Lead screw	Hall pulse displacement ratio
(24V)	(N)	(mm/s)	(A)	(mm/s)	(A)	(mm)	(pulse/mm)
A	6000	5	0.8-1.0	4.3	≤4.5	4.0	3.2
B	4000	6.5	0.6-0.8	5.0	≤4.2	5.0	4.3
C	3000	10	0.6-0.8	7.4	≤4.0	7.5	6.5
D	1500	16	0.9-1.0	12.0	≤3.9	12.0	8.1

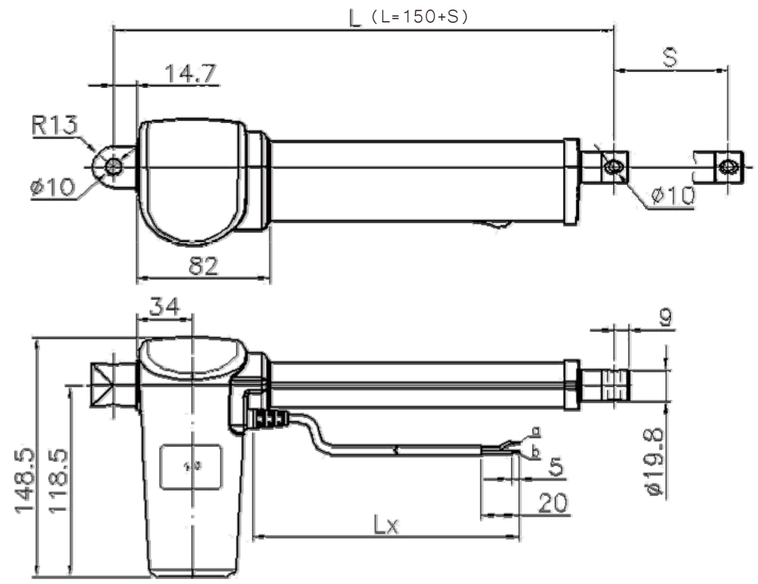


Stroke	Installation distance
S (mm)	L (mm)
50-300	+0

Household Application

Model		PLARHL-33
Input Voltage	(VDC)	12 or 24 or 36 or 48
Stroke Length	(mm)	50 to 200
Load Capacdty	(N)	Max2000
Travel Speed	(mm/s)	6 to 15
Limit Switch		Built-in
Duty Cycle		10% (2 min continous moving)
IP Rating		IP54
Operating Temp	(℃)	-15 to 45
Cable Length	(mm)	Customizable
Signal Feedback		Potentiometer or Hall Sensor

Transmission code	Maximum dynamic load	No-load speed	No-load current	Load speed	Load current	Lead screw	Hall pulse displacement ratio
(24V)	(N)	(mm/s)	(A)	(mm/s)	(A)	(mm)	(pulse/mm)
A	2000	6	0.5-0.6	4.8	≤3	3.2	
B	1000	9.5	0.5-0.6	7.6	≤3	5.0	
C	500	14	0.5-0.6	11.5	≤3	7.5	
D							



Stroke	Installation distance
S (mm)	L (mm)
25-200	+0
200-400	+25

SOLAR ENERGY APPLICATION

The solar panel can be kept facing the sun at all times, so that the sun's rays are always irradiated vertically with the rotation of the electric push rod, thereby optimizing the use of sunlight and improving the photoelectric conversion efficiency.

Solar Energy Application

Model		PLARSL-01	
Maximum dynamic load	KN	20	
Maximum half-way static load	KN	60	
speed	mm/s	≥1.4	
Stroke Length	mm	500-850	
Duty cycle	%	10	
Voltage	VDC	24	
Operating Temp	℃	-40 to 65	
IP Rating		IP65	
Product Features		Big thrust	
		Heavy aluminum housing	
		Strong self-locking ability	
		Designed for outdoor use	

Solar Energy Application

Model		PLARS-02	
Maximum dynamic load	KN	22.5	
Maximum half-way static load	KN	133	
speed	mm/s	≥0.7	
Stroke Length	mm	500-1000	
Duty cycle	%	10	
Voltage	VDC	24	
Operating Temp	℃	-40 to 65	
IP Rating		IP65	
Product Features		Big thrust	
		Heavy aluminum housing	
		Strong self-locking ability	
		Designed for outdoor use	

Solar Energy Application

Model		PLARS-03
Maximum dynamic load	KN	6
Maximum half-way static load	KN	20
speed	mm/s	1
Stroke Length	mm	300-600
Duty cycle	%	10
Voltage	VDC	24
Operating Temp	℃	-40 to 65
IP Rating		IP65
Product Features		Big thrust
		Heavy aluminum housing
		Strong self-locking ability
		Designed for outdoor use

Solar Energy Application

Model		PLARS-04
Maximum dynamic load	KN	20
Maximum half-way static load	KN	60
speed	mm/s	0.6-1.0
Stroke Length	mm	500-1000
Duty cycle	%	10
Voltage	VDC	12、24
Operating Temp	℃	-40 to 65
IP Rating		IP65
Product Features		Big thrust
		Strong self-locking ability
		Designed for outdoor use

Solar Energy Application

Model		PLARSI-05
Maximum dynamic load		
Maximum half-way static load		
speed	mm/s	1.5、2、3
Stroke Length	mm	500-1000
Duty cycle		
Voltage	VDC	24
Operating Temp	℃	-40 to 65
IP Rating		IP66
Product Features		Big thrust
		Strong self-locking ability
		Designed for outdoor use

Solar Energy Application

Model		PLARSI-06
Maximum dynamic load		
Maximum half-way static load		
speed	mm/s	1.5
Stroke Length	mm	1000
Duty cycle		
Voltage	VDC	24
Operating Temp	℃	-40 to 65
IP Rating		IP66
Product Features		Big thrust
		Strong self-locking ability
		Designed for outdoor use

Solar Energy Application

Model		PLARSU-07	
Maximum dynamic load	N	15000	
Maximum half-way static load	N	45000	
speed	mm/s	1.4、2、3	
Stroke Length	mm	500-1000	
Duty cycle	%		
Voltage	VDC		
Operating Temp	℃	-40 to 65	
IP Rating		IP66	
Product Features		Big thrust	
		Strong self-locking ability	
		Designed for outdoor use	

Memo