[illegible]

WUXI HONGBA
Linear Actuator



Dear Customers ,

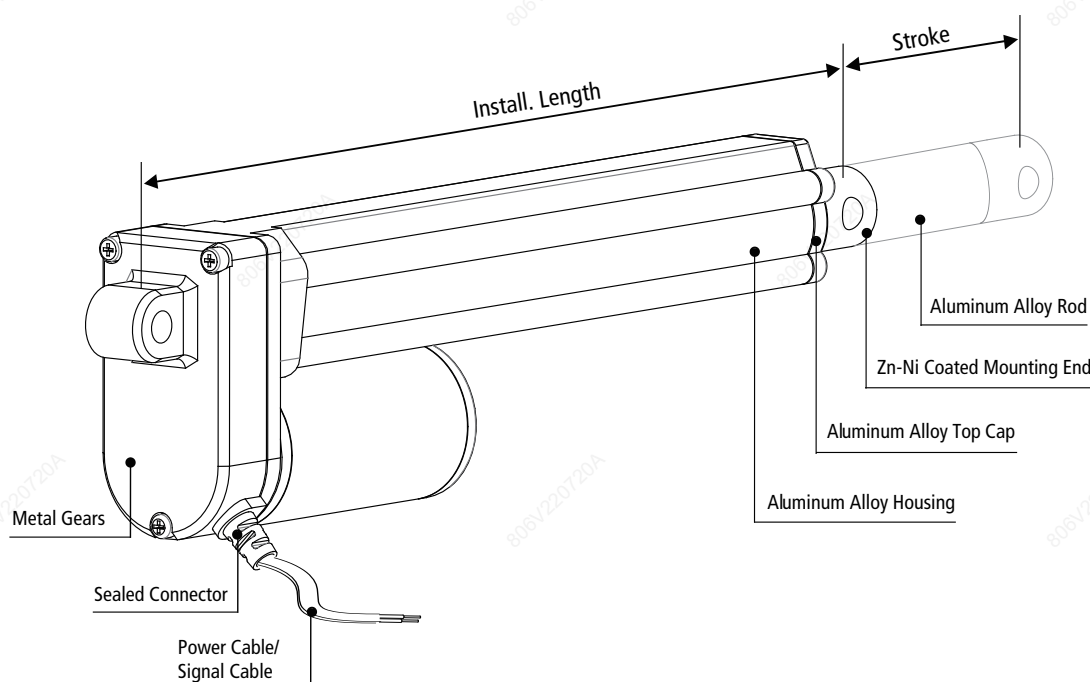
What a big world ! But thanks to crazy technology, it's been getting smaller than ever, so that we can meet here from all corners of the world. It's our pleasure to have opportunities to provide you with a variety of products and services to help with the implementation of your amazing designs.

We present our products thoroughly in front of you by using refined parameters and words, so that you can find the most suitable solution.

Next, we will take you to a deeper understanding of Hongba's products. Please read this datasheet carefully. You are also welcome to leave valuable comments and suggestions to help Hongba improve itself continuously.


HB Engineer Team

Definition of Terms



Stroke	How far the rod extends outwards from the body. The difference between fully extended length and fully retracted length. [Customizable]
Install. Length	The fully closed size. [Customizable]
Front Mount. End	Optional.
Rear Mount. End	Optional.
Mount. Holes	Can be rotated by 90°.
Dynamic Force	The max force that actuator is able to carry when it is moving.
Selflocking	The max force that linear actuator is able to hold when it stops.
Weather Protection	IP XX. The first digit: dust protection. The second digit: liquid protection. Please refer to [Table 1].
Duty Cycle	Continous working time 'a', rest time 'b'. Duty cycle is $a/(a+b) \times 100\%$. Please refer to [Table 1].
Speed	Include free-load speed and full-load speed.
Hall Sensor	Provide pulse signals. Displacement measurement is achieved through pulse counting, and the phase difference of the waveform can be used to identify the rotation direction of motor. Check [Table 1] to see if it is available.
Potentiometer	Potentiometer is a three-terminal variable resistor with a rotating contact which is used to measure the displacement of actuators. Check [Table 1] to see if it is available.
Manual Override	Can be used to extend or retract the actuator without power for emergency. Check [Table 1] to see if it is available.

Configs.

Color	<input checked="" type="checkbox"/> Sliver	<input checked="" type="checkbox"/> Black	<input type="checkbox"/> Customized			
Lead Screw	<input checked="" type="checkbox"/> Acme Screw	<input type="checkbox"/> Ball Screw				
Operation Mode	<input checked="" type="checkbox"/> Electrical	<input type="checkbox"/> Electrical + Manual				
Application	<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/> Furniture	<input type="checkbox"/> Medical			
Operational Temp.	<input type="checkbox"/> 5 to 40°C	<input checked="" type="checkbox"/> -10 to 65°C	<input checked="" type="checkbox"/> -40 to 65°C			
Operating Noise	<input type="checkbox"/> ≤45 dB	<input type="checkbox"/> ≤50 dB	<input checked="" type="checkbox"/> ≤65 dB			
Stroke Range	<input checked="" type="checkbox"/> 50-600mm	<input checked="" type="checkbox"/> 600-1,000mm				
Dynamic Load	<input checked="" type="checkbox"/> ≤1,200N	<input type="checkbox"/> ≤2,000N	<input type="checkbox"/> ≤4,000N	<input type="checkbox"/> ≤7,000N	<input type="checkbox"/> ≤12,000N	<input type="checkbox"/> ≤20,000N
Duty Cycle	<input type="checkbox"/> 10%	<input type="checkbox"/> 20%	<input checked="" type="checkbox"/> 25% *	<input type="checkbox"/> 50%	<input type="checkbox"/> 100%	
Motor Type	<input checked="" type="checkbox"/> Brushed DC	<input type="checkbox"/> Stepper Motor	<input type="checkbox"/> Brushless	<input type="checkbox"/> Servo Motor		
Overload Protection	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Clutch	<input type="checkbox"/> Electronic	<input type="checkbox"/> Thermistor		
Weather Protection	<input type="checkbox"/> IP20	<input type="checkbox"/> IP43	<input type="checkbox"/> IP54	<input type="checkbox"/> IP65	<input checked="" type="checkbox"/> IP66	
Position Feedback	<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> Endstop Signal	<input type="checkbox"/> Hall Sensor	<input checked="" type="checkbox"/> Potentiometer	<input type="checkbox"/> Encoder	<input checked="" type="checkbox"/> Reed Switches
Input Voltage	<input checked="" type="checkbox"/> 12VDC	<input checked="" type="checkbox"/> 24VDC	<input checked="" type="checkbox"/> 36VDC	<input checked="" type="checkbox"/> 48VDC	<input type="checkbox"/> 110VAC	<input type="checkbox"/> 220VAC

* Don't exceed four minutes continuous working with full load at 20°C.

☒ Options for DJ806 ☐ Other Models

[Table 1]

Parameters

Fill in code:

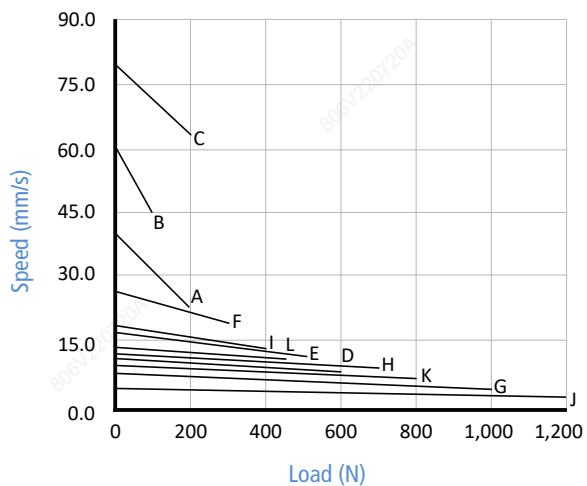
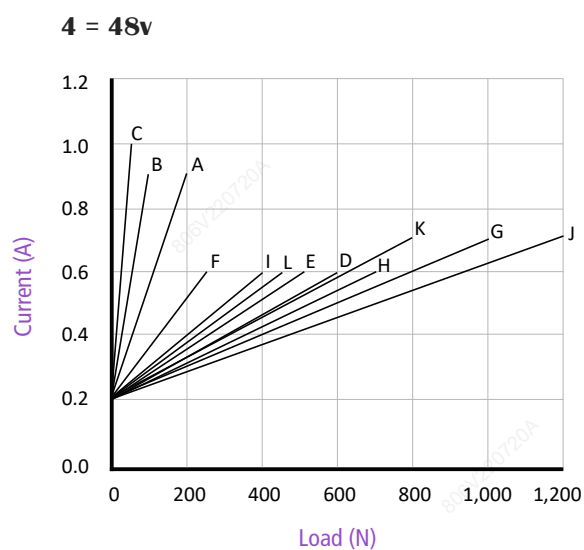
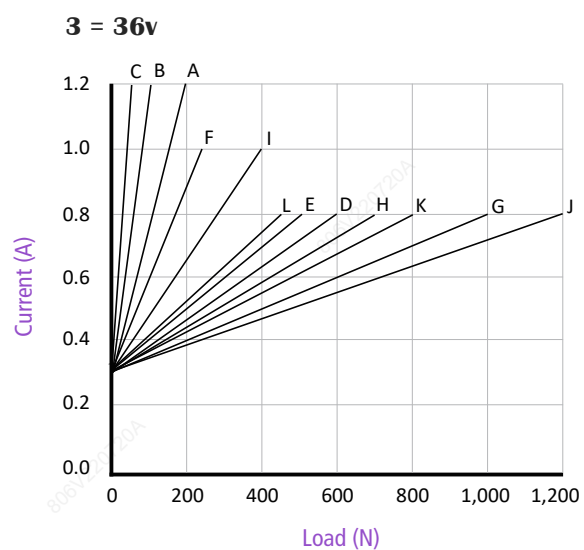
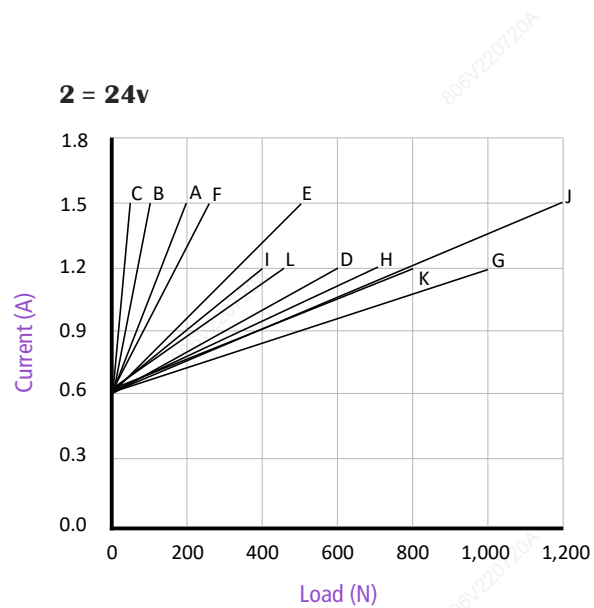
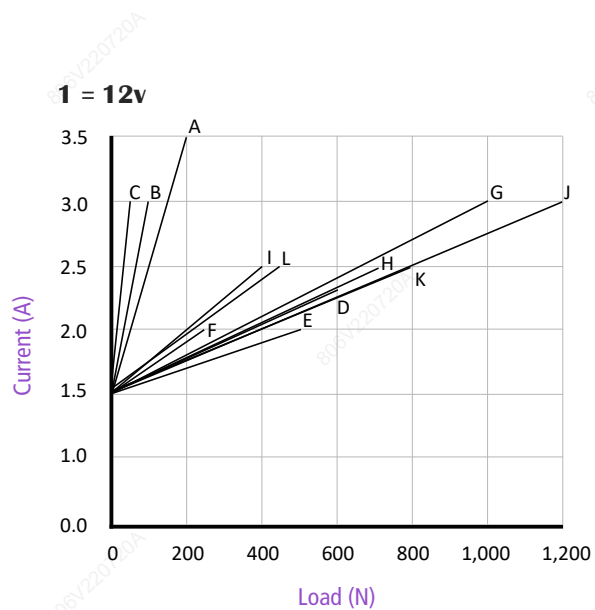
Code	Max. Dynamic Load ^②	Max. Self-locking	Reduction Ratio	Pitch	Speed±10% ^① (mm/s)		Max. Stroke w/o Pot. ^③	Max. Stroke with Pot. ^③
	(N)	(N)	-	(mm)	Free Load	Full Load	(mm)	(mm)
A	200	300	5:1	3.17	40	22	1,000	200
B	100	150	5:1	5	60	45	1,000	300
C	50	100	5:1	7.5	80	65	1,000	450
D	600	900	20:1	3.17	10.5	7.0	1,000	200
E	500	800	20:1	5	16.5	12	1,000	300
F	250	400	20:1	7.5	25	20	1,000	450
G	1,000	1,500	30:1	3.17	7.2	5.0	1,000	200
H	700	1,000	30:1	5	11.5	8.5	1,000	300
I	400	600	30:1	7.5	17	13.5	1,000	450
J	1,200	1,700	40:1	3.17	5.5	4.0	1,000	200
K	800	1,200	40:1	5	8.5	6.5	1,000	300
L	450	700	40:1	7.5	13	10	1,000	450

[Table 2]

- ① Measurements are made with actuators in connection with stable power supplies and ambient temperature at 20°C.
- ② For example, when real load is 800N, choosing code (K) is fine. Of course, you can also choose (G) or (J) which come with more load buffer, higher safety factor and longer product service time.
- ③ There are many factors affecting the "customizable maximum stroke", such as load, speed, force direction, etc., so the real application scenarios should be considered. If the parameters you required are not listed, please contact our sales engineers.

Charts

Fill in code:

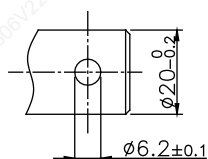


* Measurements are made with actuators in connection with stable power supplies and ambient temperature at 20°C.

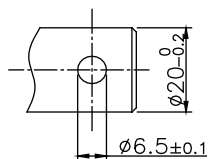
Front Mounting End

1. Please contact our sales team if none of the options below meet your requirements.

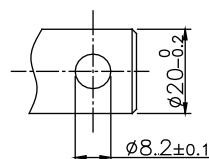
Fill in code:



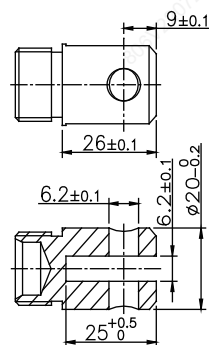
F01



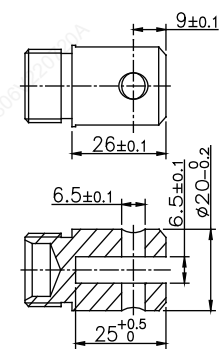
F02



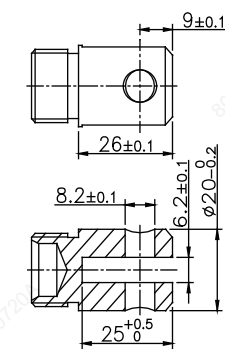
F03



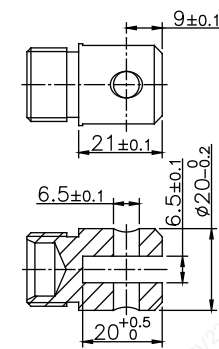
F04



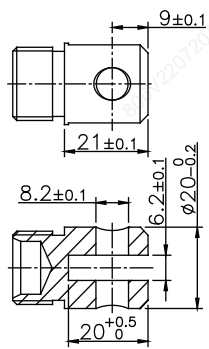
F05



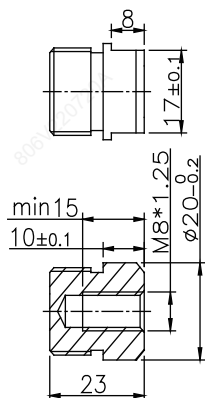
F06



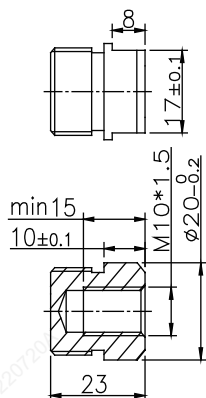
F07



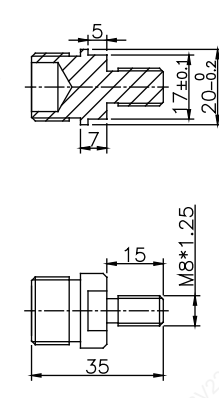
F08



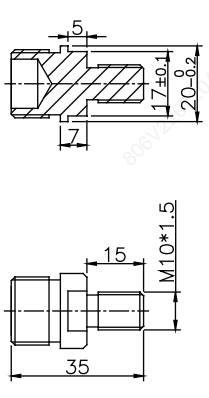
F09



F10

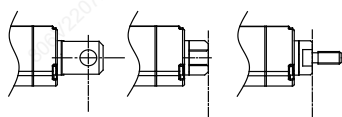


F11

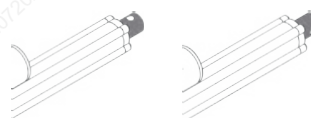


F12

2. Start of Installation Length



3. Hole Directions



1 = 90°

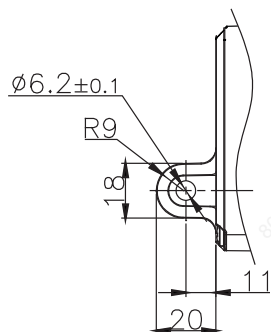
2 = 0°

Fill in code:

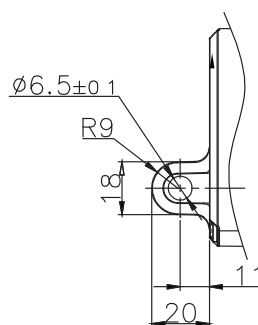
Rear Mounting End

1. Please contact our sales team if none of the options below meet your requirements.

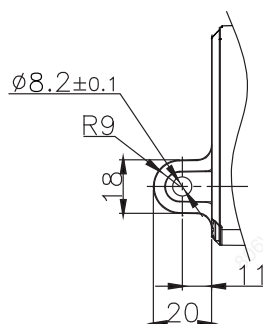
Fill in code:



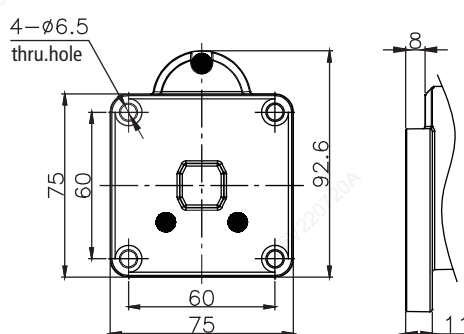
R01



R02

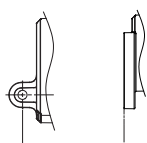


R03



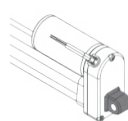
R04

2. End of Installation Length

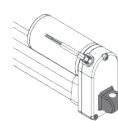


3. Hole Directions

Fill in code:



1 = 90°

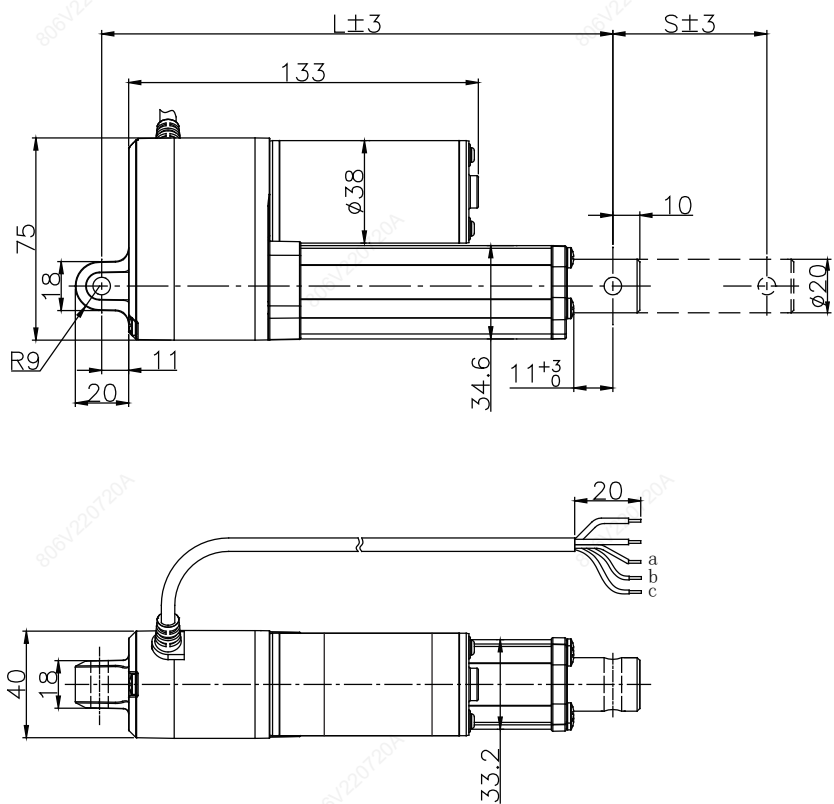


2 = 0°

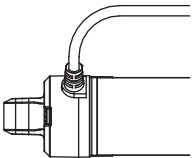
Overall Dimension

[Integrated Potentiometer]

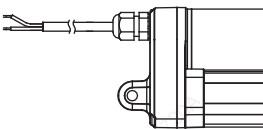
S = mm, L = mm



Fill in code:



A: sideways cable outlet



B: bottom cable outlet
(not applied to R04)

A. Mounting Ends VS Install. Length

Front Mount. Ends	Rear Mount. Ends
	R01, R02, R03, R04
F01, F02, F03, F07, F08, F09, F10, F11, F12	$A \geq S + 135 \text{ mm}$
F04, F05, F06	$A \geq S + 140 \text{ mm}$

[Table 6]

B. Stroke VS Install. Length

Stroke (S) (mm)	Install. Length (L) (mm)
50 - 299	+ 0
300 - 450	+ 15

[Table 7]

How to calculate 'Install. Length' ?
 $S = \text{Stroke}, L = \text{Install Length}, L \geq A + B$

Example

Front Mount.	Rear Mount.	S (mm)	A (mm)	B (mm)	$L \geq A+B$ (mm)
F04	R01	300	300+140	+15	≥ 455

[Table 8]

Signal Feedback

Fill in code:

0 = No Signal Feedback

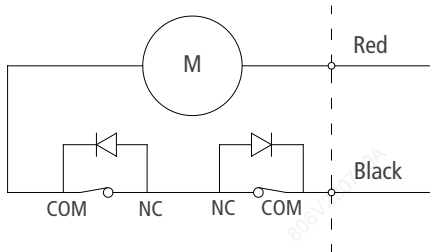
1 = Endstop Signal

2 = Potentiometer

3 = Reed Switches

0. Limit Switches without signal feedback

Standard DJ806 comes with limit switches that shut off the motor automatically at the end of its travel.

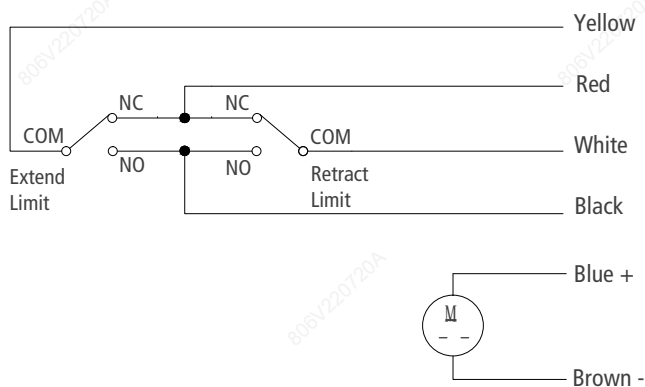


Wiring		
	Black	Red
Extend	-	+
Retract	+	-

[Table 9]

1. Endstop Signal

Optional endstop signals output, and the limit switches do not cut off the power at neither end of the travel.



Power Wire Coding		
	Brown	Blue
Extend	-	+
Retract	+	-
Signal Wire Coding		
Black	Extend / Retract limit, N.O.	
Red	Extend / Retract limit, N.C.	
Yellow	Extend limit. COM.	
White	Retract limit. COM.	

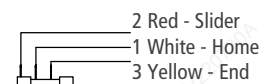
[Table 10]

2. Potentiometer

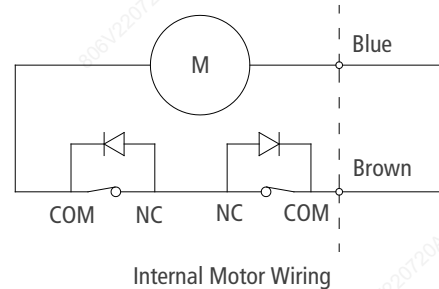
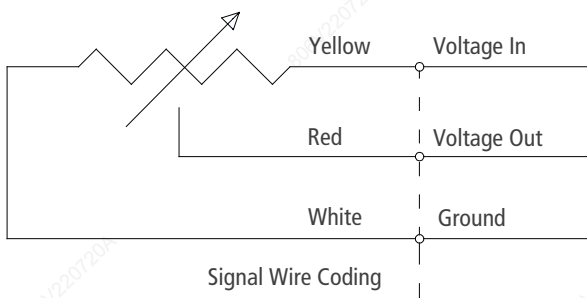
Code	Max. Stroke	Resistance Value per mm
A, D, G, J	200 mm	0.047 K Ω
B, E, H, K	300 mm	0.030 K Ω
C, F, I, L	450 mm	0.020 K Ω

* Start value 0.2~0.4K Ω

[Table 11]



Connect 1+2, resistance value increase, actuator extend.



3. Reed switch

Standard N.O. contact. Optional N.C. contact.

Inquiry Table

RESET

<div style="border: 1px solid black; width: 40px; height: 30px; margin: 5px;"></div>	Voltage	1 = 12VDC 2 = 24VDC 3 = 36VDC 4 = 48VDC
<div style="border: 1px solid black; width: 40px; height: 30px; margin: 5px;"></div>	Load & Speed	See [Table 2]
<div style="border: 1px solid black; width: 20px; height: 30px; margin: 5px;"></div> <div style="border: 1px solid black; width: 20px; height: 30px; margin: 5px;"></div>	Stroke (mm)	Please contact us if the stroke you required is out of range.
<div style="border: 1px solid black; width: 20px; height: 30px; margin: 5px;"></div> <div style="border: 1px solid black; width: 20px; height: 30px; margin: 5px;"></div>	Install. Length (mm)	See Table [3] to [8]
<div style="border: 1px solid black; width: 40px; height: 30px; margin: 5px;"></div>	Front Mount. End	F01 - F12 FX = Custom
<div style="border: 1px solid black; width: 40px; height: 30px; margin: 5px;"></div>	Rear Mount. End	R01 - R04 RX = Custom
<div style="border: 1px solid black; width: 20px; height: 30px; margin: 5px;"></div> <div style="border: 1px solid black; width: 20px; height: 30px; margin: 5px;"></div>	Mount. Hole Direction	Front 1 = 90° 2 = 0° Rear 1 = 90° 2 = 0°
<div style="border: 1px solid black; width: 40px; height: 30px; margin: 5px;"></div>	Signal Feedback	0 = None 1 = Endstop Signal 2 = Potentiometer 3 = Reed Switches
<div style="border: 1px solid black; width: 40px; height: 30px; margin: 5px;"></div>	Cable Length	1 = 800 mm 2 = 1500 mm 3 = 2000 mm X = Custom
<div style="border: 1px solid black; width: 20px; height: 30px; margin: 5px;"></div> <div style="border: 1px solid black; width: 20px; height: 30px; margin: 5px;"></div>	Connector	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> A = Sideway Cable Outlet B = Bottom Cable Outlet (not applied to R04) </div> <div style="width: 45%;"> 0 = Tinned Bared Wires 1 = Match with KZ-series Controller X = Custom </div> </div>
<div style="border: 1px solid black; width: 40px; height: 30px; margin: 5px;"></div>	Working Temperture	1 = -10℃ to 65℃ 2 = -40℃ to 65℃
Application	Working Frequency	Estimated cycles work per day
	End Use	Indoor or outdoor, and please describe your end use.
	Your contact	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Company Name Tel. </div> <div style="width: 45%;">Email</div> </div>

Terms of Use

Due to our continuous improving of HB products, Hongba reserves the right to change or modify our products without prior notice, at any time. Therefore, Hongba cannot guarantee the correct and actual status of said information on its products. The user is responsible for determining the suitability of HB products for specific application.

Wuxi Hongba Mechanical Electrical Equipment. Co., Ltd.


Cell:

Email:

Tel.: 0510-85436730

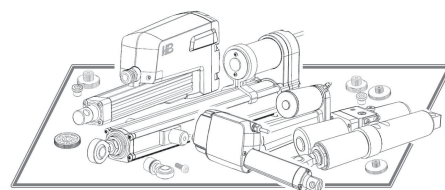
Website: hbactuator.com

Address: 5 Lijiang Rd. Xinwu District, Wuxi 214028 China

 You may also be interested in...

Model	Load (N)	Stroke (mm)	Speed (mm/s)	Install.Length (mm)	Overall Size (mm)	IP rate	Application
DJ803 (Track)	1,500	50-600	16-32	155	155 x 77.4 x L	IP20	Furniture
DJ823	3,000	50-600	5.0-15	S+155	148.5 x 80 x L	IP54	Furniture Medical Care
DJ810	4,000	50-600	5.0-32	S+150	156 x 83 x L	IP43	Furniture Medical Care
DJ801	6,000	50-600	4.7-28	S+175	156 x 83 x L	IP43	Furniture Medical Care
DJ822	6,000	50-600	5.0-16	S+175	166 x 91 x L	IP54	Furniture Medical Care
* DJ806	1,200	50-600	5.5-80	S+105	40 x 75 x L	IP66	Industrial
DJ809	2,000	50-600	5.0-55	S+108	45 x 77.5 x L	IP66	Industrial
DJ825	2,000	50-600	6-15	S+115	43 x 84.5 x L	IP66	Furniture Medical Care Industrial
DJ820	2,500	50-600	2.5-22	S+120	64.5 x 102 x L	IP66	Furniture Medical Care Industrial
DJ820P	1,000	50-600	25-50	S+140	64.5 x 102 x L	IP66	Industrial
DJ830	4,000	50-600	5.5-35	S+200	76 x 151 x L	IP65	Industrial
DJ830P	7,000	50-600	5.5-35	S+200	76 x 151 x L	IP65	Industrial
DJ808	7,000	50-600	5.5-35	S+250	77 x 151 x L	IP65	Industrial
DJ805G	12,000	50-1,000	6.5-37	S+200	102 x 154 x L	IP66	Industrial

* You are now reading...



For more information, please visit our website hbactuator.com