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Dear Customers,

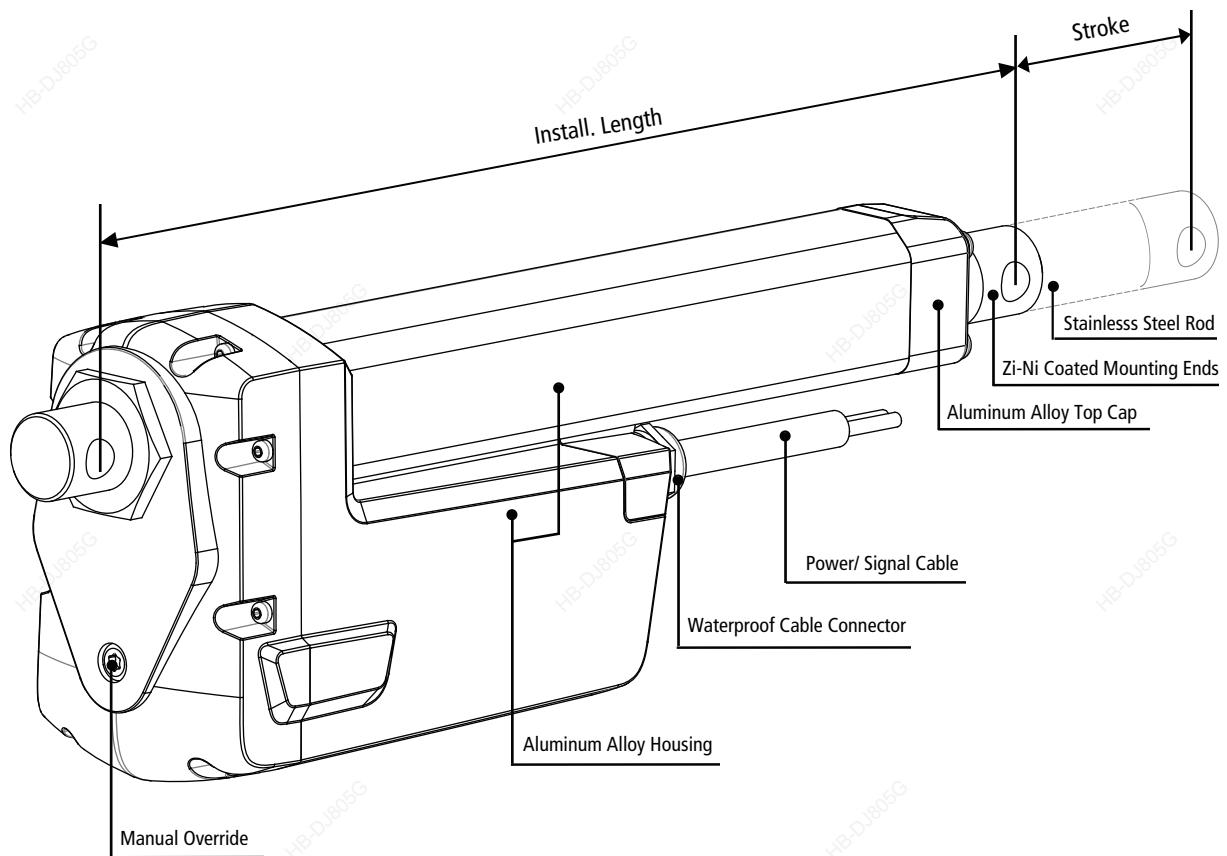
What a big world ! But thanks to crazy technology, it's been getting smaller than ever, so that we can meet here from all corners of the world. It's our pleasure to have opportunities to provide you with a variety of products and services to help with the implementation of your amazing designs.

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	Continuous 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"/> Silver	<input type="checkbox"/> Black	<input type="checkbox"/> Customized			
Lead Screw	<input checked="" type="checkbox"/> Acme Screw	<input checked="" type="checkbox"/> Ball Screw				
Operation Mode	<input type="checkbox"/> Electrical		<input checked="" 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 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 type="checkbox"/> ≤1,200N	<input type="checkbox"/> ≤2,000N	<input type="checkbox"/> ≤4,000N	<input type="checkbox"/> ≤7,000N	<input checked="" 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 type="checkbox"/> None	<input type="checkbox"/> Clutch	<input checked="" 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 checked="" type="checkbox"/> Hall Sensor	<input checked="" type="checkbox"/> Potentiometer	<input type="checkbox"/> Encoder	<input 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 when with full load and 20°C.

Options for DJ805G 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	12,000	15,000	43:1	4	6.0	4.0	1,000	176
B	11,000	12,000	31:1	4	8.0	5.2	1,000	176
C	7,500	9,000	21:1	4	12.0	8.0	1,000	176
D	10,000	12,000	43:1	8	12.0	7.0	1,000	352
E	7,000	8,000	31:1	8	17.0	9.5	1,000	352
F	5,000	6,000	21:1	8	25.0	14.0	1,000	352
G	6,500	8,000	43:1	12	18.5	11.0	1,000	528
H	4,500	5,500	31:1	12	25.0	13.0	1,000	528
I	3,200	4,000	21:1	12	37.0	23.0	1,000	528

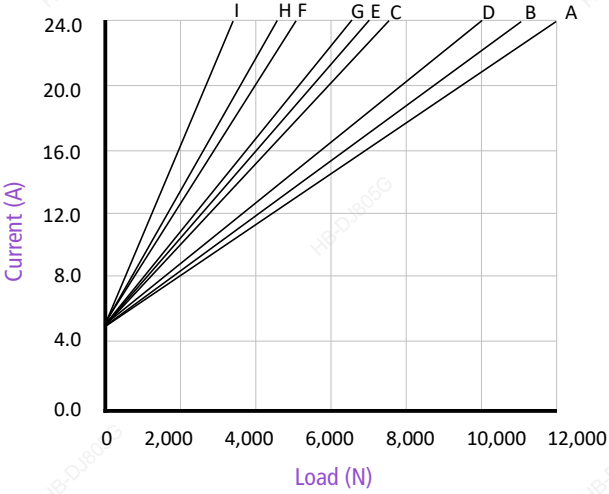
[Table 2]

- 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 10000N, choosing code (D) is fine. Of course, you can also choose (B) or (A) 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.

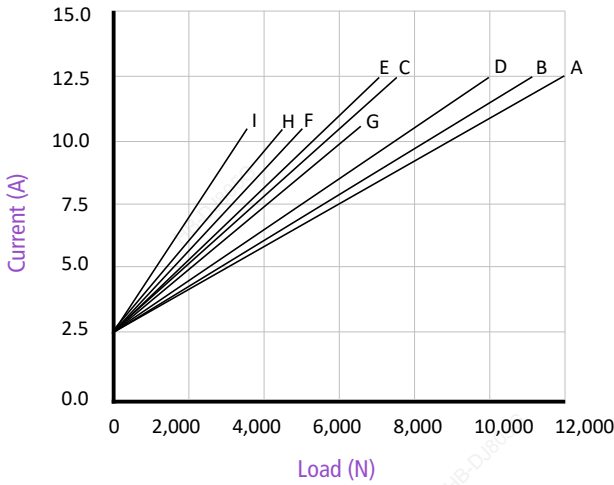
Charts

Fill in code:

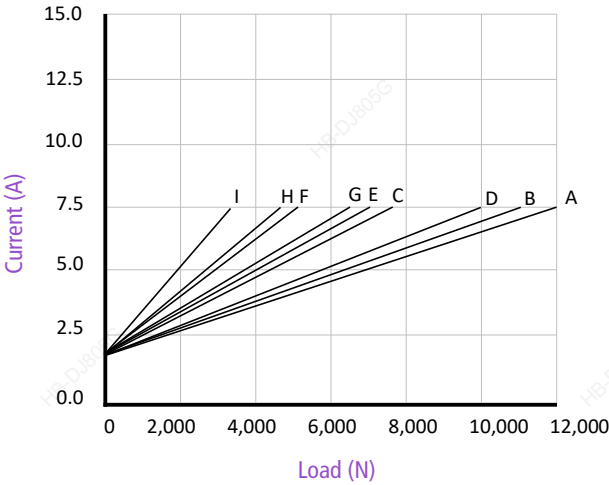
1 = 12v



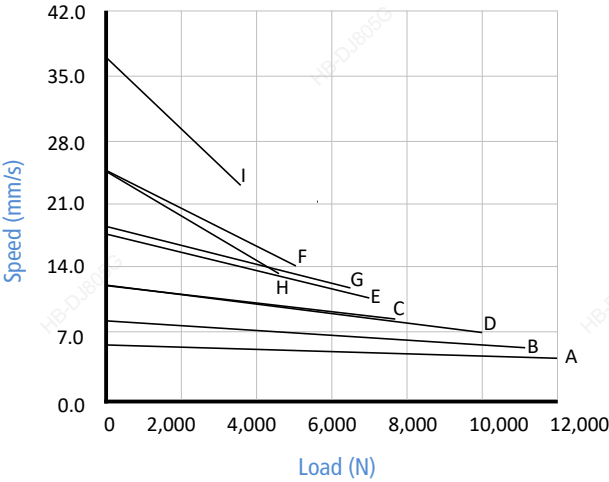
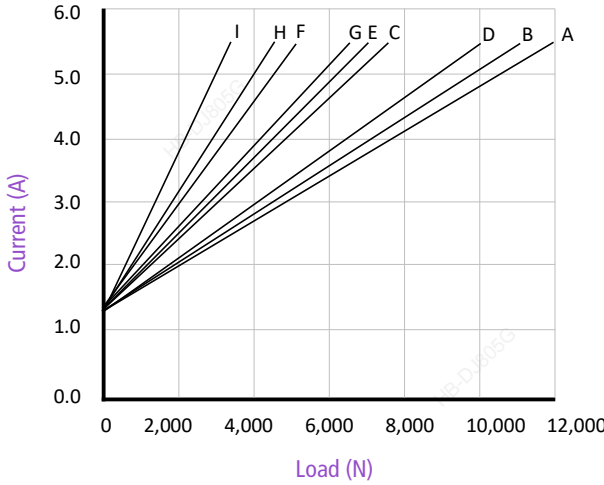
2 = 24v



3 = 36v



4 = 48v

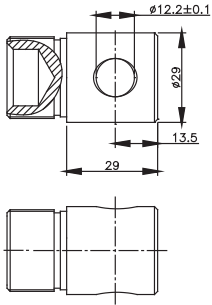


* Measurements are made with actuators in connection with stable power supplies and ambient temperature at 20°C.

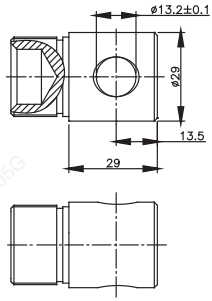
Front Mounting End

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

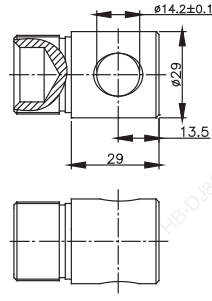
Fill in code:



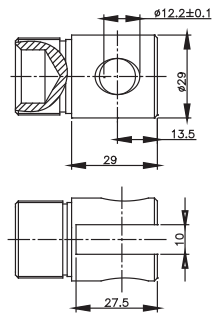
F01



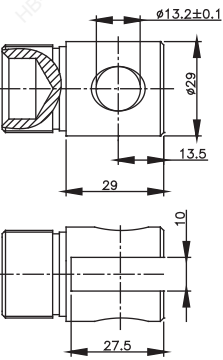
F02



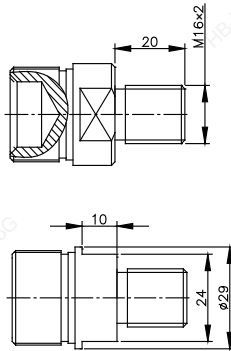
F03



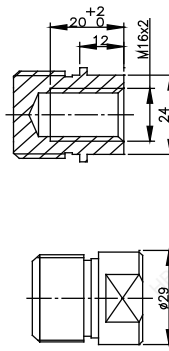
F04



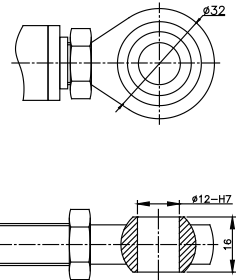
F05



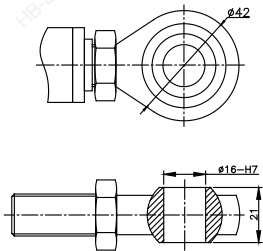
F06



F07

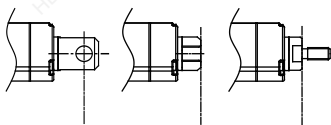


F08

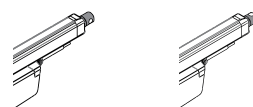


F09

2. Start of Installation Length



3. Hole Direction



1 = 90°

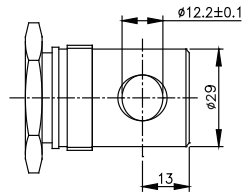
2 = 0°

Fill in code:

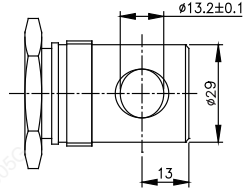
Rear Mounting End

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

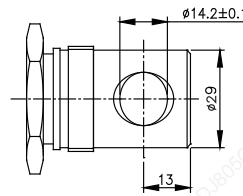
Fill in code:



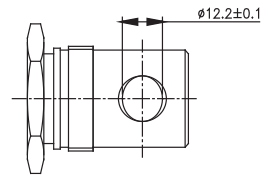
R01



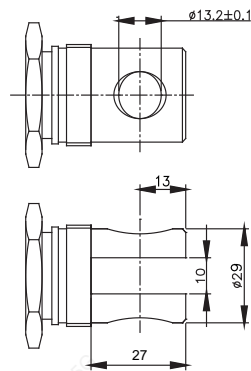
R02



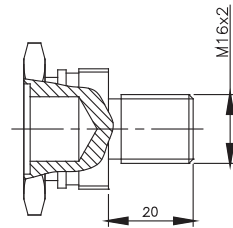
R03



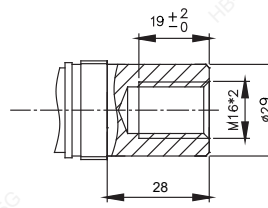
R04



R05

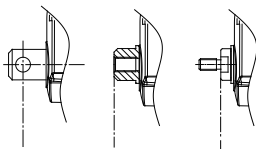


R06



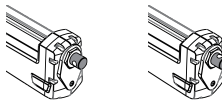
R07

2. End of Installation Length



3. Hole Direction

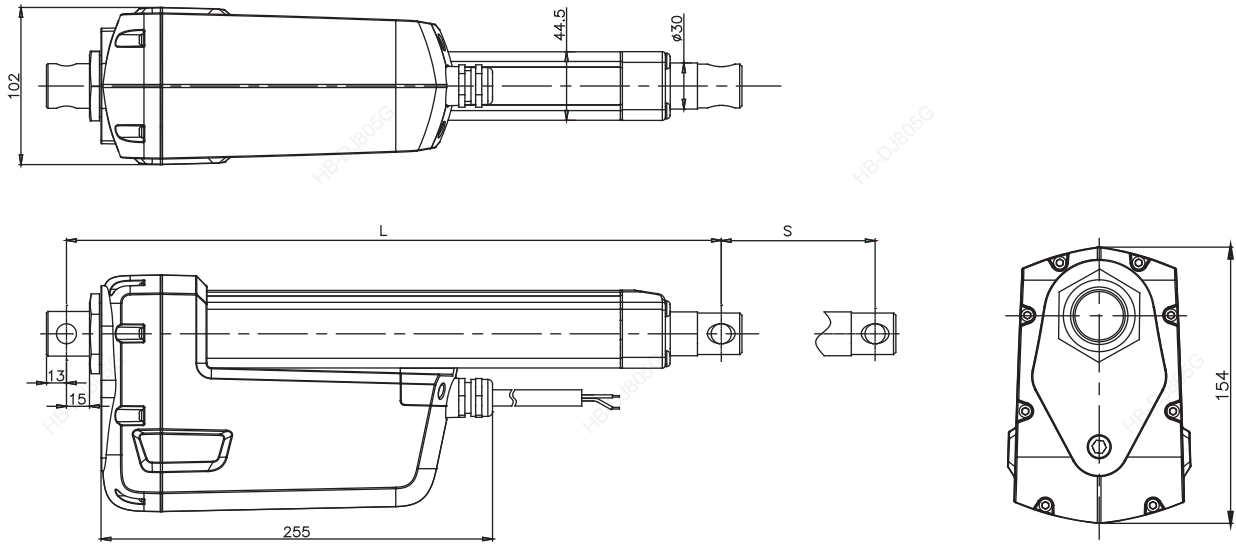
Fill in code:



1 = 90°

2 = 0°

1. Overall Size



2. Installation Size ($L \geq A+B$)

A. Mounting Ends	Rear
Front	R01 - R07
F01 - F07	S+200 mm (min 300mm)
F08, F09	S+250 mm (min 340mm)

【Table 3】

B. Stroke Range	mm
50 - 299	+ 0
300 - 599	+ 50
≥ 600	+ 100

【Table 4】

Example

Front Mount.	Rear Mount.	S	A	B	-	$L \geq A+B$
F08	R01	50	340	+0	-	≥ 340

【Table 5】

Fill in code:

- 0 = None
- 1 = Hall Effect Sensor
- 2 = Potentiometer
- 3 = Endstop Signal

1. Hall Effect Sensor

Option 'A' (Standard)
Dual-sensor, Monitor gear box

Code	Gear Ratio		Pitch	Equivalent (pulse/mm)	
	Actuator	Sensor		1 Pole Pair	4 Pole Pairs (standard)
A	43.404:1	16:58	4	0.906	3.625
B	31.131:1	20:54		0.675	2.700
C	20.843:1	27:47		0.435	1.741
D	43.404:1	16:58	8	0.453	1.813
E	31.131:1	20:54		0.338	1.350
F	20.843:1	27:47		0.218	0.870
G	43.404:1	16:58	12	0.302	1.209
H	31.131:1	20:54		0.225	0.900
I	20.843:1	27:47		0.145	0.580

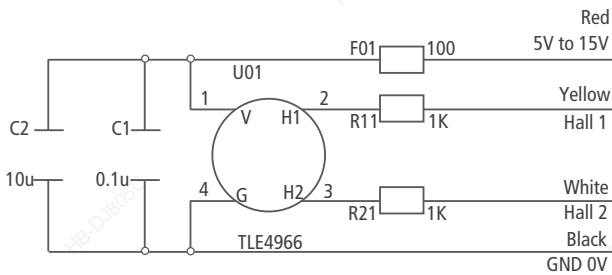
[Table 6]

Option 'B'
Dual-sensor, Monitor motor rotation

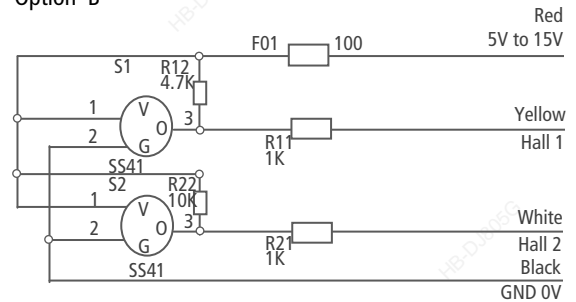
Code	Gear Ratio		Pitch	Equivalent (pulse/mm)	
	Actuator	Sensor		1 Pole Pair	4 Pole Pairs (standard)
A	43.404:1		4	10.851	43.404
B	31.131:1			7.783	31.131
C	20.843:1			5.211	20.843
D	43.404:1		8	5.426	21.702
E	31.131:1			3.891	15.566
F	20.843:1			2.605	10.422
G	43.404:1		12	3.617	14.468
H	31.131:1			2.594	10.377
I	20.843:1			1.737	6.948

[Table 7]

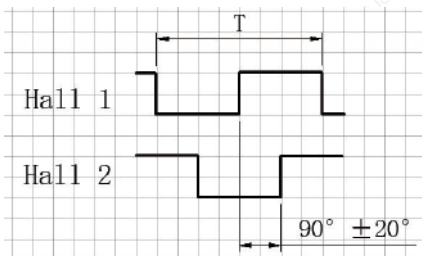
Option 'A' (Standard)



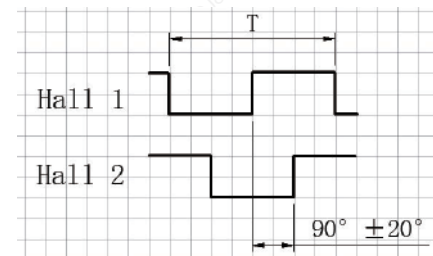
Option 'B'



Option 'A' (Standard)

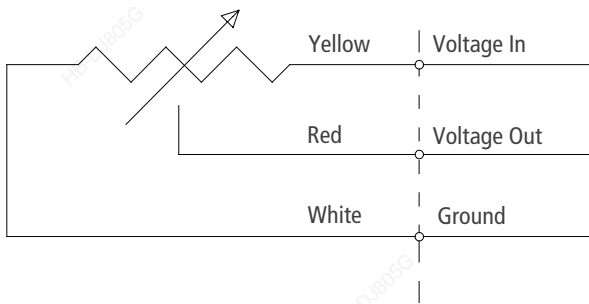


Option 'B'

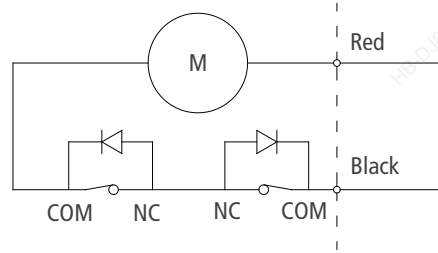


2. Potentiometer

Signal Wires



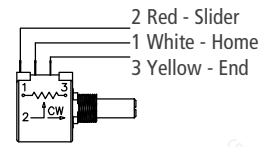
Internal Motor Wiring



Code	Max. Stroke	Resistance Value per mm
A, B, C	176 mm	0.0568 K Ω
D, E, F	352 mm	0.0284 K Ω
G, H, I	528 mm	0.0189 K Ω

* Start value 0.2~0.4K

[Table 8]



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

3. Endstop Signal

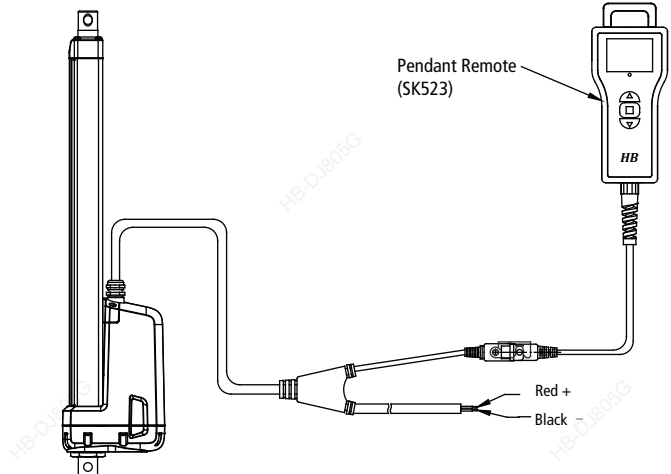
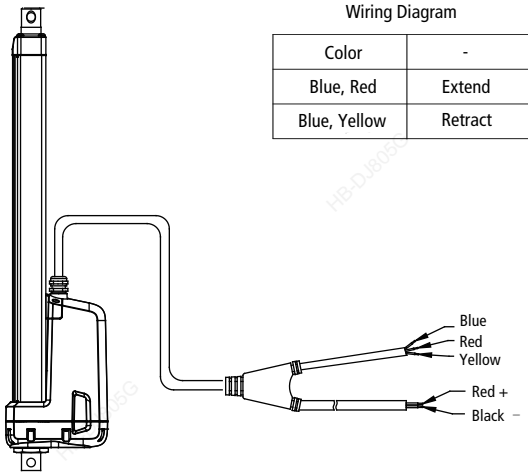
Standard NPN signal, or optional PNP.

Fill in code:

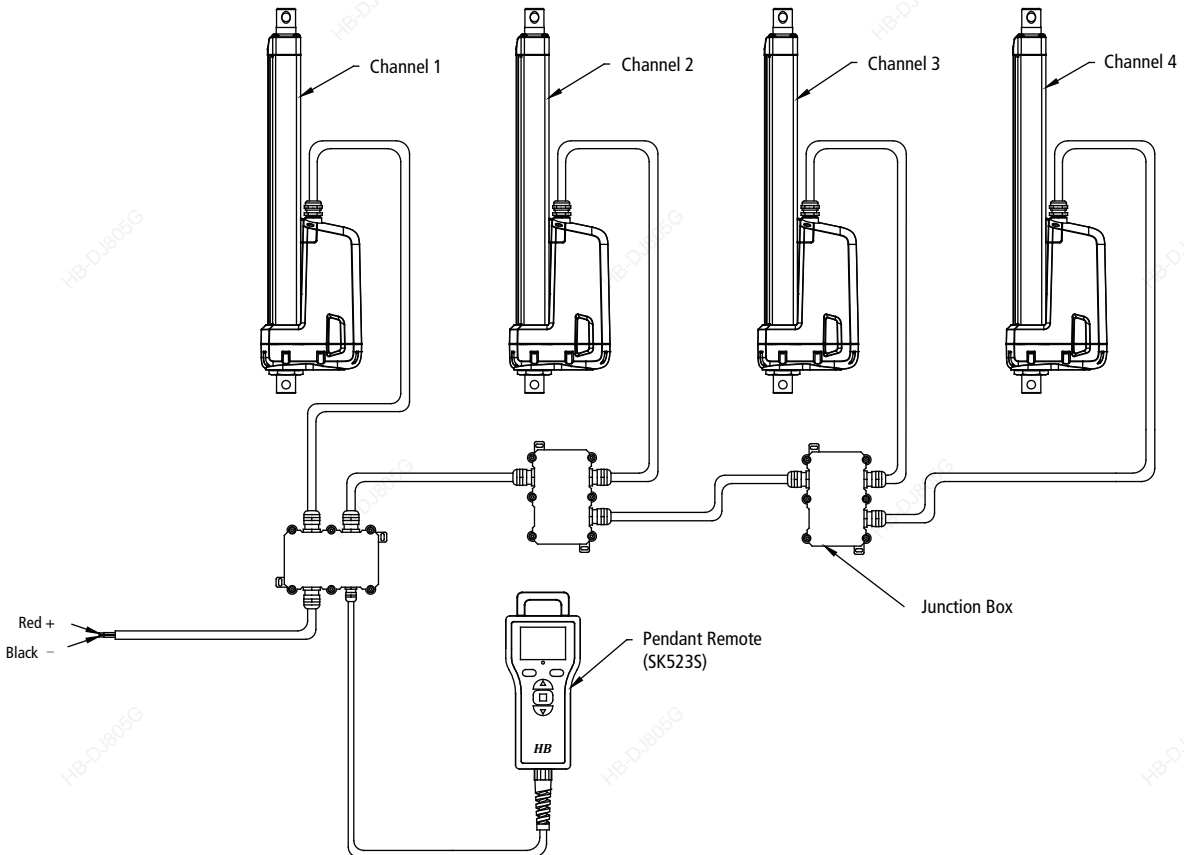
- 0 = 2-core bared wires
- 1 = Logic level control
- 2 = Go with SK control
- S = Synchronized control
- X = Custom

1 = Logic level control

2 = Go with SK523D control



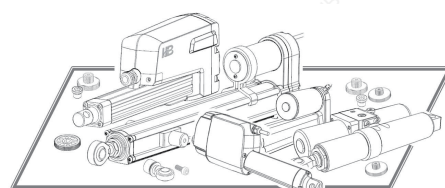
S = Synchronized control (2-4 actuators)



 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	25-100	S+200	102 x 154 x L	IP66	Industrial
DJ812	20,000	50-1,000	5.5-35	S+600	N/A	IP55	Industrial

* You are now reading...



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