

17SH820

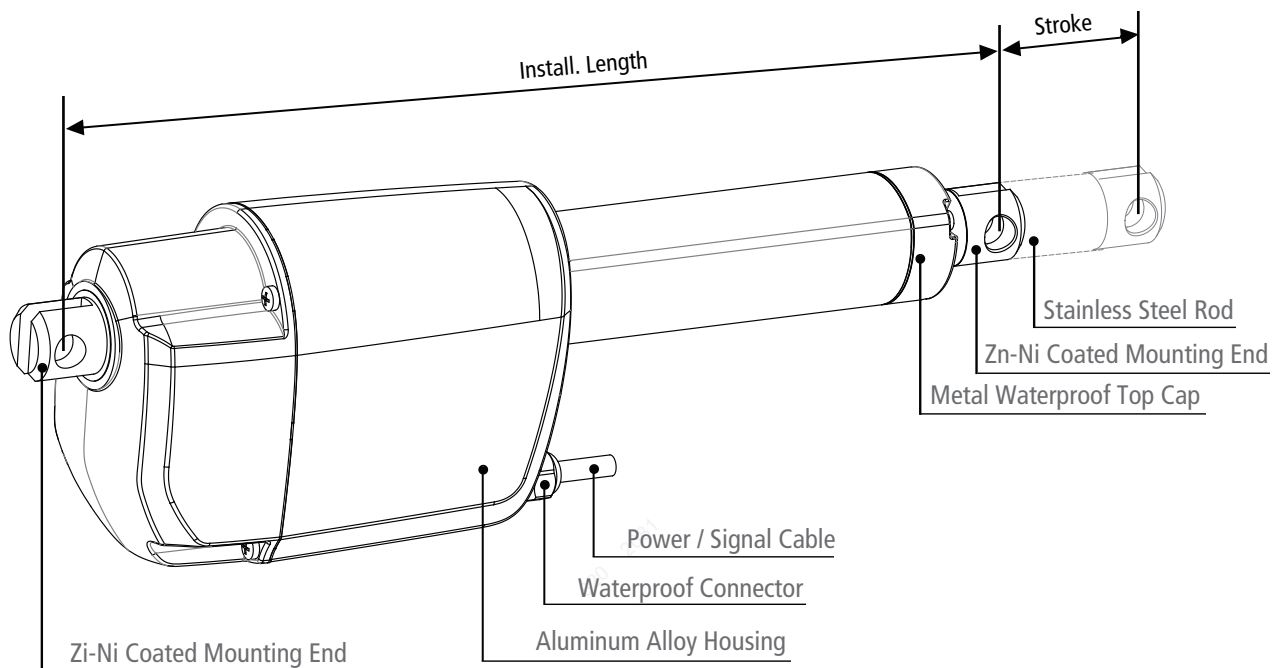
Data Sheet



Contents

- 11** Other Models
- 10** Inquiry Table
- 09** Position Feedback
- 08** Overall Dimension
- 07** Rear Mount. End
- 06** Front Mount. End
- 05** Chart of Load, Speed and Current
- 04** Configs. Load & Speed
- 03** Definition of Terms

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 type="checkbox"/> Silver	<input checked="" type="checkbox"/> Black	<input type="checkbox"/> Custom			
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 checked="" type="checkbox"/> Furniture	<input checked="" 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 checked="" type="checkbox"/> ≤45 dB	<input type="checkbox"/> ≤50 dB	<input type="checkbox"/> ≤65 dB			
Stroke Range	<input checked="" type="checkbox"/> 50-600mm		<input type="checkbox"/> 600-1,000mm			
Dynamic Load	<input type="checkbox"/> ≤1,200N	<input checked="" type="checkbox"/> ≤2,500N	<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 checked="" type="checkbox"/> 20% *	<input 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 type="checkbox"/> Electronic	<input checked="" 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 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 two minutes continuous working at full load with 20°C.

Options for 17SH820 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 ^③
	(N)				(N)	-	(mm)
A	2,500	3,500	86.6:1	3.17	2.5	1.8	300
B	2,000	3,000	86.6:1	5	4.0	3.0	400
C	1,500	2,500	86.6:1	7.5	6.0	4.0	400
D	1,200	2,000	43.3:1	5	8.0	6.0	500
E	1,000	1,500	43.3:1	7.5	12.0	8.0	500
F	500	700	43.3:1	15	22.0	17.0	600

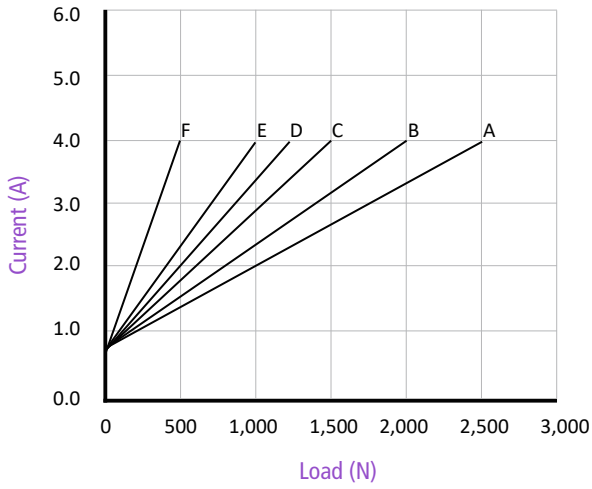
[Table 2]

- 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 1500N, choosing code (C) is fine. Of course, you can also choose (B) or even (A) which comes 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.

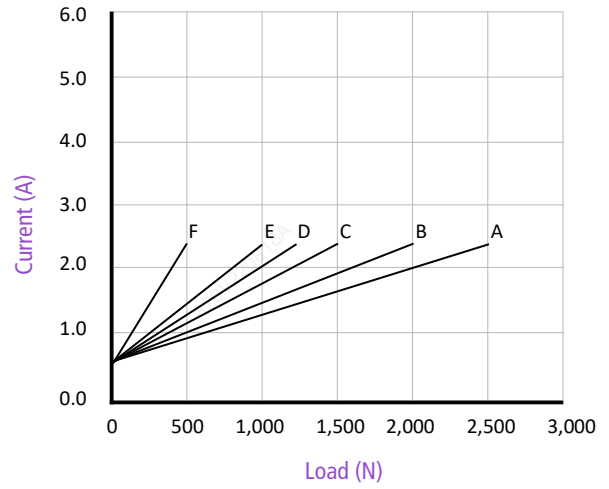
Charts

Fill in code:

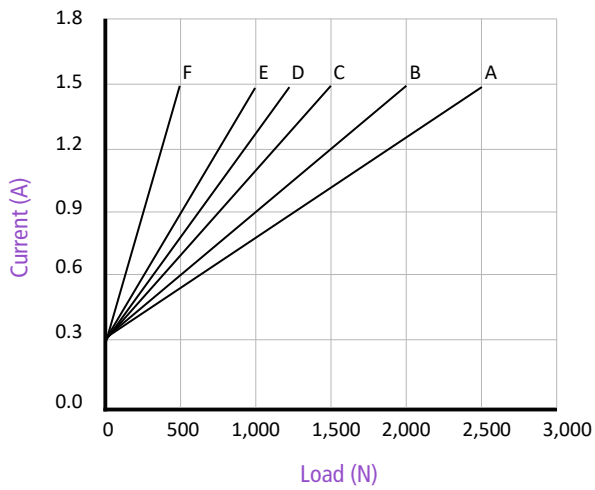
1 = 12v



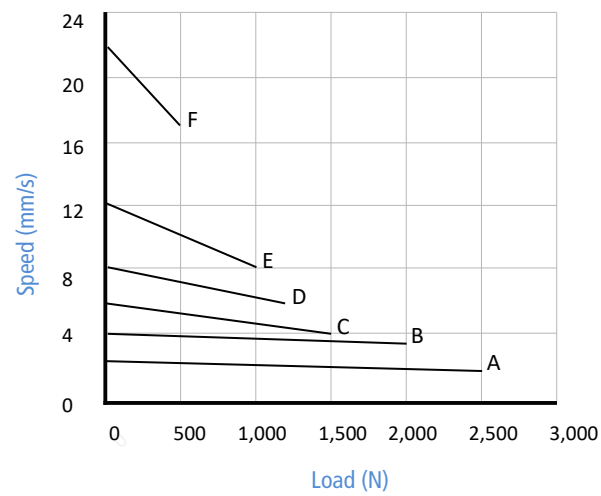
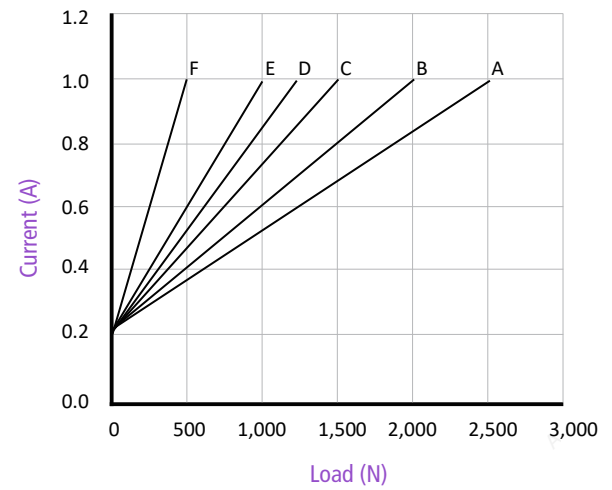
2 = 24v



3 = 36v



4 = 48v

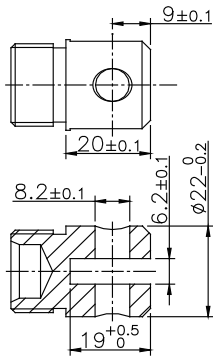


* Measurements are made with actuators in connection with stable power supplies and ambient temperature at 20°C.

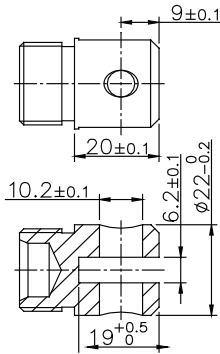
Front Mounting End

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

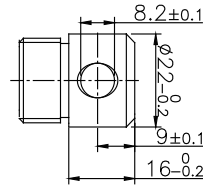
Fill in code:



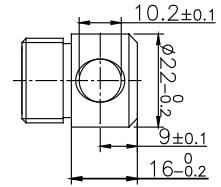
F01



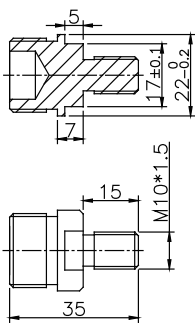
F02



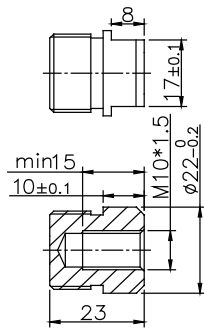
F03



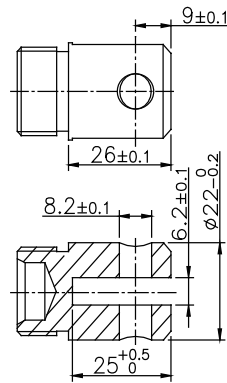
F04



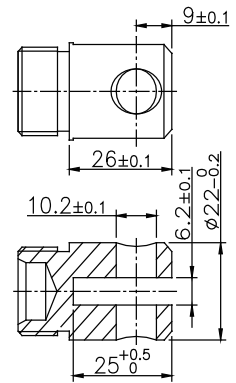
F05



F06

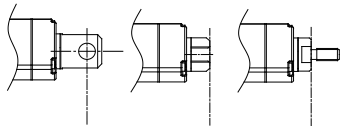


F07



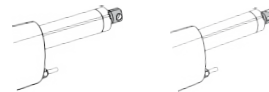
F08

2. Start of Installation Length



3. Hole Directions

Fill in code:



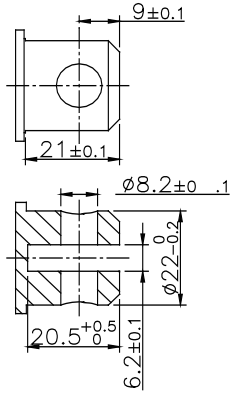
1 = 90°

2 = 0°

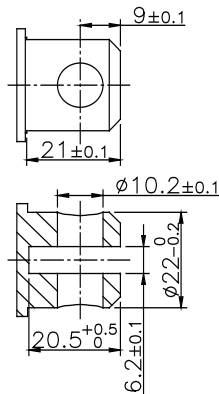
Rear Mounting End

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

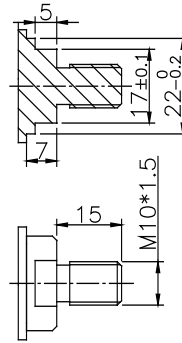
Fill in code:



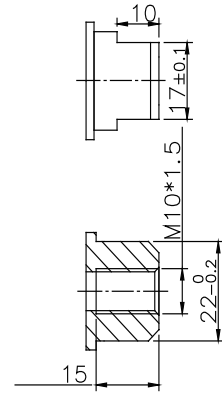
R01



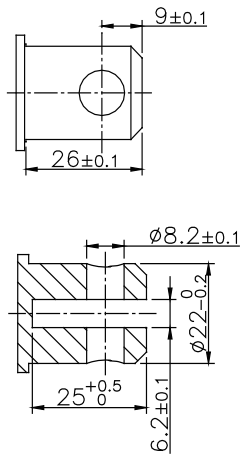
R02



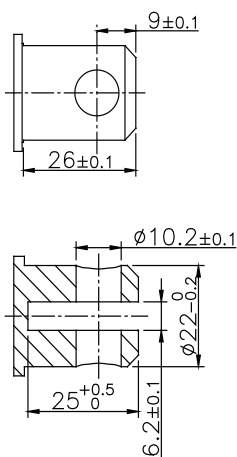
R03



R04



R05

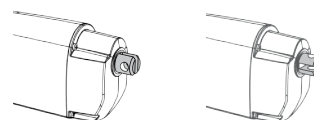
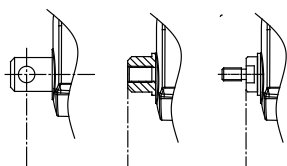


R06

2. End of Installation Length

3. Hole Directions

Fill in code:



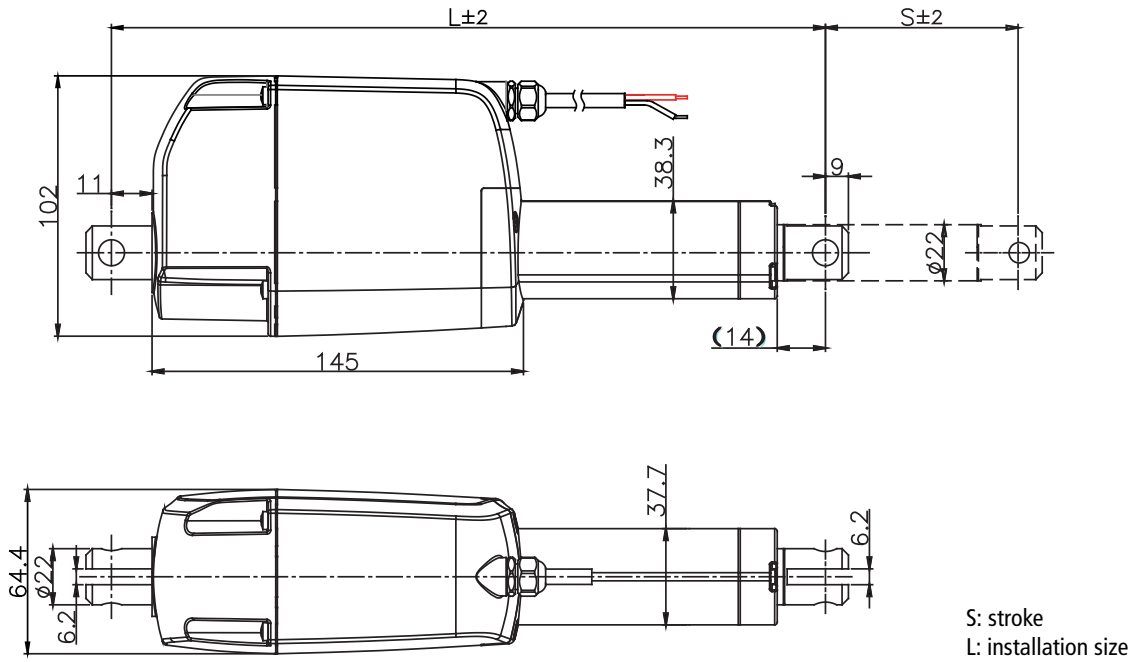
1 = 90°

2 = 0°

Dimension

S = mm, L = mm

1. Overall Size



2. Installation Size (L ≥ A+B)

A. Mounting Ends	Rear Ends	
	Front Ends	Rear Ends
F01 - F06	R01- R06	R07, R08
F07, F08	S+120 (L is min.190mm)	S+125 (L is min.195mm)
	S+125 (L is min.195mm)	S+130 (L is min. 200mm)

[Table 3]

B. Stroke Range	mm
30 - 299	+ 0
300 - 399	+ 30
≥ 400	+ 50

[Table 4]

Example

Front Mount.	Rear Mount.	S (mm)	A (mm)	B (mm)	L≥A+B (mm)
F07	R01	300	300+125	+30	≥455

[Table 5]

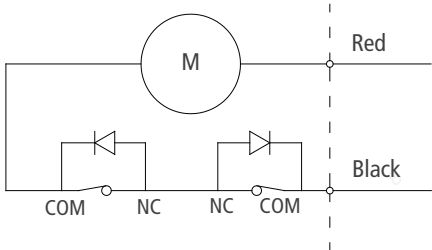
Signal Feedback

Fill in code:

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

0. Standard Limit Switches without Signal feedback

Standard DJ820 comes with limit switches that shut off the motor automatically at the end of its travel.

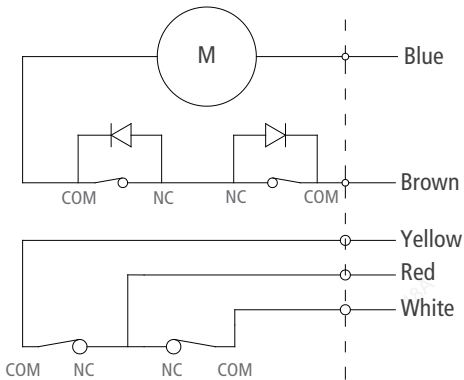


Wire Coding		
	Black	Red
Extend	-	+
Retract	+	-

[Table 6]

1. Endstop Signal

Equipped with two separated switches. One is to cut off power supply at either end of stroke, and the other is to supply signals.



Power Wire Coding		
	Brown	Blue
Extend	-	+
Retract	+	-

Signal Wire Coding	
Red	Extend / Retract limit, N.C. contact
Yellow	Extend limit. COM.
White	Retract limit. COM.

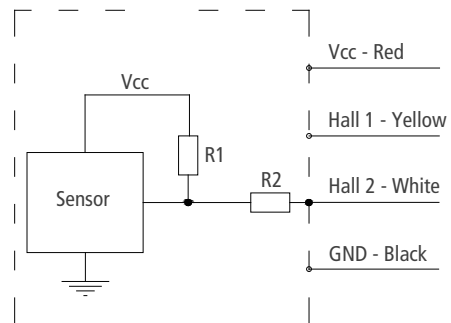
[Table 7]

2. Hall Sensor (standard dual-sensor)

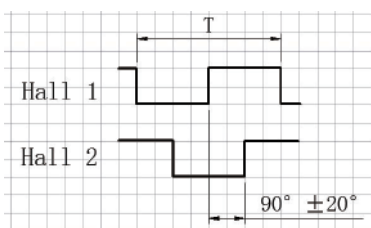
Code	Magnetic Pole	Pulse Equivalent (pulse/mm)
A	1 pole pair (standard)	27.30
B		17.33
C		11.55
D		8.67
E		5.78
F		2.89

[Table 8]

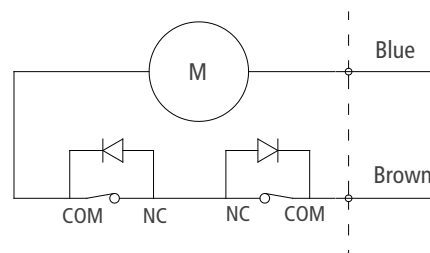
Wire Coding



* Power supply (V)= 5~15V



Oscillogram



Inquiry Table

RESET

<input style="width: 100%; height: 20px;" type="text"/>	Voltage	1 = 12VDC 2 = 24VDC 3 = 36VDC 4 = 48VDC
<input style="width: 100%; height: 20px;" type="text"/>	Load & Speed	See [Table 2]
<input style="width: 100%; height: 20px;" type="text"/>	Stroke (mm)	Please contact us if the stroke you required is out of range.
<input style="width: 100%; height: 20px;" type="text"/>	Install. Length (mm)	See Table [3] [4] [5]
<input style="width: 100%; height: 20px;" type="text"/>	Front Mount. End	F01 - F08 FX = Custom
<input style="width: 100%; height: 20px;" type="text"/>	Rear Mount. End	R01 - R06 RX = Custom
<input style="width: 100%; height: 20px;" type="text"/>	Mount. Hole Direction	Front 1 = 90° 2 = 0° Rear 1 = 90° 2 = 0°
<input style="width: 100%; height: 20px;" type="text"/>	Signal Feedback	0 = None 1 = Endstop Signal 2 = Hall Effect Sensor
<input style="width: 100%; height: 20px;" type="text"/>	Cable Length	1 = 500 mm 2 = 1,000 mm X = Custom
<input style="width: 100%; height: 20px;" type="text"/>	Connector	0 = Tinned Bared Wires 1 = Match with KZ-series Controller X = Custom
<input style="width: 100%; height: 20px;" type="text"/>	Working Temperature	1 = -10 °C to 65 °C 2 = -40 °C to 65 °C
<div style="border: 1px solid black; padding: 5px; transform: rotate(-90deg); transform-origin: center;">Application</div>	Working Frequency	Estimated cycles work per day
	End Use	Indoor or outdoor, and please describe your end use.
	Your Contact	Company Name Tel. Email

 You may also be interested in...

Model	Load (N)	Stroke (mm)	Speed (mm/s)	Install.Length (mm)	Overall Size (mm)	IP rate	Application
17SH803 (Track)	1,500	50-600	16-32	155	155 x 77.4 x L	IP20	Furniture
17SH823	3,000	50-600	5.0-15	S+155	148.5 x 80 x L	IP54	Furniture Medical Care
17SH810	4,000	50-600	5.0-32	S+150	156 x 83 x L	IP43	Furniture Medical Care
17SH801	6,000	50-600	4.7-28	S+175	156 x 83 x L	IP43	Furniture Medical Care
17SH822	6,000	50-600	5.0-16	S+175	166 x 91 x L	IP54	Furniture Medical Care
17SH806	1,200	50-600	5.5-80	S+105	40 x 75 x L	IP66	Industrial
17SH809	2,000	50-600	5.0-55	S+108	45 x 77.5 x L	IP66	Industrial
17SH825	2,000	50-600	6-15	S+115	43 x 84.5 x L	IP66	Furniture Medical Care Industrial
* 17SH820	2,500	50-600	2.5-22	S+120	64.5 x 102 x L	IP66	Furniture Medical Care Industrial
17SH8200	1,000	50-600	25-50	S+140	64.5 x 102 x L	IP66	Industrial
17SH830	4,000	50-600	5.5-35	S+200	76 x 151 x L	IP65	Industrial
17SH8300	7,000	50-600	5.5-35	S+200	76 x 151 x L	IP65	Industrial
17SH808	7,000	50-600	5.5-35	S+250	77 x 151 x L	IP65	Industrial
17SH805F	12,000	50-1,000	6.5-37	S+200	102 x 154 x L	IP66	Industrial

* You are now reading...