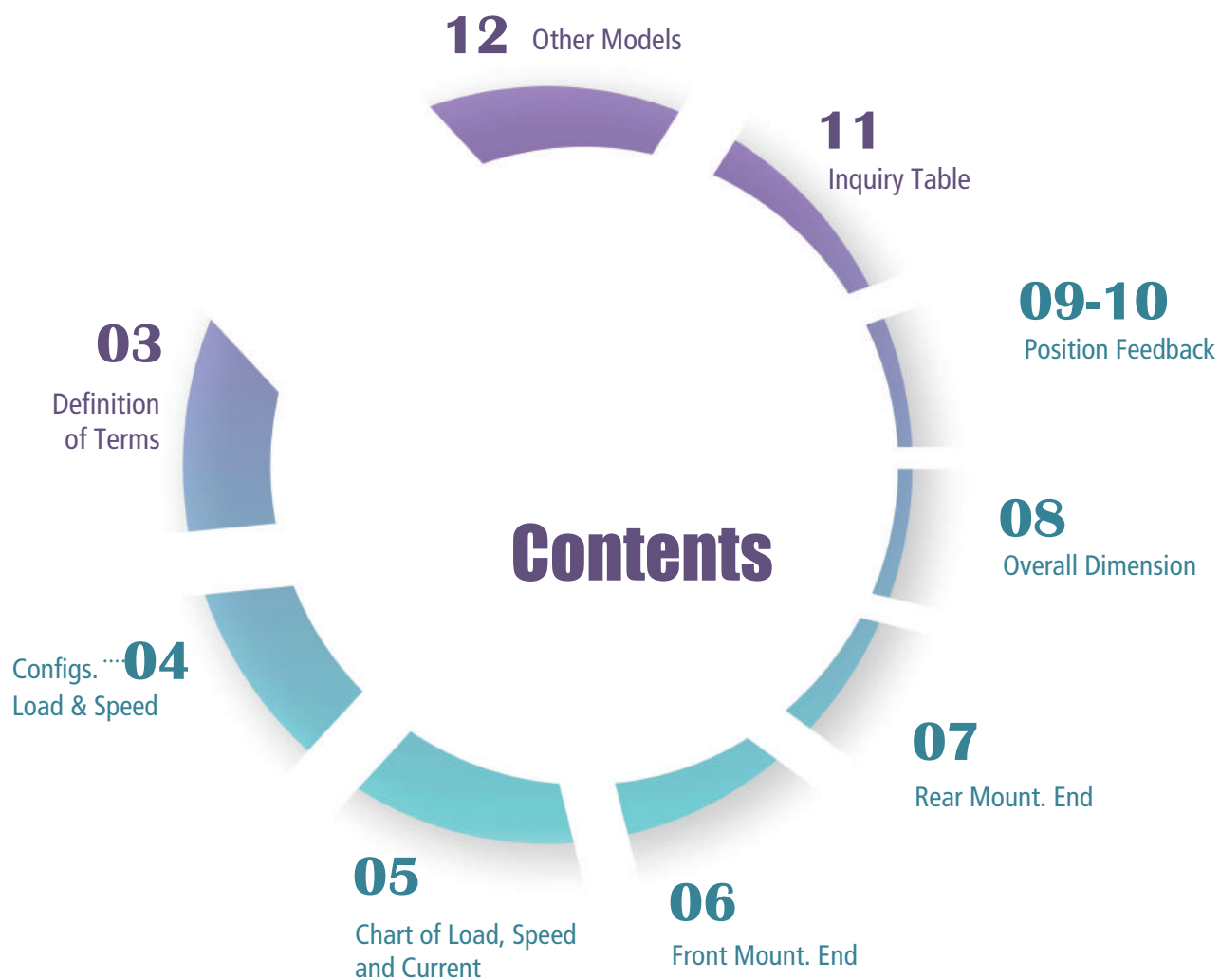


17SH805

Data Sheet





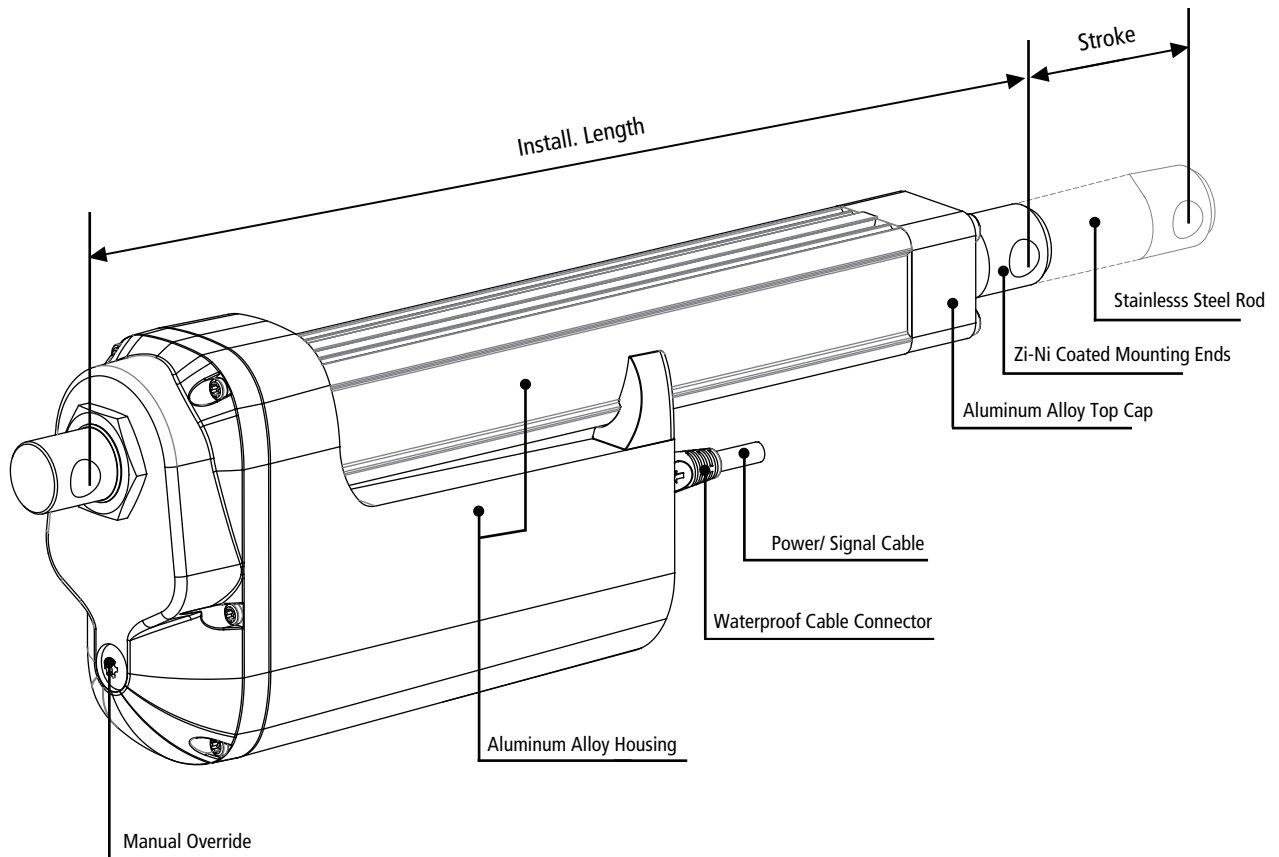
Dear Customers,

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.

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"/> 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 checked="" 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 checked="" 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 when with full load and 20°C.

Options for 17SH805 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	40:1	4	6.5	4.5	1,000	176
B	11,000	12,000	30:1	4	8.5	6.0	1,000	176
C	7,500	9,000	20:1	4	13.0	9.0	1,000	176
D	10,000	12,000	40:1	8	13.0	7.0	1,000	352
E	7,000	8,000	30:1	8	17.0	9.5	1,000	352
F	5,000	6,000	20:1	8	25.0	14.0	1,000	352
G	6,500	8,000	40:1	12	20.0	11.0	1,000	528
H	4,500	5,500	30:1	12	25.0	13.0	1,000	528
I	3,200	4,000	20:1	12	38.0	24.0	1,000	528

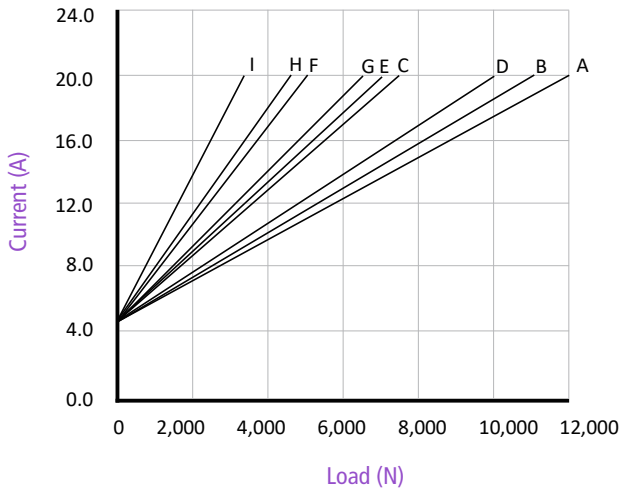
[Table 2]

- 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.

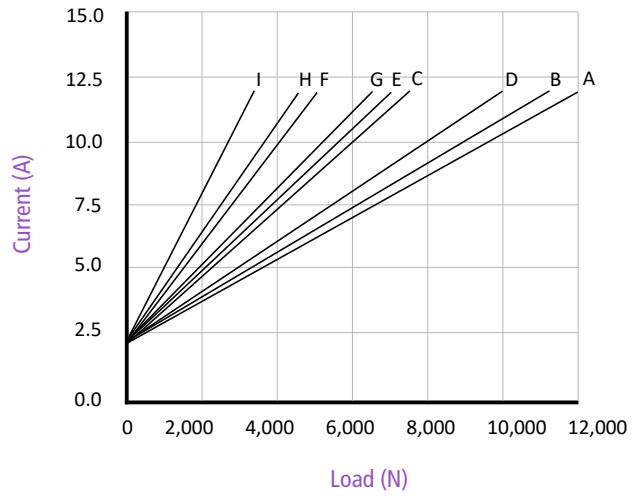
Charts

Fill in code:

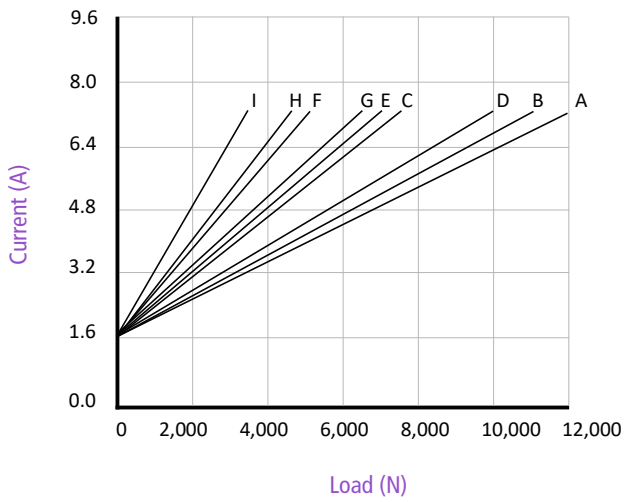
1 = 12v



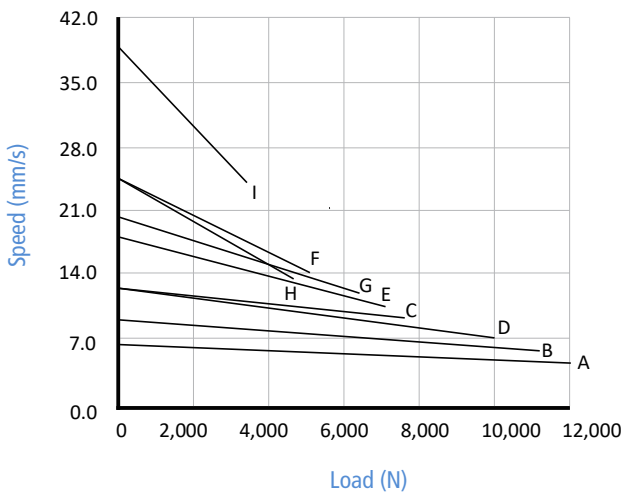
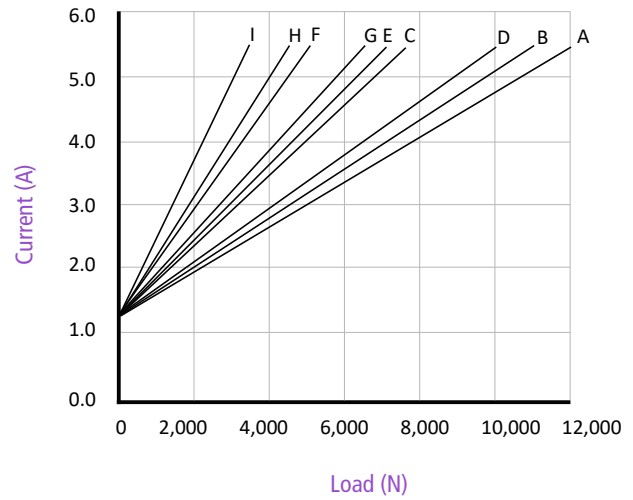
2 = 24v



3 = 36v



4 = 48v

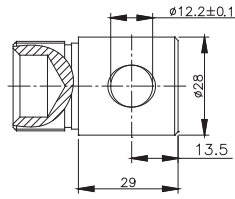


* Measurements are made with actuators in connection with stable power supplies and ambient temperature at 20°C.

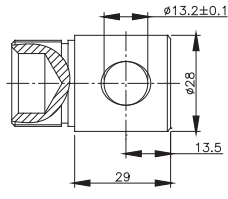
Front Mounting End

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

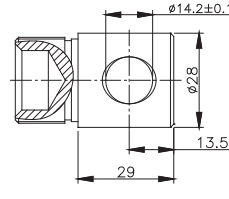
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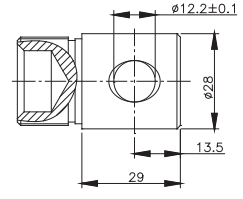
F01



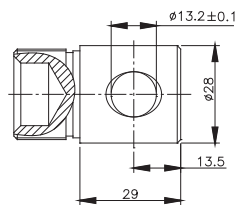
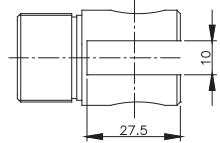
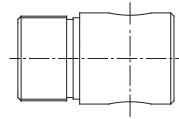
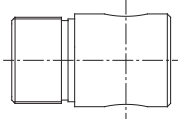
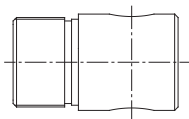
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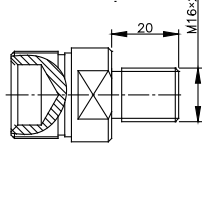
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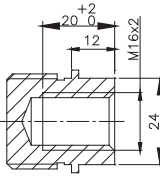
F04



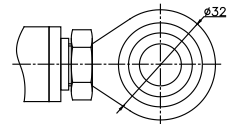
F05



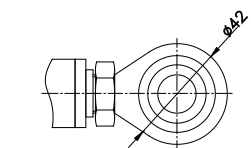
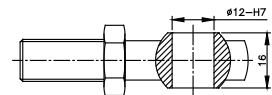
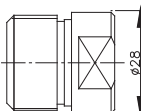
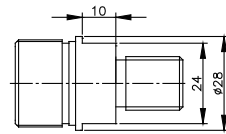
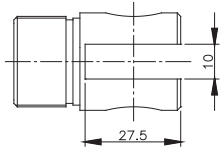
F06



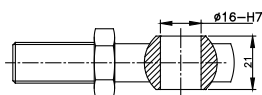
F07



F08



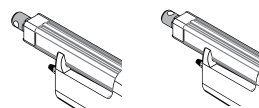
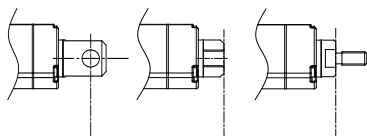
F09



2. Start of Installation Length

3. Hole Directions

Fill in code:



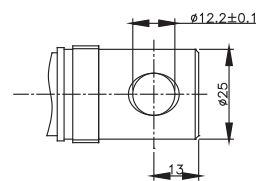
1 = 90°

2 = 0°

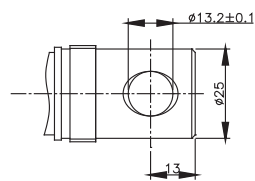
Rear Mounting End

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

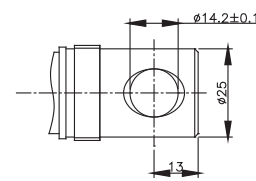
Fill in code:



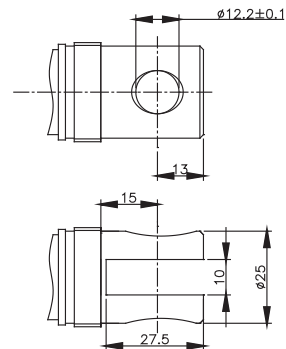
R01



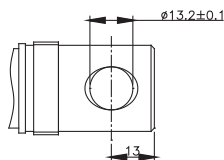
R02



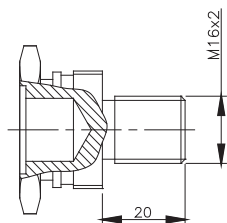
R03



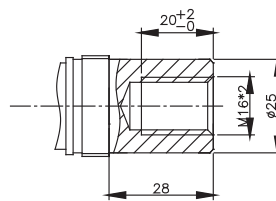
R04



R05

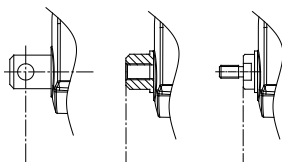


R06



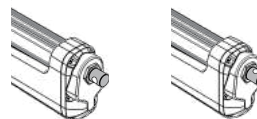
R07

2. End of Installation Length



3. Hole Directions

Fill in code:

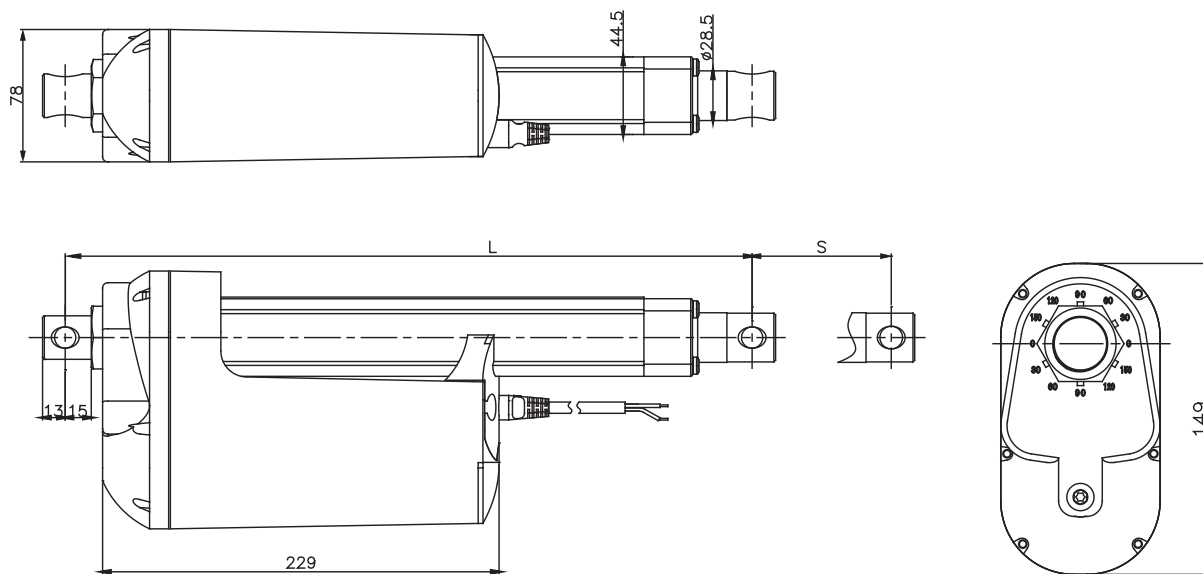


1 = 90°

2 = 0°

Overall Dimension

S = mm, L = mm



A. Mounting Ends VS Install. Length

	Rear Mount. Ends
Front Mount. Ends	R01, R02, R03, R04 R05, R06, R07
F01, F02, F03, F04, F05, F06, F07	$A \geq S + 200$ mm (min. 300)
F08, F09	$A \geq S + 250$ mm (min. 340)

[Table 3]

B. Stroke VS Install. Length

Stroke (S) (mm)	Install. Length (L) (mm)
50 - 299	+ 0
300 - 599	+ 50
≥ 600	+ 100

[Table 4]

How to calculate 'Install. Length' ?

S = Stroke, L = Install Length, $L \geq A + B$

Example

Front Mount.	Rear Mount.	S (mm)	A (mm)	B (mm)	$L \geq A+B$ (mm)
F08	R01	300	300+250	+50	≥ 600

[Table 5]

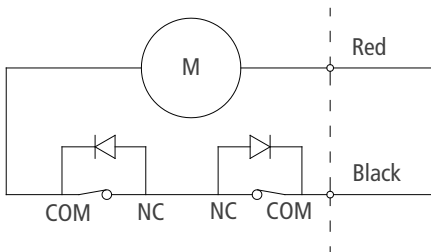
Signal Feedback

Fill in code:

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

0. Standard Limit Switches without Signal feedback

Standard 17SH805 comes with limit switches that shut off the motor automatically at the end of its travel.

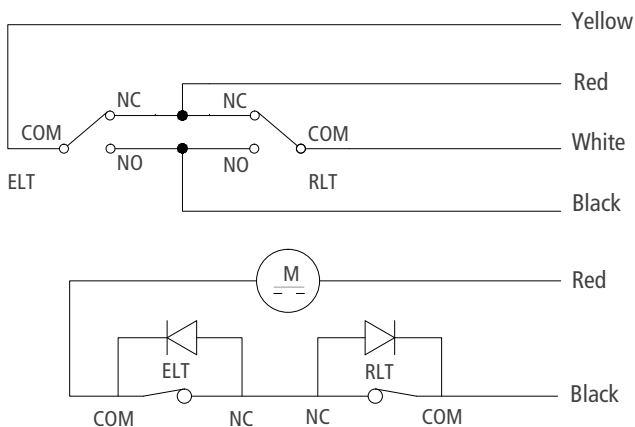


Wire Coding		
	Black	Red
Extend	-	+
Retract	+	-

[Table 6]

1. Endstop Signal

Equipped with two switch groups. One is used to cut off power supply at either end of stroke, and the other supplies endstop signals.



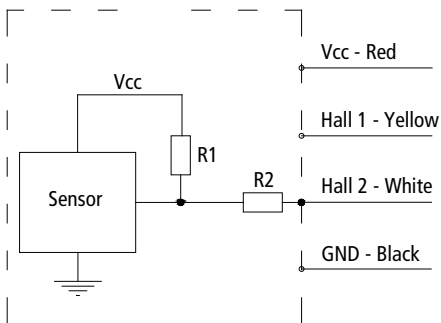
Power Wire Coding		
	Black	Red
Extend	-	+
Retract	+	-

Signal Wire Coding	
Black	Extend or Retract limit, N.O.
Red	Extend or Retract limit, N.C.
White	Extend limit. COM.
Yellow	Retract limit. COM.

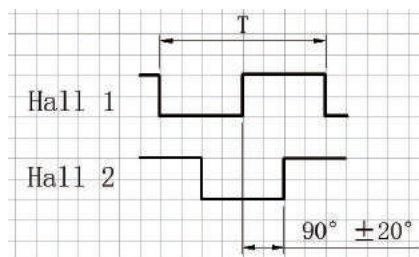
[Table 7]

2. Hall Effect Sensor

schematic diagram



* Power supply (V)= 5~15V



Oscillogram with Two Sensors

Option 'A' (Standard)

Dual-sensor, Monitor gear box

Code	Pulse Equivalent per Sensor (pulse/mm)	
	1 pole pair	4 pole pairs (standard)
A	0.9	3.6
B	0.7	2.7
C	0.4	1.7
D	0.5	1.8
E	0.3	1.4
F	0.2	0.9
G	0.1	1.2
H	0.2	0.9
I	0.3	0.6

[Table 8]

Option 'B'

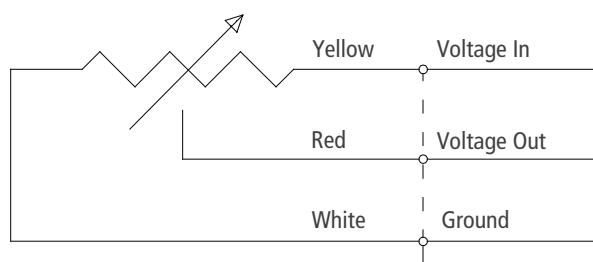
Dual-sensor, Monitor motor rotation

Code	Pulse Equivalent per Sensor (pulse/mm)	
	1 pole pair	4 pole pairs (standard)
A	10.0	40.0
B	7.5	30.0
C	5.0	20.0
D	5.0	20.0
E	3.8	15.0
F	2.5	10.0
G	3.3	13.3
H	2.5	10.0
I	1.7	6.7

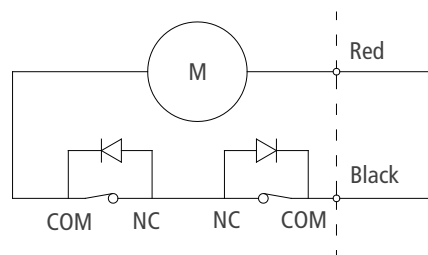
[Table 9]

3. 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 10]


4. Reed switch

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

Inquiry Table

RESET

<input type="text"/>	Voltage	1 = 12V 2 = 24V 3 = 36V 4 = 48V
<input type="text"/>	Load & Speed	See [Table 2]
<input type="text"/>	Stroke (mm)	Please contact us if the stroke you required is out of range.
<input type="text"/>	Install. Size (mm)	See Table [3] - [5]
<input type="text"/>	Front Mount. End	F01 - F09 FX = Custom
<input type="text"/>	Rear Mount. End	R01 - R07 RX = Custom
<input type="text"/> <input type="text"/>	Mount. Hole Direction	Front 1 = 90° 2 = 0° Rear 1 = 90° 2 = 0°
<input type="text"/>	Signal Feedback	0 = None 1 = Endstop Signal 2 = Hall Sensor 3 = Potentiometer 4 = Reed Switches
<input type="text"/>	Cable Length	1 = 600 mm 2 = 1000 mm 3 = 1500 mm 4 = 2000 mm X = Custom
<input type="text"/>	Connector	0 = Tinned bared wires 1 = Go with KZ control X = Custom
<input type="text"/>	Working Temperture	1 = -40 C to 65 C
<input type="text"/>	Working Frequency	Estimated cycles work per day
	Application	Indoor or outdoor, end use (Understand your application could help facilitate a good solution.)
	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
17SH805 (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	25-100	S+200	102 x 154 x L	IP66	Industrial
17SH812	20,000	50-1,000	5.5-35	S+600	N/A	IP55	Industrial