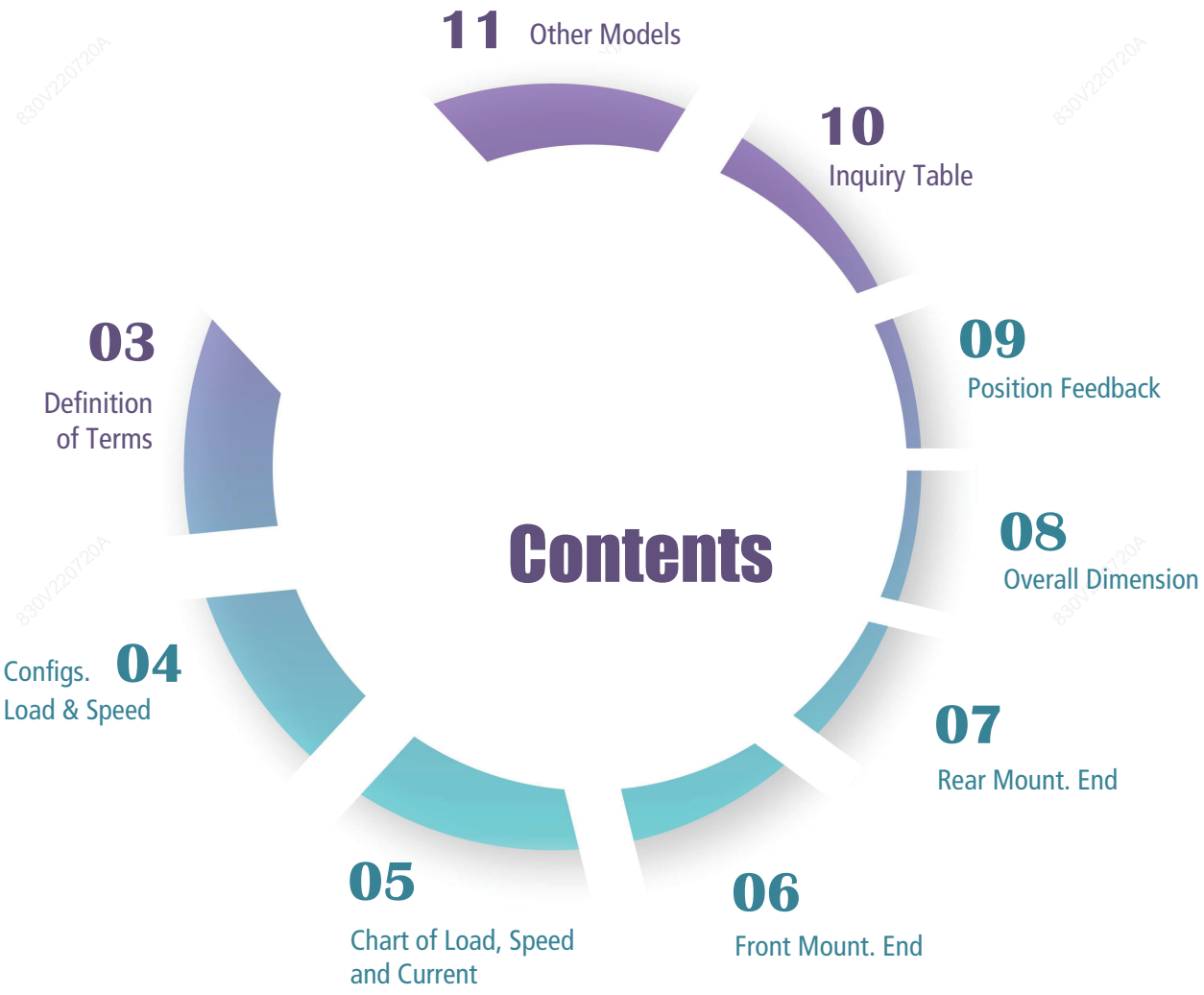
830
Data Sheet

830V220720A

HEDRON

Linear Actuator

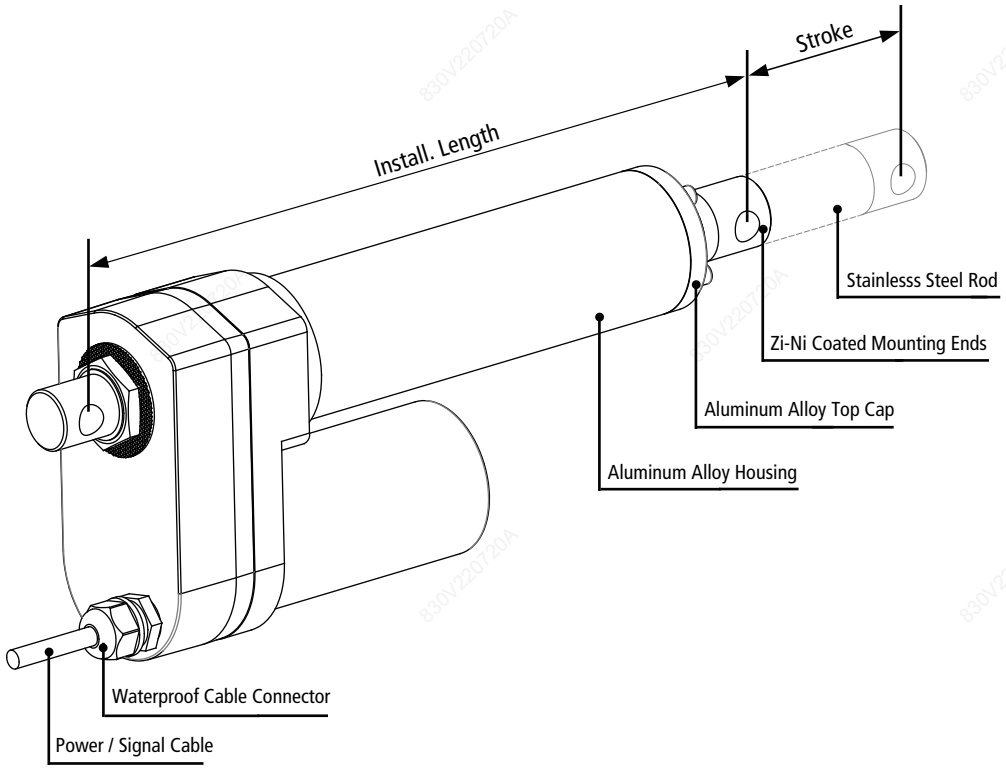


D

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.

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)x100%. 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	☐Silver	■Black	☐Customized			
Lead Screw	■Acme Screw	☐Ball Screw				
Operation Mode	■Electrical	☐Electrical + Manual				
Application	■Industrial	☐Furniture	☐Medical			
Operational Temp.	☐5 to 40℃	■-10 to 65℃	■-40 to 65℃			
Operating Noise	☐≤45 dB	☐≤50 dB	■≤65 dB			
Stroke Range	■50-600mm	■600-1,000mm				
Dynamic Load	☐≤1,200N	☐≤2,000N	■≤4,000N	☐≤7,000N	☐≤12,000N	☐≤20,000N
Duty Cycle	☐10%	☐20%	■25%*	☐50%	☐100%	
Motor Type	■Brushed DC	☐Stepper Motor	☐Brushless	☐Servo Motor		
Overload Protection	☐None	■Clutch	☐Electronic	☐Thermistor		
Weather Protection	☐IP20	☐IP43	☐IP54	■IP65	☐IP66	
Position Feedback	■None	■Endstop Signal	■Hall Sensor	☐Potentiometer	☐Encoder	■Reed Switches
Input Voltage	■12VDC	■24VDC	■36VDC	■48VDC	☐110VAC	☐220VAC

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

■ Options for DJ830 ☐ Other Models

[Table 1]

Parameters

Fill in code:

Code	Max. Dynamic Load ②	Max. Self-locking	Reduction Ratio	Pitch	Speed±10% (mm/s) ①		Max. Stroke ③
	(N)	(N)	-	(mm)	Free Load	Full Load	(mm)
A	4,000	5,000	40:1	3.17	5.5	4.0	1,000
B	3,500	5,000	40:1	5	8.5	7.0	1,000
C	3,000	4,000	20:1	3.17	11.0	9.5	1,000
D	2,500	3,500	20:1	5	17.0	14.0	1,000
E	2,000	2,500	10:1	3.17	22.0	18.0	1,000
F	1,000	2,000	10:1	5	35.0	28.5	1,000

[Table 2]

① Measurements are made with actuators in connection with stable power supplies and ambient temperature at 20°C.

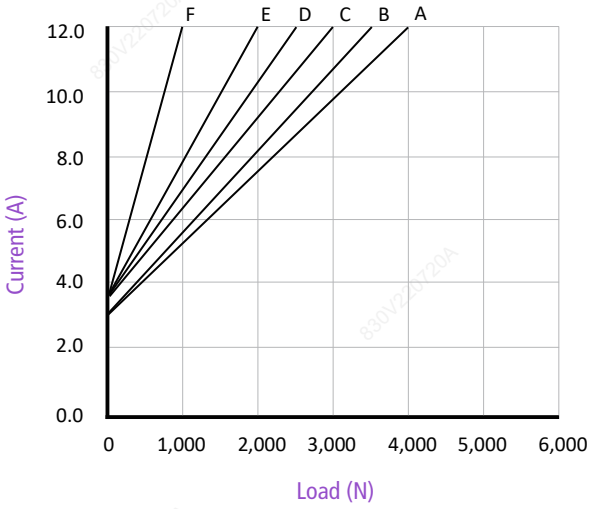
② For example, when real load is 2400N, choosing code (D) is fine. Of course, you can also choose (C), (B) or even (A) which come with more load buffer, higher safety factor and longer product service time.

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.

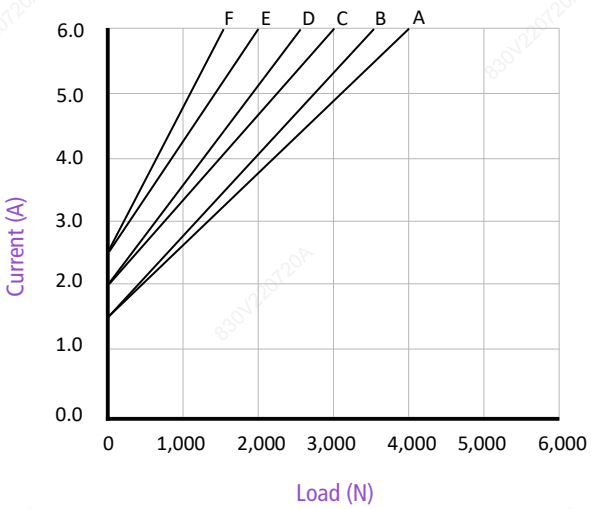
Charts

Fill in code:

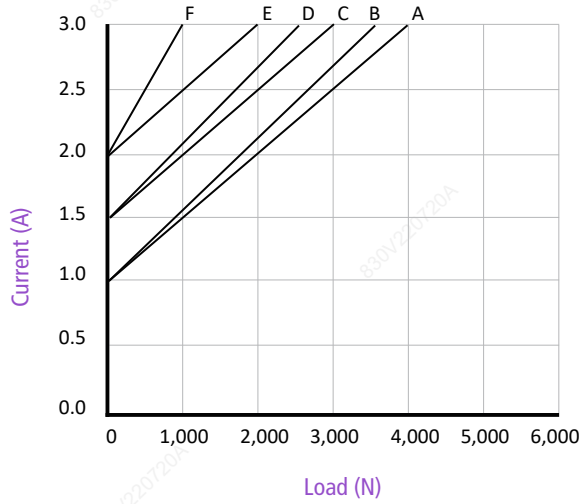
1 = 12v



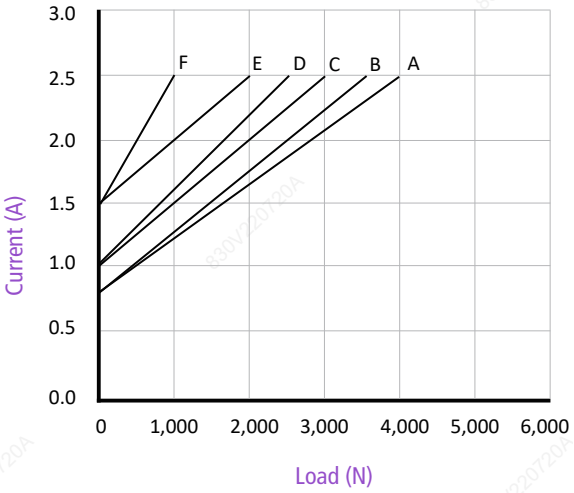
2 = 24v

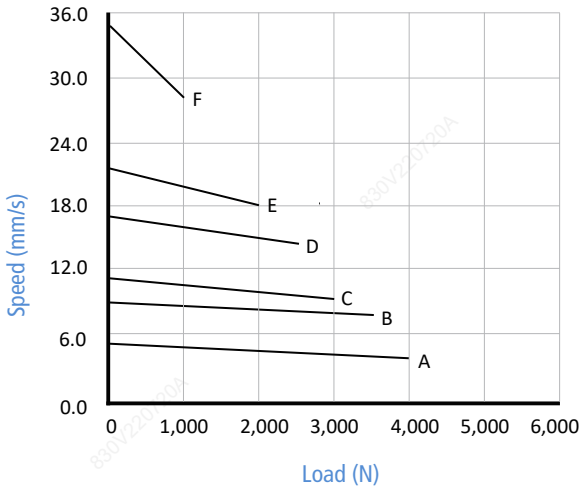


3 = 36v



4 = 48v



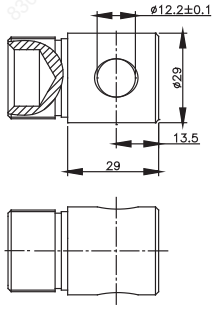


* Measurements are made with actuators in connection with stable power supplies and ambient temperature at 20°C.

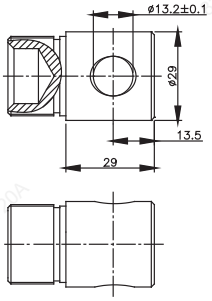
Front Mounting End

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

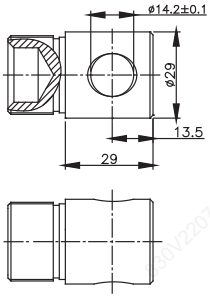
Fill in code:



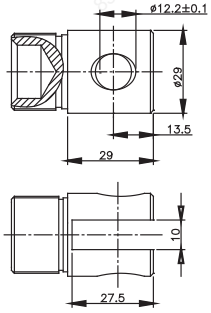
F01



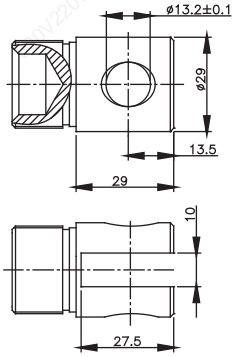
F02



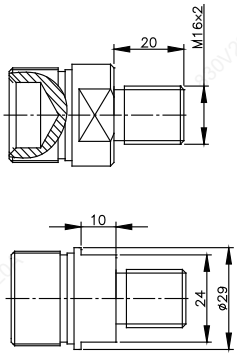
F03



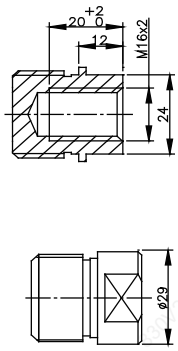
F04



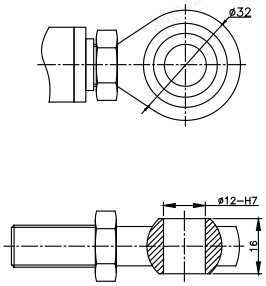
F05



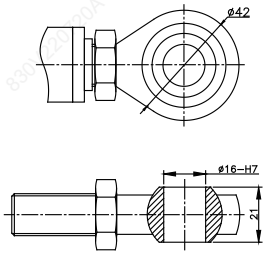
F06



F07

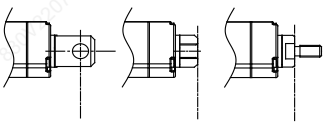


F08



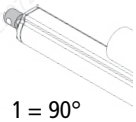
F09

2. Start of Installation Length

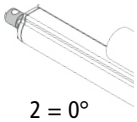


3. Hole Directions

Fill in code:



1 = 90°

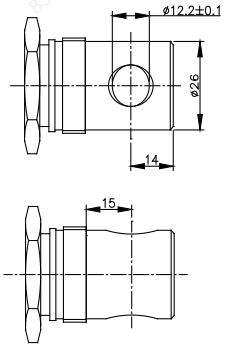


2 = 0°

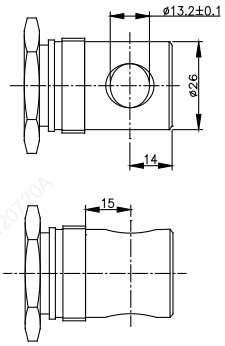
Rear Mounting End

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

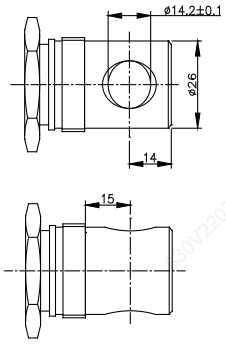
Fill in code:



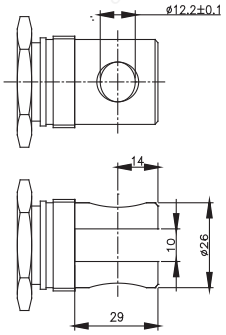
R01



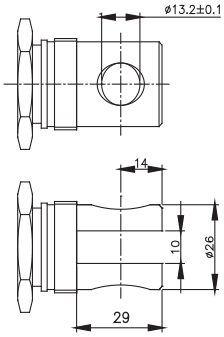
R02



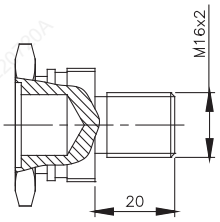
R03



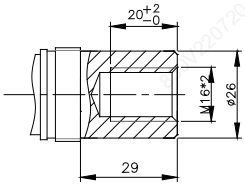
R04



R05

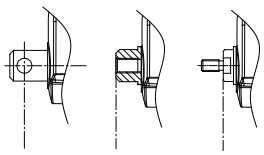


R06



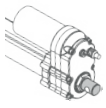
R07

2. End of Installation Length

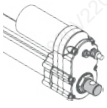


3. Hole Directions

Fill in code:



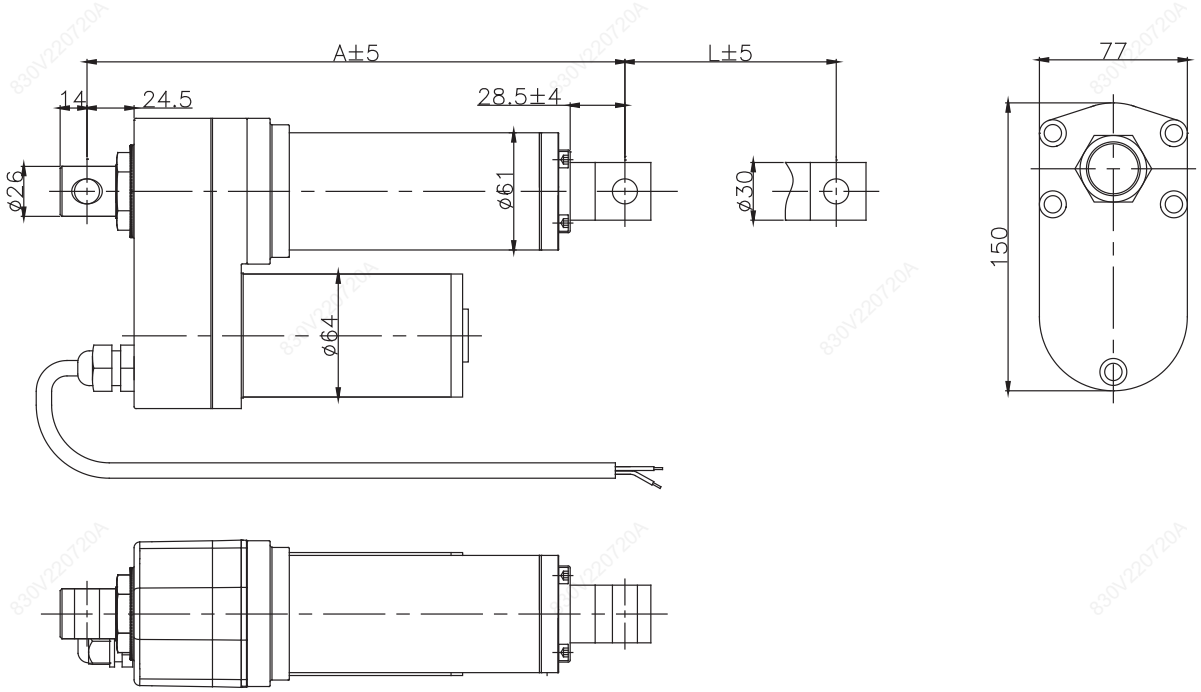
1 = 90°



2 = 0°

Overall Dimension

S = mm, L = mm



A. Mounting Ends VS Install. Length

Front Mount. Ends	Rear Mount. Ends
	R01, R02, R03, R04, R05, R06, R07
F01, F02, F03, F04, F05, F06, F07	A≥ S+200 mm (min. 250)
F08, F09	A≥ S+250 mm (min. 280)

[Table 3]

B. Stroke VS Install. Length

Stroke (S) (mm)	Install. Length (L) (mm)
50 - 399	+ 0
⩾ 400	+ 50

[Table 4]

How to calculate 'Install. Length' ?

S = Stroke, L = Install Length, L ≥ A + B

Example

Front Mount.	Rear Mount.	S (mm)	A (mm)	B (mm)	L≥A+B (mm)
F08	R01	300	300+250	+0	≥550

[Table 5]

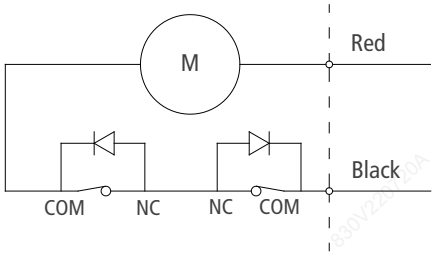
Signal Feedback

Fill in code:

0 = None
1 = Endstop Signal
2 = Hall Sensor
3 = Reed Switches

0. Standard Limit Switches without Signal feedback

Standard 30 comes with limit switches that shut off the motor automatically at the end of its travel.
8

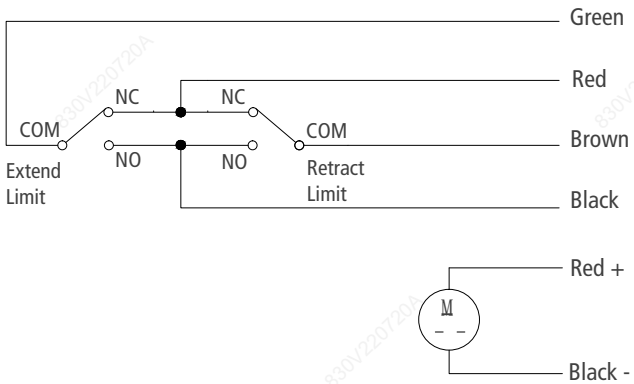


Wiring		
	Black	Red
Extend	-	+
Retract	+	-

[Table 6]

1. Endstop Signal

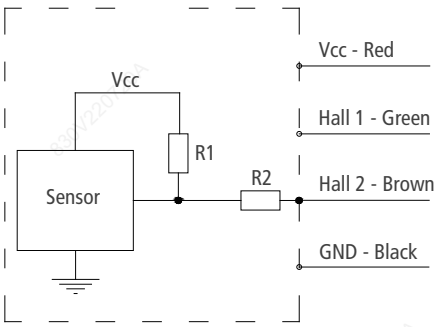
The actuator can be equipped with endstop signals output, but it will not auto-stop at neither end of the travel.

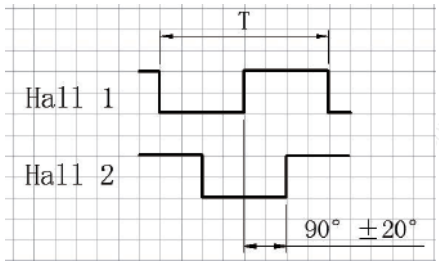


Power Wire Coding		
	Black	Red
Extend	-	+
Retract	+	-
Signal Wire Coding		
Black	Extend / Retract limit, N.O.	
Red	Extend / Retract limit, N.C.	
Green	Extend limit. COM.	
Brown	Retract limit. COM.	

[Table 7]

2. Hall Sensor (standard dual-sensor)

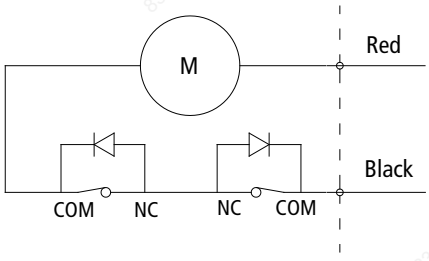




* Power supply (V)= 5~15V

Code	Pulse Equivalent per Sensor (pulse/mm)	
A	4 pole pairs (standard)	50.47
B		32.00
C		25.24
D		16.00
E		12.62
F		8.00

[Table 8]



Internal Motor Wiring

3. Reed switch

No\i_\m_ I)J) ^jio\^o) Jkodji\g I)>) ^jio\^o)

Inquiry Table

RESET

	Voltage	1 = 12VDC 2 = 24VDC 3 = 36VDC 4 = 48VDC
	Load & Speed	See [Table 2]
	Stroke (mm)	Please contact us if the stroke you required is out of range.
	Install. Length (mm)	See Table [3] - [5]
	Front Mount. End	F01 - F09, or FX = Custom
	Rear Mount. End	R01 - R07, or RX = Custom
	Mount. Hole Direction	Front 1 = 90° 2 = 0° Rear 1 = 90° 2 = 0°
	Signal Feedback	0 = None 1 = Endstop Signal 2 = Hall Sensor 3 = Reed Switches
	Cable Length	1 = 500 mm 2 = 1,000 mm X = Custom
	Connector	0 = Tinned bared wires 1 = Go with KZ control X = Custom
	Working Temperature	1 = -10℃ to 65℃ 2 = -40℃ to 65℃
	Working Frequency	Estimated cycles work per day
Application	End Use	Indoor or outdoor, and please describe your end use.
	Your Contact	Company Name Tel. Email

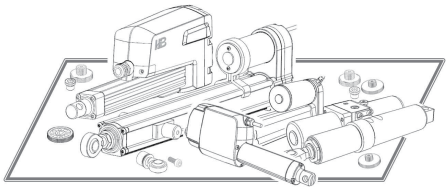
1

1

You may also be interested in...

Model	Load (N)	Stroke (mm)	Speed (mm/s)	Install.Length (mm)	Overall Size (mm)	IP rate	Application
803 (Track)	1,500	50-600	16-32	155	155 x 77.4 x L	IP20	Furniture
823	3,000	50-600	5.0-15	S+155	148.5 x 80 x L	IP54	Furniture Medical Care
810	4,000	50-600	5.0-32	S+150	156 x 83 x L	IP43	Furniture Medical Care
801	6,000	50-600	4.7-28	S+175	156 x 83 x L	IP43	Furniture Medical Care
822	6,000	50-600	5.0-16	S+175	166 x 91 x L	IP54	Furniture Medical Care
806	1,200	50-600	5.5-80	S+105	40 x 75 x L	IP66	Industrial
809	2,000	50-600	5.0-55	S+108	45 x 77.5 x L	IP66	Industrial
825	2,000	50-600	6-15	S+115	43 x 84.5 x L	IP66	Furniture Medical Care Industrial
820	2,500	50-600	2.5-22	S+120	64.5 x 102 x L	IP66	Furniture Medical Care Industrial
820P	1,000	50-600	25-50	S+140	64.5 x 102 x L	IP66	Industrial
* 830	4,000	50-600	5.5-35	S+200	76 x 151 x L	IP65	Industrial
830P	7,000	50-600	5.5-35	S+200	76 x 151 x L	IP65	Industrial
808	7,000	50-600	5.5-35	S+250	77 x 151 x L	IP65	Industrial
805G	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 www.hedron.com.tr