

Model ALM501B

Feature

- L-type linear actuator
- Compact mechanical system
- Protect class IP65
- Built-in limit switches
- Imported HALL sensors (options)
- CE certificated
- Widely work in the harsh environment



Basic Spec.

Housing color	<input type="checkbox"/> Silver	<input type="checkbox"/> Black	<input type="checkbox"/> Customize colors		
Screw type	<input type="checkbox"/> T-screw				
Control	<input type="checkbox"/> control box	<input type="checkbox"/> control system + manual			
Application	<input type="checkbox"/> Industrial	<input type="checkbox"/> Furniture	<input type="checkbox"/> Medical		
Work environment	<input type="checkbox"/> 0~40°C	<input type="checkbox"/> -20~65°C	<input type="checkbox"/> -40~65°C		
Noise level	<input type="checkbox"/> ≤ 50 dB				
Stroke	<input type="checkbox"/> 50-600mm	<input type="checkbox"/> Customize stroke			
Load	<input type="checkbox"/> ≤ 1200N	<input type="checkbox"/> ≤ 2000N	<input type="checkbox"/> ≤ 2500N	<input type="checkbox"/> ≤ 8000N	
Duty cycle	<input type="checkbox"/> 10%	<input type="checkbox"/> 20%			
Motor type	<input type="checkbox"/> Brushed DC motor				
IP rating	<input type="checkbox"/> No	<input type="checkbox"/> IP65			
Signal output	<input type="checkbox"/> No	<input type="checkbox"/> Switch signal	<input type="checkbox"/> Hall sensors	<input type="checkbox"/> Magnetic switch	
Input voltage	<input type="checkbox"/> 12V	<input type="checkbox"/> 24V	<input type="checkbox"/> 36V	<input type="checkbox"/> 48V	
Cable length	<input type="checkbox"/> 1m	<input type="checkbox"/> 2m	<input type="checkbox"/> Customize length		

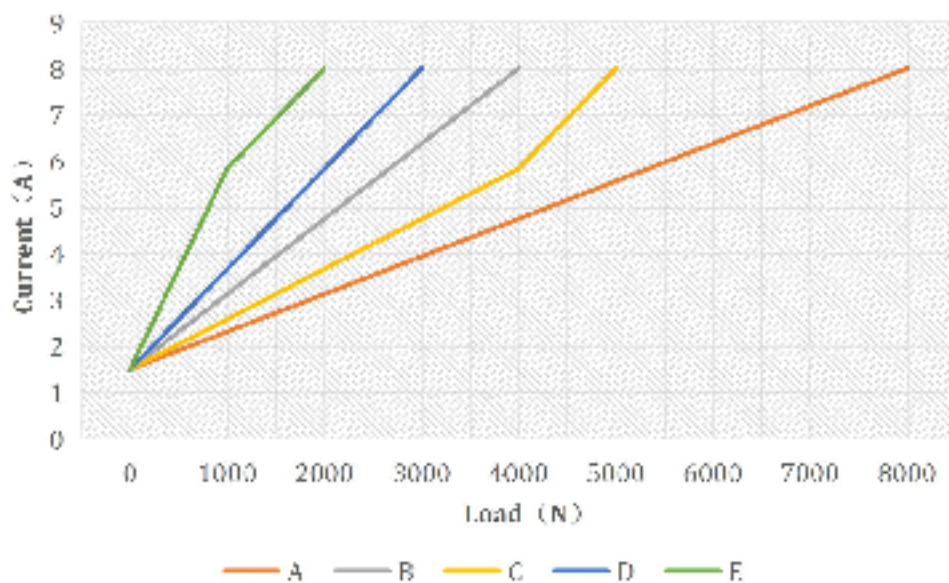
Technical info

Code	Screw pitch	No-load speed (mm/s)	Full load (mm/s)	Max load (N)	Max.Selflocking (N)	No-load current (A)				Full-load current (A)			
						12V	24V	36V	48V	12V	24V	36V	48V
A	4	4.6	2.8	8000	8000	1.5	0.7	0.6	0.4	8	4	3	2
B		9.2	6.5	4000	5000	1.5	0.7	0.6	0.4	8	4	3	2
C	5	6	3.5	5000	6000	1.5	0.7	0.6	0.4	8	4	3	2
D		11	7	2500	3000	1.5	0.7	0.6	0.4	8	4	3	2
E	7.5	17	11.5	1500	1500	1.5	0.8	0.6	0.4	8	4	3	2

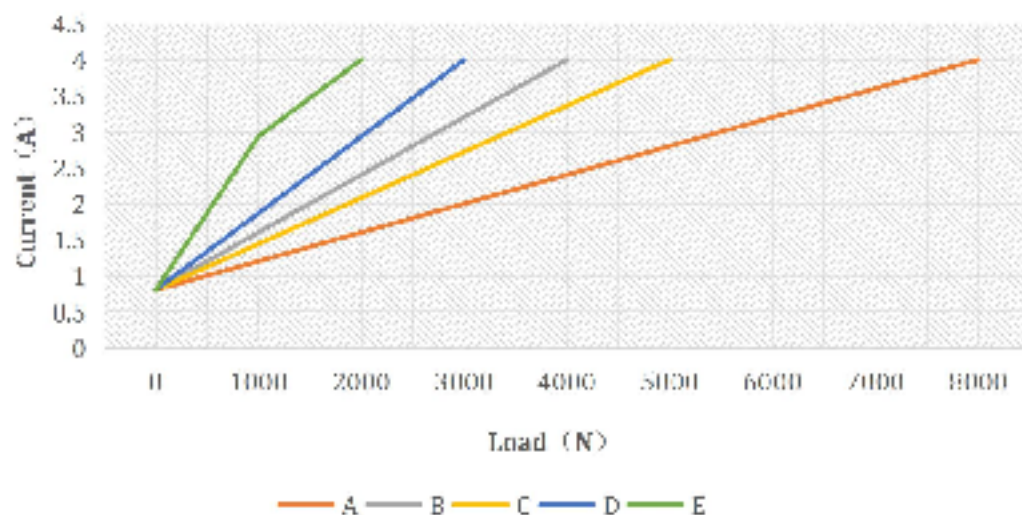
Load & Current

(The letter corresponds to the transmission code in the selection parameter table)

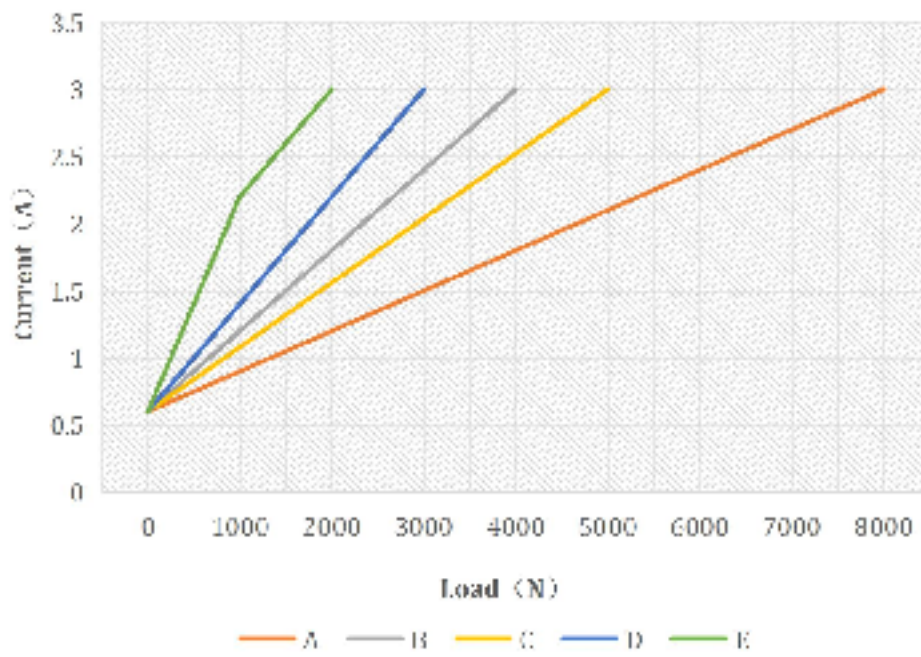
12V Load & Current



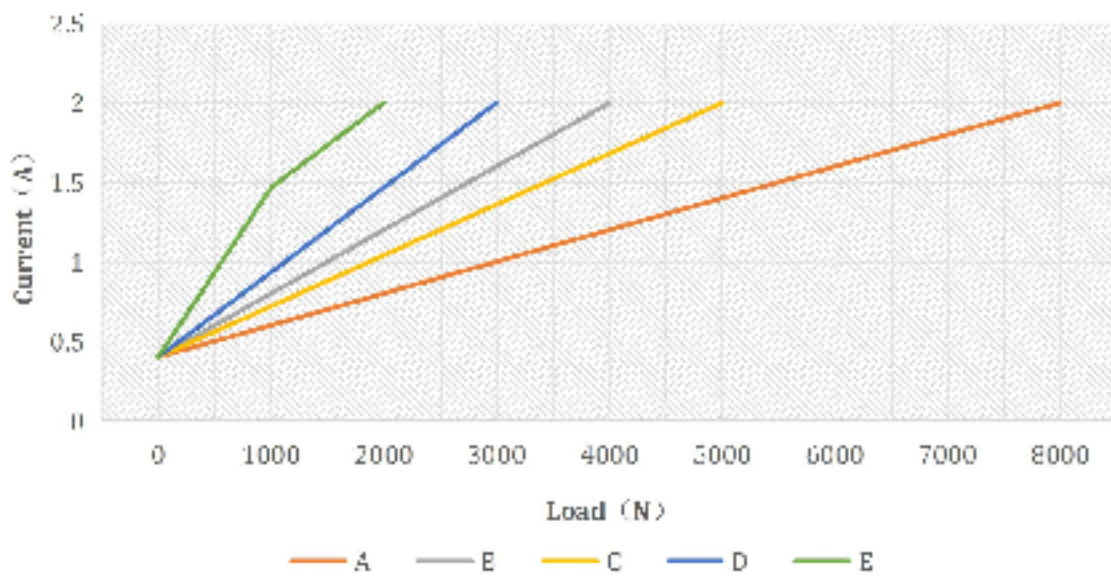
24V Load & Current



36V Load & Current



48V Load & Current



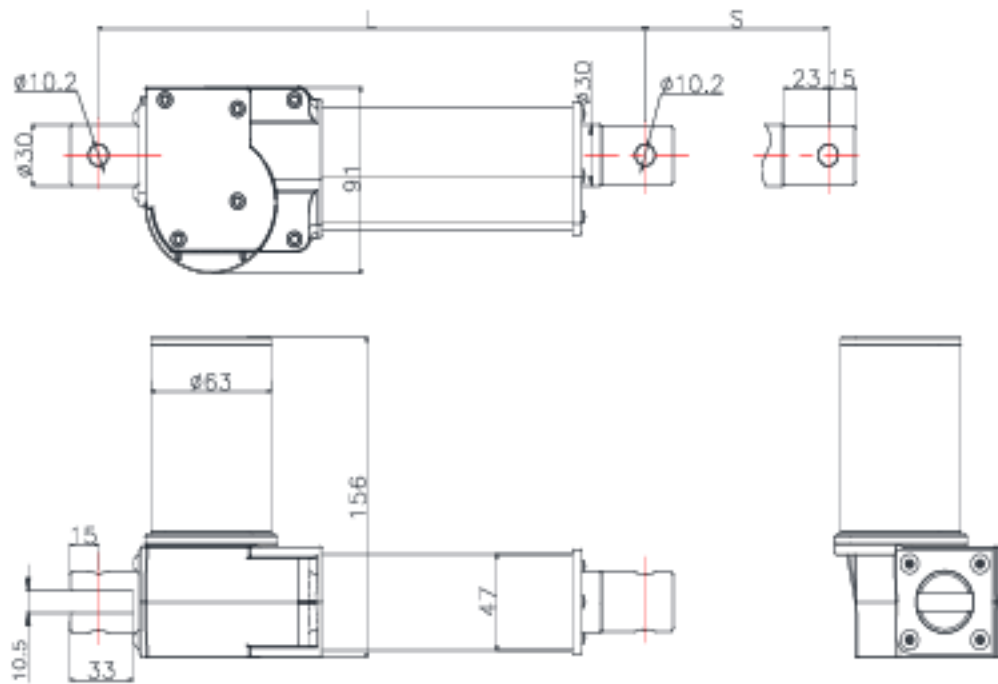
Mounting length

Dimension

S: Stroke, the travel length of actuator

L: Length, the fully retracted length of actuator from front hole centre to rear hole centre

Standard type

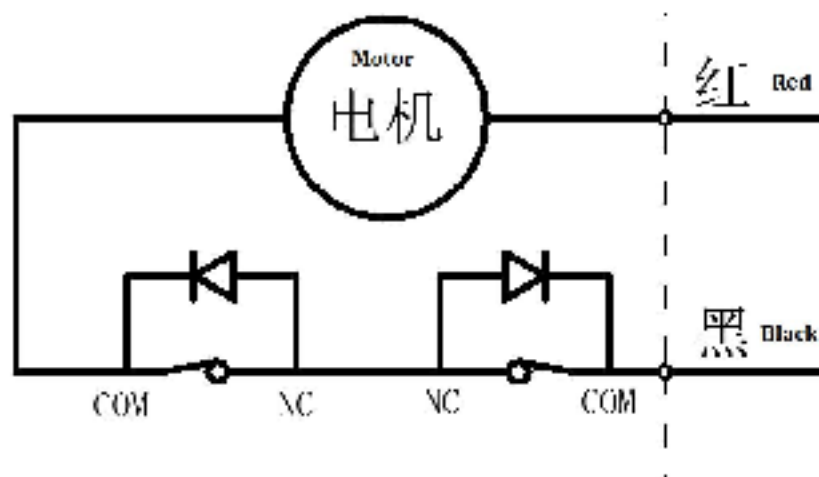


Stroke & Mounting length

S(mm)	Retracted L(mm)	Extended A(mm)	Simulate
50	230	280	$50 \leq \text{Stroke} \leq 400,$ $L = S + 180;$ $A = L + S(A = S^2 + 180)$
100	280	380	
150	330	480	
200	380	580	
250	430	680	
300	480	780	
350	550	900	$400 < \text{Stroke} \leq 600,$ $L = S + 200;$
400	600	1000	$A = L + S(A = S^2 + 200)$
450	680	1130	$400 < \text{Stroke} \leq 600,$ $L = S + 230;$ $A = L + S(A = S^2 + 230)$
500	730	1230	
550	780	1330	
600	830	1430	

Signal output

Standard limit switch diagram



Limit switch signal output

Closed <input type="checkbox"/>	Open <input type="checkbox"/>
<p>The diagram shows a motor circuit. The top line is labeled '红 Red' and the bottom line is labeled '黑 Black'. A motor is connected between these two lines. Below the motor, there are two limit switches. Each switch has a common terminal (COM) and a normally closed terminal (NC). The switches are connected in parallel between the red and black lines.</p>	<p>The diagram shows a motor circuit. The top line is labeled '红 Red' and the bottom line is labeled '黑 Black'. A motor is connected between these two lines. Below the motor, there are two limit switches. Each switch has a common terminal (COM) and a normally open terminal (NO). The switches are connected in parallel between the red and black lines.</p>
C <input type="checkbox"/>	NC <input type="checkbox"/>
<p>The diagram shows a motor circuit. The top line is labeled '红 Red' and the bottom line is labeled '黑 Black'. A motor is connected between these two lines. Below the motor, there are two limit switches. Each switch has a common terminal (COM) and a normally open terminal (NO). The switches are connected in parallel between the red and black lines.</p>	<p>The diagram shows a motor circuit. The top line is labeled '红 Red' and the bottom line is labeled '黑 Black'. A motor is connected between these two lines. Below the motor, there are two limit switches. Each switch has a common terminal (COM) and a normally closed terminal (NC). The switches are connected in parallel between the red and black lines.</p>

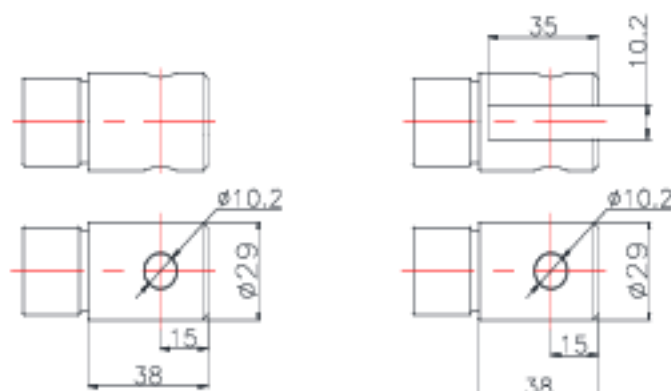
Hall sensor signal

Hall sensors built-in motor				
Code	Signal feedback	Magnetic pole	Resolution (1 pair of pole) Pulse/mm	Resolution (4 pairs of poles) Pulse/mm
A	Hall sensors	1 pair of pole or 4 pairs of poles	10 pulse/mm	40 pulse/mm
B			5 pulse/mm	20 pulse/mm
C			8 pulse/mm	32 pulse/mm
D			4 pulse/mm	16 pulse/mm
E			2.667 pulse/mm	10.667 pulse/mm
F			1.667 pulse/mm	6.667 pulse/mm
Phase difference				
Phase difference 90°				

Notice: Hall sensor power supply 3.3V-24V, recommend to use 5V or 12V

Attachment options

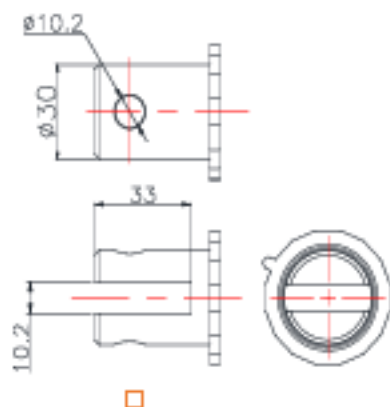
Front



01
□

02
□

Rear



*The attachment can customize as per customer's requirements.

Main products

Model	Load (N)	Stroke (mm)	Speed (mm/s)	IP rating	Application
ALM50 1B	8000	50-600mm	5-17mm/s	IP65	Medical, furniture, industrial
ALM60 1	1200	50-600mm	3.5-80mm/s	IP65	Industrial
ALM60 2	2000	50-600mm	3.5-55mm/s	IP65	Industrial
ALM60 3	2500	50-600mm	5-15mm/s	IP65	Medical, furniture, industrial
ALM60 6	8000	50-900mm	5-50mm/s	IP65	Industrial
ALM606A	7000	50-600mm	5-50mm/s	IP65	Industrial
ALM60 7	5000	50-600mm	5-50mm/s	IP65	Industrial
ALM60 8	12000	50-1000mm	6.5-38mm/s	IP66	Industrial