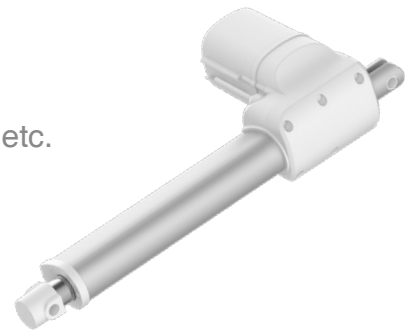
JC35L30 Linear Actuator

Application field - Medical Line & Care Line
Preferably in hospital bed, operation table and home care bed etc.



JC35L30 is a durable yet quiet actuator. It has rich specifications and can be used to both push and pull applications.
JC35L30 has 2 versions: standard and fast version(4000N). It enables JIECANG to offer the hospital beds a powerful, elegant and safe product.
Mechanical end stop structure, safety nut is available for JC35L30.

Features And Options

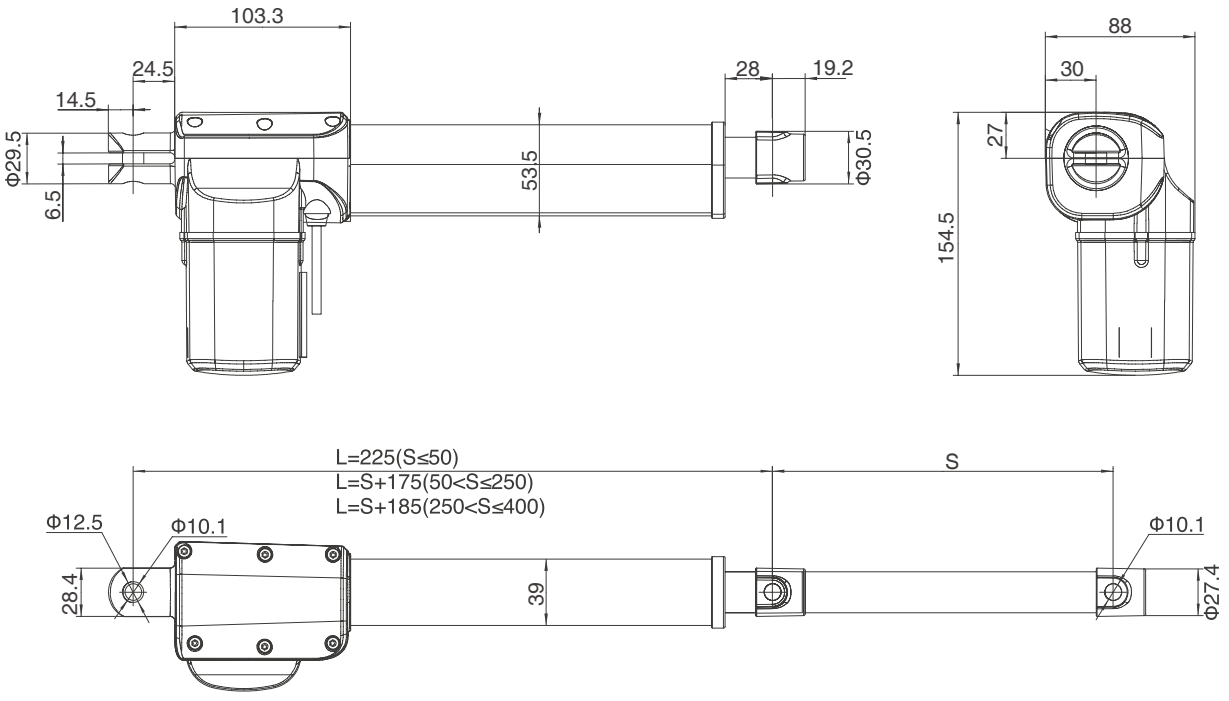
Dynamic Load Push(N):	8000 | 6000
Dynamic Load Pull(N):	4000 | 3000
Colour:	Gray | 4000 | 3000
Protection Class:	Max.IPX6
Stroke Length:	8000N: 50-250mm(in steps of 4mm) 6000N: 50-250mm(in steps of 4mm) 4000N: 50-400mm(in steps of 4mm) 3000N 50-400mm(in steps of 4mm)
Installation Dimension:	L=225(S<50) L=S+175（ L=S+185（ F09 Top clevis: 50≤S≤250） Min. retracted length L=220 (S<50); 250<S≤400） L=S+170 (50<S≤250); L=S+180 (250<S≤400). Center of front pull hole to end cap face: 23mm.
Noise Level:	≤48dB (environmental noise≤40dB)
Options:	Safety nut, Hall sensor, Only push, Signal switch+Mechanical end stop
Limit Switch:	Built-in (electronic)
Weight:	About 2kg (different stroke length and installation dimensions with different weight)
Static Bending Moment:	Lateral load is not allowed
Approval:	IEC60601-1: 2012 EN 60601-1: 2006+A12:2014 ANSI/AAMI ES60601-1: 2005/(R)2012 and A1: 2012 C1:2009/(R)2012 and A2: 2010/(R)2012

Usage

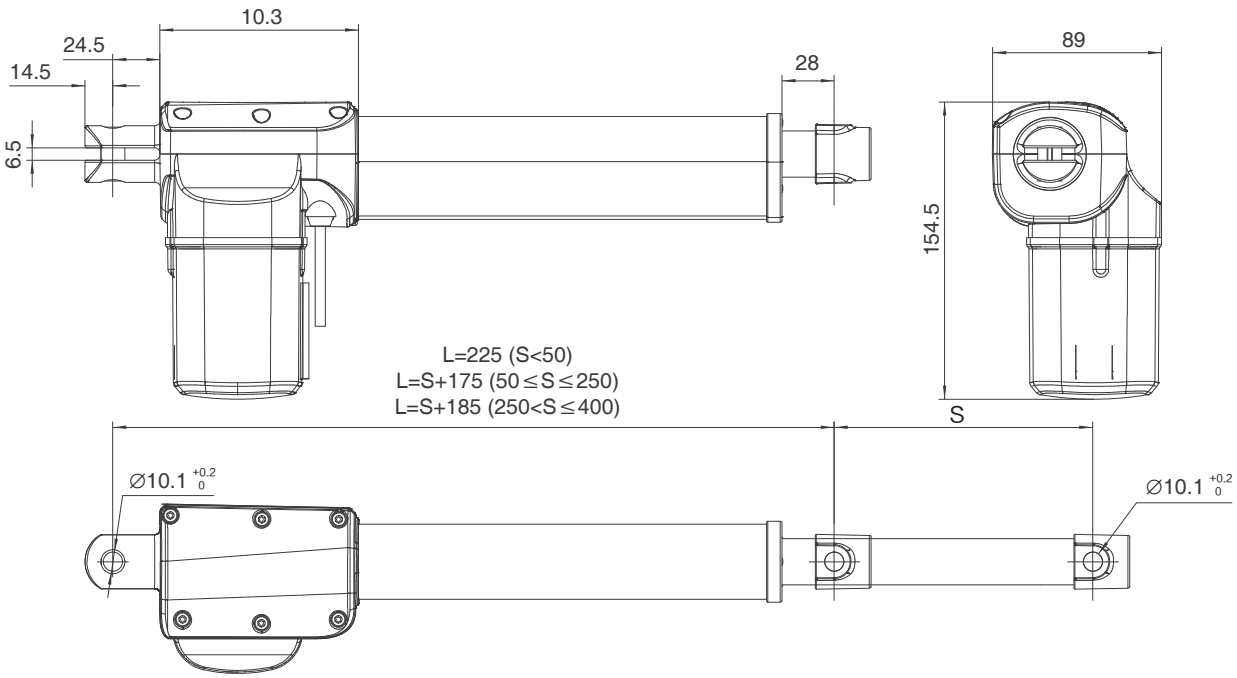
Duty Cycle:	10%, max. continuous work for 2min. and 18 min. off
Operating Temperature:	+5°C to +40°C
Reserve Temperature:	-10°C to +50°C
Supporting Control Box:	Matching with JIECANG control box
Relative Humidity:	Under 30°C, 20% to 90%, non-condensing
Atmospheric Pressure:	700 to1060hPa

Dimensions

Front clevis F09,end clevis B34



Front clevis F09,end clevis B68, 2MOPP design

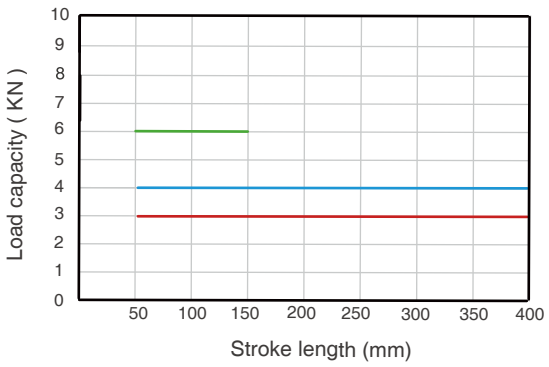


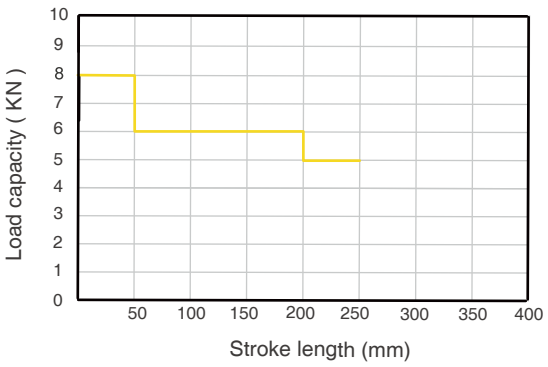
Technical Specifications (Standard Value)

Input voltage (VDC)	Spindle pitch (mm)	Max. load in push (N)	Max. load in pull (N)	Mechanical self-locking (N)	Speed at no load/full load (mm/s)	Current at full load (A)
24	4	8000	4000	8000	6.6/4.3	≤7
24	5	6000	4000	6000	8/6	≤6.5
24	4	6000	4000	6000	6/4	≤5
24	4	4000F	4000F	4000	11.7/8	≤6
24	5	4000	4000	4000	7.4/5.4	≤4
24	6	3000	3000	3000	17.5/12	≤6
29	4	8000	4000	8000	8/5	≤7
29	5	6000	4000	6000	10/7	≤6.5
29	4	6000	4000	6000	7.3/4.8	≤5
29	4	4000F	4000F	4000	14/9.6	≤6
29	5	4000	4000	4000	9/6.5	≤4
29	6	3000	3000	3000	21/14.4	≤6

Remarks: It can achieve better self-locking ability with Jiecang control box;
The above data is the standard value of the test data (inspection specification) at room temperature of 25□.

Diagram of relationship between stroke length and load

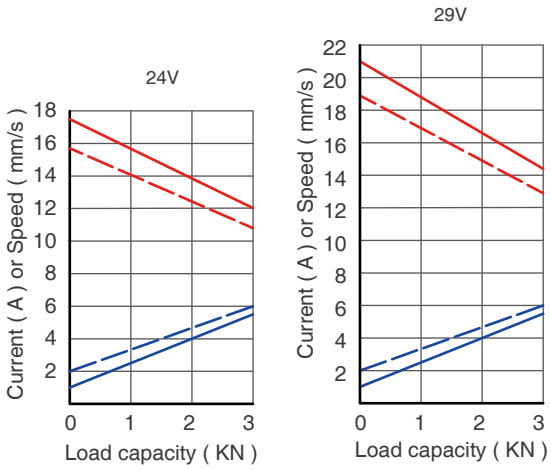




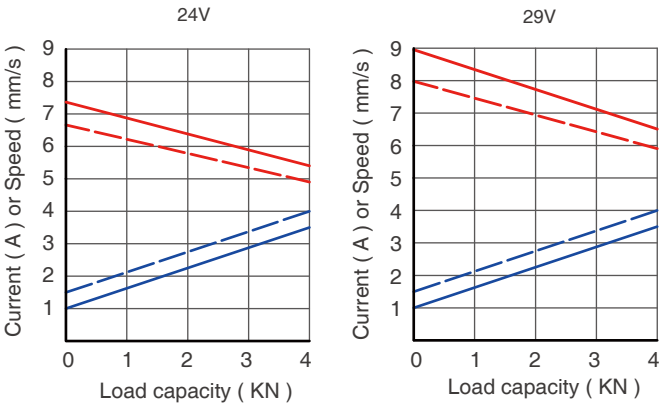
Characteristic Curve

Typical speed —— Typical current ——
Min. speed - - - - Max. current - - - -

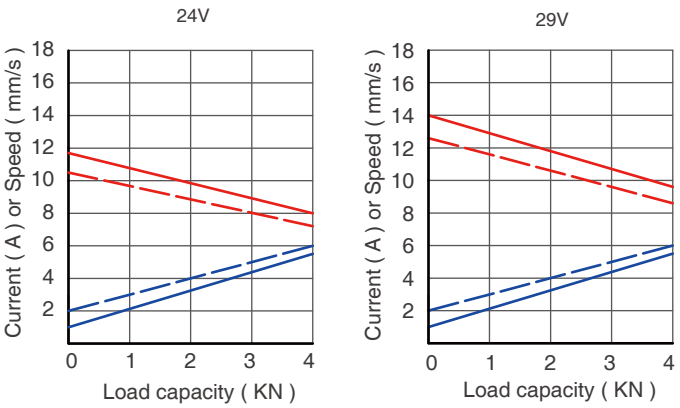
3000N



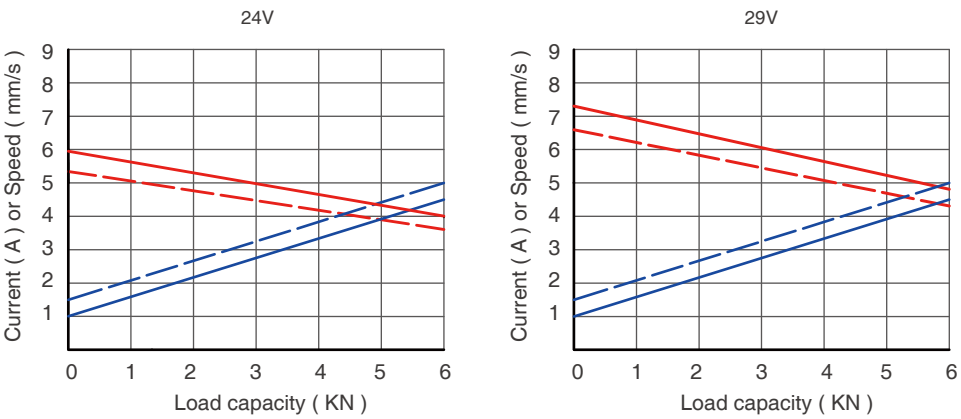
4000N



4000F



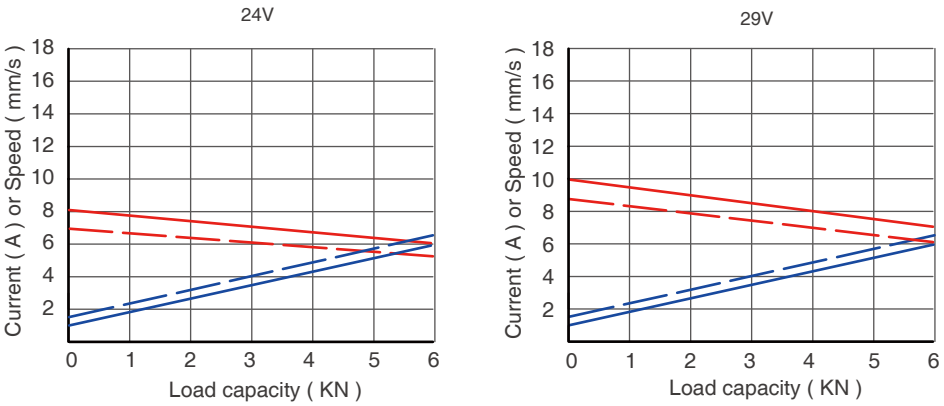
6000N



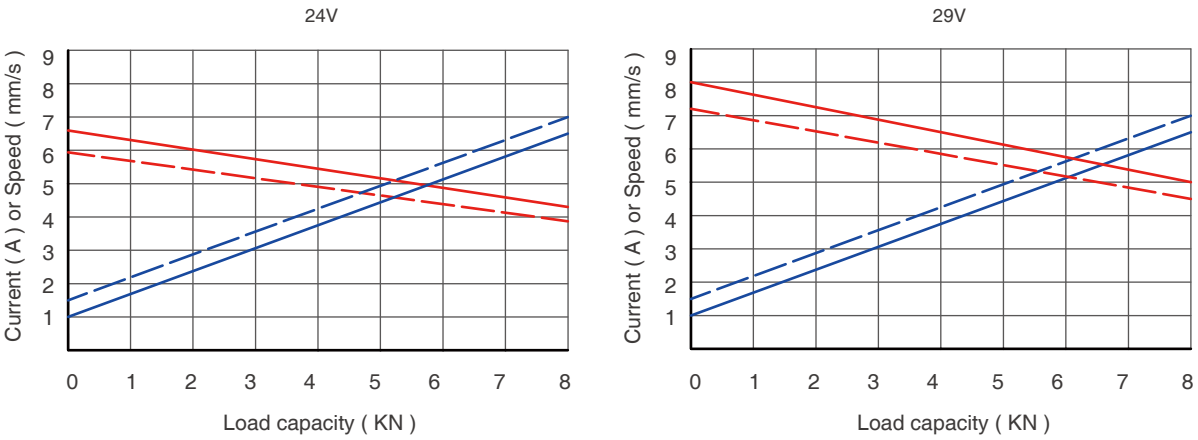
Characteristic Curve

Typical speed
Min. speed
Typical current
Max. current

6000F



8000N



Ordering Key

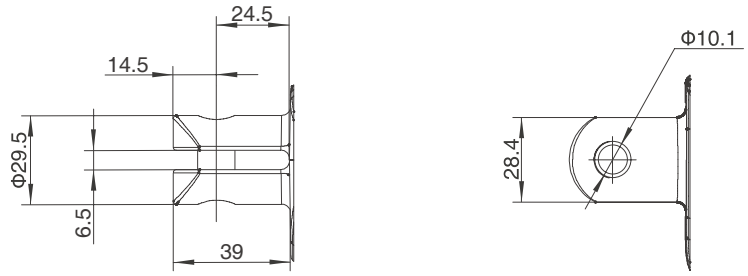
Take **JC35L3006424200/375HGB34LF092022D0** as an example

Model	**JC35L30**	
Optional features	**X**	0 = Standard / P = Only push / S = Safety nut / Y = Hall sensor PY = Only push + Hall sensor / SY = Safety nut+Hall sensor F=Fast version / B= Signal switch+Mechanical end-stop M1 = Dual Hall feedback + safety nut + low-level signal + front-end hard limit + 2MOPP design M2 = Safety nut + low-level signal + front-end hard limit + 2MOPP design
Load in push	**X**	8 = 8000N / 6 = 6000N / 4 = 4000N / 3 = 3000N
Speed at full load	**X**	4 = 4mm/s | 5d4 = 5.4mm/s | 8 = 8mm/s | 12 = 12mm/s
Input voltage	**XX**	24 = 24VDC
Stroke length/ Installation dimension	**XXX/XXX**	Stroke length = XXX Installation dimension = XXX
Clevis directions	**X**	H=horizontal V=vertical (to motor direction)
Colour	**X**	G = Gray
End clevis specification	**XX**	B34: Slot 6.5; depth 39, hole 10.1 with b ushing B46: hole 10.1 with bushing (black) B47: hole 10.1 with bushing (gray) B63:Slot width 6.5; depth 39, Hole 12.5, with Hole 10.1 wish bushing (gray, 8000N, 6000F) B64:Slot width 6.5; depth 39, Hole 12.5, with Hole 10.1 wish bushing (black, 8000N, 6000F) B68:Slot width 6.5; depth 39, Hole 12.5, with Hole 10.1 wish bushing (8000N, 6000F)
End clevis material	**X**	L = Aluminum alloy
Front clevis specification	**XX**	F05: Slot 6.5, depth 26, hole 10.1 wish bushing F09: hole 10.1 with bushing
Brake specification	**X**	0 = Standard / 1 = Brake in pull / 2 = Brake in push
Type of connector and cable	**XX**	02 = 4 Pin Din connector 10 = 5 Pin Din connector
Cable length	**XXX**	2D0 = 2m / 0D5 = 0.5m

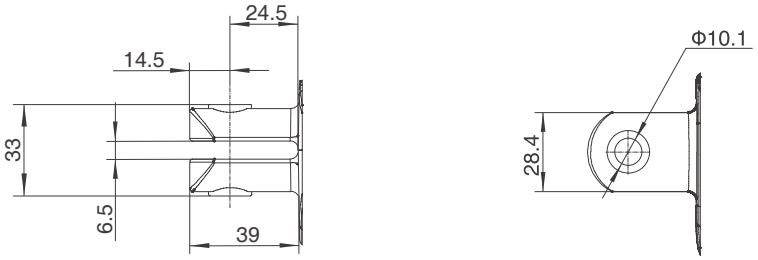
Ordering Details

Dimensions of clevis

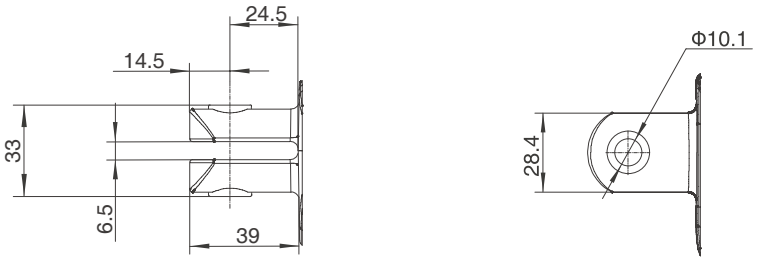
End clevis: B34



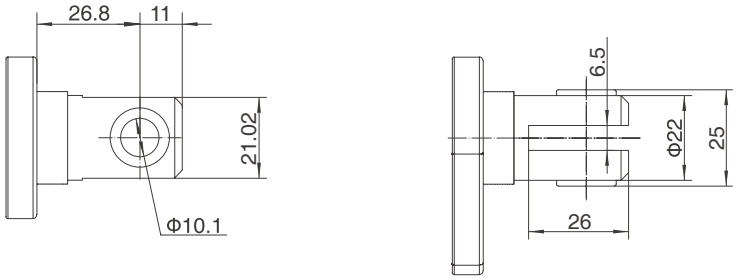
End clevis: B46



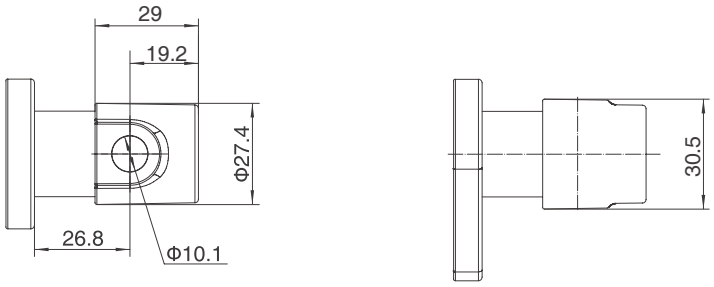
End clevis: B47



Front clevis: F05

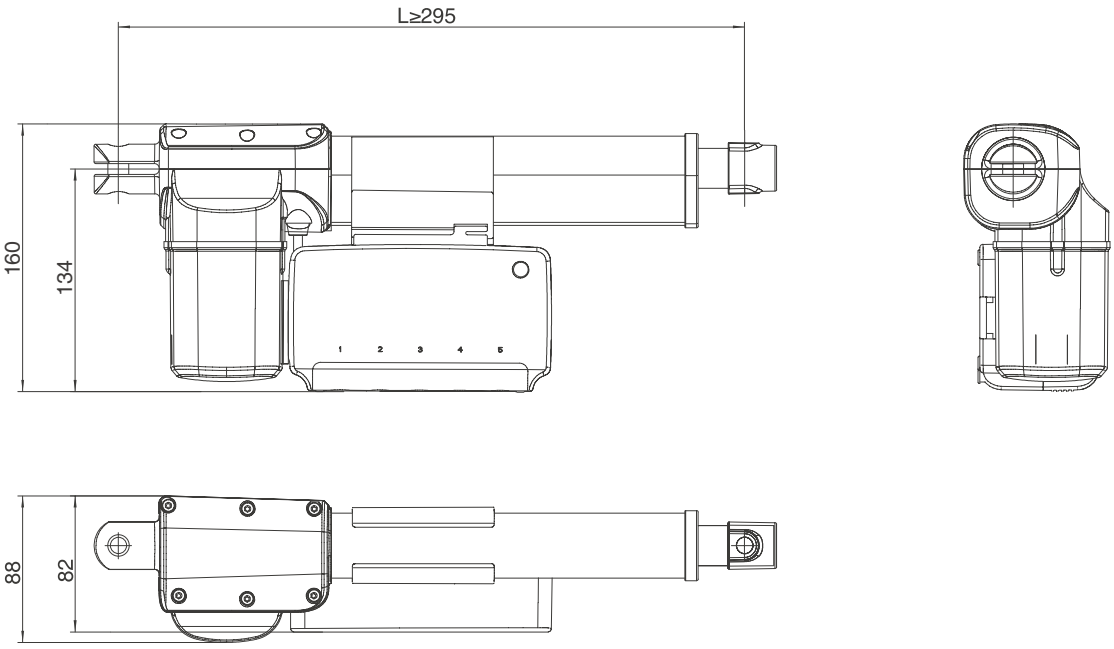


Front clevis: F09

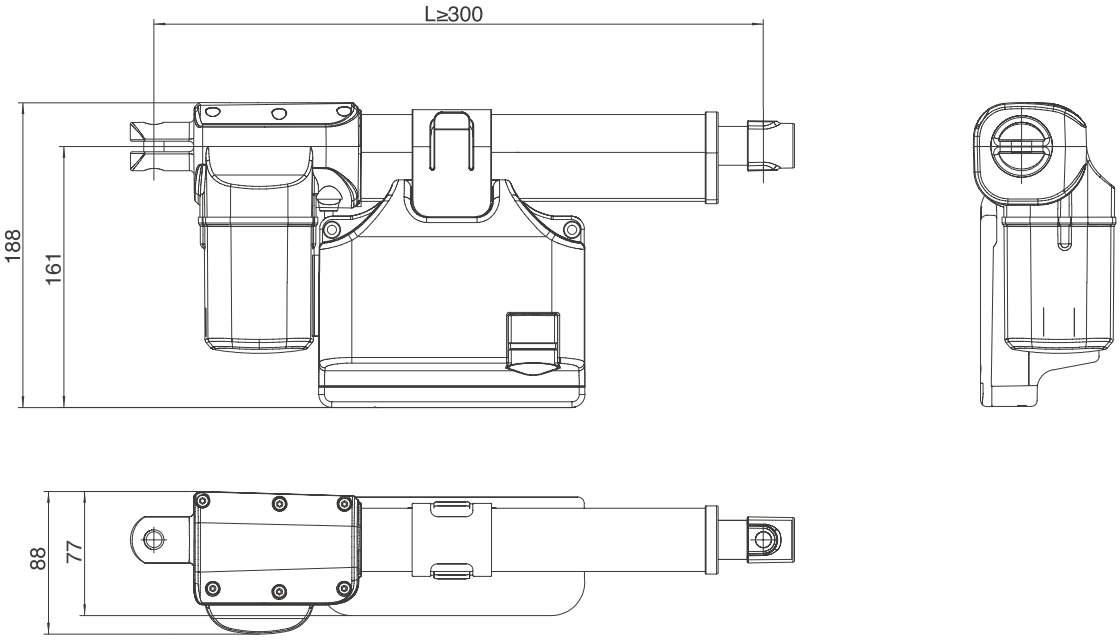


Dimensions of JC35L30 with control box

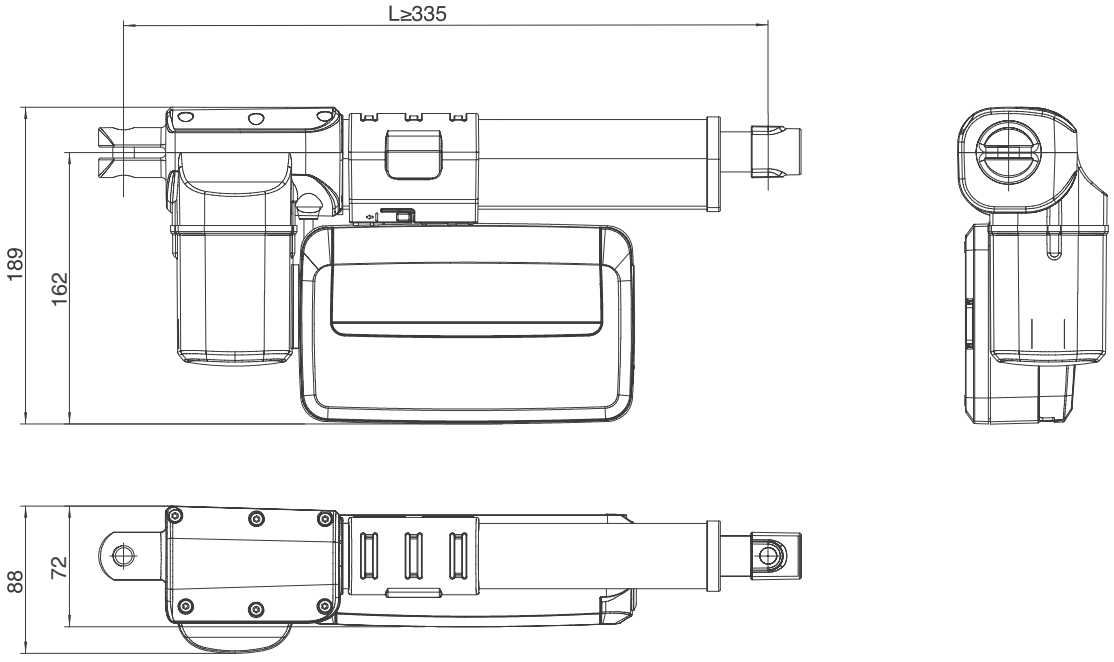
JCB35Q installing with JC35L30



JCB35T installing with JC35L30



JCB35T2 installing with JC35L30



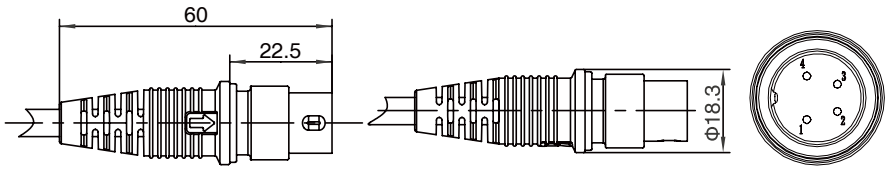
Motor cable

4 Pin Din connector (standard)

Supporting control box :
JCB35Q / JCB35T / JCB35R / JCB35R1 / JCB35S

Pin	Color	Function
1	NC	Not connected
2	Brown	power with positive voltage, actuator going down
3	Blue	power with positive voltage, actuator going up
4	NC	Not connected
Outer Circle	NC	Not connected



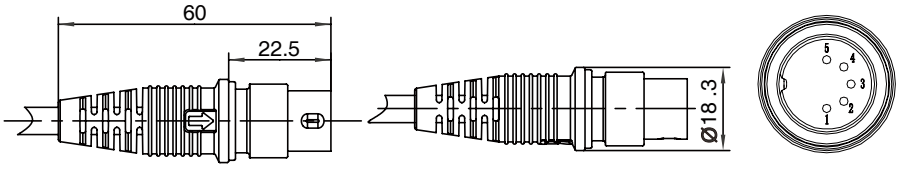


5 Pin Din Connector (with Hall sensor)

Supporting control box :
JCB35Q / JCB35T / JCB35R / JCB35R1 / JCB35S

Pin	Color	Functions
1	Red	5V
2	Brown	power with positive voltage, actuator going down
3	Black	GND
4	Blue	power with positive voltage, actuator going up
5	Yellow	Hall sensor signal 1
Outer Circle	Orange	Hall sensor signal 2



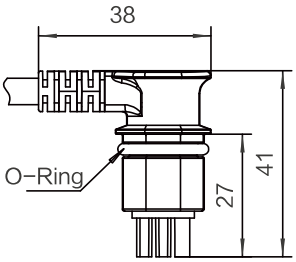


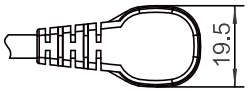
6 Pin Mini-Fit elbow connector

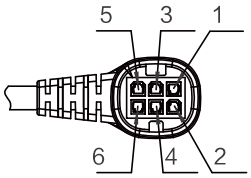
Supporting control box :
JCB35T2 / JCB35T3 / JCB35Q3

Pin	Color	Function
1	Orange	When not in the lower limit, it is connected with red
2	Brown	power with positive voltage, actuator going down
3	Black	When not in the upper limit, it is connected with yellow
4	Blue	power with positive voltage, actuator going up
5	Red	When not in the lower limit, it is connected with orange
6	Yellow	When not in the upper limit, it is connected with black









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Passed EMC tests. To ensure our products pass all kinds of tests domestic or abroad.

Communication protocol development

Aiming at different applications, develop more extensive functions for control system.

Professional customization

Powerful R&D strength, fully satisfy customers' needs. Development cycle is about 10 days, seizing more market opportunities

Intelligent Control of Bluetooth

Mobile phone as the remote, applying in home care. Market pioneer, Jiecang provides better choices

Wireless Communication

Controllers adopt high-frequency wireless system. It can avoid interference mixing with signal receivers, assisting in remote control over medical equipment.

Latest Weighing System

Designed for physiotherapy beds and medical care beds. Cantilever carrying weighing sensor, it is applicable to different bedsteads dispensing with any adjustment

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Notes for mounting and usage can be found in the corresponding mounting manual

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