

# JC35L3 Linear Actuator

Application field - Medical Line Preferably in medical beds; operation bed; nursing bed and other fields.

JC35L3 is a kind of actuator with low noise and high load capacity. It has following specifications: JC35L3-6000N (push); JC35L3-4000N (pull). JC35L3 is characterized by large load capacity, fast speed, high IP grade(IPX6) and low noise.



### **General Features**

**Load in push (N):** 6000 | 4000

Dynamic load pull (N): 4000

Motor rated voltage Input (VDC): 24

Stroke length: 6000N: 50-300mm (4mm tolerance)

4000N: 50-400mm (4mm tolerance)

Installation dimensions (mm): L=225 (S≤50)

L=S+175 (50<S≤200) L=S+185 (200<S≤400)

Colour: Grey (RAL 7035) / Black(RAL9005)

Limit switch: Built-in (electrical)

Noise level: ≤48dB (environmental noise≤40dB)

Quickly release: Standard

Weight: About 2kg

(different stroke length and installation dimensions with different weight)

Static bending load: No bending load

Duty cycle: 10%, max. 2min. continuous use

Max IP grade: IPX6

Options: Safety nut, Hall sensor, Only push no pull

Flame retardant grade: UL94-HB

**Standards:** IEC60601-1: 2012

EN 60601-1: 2006+A12:2014

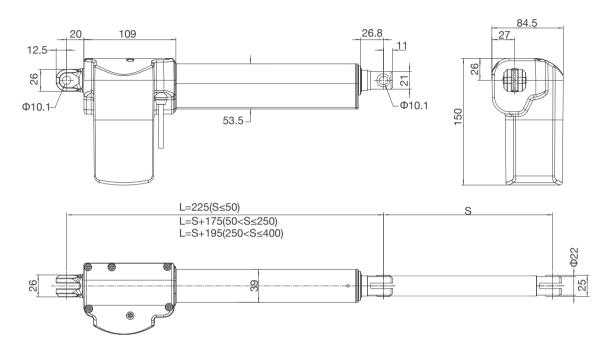
ANSI/AAMI ES60601-1: 2005/(R)2012 and A1: 2012, C1: 2009/(R)2012 and

A2: 2010/(R)2012

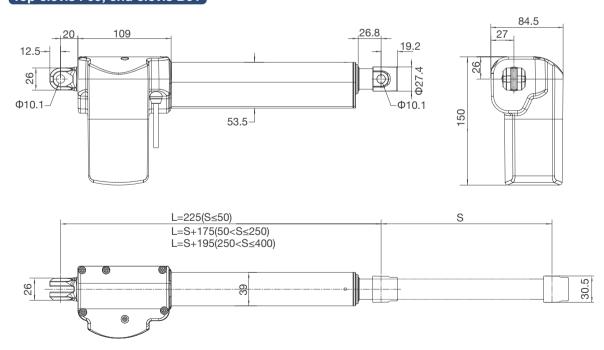


# **Dimension Drawing**

### Top clevis F05, end clevis B01



### Top clevis F09, end clevis B01



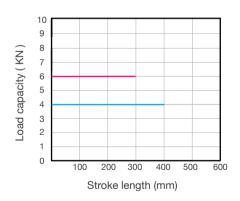


# **Technical parameters**

Power voltage (VDC)	Spindle pitch (mm)	Max.Load capacity (N)	Self locking (N)	Speed no load (mm/s)	Speed full load (mm/s)	Current full load (A)
24	4	6000	6000	5.7	4	5
24	5	4000	4000	6.8	5.9	5
29	4	6000	6000	6	5	5
29	5	4000	4000	8.5	6.5	5
36	4	6000	6000	8	6.5	5
36	5	4000	4000	11	8.5	5

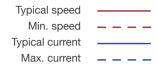
Remark: the above data are typical values at 25 "C

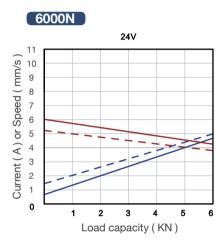
# Stroke length versus load

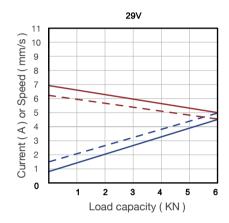


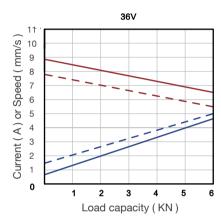


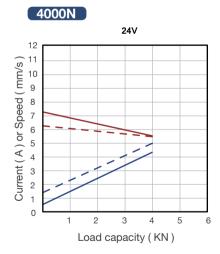
# **Characteristic**

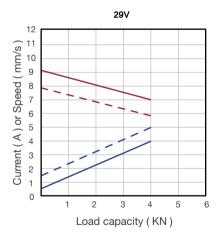


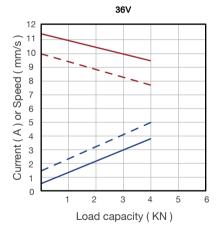














# **Ordering Key**

### Take JC35L306424100/275HG01L052022D0 for example

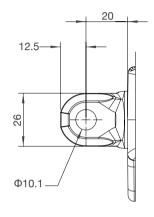
Model	JC35L3	
Optional features 0		0 = Standard / P = Only push no pull option S = Safe nut option / Y = Double hall sensor option PY = Only push no pull + Double hall sensor option SY = Safety nut + Double hall sensor option
Load in push	6	6 = 6000N 4 = 4000N
Speed at full load	4	4 = 4mm/s 5D9 = 5.9mm/s
Input voltage	24	24 = 24VDC
Stroke length/ Installation dimension	100/275	Stroke length = XXX Retracted length = XXX
Clevis directions H		H = H direction / V = V direction
Color	G	G = Grey (RAL7035) / B = Black (RAL9005)
End clevis specification	01	01 = B01; slot width is 6.5, the depth of slot is 28, and the hole diameter isφ10.1, JC35L3 end clevis
End clevis material	L	L = Aluminum alloy
Top clevis specification	05	05 = F05: slot width is 6.5, the depth of slot is 26 and the hole diameter isφ12.5 withφ24 aluminum tube and φ10.1 clevis pad, 09 = F09: the hole on inner tube is 14.2, the distance between the hole and the end face is 17; add D inner tube top clevis bushing, aperture 10.1; add D inner tube top clevis sleeve (white)
Brake specification	2	0 = No brake 1 = Left brake 2 = Right brake
Type of plug and cable	02	02 = 4 pin DIN plug and 2 pin straight cable 10 = 5 pin DIN plug and 6 pin straight cable
Cable length	2D0	2D0 = 2m / 0D5 = 0.5m

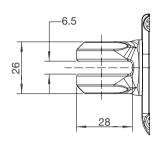


# **Ordering Details**

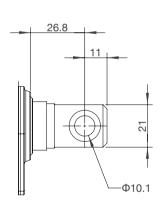
# Dimension drawing of clevis

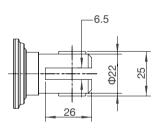
End clevis: B01



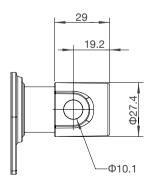


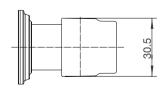
Top clevis: F05





Top clevis: F09

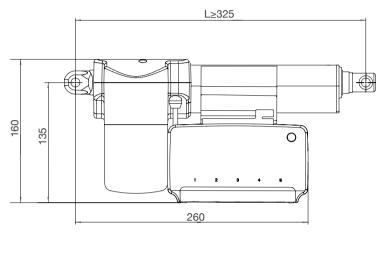


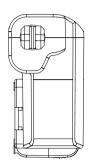


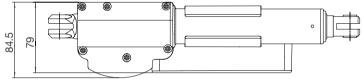


# Dimensions JC35L3 with control box

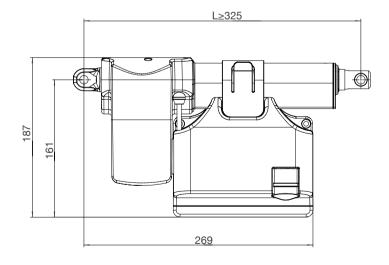
#### JCB35Q install on JC35L3

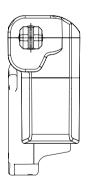


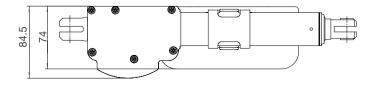




#### JCB35T install on JC35L3

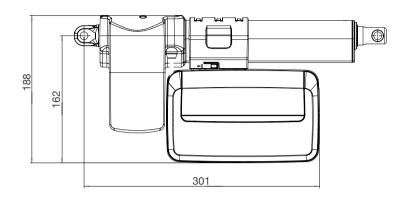


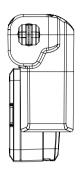


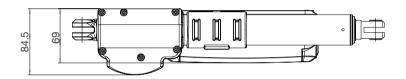




#### JCB35T2 install on JC35L3







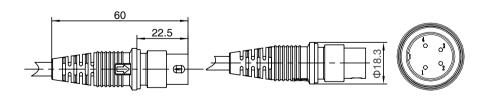
#### Motor wire

### 4-pin straight plug (standard)

Matching controller: JCB35Q/ JCB35T/ JCB35R/ JCB35R1/ JCB35S/ JCB35K2

Pin	Color	Function	
1	NC	Not connected	
2	Brown	When positive voltage power on,actuator will go down	
3	Blue	When positive voltage power on,actuator will go up	
4	NC	Not connected	
Outer ring	NC	Not connected	





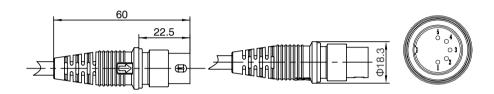


## 5 pin DIN plug (with Hall sensor)

Matching controller: JCB35Q/ JCB35T/ JCB35R/ JCB35R1/ JCB35S/ JCB35K2



Pin	Color	Function
1	Red	5V
2	Brown	When positive voltage power on,actuator will go down
3	Black	GND
4	Blue	When positive voltage power on,actuator will go up
5	Yellow	Hall signal 1
Outer ring	Orange	Hall signal 2







#### Strictly abiding by medical safety certifications

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



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