

# JC35B8 Linear Actuator

Application field - Medical Line Preferably in homecare nursing or medical beds

Jiecang JC35B linear actuator is compact, quiet and powerful. It is designed to fit in areas specifically requiring an angle motor. It can be equipped with a fast motor and Hall sensor for feedback. Certifications for the JC35 B linear actuator include IEC60601-1, ES60601-1, UL73 and EMC.

In addition, the JC35B is available with optional IPX6W rating.



### **General Features**

Max./ Static Load push\*(N): 6000 | 4000 | 2000 | 1000

Max./ Static Load pull\*(N): 4000 | 4000 | 2000 | 1000

Motor rated voltage Input (VDC): 24 (permanent magnet motor)

**Speed at Full Load:** 3 (mm/s) | 4 (mm/s) | 8 (mm/s) | 12 (mm/s)

**Stroke Length (mm):** 100 - 400 (option > 400)

Mounting position: H-Type, V-Type

Colour: Black (RAL 9005) or Grey (RAL 7035)

Limit Switch: Built-in (electrical)

Overload Protection\*: Yes

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

IP Grade: IP54 (Max. IPX6W)

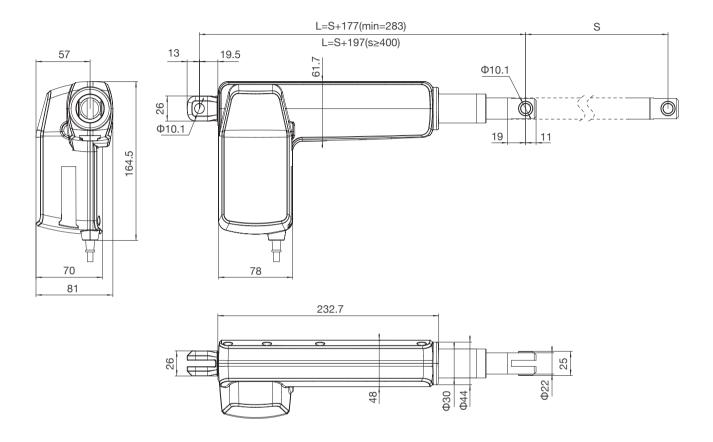
Options: Reed switch, push only, safety nut, Hall sensor

**Standards:** IEC60601-1: 2012, EN60601-1:2006+A12:2014, ANSI/AAMIES 60601-1:

2005/(R)2012 and A1: 2012, C1: 2009/(R)2012 and A2:2010/(R)2012



## **Dimension Drawing**





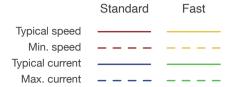
## **Technical parameters**

	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)
Standard	24	4	6000	6000	5.5	3	5.5
	24	5	4000	4000	7	4	4.5
	24	7.5	3000	3000	10.5	6.5	4
	29	4	6000	6000	7	4.5	6
	29	5	4000	4000	8.5	5.5	5
	29	7.5	3000	3000	13	9	4.5
	36	4	6000	6000	8.3	5.8	6
	36	5	4000	4000	10.3	8.5	4.5
	36	7.5	3000	3000	15.5	12.5	5
Fast	24	4	6000	6000	7	4	6.5
	24	5	4000	4000	8.5	6	6.5
	29	4	6000	6000	8.5	5.5	6.5
	29	5	4000	4000	10.5	7.5	6.5
	36	4	6000	6000	10.3	8	6
	36	5	4000	4000	14.5	10.4	5.5

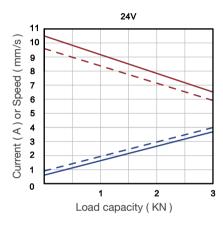
Remark: the above data are typical values at 25 "C

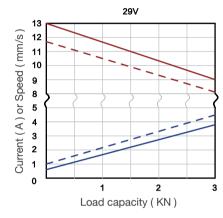


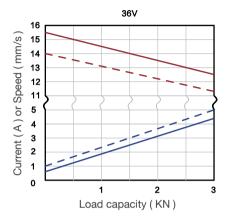
## **Characteristic**



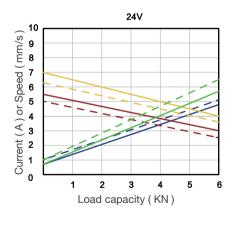
#### 3000N

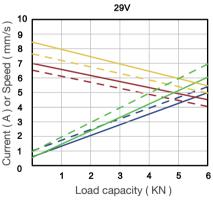


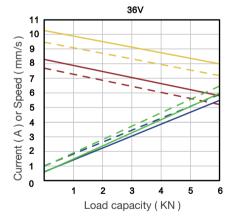




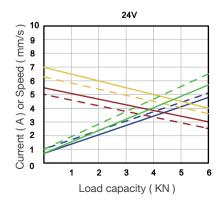
#### 4000N

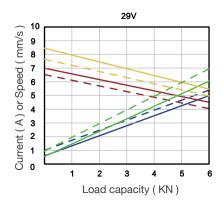


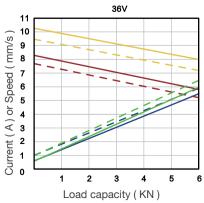




#### 6000N









## **Ordering Key**

### Take JC35B806324150/327VGDZ052022D0 for example

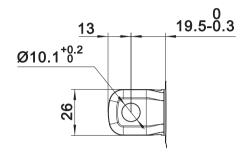
Model	JC35B8		
Optional features 0		O = Standard / P = Push only / S = Safety nut Y = Hall sensor / R = Reed switch	
Load in push	6	6 = 6000N 4 = 4000N 3 = 3000N	
Speed at full load	3	3 = 3mm/s 4 = 4mm/s 6 = 6mm/s 6D5 = 6.5mm/s	
Input voltage	24	24 = 24 VDC	
Stroke length/ Installation dimension	150/327	Stroke length = XXX Installation dimension = XXX	
Clevis directions	V	H = H direction / V = V direction	
Color	G	G = Grey (RAL7035) / B = Black (RAL9005)	
End clevis specification	D	D = slot 6.5, hole Φ 10.1	
End clevis material	z	Z = Zinc-Aluminum alloy T = Steel	
Top clevis specification	05	05 = F05 slot 6.5, depth 26, hole $\Phi$ 12.5 with $\Phi$ 24 aluminum tube, hole $\Phi$ 10.1 with bushing	
Brake specification	2	0 = no brake / 1 = brake in pull / 2 = brake in push	
Type of plug and cable	02	02 = 4-pin DIN plug 10 = 5 pin DIN plug 93 = 6 pin Molex elbow plug	
Cable length	2D0	2D0 = 2m / 0D5 = 0.5m	

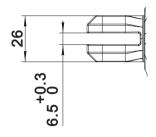


## **Ordering Details**

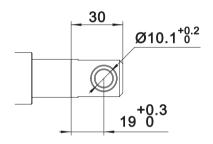
### Dimension drawing of clevis

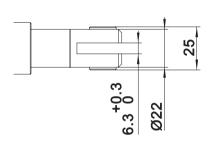
End clevis: D





Top clevis: F05





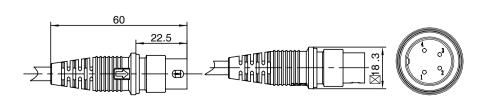
#### Motor wire

#### 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





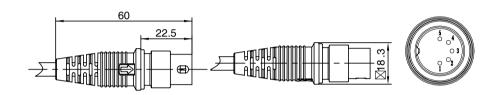


## 5 pin DIN plug (with Hall sensor)

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

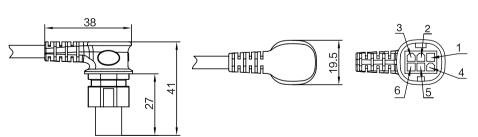


### 6 Pin Mini-Fit elbow plug

Matching control box :JCB35T2/ JCB35T3/JCB35Q3/JCB35K3

Pin	Color	Function
1	Orange	When not on lower limit, link with red wire
2	Black	When not on upper limit, link with yellow wire
3	Red	When not on lower limit, link with orange wire
4	Brown	When positive voltage power on,actuator will go down
5	Blue	When positive voltage power on,actuator will go up
6	Yellow	When not on upper limit, link with black wire









#### 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