JIECANG

JC35D4 Linear Actuator

Application field - Medical Line & Care Line
preferably in operating table, nursing bed, hospital bed

JC35D4 is widely applied to nursing beds, hospital beds, operating tables as well home care beds with its advantages of durability and rich specifications.
With a powerful structure, JC35D4 thrust is up to 6000N and can meet the water-proof requirement of medical line IP54.



Features And Options

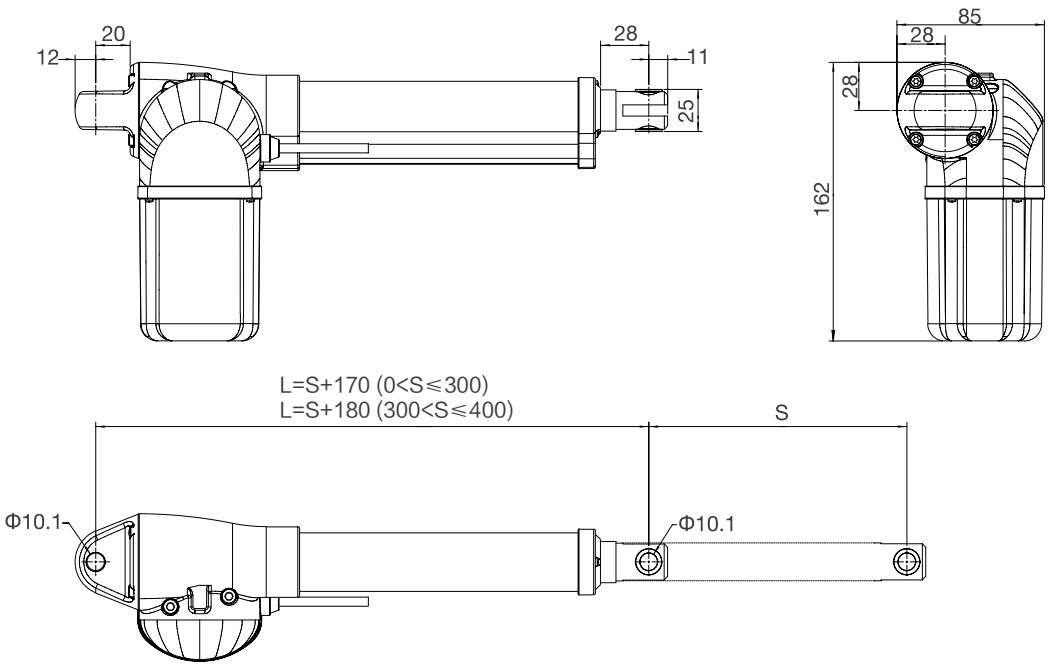
Dynamic load in push(N)	6000 | 4000 | 3000 | 2000 | 1500
Colour:	Gray / Black
Protection Class:	IP54
Stroke Length:	6000N: 50-200mm (in steps of 4mm) 4000N: 50-300mm (in steps of 4mm) 3000N: 50-300mm (in steps of 4mm) 2000N: 50-400mm (in steps of 4mm) 1500N: 50-400mm (in steps of 4mm)
Installation Dimension:	L=S+170(50≤S≤300) L=S+180(300＜S≤400)
Noise Level:	≤48dB(environmental noise≤40dB)
Optional:	Safety nut, Hall sensor, Only push, Signal switch+Mechanical end stop
Limit Switch:	Built in (electronic)
Weight:	About 1.5kg (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

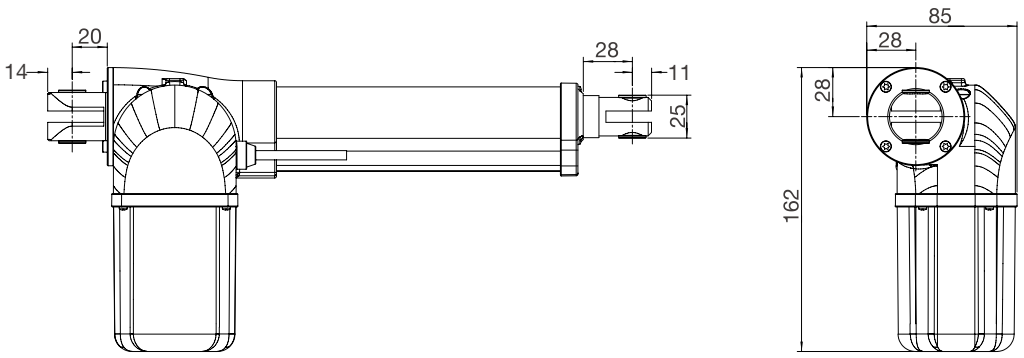
Duty Cycle:	10%, max. continuous work for 2min. and 18 min. off
Operating Temperature:	+5°C to +40°C
Reserve Temperature:	-10°C to +50°C
Supporting Control Box:	Matching with JIECANG control box
Relative Humidity:	Under 30°C, 20% to 90%, non-condensing
Atmospheric Pressure:	700 to1060hPa

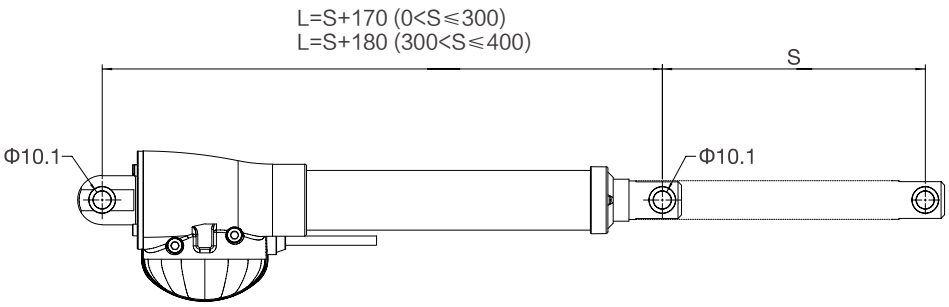
Dimensions

Front clevis F05, end clevis A

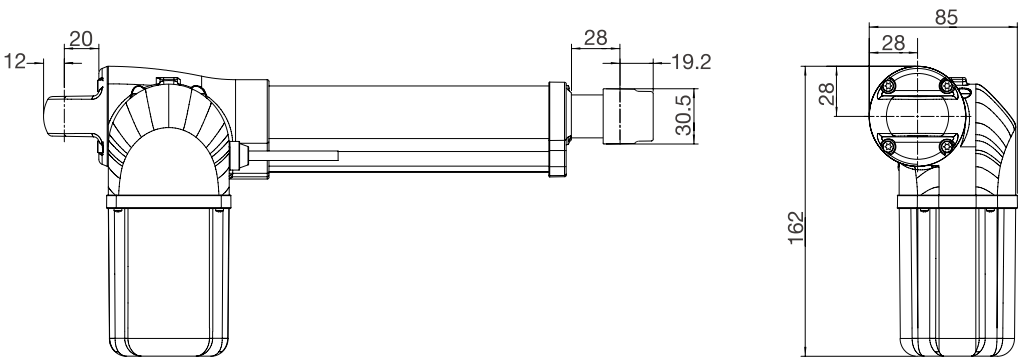


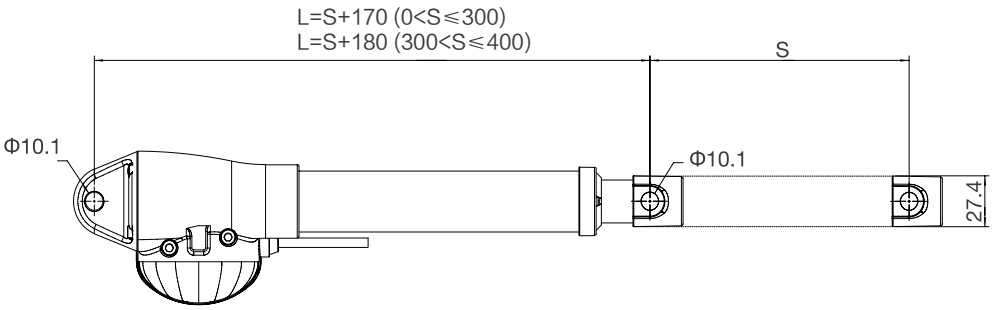
Front clevis F05, end clevis D



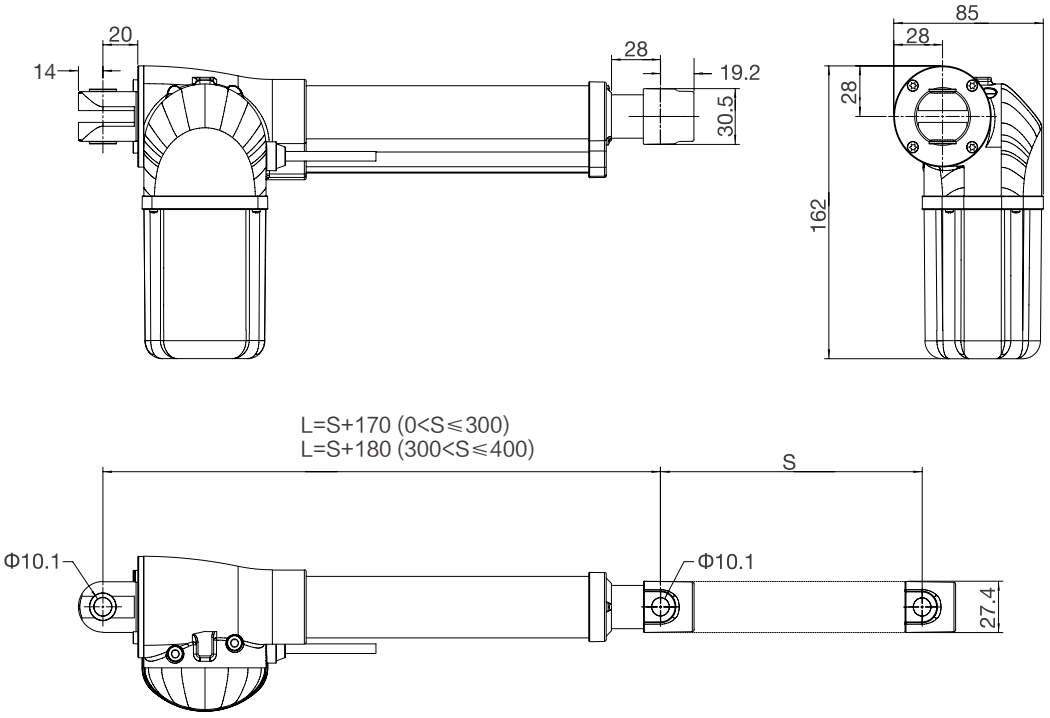


Front clevis F08 (F09), end clevis A





Front clevis F08 (F09), end clevis D

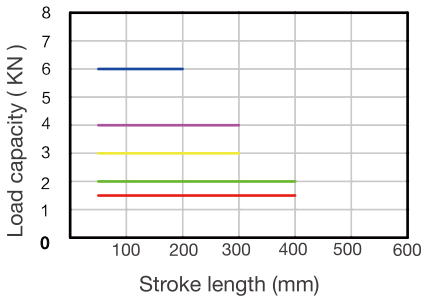


Technical Specifications (Standard Value)

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	7.5	6000	4000	6000	5.5/3.5	≤5.2
29	7.5	6000	4000	6000	6.7/4.2	≤5.2
24	5	6000	4000	6000	4.0/3	≤4
29	5	6000	4000	6000	4.8/3.6	≤4
24	5	6000	4000	6000	5.5/3.5	≤5.2
29	5	6000	4000	6000	6.7/4.2	≤5.2
24	5	6000	4000	6000	6.6/4.5	≤6.8
29	5	6000	4000	6000	8/5.4	≤6.8
24	7.5	6000	4000	6000	6.6/4.5	≤6.8
29	7.5	6000	4000	6000	8/5.4	≤6.8
24	5	4000	4000	4000	6.7/4.7	≤4.1
29	5	4000	4000	4000	8.4/5	≤4.1
24	4	3000	3000	3000	10/6.8	≤4
29	4	3000	3000	3000	12.5/7	≤4
24	4	3000	3000	3000	7.7/5.8	≤4.5
29	4	3000	3000	3000	9.3/6.9	≤4.5
24	4	2000	2000	2000	13.9/10	≤4.5
29	4	2000	2000	2000	16.8/12	≤4.5
24	3	2000	2000	2000	23.2/16.8	≤6.5
29	3	2000	2000	2000	28/19.3	≤6.5
24	4	1500	1500	1500	20.6/16	≤4
29	4	1500	1500	1500	25/19.3	≤4

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°C.

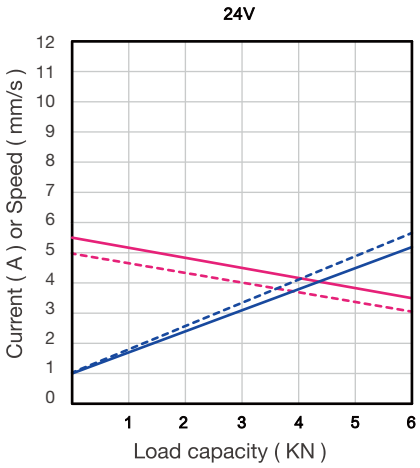
Diagram of relationship between stroke length and load

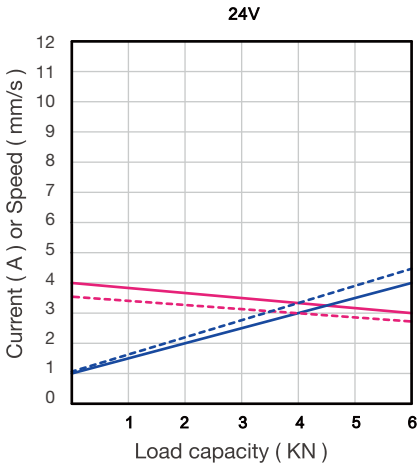


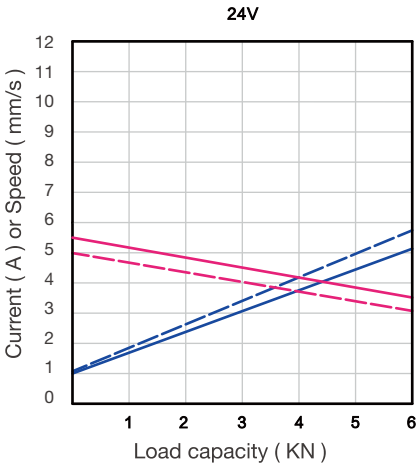
Characteristic Curve

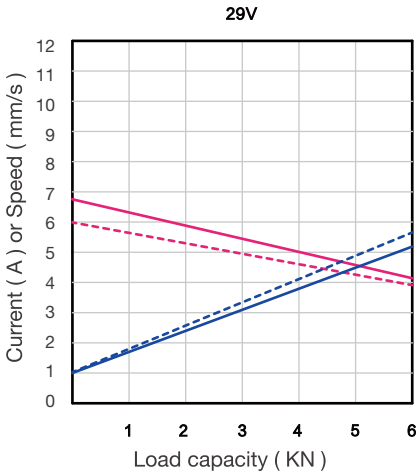
Typical speed
Min. speed
Typical current
Max. current

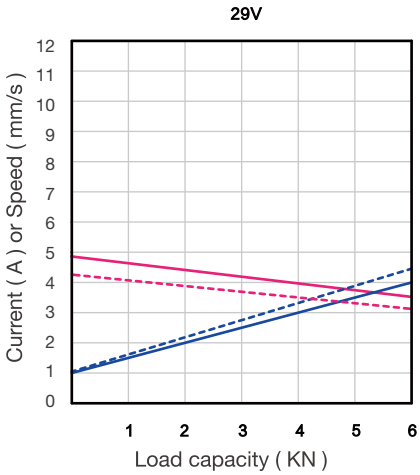
6000N

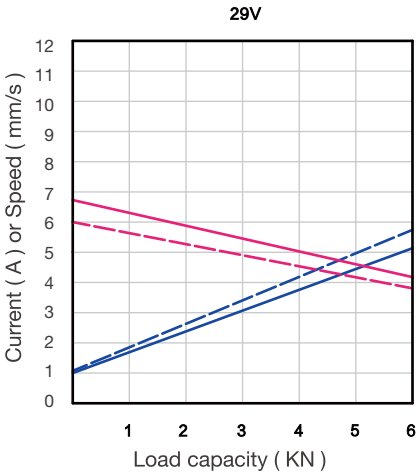






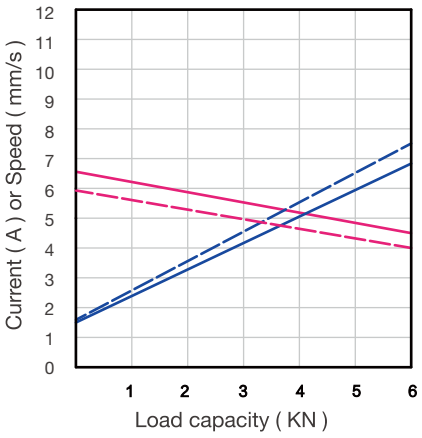




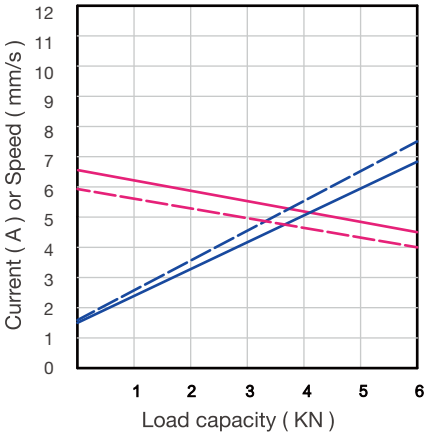


6000N

24V

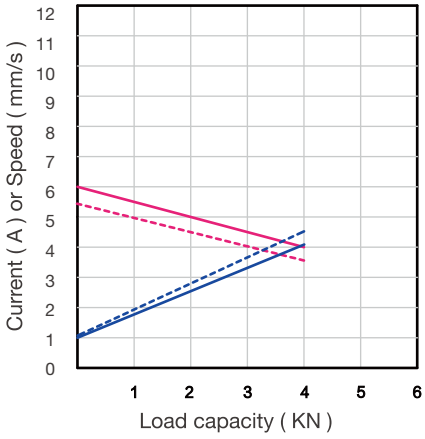


24V

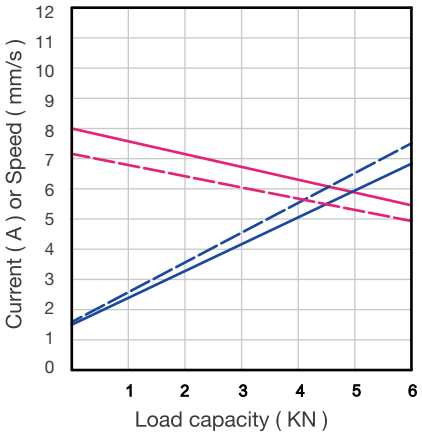


4000N

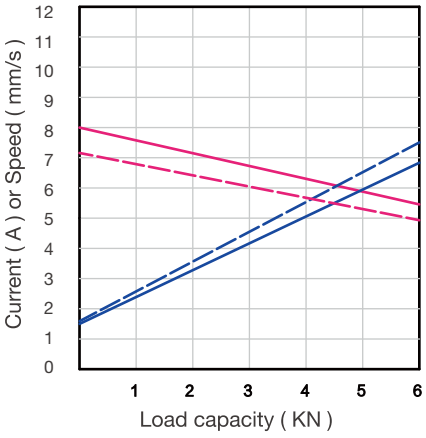
24V



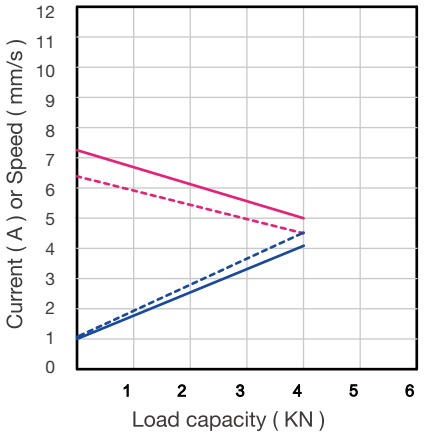
29V



29V

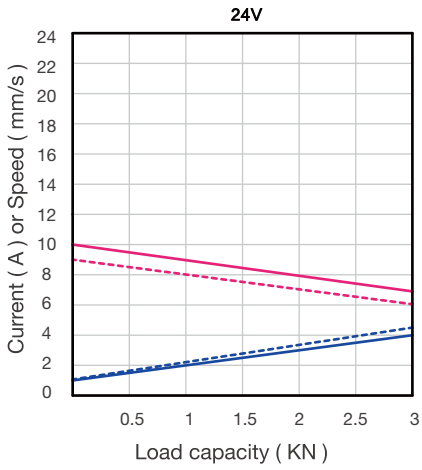


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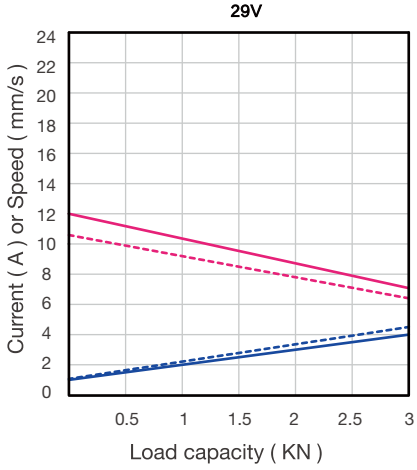


3000N

24V

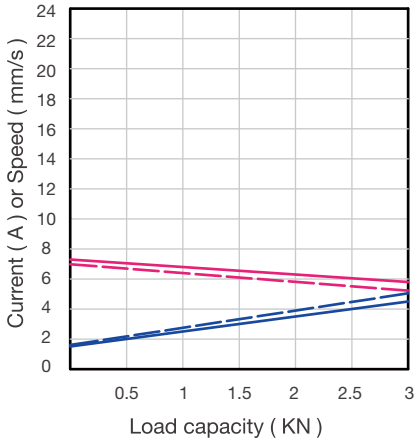


29V

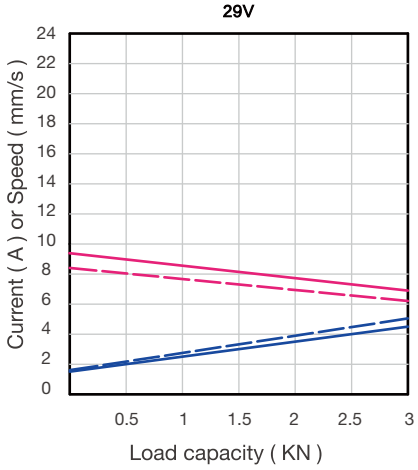


3000N

24V

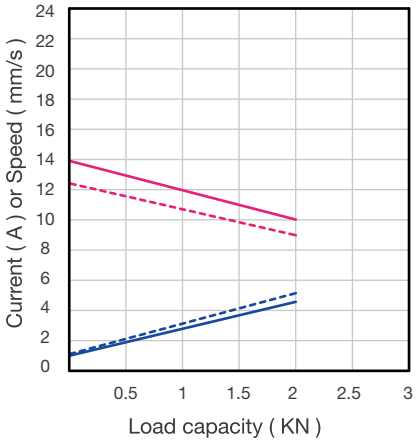


29V

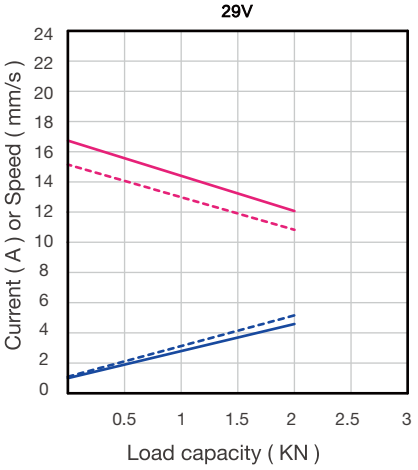


2000N

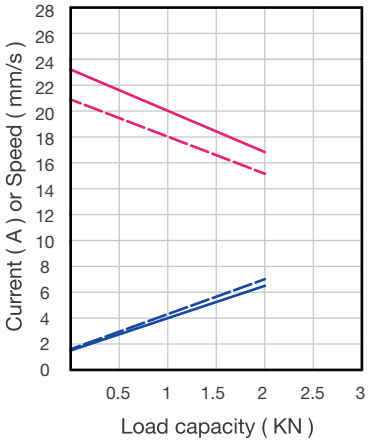
24V



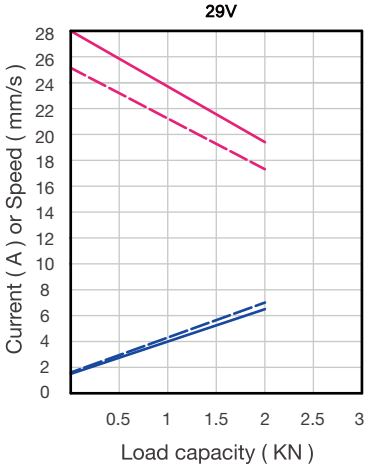
29V



24V

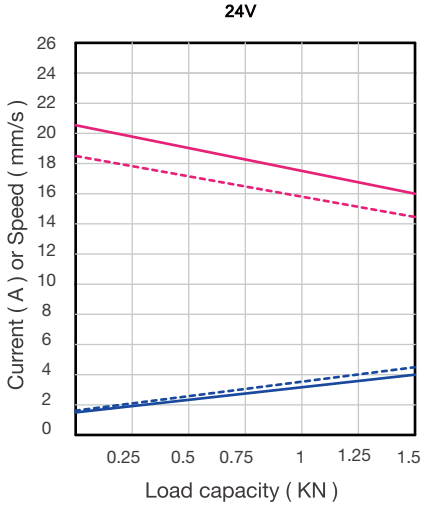


29V

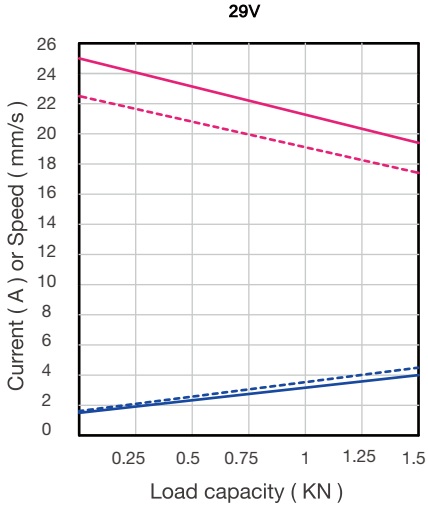


1500N

24V



29V



Ordering Key

Take **JC35D406324100/275HGDL052022D0** as an example

Model	**JC35D4**	
Optional features	**X**	O = Standard / P = Only push S = Safety nut / Y = Hall sensor B = Signal switch+Mechanical end-stop
Load in push	**X**	6 = 6000N 4 = 4000N 3 = 3000N 2=2000N 1D5=1500N
Speed at full load	**X**	3 = 3mm/s 4 = 4mm/s 6 = 6mm/s
Input voltage	**XX**	24 = 24 VDC
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 / B = Black
End clevis specification	**X**	A = without slot, hole ϕ10.1 D = slot 6.5, depth32, hole ϕ10.1 wish plastic bushing
End clevis material	**X**	S = Plastic L = Aluminum alloy
Front clevis specification	**XX**	F05 = slot 6.5, depth 26,hole ϕ10.1 with plastic bushing F08 = hole ϕ10.1 with bushing(black) F09 = hole ϕ10.1 with bushing(gray)
Brake specification	**X**	0 = No brake / 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

Dimension Drawing

Dimensions of clevis

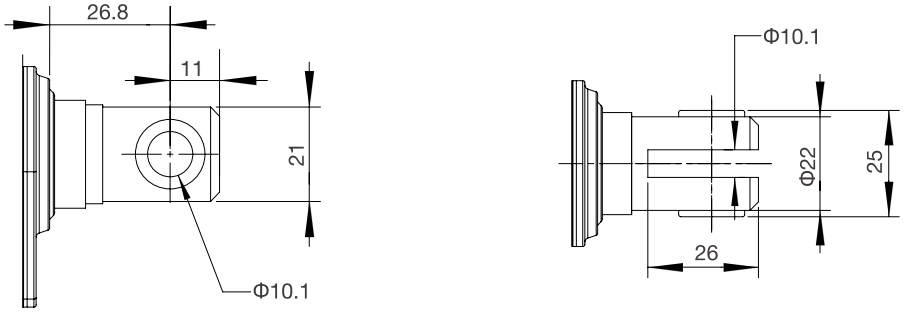
End clevis: A



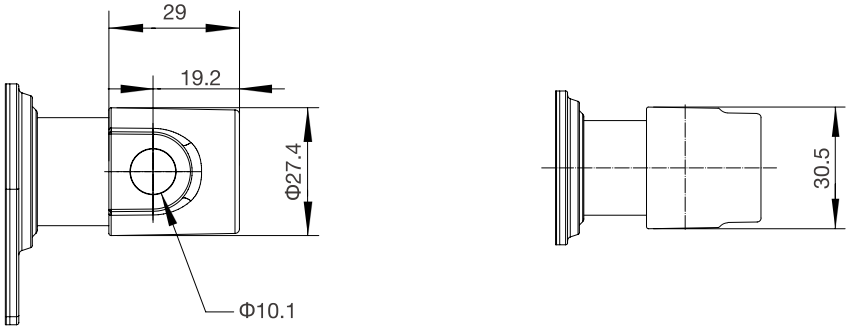
End clevis: D



Front clevis: F05

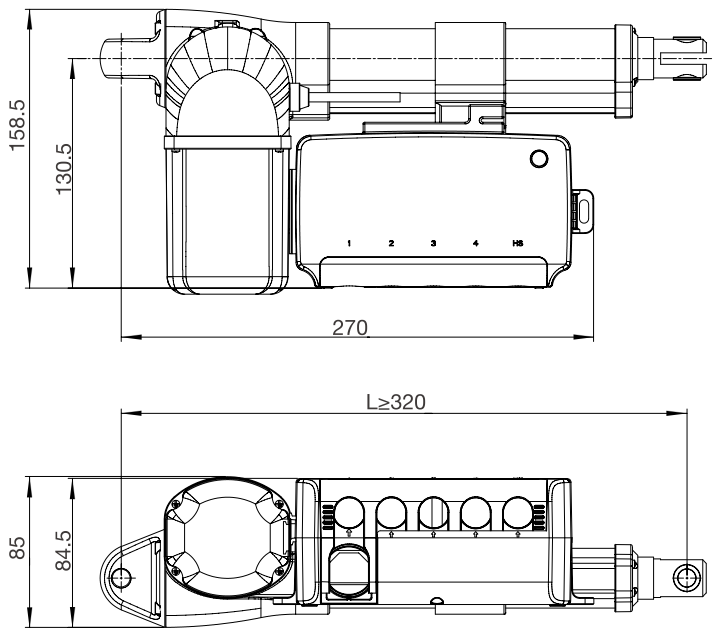


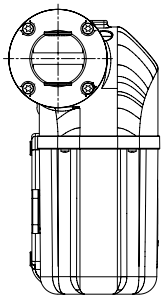
Front clevis: F08 (F09)



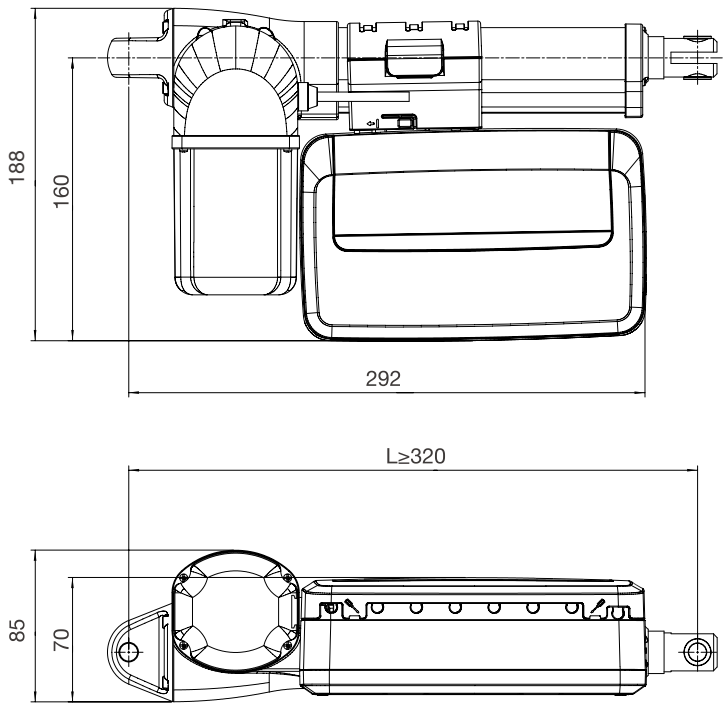
Dimensions of JC35D4 with control box

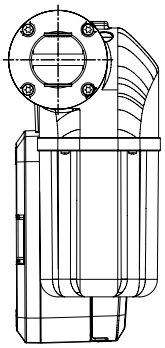
JCB35Q installing with JC35D4





JCB35T2 installing with JC35D4





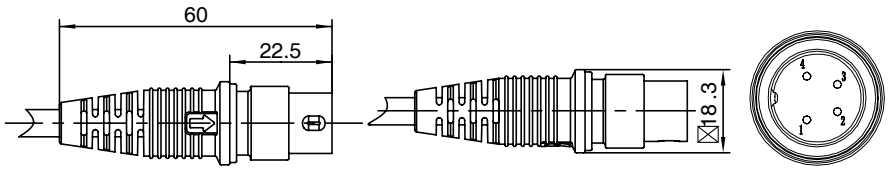
Motor cable

4 Pin Din connector (standard)

Supporting control box:
JCB35Q / JCB35T / JCB35R /
JCB35R1 / JCB35S / JCB35K2

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



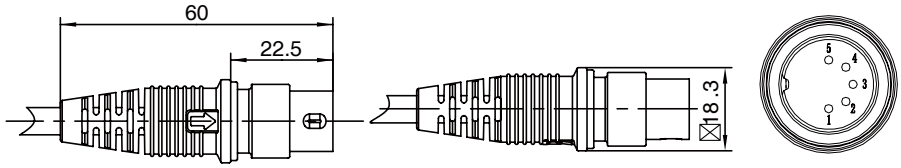


5 Pin Din connector (with Hall sensors)

Supporting control box:
JCB35Q / JCB35T / JCB35R /
JCB35R1 / JCB35S / JCB35K2

Pin	Color	Function
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





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

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