JIECANG

JC35DN Linear Actuator

Application field - Medical Line & Technical Line
preferably in hospital beds, operating tables
and other technical applications



The actuator JC35DN combines compact design and high power in a solution fit for use in medical and technical demanding applications. A comprehensive testing program is behind the durable performance of this solid and high-quality actuator JC35DN.

·Thrust up to 6000N
·Rated up to max. IP66
·Stroke length 50-600mm
·Hall signal optional
·Max. load speed: 25mm/s

Features And Options

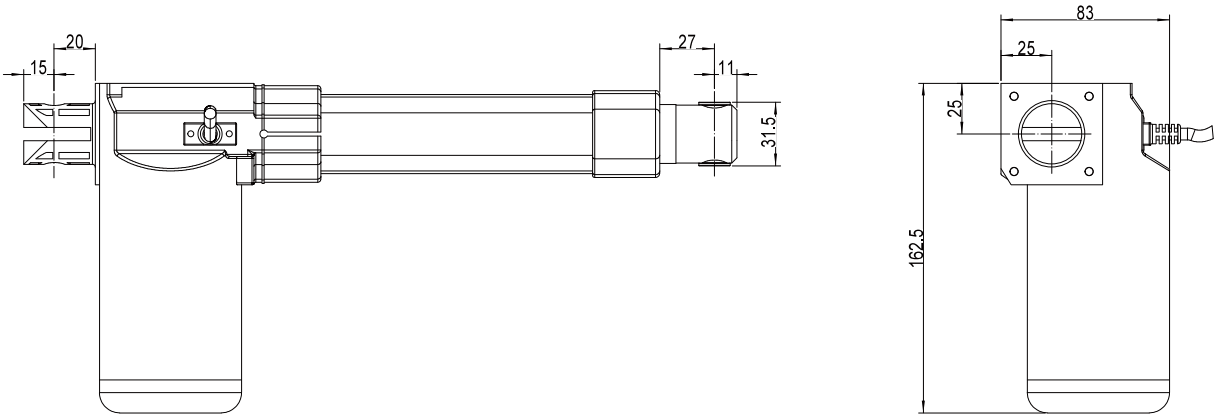
Dynamic Load In Push(N):	8000 | 6000 | 4000 | 3000 | 2000 | 1500 | 1000 | 750 | 500
Dynamic Load In Pull(N):	4000 | 2000 | 1000 | 750 | 500
Colour:	Gray / Black
Protection Class:	Max. IP66
Stroke Length:	8000N: 50-200mm (in steps of 4mm) | 1500N: 50-600mm (in steps of 4mm) 6000N: 50-250mm (in steps of 4mm) | 1000N: 50-600mm (in steps of 4mm) 4000N: 50-400mm (in steps of 4mm) | 750N: 50-600mm (in steps of 4mm) 3000N: 50-400mm (in steps of 4mm) | 500N: 50-600mm (in steps of 4mm) 2000N: 50-600mm (in steps of 4mm)
Installation Dimension:	L=S+175(S＜400) L=S+195(S≥400)
Noise Level:	≤55dB (environmental noise ≤40dB) regular version ≤60dB (environmental noise ≤40dB) fast version
Optional:	Hall Sensor, Only Push, Reed Switch
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

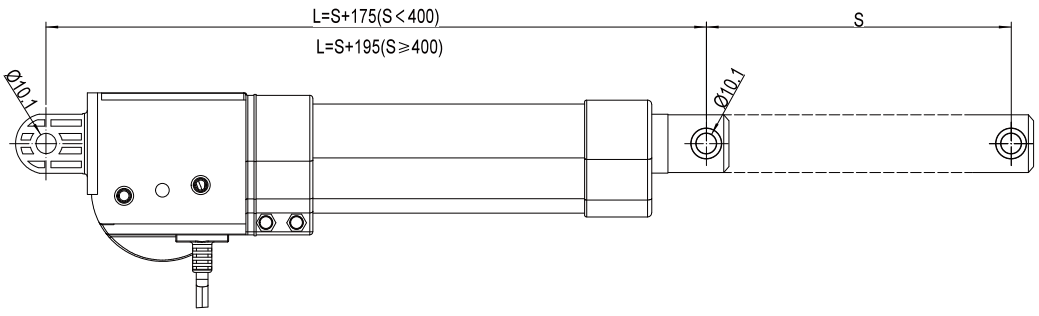
Usage

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:	20% to 90% at 30°C, non-condensing
Atmospheric Pressure:	700 to1060hPa

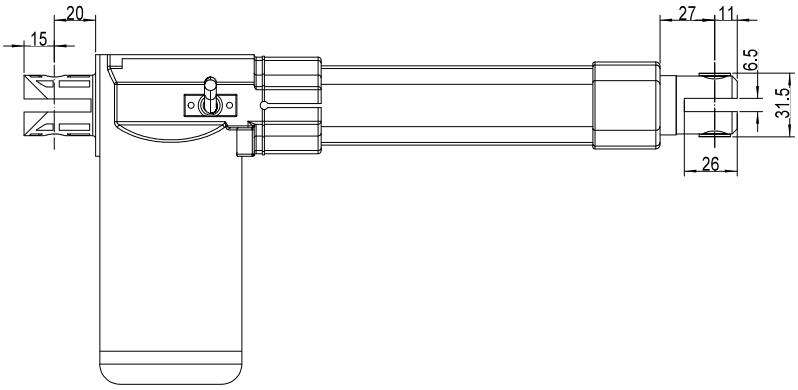
Dimensions

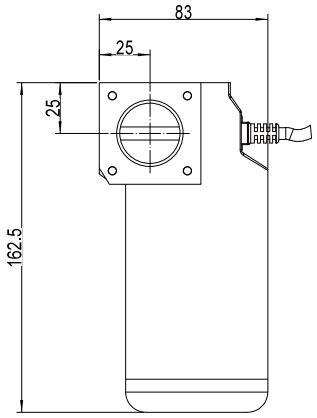
Front clevis A, end clevis D

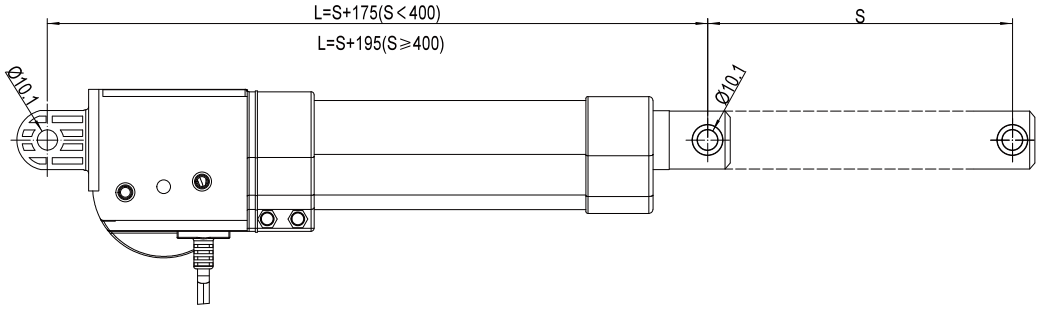




Front clevis D, end clevis D







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	4	8000	/	6000	6.7/3.3	≦8
29	4	8000	/	6000	8/4	≦8
24	3	8000	/	8000	4.2/2.2	≦7.5
29	3	8000	/	8000	5/2.6	≦7.5
24	4	8000	/	8000	5/3	≦7.5
29	4	8000	/	8000	6/3.6	≦7.5
24	3	8000	/	6000	4.6/3.3	≦7
29	3	8000	/	6000	5.5/4	≦7
24	4	6000	/	6000	6.3/3.5	≦6.5
29	4	6000	/	6000	7.5/4.2	≦6.5
24	5	6000	/	4000	8.3/5	≦7
29	5	6000	/	4000	10/6	≦7
24	5	6000	/	6000	6.6/4	≤5.5
29	5	6000	/	6000	8/4.8	≤5.5
24	3	6000	/	6000	5/3.3	≦7.5
29	3	6000	/	6000	6/3.9	≦7.5
24	4	6000	4000	6000	5.6/3.3	≤5.5
29	4	6000	4000	6000	6.7/4	≤5.5
24	5	4000	4000	4000	8.3/6	≤7
29	5	4000	4000	4000	10/7.2	≤7
24	5	4000	4000	4000	6.8/4	≤4
29	5	4000	4000	4000	8.2/4.8	≤4
24	5	3000	3000	2000	13.3/9	≤5.3
29	5	3000	3000	2000	16/10.8	≤5.3
24	7.5	3000	3000	3000	10/6	≤4.5
29	7.5	3000	3000	3000	12/7.2	≤4.5
24	5	2000	2000	2000	13.3/9	≤4.5
29	5	2000	2000	2000	16/10.8	≤4.5

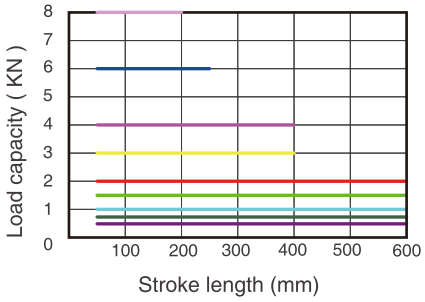
Remarks: It can achieve better self-locking ability with Jiecang control box;
The above data is the standard value of the test data (inspection specification) at room temperature of 25°C.

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	2000	2000	1500	20.8/13	≤5.3
29	7.5	2000	2000	1500	25/15.6	≤5.3
24	7.5	1500	1500	1500	20.8/15	≤4.5
29	7.5	1500	1500	1500	25/18	≤4.5
24	12	1000	1000	800	33.3/22	≤4
29	12	1000	1000	800	40/26.4	≤4
24	16	500	500	500	44.2/25	≤4
29	16	500	500	500	53/30	≤4
12	4	6000	4000	6000	5/3	≤11
12	5	4000	4000	4000	6.5/4	≤7
12	7.5	3000	3000	3000	10/6	≤8
12	5	2000	2000	2000	13/9	≤8
12	7.5	2000	2000	1500	20/13	≤8
12	7.5	1500	1500	1500	20/13	≤8
12	12	1000	1000	800	30/22	≤7
12	16	500	500	500	40/25	≤11
24	4	6000	4000	6000	8.5/6	≦8
24	5	4000	4000	4000	12/7	≦7.5
24	5	2000	2000	2000	22/18	≦8
24	7.5	2000	2000	1500	32/22	≦8
24	12	1000	1000	800	58/33	≦9
24	16	500	500	500	75/55	≦7
12	5	4000	4000	4000	12/10	≦14
12	5	2000	2000	2000	23/13	≦18
12	7.5	2000	2000	1500	32/22	≦15
12	12	1000	1000	800	58/42	≦15
12	16	750	750	500	65/55	≦15
12	16	500	500	500	65/55	≦15

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

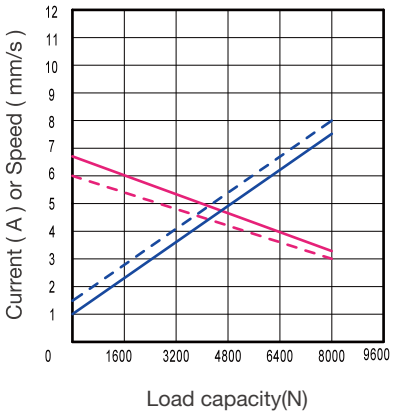


Characteristic Curve

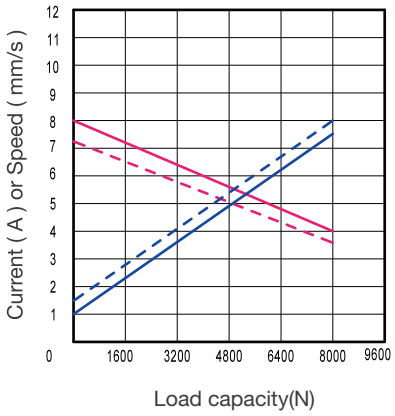
Typical speed
Min. speed
Typical current
Max. current

8000N

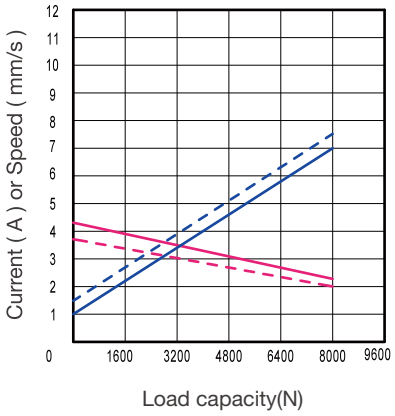
24V



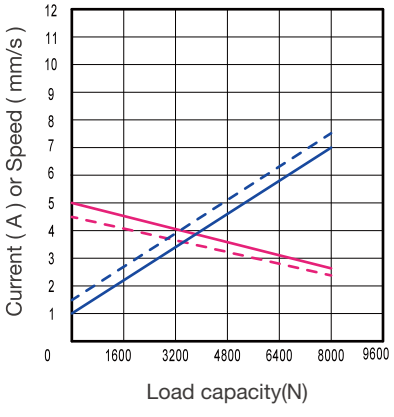
29V



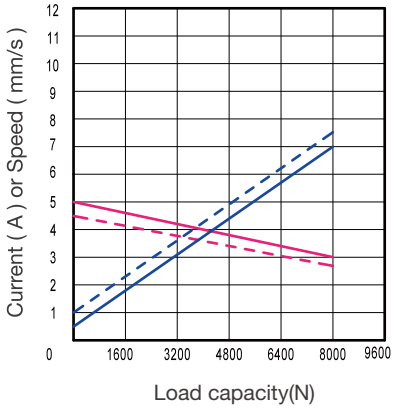
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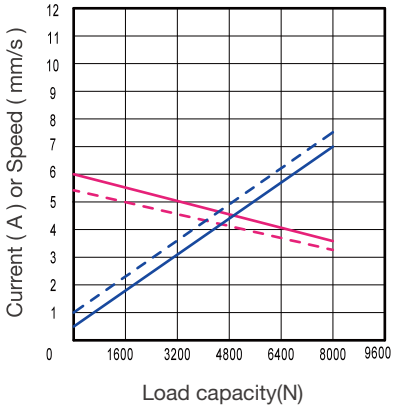
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24V

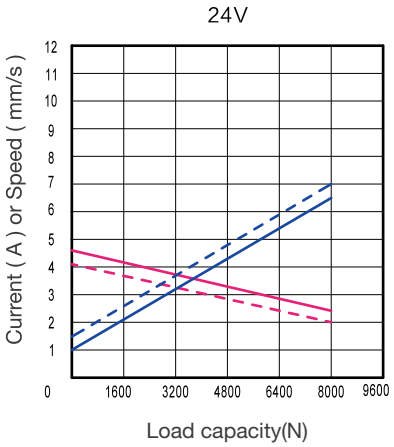


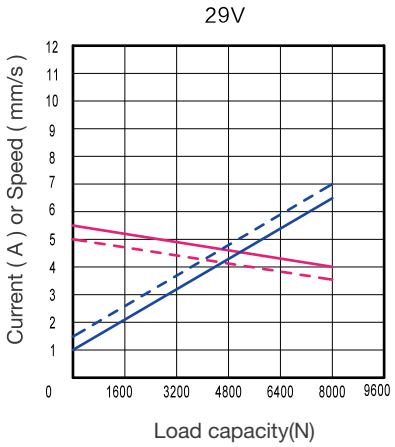
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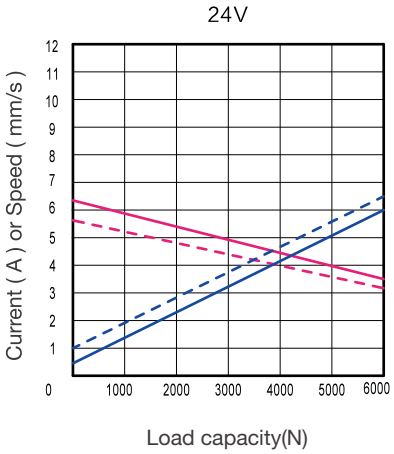
Typical speed
Min. speed
Typical current
Max. current

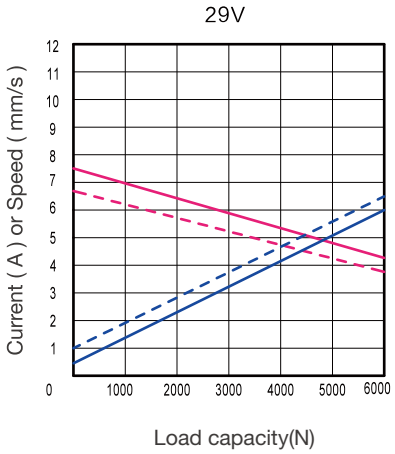
8000N

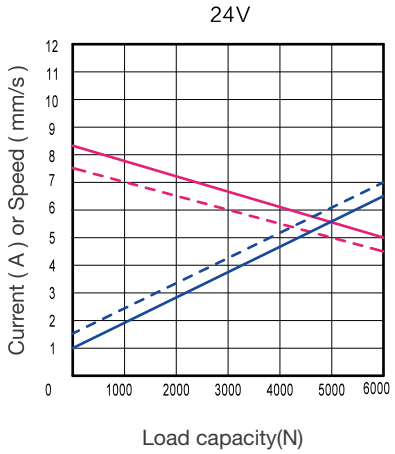


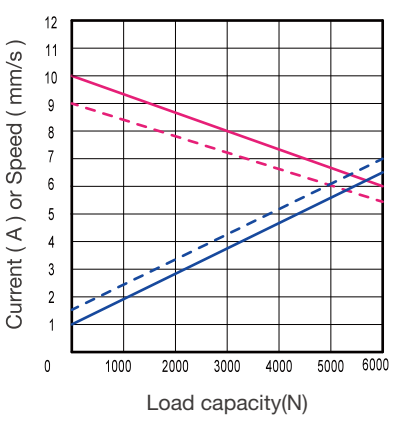


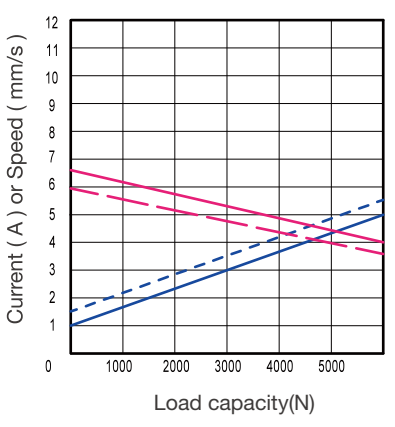
6000N

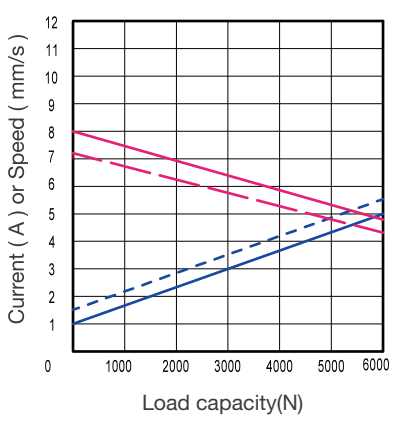








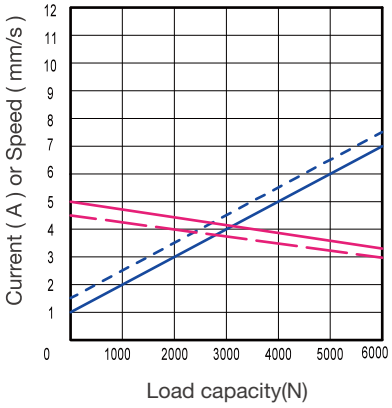




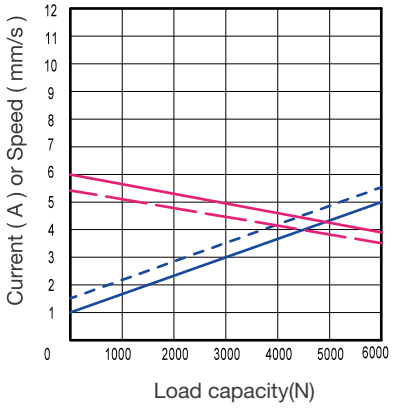
Typical speed
Min. speed
Typical current
Max. current

6000N

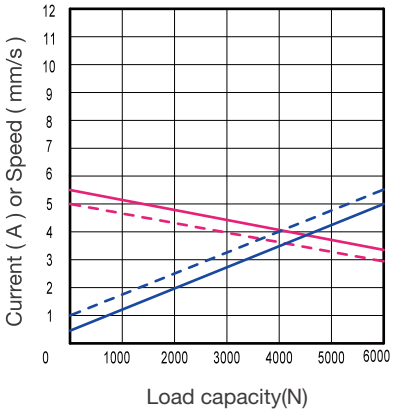
24V



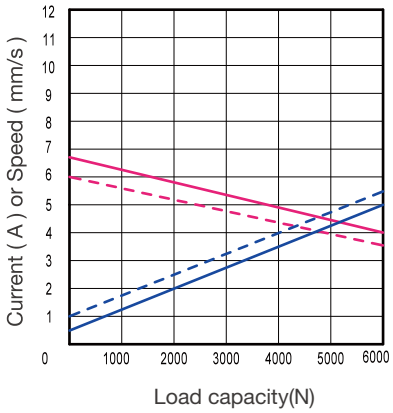
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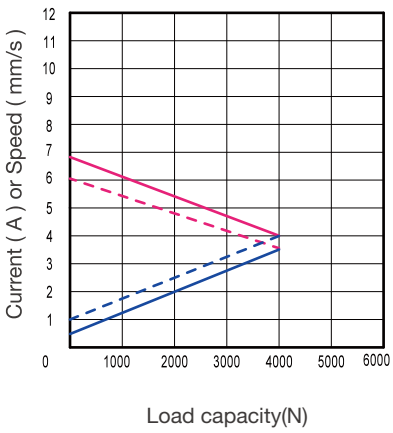


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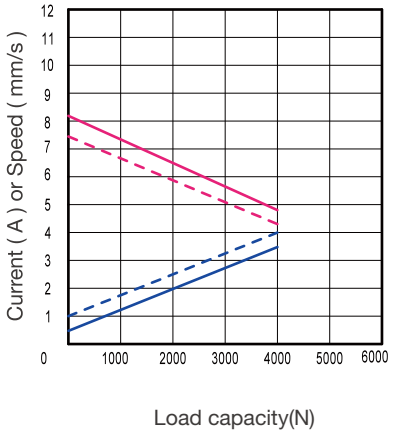


4000N

24V



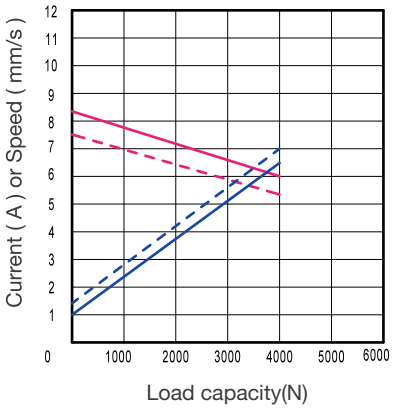
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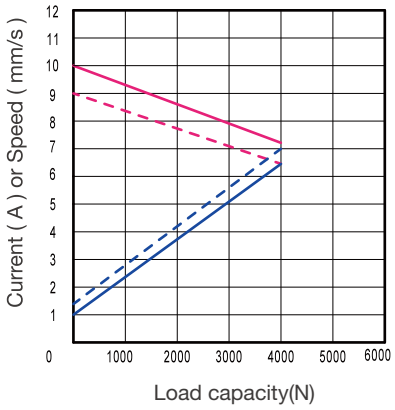
Typical speed
Min. speed
Typical current
Max. current

4000N

24V

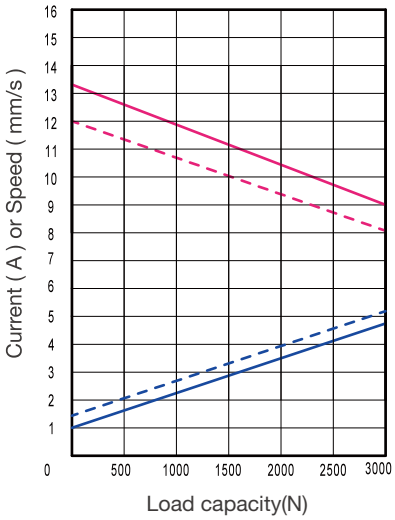


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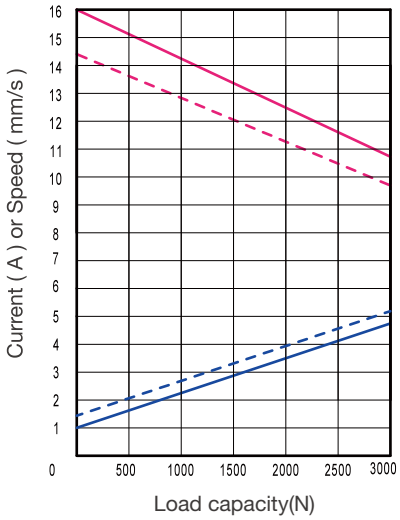


3000N

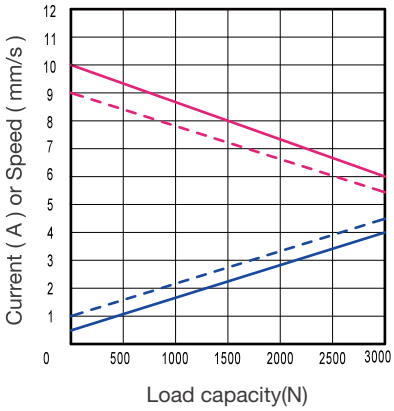
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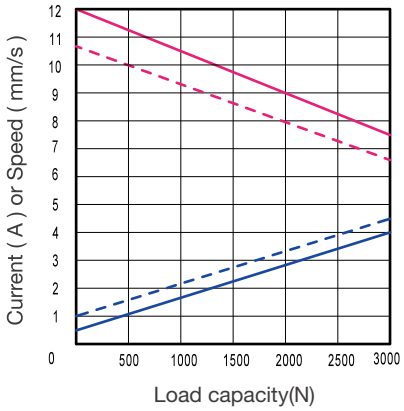
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24V



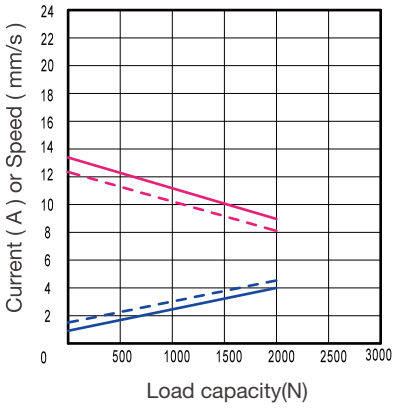
29V



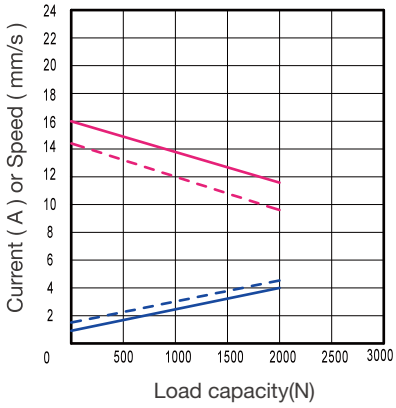
Typical speed
Min. speed
Typical current
Max. current

2000N

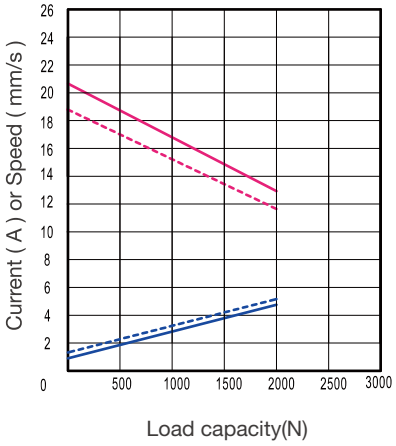
24V



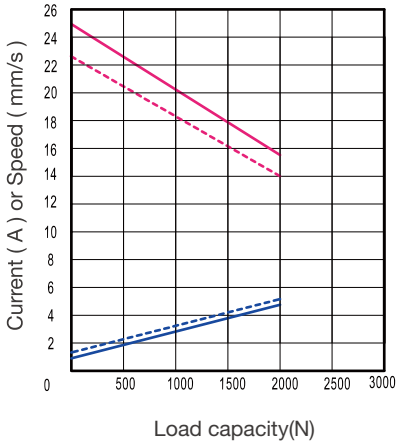
29V



24V

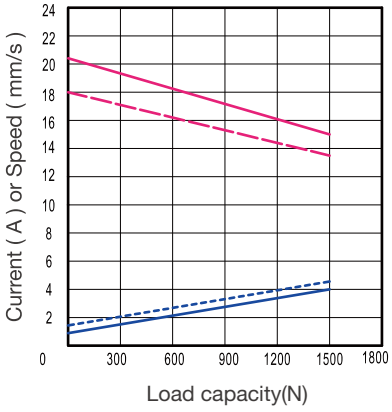


29V

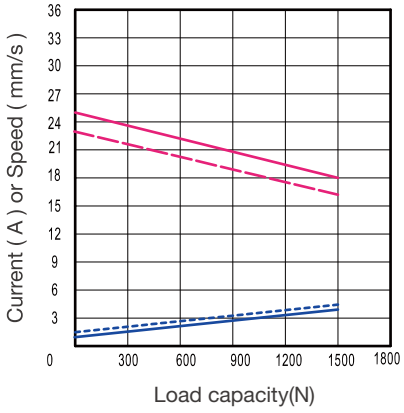


1500N

24V



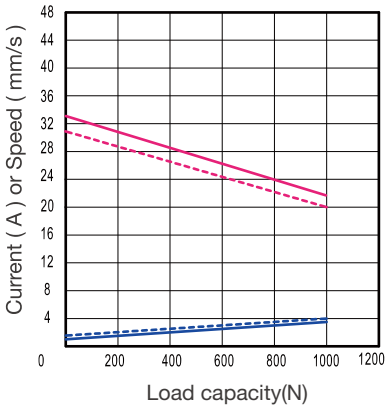
29V



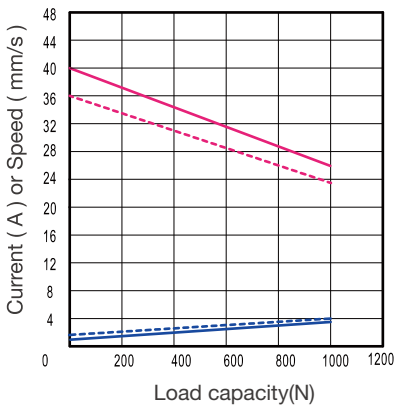
Typical speed
Min. speed
Typical current
Max. current

1000N

24V

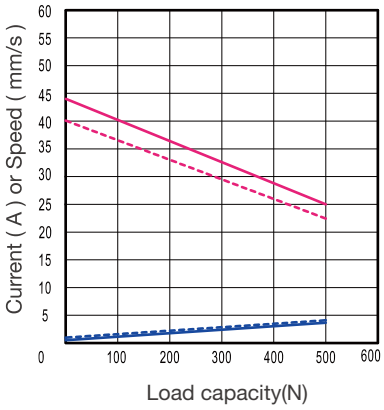


29V

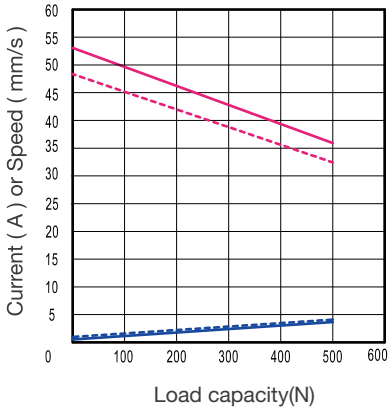


500N

24V

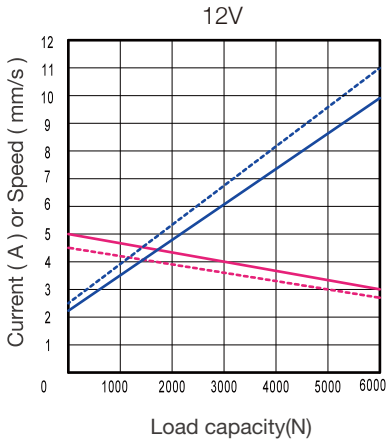


29V

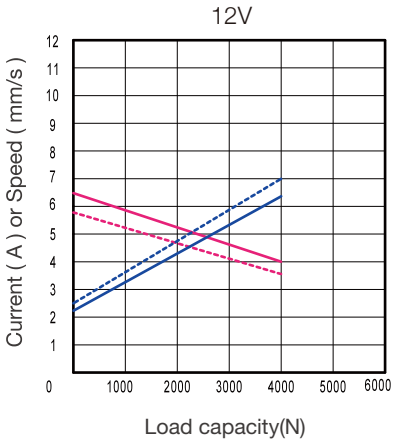


Typical speed
Min. speed
Typical current
Max. current

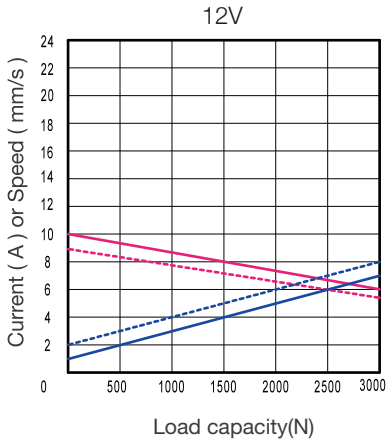
6000N



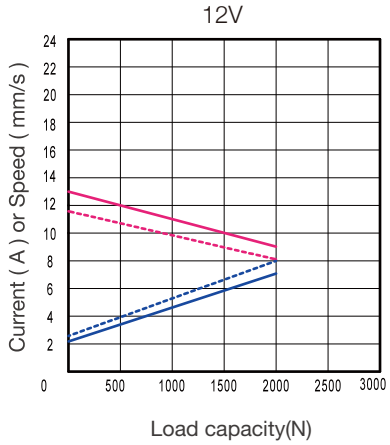
4000N



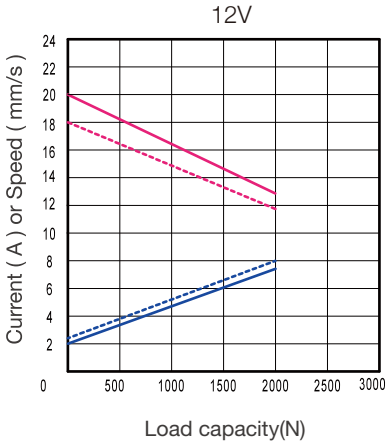
3000N



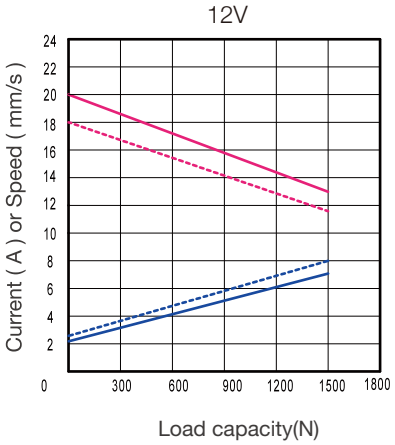
2000N



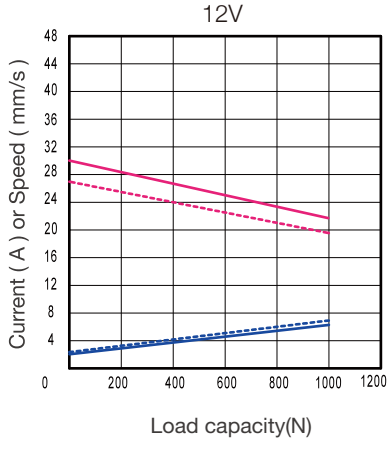
2000N



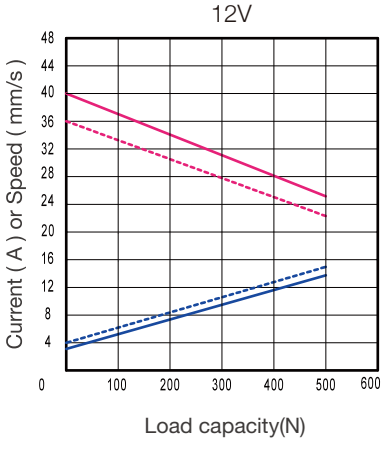
1500N



1000N

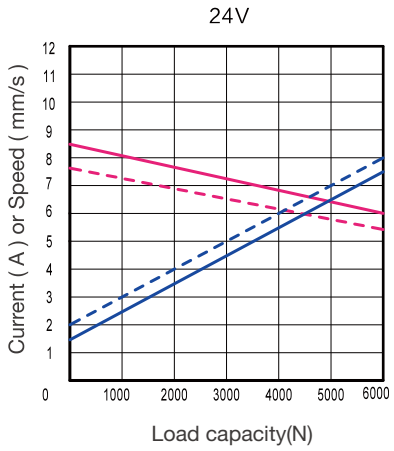


500N

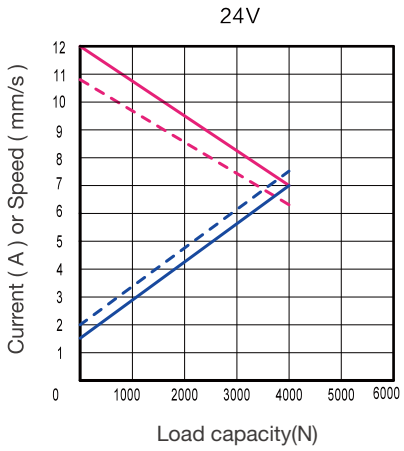


Typical speed
Min. speed
Typical current
Max. current

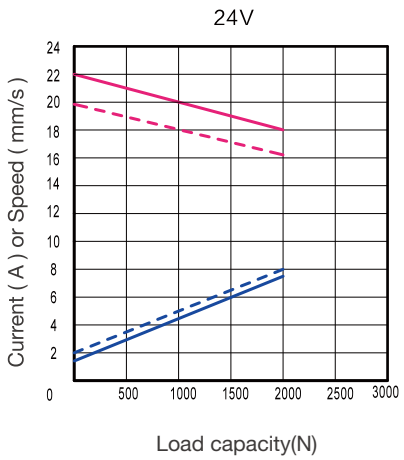
6000N



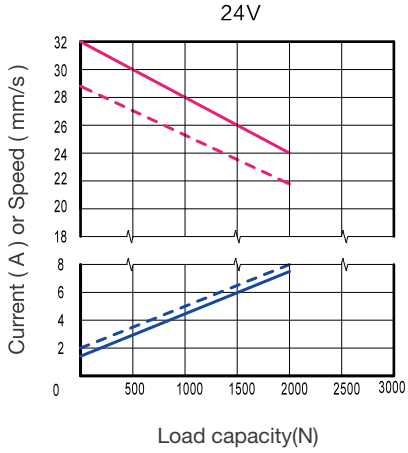
4000N



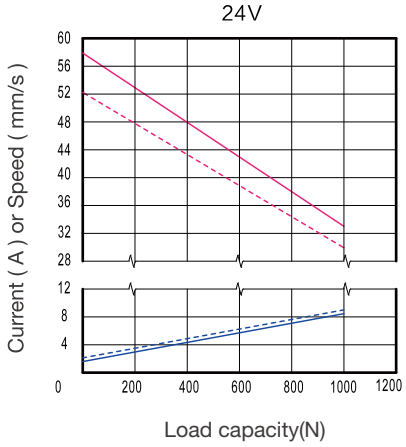
2000N



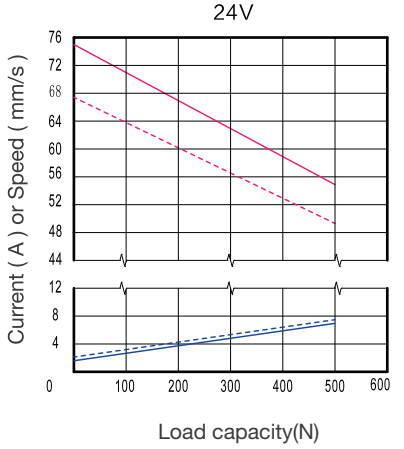
2000N



1000N



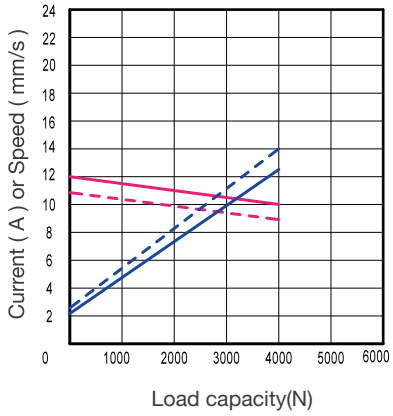
500N



Typical speed
Min. speed
Typical current
Max. current

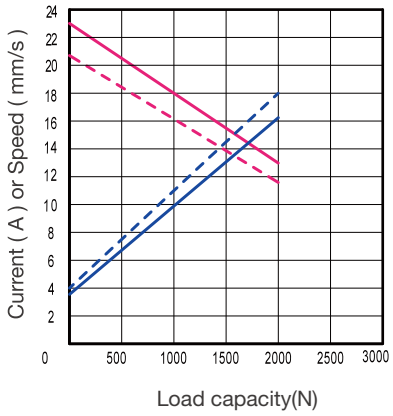
4000N

12V



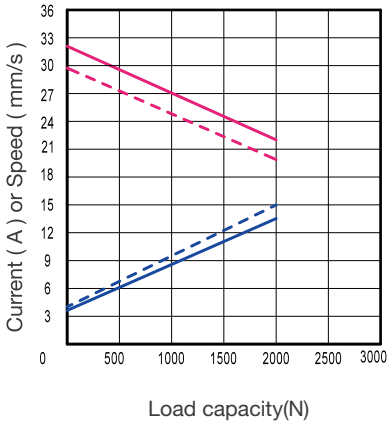
2000N

12V



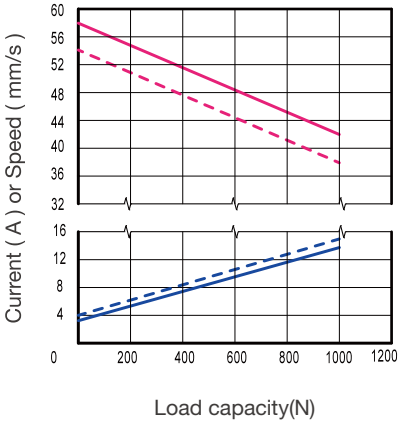
2000N

12V



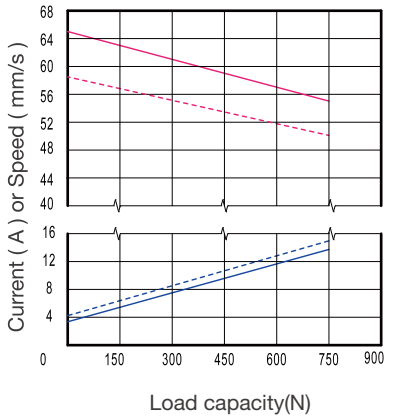
1000N

12V



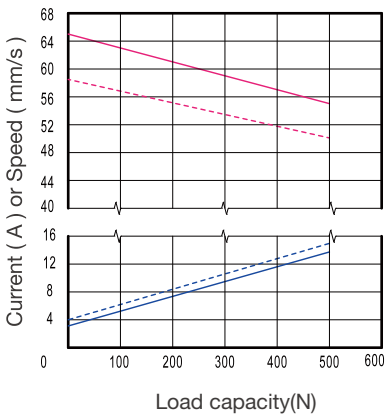
750N

12V



500N

12V



Ordering Key

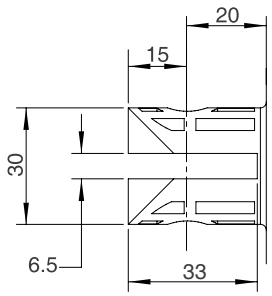
Take **JC35DN06324150/325HGDZD2022D0** as an example

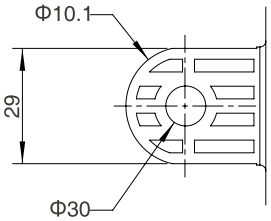
Model	**JC35DN**	
Optional features	**X**	0 = Standard / P = Only push / Y = Hall sensor / R = Reed switch
Load in push	**X**	8=8000N / 6=6000N / 4=4000N / 3=3000N / 2=2000N 1D5=1500N / 1=1000N / 0D75=750N / 0D5=500N
Speed at full load	**X**	2D2=2.2mm/s, 3=3mm/s, 3D3=3.3mm/s 3D5=3.5mm/s, 4=4mm/s, 5=5mm/s 6=6mm/s, 7=7mm/s, 9=9mm/s 10=10mm/s, 13=13mm/s, 18=18mm/s 22=22mm/s, 25=25mm/s, 33=33mm/s 42=42mm/s, 55=55mm/s
Input voltage	**XX**	24 = 24 VDC
Stroke length/ Installation dimension	**XXX/XXX**	Stroke length=XXX Installation dimensions =XXX
Clevis directions	**X**	H=horizontal V=vertical (to motor direction)
Colour	**X**	G=Gray / B=Black
End clevis specification	**X**	D = Slot 6.5, hole diameterΦ10.1
End clevis material	**X**	Z = Zinc Aluminum alloy
Front clevis specification	**X**	A = Without slot, hole 10.1 with bushing D = Slot 6.5, hole 10.1 with bushing
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

Ordering Details

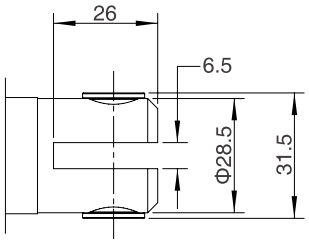
Dimensions of clevis

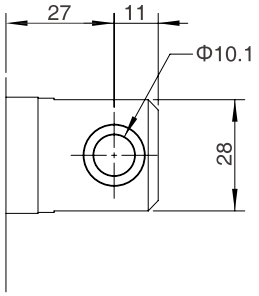
End clevis: D



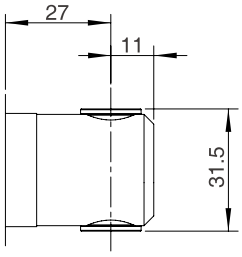


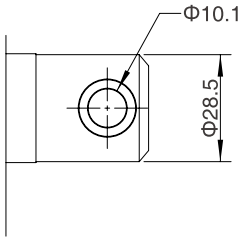
Front clevis: D





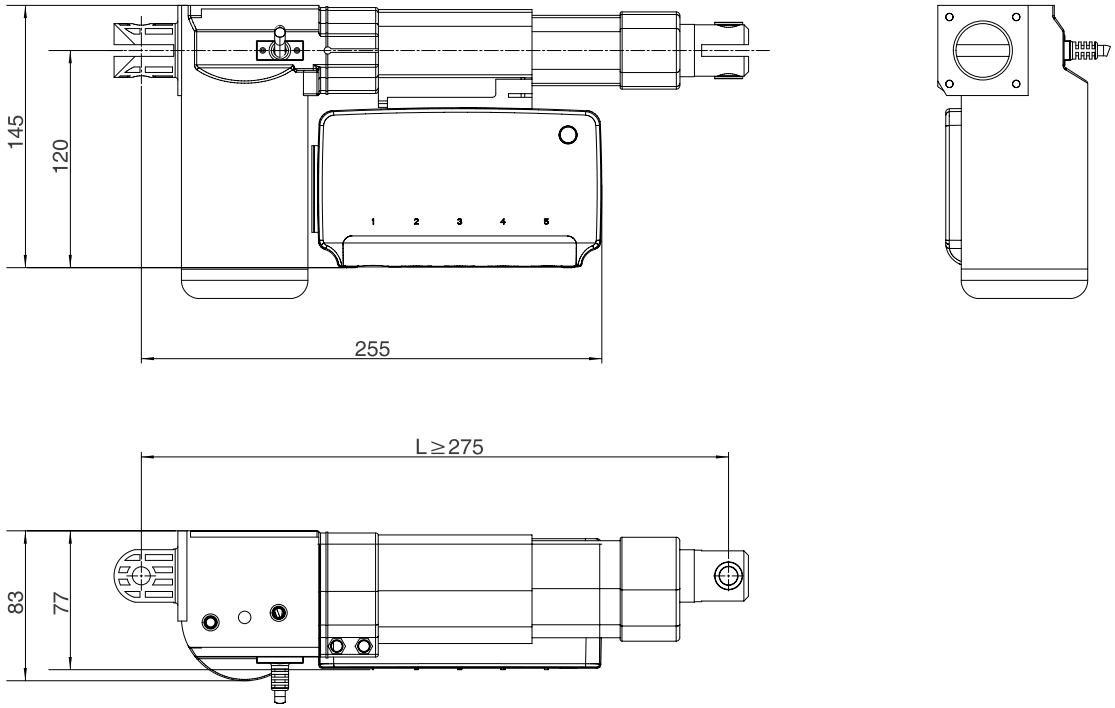
Front clevis: A





Dimensions of JC35DN with control box

JCB35Q installing with JC35DN



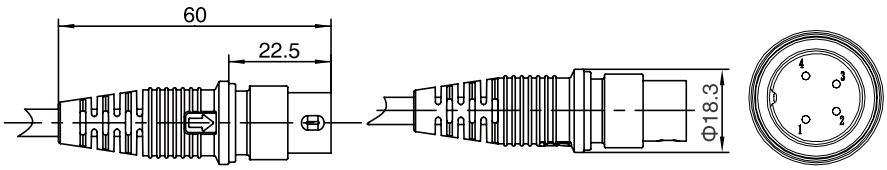
Motor cable

4 Pin Din connector (standard)

Supporting control boxes:
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



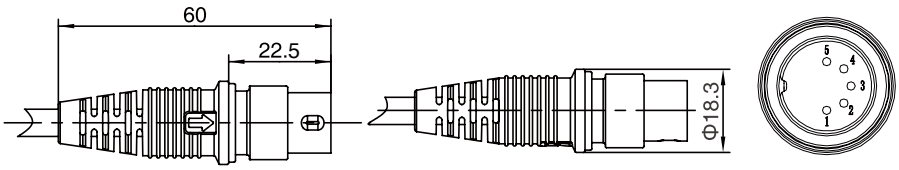


5 Pin DIN connector (with Hall sensor)

Supporting control boxes:
JCB35T / JCB35R / JCB35R1 / JCB35S

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