## JC35L10 Linear Actuator

## Application field - Medical Line

Preferably in medical bed, nursing bed, operating bed and other fields.

JC35I10 is a kind of actuator with quick release function, which can realize CPR function of medical bed and help patients quickly return to the flat position. At the same time, it has low noise and its IP54 grade meets the medical standard. It has the following models: JC35L10-4000N (push); JC35L10-3000N (push);

## General Features

| Load in push ( N ): | 4000 \| 3000 |
| :---: | :---: |
| Motor rated voltage Input (VDC): | 24 |
| Stroke length: | 4000N: $50-400 \mathrm{~mm}$ (in steps of 4 mm ) |
|  | 3000N: 50-400mm (in steps of 4mm) |
| Installation dimensions (mm): | L=225 (S 550) |
|  | $\mathrm{L}=\mathrm{S}+185$ (50<S 5400 ) |
| Colour: | Grey (RAL 7035) |
| Limit switch: | Built-in (electrical) |
| Weight: | About 1.5 kg |
|  | (different stroke length and installation dimensions with different weight ) |
| Noise level: | $\leq 48 \mathrm{~dB}$ (environmental noise $\leq 40 \mathrm{~dB}$ ) |
| Static bending moment: | Lateral load is not allowed |
| Duty cycle: | $10 \%$, max. 2 min. continuous use |
| Max IP grade: | IPX54 |
| Options: | Safety nut, Hall sensor, Only push |
| 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 |

TECHNOLOGY

## Dimension Drawing



## Technical parameters

| Power <br> voltage <br> (VDC) | Spindle <br> pitch <br> $(\mathrm{mm})$ | Max.Load <br> capacity <br> $(\mathbf{N})$ | Self <br> locking <br> $(\mathbf{N})$ | Speed <br> no load <br> $(\mathrm{mm} / \mathrm{s})$ | Speed <br> full load <br> $(\mathrm{mm} / \mathrm{s})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 24 | 5 | 4000 | 4000 | 6.5 | Current <br> full load <br> (A) |
| 29 | 5 | 4000 | 4000 | 8 | 6.2 |
| 36 | 5 | 4000 | 4000 | 10.5 | 8.5 |
| 24 | 6 | 3000 | 3000 | 8 | 7 |

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

## Stroke length versus load



## Characteristic

| Typical speed | - |
| ---: | :--- |
| Min. speed | ---- |
| Typical current | - |
| Max. current | ---- |

3000N


## 4000N



## Ordering Key

Take JC35L1003724200/385HGDZK2022DO for example

| Model | JC35L10 |  |
| :---: | :---: | :---: |
| Optional features | 0 | $P=$ Only push / S = Safety nut $/ \mathrm{Y}=$ Hall sensor <br> PY = Only push + Hall sensor |
| Load in push | 3 | $4=4000 \mathrm{~N} / 3=3000 \mathrm{~N}$ |
| Speed at full load | 7 | $\begin{aligned} & 5=5 \mathrm{~mm} / \mathrm{s} \\ & 7 \mathrm{D} 5=7.5 \mathrm{~mm} / \mathrm{s} \end{aligned}$ |
| Input voltage | 24 | $24=24 \mathrm{VDC}$ |
| Stroke length/ Installation dimension | 200/385 | $\begin{aligned} & \text { Stroke length }=\text { XXX } \\ & \text { Retracted length }=\text { XXX } \end{aligned}$ |
| Clevis directions | H | $\mathrm{H}=\mathrm{H}$ direction $/ \mathrm{V}=\mathrm{V}$ direction |
| Color | G | $\mathrm{G}=\mathrm{Grey}$ (RAL7035) |
| End clevis specification | D | $\mathrm{D}=$ slot 6.5 , slot depth 32 , hole diameterФ10.1 |
| End clevis material | Z | Z = Zinc aluminum alloy |
| Top clevis specification | K | $\mathrm{K}=$ Without top clevis, hole diameterФ10.1 |
| Brake specification | 2 | $2=$ Right brake |
| Type of plug and cable | 02 | $02=4$ pin DIN plug and 2 pin straight cable <br> $10=5$ pin DIN plug and 6 pin straight cable <br> $21=6$ pin ET waterproof bending plug 6pin straight cable |
| Cable length | 2D0 | $\mathrm{OD} 5=0.5 \mathrm{~m} / 1 \mathrm{D} 5=1.5 \mathrm{~m} / 2 \mathrm{DO}=2 \mathrm{~m}$ |

## Ordering Details

## Dimension drawing of clevis

## End clevis



## Top clevis



## Dimensions JC35L10 with control box

## JCB35Q install on JC35L10



JCB35T install on JC35L10


JCB35T2 install on JC35L10


## 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 | 5 V |
| 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

