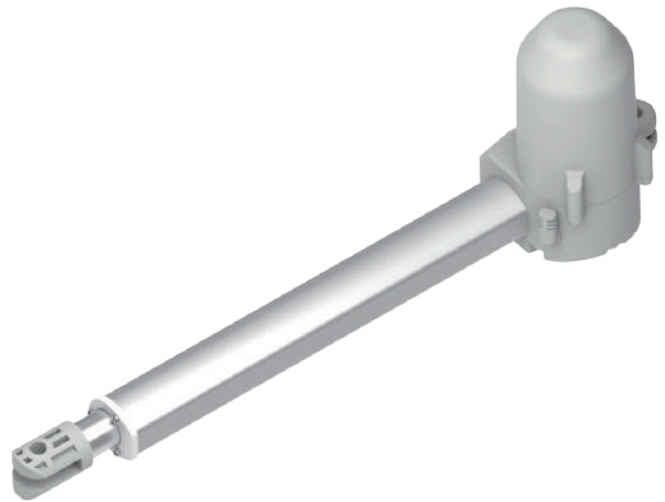


Product Data Sheet

Actuator 01NJ67

01NJ67 is an economical actuator for medical applications with the advantages of short installation dimension and small size of the motor box. It can be equipped with dual Hall sensors to feedback positioning signals. Mainly used in applications such as home care and medical beds.



Features and Options

Main applications: Medical, Home care

Standard features:

- Input voltage: 24V DC
- Max. load: 6000N (push) / 3000N (pull)
- Typical speed at full load: 2.7mm/sec (6000N load)
- Stroke: 50 ~ 300mm
- Noise level: ≤ 50 dB
- IP level: IPX5
- Aluminum alloy outer tube
- Color: Light gray RAL 7035
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Ambient operation temperature: +5°C ~ +40°C

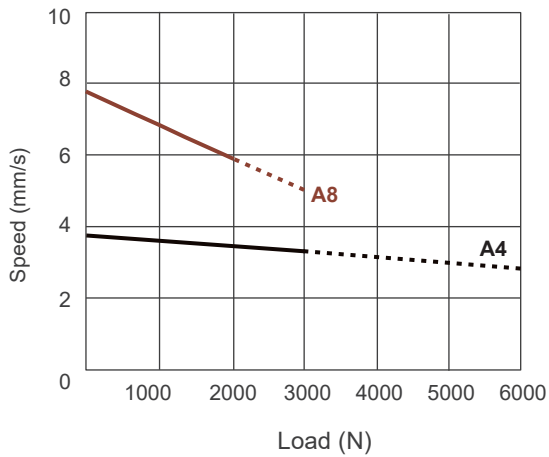
Options:

- Positioning signal feedback with dual Hall effect sensors
- Push only
- Pivot orientation of rear connector 90°

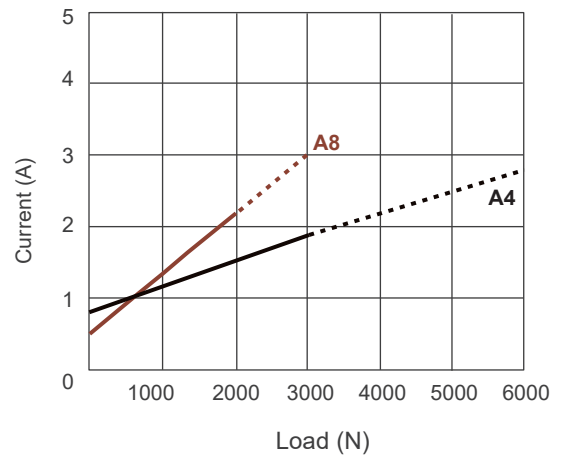
Performance Data

| Model No. | Push Max. (N) | Pull Max. (N) | *Braking ability (N) | **Typical Speed (mm/s) | | **Typical Current (A) | |
|-----------------|---------------|---------------|----------------------|------------------------|-----------|-----------------------|-----------|
| | | | | No load | Full load | No load | Full load |
| 01NJ67-24-A4... | 6000 | 3000 | 6000 | 3.8 | 2.7 | 0.8 | 2.8 |
| 01NJ67-24-A8... | 3000 | 2000 | 3000 | 7.8 | 5.2 | 0.5 | 3.0 |

Speed vs. Load



Current vs. Load



Push / Pull Load — Push Load - - -

Remarks:

* Equipped with mechanical brakes for thrust applications only.

** The typical speed and current are the average value neither upper limit nor lower limit, which measured under room temperature and stable power. The performance curves are made with typical values.

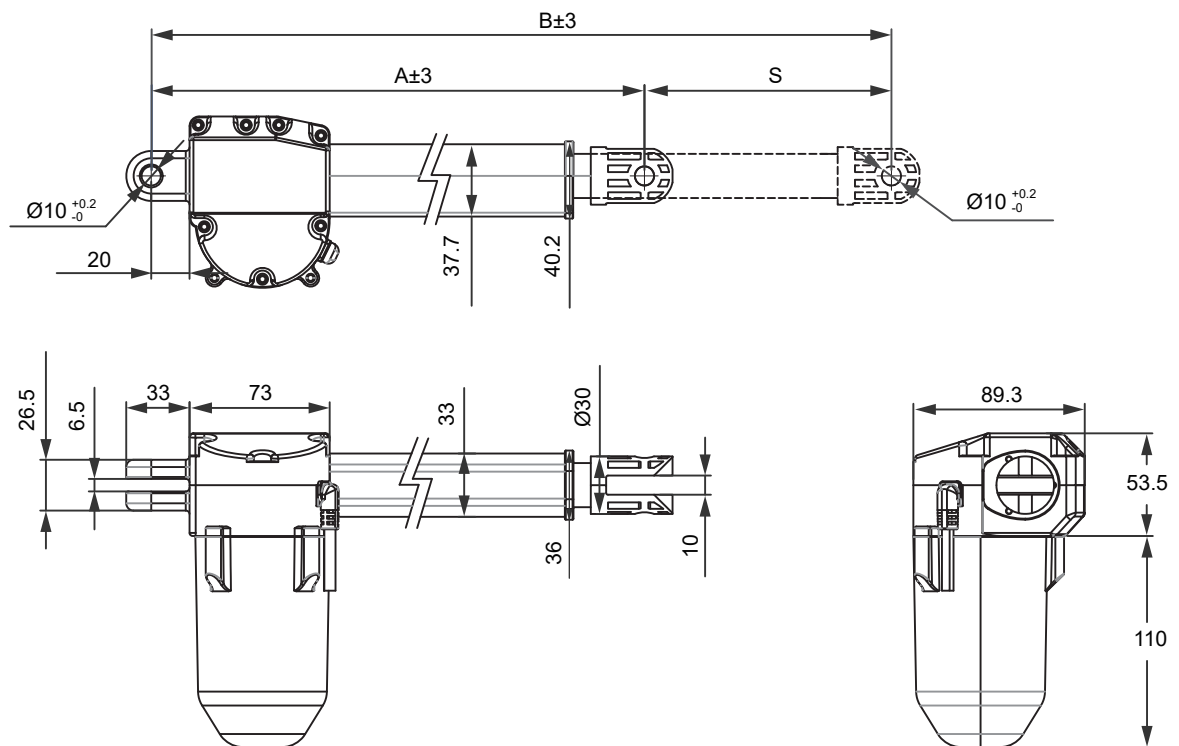
Dimensions

- Retracted length (A):

Unit: mm

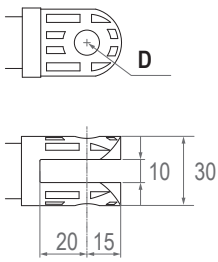
| Front connector | Retracted length(A) |
|-----------------|---------------------------|
| 1 | $A \geq S + 170\text{mm}$ |
| 3, 7 | $A \geq S + 142\text{mm}$ |

- Available stroke (S) range = 50 ~ 300 mm
- Extended length (B) = Retracted length (A) + Stroke (S)

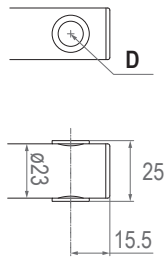


● **Front connector**

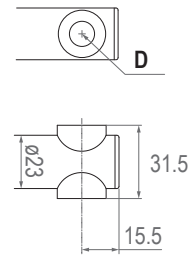
1: Plastic



3: Drilled hole with bushing

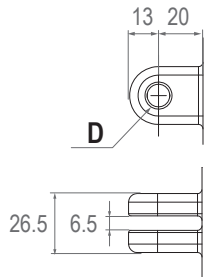


7: Plastic bushing



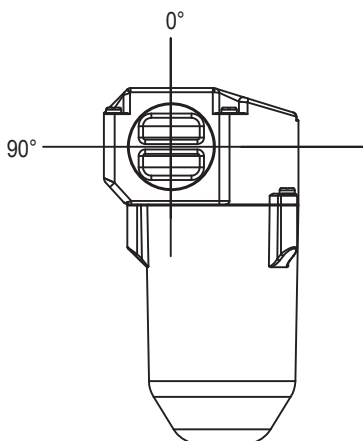
● **Rear connector**

1: Plastic



| Front connector code | Diameter of pivot (D) |
|----------------------|-----------------------|
| 1 | Ø8, Ø10, Ø12 |
| 3 | Ø8, Ø10 |
| 7 | Ø10 |
| Rear connector code | Diameter of pivot (D) |
| 1 | Ø10 |

● **Pivot orientation of rear connectors**



***Remarks:** As an example in 0° orientation for rear connector.

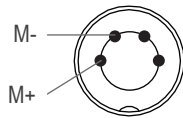
Compatibility

| Product | Model | 01NJ67 spec |
|--------------------|--------------------|---|
| Control box | 01XV4O | - Without positioning sensor feedback - With H-type 4-pin DIN plug |
| | 01XV5O-M, 01XN41-M | - With dual Hall effect sensors - With LR-type minifit 6-pin plug |
| | 01XN45, 01NS6X-M | - Without positioning sensor - With V-type or H-type 4-pin DIN plug |
| | 01NS6X-M | - With dual Hall effect sensors - With V-type or H-type 6-pin DIN plug |

Cable Plug

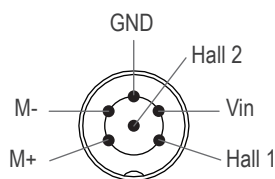
- With H-type, V-type or LR-type plug:

- Without Hall effect sensor

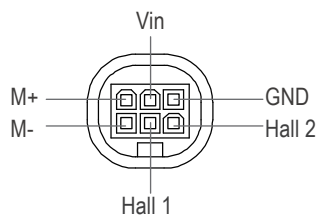


H-type or V-type 4-pin DIN plug

- With dual Hall effect sensors



H-type or V-type 6-pin DIN plug



LR-type minifit 6-pin plug



H-type



V-type




LR-type

Cable with Flying Leads

Without positioning feedback

| | Wire color | Definition | Comments |
|-------------|------------|------------|--|
| Power wires | Red | DC power | Connect red wire to "Vdc +" & black wire to "Vdc -" of DC power to extend the actuator. Switch the polarity of DC input to retract it. |
| | Black | | |

With dual Hall effect sensors for positioning

| | Wire color | Definition | Comments | | | | | | |
|-------------------------------|------------|------------------------|---|-----------|------------------------|-------------------------------|------|-------------------------------|-----|
| Power wires | Blue | DC power | Connect blue wire to "Vdc +" & Brown wire to "Vdc -" of DC power to extend the actuator. Switch the polarity of DC input to retract it. | | | | | | |
| | Brown | | | | | | | | |
| Signal wires | Yellow | Vin | Voltage input range: 5 ~ 20V | | | | | | |
| | Red | Hall 1 output | High= Input - 1.2V ($\pm 0.6V$) Low= GND Hall signal data:  | | | | | | |
| | Green | Hall 2 output | Hall effect sensor resolution: <table border="1" data-bbox="638 1142 1300 1288"> <thead> <tr> <th>Model No.</th> <th>Resolution (pulses/mm)</th> </tr> </thead> <tbody> <tr> <td>01NJ67-24-A4-XXX.XXX-XXXXXXXX</td> <td>10.0</td> </tr> <tr> <td>01NJ67-24-A8-XXX.XXX-XXXXXXXX</td> <td>2.5</td> </tr> </tbody> </table> | Model No. | Resolution (pulses/mm) | 01NJ67-24-A4-XXX.XXX-XXXXXXXX | 10.0 | 01NJ67-24-A8-XXX.XXX-XXXXXXXX | 2.5 |
| | Model No. | Resolution (pulses/mm) | | | | | | | |
| 01NJ67-24-A4-XXX.XXX-XXXXXXXX | 10.0 | | | | | | | | |
| 01NJ67-24-A8-XXX.XXX-XXXXXXXX | 2.5 | | | | | | | | |
| Black | GND | | | | | | | | |

Ordering Key

| | 01NJ67 - 24 - A4 - 220 - 270 - 1 1 0 H P 5 0 |
|--|---|
| Input voltage | 24: 24V DC |
| Motor and Spindle type | A4: 2500rpm / 4mm pitch A8: 2500rpm / 8mm pitch |
| Retracted length | XXX (Refer to Page 3) |
| Extended length | XXX (Refer to Page 3) |
| Front connector | 1: Plastic 3: Drilled hole with bushing 7: Plastic bushing |
| Rear connector | 1: Plastic |
| Pivot orientation of rear connector | 0: 0° (standard) 9: 90° |
| Positioning feedback | 0: None H: dual Hall effect sensors |
| Option | 0: None P: Push only (PO) |
| IP Level | 5: IPX5 |
| Cable length | 0: 300mm straight 3: 1000mm straight 6: 2000mm straight A: 450mm with 300mm coiled |