

Product Data Sheet

Actuator 01NS100

01NS100 is a quiet and powerful actuator up to 10,000N thrust, designed for a variety of furniture and medical care applications such as patient lifts and medical beds.



Features

- Main applications: Furniture, Medical Care
- Input voltage: 24V DC
- Max. load: 10,000N (push) / 6,000N (pull)
- Stroke: 100 ~ 600 mm
- Noise level: ≤ 52 dB
- IP Protection level: IPX4
- Rear connector's pivot orientation can be chosen in every 30 degrees.
- Preset limit switches
- Aluminum outer tube
- Stainless extension tube
- Color: Light gray RAL 7035
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Ambient operation temperature: +5°C ~ +40°C
- Certified: CE Marking, EN 60601-1-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-8, UL60601

Options

- Mechanical push only extension tube
- Safety nut (in push direction)
- QR2 quick release (Fig. 1): To retract actuator quickly by pinching the QR2 grip while emergency.
- MR3 manual release (Fig. 2): To retract actuator slowly and put down the patient safely by turning the MR3 knob with hand when losing power in the application of patient hoist.
- IPX6 Protection level

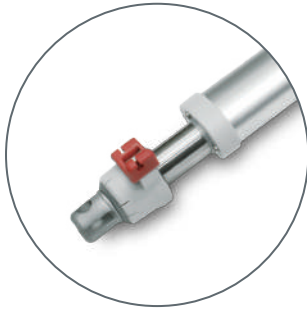


Fig. 1

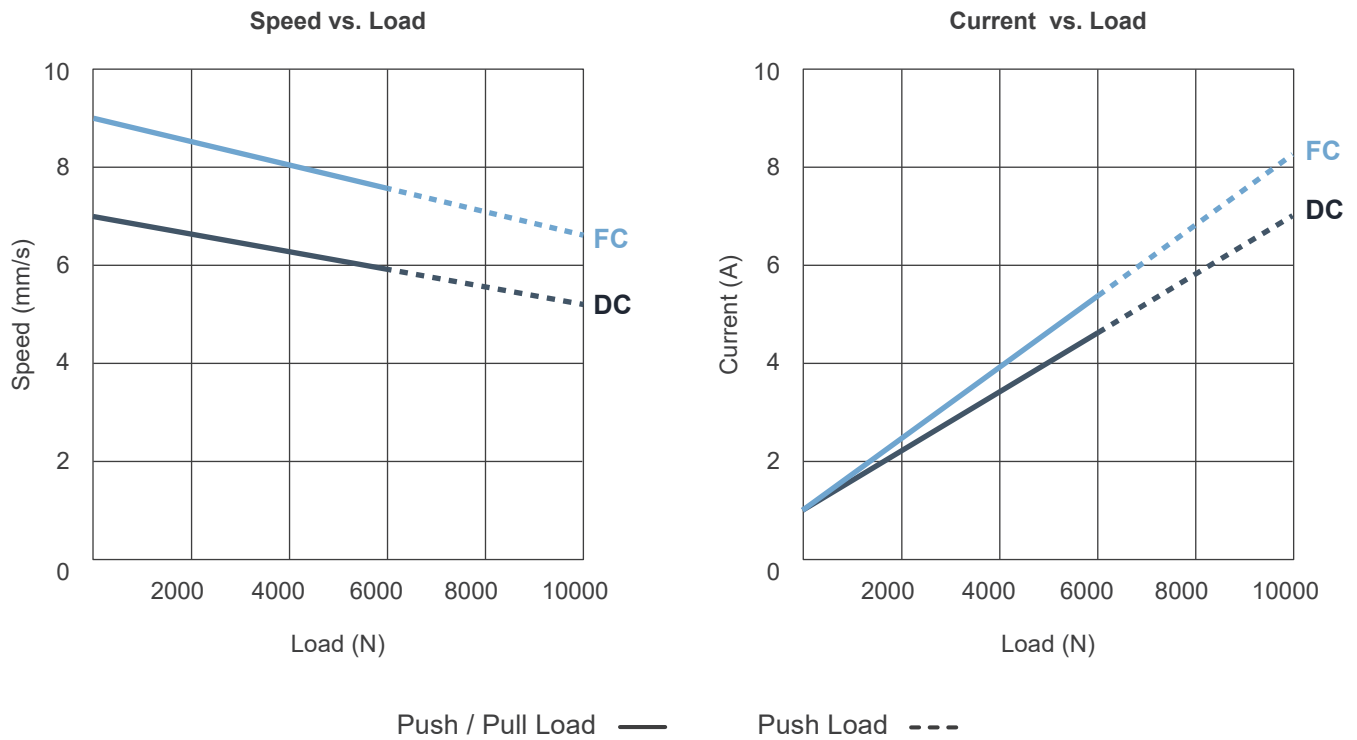


Fig.2

Performance Data

Model No.	Push Max. (N)	Pull Max. (N)	*Typical speed (mm/s)		*Typical current (A) @ 24V	
			No load	Full load	No load	Full load
01NS100-24DC-XXX.XXX-XX	10,000 ^①	6,000	7.0	5.2	1.0	7.0
01NS100-24FC-XXX.XXX-XX	10,000 ^①	6,000	9.0	6.7	1.0	8.2

Note ^①: Within the stroke range of 150 mm (refer to Table 1)



Remarks:

- * The typical speed or typical current means the average value neither upper limit nor lower limit. The performance curves are made with typical values.

Table 1 Maximum push load VS. stroke

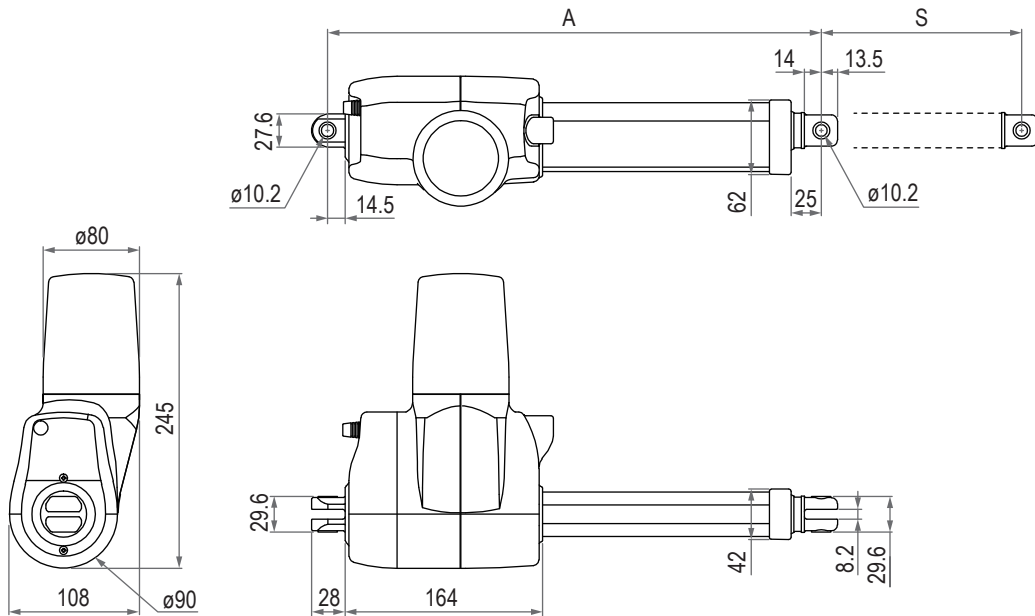
Spec of stroke (mm)	At actual stroke position (mm)					
	150	200	300	400	500	600
200	10,000	8,000	-	-	-	-
300	10,000	10,000	5,000	-	-	-
600	10,000	10,000	10,000	9,000	6,000	5,000

Unit: N

Dimensions

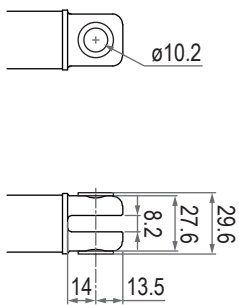
- Available stroke (S) range = 100 ~ 600 mm
- Extended length = (S) + (A)

Front connector code	Retracted length (A)
1	$A \geq S + 210\text{mm} (\pm 3\text{mm})$
M, Q	$A \geq S + 267\text{mm} (\pm 3\text{mm})$

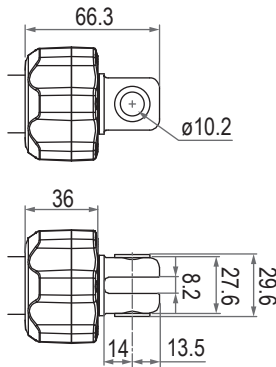


• Front connector

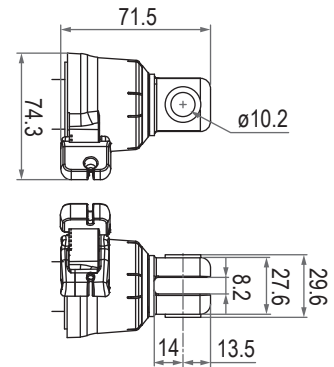
1: Zinc alloy clevis with plastic bushing



M: Zinc alloy clevis with MR3 manual release

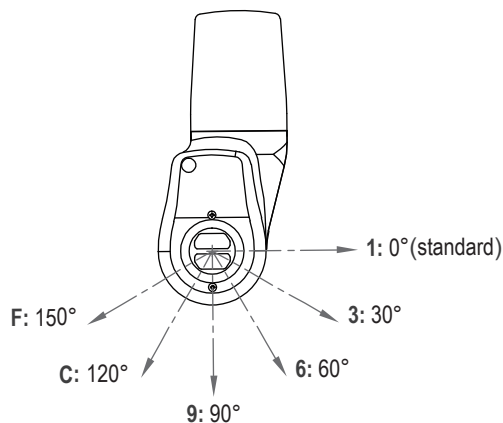


Q: Zinc alloy clevis with QR2 quick release



• Pivot orientation of rear connector

Zinc alloy clevis with plastic bushing, with following orientation options.

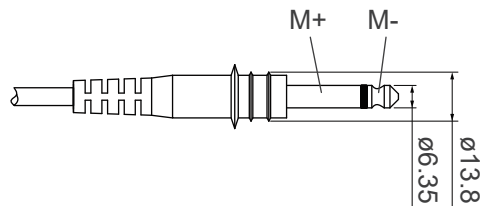


Compatibility

Product	Model	Compatible requirement
Control box	CM42	- Without positioning feedback sensors - With J1-type $\varnothing 6.35$ phone jack
	CB4P-HP, CM43	- Without positioning feedback sensors - With J2-type $\varnothing 6.35$ phone jack
	CBP2, CBP3	- Without positioning feedback sensors - With J1 or J2-type $\varnothing 6.35$ phone jack

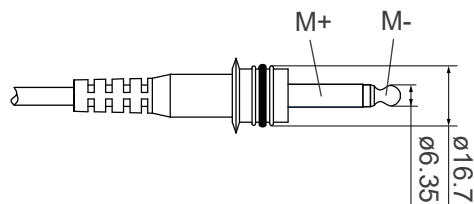
Cable Plug

J1-type phone jack



J1-type

J2-type phone jack



J2-type

Note: Connect (M+) to '+' & (M-) to '-' of DC power, the actuator will extend.

Ordering Key

01NS100 - 24 DC - 310 . 410 - 1 0 0 0 G 4 1

Input voltage	24: 24V DC
Motor and Spindle type	DC: Default motor 2600rpm, 12mm pitch FC: Fast motor 3300rpm, 12mm pitch <i>(Refer to Performance Data)</i>
Retracted length	XXX <i>(Refer to Dimensions)</i>
Extended length	XXX <i>(Refer to Dimensions)</i>
Front connector	1: Zinc alloy clevis with plastic bushing M: Zinc alloy clevis with MR3 Manual release Q: Zinc alloy clevis with QR2 Quick release <i>(MR3, QR2 must with options of Push only and Safety nut)</i>
Pivot orientation of Rear connector	Zinc alloy clevis with plastic bushing, with following orientation options 1: 0° 3: 30° 6: 60° 9: 90° C: 120° F: 150°
Option	0: None S: Safety nut P: Push only + Safety nut
Reserved	0: No meaning
Color	G: Light gray RAL 7035
IP Protection level	4: IPX4 (Standard) 6: IPX6
Cable length	1: 300 mm straight 2: 1000 mm straight 3: 400 mm coiled