

Product Data Sheet

Actuator 01NS51

01NS51 is a compact and powerful actuator up to 3500N thrust, which is designed for the use in furniture and homecare application. It's an ideal solution for applications that require limited installation space. There are plastic casings providing IP protection.



Feature

- Main applications: Furniture, homecare
- Input voltage: 24V DC
- Max. load: 3500N (push) / 2000N (pull)
- Max. speed at no load: 11.4 mm/sec
- Max. speed at full load: 3.8 mm/sec @ 3500N
- Stroke: 100 ~ 600 mm
- Noise level: ≤ 65 dB
- IP Protection level: IP66
- Color: Black
- Present limit switches
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Ambient operation temperature: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$
- Certified: CE Marking, Medical Device Directive (MDD) 93/42/EEC

Option

- Mechanical push only extension tube

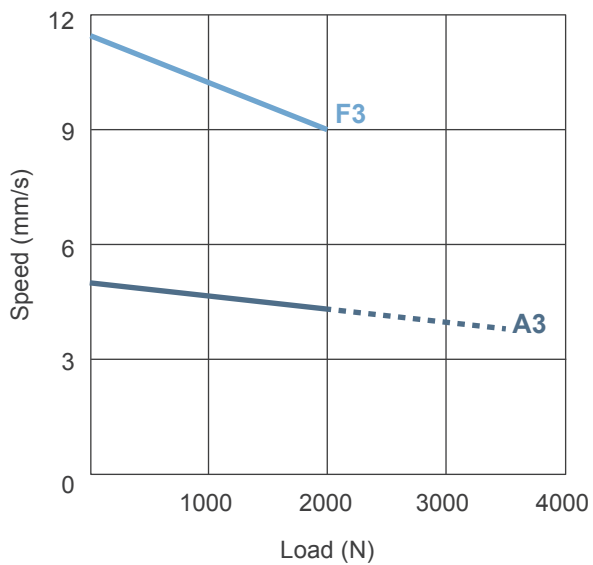
Compatibility

Product	Model	MD51 spec
Control box	01XV3R	With F-type DIN plug

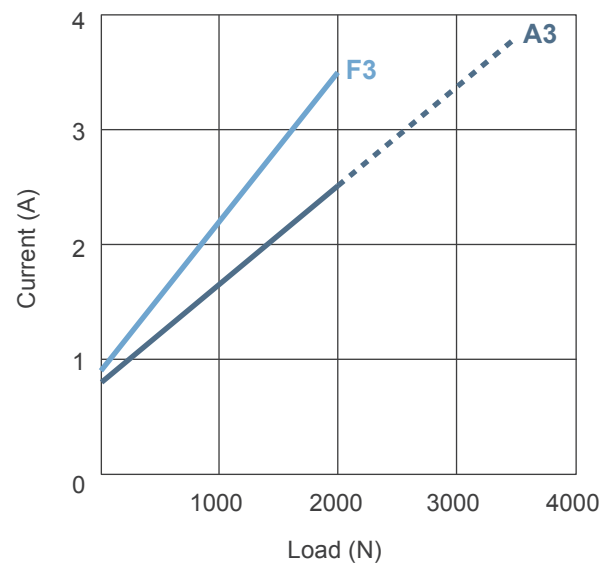
Performance Data

Model No.	Push Max. (N)	Pull Max. (N)	Typical speed (mm/s)		Typical current (A) @ 24V	
			No load	Full load	No load	Full load
01NS51-24-A3-XXX.XXX-CXX-XXXX	3500	2000	5.0	3.8	0.8	3.8
01NS51-24-F3-XXX.XXX-CXX-XXXX	2000	2000	11.4	9.0	0.9	3.5

Speed vs. Load



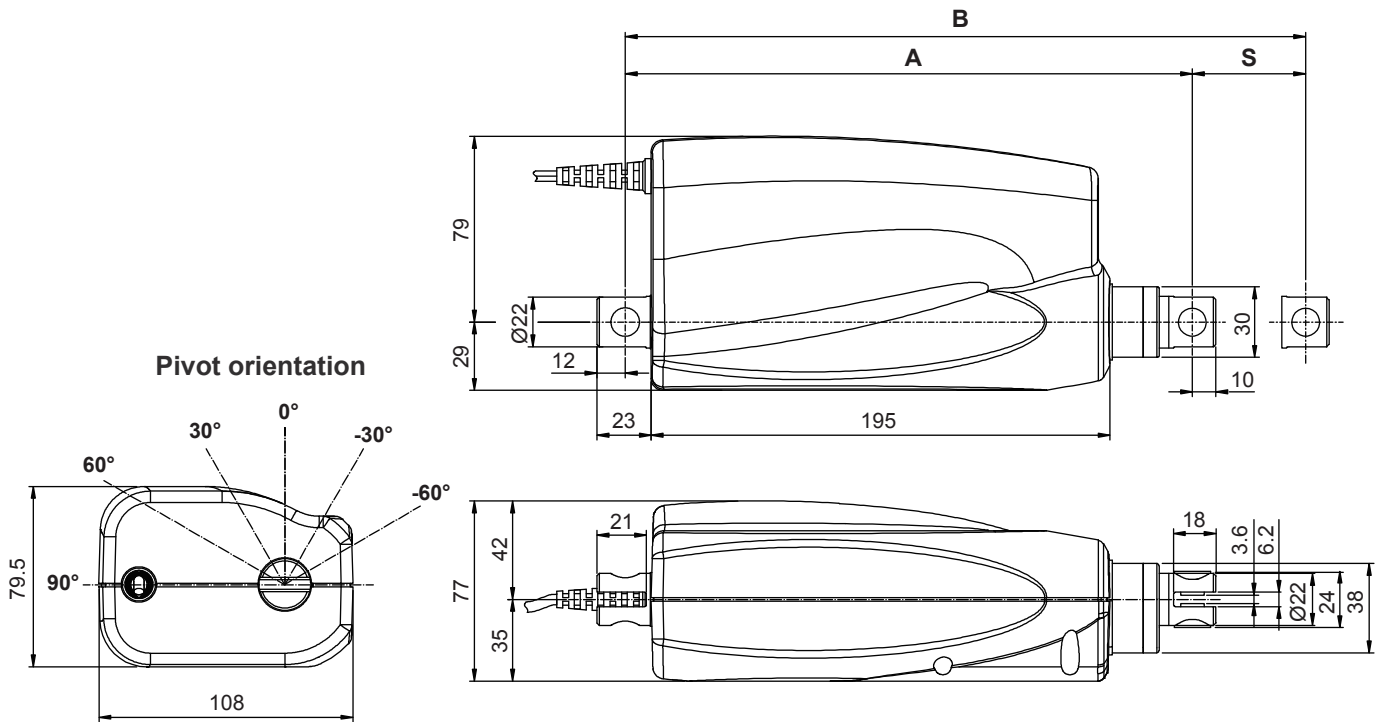
Current vs. Load



Push / Pull Load —

Push Load - - -

Dimensions



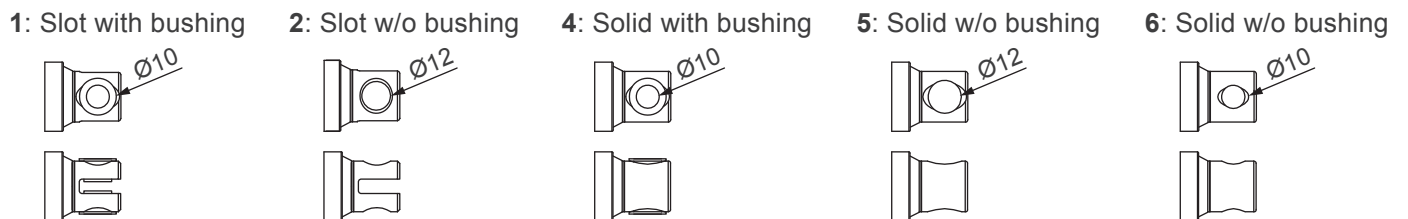
Installation Dimensions

Stroke (S)	Retracted length (A)
≤ 300 mm	$A \geq S + 141$ mm (± 3 mm)
> 300 mm	$A \geq S + 160$ mm (± 3 mm)

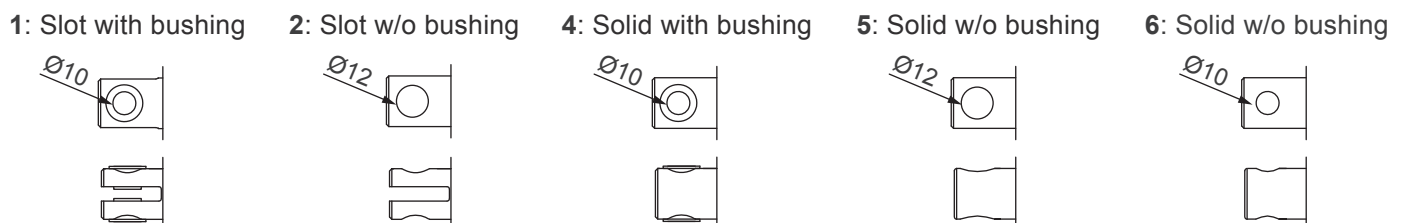
Available stroke (S) range = 100 ~ 600 mm

Extended length (B) = S + A

Front Connector

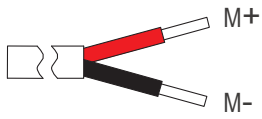


Rear Connector



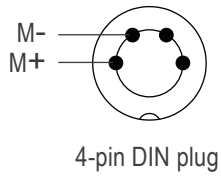
Wiring & Cable Plug

2 wires without jacket



F-type DIN plug to connect to control box -

Without positioning sensor feedback



4-pin DIN plug

Note:

Connect Pin (M+) to “+” & Pin (M-) to “-” of DC power, the actuator will extend.



Ordering Key

01NS51 - 24 - A3 - 341 - 541 - C 1 1 - P 1 1 1

Input voltage	24: 24V DC
Motor and Spindle type	A3: Standard version F3: Fast version (Refer to Performance Data)
Retracted length	XXX (Refer to Dimensions)
Extended length	XXX (Refer to Dimensions)
Front connector	<ul style="list-style-type: none"> 1: Slot with bushing, Ø10 mm 2: Slot w/o bushing, Ø12 mm 4: Solid with bushing, Ø10 mm 5: Solid w/o bushing, Ø12 mm 6: Solid w/o bushing, Ø10 mm (Refer to Dimensions)
Rear connector	<ul style="list-style-type: none"> 1: Slot with bushing, Ø10 mm 2: Slot w/o bushing, Ø12 mm 4: Solid with bushing, Ø10 mm 5: Solid w/o bushing, Ø12 mm 6: Solid w/o bushing, Ø10 mm (Refer to Dimensions)
Option	<ul style="list-style-type: none"> 0: None P: Push only
Pivot orientation of rear connector	<ul style="list-style-type: none"> <li style="width: 33%;">1: 0° (standard) <li style="width: 33%;">2: 30° <li style="width: 33%;">3: 60° <li style="width: 33%;">4: 90° <li style="width: 33%;">5: -30° <li style="width: 33%;">6: -60°
Cable length	<ul style="list-style-type: none"> 1: 300 mm straight 2: 1000 mm straight
Cable type	<ul style="list-style-type: none"> 1: 2 wires without jacket 2: F-type DIN plug