

Actuator

MD50

MD50 is a compact actuator providing up to 3500N thrust, which is suitable for limited installation space. It's designed for use in a variety of medical care application, such as patient hoists or stand-up lifts.

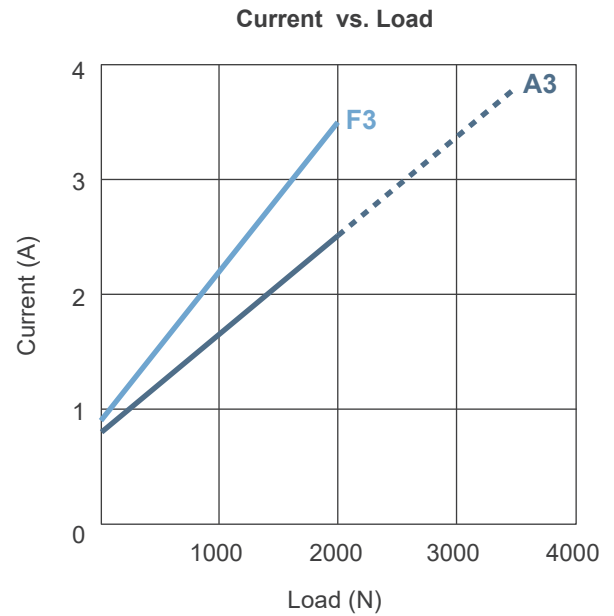
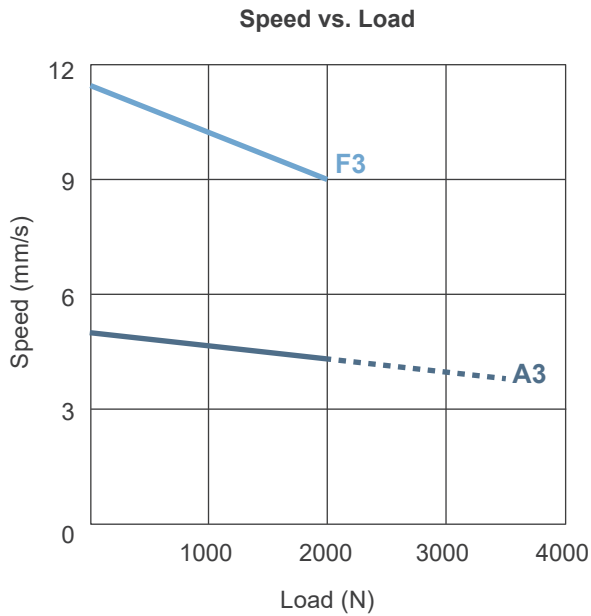


Features and Options

- Main applications: Medical Care
- Input voltage: 24V DC
- Max. load: 3500N (push) / 2000N (pull)
- Max. speed at no load: 11.4 mm/sec (Typical value)
- Max. speed at full load: 3.8 mm/sec (Typical value @ 3500N Loaded)
- Stroke: 50 ~ 600 mm
- Noise level: ≤ 65 dB
- Color: Black
- Present limit switches
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Ambient operation temperature: -20°C ~ +60°C
- Certified: CE Marking, EN 60601-1, EN 60601-1-2, IEC 60601-1, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-8
- Optional mechanical push only extension tube

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
MD50-24-A3-XXX.XXX-CXX	3500	2000	5.0	3.8	0.8	3.8
MD50-24-F3-XXX.XXX-CXX	2000	2000	11.4	9.0	0.9	3.5



Push / Pull Load — Push Load - - -

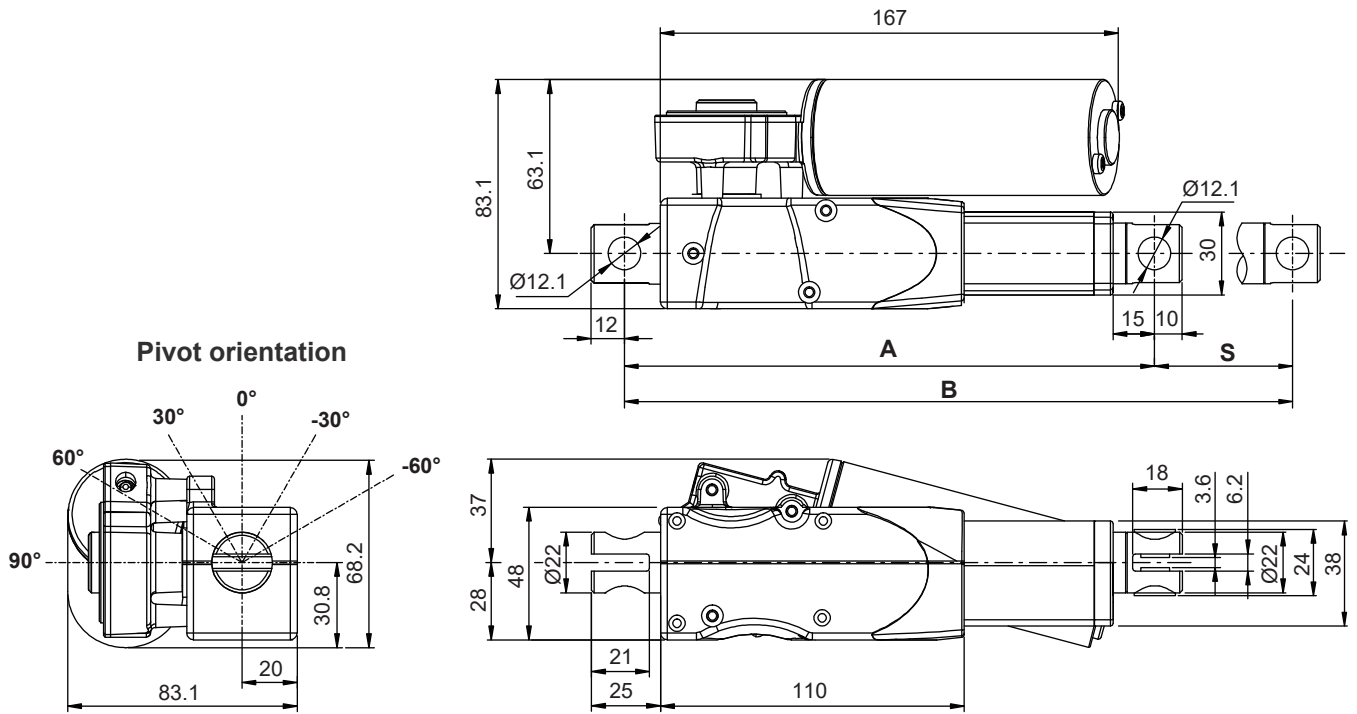
Remarks:

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

Dimensions

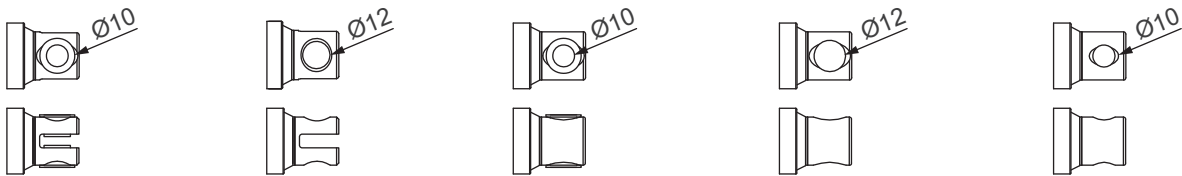
- Available stroke (S) range = 50 ~ 600 mm
- Extended length (B) = (S) + (A)

Stroke (S)	Retracted length(A)
≤55 mm	192mm (±3mm)
≤300 mm	S+137mm (±3mm)
>300 mm	S+156mm (±3mm)



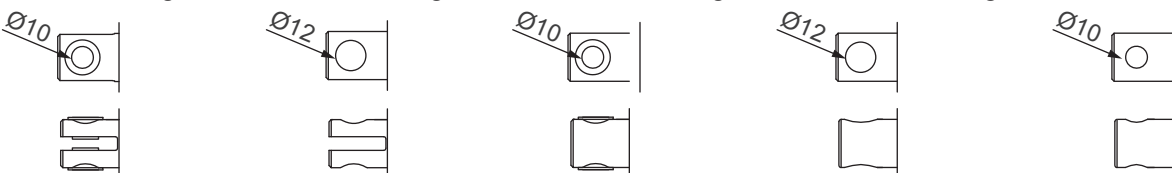
• Front Connector

- 1: Slot with bushing 2: Slot w/o bushing 4: Solid with bushing 5: Solid w/o bushing 6: Solid w/o bushing



• Rear Connector

- 1: Slot with bushing 2: Slot w/o bushing 4: Solid with bushing 5: Solid w/o bushing 6: Solid w/o bushing

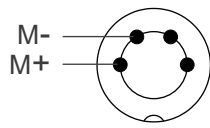


Compatibility

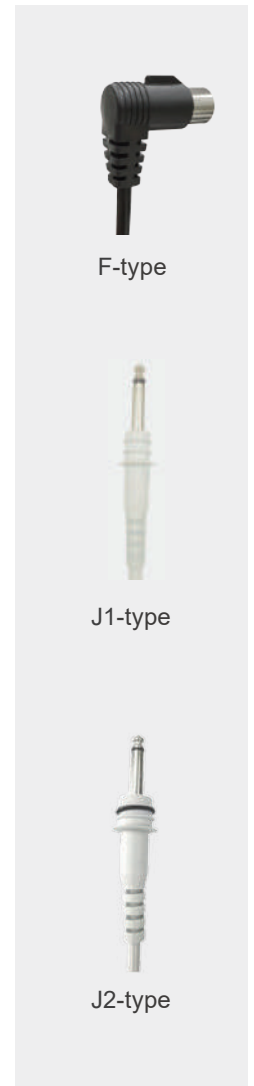
Product	Model	Compatible requirement
Control box	CB3T	- With Moteck F-type 4-pin DIN plug
	CBP2, CBP3	- Phone jack(ø6.35mm) with Moteck J1-type or J2-type plug
	CM42	- Phone jack(ø6.35mm) with Moteck J1-type plug

Plug type

- Moteck F-type DIN plug



4-pin DIN plug

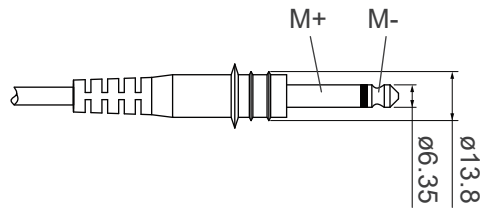


F-type

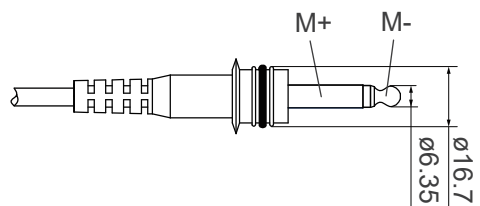
J1-type

J2-type

- Moteck J1-type phone jack



- Moteck J2-type phone jack



Note:

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

Cable with Flying Leads

	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		

Ordering Key

MD50 - 24 - A3 - 237 - 337 - C 1 1 - P 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	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	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	0: None P: Push only		
Pivot orientation of rear connector	1: 0° (standard) 4: 90°	2: 30° 5: -30°	3: 60° 6: -60°
Cable length	1: 300 mm straight 2: 1000 mm straight		

Terms of Use

The user is responsible for application suitability of Moteck products. As ongoing improvement process continues, products listed on the Moteck website are subject to change without prior notice. Moteck reserves the right to terminate the sales or remove any product displayed on the website, or listed in its catalogues.