

# Actuator

## MD80



### Features

- ◆ MD80 is a quiet and powerful actuator designed for use in a variety of medical and home care applications such as patient hoist and bed.
- ◆ Main applications : homecare, medical
- ◆ Input voltage : 24V DC
- ◆ Max. load : 8000N (push) / 6000N (pull)
- ◆ Max. current : 5.5A
- ◆ Max. speed at no load : 16.6mm/sec
- ◆ Max. speed at full load : 6.7mm/sec @ 8000N
- ◆ Stroke : 50 ~ 400mm
- ◆ Duty cycle : 10% or 2 min. continuous operation in 20 min.
- ◆ IP protection level : IPX4
- ◆ Color : RAL 7035
- ◆ Certified : EN60601-1-2 / EN55011 / EN61000-4-2 / EN61000-4-3 / EN61000-4-8
- ◆ Noise level : < 53dB
- ◆ Preset limit switches
- ◆ Steel extension tube
- ◆ Working environment temperature : +5 ~ 40°C
- ◆ Clevis type of metal connectors. Rear connector's pivot angle can be chosen in every 30 degrees.

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# Options

- ◆ Push only
- ◆ Safety nut (in push direction)
- ◆ IPX5 protection level
- ◆ QR2 quick release : To retract actuator quickly by pinching the QR2 grip while emergency.
- ◆ MR1 manual release : To retract actuator slowly and put down the patient safely by turning the MR1 knob with hand when losing power in the application of patient hoist.

## Compatibility

### 1. Control box

(1) CBP2 ( $\varphi$  6.35mm loud speaker plug with Moteck J1 type housing  $\varphi$  13.8)

(2) CB4P-HP (DIN plug with Moteck H type or V type housing)



J1 type plug housing



H type plug housing



V type plug housing

### 2. Handset

HC, HD, HF, HT

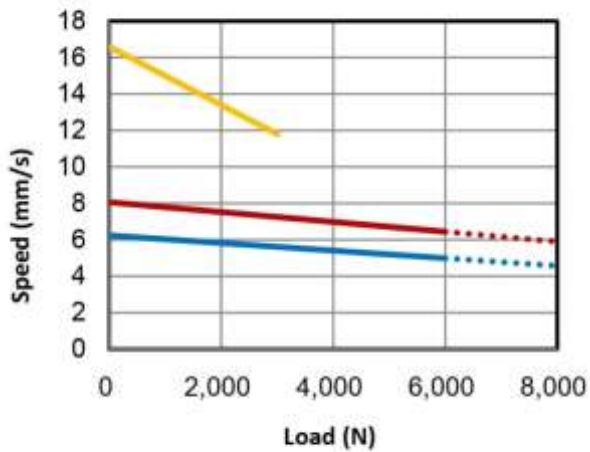
### 3. Accessory

None

# Performance Data

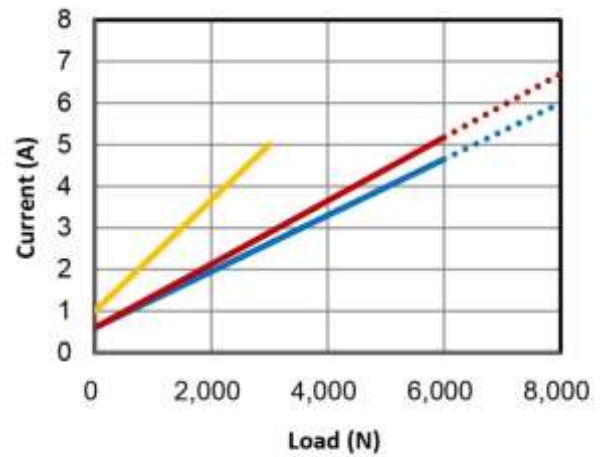
Model No.	Push Max. (N)	Pull Max. (N)	Typical Speed (mm/s)		Current (A) @ 24V	
			No load	Full load	No load	Full load
MD80-24-A6-xx-xxx.xxx-xxx	8,000	6,000	6.2	4.6	0.6	6.0
MD80-24-A8-xx-xxx.xxx-xxx	8,000	6,000	8.1	5.9	0.6	6.7
MD80-24-K8-xx-xxx.xxx-xxx	3,000	3,000	16.6	11.8	1.0	5.0

Speed vs. Load



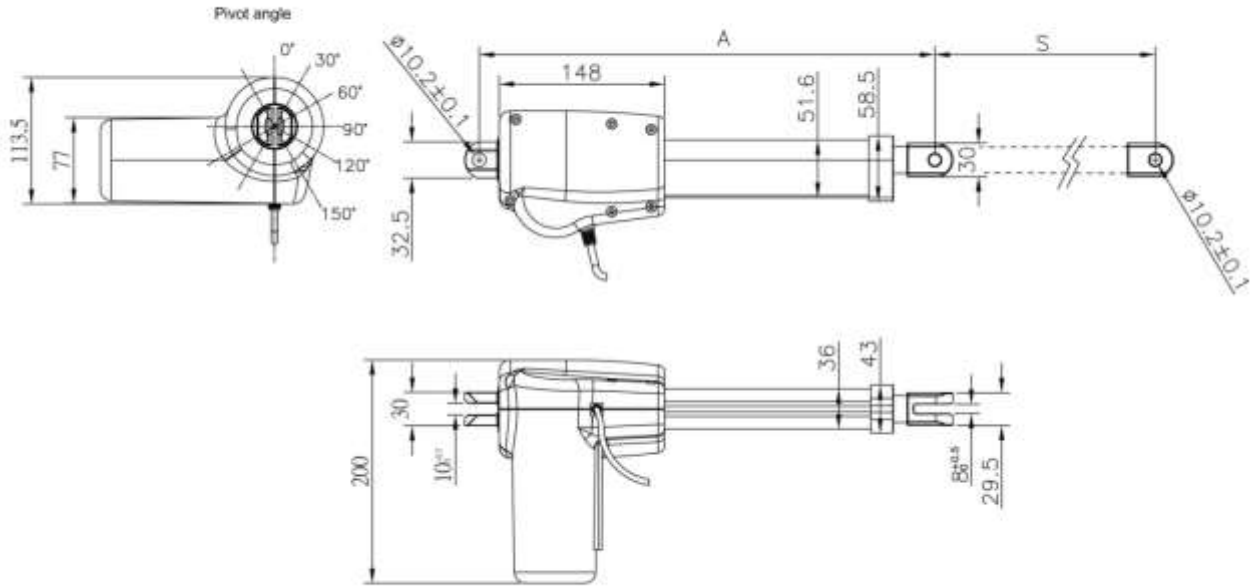
— A6 — A8 — K8 ..... Push

Current vs. Load



— A6 — A8 — K8 ..... Push

# Dimensions



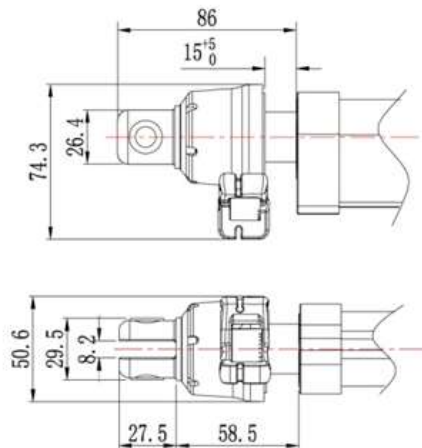
Unit: mm

## Available Length

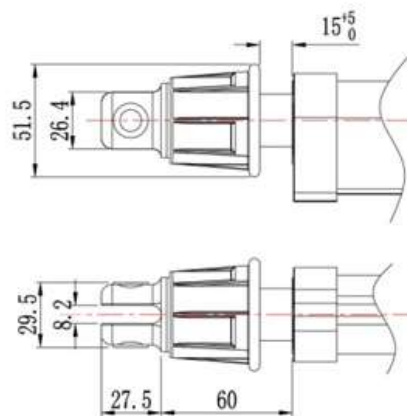
Options	Retracted Length (A)
Standard	$A \geq S + 210 \text{ mm}$
Safety Nut	Add 5 mm
MR1 manual release	Add 50 mm
QR2 quick release	Add 50 mm

Remarks: S= Stroke, 50~400mm available

## Front connector with QR2



## Front connector with MR1



# Ordering Key

MD80-□□-□□-□□□.□□□-C□□-□□□□□□□-□□

## Input Voltage

24 : 24V DC

## Motor and Spindle Type

A6, A8, K8

(Refer to paragraph Performance Data)

## Retracted Length

(Refer to paragraph Dimensions)

## Extended Length

(=Retracted length + Stroke. Refer to Dimensions drawing)

## Front Connector

8 : Zinc alloy clevis,  $\varphi$  10.2 pivot, 8mm grip

## Rear Connector

1 : Zinc alloy clevis,  $\varphi$  10.2 pivot, 10mm grip

## Safety Options

Blank : None

PO : Push only

MR1 : Manual release + Push only

SN : Safety nut

QR2 : Quick release + Push only

PO-SN : Push only + Safety nut

MR1-SN : Manual release + Push only + Safety nut

QR2-SN : Quick release + Push only + Safety nut

## IP Protection Level

Blank : IPX4

X5 : IPX5

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