Preliminary Product Data Sheet





Features

- ◆ MD120 is a quiet and powerful actuator, which can push up to 12,000N. It's designed for use in a variety of medical and home care applications, such as patient hoist and medical bed.
- Main applications : home care, medical
- ◆ Input voltage : 24V DC
- ◆ Max. push load : 12,000 N (push) / 6,000 N (pull)
- ◆ Max. current : 7.5 A @ 24V DC
- ◆ Max. speed at no load : 6.9 mm/s
- ◆ Max. speed at full load : 5.2 mm/s @ 12,000N
- ◆ Stroke: 100 ~ 400mm
- Safety nut (in push direction)
- Preset limit switches
- ◆ Duty cycle: 10% or 2 min. continuous operation in 20 min.
- ◆ IP protection level: IPX4
- ◆ Color: RAL 7035
- ◆ Certified: EMC Directive 93/42/EEC for CE Marking
- Aluminum outer tube
- ◆ Noise level : ≤ 50 dB
- ♦ Working environment temperature : +5 ~ 40°C

Options

- ♦ Mechanical push only extension tube
- Electrical push only function
- Positioning signal feedback with Hall effect sensors
- ◆ IPX6 protection level

Compatibility

1. Control box

- (1) CBP2 (φ 6.35mm loud speaker plug with Moteck J1 type strain relief φ 13.8)
- (2) CB4P-HP (φ 6.35mm loud speaker plug with Moteck J2 type strain relief φ 16.7)







J2 type strain relief

2. Accessory

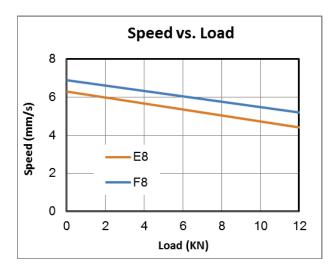
None

Performance Data

| Model No | Push Load | Speed (mm/s) | | Current (A) @ 24V | |
|-------------------------------------|-----------|--------------|-------------|-------------------|-------------|
| Model No. | Max. (N) | No load | Full load** | No load | Full load** |
| MD120-24 E8 -XXX.XXX-XXXXXXX | 12,000* | 6.3 | 4.4 | 0.6 | 6.6 |
| MD120-24 F8 -XXX.XXX-XXXXXXX | 12,000* | 6.9 | 5.2 | 0.9 | 7.5 |

Note * : Within the stroke range of 200 mm.

Note ** : At 12,000N loaded.



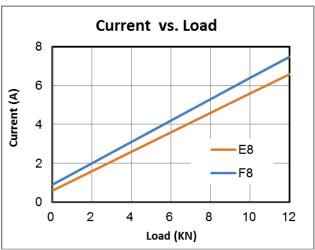
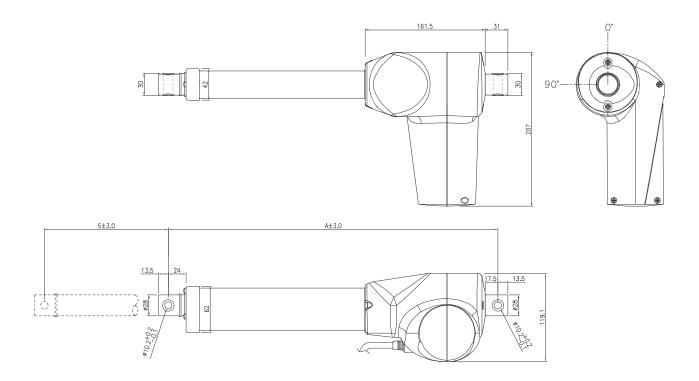


Table of max. push load

Unit: KN

| Spec of stroke | | At actual stroke position (mm) | | | | |
|----------------|-----|--------------------------------|-----|-----|--|--|
| (mm) | 100 | 200 | 300 | 400 | | |
| 100 | 12 | - | - | - | | |
| 200 | 12 | 12 | - | - | | |
| 300 | 12 | 12 | 8 | - | | |
| 400 | 12 | 12 | 9 | 6 | | |

Dimensions

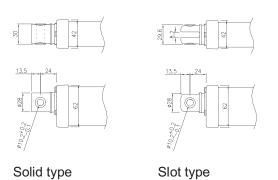


Unit: mm

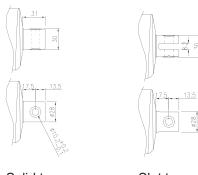
Installation Length

| Stroke Range (S) | $100 \le S \le 300 \text{ mm}$ | $300~<~S~\leqq~400~mm$ |
|---------------------------|--------------------------------|------------------------|
| Min. Retracted Length (A) | A \geq S + 230 mm | A \geq S + 250 mm |

Front Connectors



Rear Connectors

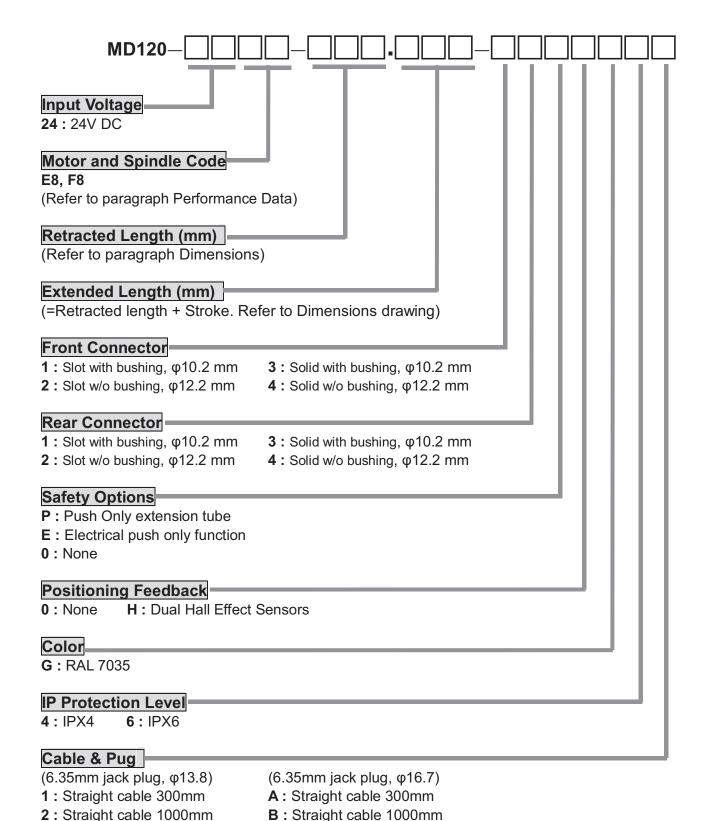


Solid type

Slot type

Ordering Key

3: Coiled cable 400mm



C: Coiled cable 400mm

