

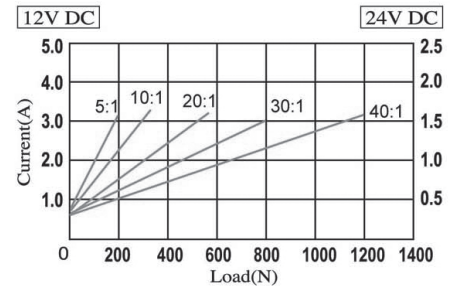
Overview

MDC3 actuators are very easy to operate and install, with IP-65 protection and multiple options for position feedback. Stroke lengths from 50mm to 300mm are available and all actuators come with pre-set limit switches so setup is quick and you never have to worry about overtravel. Aluminum construction provides the durability and corrosion resistance you need in a light-weight and compact body. The DC motor runs on 12 or 24 volts, and direction of motion is simply determined by the polarity of voltage applied to the motor. MDC3 actuators come with clevis-clevis mounts, are lubricated for life, and are rated for operation in a wide variety of temperatures.

Specifications

- Force up to 1,200N
- 12 / 24 VDC Operation
- Pot and Hall Effect feedback options
- Speed up to 45mm/sec
- Rated for -25 ~ 65 °C
- 10,000 cycles min. life
- 50~300mm stroke
- Clevis-Clevis mounting

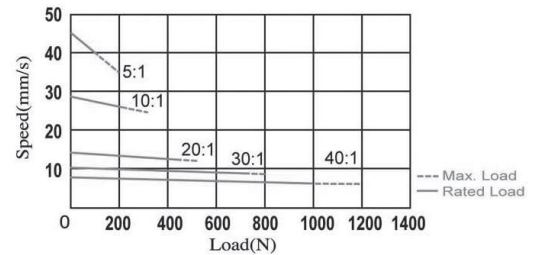
Current vs Load



Actuator Numbering

| MDC3 - Model No. | 24 - Voltage: | 20 - Gear ratio: | 200 - Stroke: | Feedback |
|------------------|---------------|------------------|---------------|--------------------------------|
| | 12=12V DC | 5=5:1 | 50mm (2") | Blank: Standard (no feedback) |
| | 24=24V DC | 10=10:1 | 100mm (4") | HS 2: Dual Hall Effect Sensors |
| | | 20=20:1 | 150mm (6") | POT: Potentiometer Sensor |
| | | 30=30:1 | 200mm (8") | |
| | | 40=40:1 | 300mm (12") | |

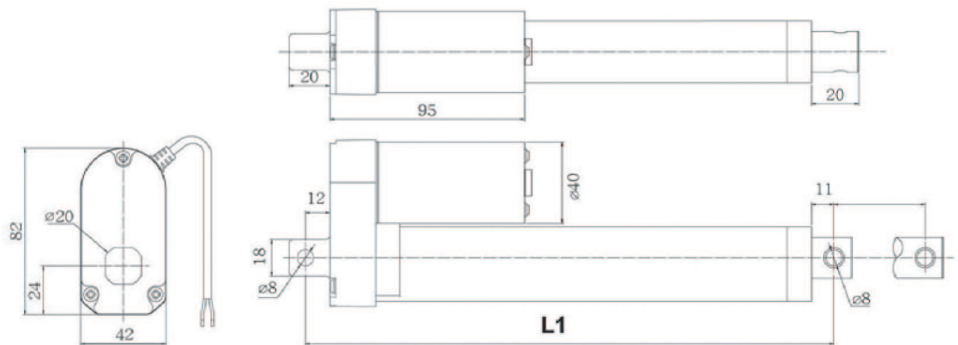
Speed vs Load



Dimensions

| Stroke (mm) | Retracted Length (L1) | | |
|-------------|-----------------------|---------------|-------------|
| | Standard (none) | Potentiometer | Hall Effect |
| 50 | 158 | 195 | 158 |
| 100 | 209 | 246 | 209 |
| 150 | 260 | 297 | 260 |
| 200 | 311 | 348 | 311 |
| 300 | 413 | 450 | 413 |

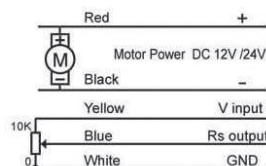
Notes: extended length = retracted length (L1) + stroke lengths are ±2mm



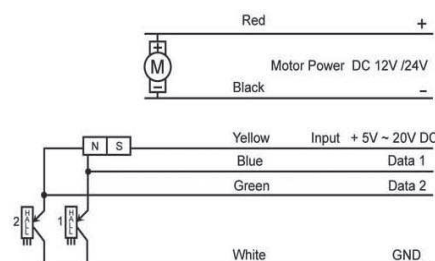
Electrical Specs for Potentiometer Feedback

| Stroke (mm) | Value of POT Resistance (Ω) |
|-------------|-----------------------------|
| 50 | 0.3-9.3K |
| 100 | 0.3-9.7K |
| 150 | 0.3-8.6K |
| 150 | 0.3-9.6K |
| 200 | 0.3-9.3K |
| 250 | 0.3-9.3K |
| 300 | 0.3-9.3K |

Remark: tolerance ± 0.3K



Electrical Specs for Hall Effect Feedback



| Gear Ratio | Hall Sensor Resolution (Pulses/mm) |
|------------|------------------------------------|
| 5 : 1 | 2.3 |
| 10 : 1 | 3.6 |
| 20 : 1 | 6.9 |
| 30 : 1 | 10.6 |
| 40 : 1 | 14.3 |

