

## Product Data Sheet



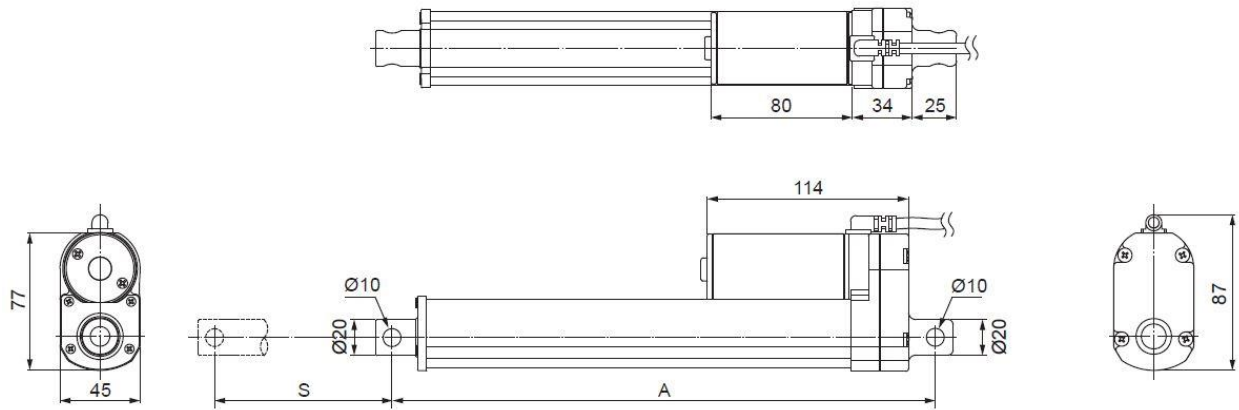
### Standard Features:

- Compact design
- All aluminum frame and extension tube
- Nominal stroke lengths: 4" [100mm], 6" [150mm], 8" [200mm], 10" [250mm], 12" [300mm]
- Input voltage: 12VDC, 24VDC
- Standard gear ratio: 20:1 [other ratios available]
- Rated load range: 112 lbs. [500 Newtons] –to- 562 lbs. [2,500 Newtons]
- Maximum static load: 337 lbs. [1,500 Newtons] (10:1 gear ratio)  
1,012 lbs. [4,500 Newtons] (20, 30, 40, 50:1 gear ratios)
- Maximum current draw: 4.6 Amps @ 12 VDC
- Speed at no load: 0.24 in/sec [6.1 mm/sec] –to- 1.06 in/sec [27 mm/sec]
- Speed at full load: 0.17 in/sec [4.4 mm/sec] –to- 0.74 in/sec [18.7 mm/sec]
- Standard preset limit switches at both ends of stroke
- Noise level:  $\leq 70$ dB
- Mounting hole diameter (both ends): 3/8" [10mm]
- Duty cycle: 25% or 1 min continuous operation in 4 min.
- Working temperature: -13F [-25C] to +149F [+65C]
- IP rating: IP65

### Accessories:

- Mounting brackets
- Wired and wireless controllers
- Direction reversing relays
- Direction reversing switches

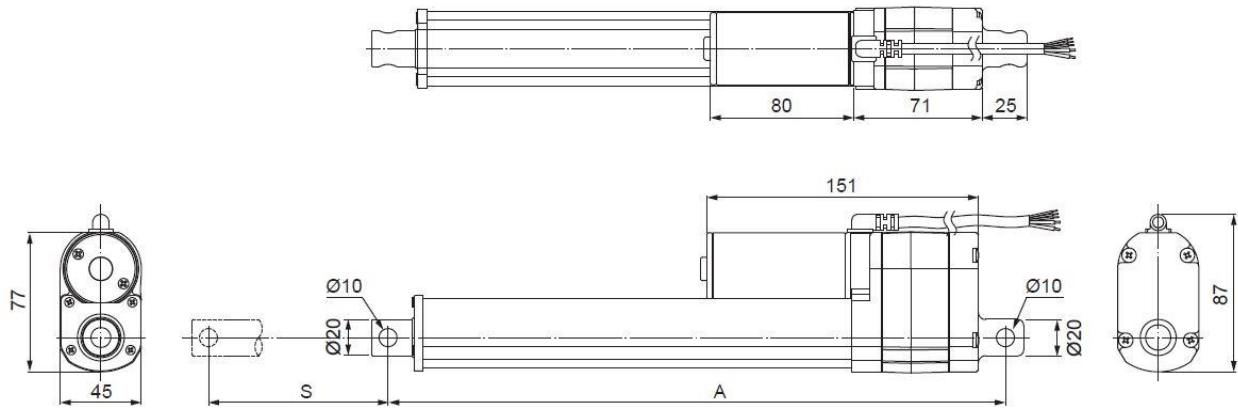
### Dimensions – Actuator Without Potentiometer



Unit: mm

Nominal Stroke	4"		6"		8"		10"		12"	
	in	mm	in	mm	in	mm	in	mm	in	mm
Actual Stroke (S)	3.94	100	5.91	150	7.87	200	9.84	250	11.81	300
Retracted Length (A)	8.07	205	10.04	255	12.01	305	13.98	355	15.94	405
Extended Length	12.01	305	15.94	405	19.88	505	23.82	605	27.76	705

### Dimensions – Actuator With Potentiometer



Unit: mm

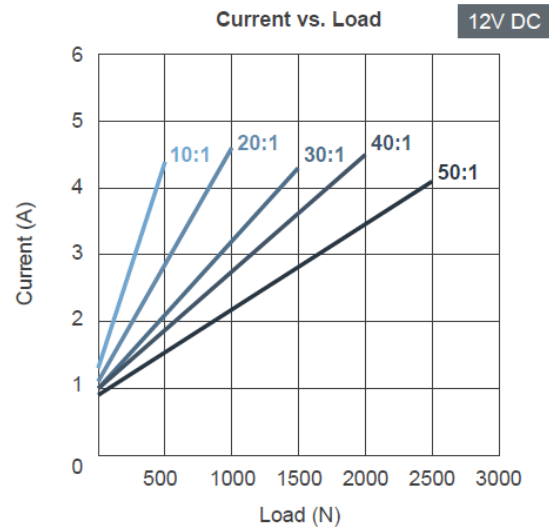
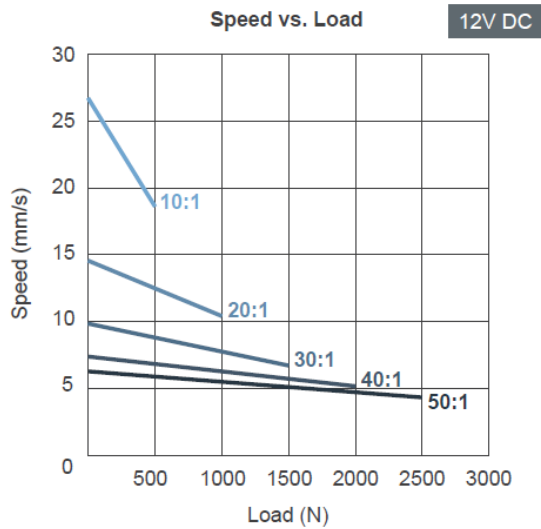
Nominal Stroke	4"		6"		8"		10"		12"	
	in	mm	in	mm	in	mm	in	mm	in	mm
Actual Stroke (S)	3.94	100	5.91	150	7.87	200	9.84	250	11.81	300
Retracted Length (A)	9.53	242	11.50	292	13.46	342	15.43	392	17.40	442
Extended Length	13.47	342	17.41	442	21.33	542	25.27	642	29.21	742

### Performance Data

#### 12V

Gear Ratio	Max Load/Dynamic		Speed/No Load/12V		Speed/Max Load/12V	
	Lbs. [US]	Newtons	inches/Sec	mm/Sec	inches/Sec	mm/Sec
10:1	112	500	1.06	26.8	0.73	18.6
20:1	225	1000	0.58	14.7	0.41	10.4
30:1	337	1500	0.39	9.9	0.27	6.8
40:1	450	2000	0.29	7.4	0.20	5.1
50:1	562	2500	0.24	6.2	0.17	4.4

Gear Ratio	Typical Current (A)	
	No Load	Full Load
	12 VDC	12 VDC
10:1	1.3	4.4
20:1	1.1	4.6
30:1	1.0	4.3
40:1	1.0	4.5
50:1	0.9	4.1

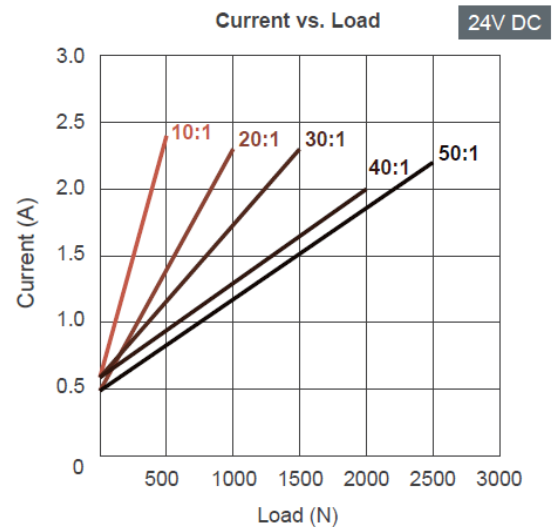
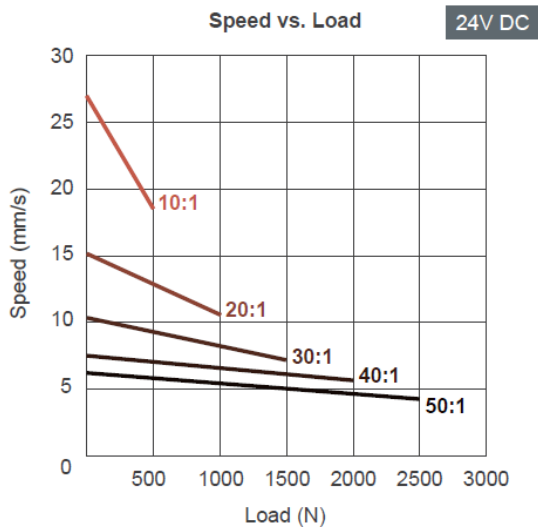


### Performance Data

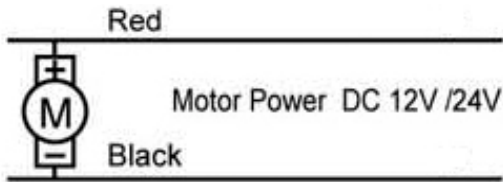
#### 24V

Gear Ratio	Max Load/Dynamic		Speed/No Load/24V		Speed/Max Load/24V	
	Lbs. [US]	Newtons	inches/Sec	mm/Sec	inches/Sec	mm/Sec
10:1	112	500	1.06	27.0	0.74	18.7
20:1	225	1000	0.59	15.1	0.42	10.7
30:1	337	1500	0.41	10.3	0.28	7.2
40:1	450	2000	0.30	7.6	0.22	5.7
50:1	562	2500	0.24	6.1	0.17	4.4

Gear Ratio	Typical Current (A)	
	No Load	Full Load
	24 VDC	24 VDC
10:1	0.6	2.4
20:1	0.5	2.3
30:1	0.6	2.3
40:1	0.6	2.0
50:1	0.5	2.2

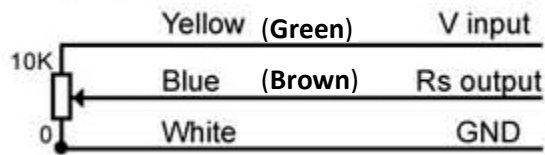


### Electrical



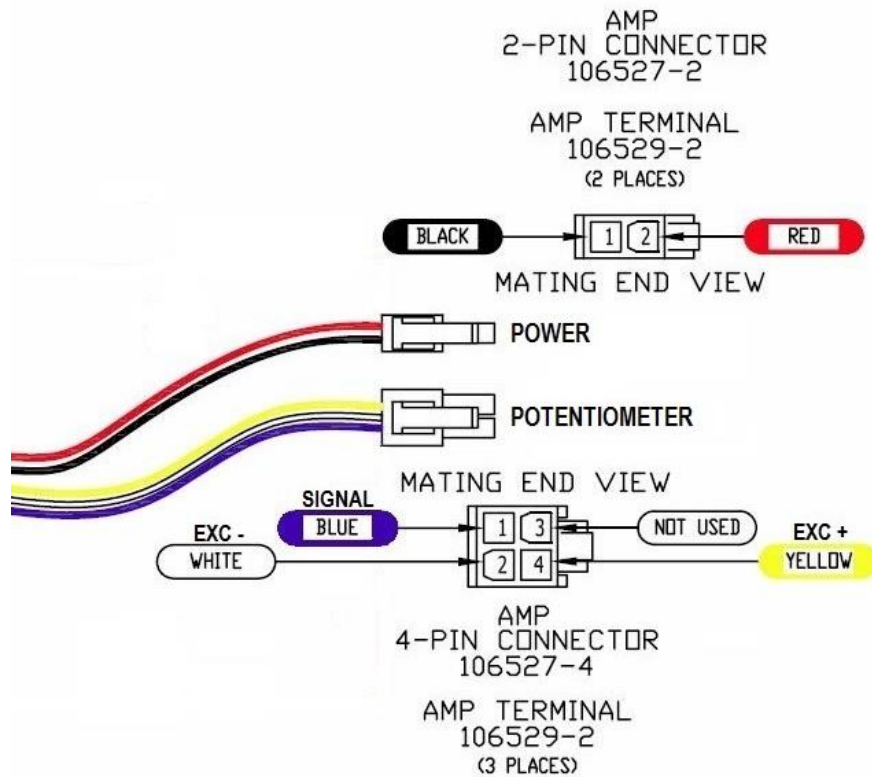
Without Potentiometer  
 Red + // Black - : Extend  
 Red - // Black + : Retract

With Potentiometer  
 Red + // Black - : Retract  
 Red - // Black + : Extend

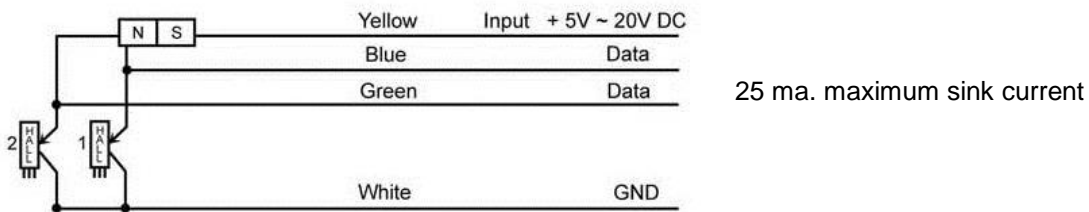
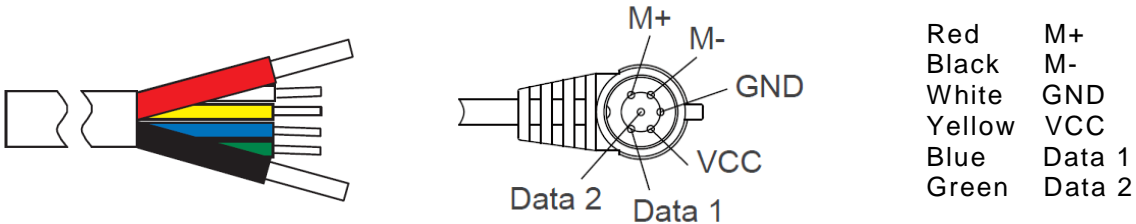


Value of POT	
Stroke (in / mm)	Resistance
3.94 / 100	0.3 – 8.8K
5.91 / 150	0.3 – 9.6K
7.87 / 200	0.3 – 8.9K
9.84 / 250	0.3 – 9.5K
11.81 / 300	0.3 – 9.5K
Tolerance: +/- 0.3K	
Values in this table are an approximation. Actual values will vary due to actuator configuration and construction.	

### Connector Wiring

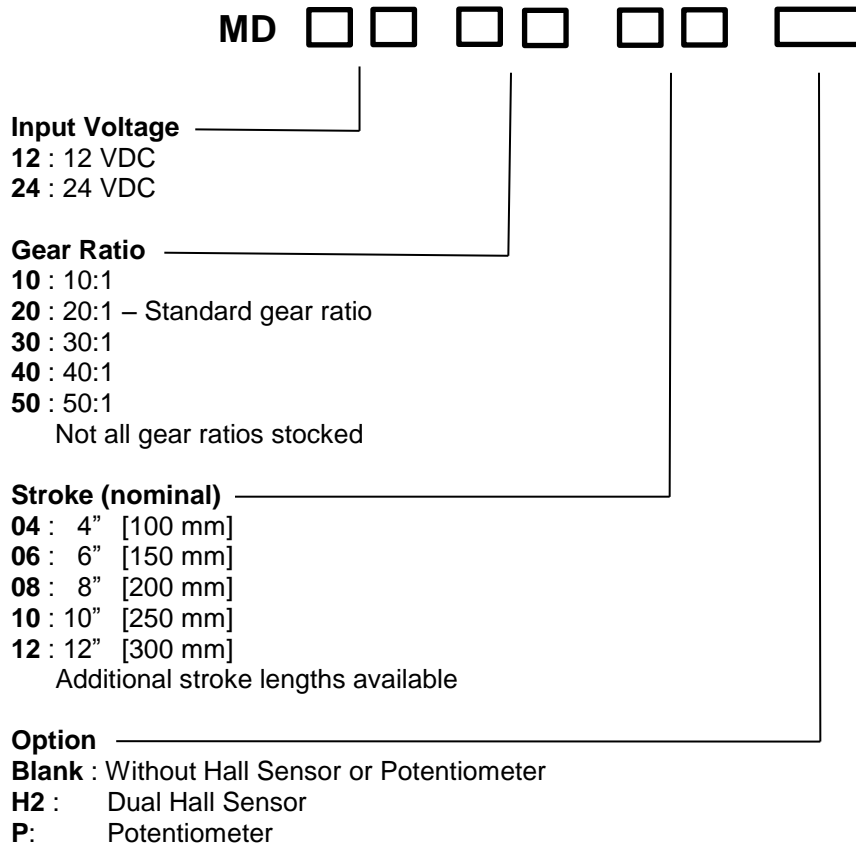


### Hall Effect Sensor



Gear Ratio	Signal Resolution	
	Pulses/in	Pluses/mm
10	65.02	2.56
20	120.65	4.75
30	181.86	7.16
40	245.36	9.66
50	300.23	11.82

**Ordering Key**



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