

## Product Data Sheet



### Standard Features:

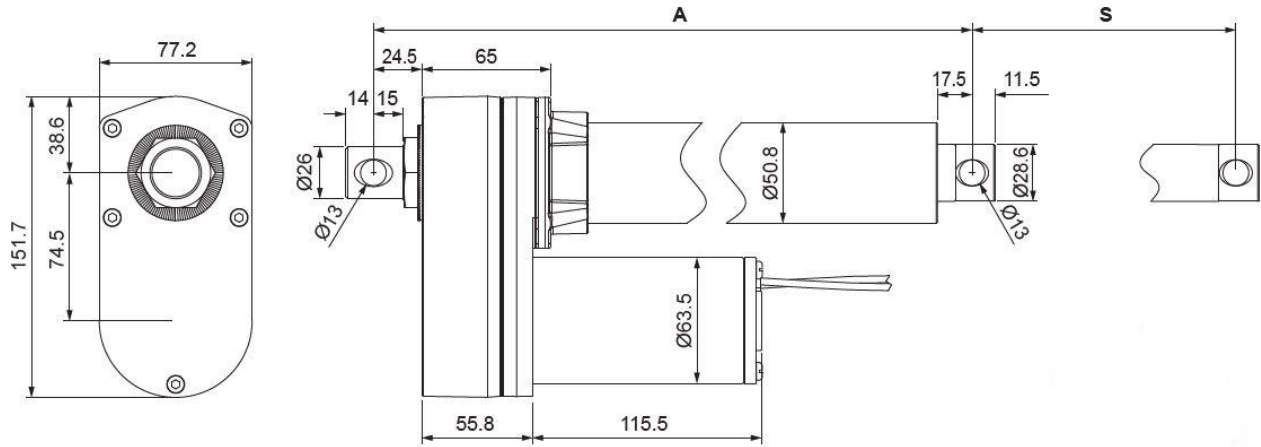
- Carbon steel frame and extension tube
  - Aluminum gearbox housing
- Stroke lengths: 4", 6", 8", 10", 12", 18", 24", [other stroke lengths available]
- Input voltage: 12VDC, 24VDC, (48VDC – Special Order)
- Standard gear ratio: 20:1 [other ratios available]
- Dynamic load range: 337 lbs. [1,500 Newtons] -to- 787 lbs. [3,500 Newtons]
- Maximum static load: 1,012 lbs. [4,500 Newtons]
- Maximum current draw (at full load): 11.0 -to- 17.6 Amps @ 12 VDC
- Speed at no load: 0.33 in/sec [8.4 mm/sec] -to- 1.44 in/sec [36.5 mm/sec]
- Speed at full load: 0.29 in/sec [7.4 mm/sec] -to- 1.15 in/sec [29.1 mm/sec]
- Overload clutch
- ACME screw drive
- Mounting hole diameter (both ends): 1/2" [13mm]
- Duty cycle: 25% or 2 min continuous operation in 8 min.
- Working temperature: -13F [-25C] to +149F [+65C]
- IP rating: IP65, (IP69K – Special Order)
- Certified: CE marking, EMC Directive 2014/30/EU

### Accessories:

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

**Dimensions**

**Standard (without Limit Switches or Potentiometer)**

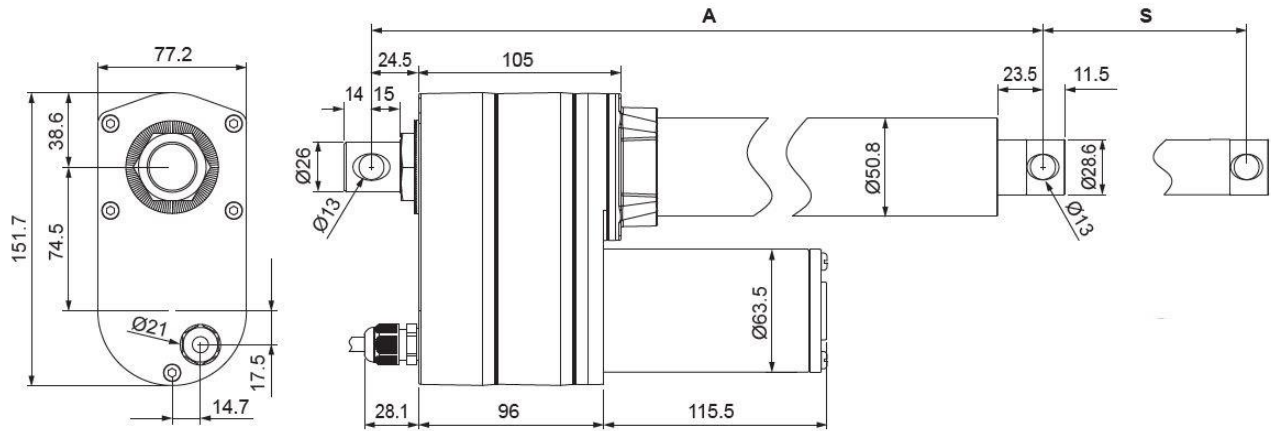


Nominal Stroke	4"		6"		8"		10"		12"		18"		24"	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
Actual Stroke (S)	4.0	102	6.0	153	8.0	203	10.0	254	12.0	305	18.0	457	24.0	610
Retracted Length (A)	10.3	262	12.3	313	14.3	364	16.3	414	18.3	465	26.3	668	32.3	821
Extended Length	14.3	364	18.4	466	22.3	567	26.3	668	30.3	770	44.3	1125	56.3	1431

Tolerance: ±5mm

**Dimensions**

**With Potentiometer Only**



Nominal Stroke	4"		6"		8"		10"		12"		18"		24"	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
Actual Stroke (S)	4.0	102	6.0	153	8.0	203	10.0	254	12.0	305	18.0	457	24.0	610
Retracted Length (A)	11.9	302	13.9	353	15.9	404	17.9	454	19.9	505	27.9	708	33.9	861
Extended Length	15.9	404	19.9	506	23.9	607	27.9	708	31.9	810	45.9	1165	57.9	1471

Tolerance: ±5mm

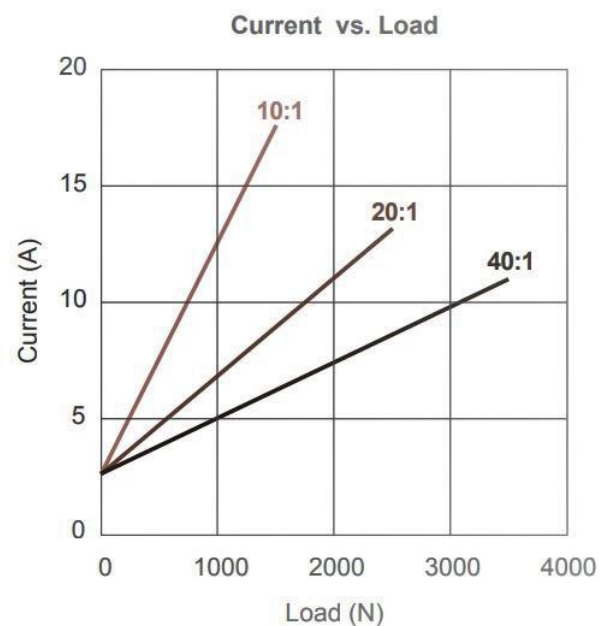
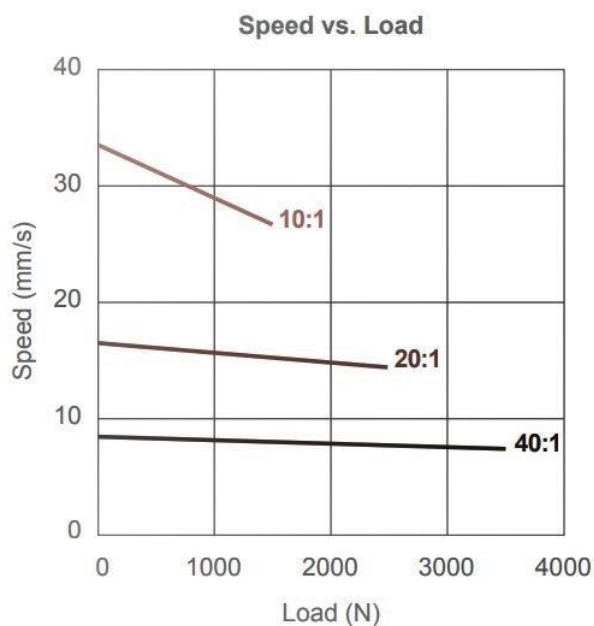


## Performance Data

- 12V DC Motor

Gear Ratio	Max Load/Dynamic		Typical Speed/No Load		Typical Speed/Max Load	
	Lbs. [US]	Newtons	inches/sec	mm/sec	inches/sec	mm/sec
10:1	337	1500	1.32	33.5	1.05	26.7
20:1	562	2500	0.66	16.8	0.56	14.3
40:1	787	3500	0.33	8.4	0.29	7.4

Gear Ratio	Typical Current (A)	
	No Load	Full Load
	12 VDC	12 VDC
10:1	2.6	17.6
20:1	2.6	13.2
40:1	2.6	11.0

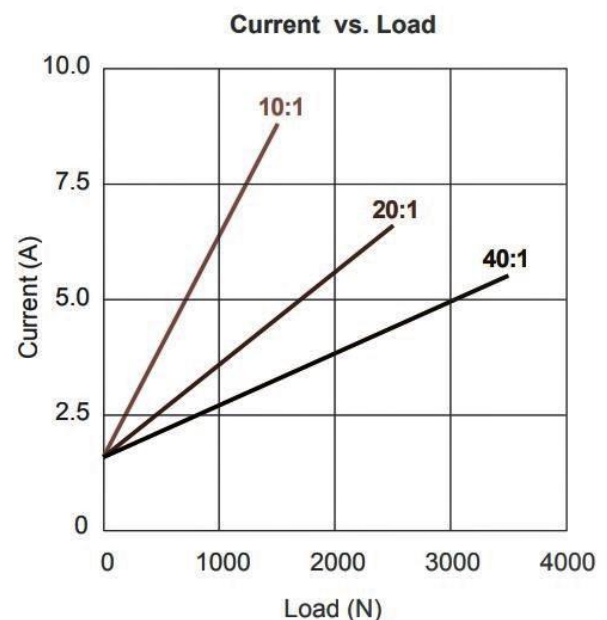
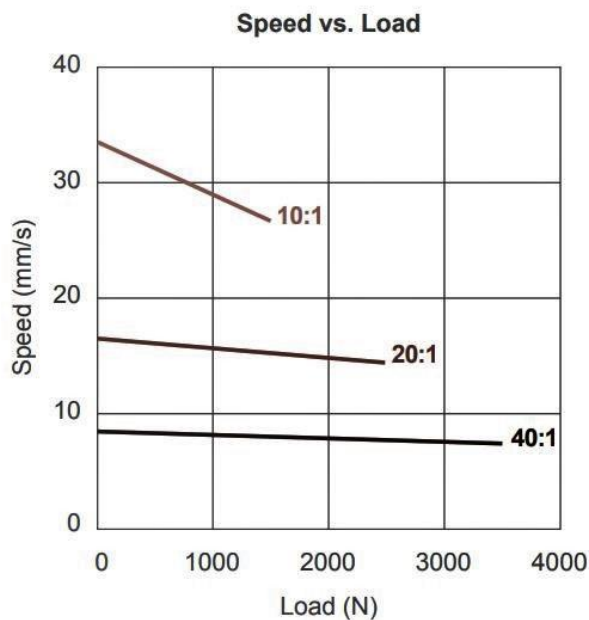


**Note:** The typical speed and typical current are the average values – not the upper or lower limit. The performance curves are made with typical values.

- **24V DC Motor**

Gear Ratio	Max Load/Dynamic		Typical Speed/No Load		Typical Speed/Max Load	
	Lbs. [US]	Newtons	inches/sec	mm/sec	inches/sec	mm/sec
10:1	337	1500	1.32	33.5	1.05	26.7
20:1	562	2500	0.66	16.8	0.56	14.3
40:1	787	3500	0.33	8.4	0.29	7.4

Gear Ratio	Typical Current (A)	
	No Load	Full Load
	24 VDC	24 VDC
10:1	1.6	8.8
20:1	1.6	6.6
40:1	1.6	5.5

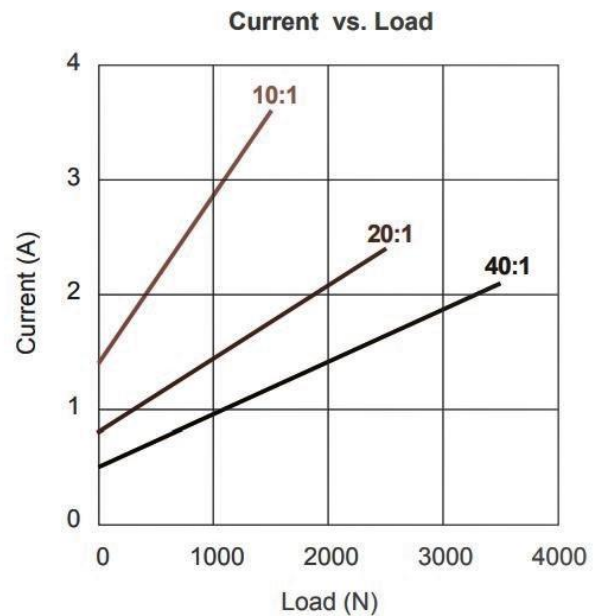
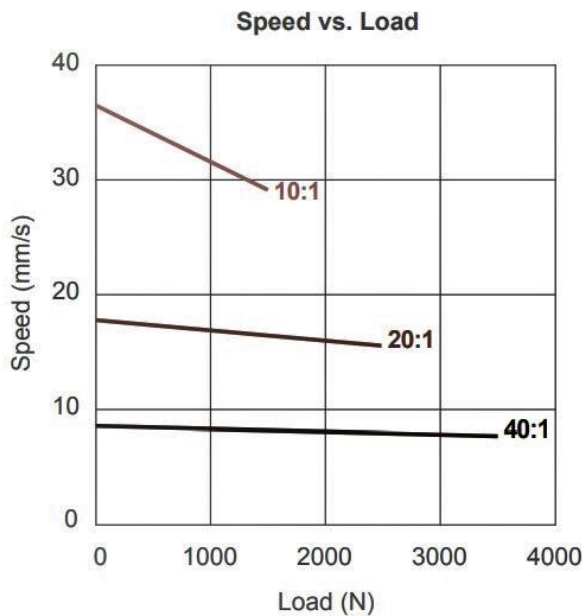


**Note:** The typical speed and typical current are the average values – not the upper or lower limit. The performance curves are made with typical values.

- **48V DC Motor**

Gear Ratio	Max Load/Dynamic		Typical Speed/No Load		Typical Speed/Max Load	
	Lbs. [US]	Newtons	inches/sec	mm/sec	inches/sec	mm/sec
10:1	337	1500	1.44	36.5	1.15	29.1
20:1	562	2500	0.70	17.8	0.60	15.3
40:1	787	3500	0.34	8.6	0.31	7.8

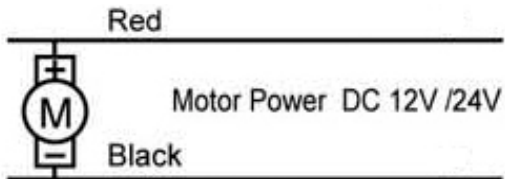
Gear Ratio	Typical Current (A)	
	No Load	Full Load
	48 VDC	48 VDC
10:1	1.4	3.6
20:1	0.8	2.4
40:1	0.5	2.1



**Note:** The typical speed and typical current are the average values – not the upper or lower limit. The performance curves are made with typical values.

## Electrical

### Standard



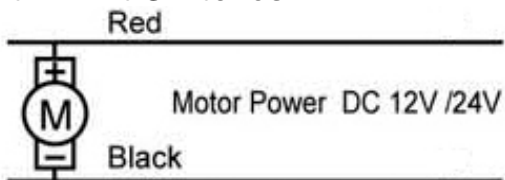
Gear Ratio: 10:1, 20:1

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

Gear Ratio: 40:1

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

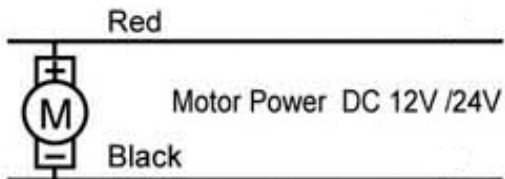
### With Limit Switches



Gear Ratio: 10:1, 20:1, 40:1

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

### With Potentiometer (or Limit Switches and Potentiometer)

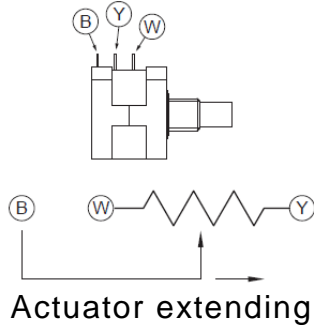


Gear Ratio: 10:1, 20:1, 40:1

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



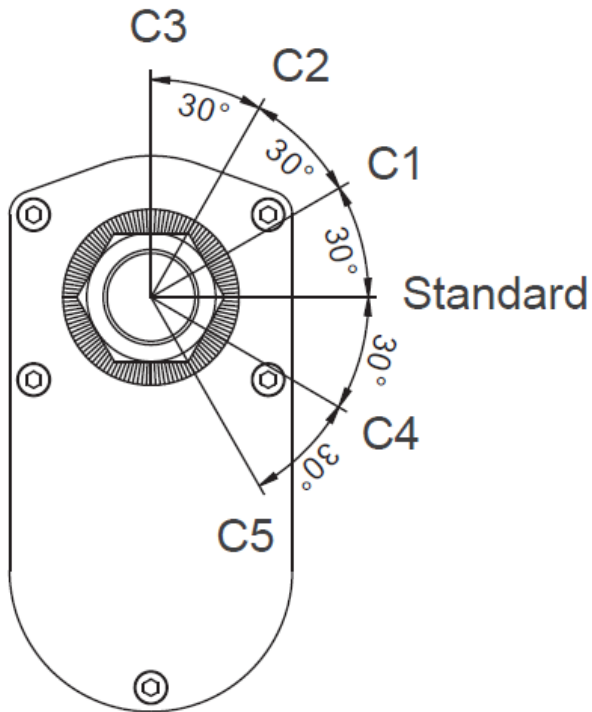
## Potentiometer



When fully retracted, the potentiometer reading will be in or near the range of 0 - 600Ω (between the blue and the white wires).

When fully extended, the potentiometer reading will be in or near the range of 8K - 10KΩ (between the blue and the white wires).

## Base Stud Mount Hole Orientation



**Ordering Key**

10     .  -

**Drive Type**

A : AMCE Screw (562 lbs. @ 20:1)

**Input Voltage**

12 : 12 VDC  
24 : 24 VDC  
48 : 48 VDC (available by special order)

**Gear Ratio**

10 : 10:1  
20 : 20:1  
40 : 40:1  
Not all gear ratios stocked

**Stroke (nominal)**

04 : 4" [102mm]  
06 : 6" [153mm]  
08 : 8" [203mm]  
10 : 10" [254mm]  
12 : 12" [305mm]  
18 : 18" [457mm]  
24 : 24" [610mm]  
Additional stroke lengths available

**Options**

0 : None  
1 : Limit Switches  
2 : Potentiometer  
3 : Limit Switches and Potentiometer

**IP Rating**

<Blank> : IP65  
69 : IP69K

- Not all combinations stocked

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