

Product Data Sheet



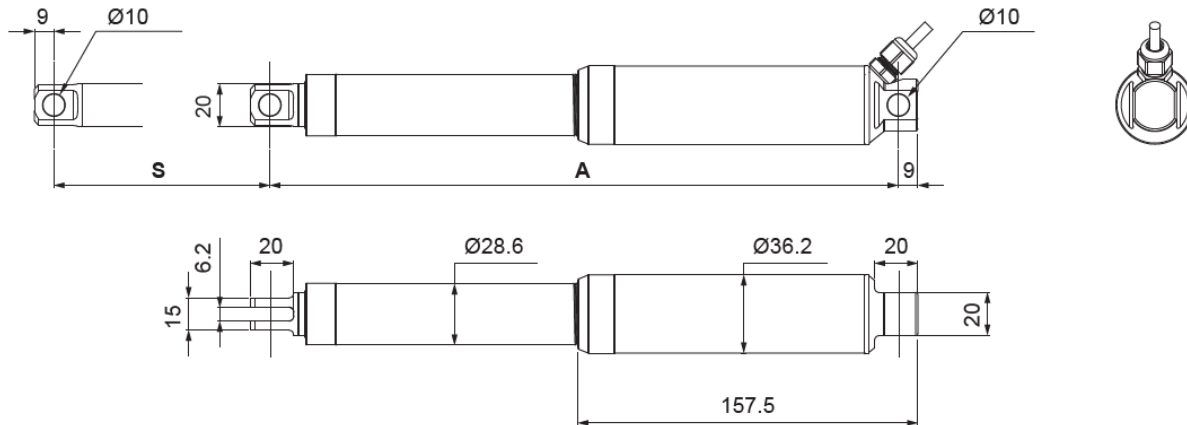
Standard Features:

- Compact in-line design
- Stainless steel (SUS304) or black power coated
- Nominal stroke lengths: 2" [50mm], 4" [100mm], 6" [150mm], 8" [200mm], 10" [250mm], 12" [300mm], 14" [350mm], 16" [400mm]
- Input voltage: 12VDC, 24VDC
- Rated load range: 135 lbs. [600 Newtons] –to- 337 lbs. [1,500 Newtons]
- Static load rating is 405 lbs. [1800 Newtons] for all 3 gear ratios
- Maximum current draw: 3.6 Amps @ 12 VDC
- Speed at no load: 0.30 in/sec [7.5 mm/sec] –to- 0.69 in/sec [17.4 mm/sec]
- Speed at full load: 0.20 in/sec [5.0 mm/sec] –to- 0.46 in/sec [11.7 mm/sec]
- Positioning signal feedback with 2 Hall effect sensors
 - Optional without Hall effect sensors
- Standard lead wire length is approximately 39" [1,000mm]
- Mounting hole diameter (both ends): 3/8" [10mm]
- Duty cycle: 10%, maximum 2 min continuous operation in 20 min.
- Working temperature: -4F [-20C] to +158F [+70C]
- IP rating: IP66, IP69K
- Certified: CE Marking, EMC Directive 2014/30/EU

Accessories:

- Mounting brackets
- Direction reversing relays
- Direction reversing switches
- Wireless remote

Dimensions



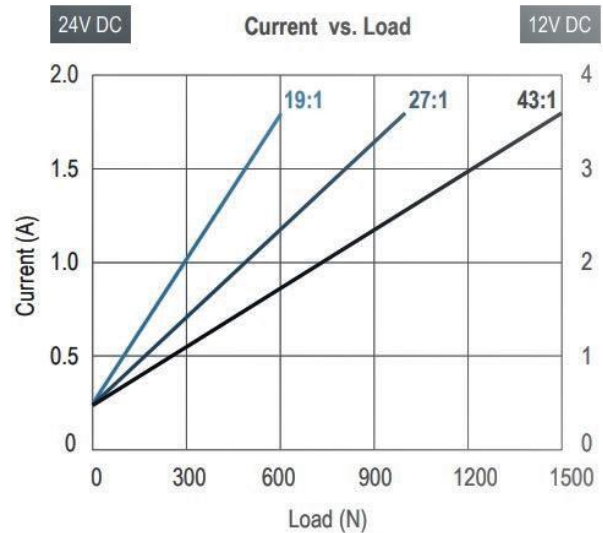
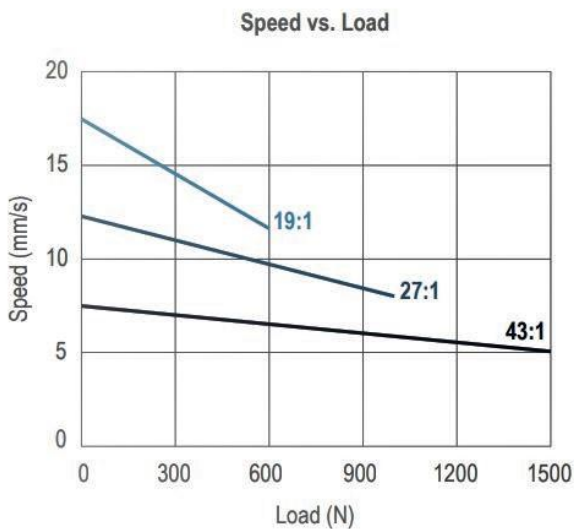
Unit: mm

Nominal Stroke	2"	4"	6"	8"	10"	12"	14"	16"
Actual Stroke (S)	1.97" [50mm]	3.94" [100mm]	5.91" [150mm]	7.87" [200mm]	9.84" [250mm]	11.81" [300mm]	13.78" [350mm]	15.75" [400mm]
Retracted Length (A)	9.17" [233mm]	11.14" [283mm]	13.11" [333mm]	15.08" [383mm]	17.05" [433mm]	19.02" [483mm]	20.98" [533mm]	22.95" [583mm]
Extended Length	11.14" [283mm]	15.08" [383mm]	19.02" [483mm]	22.95" [583mm]	26.89" [683mm]	30.83" [783mm]	34.76" [883mm]	38.70" [983mm]

Performance Data

Gear Ratio	Max Load/Dynamic		Typical Speed No Load		Typical Speed Max Load	
	Lbs. [US]	Newtons	inches/Sec	mm/Sec	inches/Sec	mm/Sec
19:1	135	600	0.69	17.4	0.46	11.7
27:1	225	1000	0.48	12.3	0.31	8.0
43:1	337	1500	0.30	7.5	0.20	5.0

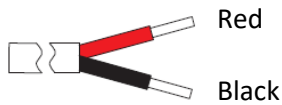
Gear Ratio	Typical Current (A)			
	No Load		Full Load	
	12 VDC	24 VDC	12 VDC	24 VDC
19:1	0.5	0.25	3.6	1.8
27:1	0.5	0.25	3.6	1.8
43:1	0.5	0.25	3.6	1.8



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.

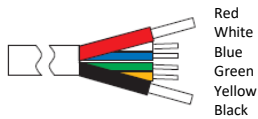
Electrical

Basic wiring (no positioning feedback)



Power	
Red	Black
M+	M-

Wiring with 2 Hall effect sensors



Power		Signal			
Red	Black	White	Blue	Green	Yellow
M+	M-	COM	Data 1	Data 2	VCC

Gear Ratio	Resolution / pulses/inch [mm]
19:1	242.8 [9.56]
27:1	342.9 [13.50]
43:1	544.8 [21.45]

Notes:

- Connect Red to “+” and Black to “-” of DC power supply, the actuator will extend.
- Hall effect input voltage range (VCC): 3.5 – 20 VDC.
- Hall effect output voltage of signal (Data) = Input voltage (VCC).

Ordering Key



Product Category

- 14 : Stainless Steel
- 15 : Black Powder Coat

Input Voltage

- 12 : 12 VDC
- 24 : 24 VDC

Gear Ratio

- 19 : 19:1
- 27 : 27:1
- 43 : 43:1

Stroke (nominal)

- 02 : 2" [50 mm]
- 04 : 4" [100 mm]
- 06 : 6" [150 mm]
- 08 : 8" [200 mm]
- 10 : 10" [250 mm]
- 12 : 12" [300 mm]
- 14 : 14" [350 mm]
- 16 : 16" [400 mm]

Sensor Options

- 0 : No Options
- 5 : 2 Hall Effect Sensors

IP Rating

- 66 : IP66
- 69 : IP69K (for GF14 only)

- Not all combinations stocked

Attention

The GF14 and GF15 Series actuators are without built-in mechanical limit switches. It is suggested to be used with Hall sensor feedback included. It is important that these series of actuators work with a control system that prevents the actuator from constantly hitting its internal end positions, which will reduce the actuator lifespan.

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