

## Product Data Sheet



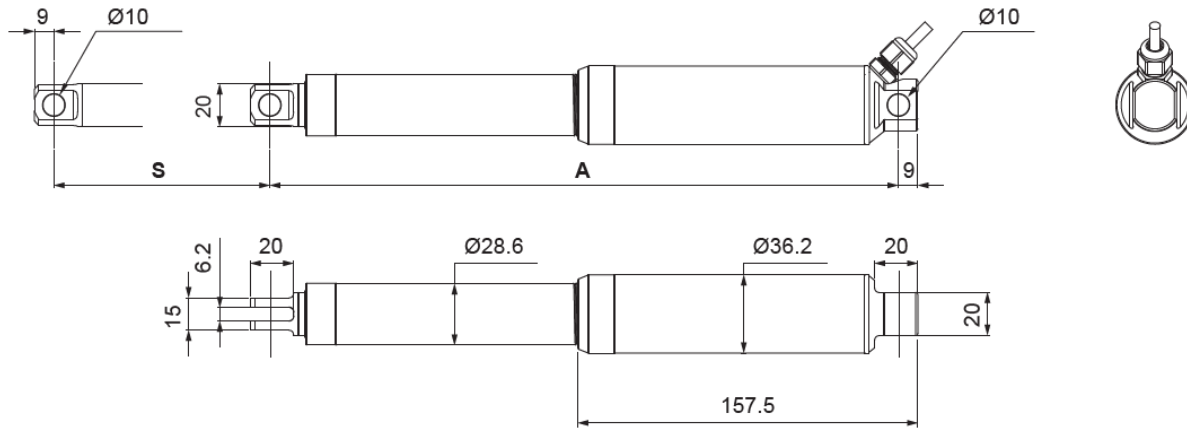
### Standard Features:

- 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: 4.0 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)	9.33" [237mm]	11.30" [287mm]	13.27" [337mm]	15.24" [387mm]	17.20" [437mm]	19.17" [487mm]	21.14" [537mm]	23.11" [587mm]
Extended Length	11.30" [287mm]	15.24" [387mm]	19.17" [487mm]	23.11" [587mm]	27.05" [687mm]	30.98" [787mm]	34.92" [887mm]	38.86" [987mm]

Available stroke (S) range = 1.97" – 15.75" [50 – 400 mm]

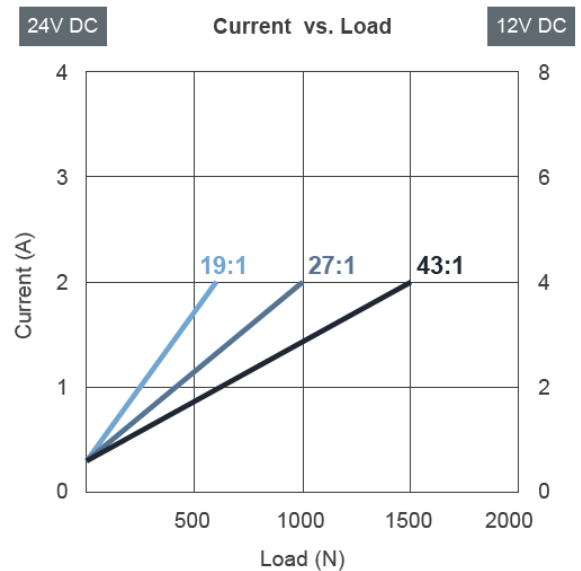
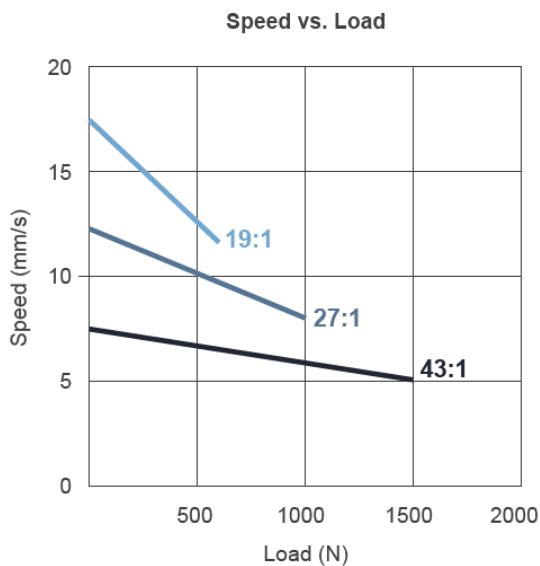
Retractable length (A)  $\geq$  S + 7.36" [187 mm]

Extended length: S + A

**Performance Data**

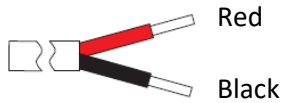
Gear Ratio	Max Load/Dynamic		Speed/No Load		Speed/Max Load	
	Lbs. [US]	Newtons	inches/Sec	mm/Sec	inches/Sec	mm/Sec
19:1	135	600	0.69	17.4	0.46	11.7
27:1	225	1000	0.48	12.3	0.31	8.0
43:1	337	1500	0.30	7.5	0.20	5.0

Gear Ratio	Typical Current (A)			
	No Load		Full Load	
	12 VDC	24 VDC	12 VDC	24 VDC
19:1	0.6	0.3	4.0	2.0
27:1	0.6	0.3	4.0	2.0
43:1	0.6	0.3	4.0	2.0



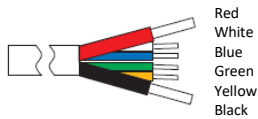
### Electrical

Basic wiring (no positioning feedback)



Power	
Red	Black
M+	M-

Wiring with 2 Hall effect sensors



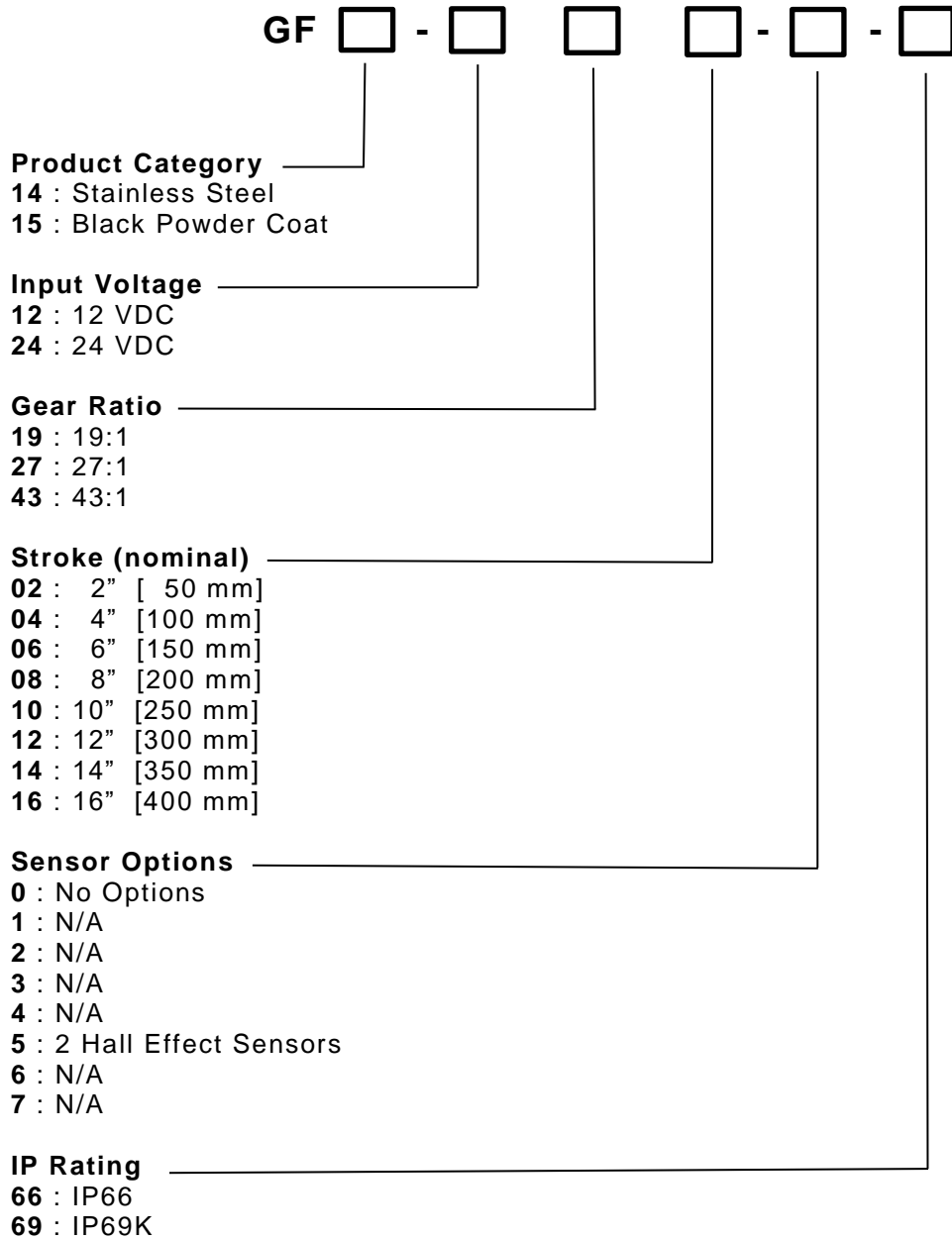
Power		Signal			
Red	Black	White	Blue	Green	Yellow
M+	M-	COM	Data 1	Data 2	VCC

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

**Note:**

Connect Red to “+” and Black to “-” of DC power supply, the actuator will extend.

**Ordering Key**



- 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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