

Specifications



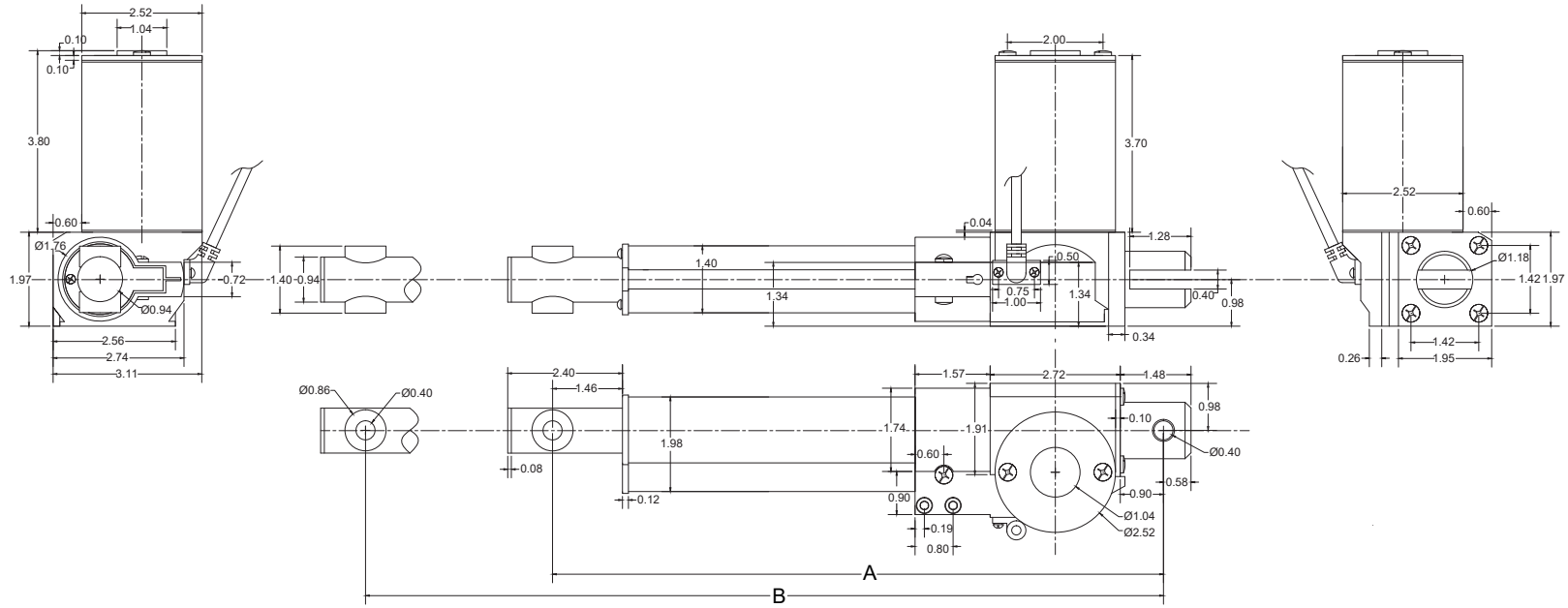
| Load (LBS) | | No Load Current (A) | | Full Load Current (A) | | Speed (inch/sec) | |
|------------|--------|---------------------|-------|-----------------------|-------|------------------|-----------|
| Dynamic | Static | 12VDC | 24VDC | 12VDC | 24VDC | No Load | Full Load |
| 2 | 2 | 2 | 1 | 4 | | 16 | 86 |
| 6 | 6 | 2 | 1 | 6 | 4 | 3 | 24 |
| 1 | 1 | 3 | | 33 | | 2 | 12 |

| | |
|--------------------------------|---|
| Stroke | 1" to 40" |
| Limit Switch | Internal - Non-Adjustable |
| Limit Switch Feedback | Available in 24VDC Only |
| Screw Type | ACME Screw |
| Motor Type | Brushed DC Motor |
| Connector Type | See Page 5 |
| Wire Length | 40" (customizable) |
| Housing Material | Aluminum Alloy |
| Rod Material | Aluminum Alloy |
| Gear Material | Polyformaldehyde |
| Color (Shaft) | Silver |
| Color (Motor End) | Black/White (customizable) |
| Noise | <45dB |
| Duty Cycle | 20% (4 minutes on, 16 minutes off) |
| Operational Temperature | -25°C to 65°C (-13°F to 149°F) |
| Protection Class | IP43 |
| Feedback Options | Hall Effect or Limit Switch Feedback (see page 5) |
| Certifications | CE/RoHS (UL customizable) |
| Mounting Brackets | See Page 7 |
| Mounting Ends | Customizable |



Dimensions

(Dimensions in inches)



Hole to Hole

| Stroke | 1 | 2 | 3 | 4 | 6 | 8 | 9 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 30 | 40 | 50 | 60 | |
|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--|
| PA-03 | | | | | | | | | | | | | | | | | | | | |
| A | 7.88 | 8.88 | 9.88 | 10.88 | 12.88 | 14.88 | 15.88 | 16.88 | 18.88 | 20.88 | 23.68 | 25.68 | 27.68 | 29.68 | 31.68 | 37.68 | 47.68 | 57.68 | 67.68 | |
| B | 8.88 | 10.88 | 12.88 | 14.88 | 18.88 | 22.88 | 24.88 | 26.88 | 30.88 | 34.88 | 39.68 | 43.68 | 47.68 | 51.68 | 55.68 | 67.68 | 87.68 | 107.68 | 127.68 | |

For Stroke Length Less Than 16"

A = Stroke Length + 6.88"

B = Stroke Length x 2 + 6.88"

For Stroke Length Greater Than or Equal to 16"

A = Stroke Length + 7.68"

B = Stroke Length x 2 + 7.68"

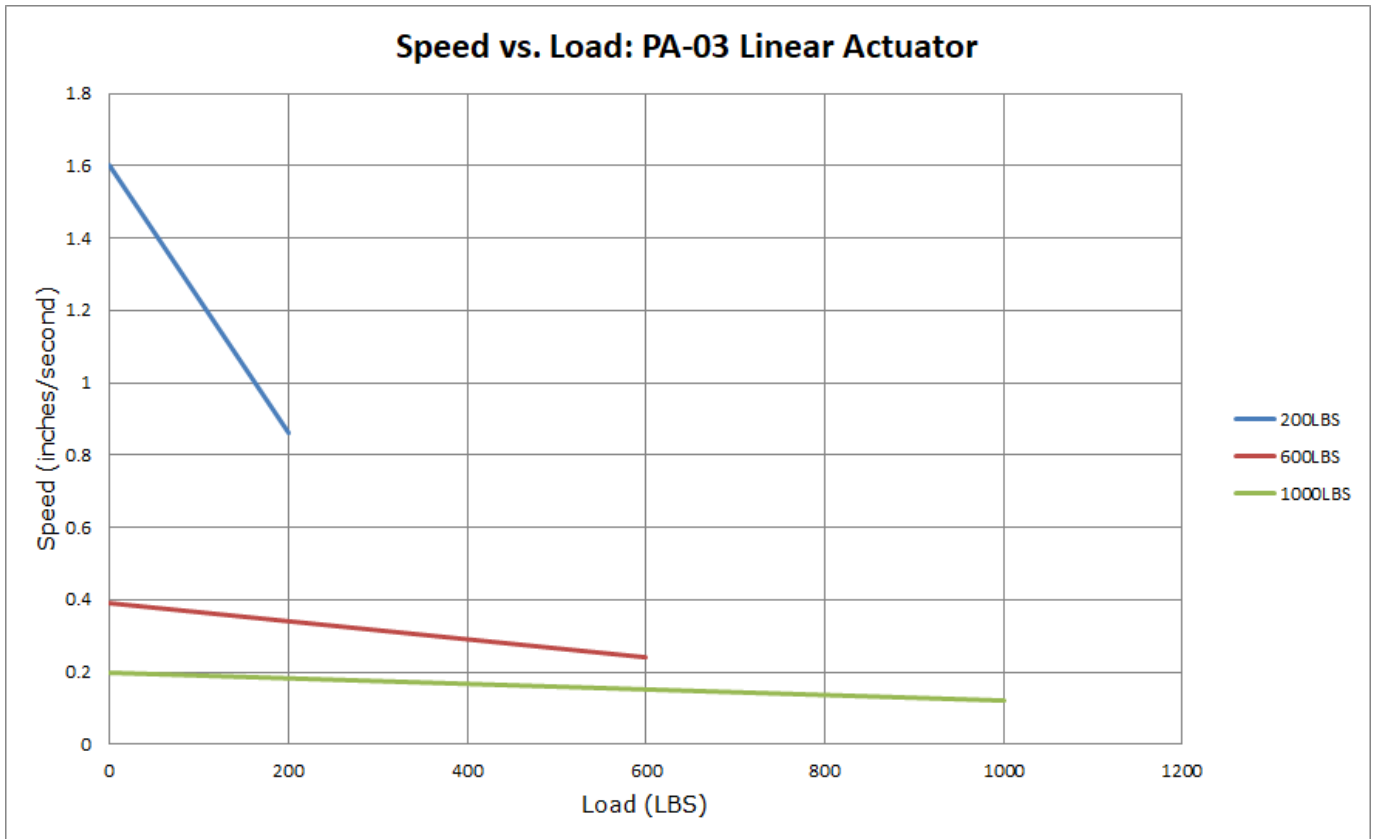
For All Strokes Lengths with Hall Effect Sensor

A = Stroke Length + 7.68"

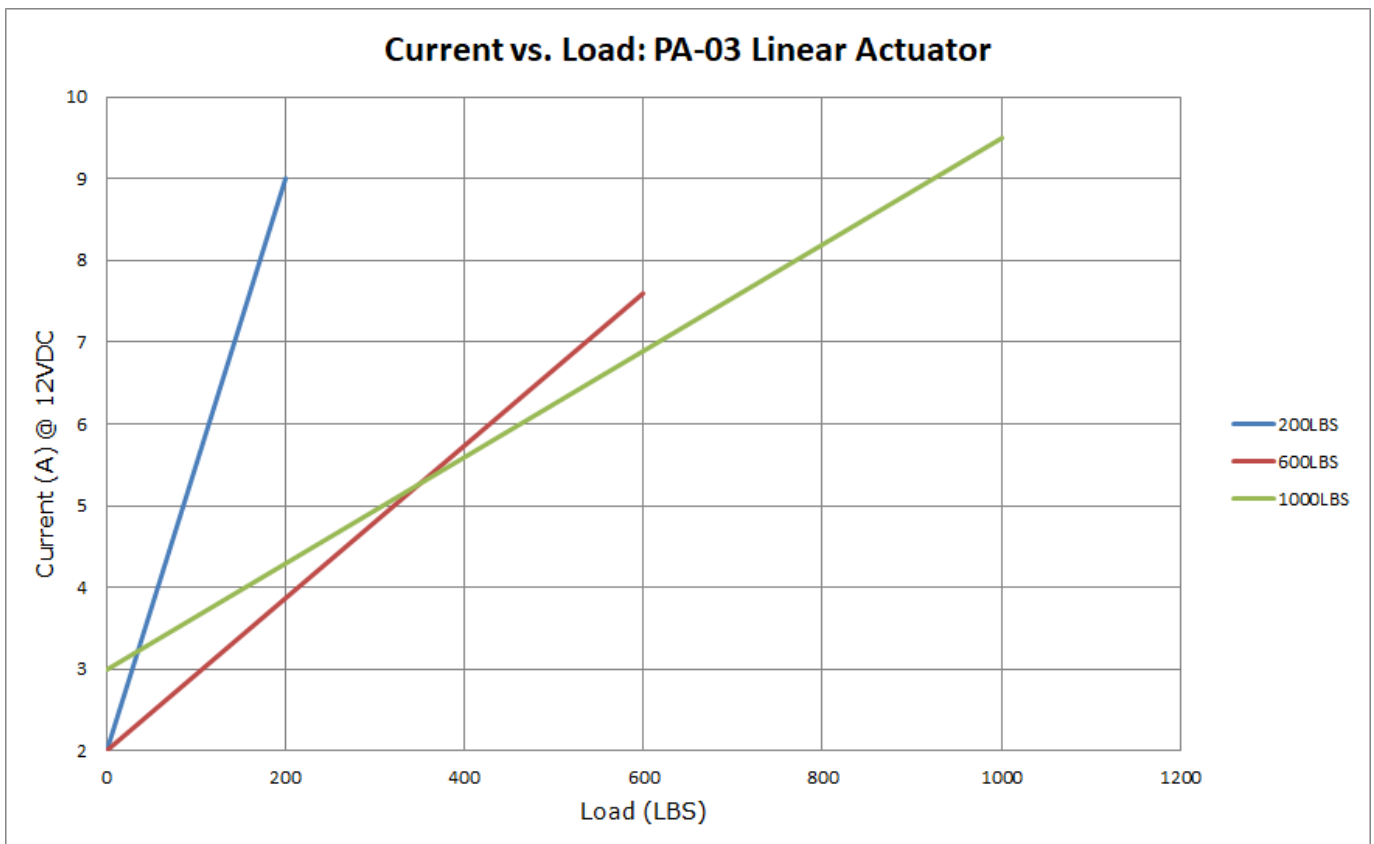
B = Stroke Length x 2 + 7.68"



Speed vs Load



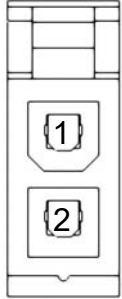
Current vs Load



Connectors & Feedback



2-Pin Connector (Standard)



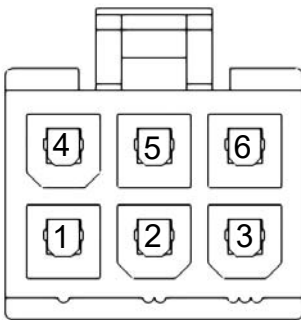
| Motor | |
|-------|------|
| 1 | 2 |
| +VDC | -VDC |

| Component | Part Name | Part Number | Mating Part Number |
|-----------|------------------------------------|-------------|------------------------|
| Housing | Molex Mini Fit Jr 2-Pin Receptacle | 39-01-2025 | 39-01-2029 /39-01-2026 |

6-Pin Hall Effect Connector

*For Stroke Length up to 40"

Front View



| Motor | | Hall Sensor | | | |
|-------|----|-------------|-------|----------|----------|
| 4 | 5 | 2 | 3 | 1 | 6 |
| M+ | M- | GND | +5VDC | Signal 1 | Signal 2 |

| Component | Part Name | Part Number | Mating Part Number |
|-----------|------------------------------------|-------------|---------------------------|
| Housing | Molex Mini Fit Jr 6-Pin Receptacle | 39-01-2065 | 39-01-2069/ 39-01-2066 |

| Output Signal Extending | | Output Signal Retracting | |
|-------------------------|--|--------------------------|--|
| Hall Effect 1 Signal | | Hall Effect 1 Signal | |
| Hall Effect 2 Signal | | Hall Effect 2 Signal | |

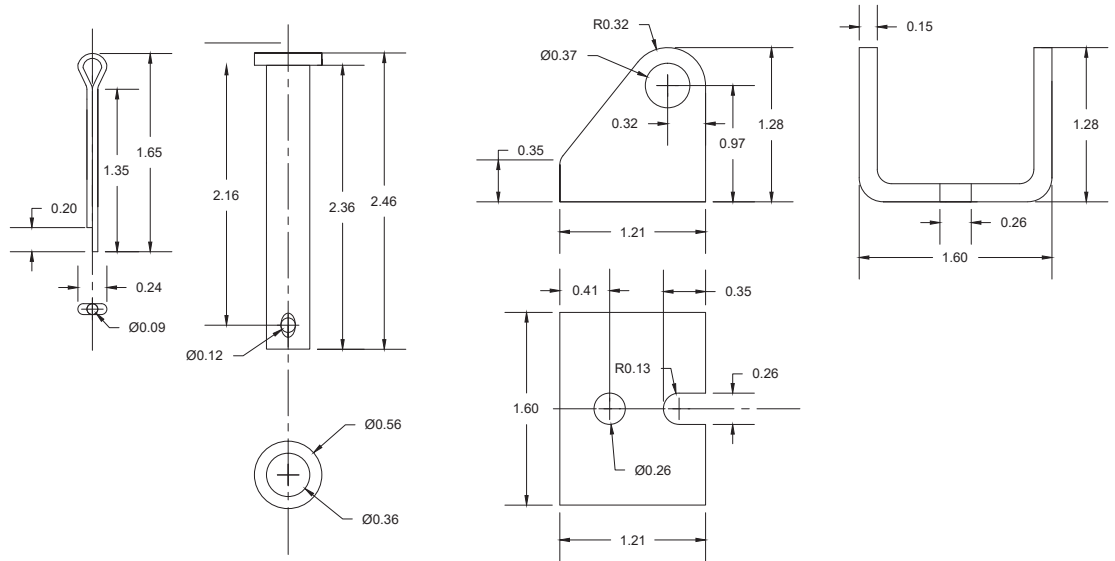
| Force | Resolution (pulses/ inch) |
|-------|---------------------------|
| 200 | 4,953 |
| 600 | 15850 |
| 1000 | 29,718 |



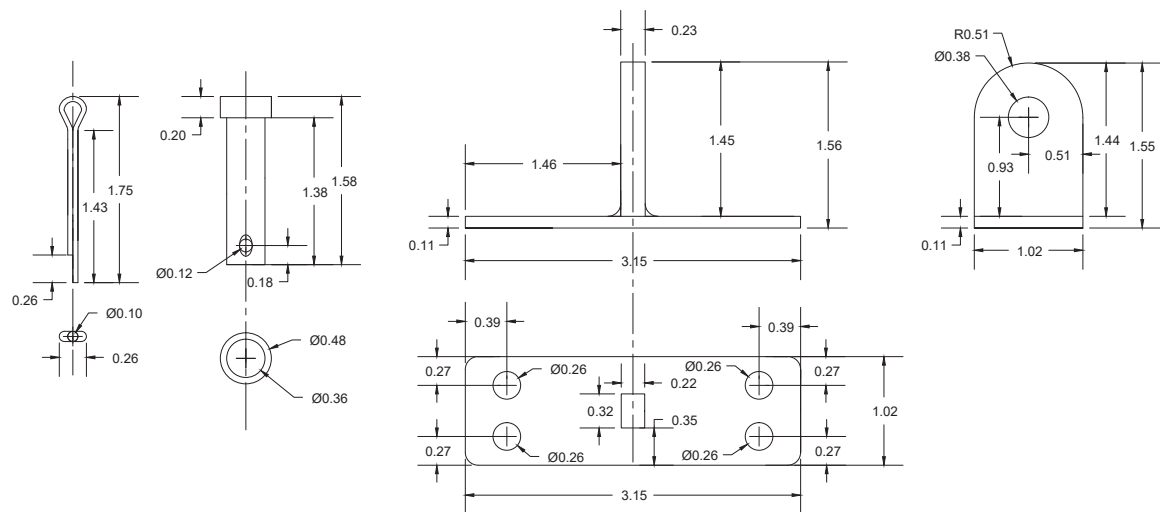
Mounting Brackets

(Dimensions in inches)

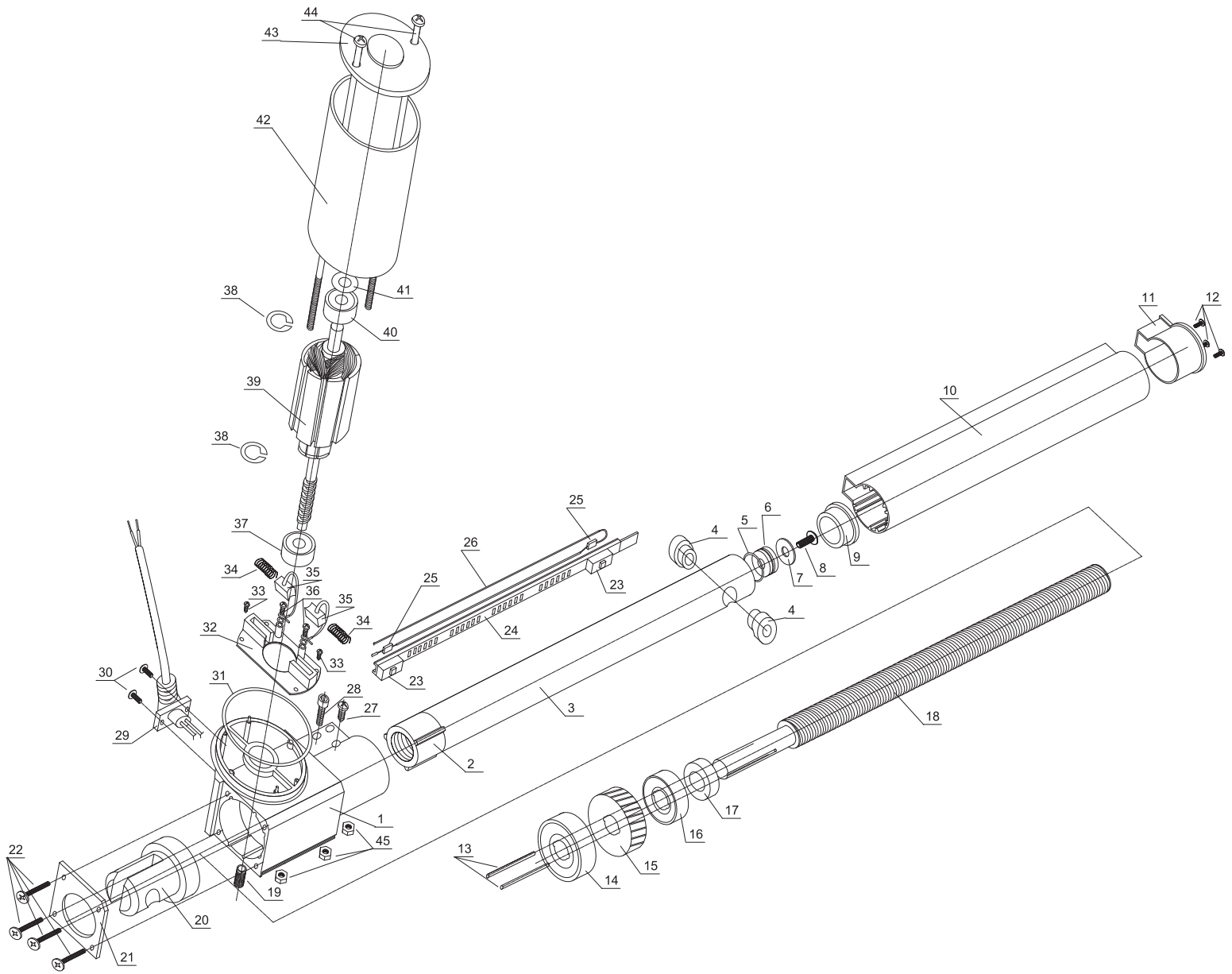
BRK-02



BRK-01



Internal Components



Internals Descriptions



| Item | Description | Qty |
|------|---------------------------------|-----|
| 1 | Actuator Base | 1 |
| 2 | Shaft Guide | 1 |
| 3 | Shaft With Mounting Hole | 1 |
| 4 | Mounting Hole Guard | 2 |
| 5 | Shaft Drive O-Ring | 1 |
| 6 | Shaft Stopper | 1 |
| 7 | Shaft Stopper Washer | 1 |
| 8 | Shaft Stopper Screw | 1 |
| 9 | Shaft Top Cap | 1 |
| 10 | Shaft Enclosure | 1 |
| 11 | Shaft Enclosure Cap | 1 |
| 12 | Shaft Enclosure Cap Screw | 3 |
| 13 | Gear Wheel Locking Pin | 2 |
| 14 | Shaft Drive Bottom Ball Bearing | 1 |
| 15 | Shaft Drive Gear Wheel | 1 |
| 16 | Shaft Drive Ball Bearing | 1 |
| 17 | Shaft Drive Bumper | 1 |
| 18 | Shaft Drive | 1 |
| 19 | Rotor Bottom Support Screw | 1 |
| 20 | Bottom Cap With Mounting Hole | 1 |
| 21 | Bottom Cap Mounting Plate | 1 |
| 22 | Mounting Plate Screw | 4 |
| 23 | Limit Switch | 2 |

| Item | Description | Qty |
|------|--------------------------------------|-----|
| 24 | Limit Switch Carrier | 1 |
| 25 | Diode | 2 |
| 26 | Wire | 1 |
| 27 | Shaft Enclosure Central Screw | 1 |
| 28 | Shaft Enclosure Side Screw | 1 |
| 29 | Power Cable With Mounting | 1 |
| 30 | Power Cable Screw | 2 |
| 31 | Motor Case Gasket | 1 |
| 32 | Brush Holder PCB | 1 |
| 33 | Brush Holder PCB Screw | 2 |
| 34 | Brush Spring | 2 |
| 35 | Electric Motor Brush | 2 |
| 36 | Brush Wire Screw | 2 |
| 37 | Rotor Bottom Bearing | 1 |
| 38 | Locking Washer | 2 |
| 39 | Electric Motor Rotor | 1 |
| 40 | Rotor Top Bearing | 1 |
| 41 | Rotor Top Washer | 1 |
| 42 | Electric Motor Enclosure With Stator | 1 |
| 43 | Motor Top Cap | 1 |
| 44 | Motor Top Cap Screw | 2 |
| 45 | Hex Nut | 3 |