

# RGW10 Non-Motorized Linear Rails

- Screw driven linear rails in wide format
- Linear rails without screw in wide format

The non-motorized RGW Series features standard wear compensating, anti-backlash driven carriages to ensure repeatable and accurate positioning. All moving surfaces include Kerkite® engineered polymers running on Kerkote® TFE coating, providing a strong, stable platform for a variety of linear motion applications. Recommended for horizontal loads up to 100 lbs (445 N).

RGW10 Wide Series,  
Non-Motorized  
Screw Driven Linear Rail



### Identifying the Non-Motorized RGW Part Numbers when Ordering

| RG                                      | W  | 10   | K   | A   | 0500   | XXX   |
|---|--|--|---|---|--|---|
| <b>Prefix</b><br>RG = Rapid Guide Screw | <b>Frame Style</b><br>W = Wide Sensor Mount Capability | <b>Frame Size Load</b><br>10 = 100 lbs (445 N) (Maximum static load) | <b>Coating</b><br>K = TFE Kerkote<br>X = Special (example: Kerkote with grease) | <b>Drive / Mounting</b><br>A = None<br>B = Inline Screw Motor Mount | <b>Nominal Thread Lead Code</b><br>0000 = No Screw<br>0100 = .100-in (2.54)<br>0200 = .200-in (5.08)<br>0500 = .500-in (12.70)<br>1000 = 1.000-in (2.54) | <b>Unique Identifier</b><br>Suffix used to identify specific motors or a proprietary suffix assigned to a specific customer application. The identifier can apply to either a standard or custom part |

NOTE: Dashes must be included in Part Number (-) as shown above. For assistance call our Engineering Team at 603 213 6290.

### Specifications

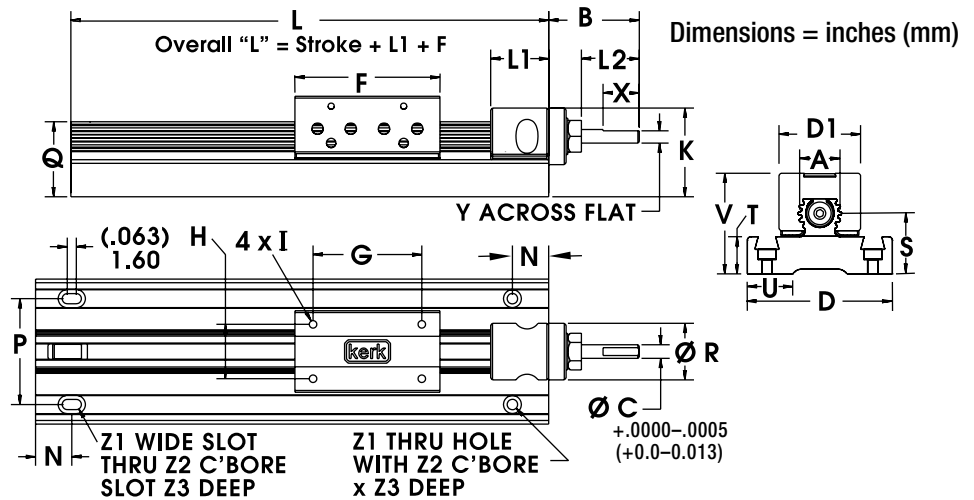
|                                      | Inch Lead    | Thread Lead Code | Nominal Rail Diam. | Nominal Screw Diam. | Typical Drag Torque | Life @ 1/4 Design Load*   | Torque-to-Move Load | Design Load* | Screw Inertia   |
|--------------------------------------|--------------|------------------|--------------------|---------------------|---------------------|---------------------------|---------------------|--------------|---|
| RGW10 Non-Motorized with Guide Screw | inch (mm)    |                  | inch (mm)          | inch (mm)           | oz - in (N-m)       | inch (cm)                 | oz-inc/lb (Nm/Kg)   | lbs (N)      | oz-in-sec <sup>2</sup> /in (kg-m-sec <sup>2</sup> /m) |
|                                      | .100 (2.54)  | <b>0100</b>      | 1.0 (25.4)         | 5/8 (15.9)          | 5.0 (0.4)           | 100,000,000 (254,000,000) | 1.3 (.020)          | 100 (445)    | 14.2 x 10 <sup>-5</sup> (3.9 x 10 <sup>-6</sup> )     |
|                                      | .200 (5.08)  | <b>0200</b>      |                    |                     | 6.5 (.05)           |                           | 2.0 (.031)          |              |   |
|                                      | .500 (12.70) | <b>0500</b>      |                    |                     | 7.0 (.05)           |                           | 3.0 (.047)          |              |   |
| 1.000 (25.40)                        | <b>1000</b>  | 8.5 (.06)        |                    |                     | 6.5 (.101)          |                           |                     |              |   |

NOTE: RGW assemblies with lengths over 36 inches (914.4 mm) and/or leads higher than .5 inch (12.7 mm) will likely have higher drag torque than listed values.

\*Determined with load in a horizontal position.

**Non-Motorized with Guide Screw Dimensional Drawings**

- Screw Driven
- Wide Frame



RGW10 Wide Series, Non-Motorized, Screw Driven

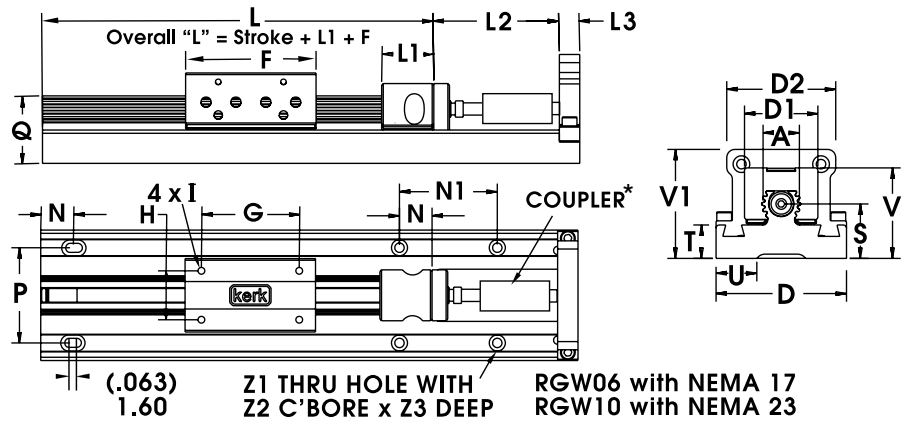
|      | A    | B    | C    | D    | D1   | F   | G    | H    | I*     | K   | L1  | L2  | N   | P   | Q    | S   | T    | U    | V    | X    | Y    | Z1  | Z2   | Z3   |
|------|------|------|------|------|------|-----|------|------|--------|-----|-----|-----|-----|-----|------|-----|------|------|------|------|------|-----|------|------|
| inch | 1.0  | 1.75 | .312 | 3.38 | 2.0  | 3.3 | 2.25 | 1.25 | 1/4-20 | 1.9 | 1.3 | 1.3 | .75 | 2.6 | 1.5  | 1.2 | .69  | 1.3  | 2.1  | .88  | .28  | .14 | .40  | .43  |
| mm   | 25.4 | 44.5 | 7.93 | 85.7 | 50.8 | 83  | 57.1 | 31.7 | UNC    | 48  | 33  | 33  | 19  | 66  | 39.6 | 31  | 17.5 | 33.8 | 54.6 | 22.4 | 7.11 | 6.6 | 10.2 | 10.9 |

\*Metric carriage hole sizes available M3, M4, M5, M6.

## RGW10 Non-Motorized Linear Rails

### Motor Mount for Non-Motorized with Guide Screw Dimensional Drawings

- Motor Mount
- Screw Driven
- Wide Frame



Dimensions = inches (mm)      \*NOTE: The coupling shown in the dimensional drawing is not included.

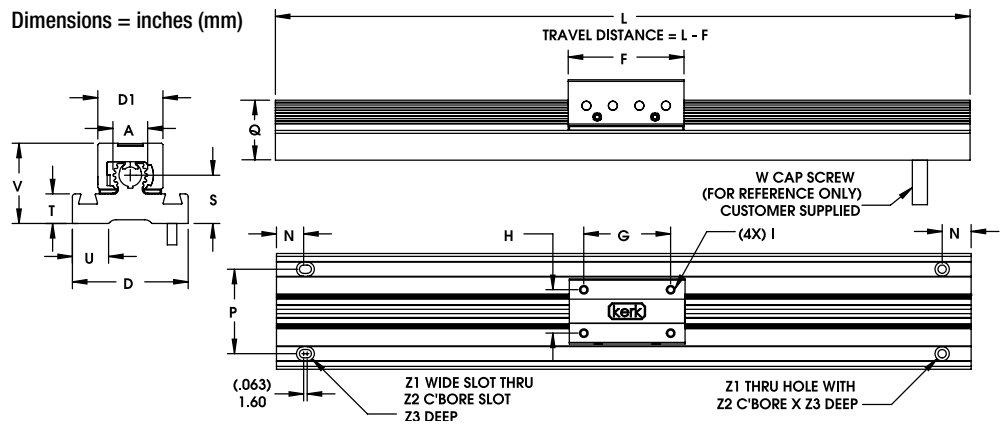
**RGW10 Motor Mount, Wide Series, Non-Motorized, Screw Driven**

|      | A    | B    | C     | D    | D1   | F    | G    | H     | I*   | K   | L1   | L2   | N    | P    | Q    | R    | S1   | T    | U    | V   | X    | Y    | Z1  | Z2  | Z3  |
|------|------|------|-------|------|------|------|------|-------|------|-----|------|------|------|------|------|------|------|------|------|-----|------|------|-----|-----|-----|
| inch | 0.60 | 1.25 | .1875 | 2.0  | 1.13 | 2.0  | 1.50 | 0.750 | 6-32 | 1.2 | .80  | .80  | .50  | 1.46 | 1.04 | .80  | .83  | .51  | .63  | 1.4 | .50  | .170 | .14 | .25 | .14 |
| mm   | 15.2 | 31.8 | 4.762 | 50.8 | 28.6 | 50.8 | 38.1 | 19.1  | UNC  | 30  | 20.3 | 20.3 | 12.7 | 37.0 | 26.4 | 20.3 | 21.2 | 13.0 | 16.0 | 36  | 12.7 | 4.32 | 3.6 | 6.4 | 3.6 |

\*Metric carriage hole sizes available M3, M4, M5, M6.

### Non-Motorized without Guide Screw Dimensional Drawings

- Without Guide Screw
- Wide Frame



**RGW10 Wide Series, Non-Motorized, Without Screw Driven**

|      | A    | D    | D1   | F   | G    | H    | I*      | N   | P   | Q    | S   | T    | U    | V    | Z1  | Z2   | Z3   |
|------|------|------|------|-----|------|------|---------|-----|-----|------|-----|------|------|------|-----|------|------|
| inch | 1.0  | 3.38 | 2.0  | 3.3 | 2.25 | 1.25 | 1/4-200 | .75 | 2.6 | 1.5  | 1.2 | .69  | 1.3  | 2.15 | .26 | .40  | .43  |
| mm   | 25.4 | 85.7 | 50.8 | 83  | 57.1 | 31.7 | UNC     | 19  | 66  | 39.6 | 31  | 17.5 | 33.8 | 54.6 | 6.6 | 10.2 | 10.9 |

\*Metric carriage hole sizes available M3, M4, M5, M6.

## Material Coatings

### Kerkite® Polymers

Compounded with lubricants, reinforcements and thermoplastic polymers.

- Injection molded
- High performance
- Exceptional wear properties

### Kerkote® TFE Coating

A dry lubricant, Kerkote will not become dry and paste-like, and does not attract dirt or debris.

- Reduces friction
- Cost effective
- Requires no additional external lubrication or maintenance

## Accessory

### RGW10 Sensor Mount Kits

Sensor mounting kits based on U-channel optical sensor. Each kit includes one flag, three sensor mounts and all mounting hardware. Sensors are not included in the kit and must be ordered separately from sensor manufacturer. Part # RGW10SK

Linear Rail Check List ▶