## WGS06 Non-Motorized Linear Rails

- Wide, low profile screw driven linear rails

The non-motorized WGS Series features standard wear compensating, anti-backlash driven carriages to ensure repeatable and accurate positioning. All moving surfaces include Kerkite ${ }^{\circledR}$ engineered polymers running on Kerkote ${ }^{\circledR}$ TFE coating, providing a strong, stable platform for a variety of linear motion applications.
Recommended for horizontal loads up to 35 lbs ( 156 N ).
To determine what is best for your application see the Linear Rail Applications Checklist.


|  | Identifying the Non-Motorized WGS Part Numbers when Ordering |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WG | S | 06 | K | A | 0100 | XXX |
| Prefix WG = Wide Guide Screw | Frame Style S = Standard | Frame Size Load $06=35 \mathrm{lbs}$ <br> (156 N) <br> (Maximum <br> static load) | Coating K = TFE Kerkote | Drive / Mounting A = None B = Inline Screw Motor Mount | Nominal Thread Lead Code $\begin{aligned} 0100 & =.100-\mathrm{in}(2.54) \\ 0200 & =.200-\mathrm{in}(5.08) \\ 0500 & =.500-\mathrm{in}(12.70) \\ 1000 & =1.000-\mathrm{in}(2.54) \end{aligned}$ | Unique Identifier <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 |

Specifications

| WGS06 <br> Non-Motorized with Lead Screw | Inch Lead | Thread Lead Code | Nominal Rail Diam. | Nominal Screw Diam. | Typical Drag Torque | Life @ 1/4 Design Load* | Torque-toMove Load | Design Load* | Screw Inertia |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | inch (mm) |  | inch (mm) | inch (mm) | Oz - in (N-m) | inch (cm) | 0z-inc/lb ( $\mathrm{Nm} / \mathrm{Kg}$ ) | lbs ( N ) | $0 z-\mathrm{in}-\sec ^{2} / \mathrm{in}$ (kg-m-sec $2 / m$ ) |
|  | . 100 (2.54) | 0100 |  | $\begin{gathered} 3 / 8 \\ (9.5) \end{gathered}$ | 4.0 (0.3) | $\begin{gathered} 100,000,000 \\ (254,000,000) \end{gathered}$ | 1.0 (.016) | 35 (156) | $\begin{gathered} 1.5 \times 10^{-5} \\ \left(4.2 \times 10^{-6}\right) \end{gathered}$ |
|  | . 200 (5.08) | 0200 |  |  | 5.0 (.04) |  | 1.5 (.023) |  |  |
|  | . 500 (12.70) | 0500 |  |  | 6.0 (.04) |  | 2.5 (.039) |  |  |
|  | 1.000 (25.40) | 1000 |  |  | 7.0 (.05) |  | 4.5 (.070) |  |  |

NOTE: WGS assemblies with lengths over 36 inches ( 914.4 mm ) and/or leads higher than $.5 \mathrm{inch}(12.7 \mathrm{~mm})$ will likely have higher drag torque than listed values.
*Determined with load in a horizontal position.

Non-Motorized with Lead Screw
Dimensional Drawings

- Screw Driven
- Wide Frame


WSG06 Wide Series, Non-Motorized, Screw Driven

|  | A | B | C | D | E | F | G | H | I | J | K | L | M | $\mathrm{N}^{*}$ | 0 | P1 | P2 | P3 | Q | R |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| inch | 1.0 | 2.5 | 1.1 | . 44 | 2.0 | 1.0 | . 75 | . 63 | . 39 | . 187 | 1.2 | 2.1 | 1.62 | 8-32 | . 09 | . 15 | . 26 | . 256 | . 45 | . 92 |
| mm | 25.4 | 63.5 | 28 | 11.2 | 50.8 | 25.4 | 19.1 | 16 | 9.9 | 4.76 | 39.9 | 53.9 | 41.2 | UNC-2B | 2.3 | 3.8 | 6.6 | 6.5 | 11.4 | 23.3 |

## Material Coatings

## Kerkite ${ }^{\ominus}$ Polymers

Compounded with lubricants, reinforcements and thermoplastic polymers, Kerkite Polymers are formulated to provide optimum performance in its target conditions and applications.

- Injection molded
- High performance
- Exceptional wear properties


## Kerkote ${ }^{\oplus}$ TFE Coating

A dry lubricant, Kerkote will not become dry and paste-like, and does not attract dirt or debris. Kerkote differs from conventional plating and coating because it is soft, more evenly distributed than other lubricants, and decreases erratic drag torques and unpredictable wear.

- Reduces friction
- Cost effective
- Long term and maintenance free

Kerkote provides the maximum level of self-lubrication, requiring no additional external lubrication or maintenance.

