

## 600 SERIES

LINEAR POSITION SENSOR



### Introduction

The 600 Series linear motion position transducers provide extremely accurate measurements in applications that require a rugged instrument operating in a tight area. Their long life, infinite resolution and smooth output deliver high reliability in critical measurements. Seven models provide a choice of electrical travel from 1" (25mm) to 12" (305mm) and include a floating design to accommodate shaft/interface connecting misalignments. An optional mounting bracket and rod end bearing are available.

### SPECIFICATIONS

#### Mechanical

|                          |                             |
|--------------------------|-----------------------------|
| <b>Mechanical Travel</b> | Elect travel + 0.1 in. min  |
| <b>Actuation Force</b>   | 2 oz. max                   |
| <b>Repeatability</b>     | Within 0.0005 inch          |
| <b>Life</b>              | 10 x 10 <sup>6</sup> cycles |

#### Electrical

|                                       |   |
|---------------------------------------|---|
| <b>Electrical Travel</b>              | See Table 1                                   |
| <b>Resistance Range</b>               | See Table 1                                   |
| <b>Resistance Tolerance</b>           | ±20%  |
| <b>Independent Linearity</b>          | See Table 1                                   |
| <b>Power Rating @ 70°C</b>            | 0.25 Watt per inch Derated to 0 Watts @ 125°C |
| <b>Output Smoothness</b>              | 0.1%  |
| <b>Insulation Resistance @500 VDC</b> | 1000 Megohms                                  |
| <b>Resolution</b>                     | Infinite                                      |
| <b>Dielectric Strength</b>            | 500 VRMS                                      |
| <b>Temperature Range</b>              | -55° to +125°C                                |



## DIMENSIONS

Dimensions are in inches(mm). Tolerance: .03 (.8)

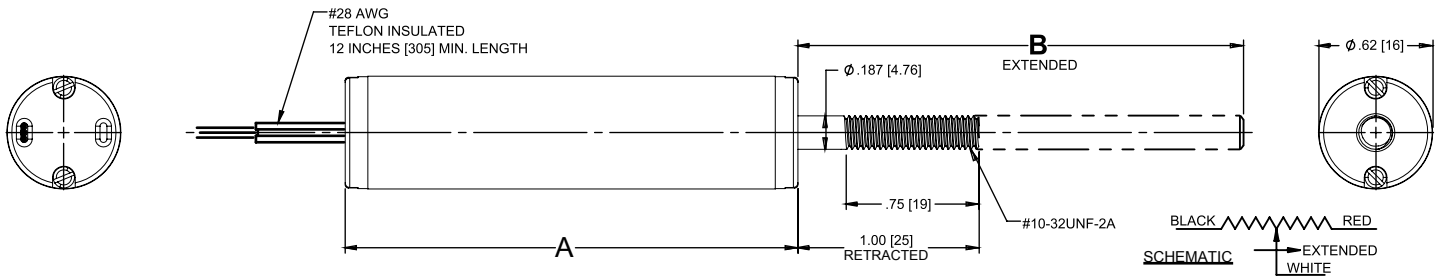


Table 1

| Model | Resistance $\Omega$ | Linearity $\pm\%$ | Electrical Travel | Dimensions  |             |
|-------|---------------------|-------------------|-------------------|-------------|-------------|
|       |                     |                   |                   | A           | B           |
| 601   | 1.0                 | 0.70              | 1.00 (25)         | 2.50 (57)   | 2.10 (53)   |
| 602   | 2.0                 | 0.35              | 2.00 (51)         | 3.50 (89)   | 3.10 (79)   |
| 603   | 3.0                 | 0.25              | 3.00 (76)         | 4.50 (114)  | 4.10 (104)  |
| 604   | 4.0                 | 0.15              | 4.00 (102)        | 5.50 (140)  | 5.10 (129)  |
| 606   | 6.0                 | 0.12              | 6.00 (152)        | 7.50 (190)  | 7.10 (180)  |
| 610   | 10.0                | 0.09              | 10.00 (254)       | 11.50 (292) | 11.10 (282) |
| 612   | 12.0                | 0.08              | 12.00 (305)       | 13.50 (343) | 13.10 (333) |

## General Notes

- Available in dual configuration.
- Most specifications may be altered to meet specific requirements.
- Other travels available

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