

MODEL 612

The Duncan 600 Series provides an extremely accurate method of position sensing in applications that require a rugged instrument operating in a tight area. Its long life, infinite resolution and very 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 shaft design to accommodate shaft/interface connecting misalignments. Accessories for the 600 Series include a rod end bearing and mounting bracket.

ELECTRICAL SPECIFICATIONS

Electrical Travel:

1.00" (25mm) to 12.00" (305mm) (See table)

Resistance Range:

1.0K to 12.0K Ω standard (See table)

Resistance Tolerance:

$\pm 20\%$

Independent Linearity:

± 0.70 to 0.08% (See table)

Power Rating at 70°C:

0.25 watts

Per inch of electrical travel derated
to 0 watts at 125°C

Output Smoothness:

0.1%

Resolution:

Infinite

Insulation Resistance at 500 VDC:

1000 megohms

Dielectric Strength:

500 VRMS

Temperature Range:

-55 to +125°C

MECHANICAL SPECIFICATIONS

Mechanical Travel:

Electrical travel + 0.1 inch min.

Actuation Force:

2 oz. max.

Repeatability:

Within .0005 in.

Life:

10×10^6 Cycles

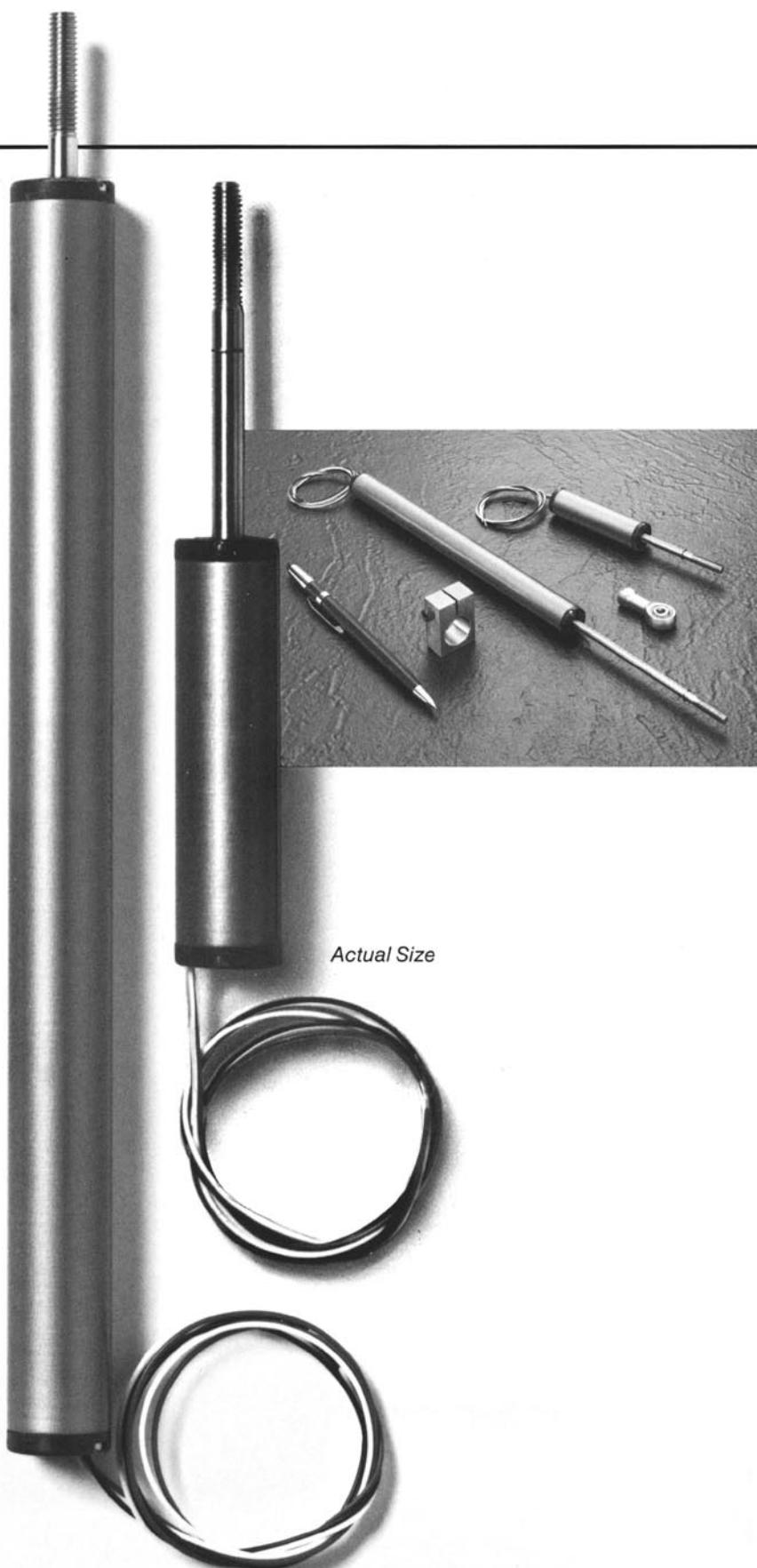
Shaft Alignment:

Floating shaft design allows for shaft/interface
misalignment up to 0.010" (.25).

Shaft rotates freely

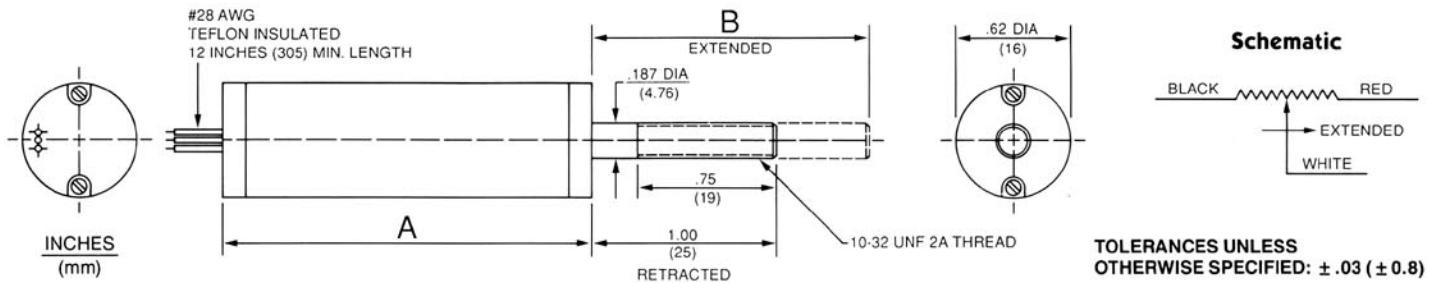
NOTES:

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



LINEAR MOTION POSITION SENSOR INFINITE RESOLUTION

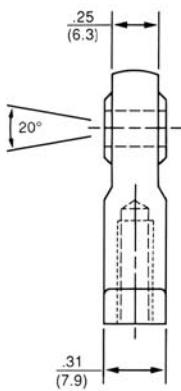
OUTLINE SPECIFICATIONS



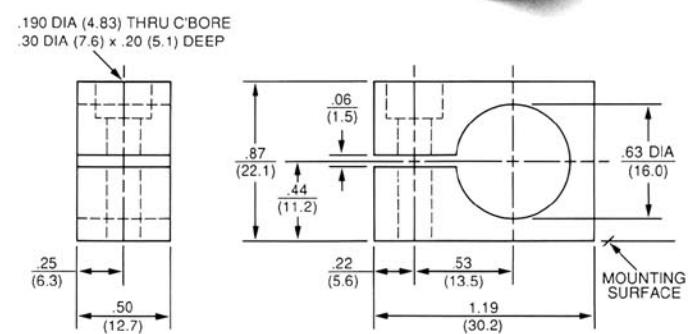
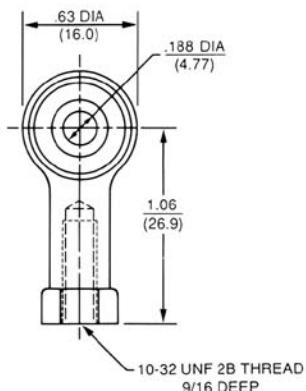
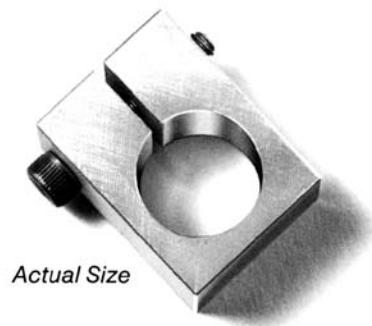
MODEL	612
Resistance K Ω	12.0
Linearity \pm %	0.08
Electrical Travel inches (mm)	12.00 (305)
Case Dimensions	
A inches (mm)	13.50 (343)
B inches (mm)	13.10 (333)

ACCESSORIES

ROD END BEARING
600-52



MOUNTING BRACKET
600-51



INCHES
(mm)

TOLERANCES UNLESS
OTHERWISE SPECIFIED: $\pm .03$ ($\pm .08$)

Mouser Electronics

Authorized Distributor

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[612R12KL.08](#)