



High Pressure, Wide Temperature Range

The 700 Series Linear Position Sensors are designed to operate reliably in extreme environments such as “down hole” oil well applications at temperatures between -40° and over 200°C and pressures of up to 30,000 psi. Containing a conductive plastic resistive element, the 700 Series has a longer operating life and resolution than traditional wire-wound units. Offered in miniature diameters for space-saving advantages, the 700 Series is also designed to meet a wide variety of interface and mounting requirements making it ideal for applications requiring accurate performance in high temperature and high pressure environments with limited space

Electrical Specifications

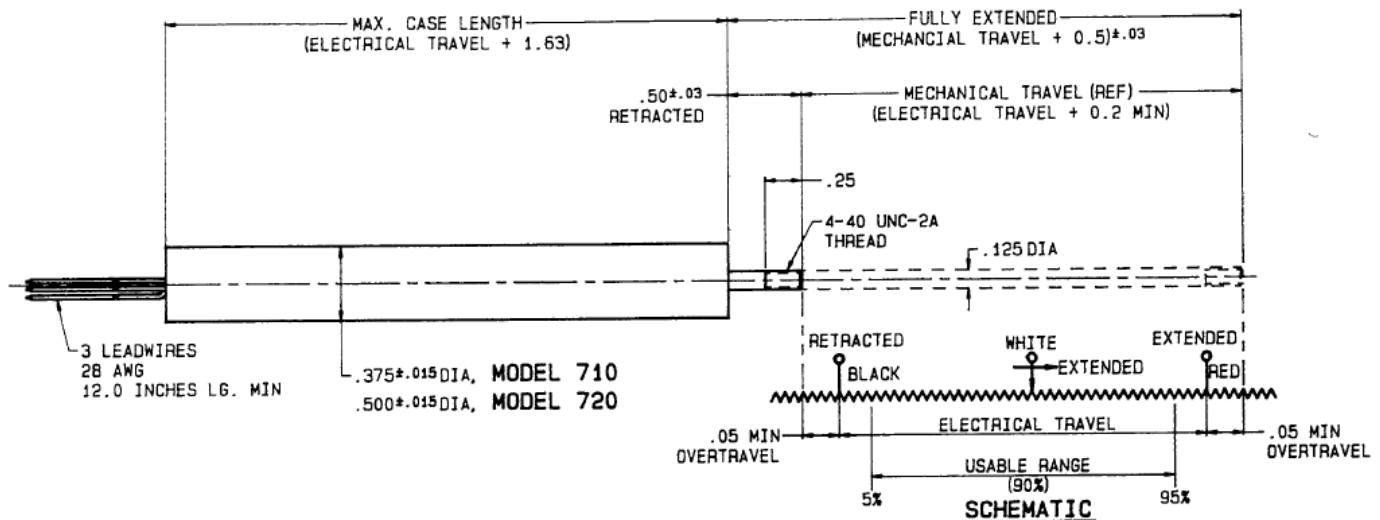
Electrical Travel: 1 in. min to 6 in. max
 Total Resistance: 1.23 KΩ per inch
 Resistance Tolerance: ±25%
 Accuracy over useable range:
 (Ind. Lin. See Note 2) STD: ± 0.020 inch
 Best: ± 0.005 inch

Power Rating @ 175°C: 0.25 Watt per inch
 Derated to 0.10 Watts @ 250°C
 Output smoothness: 0.1%
 Insulation resistance @250 VDC: 1000 Megohms
 Dielectric strength: 250 VRMS
 Operating Temperature Range: -40° to +200°C
 Storage Temperature Range: -40° to +250°C

Mechanical Specifications

Mechanical Travel: Elect travel + 0.2 in. min
 Actuation Force: 2 oz. max
 Repeatability: within 0.001 inch
 Life: 5 x 10⁵ cycles

Dimensions



Notes

1. Dimensions are in inches. Tolerance: ±.010
2. Most specifications may be altered to meet specific requirements.

Special Feature Examples:

- Vent holes for immersion in fluids.
- Mounting: Threaded bushing front/rear.
- Leads: Jacketed/Shielded cable.
- Shaft End Options: (Figure 1)

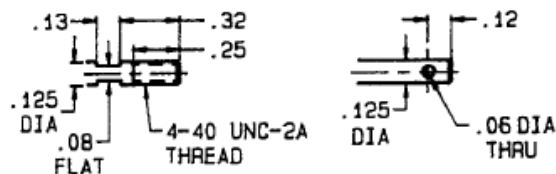


Figure 1