

6300 LINEAR POTENTIOMETER



Introduction

Sensata 6300 Series of thick film conductive plastic sensors fit snugly into cylinders to provide highly accurate positioning information and are built rugged to operate in extreme environments.

The 6300 Series is built with a proprietary conductive plastic resistive ink that is tough enough to withstand operating temperatures from -40° to +200°C and pressures up to 35000 psi immersed in fluid. This linear potentiometer series is also well-suited for high velocity applications exceeding 2000mm/sec (hydraulic) or 5000mm/sec (pneumatic).

To meet a wide variety of interface and mounting requirements, the 6300 Series is designed to be adaptable with a wide range of installation styles; leadwires or connectors in pressure or non-pressure headers. This makes it ideal for applications requiring accurate performance with limited space such as in the automotive, medical, off-highway, oil and gas, marine and military industries.

SPECIFICATIONS

Electrical

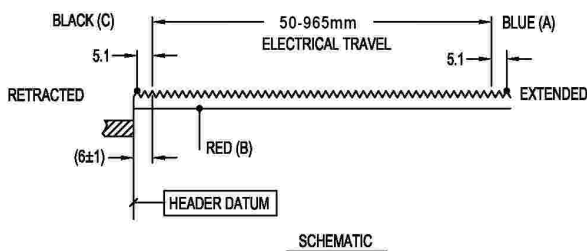
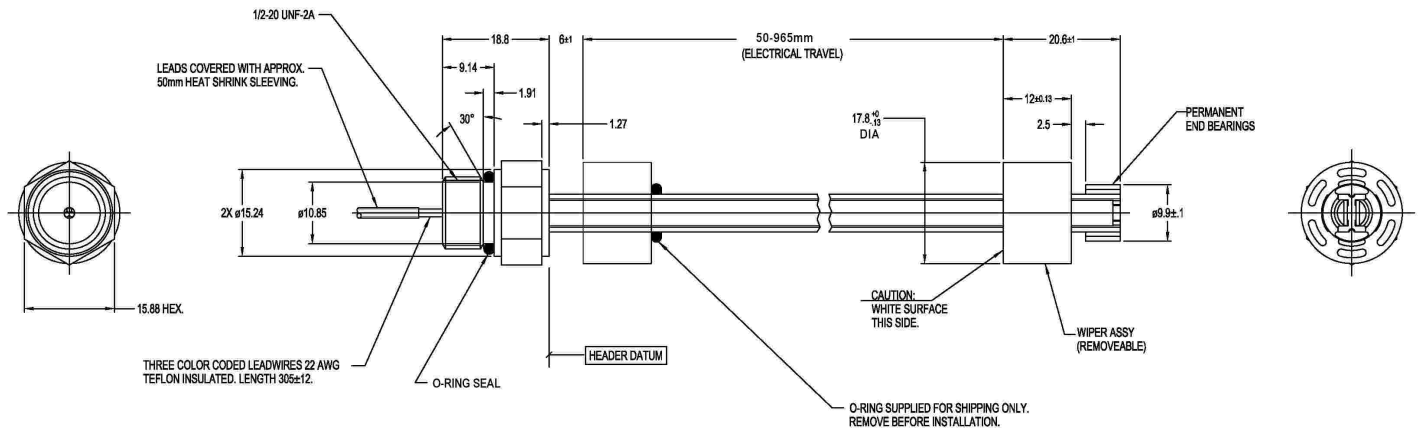
Electrical Travel	50 to 965 mm
Resistance	80Ω/mm
Resistance Tolerance:	+/-20%
Power Rating At 70°C	0.5 watts per 50mm of electrical travel (Derated to 0 watts at 125°C)
Output Smoothness	0.1% of total applied voltage
Insulation Resistance at 250VDC	50 megaohms min
Resolution	Infinite
Accuracy	Varies with length (.04% to 0.75%)
Dielectric	250VDC
Operating Temperature	-40°C to +125°C (Available up to 200°C)

Mechanical

Actuation Force	0.56 Newtons max
Repeatability	Within 0.013mm

DIMENSIONS

Dimensions are in millimeters



Most specifications can be altered to meet specific requirements. Consult factory for details.

Special Feature Examples:

- Temperature rating up to 200°C
- Multiple mounting headers (pressure or non-pressure)
- Leads: Jacketed/Shielded cable

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