Radiation Resistant Servo-Inclinometer model TS2R



This Servo-Inclinometer was designed to operate in intense radiation environment. It was originally developed in cooperation with Ontario-Hydro of Canada to monitor the fuelling machines of nuclear power-stations, where it is exposed to radiation over extended periods of time. The sensors were wired to a remote control box, to provide monitoring, control and alarm functions.



• FEATURES

- High radiation resistance
- High accuracy closed-loop operation
- Good repeatability
- Fast response
- Low power consumption
- High level, low impedance output

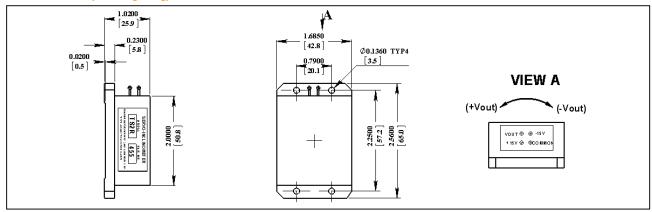


• SPECIFICATIONS:

| Measuring range | ±2 degrees to ±15 degrees max |
|-------------------------------------|--|
| Non-linearity error | 0.02%FR typ (1) |
| Resolution | <0.01%FR |
| Non-repeatability & hysteresis | <0.001 deg |
| Sensitive axis misalignment | < 0.75 deg |
| Cross-axis sensitivity | <0.002g/g |
| Bias | <0.1 deg |
| Power supply | ±15VDC @ 10 mA |
| Output | ±5V max |
| Output impedance | <10 Ω |
| Step response | 50 msec |
| Zero temperature coefficient | 0.002 deg/°C typ (10 to 40°C) |
| Span temperature coefficient | 0.02%/°C typ |
| Operating temperature range | 0 to +70°C |
| Rated performance temperature range | 10 to +40°C |
| Maximum overload | 100g constant acceleration |
| Shock survival | 250g, 11msec |
| Housing material | Sulphuric anodized # 2024 Aluminum alloy |
| Weight | 100 grams |

Notes: 1) Non-linearity error defined as maximum deviation of any point from the theoretical sine function line in percents of the full measuring range.

• DIMENSIONS (INCH/[mm]):



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Singer Instruments & Control Ltd.

2 Yozma St., Tirat Carmel 39032, **ISRAEL** info@singer-instruments.com

Tel: 972-4-857-8880 Fax: 972-4-857-8881