R120LC Series

DC-Operated Rotary Variable Inductance Transducer (RVIT)

DESCRIPTION

The R120LC Series is a DC operated noncontact rotary transducer. The R120LC proprietary design incorporates a set of printed circuit coils and a conductive spoiler to achieve superior performance and low cost. The digital circuit is very resistant to environmental disturbances and ideally suited to most industrial applications. The R120LC utilizes non-contacting technology, and does not suffer the wear problems experienced by potetiometers.



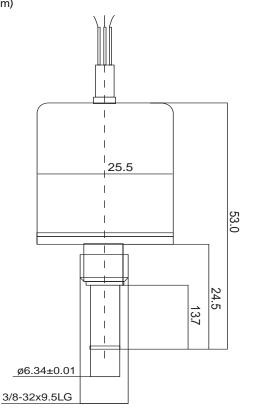
◆ Offer Wide Operating Temperature

Range

- ◆ Infinite Resolution
- ♦ Virtually Infinite Rotational Life

dimensions

in (mm)





| specifications | |
|-----------------------|--------------------------|
| Full Range | ±60° |
| Input Voltage (nom) | 4.75-5.25V |
| Output Voltage (nom) | 0.5-4.5 |
| Input Current (max) | 21 mA |
| Output Current (max) | 5 mA |
| Output Impedance | <10 Ohms |
| Frequency Response | 200 Hz @ -3 dB |
| Linearity Error | ±0.5% of full scale |
| | output |
| Nonrepeatability & | |
| Hysteresis (max) | 0.1% of full scale |
| | range output maximum |
| Storage Temperature | |
| Range | -65°F to 250°F |
| | (-55°C to 125°C) |
| Operating Temperature | |
| Range | -40°F to 185°F |
| | (-40°C to 85°C) |
| Temperature | |
| Coefficient of FS | ±0.03% (10°C) |
| Lead Wires | 24 AWG, PVC insulation, |
| | 4 wire, minimum 12" long |

