







High Performance AC/AC LVDTs



- After years of research, Uni-Automation has developed highly reliable LVDTs for harsh environments and high- performance demanding applications
- Unique coil winding & assembly techniques provide excellent length to stroke ratios, good sensitivities & frictionless operation
- Thermal, environmental, computerised performance testing: all in-house
- Stainless steel housings and push-rods available as standard to withstand harsh environments & chemical, corrosion, fatigue resistance.
- Specially developed welding techniques provide excellent strength & assembly reliability
- Each LVDT is magnetically shielded from external AC and DC fields. Shielding can be customised to withstand the specified environment
- 35 years of precision electromechanical engineering; continuous improvement processes ensure that we deliver one of the most reliable sensors year after year

FEATURES

- High benefit to cost ratio
- Use of high-quality materials with AS9100D standard for manufacturing
- Strokes from ±0.5 mm to ±125 mm in 4, 5 or 6 wire configurations
- Independent linearities of <±0.5% of FS
- Low thermal drifts from 70 ppm/°C (of FS) for ratiometric outputs & max. 300 ppm/°C (absolute) for differential outputs
- Built for excitation voltages from 1 VRMS to 10 VRMS at 1 kHz to 10 kHz
- Custom-built aviation/aerospace grade duplex, triplex & quadruplex LVDTs
- Designs for operating temperatures from -55°C to +200°C possible
- Variants with operating pressures upto 100 Bar (1450 PSI) & burst pressures upto 150 Bar (2170 PSI)
- Designed, built and tested in India for MIL-STD-810D, JSS-0256 standards

DESIGNS & VARIANTS

Electrical Strokes (mm) : ±0.5, ±1, ±10,±15,±25, ±30, ±50, ±60, ±75, ±100. Other strokes possible

Approximate Dimensions:

TYPE	DIAMETER (mm)
Simplex	10 to 12
Duplex	20 to 25
Triplex	25 to 28
Quadruplex	25 to 28

TESTING FACILITIES & INFRASTRUCTURE

- Thermal cycling -40°C to +180°C at 3 °C/min with upto 95% RH
- 3-second thermal shock chamber -70°C to +200°C
- Test setup for testing in pressurised hydraulic oil upto 200 Bar (2900 PSI) with programmable cyclic pressure loading
- Thermal drift active testing
- Computerised linearity, accuracy testing, signal output relationships, polarity, crosstalk, phase relationships testing
- Active testing during thermal cycling or soaking
- Dielectric and insulation resistance
- Differential or ratiometric signal conditioning
- Well-equipped quality assurance department with state-of-the-art 2D optical scanning for inspection
- Cloud-based ERP with quality and process documentation included
- Mechanical, EMI/EMC, fungal, acceleration, altitude, attitude testing facilities available from nationally accredited labs
- Deep experience in raw materials and global materials & parts sourcing
- ISO 9001:2015 and IATF 16949:2016 certified. AS9100D certification in-progress.

CONTACT DETAILS

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