

- **Small transducer body length to stroke ratio**
- **Temperature error less than 35ppm/°C**
- **Welded stainless steel construction, sealed to IP66**
- **Absolute Measurement**
- **Infinite resolution**



Our range of rugged, high integrity LVDT displacement transducers are designed for operation in harsh automotive and industrial environments. The design elements employed have evolved from the technology and experience gained over 40 successful years in the aerospace/military sensor market, where performance and reliability under extreme operating conditions are paramount.

These LVDT displacement transducers have been designed primarily for use in the difference over sum (or ratiometric) configuration to provide high system accuracy performance where the output is virtually unaffected by temperature and supply changes. As the sum of the secondary output coil voltage ($V_a + V_b$) is nominally constant throughout the stroke range, Penny+Giles LVDT's can be employed for system error detection in high integrity systems. Alternatively, the

LVDT's can be used in the differential output configuration, with lower system accuracy.

These LVDT displacement transducers are designed to provide the user with the most popular choice of mounting styles for a wide range of industrial applications. Stroke ranges from 5mm to 150mm are available from stock, so call your nearest sales office for the latest information.

The AF145 range of high accuracy LVDT displacement transducers have been designed primarily for use in the ratiometric configuration, and have a compact size, with stroke lengths from 5mm to 150mm. The AF145 has self-aligning rod end bearing mounting, with an outer sliding sleeve which protects the movable core whilst enhancing the rigidity of the transducer during operation. Suited to harsh automotive and industrial environments.

SPECIFICATIONS

ELECTRICAL

ELECTRICAL STROKE	5 15 25 50 75 100 125 150 2.5 7.5 12.5 25.0 37.5 50.0 62.5 75.0
INPUT VOLTAGE AND FREQUENCY	1 to 10VRMS at 400Hz to 12.5kHz (sinewave)
INSULATION RESISTANCE	Greater than 100MΩ at 500Vdc
OPERATIONAL TEMPERATURE	-35 to +125°C
STORAGE TEMPERATURE	-55 to +135°C
VIBRATION	RTCA/DO - 160C, Section 8, Fig 8 - 1 Curve C (Random), 10 - 2000Hz, 4.12g rms RTCA/DO - 160C, Section 8, Fig 8 - 3 Curve L (Sine), 10 - 2000Hz, 3g rms
ENVIRONMENTAL PROTECTION	IP66
