

Drip Proof Large-capacity Displacement Transducer



Suitable for large displacement by drip proof structure

- Displacement measurement by expansion and contraction (Winding) of wire
- Compact size and low measuring force.
- Connectable to strain amplifier for measurement
- Resolution approx. 1/1850

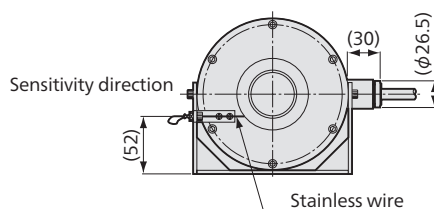
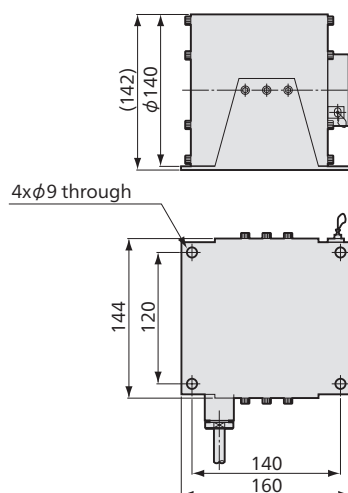
The DTP-E-S series is potentiometer-based transducers for measurement of large displacement.

A drip proof structure enables applications where they may be splashed with water or involving highly humid environment.

To ensure Safe Usage

This Transducer cannot be used for a dynamic measurement, a measurement object with rapid movement and a micro vibration.

Displacement



DTP-E-500S

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 1\%$ RO
Hysteresis	Within $\pm 1\%$ RO
Rated Output	Approx. 5 mV/V
Resolution	Approx. 1/1850

Environmental Characteristics

Compensated Temperature	-10 to 60°C
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Electrical Characteristics

Detection Method	Potentiometer based
Safe Excitation	10 V AC or DC
Recommended Excitation	1 to 5 V AC or DC
Input Resistance	350 Ω $\pm 5\%$
Output Resistance	350 Ω $\pm 5\%$
Cable	4-conductor (0.5 mm ²) shielded chloroprene coated cable, 10 mm diameter by 3 m long bared at the tip (Shield is not connected to the case.)

Mechanical Properties

Safe Overloads	120%
Measuring Force	See table below.
Cycling life	10 ⁴ times
Degree of Protection	IP67 (IEC 60529)
Frame	Stainless

Models	Rated Capacity	Measuring force (Approx.)
DTP-E-500S	500 mm	9.8 N
DTP-E-1KS	1000 mm	4.9 N
DTP-E-2KS	2000 mm	

Application Example

