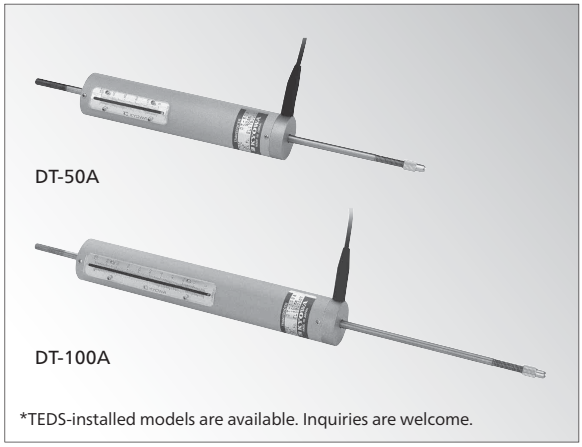
# DT-A

## Displacement Transducer

●With a scale ●50 &100 mm




*TEDS-installed models are available. Inquiries are welcome.

## Possibly to read displacement directly by scale

●Both tension and compression

DT-A displacement transducers adopt strain gages in the sensor part to ensure measurement. Rated capacity is 50 and 100 mm. They are widely used for measurement of structural relative displacement or absolute displacement from a steady point.

### Specifications

**Performance**

| | |
|---|---|
| **Rated Capacity** | See table below. |
| **Nonlinearity** | Within ±0.5% RO |
| **Hysteresis** | Within ±0.5% RO |
| **Repeatability** | 0.3% RO or less |
| **Rated Output** | 1.5 mV/V ±20% |

**Environmental Characteristics**

| | |
|---|---|
| **Safe Temperature** | 0 to 60°C (Non-condensing) |
| **Compensated Temperature** | 0 to 50°C (Non-condensing) |
| **Temperature Effect on Zero** | Within ±0.05% RO/°C |
| **Temperature Effect on Output** | Within ±0.05%/°C |

**Electrical Characteristics**

| | |
|---|---|
| **Safe Excitation** | 5 V AC or DC |
| **Recommended Excitation** | 1 to 4 V AC or DC |
| **Input Resistance** | 120 Ω ±3% |
| **Output Resistance** | 120 Ω ±3% |
| **Cable** | 4-conductor (0.08 mm²) chloroprene shielded cable, 4 mm diameter by 5 m long, terminated with a connector plug PRC03-12A10-7M (Shield wire is connected to the case.) |

**Mechanical Properties**

| | |
|---|---|
| **Frequency Response** | DC to approx. 1.5 Hz |
| **Measuring Force** | Approx. 4.4 N |
| **Weight** | See table below. (Excluding cable) |

Optional Accessories

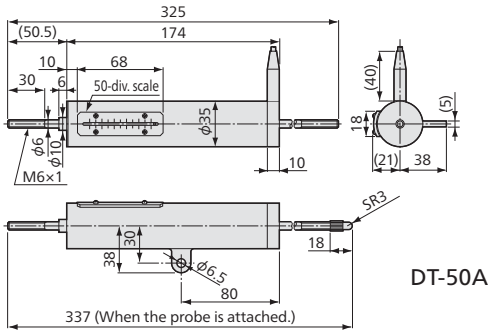
Magnet base MB-B

(Note 1) Replacement probe X, XS, SH, or H does not apply.
(Note 2) Extension rods do not apply.
(Note 3) Avoid usage in vibration.
(Note 4) If large displacement is applied momentarily, it takes some time that output is settled.
(Note 5) Do not apply any displacement in other than expansion/contraction direction of the rod.

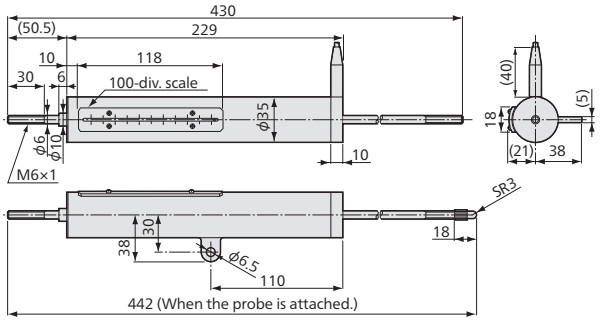
| Models | Rated Capacity | Weight (Approx.)* |
|---|---|---|
| ●DT-50A | 50 mm | 380 g |
| DT-100A | 100 mm | 450 g |

●For delivery date, please contact us. *Excluding cable

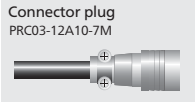
### ■Dimensions




DT-50A




DT-100A




### To Ensure Safe Usage

●Fix the transducer to a steady point by the M6 bolt.
●DT-A series transducers are designed to provide the smallest possible measuring force. Thus, the rod may not move with the displacement when the transducer is mounted upward. In such a case, detach the probe and fix the rod to the steady point using a nut. (See the figure at the left.)