

## Dial Gage-equipped Displacement Transducer



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

### Possible to read displacement directly by scale Excellent temperature characteristics

DT-D displacement transducers adopt strain gages for the sensor part to ensure long-term stable measurement. They are widely used for measurement of structural relative displacement or absolute displacement from a steady point.

#### Specifications

##### Performance

<b>Rated Capacity</b>	See table below.
<b>Nonlinearity</b>	Within $\pm 0.5\%$ RO
<b>Hysteresis</b>	Within $\pm 0.5\%$ RO
<b>Repeatability</b>	0.3% RO or less
<b>Rated Output</b>	1.5 mV/V or more

##### Environmental Characteristics

<b>Safe Temperature</b>	0 to 55°C (Non-condensing)
<b>Compensated Temperature</b>	0 to 50°C (Non-condensing)
<b>Temperature Effect on Zero</b>	Within $\pm 0.03\%$ RO/°C
<b>Temperature Effect on Output</b>	Within $\pm 0.03\%$ /°C

##### Electrical Characteristics

<b>Safe Excitation</b>	12 V AC or DC
<b>Recommended Excitation</b>	1 to 4 V AC or DC
<b>Input Resistance</b>	350 $\Omega$ $\pm 2\%$
<b>Output Resistance</b>	350 $\Omega$ $\pm 2\%$
<b>Cable</b>	4-conductor (0.08 mm <sup>2</sup> ) 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

<b>Safe Overloads</b>	100%
<b>Frequency Response</b>	DC to approx. 0.8 Hz
<b>Measuring Force</b>	See table below.
<b>Weight</b>	See table below.

##### Optional Accessories

Replacement probes X, XS, SH  
Magnet base MB-B

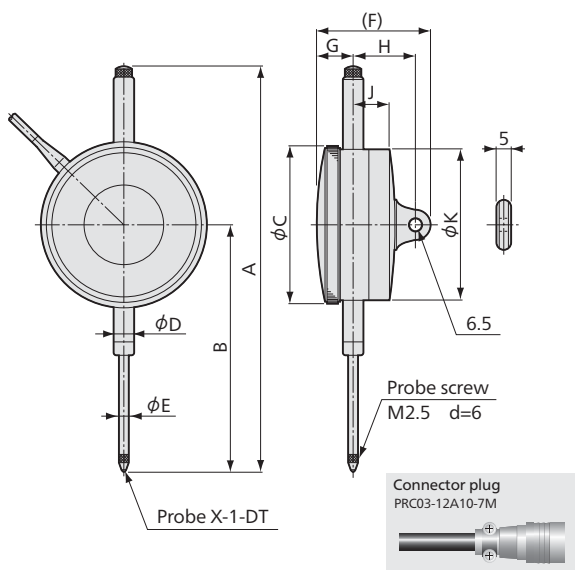
(Note 1) Avoid usage in vibration.

(Note 2) If large displacement is applied momentarily, it takes some time that output is settled.

(Note 3) Do not apply any displacement in other than expansion/contraction direction of the rod.

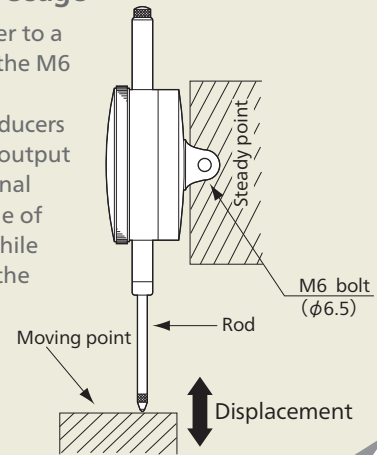
(Note 4) If the DT-50D M150 is used in horizontal position, the rod inclines by approximately 10 mm due to its own weight and may not follow displacement.

#### Dimensions



#### To Ensure Safe Usage

- Fix the transducer to a steady point by the M6 bolt.
- DT-D series transducers are designed to output signal proportional to the magnitude of displacement, while indicating it on the dial gage.



Models	Rated Capacity	Measuring Force (Approx.)	A	B	$\phi C$	$\phi D$	$\phi E$	(F)	G	H	J	$\phi K$	Weight (Approx.)*
DT-10D	10 mm	1.7 N	106.5	65	53	8	4	54	14.5	31	17.5	49	160 g
●DT-20D	20 mm	2.1 N	131	90	66.5	8	5	52	14.5	29.5	17	62.5	310 g
●DT-30D M150	30 mm	2.2 N	148	102	75.5	8	5	54	17.5	28.5	15.5	72.5	260 g
●DT-50D M150	50 mm	2.7 N	209.5	128	81.5	10	5.5	58	17.5	32	19	78.5	300 g

●For delivery date, please contact us.

\*Excluding cable