

Dial Gage-equipped Displacement Transducer



Specifications

Performance

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

Environmental Characteristics

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

Electrical Characteristics

Safe Excitation	12 V AC or DC
Recommended Excitation	1 to 4 V AC or DC
Input Resistance	350 Ω $\pm 2\%$
Output Resistance	350 Ω $\pm 2\%$
Cable	4-conductor (0.08 mm ²) 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

Safe Overloads	100%
Frequency Response	DC to approx. 0.8 Hz
Measuring Force	See table below.
Weight	See table below. (Excluding cable)

Optional Accessories (For details, see page 2-163.)

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.

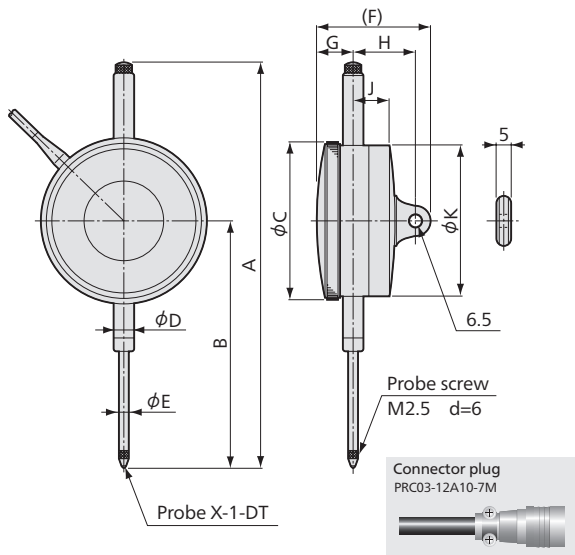
(Note 3) Do not apply any displacement in other than expansion/contraction direction of the rod.

(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.

Possible to read displacement directly by scale Excellent temperature characteristics

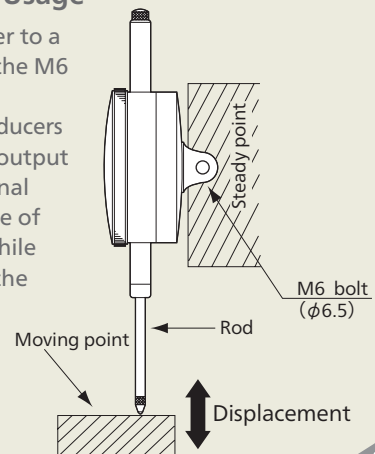
DT-D displacement transducers adopt strain gages for the sensor part to ensure long-term stable measurement. They are widely used for measurement of structural relative displacement or absolute displacement from a steady point.

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	ϕC	ϕD	ϕE	(F)	G	H	J	ϕK	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

● Physical quantity indication ● Static measurement ● Dynamic measurement

DT-D Recommended products for combination

- Instrumentation Amplifier WGA-680A → 3-94
- Data Logger UCAM-60 series → 3-27
- Medium Speed Network Terminal Box NTB-500A → 3-37
- Universal Recorder EDX-200A → 3-55
- Sensor Interface PCD-400A/430A → 3-78