DT-D

●Easy Installation, Handling & Maintenance
●10 to 50 mm

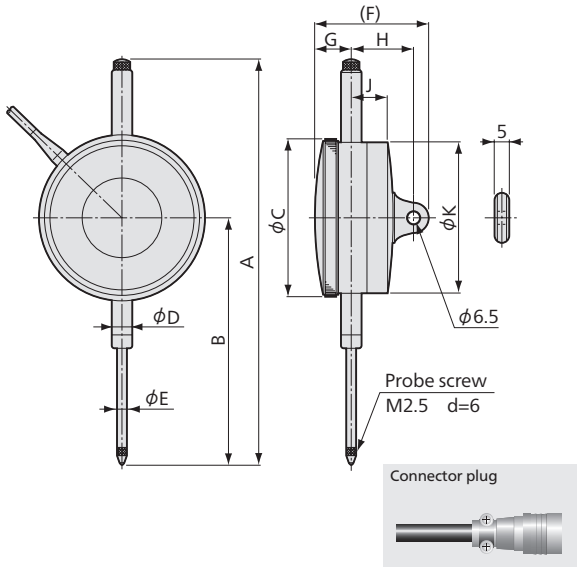
Dial Gage-equipped Displacement Transducer

*TEDS-installed versions can be manufactured. Inquiries are welcome.

Possible to Read Displacement Directly by Scale and Excellent Temperature Characteristics

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

■Dimensions



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 (3000 μm/m) or more

Environmental Characteristics

Safe Temperature Range	0 to 55°C (Non-condensing)
Compensated Temperature Range	0 to 50°C (Non-condensing)
Temperature Effect on Zero Balance	Within ±0.03% RO/°C
Temperature Effect on Output	Within ±0.03%/°C

Electrical Characteristics

Safe Excitation Voltage	12 V AC or DC
Recommended Excitation Voltage	1 to 4 V AC or DC
Input Resistance	350 Ω±2%
Output Resistance	350 Ω±2%
Cable	4-conductor (0.08 mm²) chloroprene shielded cable, 4 mm diameter by 5 m long, terminated with connector plug (Shield wire is connected to mainframe.)

Mechanical Properties

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

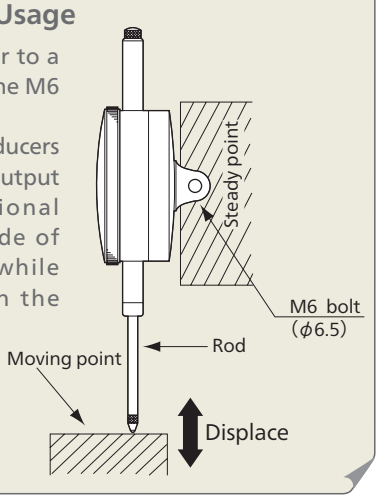
Optional Accessories (For details, refer to page 2-159.)

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

Notes:
1. Avoid usage in vibration.
2. If large displacement is applied momentarily, it takes some time that output is settled.
3. Do not apply any displacement in other than expansion/contraction direction of the rod.
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.

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 → 3-97


Data Logger UCAM-60B → 3-25


Medium Speed Network Terminal Box NTB-500A → 3-35


Universal Recorder EDX-200A → 3-55


Sensor Interface PCD-400A → 3-77