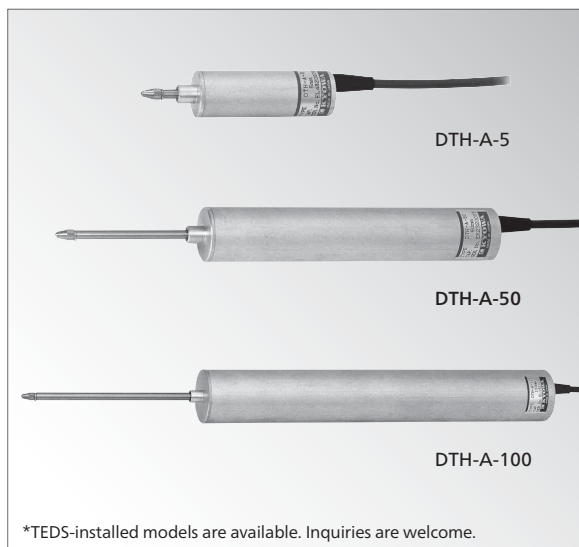


DTH-A

Displacement Transducer

- Large output, small measuring force
- 5 to 100 mm



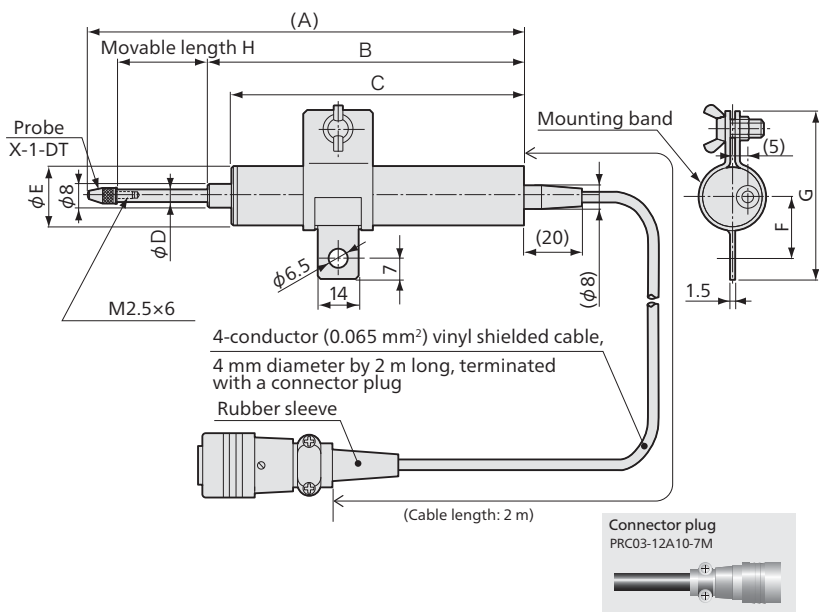
*TEDS-installed models are available. Inquiries are welcome.

Compact & lightweight Excellent temperature characteristics Nonlinearity $\pm 0.1\%$ RO

- Large output of 5 mV/V
- Small measuring force: Approx. 1.5 to 4 N

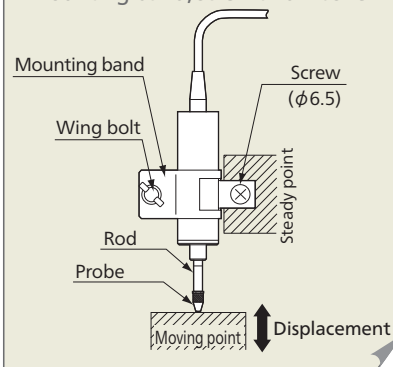
DTH-A series displacement transducers adopt a strain gages for the sensing elements to ensure long-term stable measurement. They are widely used for measurement of structural relative displacement or absolute displacement from a steady point.

Dimensions



To Ensure Safe Usage

Fix the transducer to the steady point by using an accessory mounting band, screw and washer.



Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.1\%$ RO
Hysteresis	Within $\pm 0.1\%$ RO
Repeatability	0.1% RO or less
Rated Output	5 mV/V $\pm 0.1\%$ $\pm 0.15\%$ (DTH-A-5)

Environmental Characteristics

Safe Temperature	-10 to 70°C (Non-condensing)
Compensated Temperature	0 to 60°C (Non-condensing)
Temperature Effect on Zero	Within $\pm 0.01\%$ RO/°C
Temperature Effect on Output	Within $\pm 0.01\%$ /°C

Electrical Characteristics

Safe Excitation	6 V AC or DC
Recommended Excitation	1 to 4 V AC or DC
Input Resistance	350 Ω $\pm 1\%$
Output Resistance	350 Ω $\pm 1\%$
Cable	4-conductor (0.065 mm²) vinyl shielded cable, 4 mm diameter by 2 m long, terminated with a connector plug PRC03-12A10-7M (Shield wire is not connected to the case.)

Mechanical Properties

Frequency Response	DC to approx. 2 Hz
Measuring Force	See table below.
Weight	See table below.
Degree of Protection	IP50 (IEC 60529)

Others

Initial Unbalance	With the rod fully extended is approx. -6000 to -5000 $\times 10^{-6}$ strain.
-------------------	---

Standard Accessories Mounting band: FXB-5A (x1 for DTH-A-5 to 30)
FXB-50A (x2 for DTH-A-50)
FXB-100A (x2 for DTH-A-100)

Optional Accessories

Extension rods EB-50, EB-100, EB-200
Replacement probes X, XS, SH
Magnet base MB-B

(Note 1) Do not apply any displacement in other than expansion/contraction direction of the rod.

Models	Rated Capacity	Measuring Force (Approx.)	(A)	B	C	ϕD	ϕE	F	G	Movable length H	Weight (Approx.)*
DTH-A-5	5 mm	1.5 N	85	68	60	4	20	21	57	6	30 g
● DTH-A-10	10 mm	2.2 N	97	75	67					11	35 g
DTH-A-20	20 mm	2.2 N	123	91	83					21	
DTH-A-30	30 mm	2.2 N	150	108	100					31	40 g
DTH-A-50	50 mm	3 N	210	148	140	4	25	23.5	62	51	75 g
DTH-A-100	100 mm	4 N	360	248	240	5	35	28.5	72	101	200 g

● For delivery date, please contact us.

*Excluding cable