

BEN-A

Soil Pressure Transducer



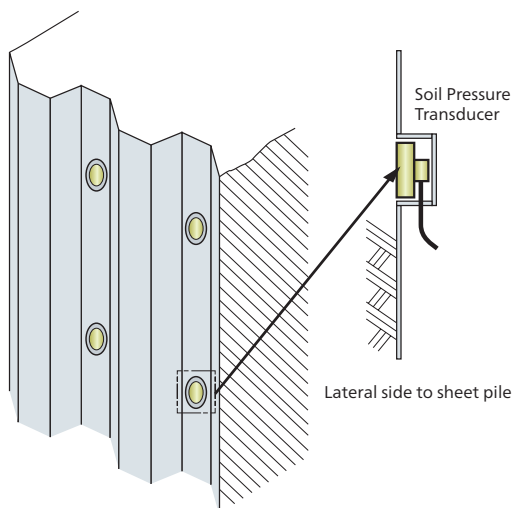
A pressure-sensing surface 70 mm in diameter.
Vibration-resistant design for installation on driven materials

- Dual diaphragm design, with the pressure medium sealed between the pressure-sensing surface and strain-gage bonded diaphragm, enables transmission of minute displacement through enlargement.
- Vibration-resistant design for installation on driven materials
- Highly wear-resistant pressure-sensing surface

The BEN-A series soil pressure transducers are specially designed to endure vibrations. Thus, they are suitable for installation on driven materials such as sheet piles and steel pipe piles.

Application Example

Sheet Pile



● Pressure Measurement ● 500 kPa to 1 MPa

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Specifications

Performance

Rated Capacity	BEN-A-500KP: 500 kPa
	BEN-A-1MP: 1 MPa
Nonlinearity	Within $\pm 1\%$ RO
Hysteresis	Within $\pm 1\%$ RO
Rated Output	1 mV/V or more

Environmental Characteristics

Safe Temperature	-20 to 80°C
Compensated Temperature	-10 to 50°C
Temperature Effect on Zero	Within $\pm 0.4\%$ RO/°C for 500 kPa
	Within $\pm 0.2\%$ RO/°C for 1 MPa
Temperature Effect on Output	Within $\pm 0.2\%$ /°C for 500 kPa
	Within $\pm 0.1\%$ /°C for 1 MPa

Electrical Characteristics

Safe Excitation	10 V AC or DC
Recommended Excitation	2 to 8 V AC or DC
Input Resistance	350 Ω $\pm 1\%$
Output Resistance	350 Ω $\pm 1\%$
Cable	4-conductor (0.5 mm ²) chloroprene cable, 8 mm diameter by 1 m long, bared at the tip

Mechanical Properties

Safe Overloads	150%
Weight	Approx. 1 kg

Dimensions

