



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor

BER-A-110S

Wall-surface Soil Pressure Transducer

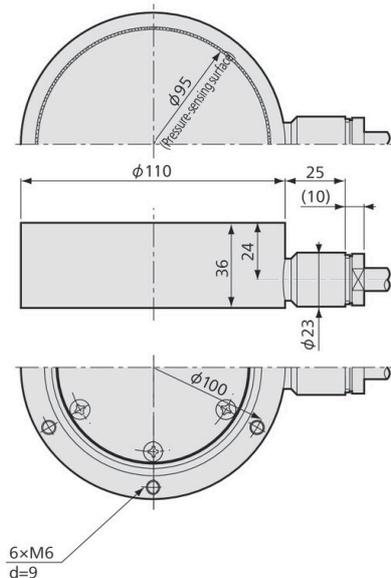


For measuring powder pressure with particle size around $\phi 15$

- Rated capacity: 100 kPa to 2 MPa
- Pressure sensing surface diameter: 95 mm
- Degree of protection: IP68

These wall-mounted soil pressure transducers are thin with the cable extending horizontally along the pressure sensing surface. They are ideal for measuring powder pressure, such as in coal or grain silos.

■ Dimensions



Specifications

Performance

Rated Capacity See table below.

Nonlinearity Within $\pm 1\%$ RO

Hysteresis Within $\pm 1\%$ RO

Rated Output 1 mV/V or more

Environmental Characteristics

Safe Temperature -30 to 80°C

Compensated Temperature 0 to 70°C

Temperature Effect on Zero Within $\pm 0.1\%$ RO/ $^{\circ}\text{C}$

Temperature Effect on Output Within $\pm 0.1\%$ / $^{\circ}\text{C}$

Electrical Characteristics

Safe Excitation 10 V AC or DC

Recommended Excitation 1 to 5 V AC or DC

Input Resistance $350\ \Omega \pm 2\%$

Output Resistance $350\ \Omega \pm 2\%$

Cable 4-conductor ($0.5\ \text{mm}^2$) chloroprene shielded cable, 9.6 mm diameter by 1 m long, bared at the tip (Shield wire is not connected to the case.)

Mechanical Properties

Safe Overloads 120%

Calculated Loads See table below.

Pressure-sensing Surface Approx. $\phi 95\ \text{mm}$

Exterior Pressure sensing surface: Stainless steel metallic finish
Flange and cable outlet: ZnC-plated MF

Water Pressure Resistance (Cable outlet)

600 kPa

Degree of Protection IP68 (600 kPa) (JIS C 0920/IEC 60529)

Weight Approx. 2.2 kg

■ Models

Model	Rated Capacity	Calculated Loads
BER-A-100KP110S	100 kPa	709 N
BER-A-200KP110S	200 kPa	1.4 kN
BER-A-500KP110S	500 kPa	3.5 kN
BER-A-1MP110S	1 MPa	7.1 kN
BER-A-2MP110S	2 MPa	14.2 kN

*An anti-biofouling paint coating is available as an option.

*Stainless steel models can be manufactured for wave pressure measurement. Please contact us.

To Ensure Proper Usage

Do not apply loads (pressure/load) exceeding the rated capacity to the pressure sensing surface (refer to table).

Bared at the tip (standard)

