

BER-A-110S

● Pressure Measurement
● 100 kPa to 2 MPa

Wall-surface Soil Pressure Transducer



Stainless steel models can be manufactured for wave pressure measurement.

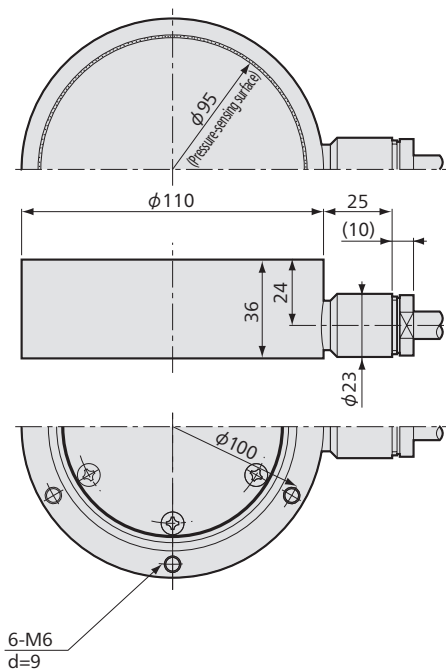
- Wear of the pressure-sensing surface does not affect output or initial values.
- Load cell-based design is less affected by bending effects.
- Usable for pressure measurement of coal or grain in a silo
- For pressure measurement of pulverulent (Powder) bodies of approximately 15 mm in diameter

The BER-A-110S soil pressure transducers come with the cable attached in parallel to the pressure-sensing surface.

To Ensure Safe Usage

Do not apply a load more than the rated capacity (Pressure, load) to the applied pressure surface.

■ 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/°C
Temperature Effect on Output	Within $\pm 0.1\%$ /°C

Electrical Characteristics

Safe Excitation	10 V AC or DC
Recommended Excitation	1 to 5 V AC or DC
Input Resistance	350 Ω $\pm 2\%$
Output Resistance	350 Ω $\pm 2\%$
Cable	4-conductor (0.5 mm ²) chloroprene shielded cable, 10 mm diameter by 1 m long, bared at the tip (Shield is not connected to the case.)

Mechanical Properties

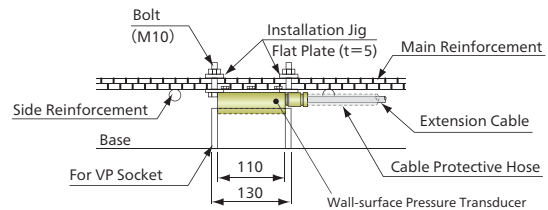
Safe Overloads	120%
Maximum Load	See table below.
Pressure-sensing Surface	Approx. ϕ 95 mm
Material	Stainless steel metallic finish (Pressure sensing surface) ZnC-plated MF (Flange and cable outlet)
Water Resistance (Cable outlet)	600 kPa
Degree of Protection	IP68 (IEC 60529), (600 kPa)
Weight	Approx. 2.2 kg

*Optionally coated with anti-biofouling paint is possible.

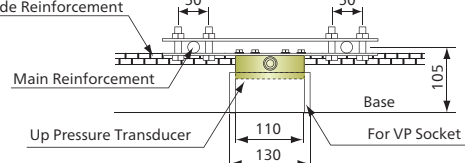
Models	Rated Capacity	Calculated Loads
BER-A-100KP110S	100 kPa	709 N
BER-A-200KP110S	200 kPa	1.4 kN
BER-A-500KP110S	500 kPa	3.5 kN
BER-A-1MP110S	1 MPa	7.1 kN
BER-A-2MP110S	2 MPa	14.2 kN

■ Application Example

A-A Section



B-B Section



Bottom View

