

BER-A-15S/17S

● Pressure Measurement
● 500 kPa to 5 MPa

Wall-surface Soil Pressure Transducer



Suitable for surface-of-a-wall soil pressure measurement of a small shield machine.

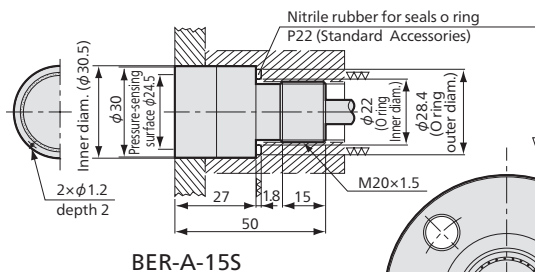
- Wear of the pressure-sensing surface does not affect output or initial values.
- Load cell-based design is less affected by bending effects.
- This is for granular material pressure measurement whose particle diameter is about $\phi 3$.

This is the small and lightweight wall-surface soil pressure transducers which made the most use of the feature of BER-A-12. 2 models (15S, 17S) are available to suit the installation directions.

To Ensure Safe Usage

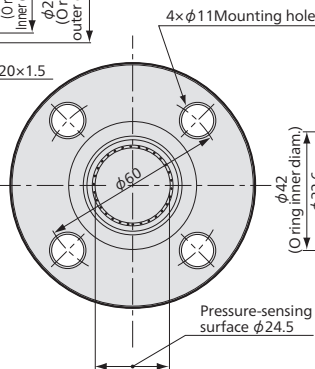
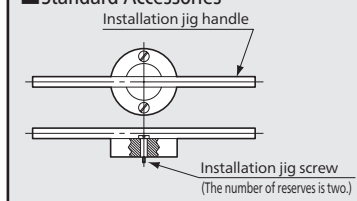
Do not apply a load more than the rated capacity (Pressure, load) to the applied pressure surface.

Dimensions



BER-A-15S

Standard Accessories



BER-A-17S

Note: Please process the surface where O ring hits by ∇ .

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 2\%$ RO
Hysteresis	Within $\pm 2\%$ 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 $\pm 0.3\%$ RO/°C for 500 kPa Within $\pm 0.1\%$ RO/°C for 1 to 5 MPa
Temperature Effect on Output	Within $\pm 0.1\%$ /°C

Electrical Characteristics

Safe Excitation	10 V AC or DC
Recommended Excitation	2 to 5 V AC or DC
Input Resistance	350 Ω $\pm 2\%$
Output Resistance	350 Ω $\pm 2\%$
Cable	4-conductor (0.3 mm ²) chloroprene shielded cable, 8 mm diameter by 30 m long, bared at the tip (Shield is not connected to the case.)

Mechanical Properties

Safe Overloads	120%
Pressure-sensing Surface	Approx. $\phi 24.5$
Material	Stainless steel metallic finish (Whole surface) Cable fittings are brass.
Water Resistance (Cable outlet)	600 kPa
Weight	Approx. 400 g for 15S, Approx. 500 g for 17S

Models	Rated Capacity	Calculated Loads
BER-A-500KP15S	500 kPa	236 N
BER-A-1MP15S	1 MPa	471 N
BER-A-2MP15S	2 MPa	943 N
BER-A-5MP15S	5 MPa	2.4 kN
BER-A-500KP17S	500 kPa	236 N
BER-A-1MP17S	1 MPa	471 N
BER-A-2MP17S	2 MPa	943 N
BER-A-5MP17S	5 MPa	2.4 kN

Application Example

