BER-S-35SA1
Wall-surface Soil Pressure Transducer

With a stopper, enables to support overload of 1000%

- Outstanding 1000% overload
- Regular capacity models are available
- Support of 1000% overload against eccentric loads (With a stopper)

Application Example

Wall-surface Soil Pressure Transducer
Segment
Shield Machine
Chamber

Dimensions

Wall-surface Soil Pressure Transducer

Specifications

Performance
- Rated Capacity: See table below
- Nonlinearity: Within ±2% RO
- Hysteresis: Within ±2% RO
- Rated Output: Approx. 1.5 mV/V

Environmental Characteristics
- Safe Temperature: -30 to 80°C
- Compensated Temperature: 0 to 70°C
- Temperature Effect on Zero: Within ±0.1% RO/°C
- Temperature Effect on Output: Within ±0.1%/°C

Electrical Characteristics
- Safe Excitation: 12 V AC or DC
- Recommended Excitation: 1 to 10 V AC or DC
- Input Resistance: 350 Ω ±2%
- Output Resistance: 350 Ω ±2%
- Cable: 4-conductor (0.5 mm²) chloroprene shielded cable, 10 mm diameter by 30 m long, bared at the tip (Shield is not connected to the case.)

Mechanical Properties
- Safe Overloads: 1000% soil pressure (Powdered & pore pressure) and the pore pressure (Liquid & gas pressure) is 3 MPa.
- Material: Stainless steel metallic finish
- Water Resistance (Cable outlet): 600 kPa
- Weight: Approx. 400 g (Excluding cable)

For pressure measurement of pulverulent bodies φ3 mm or less (Powdered & pore pressure)

Models | Rated Capacity | Calculated Loads |
---|---|---|
BER-S-500KP35SA1 | 500 kPa | 230 N |
BER-S-1MP35SA1 | 1 MPa | 460 N |
BER-S-2MP35SA1 | 2 MPa | 910 N |
BER-S-3MP35SA1 | 3 MPa | 1360 N |

Note:
1. Do not weld the transducer when the mounting fixture fixed on.
2. The O ring contact surface must be finished as smooth as Rz6.3.