

BEM-A

Soil Pressure Transducer

● Pressure Measurement ● 50 kPa to 1 MPa

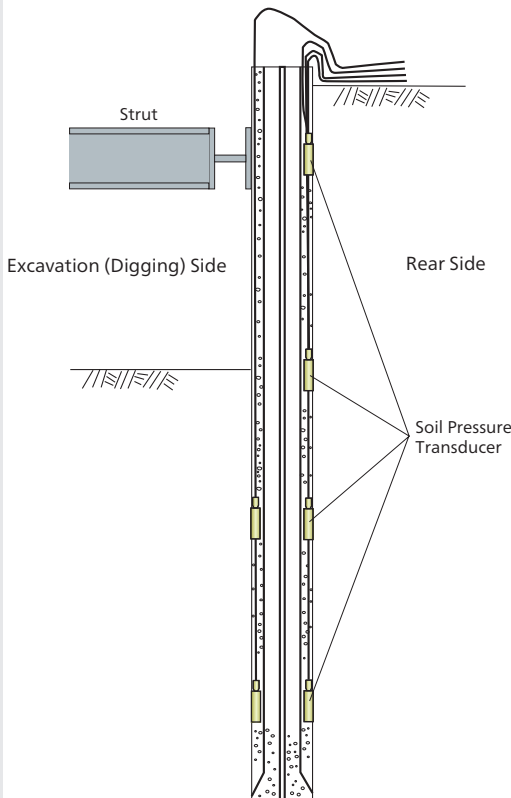


A pressure-sensing surface 80 mm in diameter. The stainless steel design enables marine applications.

- 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.
- Stainless steel construction

The BEM-A series is underground soil pressure transducers with a pressure-sensing surface 80 mm in diameter. The stainless steel design enables marine applications.

Application Example



Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 2\%$ RO for 50 to 200 kPa Within 1% RO for 0.5 to 1 MPa
Hysteresis	Within $\pm 1\%$ RO
Rated Output	0.25 mV/V or more for 50 kPa 0.5 mV/V or more for 100 kPa 1 mV/V or more for 0.2 to 1 MPa

Environmental Characteristics

Safe Temperature	-20 to 80°C
Compensated Temperature	-15 to 70°C
Temperature Effect on Zero	Within $\pm 0.5\%$ RO/°C for 50 kPa Within $\pm 0.3\%$ RO/°C for 100 to 200 kPa Within $\pm 0.2\%$ RO/°C for 0.5 to 1 MPa
Temperature Effect on Output	Within $\pm 0.1\%$ /°C

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

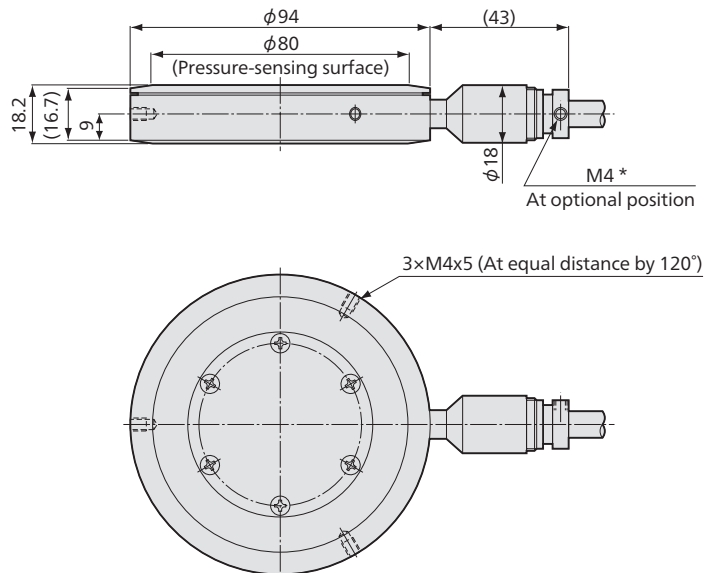
Mechanical Properties

Safe Overloads	120%
Weight	Approx. 1 kg

Models	Rated Capacity
BEM-A-50KP	50 kPa
BEM-A-100KP	100 kPa
BEM-A-200KP	200 kPa
BEM-A-500KP	500 kPa
BEM-A-1MP	1 MPa

To Ensure Safe Usage
Avoid installation onto a wall surface.

Dimensions



*For grounding of lightning arrester kit.

