

BPC-A

Pore Pressure Transducer

- Water Pressure Measurement
- 200 kPa to 2 MPa

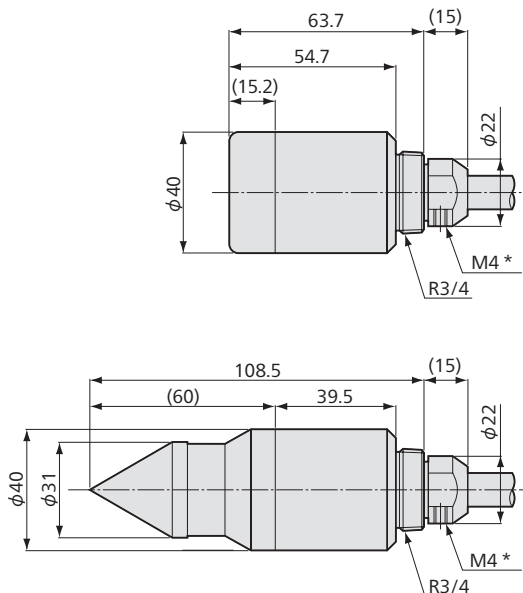


For underground pore pressure measurement

- Double-cased structure ensures measurement without receiving any effect of lateral pressure.
- Flat Filters (10 μm mesh standard) are provided to prevent the sensing part from clogging.
- Stainless steel case (Including a flat filter FB-10SUS)

Embedded in soil, BPC-A transducers measure underground pore pressures. A double-cased structure lets them perform without receiving any adverse effect from lateral pressures and makes them suitable for measurement where underground soil pressures change significantly. The cable length may be as desired.

■ Dimensions



* For grounding of lightning arrester kit.

Specifications

Performance

● Pore Pressure Measurement	
Rated Capacity	See table below.
Nonlinearity	Within ±2% RO for 200 kPa Within ±1% RO for 0.5 to 2 MPa
Hysteresis	Within ±1% RO
Rated Output	0.75 mV/V or more for 200 kPa 1 mV/V or more for 0.5 to 2 MPa

Environmental Characteristics

Safe Temperature	0 to 80°C (BPC-A) (Non-freezing)
Compensated Temperature	0 to 60°C (Non-freezing)
Temperature Effect on Zero	Within ±0.1% RO/°C
Temperature Effect on Output	Within ±0.1%/°C

Electrical Characteristics

Safe Excitation	10 V AC or DC
Recommendable Excitation Voltage	2 to 10 V AC or DC
Input Resistance	350 Ω ±1%
Output Resistance	350 Ω ±1%
Cable	4-conductor (0.5 mm ²) chloroprene cable, 11.5 mm diameter by 1 m long, bared at the tip

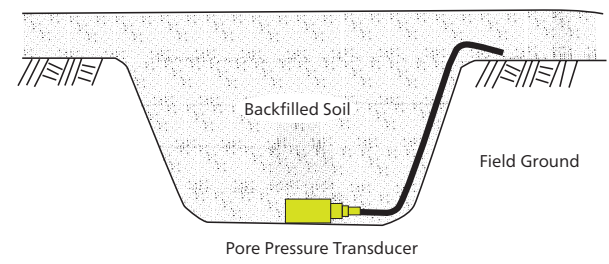
Mechanical Properties

Safe Overloads	150%
Weight	Approx. 550 g

*Double shielded cable can also be manufactured.

Models	Rated Capacity
BPC-A-200KP	200 kPa
BPC-A-500KP	500 kPa
BPC-A-1MP	1 MPa
BPC-A-2MP	2 MPa

■ Application Example



BPF and FB Filters for Pore Pressure Transducers



These filters are used to prevent the sensing portion of the pore pressure transducer which is embedded in clay soil or mud from clogging. The standard mesh size is 10 μm. If grouting is made around the embedded site, use the 2 μm mesh Filters.

Cone Filters	Flat Filters	Mesh Size
BPF-2C	FB-2	2 μm
BPF-5C	FB-5	5 μm
BPF-10C	FB-10SUS	10 μm
	FB-40	40 μm
	FB-100	100 μm

*Filter section is made of brass, sintered metallic finish.

*10 μm flat filters only are made of stainless steel.