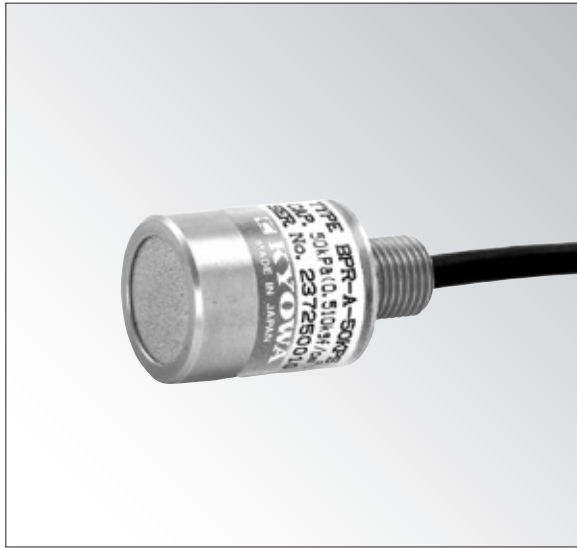


BPR-A-S

● Water Pressure Measurement ● 50 to 200 kPa

Small-sized Pore Pressure Transducer



Suitable for model experiments, highly-sensitive, small levels of pore pressure.

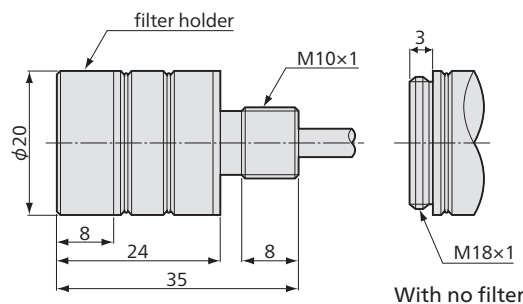
- Small-size (20 mm diameter), small rated capacity (50 to 200 kPa) and high sensitivity (1 mV/V)
- Filters are stainless (Standard 10 μ m)

Featuring an outer diameter of 20 mm, the BPR-A-S series is highly sensitive transducers for measurement of small levels of pore pressure. A watertight design enables embedment applications and makes them suitable for model experiments.

To Ensure Safe Usage

For long-term measurement, it is recommended to separately measure temperature and atmospheric pressure for compensation of measured values.

Dimensions



Filter is thrust into the filter holder, which can be removed from the pressure sensor.
*Flat filter only is usable and any cone filter cannot be used.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 1\%$ RO but $\pm 2\%$ RO for 50 kPa
Hysteresis	Within $\pm 1\%$ RO
Rated Output	Approx. 0.4 mV/V for 50 kPa Approx. 0.8 mV/V for 100 kPa 1 mV/V or more for 200 kPa

Environmental Characteristics

Safe Temperature	0 to 80°C (Non-freezing)
Temperature Effect on Zero	Within $\pm 0.8\%$ RO/°C for 50 kPa Within $\pm 0.4\%$ RO/°C for 100 kPa Within $\pm 0.2\%$ RO/°C for 200 kPa
Temperature Effect on Output	Within $\pm 0.1\%$ /°C

Electrical Characteristics

Safe Excitation	8 V AC or DC
Input Resistance	120 Ω $\pm 5\%$
Output Resistance	120 Ω $\pm 5\%$
Cable	4-conductor (0.08 mm ²) chloroprene shielded cable, 4 mm diameter by 10 m long, terminated with NDIS connector plug (Shield is not connected to the case.)

Mechanical Properties

Safe Overloads	120%
Case	Stainless steel metallic finish
Degree of Protection	IP68 (IEC 60529), (Safe overload)
Weight	Approx. 35 g

Models	Rated Capacity
BPR-A-50KPS	50 kPa
BPR-A-100KPS	100 kPa
BPR-A-200KPS	200 kPa

Application Example

