## BPT-A-80KPS

OWater Pressure Measurement - -80 kPa

## Soil Moisture Transducer



This transducer is suitable for measurement of soil moisture absorbing force and proper for management of plant cultivation

The BPT-A-80KPS is a soil moisture transducer designed to measure water pressure in a vessel equipped with a porous cup (Porous ceramic tube) and filled with degassed water. If the soil around the embedded porous cup is dry, the soil absorbs water from the vessel via the porous cup. By measuring this negative pressure (Water absorbing pressure), the amount of moisture in the soil is obtained. Thus, this transducer is applicable not only to check for possible landslide or grasp the stability of a banking but also to know changing soil moisture and proper irrigation time in plant cultivation.

## Specifications

| Performance |  |
| :--- | :--- |
| Rated Capacity | -80 kPa |
|  | 200 kPa for positive pressure |
| Nonlinearity | Within $\pm 0.5 \%$ RO |
| Hysteresis | Within $\pm 0.5 \%$ RO |
| Rated Output | Approx. $-0.8 \mathrm{mV} / \mathrm{V}$ |

Environmental Characteristics

| Safe Temperature | 0 to $80^{\circ} \mathrm{C}$ (Non-freezing) |
| :--- | :--- |
| Compensated Temperature | 0 to $70^{\circ} \mathrm{C}($ Non-freezing $)$ |
| Temperature Effect on Zero | Within $\pm 0.05 \%$ RO $/{ }^{\circ} \mathrm{C}$ |
| Temperature Effect on Output | Within $\pm 0.05 \% /{ }^{\circ} \mathrm{C}$ |


| Electrical Characteristics |
| :--- | :--- |
| Safe Excitation 10 VAC or DC <br> Input Resistance $350 \Omega \pm 2 \%$ <br> Output Resistance $350 \Omega \pm 2 \%$ |

Cable 4-conductor ( $0.5 \mathrm{~mm}^{2}$ ) chloroprene shielded cable,
10 mm diameter by 1 m long, bared at the tip
(Shield is not connected to the case.)
Mechanical Properties

| Safe Overloads | $100 \%$ |
| :--- | :--- |
| Case | Stainless steel metallic finish |
|  | (Excluding porous cup and level meter) |
| Weight | Approx. 3.5 kg |

## To Ensure Safe Usage

The BPT-A-80KPS is delivered with a vessel filled with degassed water. Never store it unused for a long period of time. Embed it upon purchasing.


Embedded the extension pipe in the soil layer.

