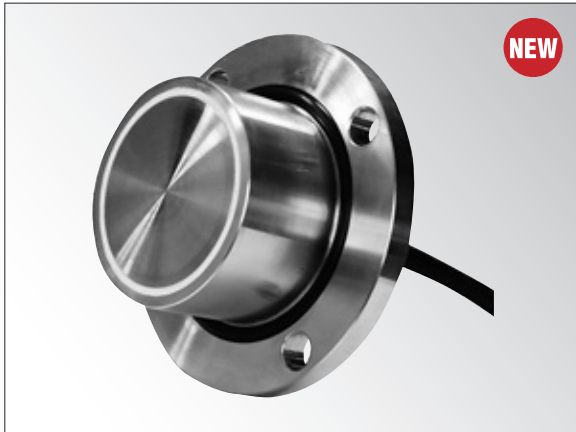


# BER-S-12SA2

● Pressure Measurement  
● 100 kPa to 3 MPa

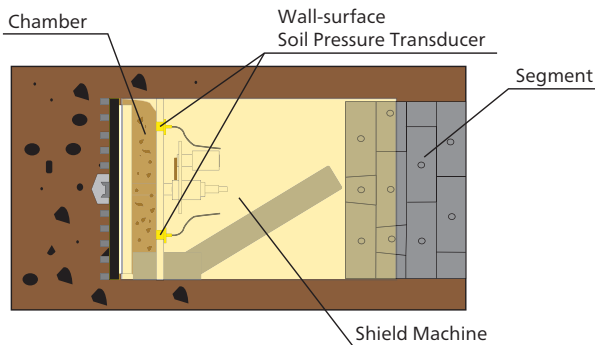
## Wall-surface Soil Pressure Transducer



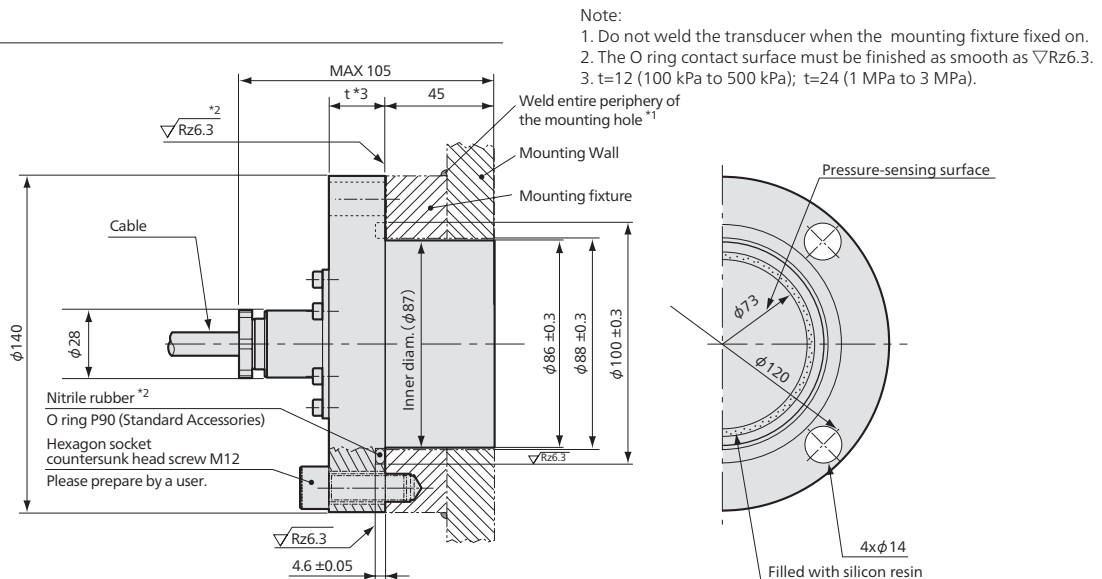
**With a stopper, enables to support overload of 1000%**

- High overload protection (Safe overload up to 1000%)
- Safe overload up to 1000% against the decenter load (With a stopper function)
- Selection of the rated overload as normal operation pressure possible

### Application Example



### Dimensions



### Specifications

#### Performance

|                |                     |
|----------------|---------------------|
| Rated Capacity | See table below.    |
| Nonlinearity   | Within $\pm 1\%$ RO |
| Hysteresis     | Within $\pm 1\%$ RO |
| Rated Output   | Approx. 1 mV/V      |

#### Environmental Characteristics

|                              |                          |
|------------------------------|--------------------------|
| Safe Temperature             | -30 to 80°C              |
| Compensated Temperature      | 0 to 70°C                |
| Temperature Effect on Zero   | Within $\pm 0.1\%$ RO/°C |
| Temperature Effect on Output | Within $\pm 0.1\%$ /°C   |

#### Electrical Characteristics

|                        |   |
|------------------------|---|
| Safe Excitation        | 12 V AC or DC   |
| Recommended Excitation | 1 to 10 V AC or DC  |
| Input Resistance       | 350 $\Omega$ $\pm 2\%$  |
| Output Resistance      | 350 $\Omega$ $\pm 2\%$  |
| Cable                  | 4-conductor (0.5 mm <sup>2</sup> ) chloroprene shielded cable,<br>10 mm diameter by 30 m long, bared at the tip<br>(Shield is not connected to the case.) |

#### Mechanical Properties

|                                 |  |
|---------------------------------|--|
| Safe Overloads                  | 1000% soil pressure (Powdered & pore pressure)<br>And the pore pressure (Liquid & gas pressure) is<br>3 MPa. |
| Material                        | Stainless steel metallic finish (Pressure-sensing surface)<br>ZnC-plated MF (Flange and cable outlet)        |
| Water Resistance (Cable outlet) | 600 kPa  |
| Weight                          | Approx. See table below.   |

| Models           | Rated Capacity | Calculated Loads | Weight (Excluding cable) |
|------------------|----------------|------------------|--------------------------|
| BER-S-100KP12SA2 | 100 kPa        | 420 N            | 3.1 kg                   |
| BER-S-200KP12SA2 | 200 kPa        | 840 N            | 3.1 kg                   |
| BER-S-500KP12SA2 | 500 kPa        | 2.1 kN           | 3.1 kg                   |
| BER-S-1MP12SA2   | 1 MPa          | 4.2 kN           | 4.4 kg                   |
| BER-S-2MP12SA2   | 2 MPa          | 8.4 kN           | 4.4 kg                   |
| BER-S-3MP12SA2   | 3 MPa          | 12.6 kN          | 4.4 kg                   |

\*For pressure measurement of pulverulent bodies within  $\phi 10$  mm (Powdered & pore pressure)

