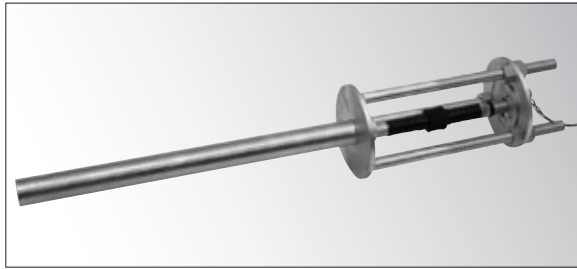


# BRD-AT

- Displacement Measurement
- 5 to 50 mm
- With Temperature Measuring Function

## Rock-bed Compression Displacement Transducer



**Suitable for compressive changes of rock-bed and enables measurement of upheaval.**

- For displacement detection, the BJ-AT joint transducer which has abundant achievements is used.

The BRD-AT series rock-bed compression displacement transducers are designed to measure compressive changes of rock-bed. They detect relative displacement between the ground surface and the anchor fixed to the bottom of a boring. A temperature measuring function enables simultaneous measurement of displacement and temperature. Zero balance adjustment at the time of installation enables measurement of upheaval, and thus they can be used for rock-bed grout management.

### Specifications

#### Performance

<b>● Displacement Measurement</b>	
Rated Capacity	See table below.
Nonlinearity	Within $\pm 1.5\%$ RO
Hysteresis	Within $\pm 1.5\%$ RO
Rated Output	1 mV/V or more
<b>● Temperature Measurement</b>	
Rated Capacity	-30 to 70°C
Measurement Error	$\pm 0.5^\circ\text{C}$ (-30 to 70°C)
(See page 7-32 for Small-sized Temperature Transducer BTS-100AT.)	

#### Environmental Characteristics

Safe Temperature	-30 to 80°C
Compensated Temperature	-20 to 70°C
Temperature Effect on Zero	Within $\pm 0.05\%$ RO/ $^\circ\text{C}$
Temperature Effect on Output	Within $\pm 0.05\%$ / $^\circ\text{C}$

#### Electrical Characteristics

Safe Excitation	10 V AC or DC
Recommended Excitation	2 to 10 V AC or DC
Input Resistance	350 $\Omega$ $\pm 1\%$ at 0°C
Output Resistance	450 $\Omega$ $\pm 0.8\%$ at 0°C
Cable	4-conductor (0.5 mm <sup>2</sup> ) chloroprene cable, 11.5 mm diameter by 1 m long, bared at the tip

#### Mechanical Properties

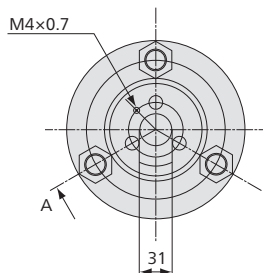
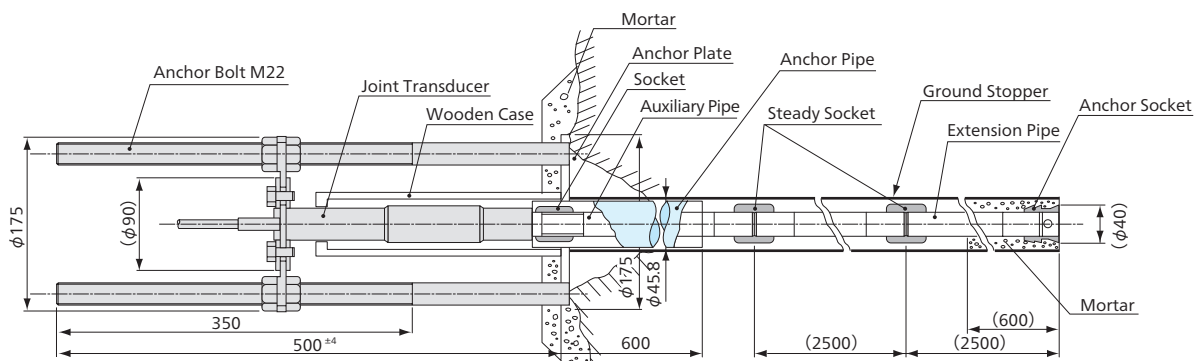
Safe Overloads	120%
Length of Mounting Frame	950 mm
Weight	Approx. 10.5 kg

\*For the BJ-AT, see page 7-33

\*\*See page 2-153 to 2-167 for Displacement Transducers.

Models	Rated Capacity
BRD-5AT	5 mm
BRD-10AT	10 mm
BRD-20AT	20 mm
BRD-50AT	50 mm

### Dimensions



Note:  
Extension pipes can extend up to 30 m by connected every 2.5 m.  
Cutting the wooden case to the length of your desired.

### Application Example

