

BKJ-A

Embedment Type Inclination Transducers



Small-sized and lightweight 27mm in outer diameter. Inclination angles detected at multiple stages enable measurement of lateral displacement of the ground or earth retaining wall.

- Facilitate quicker and easy data recording since the BKJ-A series is installed in an aluminum guide pipe embedded beforehand in a boring or earth retaining wall.
- Allows installation at maximum 20 stages in a guide pipe.
- Available in uniaxial and biaxial types for selection to meet individual applications
- Designed for high immunity against lightning surge

The BKJ-A series inclination transducers are designed for embedment at multiple stages in a boring or earth retaining wall. Inclination angles detected at multiple stages enable measurement of lateral displacement of the ground or earth retaining wall. Since the embedment method ensures quicker measurement than the insertion method, the BKJ-A series is suitable for use in information-oriented urban civil engineering fields. The BKJ-A series can be installed at maximum 20 stages in an aluminum guide pipe embedded beforehand.

To Ensure Safe Usage

To protect the cable, it is recommended to connect the dedicated aluminum guide pipe using an adhesive or screws (M4×4). Do not use rivets.

● Inclination Measurement ● $\pm 5^\circ, \pm 10^\circ$

Specifications

Performance

Rated Capacity :	See table below.
Nonlinearity :	Within $\pm 0.5\%$ RO
Hysteresis :	Within $\pm 0.5\%$ RO
Rated Output :	1.4 mV/V (2800 μ m/m) or more (minus rated capacity to plus rated capacity)

Environmental Characteristics

Safe Temperature Range :	-20 to 70°C
Compensated Temperature Range :	-10 to 60°C
Temperature Effect on Zero Balance :	Within $\pm 0.05\%$ RO/°C
Temperature Effect on Output :	Within $\pm 0.1\%$ /°C

Electrical Characteristics

Recommended Excitation Voltage :	2 to 10 V AC or DC
Input Resistance :	350 Ω \pm 1%
Output Resistance :	350 Ω \pm 1%
Cable : BKJ-A :	4-conductor (0.3 mm ²) chloroprene shielded cable, 6 mm diameter by 1 m long, bare at the tip
BKJ-A-D :	8-conductor (0.3 mm ²) chloroprene shielded cable, 6 mm diameter by 1 m long, bared at the tip

Mechanical Properties

Safe Overload Rating :	120%
Material :	Stainless steel (guide blade resin)
Protection Rating :	IP68 (JIS C 0920) Water resistance 490kPa
Weight :	See table below

Optional Accessories

Dedicated aluminum guide pipe B-30, 3 m long

Dedicated socket B-35, 30 cm long

Measuring Directions	Model	Rated Capacity	Weight(Approx.)
1 (uniaxial)	BKJ-A-5	$\pm 5^\circ$	1kg
	BKJ-A-10	$\pm 10^\circ$	
2 (biaxial)	BKJ-A-5-D	$\pm 5^\circ$	1.2kg
	BKJ-A-10-D	$\pm 10^\circ$	

Dimensions

