

## Insertion Type Inclination Transducer



### Specifications

#### Performance

Rated Capacity	BK-5G	±5°
	BK-10G	±10°
Nonlinearity	Within ±0.5%RO	
Hysteresis	Within ±0.5%RO	
Rated Output	2.182 mV/V ±0.5%	
	(From minus rated capacity to plus rated capacity)	

#### Environmental Characteristics

Safe Temperature	-20 to 60°C
Compensated Temperature	-20 to 50°C
Temperature Effect on Zero	Within ±0.03%RO/°C
Temperature Effect on Output	Within ±0.03%/°C

#### Electrical Characteristics

Input Resistance	500 to 660 Ω
Output Resistance	343 to 357 Ω
Cable ①	4-conductor (0.5 mm <sup>2</sup> ) polyurethane cable incorporating piano wire, 9 mm diameter by 60 m long (10 m of a reserve portion is included). The mark is put on the cable every 50 cm for the depth check.
	② 4-conductor (0.3 mm <sup>2</sup> ) shielded chloroprene cable, 7.8 mm diameter by 3 m long, the end to measuring instruments is a plug.

#### Mechanical Properties

Safe over load Rating	120%
Weight	Approx. 3.2 kg

#### Optional Accessories

Dedicated aluminum guide pipe B-30 (3 m long)  
Dedicated socket B-35 (30 cm long)

\*60 m or longer cables can be manufactured.

### Inclination angles detected enable measurement of lateral displacement of the ground or earth retaining wall.

- Highly reliable performance backed by durable structure ensure safe use in civil engineering fields.
- Cable and reel are standard accessories, the cable enables measurement up to 50 m deep.

BK-G series inclination transducers are designed for insertion in guide pipe embedded beforehand, in the ground or the structure, detect successive inclination angles and measure lateral displacement.

The transducer is essential for checking landslide or earth retaining wall, and often used for measuring lateral displacement of the ground or earth retaining wall.

3m cable to connect the cord reel and measurement devices is also included.

#### ■ Handy data logger SME-30A M1



- The SME-30A M1 is a revision of the standard SME-30A, and measures the insertion-type inclination transducer BK-5G/10G with the rated current bridge power source.

SME-30A M1 specifications differ from the standard SME-30A specifications in the following points.

- Rated current bridge power source approx. 3.8 mA DC (Bridge resistance 350 Ω to 670 Ω)
- Accuracy (When connected to a full bridge NDIS connector) strain measurement  
0 to ±30 k μm/m: ±(0.05% of reading+2) μm/m (Note 1)  
±30 k to ±300 k μm/m: ±(0.1% of reading+20) μm/m

Note 1. If sensor bridge resistance is 500 Ω or more (Insertion-type inclination transducer BK-5G/10G)  
0±30 k μm/m: ±(0.5% of reading) μm/m

#### ■ Dimensions

