

# INCLINOMETER CASING

---

## DATASHEET

MODEL EAN-AT



### OVERVIEW

The Encardio Rite Model EAN-AT inclinometer casing (access tubes) is a critical component in the measurement of lateral deformation and movement in structures such as embankments, dams, piles, diaphragm walls, and slopes. It is used in conjunction with digital inclinometer probes, in-place inclinometer chains, or 3D in-place inclinometers with settlement monitoring chains to determine ground or structural movement.

The sturdy grooved ABS casings feature four longitudinal keyways at 90 degrees, specially produced to close tolerances. These keyways serve as an access guide for the probe's wheels and ensure smooth and accurate probe movement inside casings.

Model EAN-AT access tubes are 3 meters (~9.85 feet) in length. Fixed couplings are available to quickly join access tubes. Telescopic couplings are used in cases where settlement is expected. The design of both fixed and telescopic couplings ensures the correct alignment of keyways throughout the depth of the gage well, maintaining the orientation of the sensing probe consistently.

## FEATURES

- **High precision machined grooves:** Ensures accurate guidance for tilt probe/sensor wheels, improving measurement reliability.
- **Self-aligning leak-proof couplings:** Provides a secure and reliable connection between casing sections, preventing leakage and ensuring structural integrity.
- **Robust ABS material:** Thick walls and durable construction make it suitable for various applications, providing long-term durability and resistance to environmental stress.
- **Minimal spiral effect:** Maintains less than 0.3° spiral per 3 m of casing length, ensuring consistent and precise measurements.
- **Easy installation:** Precision coupler facilitates quick and efficient deployment, ensures the correct alignment of keyways.
- **Telescopic couplings:** Allow for adjustment in case of settlement, maintaining alignment.
- **Versatile applications:** Casings are available in two sizes - 70 mm o.d and 85 mm o.d., to suit different field requirements.

## PRODUCT OFFERING

The inclinometer casing system includes:

### TUBING AND COUPLING:

#### Self-aligning ABS access tube:

**EAN-AT70:** 70 mm o.d. (~ 2.75 in), 58 mm i.d.

**EAN-AT85:** 85 mm o.d. (~ 3.25 in), 77 mm i.d.

**Length:** 3 m (~9.85 ft)

**Spiral:** Less than average 0.3° per 3 m, ensuring minimal twist along the length.

#### ABS fixed coupling:

**EAN-FC70:** 77 mm o.d. x 160 mm length, for 70 mm o.d. access tube.

**EAN-FC85:** 91.5 mm o.d x 200 mm length, for 85 mm o.d. access tube.

#### ABS telescopic couplings:

**EAN-TC70:** 77 mm o.d. x 300 mm length with up to 150 mm displacement, for 70 mm o.d. access tube.

**EAN-TC85:** 91 mm o.d. x 380 mm length with up to 150 mm displacement, for 85 mm o.d. access tube.

### ACCESSORIES:

#### End caps:

**EAN-EC70:** Fits 70 mm o.d access tubes.

**EAN-EC85:** Fits 85 mm o.d access tubes.

#### Lockable Top caps:

**EAN-TT70:** For 70 mm o.d access tubes.

**EAN-TT85:** For 85 mm outer o.d access tubes.

#### Joining/sealing Accessories:

**Pop rivets:** For joining fixed couplings to access tube, provided in packets of 100 numbers.

**Self tapping screws:** For joining telescopic couplings to access tubes, provided in packets of 100 numbers

**Mastic tape:** 50 mm width x 10 meters long.

**BOPP Tape:** 50 mm width x 30 meters long.

#### Tools:

**Pop rivet gun:** Handheld, manually operated.

**Power drill:** 230 V, 50 Hz with two 3.2 mm diameter drill bits.

*\*All specifications are subject to change without prior notice*

DATASHEET | 1918-17 R03



Dams



Mining



Tunnels



Transportation



Construction



Bridges



Landslides



Energy



Environmental  
Monitoring



Pipelines



Structural Health  
Monitoring



Smart  
Cities