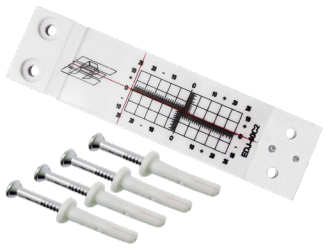
ENCARDIO RITE
METASENSING FOR MEGA STRUCTURES

CRACK METER AND JOINT METER

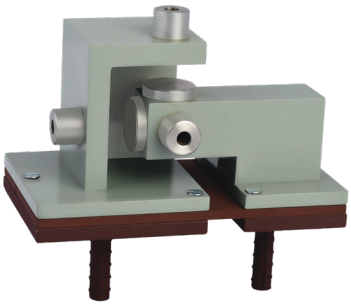
MODEL EDJ-40C/C2, EDJ-41M, EDJ-40TJ

DATASHEET



EDJ-40C2

EDJ-40M



EDJ-40TJ

OVERVIEW

Encardio Rite's crack and joint meters are ideally suited for the measurement of movements critical to monitoring the behavior of civil structures and buildings.

These instruments are particularly effective in monitoring crack openings in concrete structures, rocks, bridges, and pavement slabs, as well as measuring displacement across joints in concrete and masonry blocks in dams, tunnels, and masonry constructions. Their ability to accurately measure such movements is critical for assessing structural safety and longevity, ensuring that any potential issues can be addressed promptly to maintain structural integrity.

Our product range includes model EDJ-40C scale crack meter, EDJ-40C2 biaxial scale crack meter, EDJ-41M mounting block crack meter and EDJ-40TJ tri-axial joint meter, each designed to meet various application needs.

FEATURES

- **Reliability and accuracy:** Ensures precise measurements essential for structural monitoring.
- **Ease of installation:** Designed for straightforward, hassle-free installation.
- **Simplicity in reading:** Data can be easily read without complex procedures.
- **Rugged construction:** Built to withstand harsh conditions, ensuring durability and long-term use.

PRODUCT OFFERING

EDJ-40C CRACK METER

The Model EDJ-40C crack meter measures changes in surface crack widths with a precision of 0.5 mm. It consists of a graduated scale with a 0.5 mm resolution and a transparent acrylic plate with a hairline cursor. The crack meter is mounted across the crack using expandable anchors in 5 mm diameter, 30 mm deep holes. As the crack opens or closes, the scale and cursor move relative to each other, indicating the amount of movement. The initial reading is recorded as the baseline.

EDJ-40C2 BIAXIAL CRACK METER

Model EDJ-40C2 has a graduated scale with biaxial markings - ±25 mm on the X-axis and ±10 mm on the Y-axis, allowing measurements of both crack width changes and shearing, with a resolution of 0.5 mm. The scale and transparent acrylic plate with hairline cursor are mounted across the crack using expandable anchors.

MODEL EDJ-41M CRACK/JOINT METER

Model EDJ-41M consist of two stainless steel cylindrical datum blocks, mounted on either side of a crack, joint or fissure.

Each block features a precision-machined groove to assist in taking measurements with a digital inside caliper offering a high resolution of 0.01 mm. A central mounting hole in the blocks enable secure installation on concrete, masonry, or rock surfaces using expandable anchors and M8 nuts.

MODEL EDJ-40TJ TRIAXIAL JOINT METER

Model EDJ-40TJ triaxial joint consists of two precision machined aluminum elements, epoxy painted for corrosion resistance, attached to reinforced bar anchor. The elements are anchored on either side of an accessible surface joint, and the distance between them is measured over time using a micrometer depth gauge with a 50 mm range and 0.01 mm resolution.

Available in ranges of ±15 mm and ±25 mm in XYZ directions, the device is built for durability and precision with stainless steel micrometer rest blocks and mounting buttons.

For a comprehensive understanding of joint behavior, it is recommended to complement surface measurements with internally located joint meters like the Encardio Rite Model EDJ-50V.

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