

**DETERMINATION OF THE SECANT COMPRESSION ELASTIC MODULUS TEST ON CONCRETE AND MORTAR SPECIMENS**

**C134**

**Electronic Universal EXTENSOMETER/COMPRESSOMETER**

STANDARDS: ASTM C469 / ISO 6784 / BS 1881:121 / DIN 1048:1

Made of two anodized aluminium pieces, one fixed and the other sliding and housing a displacement transducer that measures with high accuracy the movement of two conical points made of hardened steel and fixed at the two ends of the electronic sensor.

An aluminium template (optional mod C134-10) is used to regulate and to calibrate the base length.

The two conical points are coupled to the surface of the sample with a rapid and simple fixing system through two elastic adjustable straps.

The instrument is equipped of a mechanical knob to lock and unlock the displacement transducer, allowing to maintain safe the selected base length during the fixing action of the device to the sample.

Normally the test is performed on cylinders by using 3 extensometers/compressometers, and on cubes or beams by using 2 or 4 instruments.

The extensometer is suitable to test cubes, cylinders and beam specimens, having minimum height of 130 mm.

It is also possible to test mortar prisms 40x40x160 mm by using a reducing length block.

Gauge length adjustable from 50 to 160 mm

Feeding up to 10V

Travel: +/- 1,5 mm

Sensitivity less than 0,01 micron

Supplied complete with reducing block for mortar prisms, elastic straps, carrying case.

Weight: 1000 g approx.

ACCESSORIES:

**C134-10** TEMPLATE, anodized aluminium made, used to regulate and calibrate the base length.

**S337-51** CALIBRATION PROCESS of one Extensometer/Compressometer combined with digital unit.

NOTE:

The Compressometers and the Compressometer/Extensometer connected to electronic linear transducers (accessory mod. S336-11) can be used with:

- Matest Servo-Plus Evolution compression machines equipped with Automatic Elastic Modulus system (mod. C125N) in complete accordance with ASTM C469, ISO 1920-10:2010, UNI 6556 Specifications (see page 220)
- Matest Cyber-Plus and Servo-Plus compression machines. The electric cable of the displacement transducer is "directly" connected to one of the eight channels available on the digital unit.

Through the suitable Software (accessory mod. C130-05), the digital unit will automatically elaborate the data, supplying the load/deformation graphic with certificate printing.



Set of 3 units fixed to a cylinder

C134-10

Block for 40x40x160 mm specimens

**C130-05**

FIRMWARE for Elastic Modulus test on Concrete, Mortar and Rock specimens.

Automatic data and processing acquisition, load/deformation graphic and certificate printing with direct management of the testing machine. The software can be installed only on Cyber and Servo-Plus Evolution systems.



C134 with case



C130-05 Test execution

NOTE:

The Elastic Modulus test, to fully comply ASTM C469 or ISO 1920-10:2010 Standards, must be carried out with a Servo-Plus Matest machine equipped with C125N automatic system with pace rate load and "unload" control.

