C125N
DETERMINATION OF THE SECANT COMPRESSION ELASTIC MODULUS ON CONCRETE
AUTOMATIC WITH PACE RATE CONTROL ALSO WHEN RELEASING THE LOAD
STANDARDS: EN 12390-13, EN 13412, EN 13286-43 | ASTM C469 | ISO 6784 | UNI 6556 | DIN 1048 | BS 1888:121

It can be used with a MATEST high stability frame 2000 or 3000 or 5000 kN capacity, coupled to the automatic servo-controlled system “Ser-
vo-Plus Evolution” (mod. C104N) housed in a separate pyramidal frame.

The appliance includes:

 HYDRAULIC SYSTEM
It is an hydraulic installation and has a high performance valve directly controlled by the digital unit that grants the automatic control of the 
pace rate increasing the load, keeps a certain load and than controls the pace rate decreasing the load.
The setting of the pace rate is made by a very sensitive valve controlled by a stepper motor thus allowing a micrometric action on the pace 
rate granting excellent results.
A laser position detector allows a rapid positioning of the piston. This grants a touching sensitivity of test starting at about 0.1 per thousand of 
the maximum capacity.

 ELECTRONIC MEASURING SYSTEM
The high performance control and data processing unit controlled by a 32 bit microprocessor, can manage up to 8 high resolution channels 
for the control of load cells or transducers with strain gages bridge.
The unit contains two Analogical/Digital last generation converters with 24 bits resolution. The system processes the signals coming from the 
load cells and from the extensometers giving all the results required for further processing following the most updated International Standards 
for this application.

 DATA ACQUISITION AND PROCESSING UTM2 SOFTWARE
LICENSE FOR ELASTIC MODULUS ON CONCRETE
The software has been developed on the working line of the already known software UTM-2 (Windows menu). It contains the profiles of the 
main Standards used, but the user can modify as he likes and personalize the test profile that will be carried out in a completely automatic 
way by the testing machine.
The software allows to determine both the initial and stabilized secant modulus of elasticity as requested by EN 12390-13 Standard. The software gives the possibility to print on a standard printer a test certificate reporting all the data concerning the test and the specimen and the graph of the test. The software includes the license “Servonet” mod. C123N, while the extensometers (two models are proposed: A and B) are not included in the standard supply and must be ordered separately (see accessories).

**ACCESSORY**

**C125-01N**  
SOFTWARE FOR ELASTIC MODULUS TESTS ON ROCKS  
STANDARDS: ASTM D3148, D5407, D2664,  
EN 14580, EN 1926 l ISRM  
  
**Note:** The Elastic Modulus on Concrete mod. C125N can be used together with:

A) EXTENSOMETERS (STRAIN GAGES), SINGLE USE, ELECTRIC, available in different sizes, mod. C125-10 to C125-13 (see accessories).

or:

B) EXTENSOMETERS /COMPRESSOMETERS, electronic, universal, mechanical frame, mod. C134 (see accessories)

**ACCESSORIES**

**A) EXTENSOMETERS (STRAIN GAGES), SINGLE USE, ELECTRIC**  
Pack of 10 pieces  
Available models:

- **C125-10** Electric extensometer, base length 10 mm  
- **C125-11** Electric extensometer, base length 20 mm  
- **C125-12** Electric extensometer, base length 30 mm  
- **C125-13** Electric extensometer, base length 60 mm  
- **C125-14** Electric extensometer, base length 120 mm  

**C125-15**  
KIT for the application of single use extensometers composed by: glue, welder, solder, cleaning liquid, accessories, the whole in carrying case.

**C125-09**  
INTERFACE MODULE, a needed accessory to connect up to 4 electric single use extensometers. This module allows also the automatic calibration of the zero and of the measuring range after a special thermal compensation. This grants a five times better accuracy than the one requested by the Standards.

**AS AN ALTERNATIVE:**

**B) C134**  
EXTENSOMETER / COMPRESSOMETER, ELECTRONIC, UNIVERSAL, MECHANICAL FRAME.  
It can be used only with samples having minimum height of 130 mm.  
Technical details: see p. 286  

**C134-10**  
TEMPLATE, to regulate and calibrate the base length of the C134 extensometer.