

C095N

FLEXURAL AND TRANSVERSE MULTIPURPOSE TESTING MACHINE, 320 KN CAPACITY
C-SHAPED OPEN FRAME

 STANDARDS: EN 12390-5, 12390-6, 14488-3, 14488-5, 14651, 11039-2, 1338, 1339, 1340, 196
 ASTM C78, C293, C1018, C1609, C1609M, C1550, C496, C349 | UNI 9730-3


320 KN CAPACITY

MAIN FEATURES

- Servo-Plus evolution 8-channel servo controlled system for a fully automatic execution of the test (mod. C104N).
- Load is measured by a high accuracy electric strain cell, eliminating the piston's weight and friction.
- C-shaped open frame for an easy and fast positioning of the specimen between the rollers.
- Frame is closed by a hydraulic vertical rod, granting high rigidity.
- Ram travel: 110 mm
- Maximum vertical daylight between upper/lower rollers: 263 mm
- Horizontal clearance (between uprights): 1040 mm
- Possibility to easily place one upper roller in the centre for centre-point loading.
- Graduated scales are foreseen for easy roller adjustment.
- Simple action piston with counterweights to minimize frictions.
- Calibration accuracy: class 1
- Power supply: 230V 1ph 50Hz 750W
- Frame dimensions: 1700x1470x1557 mm
- Frame weight: 800 kg + 100 kg approx. of control console.

INVERTER


For a further improvement of energy efficiency and silent operation, (optional device code C099N). Technical details, p. 223, 312

BARCODE

Scanner for specimen file/identification, (optional device code C099-01N). Details, p. 223



C095N with accessories

C095N SPECIFIC APPLICATIONS



C095N-11 FLEXURAL TESTS ON CONCRETE BEAMS

STANDARDS: EN 14651, 12390-5, 14488-3 | ASTM C78, C293, C1609, C1018

Upper and lower roller group for third point and centre tests on concrete beams up to 200x200x800 mm
Rollers size: 30 mm Ø by 312 mm long, cadmium plated against corrosion.

Span between upper rollers adjustable from 75 to 570 mm
Span between lower rollers adjustable from 75 to 1560 mm

Weight: 65 kg approx.

NEEDED ACCESSORY

C095N-18 FOUR DISTANCE PIECES height 43 mm each, to adjust the vertical useful light of the frame from 263 to 177 mm (67 mm with piston excursion)



C095N-12 FLEXURAL TESTS ON PAVING SLABS AND ANY TYPE OF MATERIAL HAVING MAX. WIDTH 600 MM STANDARD: EN 1339

One upper centre loading roller and two lower roller assembly for tests on paving slabs.

Rollers size: 40 mm Ø by 620 mm long, cadmium plated against corrosion.

Span between lower rollers adjustable from 75 to 1560 mm

Weight: 76 kg approx.



NEEDED ACCESSORY

C095N-18 FOUR DISTANCE PIECES height 43 mm each, to adjust the vertical useful light of the frame from 263 to 177 mm (67 mm with piston excursion)

C095N-19 FLEXURAL TESTS ON CONCRETE BEAMS

STANDARDS: EN 12390-5

Two upper loading rollers for third point and centre tests on concrete beams up to 200x200x800 mm

Rollers size: 40 mm Ø by 312 mm long, cadmium plated against corrosion, to be used with the rollers assembly C095N-12.

Span between upper rollers adjustable from 75 to 570 mm

Weight: 65 kg approx.

NEEDED ACCESSORY

C095N-18 FOUR DISTANCE PIECES height 43 mm each, to adjust the vertical useful light of the frame from 263 to 177 mm (67 mm with piston excursion)

C095N-13 UPPER TAMPER FOR TESTING KERBS

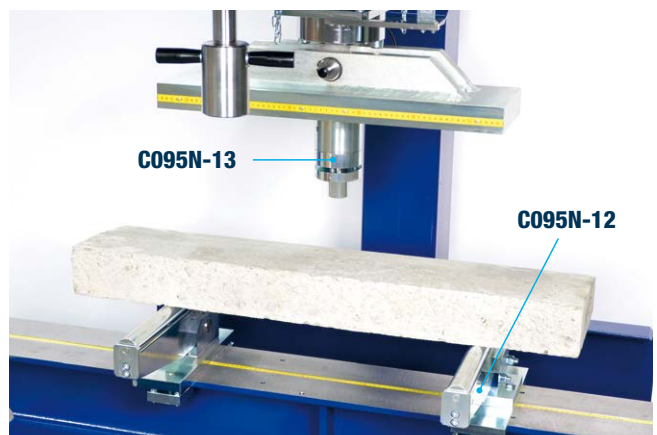
STANDARDS: EN 1340

The Tamper, steel made, is mounted on a rotating coupling and fixed to the upper part of the machine to apply a flexural load on the kerb, without any torsional stress.

To be used with the rollers assembly C095N-12.

The vertical useful light is 221 mm (111 mm with piston excursion).

Weight: 6 kg approx.



ACCESSORY

C095N-18 FOUR DISTANCE PIECES height 43 mm each, to adjust the vertical useful light from 221 to 135 mm (25 mm with piston excursion)

C095N SPECIFIC APPLICATIONS

C095N-14 COMPRESSION TESTS UP TO 320KN CAPACITY

The multipurpose (flexural) frame can be equipped with Lower platen and Upper spherically seated platen, having \varnothing 165 mm by 30 mm thick, to perform compression tests on low strength and small size specimens.

To be used with the four distance pieces C095N-18

The vertical useful light is from 350 to 178 mm (68mm with piston excursion).

The device can be used also for compression tests on mortar specimens (by using suitable devices E170 etc. listed on page 315, splitting tensile tests (by using suitable C100, C103 etc. devices listed on page 314).

Weight:
20 kg approx.



C095N-14 / C095N-18

C095N-15
DISPLACEMENT TRANSDUCER, to measure the piston travel.
Supplied complete with holder to the test frame.
Travel: 100 mm
Full bridge at 350 Ohm
Independent linearity: < 0.1%
Standard sensitivity: 2 mV/V

C095N-16 ENERGY ABSORPTION TEST ON SPRAYED CONCRETE SLABS

STANDARD: EN 14488-5
SQUARE BASE SUPPORT FRAME useful inside dimensions 500x500 mm, holding the sprayed concrete slab, complete with spherically upper loading element.

Weight:
125 kg approx.



C095N-16 + S336-14 with sample

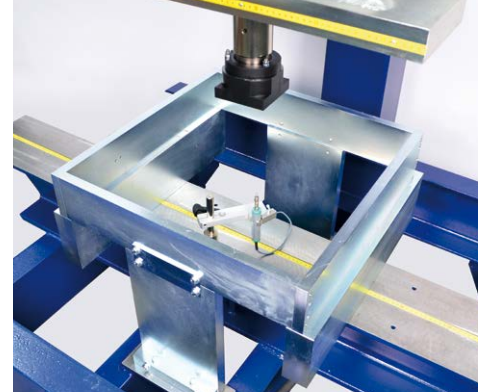
NEEDED ACCESSORY

S336-14 DISPLACEMENT TRANSDUCER, to measure the central deformation of the slab under concentrated load.
Travel: 50 mm
Full bridge at 350 Ohm
Independent linearity: < 0.1%
Standard sensitivity: 2 mV/V

C109-15N
FIRMWARE / SOFTWARE for:

- Measurement of deflection on fibre reinforced concrete beams
- Determination of toughness, first crack strength and ductility
- Energy absorption test on sprayed specimens.

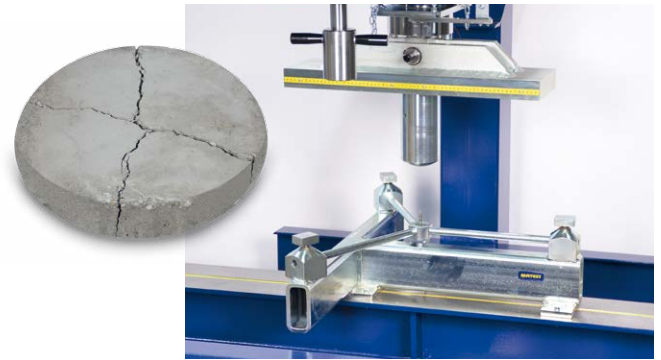
STANDARD: EN 14488-5
(see p. 283)



C095N-16 / S336-14 without sample

C095N-17 FLEXURAL TOUGHNESS OF FIBRE REINFORCED CONCRETE (FCR) SLABS

STANDARD: ASTM C1550
BASE SUPPORT FRAME, holding the concrete slabs having 800 mm diameter by 75 mm thick, complete with upper loading element.
Weight: 60 kg approx.



C095N-17

NEEDED ACCESSORY

S336-14 DISPLACEMENT TRANSDUCER, to measure the central deformation of the slab under concentrated load.
Travel: 50 mm
Full bridge at 350 Ohm
Independent linearity: < 0.1%
Standard sensitivity: 2 mV/V

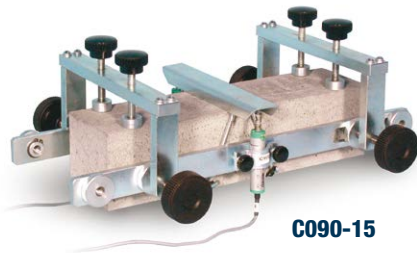
C109-15N
FIRMWARE / SOFTWARE for:

- Measurement of deflection on fibre reinforced concrete beams
- Determination of toughness, first crack strength and ductility
- Energy absorption test on sprayed specimens.

STANDARD: EN 14488-5 | ASTM C1550
(see p. 283)

C095N SPECIFIC APPLICATIONS

C090-15 DEFLECTION MEASUREMENT TEST on fiber reinforced concrete beams 100x100x400(500) mm and 150x150x500(600) mm
STANDARDS: EN 14488-3 ASTM C1609, C1018
The test is performed with the specific equipment (deflection measurement device, displacement transducers) described at p. 305 and the Software/Firmware automatic system of load and displacement Servo Strain (p. 282)



C090-15

C127N GRAPHIC PRINTER on thermo-paper on board

C115-01 TWO-WAY HYDRAULIC VALVE, connected to the motorized pumping unit of the machine to activate a second frame. Technical details: see p. 318



C115-01

C097-05 CALIBRATION CLASS 1, starting from 1% of the full range. With a special calibration procedure it is possible to grant Class 1 practically on the full range of the flexural machine.

C100 SPLITTING TENSILE test device for cylinders.
EN 12390-6 | ASTM C496
Technical details and other models: see p. 314



C100

C103 SPLITTING TENSILE test device for self blocking pavers and cubes. EN 1338, 12390-6
Technical details: see p. 314



C103

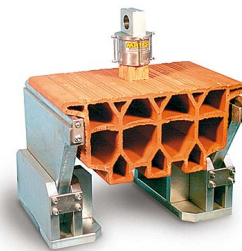
AS AN ALTERNATIVE:

C103-02 SPLITTING TENSILE test device for self blocking pavers and cubes, max dimensions 300x500 mm.
EN 1338, 12390-6. Technical details: see p. 314



C103-02

C093-11 DEVICE for flexural tests on clay blocks for flooring.
STANDARD: UNI 9730-3



C093-11

E170 COMPRESSION DEVICE to test mortar specimens 40.1 x 40 mm EN 196 | ASTM C349
Technical details and other models: see p. 315



E170

SOFTWARE for CYBER models

C109-16N	SOFTWARE for flexural tests on clay blocks
C123N	SOFTWARE Servonet for remote control through PC
C109-11N	SOFTWARE for flexural tests

Technical detail: see p. 18

Note:

Accessories for specific applications listed above are common for different tests. We recommend to check them when ordering, to avoid duplications.