

## COMPRESSION TESTING MACHINE 2000 KN CAPACITY TESTED FOR HIGH STABILITY

TO TEST BLOCKS MAX 500X300 MM, CUBES UP TO 200 MM SIDE AND CYLINDERS UP TO Ø 160X320 MM

STANDARDS: EN 12390-4, EN 772-1 | BS 1881:115, 6073 | DIN 51220 | NF P18-411 | ASTM C39, C140, C1314 | AASHTO T22 | GOST 10180

### DIAL GAUGES MODELS

- Gauges Ø 250 mm with specific resistance scales for cubes 150 mm and cylinders Ø 150 - 160 mm
- Gauges divisions: 2000 kN div. 10 kN  
600 kN div. 2 kN

### MAIN FEATURES FOR ALL MODELS

- Max. vertical daylight to test blocks: 283 mm
- Horizontal daylight between columns: 340 mm
- Compression platens for blocks: 510x320x55 mm
- Max. vertical daylight to test cubes and cylinders: 334.5 mm
- Compression platens to test cubes, cylinders: Ø 287x60 mm
- Calibration accuracy: Class 1
- Max. ram travel 60 mm approx.
- High stiffness and heavy weight 4 columns frame (german-style).
- Power supply: 230V 1ph 50Hz 750W
- Dimensions: 830x520x1200 mm approx.
- Weight: 1000...1070 kg



C089-21D + C127N



C089-22A + C127N

COMPRESSION 2000 KN High Stability Blocks

LOAD MEASURING SYSTEM

MODEL	Motorized	1 Gauge	2 Gauges	Digitec mod. C108N (p. 212)	Autotec mod. C098N (p. 212)
<b>C089B</b>	▼	▼			
<b>C089-01B</b>	▼		▼		
<b>C089-21D</b>	▼			▼	
<b>C089-22A *</b>	▼				▼

Accessories at page 254-255

**COMPRESSION TESTING MACHINE TESTED FOR HIGH STABILITY HIGH-END MODELS**

TO TEST BLOCKS MAX 500X300 MM, CUBES UP TO 200 MM SIDE AND CYLINDERS UP TO Ø 160X320 MM

STANDARDS: EN 12390-4, EN 772-1 | BS 1881:115, 6073 | DIN 51220 | NF P18-411 | ASTM C39, C140, C1314 | AASHTO T22 | GOST 10180

2000 KN CAPACITY

**CYBER-PLUS** OR **SERVO-PLUS PROGRESS** DIGITAL TOUCH-SCREEN DISPLAY

Cyber-Plus Progress control unit 7" touch-screen display, up to 8 channels for pressure, load, displacement and other transducers, 2 USB and 1 ethernet ports.

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**CYBER  
PLUS  
PROGRESS****C089-21N****C089-22N + C127N + C104-04**

COMPRESSION 2000 KN High Stability Blocks

LOAD MEASURING SYSTEM

MODEL	Motorized	Cyber-Plus Progress mod. C109M (p. 215)	Servo-Plus Progress mod. C104N (p. 215)
<b>C089-21N</b>	▼	▼	
<b>C089-22N *</b>	▼		▼

Accessories at page 254-255

\* Servo-Plus/Autotec models feature fully automatic power pack - electrovalve operated test start (no manual lever).

## COMPRESSION TESTING MACHINE 3000 KN CAPACITY TESTED FOR HIGH STABILITY

TO TEST BLOCKS MAX 500X300 MM, CUBES UP TO 200 MM SIDE AND CYLINDERS UP TO Ø 160X320 MM

STANDARDS: EN 12390-4, EN 772-1 | BS 1881:115, 6073 | DIN 51220 | NF P18-411 | ASTM C39, C140, C1314 | AASHTO T22 | GOST 10180

### DIAL GAUGES MODELS

- Gauges Ø 250 mm with specific resistance scales for cubes 150 mm and cylinders Ø 150 - 160 mm
- Gauges divisions: 3000 kN div. 10 kN  
600 kN div. 2 kN

### MAIN FEATURES FOR ALL MODELS

- Max. vertical daylight to test blocks: 283 mm
- Horizontal daylight between columns: 340 mm
- Compression platens for blocks: 510x320x55 mm
- Max. vertical daylight to test cubes and cylinders: 334.5 mm
- Compression platens to test cubes, cylinders: Ø 287x60 mm
- Calibration accuracy: Class 1
- Max. ram travel 60 mm approx.
- High stiffness and heavy weight 4 columns frame (german-style).
- Power supply: 230V 1ph 50Hz 750W
- Dimensions: 870x600x1300 mm approx.
- Weight: 1350...1400 kg



C089-17D + C127N



C089-19A + C127N

COMPRESSION 3000 KN High Stability Blocks

LOAD MEASURING SYSTEM

MODEL	Motorized	1 Gauge	2 Gauges	Digitec mod. C108N (p. 212)	Autotec mod. C098N (p. 212)
<b>C089-15</b>	▼	▼			
<b>C089-16</b>	▼		▼		
<b>C089-17D</b>	▼			▼	
<b>C089-19A *</b>	▼				▼

Accessories at page 254-255

**COMPRESSION TESTING MACHINE TESTED FOR HIGH STABILITY HIGH-END MODELS**

TO TEST BLOCKS MAX 500X300 MM, CUBES UP TO 200 MM SIDE AND CYLINDERS UP TO Ø 160X320 MM  
STANDARDS: EN 12390-4, EN 772-1 | BS 1881:115, 6073 | DIN 51220 | NF P18-411 | ASTM C39, C140, C1314 | AASHTO T22 | GOST 10180

3000 KN CAPACITY

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**CYBER  
PLUS  
PROGRESS**
**CYBER-PLUS OR SERVO-PLUS PROGRESS** DIGITAL TOUCH-SCREEN DISPLAY

Cyber-Plus Progress control unit 7" touch-screen display, up to 8 channels for pressure, load, displacement and other transducers, 2 USB and 1 ethernet ports.



C089-17N



C089-19N + C104-04 + C127N

COMPRESSION 3000 KN High Stability Blocks

LOAD MEASURING SYSTEM

MODEL	Motorized	Cyber-Plus Progress mod. C109M (p. 215)	Servo-Plus Progress mod. C104N (p. 215)
<b>C089-17N</b>	▼	▼	
<b>C089-19N *</b>	▼		▼

Accessories at page 254-255

\* Servo-Plus/Autotec models feature fully automatic power pack - electrovalve operated test start (no manual lever).

**MATEST**

**ACCESSORIES FOR 2000 kN AND 3000 kN BLOCKS MACHINES FROM MOD. C089B TO C089-19N**

**C111-32** DISTANCE PIECE, 20 mm high for cylinders Ø 150x300 mm

**C111-12** DISTANCE PIECE, 73+50 mm high for cubes 200 mm side

**C111-13** DISTANCE PIECES, 73+50+50 mm high for cubes 200 and 150 mm side

**C111-14** DISTANCE PIECES 73+50+50+50 mm high for cubes 200, 150 and 100 mm side

**C111-15** DISTANCE PIECES 50+50 mm high for cylinders Ø 110x220 mm

**C111-24** DISTANCE PIECE 50 mm high

**C111-25** DISTANCE PIECE 73 mm high

 **Note:** The cylinders Ø 160x320 mm do not require any distance piece.

**C111-50** DISTANCE PIECE, it eliminates the heavy procedure to lift the lower rectangular platen and to add distance pieces. Technical details: see p. 295



**C111-50**

TESTING CHAMBER with a vertical clearance of 376 mm, complete with a distance piece, 40 mm high, for testing cylinders Ø 150x300 mm and Ø 160x320 mm with capping retainers.

**C089-11** Model 2000 kN

**C089-12** Model 3000 kN

 **Note:** different vertical clearances are available on request.

AS AN ALTERNATIVE:

**C112-05** KIT of 4 HANDLES to lift the lower platen, making the positioning of distance pieces easier. Technical details: see p. 295



**C112-05**

**C117** SLIDING RAIL CARRIAGE, for an easy removal of the upper block platen, to perform tests on blocks or on standard cubes and cylinders.




**C117**

**C127N** GRAPHIC PRINTER on thermo-paper on board for digital models

**C127-11** THERMO-PAPER roll for printer (pack of 10 rolls)

Model	Safety Guards	Stop Switch for the Safety Guards	Stop Switch for the Piston Stroke
2000 kN	<b>C121-10</b>	<b>C121-51</b>	<b>C121-52</b>
3000 kN	<b>C121-08</b>	<b>C121-51</b>	<b>C121-52</b>

 **Note:** the safety guards are CE only of the stop switch C121-51 is added. See page 292

**C115-01 | -02 | -03**

TWO WAY HYDRAULIC VALVE, connected to the motorized pumping unit of the machine to activate a second frame. **In order to choose the correct model** and for technical details see p. 293



**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 compression machine. Applicable only on digital machines.

**C097-08** OFFICIAL ACCREDIA (Equivalent UKAS, ENAC, DAKKS, SAS, COFRAC etc.) HARDNESS CERTIFICATE of upper and lower compression platens. Minimum hardness: 55 HRC. See p. 288

**C097-01** DUAL LOW CAPACITY DIGITAL RANGE, complete with appropriate pressure transducer, only for digital machines. Recommended range 0-250kN. Technical details: see p. 288



**C097-01**

**C100** SPLITTING TENSILE test device for cylinders. EN 12390-6 | ASTM C496 Technical details and other models: see p. 289



**C100**

- C103** SPLITTING TENSILE test device for self blocking pavers and cubes. EN 1338, 12390-6.  
Technical details: see p. 289

AS AN ALTERNATIVE:

- C103-01** SPLITTING TENSILE test device for self blocking pavers and cubes having max. dimensions 300x500mm, directly fixed on the large compression platens. EN 1338, 12390-6.  
Technical details: see p. 289



**C103-01**

- C106** FLEXURAL TEST DEVICE for concrete beams. EN 12390-5 | ASTM C78, C293 | AASHTO T97  
Technical details: see p. 290




**C106**

- E170** COMPRESSION DEVICE to test cement specimens 40.1x40 mm EN 196-1 | ASTM C349  
Technical details and other models: see p. 290



**E170**

-  **Note:** All the accessories from C100 to E170 need C097-01 and suitable distance pieces basing on their height.

- C104-10N** FIRMWARE AND SOFTWARE to allow displacement control and displacement measurement during a compression test. The final results obtained are maximum load, maximum strength and displacement. It is for Servo-plus machines only and it needs the addition of a displacement transducer.

- C125M** FIRMWARE, SOFTWARE AND HYDRAULIC UPGRADE to control the load both when increasing and decreasing. Allowing to apply load cycles on the sample.  
See page 258

- C126** BENCH to hold the compression machine. See p. 292

- C104-04** CONSOLE HOUSING THE SERVO-PLUS PROGRESS  
The pump assembly **lined** with sound proofing material for noise reduction and the digital system are encased to enhance the design and look of the machine.  
Technical details: see p. 215



**C089-19N**

**C104-04**

- C099N** INVERTER DEVICE  
Applicable only on Servo-Plus Progress machine C104-04 is required.  
Technical details: see p. 215



**C099N**

- C099-01** BARCODE SCANNER This instrument allows specimen file and identification by barcodes reading.  
Supplied complete with USB cable.  
Technical details: see p. 215

#### SSW-LINK

##### FIRMWARE UPGRADE

To enable SmartLab software (pack of 3).  
Only for touch screen models. Further details at page 20

-  **Note:** UTM2 software is also available on request.