



# **DATA SHEET**

## 500/1000kN testing frame for steel and concrete testing

MAIN FEATURES

- For tensile tests up to 500 kN for testing steel rebars up to 26 mm dia.
- Connectable as additional frame to AUTOMAX Multitest control console
- Vertical daylight 450 mm
- Piston travel 150 mm
- Compatible specimens: max. rebar dia. 26 mm max. flat specimen thickness 13 mm
- o Heavy duty high-functionality jaws rated for severe prolonged
- For tensile tests only it's also availble a dedicated version fitted with high accuracy load cell

### **GENERAL DESCRIPTION**

This frame is meant to be connected to an existing AUTOMAX Multitest control console in order to have a unique system suitable to perform both concrete and steel testing.

It is suitable to perform tension tests on steel rebars up to 26 mm dia. and compression tests on cylindrical concrete specimens up to dia. 160x320 mm and cubes up to 150 mm, using the appropriate accessories.

The frame consists of a very rigid structure with double acting cylinder assembly.

It is supplied complete with a set of tensile holders, 4 wedge grips for flats up to 13 mm thickness, 4 wedge grips for rounds up to 26 mm dia. and 2 sets of grip liners 4 and 8 mm thick.

Furthermore it is fitted with a 150 mm travel high precision displacement transducer allowing test execution under crosshead separation control. See Technical Specifications.

Spherical seat and compression platens for concrete specimens are not included and have to be ordered separately (see Accessories).

It is also available a version for tensile tests only fitted with high accuracy load cell.

## **TECHNICAL SPECIFICATIONS**

### Frame

- Load capacity in tension: 500 kN
- Load capacity in compression<sup>\*</sup>: 1000 kN
- tensile jaws including: 4 wedge grips for flats up to 13 mm thickness, 4 wedge grips for rounds up to 26 mm dia. and 2 sets of grips' liners 4 and 8 mm thick.
- Maximum distance between grips (tensile mode): approx. 300 mm
- Specimen length (tensile mode): approx. 500 mm
- Max vertical clearance for compression (with 70-S0012/1)\*: 695mm
- Max. ram travel: 150 mm
- Distance between columns: 310 mm
- Overall dimensions approx (w x d x h).: 605 x 430x 1750 mm
- Weight approx.: 550 kg





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\* For model 70-S12Z00 only

### **ORDERING INFO**

### 70-S12Z00

Combined 500/1000 kN frame, 500 kN for tensile testing on steel rebars up to 26mm diameter and 1000 kN for compression testing on concrete.

Comprehends presuure transducer, tensile jaws with wedges grips and 150 mm travel displacement transducer allowing test execution under crosshead separation control to EN EN ISO 6892-1 (method B) and EN 15630-1, when connected to our AUTOMAX Multitest control console.

### 70-S12Z10

500kN tensile frame with double effect piston (to be used in tensile mode only) for tensile testing on steel rebars up to 26mm diameter.

Comprehends high accuracy load cell, tensile jaws with wedges grips and 150 mm travel displacement transducer allowing test execution under crosshead separation control to EN EN ISO 6892-1 (method B) and EN 15630-1, when connected to our AUTOMAX Multitest control console.

### ACCESSORIES

#### COMPRESSION ACCESSORIES (for model 70-S12Z00 only)

#### 70-S0012/1

Set of lower platen and upper platen with spherical seat, 216 mm dia., for testing cylinders up to dia. 160x320 mm and cubes from 100 to 150 mm. To be completed with the suitable distance pieces depending on the specimen height. Weight approx.: 45 kg

#### **Distance pieces**

Made of steel, these pieces are used to reduce the vertical clearance of the compression machine to a height that is appropriate for the size of the specimen and considering that, in general, the maximum piston travel is 150mm.

Code	Dimensions (diameter x height, mm)
50-C9080	200 x 30
50-C9082	200 x 50
50-C9083	200 x 68
50-C9084	96 x 158
50-C9086	200 x 100
50-C9087	96 x 130

### **COMMON ACCESSORIES**





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### 70-S0012/2

Front and rear fragment guard

### 70-C0961/H

Coaxial electronic extensometer for round specimens from 6 to 26 mm dia. Gauge length: 200 mm. Travel: 50 mm.

### UPGRADING



Combined tension/compression frame for steel rebar and concrete testing (70-S12Z00)



Tensile frame 500 kN capacity fitted with load cell (70-S12Z10).



Automatic system for concrete and steel testing



Test data input



Test execution



Test results



Universal Extensometer



Coaxial Extensometer

