

## DATA SHEET

# 500/1000kN Testing Frame for Steel and Concrete Testing



70-S12Z10 combined tension/compression frame with load cell

## General description

This frame is meant to be connected to the AUTOMAX Multitest or AUTOMAX PRO-M 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.**

## Main features

- **For tensile tests up to 500 kN for testing steel rebars up to 26 mm**
- **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**
- **Heavy duty high-functionality jaws rated for severe prolonged**
- **For tensile tests only it's also available a dedicated version fitted with high accuracy load cell**

## Standards

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- EN ISO 6892
- ASTM A370
- EN ISO 15630-1

## Specifications

### Frame

Load capacity in tension: 500 kN

Load capacity in compression\*: 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

\* For model 70-S12Z00 only

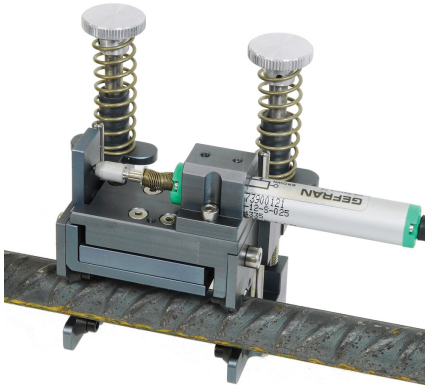


70-S12Z00 combined tension/compression frame



70-C0961/H

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70-C0954/C1

### Products

#### 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 tensile jaws with wedges grips and 150 mm piston travel displacement transducer.

#### 70-S12Z10

Tensile frame 500 kN capacity for tensile testing on steel rebar up to 26 mm diameter. To be used in tensile mode only. Comprehends tensile jaws with wedges grips and 150 mm piston travel displacement transducer. Complete with load cell.

### Accessories and consumables

#### 70-S0012/2

Upgrading of the series 70-S11T0x and 70-S12U0x machines with front rigid door

#### 50-C9080

Distance piece dia 200 x 30 mm

#### 50-C9082

Distance piece dia 200 x 50 mm

#### 50-C9083

Distance piece dia 200 x 68 mm

#### 50-C9086

Distance piece dia 200 x 100 mm.

#### 70-S0012/1

Set of spherical seta and loading platens dia. 220mm for compression test on cylinders up to 160x320mm and cubes up to 150mm. Resulting vertical daylight: 695 mm. Distance pieces not included.

#### 70-S0012/1A

Set of spherical seat with upper loading platen dia.165x30mm and bottom platens dia.250x35 with threaded centering hole. For compression on cylinders up to 160x320. Resulting vertical daylight: 720 mm. Distance pieces not included.