



**A006 (TC50)  
UNIVERSAL TESTING MACHINE  
Capacity 50 kN (11240 lbf)**

Electromechanical computerized universal testing machine, TC series single hollow test, developed for the measurement of mechanical strength of the materials under load. Depending on the needs and the types of materials, it can perform testing of tensile, compression, bending, breaking tests, bend, extension, tension, force limit, deformation limit, dishing, etc., According to the most common international standards ISO, ASTM, EN and UNI. The structure is a sturdy frame from two columns and the moving crosshead driven by pre-loaded ball screws with zero backlash to ensure the accuracy of motion. The movement and the crosshead speed is controlled electronically by 24-bit microprocessor. The machine is controlled through **LBG HIGH TOWN** software for MS® Windows 7 Operating System, at all stages of diagnostics, calibration and performance test.

The supply included :

- Load Cell of 50kN (11240 lbf) tensile/compression
- Personal computer
- Color Deskjet printer A4 format
- Manuals instruction
- ACCREDIA Calibration certificate LAT
- LBG HIGH TOWN software ( A007)

**The accessories to effect all the tests have to be ordered separately.**

**TECHNICAL CHARACTERISTICS :**

50 kN 0.001kN	Load Capacity Resolution	11240 lbf 0.225 lbf
0.5	Class ISO 7500-1 (dal 2% al 100% f.s.)	0.5
500 mm/min 0.1 mm/min	Maximun Speed Minimun Speed	19.68 in./mm 0.04 in./mm
450 mm/min	Return Speed	17.72 in./mm
60 kN/mm	Stiffness frame	340629 lbf/in.
1100 mm	Crosshead Travel without accessories	43.3 in.
600 mm	Crosshead Travel with tensile heads A006-A100	23.62 in.
390 mm	Column Spacing	15.35 in.
270 kg	Weight	595 lb
820 x 605 x 2180 mm	Dimensions width x depth x height	32.28 x 23.82 x 85.83 in.
+ 10 °C / + 35 °C	Operating Temperature	+ 50 °F / + 90°F
10 % / 80 %	Relative Umidity	
240V 1ph 50Hz + T	Power Supply*	
600 VA	Max Power Absorbed	

\* On request POWER SUPPLY : 115V 1ph 60Hz +T

## STANDARD ACCESSORIES :

### A006-A100 TENSILE HEADS

A pair of tensile heads for manual operation with seats. For grip pliers have 28 mm width to be ordered separately. Maximum capacity 50 kN (11240 lbf).

### A006-A101 GRIPS

A pair, with plain tightening surfaces applicable to specimens with thickness from 0 to 12 mm (0 to 0,47 in.) and until 28 mm (1.10 in.) width and 57 mm (2.24 in.) in length. The grips have to be lodged in the tensile head A006-A100.

### A006-A102 GRIPS

A pair, with plain tightening surfaces applicable to specimens with thickness from 12 to 18 mm (0,47 to 0,71 in.) and until 28 mm (1.10 in.) width and 57 mm (2.24 in.) in length. The grips have to be lodged in the tensile head A006-A100.

### A006-A103 GRIPS

A pair of grips with "V" plain tightening surfaces , applicable to specimens with diameter from 3 to 6 mm (0,12 to 0,24 in.) and 57 mm (2.24 in.) in length. The grips have to be lodged in the tensile head A006-A100.

### A006-A104 GRIPS

A pair of grips with "V" plain tightening surfaces , applicable to specimens with diameter from 6 to 9 mm (0,24 to 0,35 in.) and 57 mm (2.24 in.) in length. The grips have to be lodged in the tensile head A006-A100.

### A006-A105 GRIPS

A pair of grips with "V" plain tightening surfaces , applicable to specimens with diameter from 9 to 12 mm (0,35 to 0,47 in.) and 57 mm (2.24 in.) in length. The grips have to be lodged in the tensile head A006-A100.

### A006-A106 GRIPS

A pair, with plain tightening surfaces applicable to specimens with thickness from 0 to 10 mm (0 to 0,39 in.) and until 28 mm (1.10 in.) width and 57 mm (2.24 in.) in length. The grips have to be lodged in the tensile head A006-A100.

### A006-A109 SAFETY PROTECTION

Polycarbonate transparent protection, with front with shutters, and rear panel fixed. Completely with electromagnetic system and safety switch.

### A006-A111 EQUIPMENT FOR COMPRESSION TESTS

Consist of one upper plate spherically seated compression self-aligning Ø 116 mm (3.94 in.) and one lower plate plane Ø 116 mm (3.94 in.). Steel made 58HRC. Maximum capacity 50kN (11240 lbf)

### A006-A112

EQUIPMENT FOR FLEXURAL/BENDING TESTS - Capacity 50kN (11240 lbf)

Device for bending tests and 3-point bending.

Distance between supports adjustable from 30 to 250 mm.(1.18 to 9.84 in.).

With inverted supports up to 330 mm (12.99 in.)

Set of diameter rollers 10, 20, 30 mm (0.39, 0.79, 1.18 in.).

### A006-A100-S TENSILE HEADS

A pair of tensile heads for manual operation with seats. For grip pliers have 55 mm width to be ordered separately. Maximum capacity 50 kN (11240 lbf).

### A009-A101 GRIPS

A pair, with plain tightening surfaces applicable to specimens with thickness from 0 to 10 mm (0 to 0,39 in.) and until 55x65 mm (2.16x2.56 in.) (width x length). The grips have to be lodged in the tensile head A014-A100.

### A009-A102 GRIPS

A pair, with plain tightening surfaces applicable to specimens with thickness from 10 to 20 mm (0.39 to 0.79 in.) and until 55x65 mm (2.16x2.56 in.) (width x length). The grips have to be lodged in the tensile head A014-A100.

### A009-A103 GRIPS

A pair of grips with "V" plain tightening surfaces, applicable to specimens with diameter from 5 to 10 mm (0.18 to 0.39 in.) and 65 mm (2.56 in.) length. The grips have to be lodged in the tensile head A014-A100.

### A009-A104 GRIPS

A pair of grips with "V" plain tightening surfaces, applicable to specimens with diameter from 10 to 17 mm (0.39 to 0.67 in.) and 65 mm (2.56 in.) length. The grips have to be lodged in the tensile head A014-A100.

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#### A009-A105 GRIPS

A pair of grips with "V" plain tightening surfaces, applicable to specimens with diameter from 17 to 25 mm (0.67 to 0.98 in.) and 65 mm (2.56 in.) length. The grips have to be lodged in the tensile head A014-A100.

#### A009-A106 GRIPS

A pair of grips with "V" plain tightening surfaces, applicable to specimens with diameter from 25 to 32 mm (0.98 to 1.26 in.) and 65 mm (2.56 in.) length. The grips have to be lodged in the tensile head A014-A100.

**OTHER ACCESSORIES ARE AVAILABLE ON REQUEST**