

GENERAL PURPOSE and EN 772-1 AUTOMATIC COMPRESSION TESTING MACHINES FOR MASONARY UNITS/BLOCKS, CUBES AND CYLINDERS

Product Code

UTC-4714GE.FPR 1500 kN General Purpose and EN 772-1 Automatic Compression Testing Machine for Masonary Units/Blocks, Cubes and Cylinders

UTC-4729GE.FPR 2000 kN General Purpose and EN 772-1 Automatic Compression Testing Machine for Masonary Units/Blocks, Cubes and Cylinders

UTC-4739GE.FPR 3000 kN General Purpose and EN 772-1 Automatic Compression Testing Machine for Masonary Units/Blocks, Cubes and Cylinders

UTC-0210 High Precision Pressure Transducer and Electronic

UTC-4680 Pedestal for 600 kN, 1100 kN and 1500 kN Compression Testing Frames with Welded Walls

UTC-4682 Pedestal for 2000 kN and 3000 kN Compression Testing Frames with Welded Walls

Models for 220-240V 50-60 Hz, 1 ph.

UTC-4714GE.FPR	UTC-4729GE.FPR	UTC-4739GE.FPR
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Models for 110-120V 60 Hz, 1 ph.

UTC-4714GE.FPR-N	UTC-4729GE.FPR-N	UTC-4739GE.FPR-N
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Product Code

EN 772-1

UTC-4714GE.FPR, UTC-4729GE.FPR and UTC-4739GE.FPR model Automatic Compression Testing Machines are manufactured for compression testing of masonry units/blocks, cubes and cylinders by taking into account user requests for general purposes (see below table). These machines also meet the requirements of CE norms with respect to the health and safety of the operator.

The machines allow inexperienced operators to perform the test. Once the machine has been switched on and the specimen is positioned and centered by the help of concentric centering line/s of lower bearing block the only required operations are;

- Setting test parameters, including pace rate (only required when the specimen type is changed).
- Pressing the START button on the control unit.
- The machine automatically starts the rapid approach, when the specimen touches the upper platen the rapid approach is ended and starts loading at the pace rate that selected by user and stops once the specimen fails.
- Automatically saves the test parameters and test results.

The Machines consist of a welded steel frame (see table) and UTC-4830.FPR automatic hydraulic power pack with U-Touch PRO Control Unit.

UTC-4680 and UTC-4682 Pedestals that are made of steel to facilitate the user's placement of specimens in the frames for compression test should be ordered separately.



UTC - 4729GE.FPR

Main Features

- Pace Rate control between 1 kN to 25 kN
- Load Accuracy Class 1 acc. to EN 12390-4 and acc. to E74 starting from with the 5% of the machine capacity (Special calibration option starting from 1% of the full range with UTC- 0210)
- Tests automatically with closed loop control
- The tests can be performed by controlling the machine either on U-Touch PRO control unit (UTC-4930.FPR) or on a computer with using free UTEST Software (USOFT-4830.FPR) which is provided free of charge with the machines.
- Load measurement with a pressure transducer
- Hydraulic pump with dual stage for rapid approach
- Welded steel walled frame with a single acting piston
- Piston return at the end of test automatically

Safety Features

- Maximum pressure valves to avoid machine overloading
- Limit switch for piston stroke
- Emergency stop button
- Removable transparent front and rear safety doors
- Software controlled maximum load value



U-Touch PRO Control Unit

U-Touch PRO Control Unit UTC-4930.FPR is designed to perform automatically compression, flexure and splitting tensile strength tests of construction materials such as concrete, cement mortar, masonry units/blocks by controlling the Utest automatic compression / flexure testing machines.

All the operations of U-Touch PRO are controlled from the front panel touch screen display.

U-Touch PRO Control Unit has easy to use menu options. It displays all menu option listings simultaneously, allowing the operator to access the required option in a seamless manner to activate the option or enter a numeric value to set the test parameters. Digital graphic display is able to draw real-time "Load vs. Time", or "Stress vs. Time" graphics.

PLEASE see the pages of "U-Touch PRO Control Unit for Automatic Compression/Flexure Testing Machines" for details of the properties.



UTEST Software

UTEST software USOFT-4830.FPR provides to perform automatically compression, flexure and splitting tensile strength tests of construction materials such as concrete, cement mortar, masonry units/blocks by controlling the Utest automatic compression / flexure testing machines. The advantages of performing tests on computer with using UTEST Software, such as reporting, graphical output, etc. can be seen in detail at the pages of UTEST Software for Automatic Compression / Flexure Testing Machines.

Optional Additional Frame

For compression and especially flexural testing, additionally second testing frame should be ordered separately.

In this case, the machines provide load control of two separate testing frames with closed-loop P.I.D control with automatic test procedure by using selecting test channel And additional selector valve.

GENERAL PURPOSE AUTOMATIC COMPRESSION TESTING MACHINE FOR BLOCKS, CUBES AND CYLINDERS

Models	UTC-4714GE.FPR	UTC-4729GE.FPR	UTC-4739GE.FPR
Capacity	1500 kN	2000 kN	3000 kN
Frame Type	Welded Steel	Welded Steel	Welded Steel
Bearing Platens Dimensions (D)	220x410x50 mm	310x510x50 mm	310x510x50 mm
Upper Bearing Block, (With Spherically Seating Assembly) Dimensions (C)	220x410x50 mm	310x510x50 mm	310x510x50 mm
Surface Hardness of Bearing Blocks	55 HRC	55 HRC	55 HRC
Flatness Tolerance	0,05 mm	0,05 mm	0,05 mm
Piston Diameter	230 mm	250 mm	300 mm
Piston Stroke	50 mm	50 mm	50 mm
Maximum Vertical Clearance Between Bearing Blocks (E)	340 mm	330 mm	330 mm
Horizontal Clearance (B)	320 mm	360 mm	415 mm
Blocks/Masonry (Up to) Sizes for Specimens	up to 200x400mm masonry units/blocks	up to 300x500mm masonry units/blocks	up to 300x500mm masonry units/blocks
Cubes (Up to) Sizes for Specimens	200 mm (**)	200 mm (**)	200 mm (**)
Cylinders (Up to) Sizes for Specimens	up to Ø160x320 mm cylinders	up to Ø160x320 mm cylinders	up to Ø160x320 mm cylinders
Power	550 W	550 W	550 W
Oil Capacity	20 L	20 L	20 L
Maximum Working Pressure	370 Bar	410 Bar	410 Bar
Dimensions (w×l×h) (A×d×x×F)	780x451x1104 mm	720x600x1144 mm	775x600x1204 mm
Weight	690 kg	850 kg	1070 kg
Pedestal (Optional)	UTC-4680	UTC-4682	UTC-4682

(d*) Depth (**) Limited by capacity of the frame

The machines for blocks, cubes and cylinders are supplied complete with;

- 100 mm, 50 mm30mm and 15mm height x Ø165mm distance pieces for UTC-4714GE.FPR
- 100 mm, 50 mm30mm height x Ø205mm distance pieces for UTC-429GE.FPR and UTC-439GE.FPR)
- Scissor Jack for Loading Platens/Bearing Blocks, (UTC-4629)
- Removable transparent front and rear safety doors