EN 12390-4 FOUR COLUMN COMPRESSION TESTING FRAMES FOR CUBES and CYLINDERS

Product Code

UTC-6727 2000 kN EN 12390-4 Four Column Compression Testing Frame for Cubes and Cylinders
UTC-6737 3000 kN EN 12390-4 Four Column Compression Testing Frame for Cubes and Cylinders
UTC-6748 4000 kN EN 12390-4 Four Column Compression Testing Frame for Cubes and Cylinders
UTC-6758 5000 kN EN 12390-4 Four Column Compression Testing Frame for Cubes and Cylinders
UTC-4684 Pedestal for 2000 kN and 3000 kN Four Column Compression Testing Frames
UTC-4686 Pedestal for 4000 kN and 5000 kN Four Column Compression Testing Frames

Standards

EN 12390-4, EN 12390-3

UTC-6727, UTC-6737, UTC-6748 and UTC-6758 compression testing frames with four column for cubes and cylinders consist of a loading cylinder assembly, lower and upper (spherically-seated) loading platens. acc. to EN standards.
EN four column compression testing frames provides the stability needed for accurate and repeatable test results over the years of operation.
The frames are supplied with factory calibration certificate for force transfer stability and the self-alignment of the upper loading platen conforming to EN 12390-4.
Any hydraulic power pack with control and read out unit and a pressure transducer for measuring the loads, can be positioned on the right hand side of the load frame for easier accessibility, increased productivity and for safer operations.
All frames have a single acting up stroking ram and also have front and rear protective doors and limit swich for piston stroke for safety. The diameter of the pistons are designed to work with their load capacities. There is a low friction coaxial PTFE seal between the cylinder and the piston fitted to the cylinder.The lower loading platens are provided with centering lines and fixture for centering specimens
UTC-4684 and UTC-4686 Pedestals that are made of steel to facilitate the user's placement of specimens in the frames for compression test should be ordered separately.
See the below table for supplied items with the frames.

Models	UTC-6727	UTC-6737	UTC-6748	UTC-6758
Capacity	2000 kN	3000 kN	4000 kN	5000 kN
Frame Type	Four Column	Four Column	Four Column	Four Column
Lower Bearing Block, Dimensions (D)	Ø 300 mm	Ø 300 mm	Ø 360 mm	Ø 360 mm
Upper Bearing Block, (With Spherically Seating Assembly) Dimensions (C)	Ø 300 mm	Ø 300 mm	Ø 360 mm	Ø 360 mm
Surface Hardness of Bearing Blocks	53 HRC	53 HRC	53 HRC	53 HRC
Flatness Tolerance	0,03mm	0,03mm	0,03mm	0,03mm
Piston Diameter	300 mm	350 mm	400mm	450 mm
Piston Stroke	50 mm	50 mm	100 mm	100 mm
Maximum Vertical Clearance Between Bearing Blocks (E)	350 mm	350 mm	520 mm	520 mm
For Cubes (up to) Specimens Sizes	200 mm (**)	200 mm (**)	200 mm	200 mm
For Cylinder (up to) Specimens Sizes	Ø160x320 mm	Ø160x320 mm	Ø250x500 mm (**)	Ø250x500 mm (**)
Dimensions (wxlxh) (Axd*xF)	590x560x1100 mm	680x690x1150 mm	772x825x1540 mm	772x825x1570 mm
Weight	935 kg	1435 kg	2485 kg	2540 kg
Pedestal (Optional)	UTC-4684	UTC-4684	UTC-4686	UTC-4686

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

The frames for cubes and cylinders are supplied complete with;

- 100 mm, 50 mm, 30 mm height x Ø 205 mm distance pieces (two pcs. each for UTC-6748 and UTC-6758)
- UTC-4622E - Fixture for Centering Specimens, compatible with Ø300 mm lower loading platen for 100 mm and 150 mm cubes, Ø100 mm and Ø150 mm cylinders (for UTC-6727 and UTC-6737)
- UTC-4624E - Fixture for centering specimens, compatible with Ø 360mm lower loading platen for 150 mm and 250 mm cubes, Ø 150 mm and 250 mm cylinders (for UTC-6748 and UTC-6758)
- Removable transparent front and rear safety doors

Appropriate Distance piece/s for the cylinder and cube specimens with the height of lower than 150 mm should be ordered separately.