

## DATA SHEET

# EN 12390-4, EN 772-1 Compression Frames



EN 3000kN compression frame model 50-C56Z00 with distance pieces and cube specimen (steel base not included)

## General description

### EN 12390-4 Testing frames for cubes and cylinders

50-C46Z00, 50-C56Z00 and 50-C78Z00 frames, 2000 to 5000 kN cap., feature a four column rigid welded steel construction, with heavy duty spherical seat in oil bath, tested for stability conforming to EN 12390-4. Complete with front door and rear transparent fragment guard (except for the 4000 and 5000 kN models).

### EN 12390-4, EN 772-1 Testing frames for cubes, cylinders and blocks

50-C47Z00 and 50-C57Z00 2000 to 3000 kN cap., feature a four column rigid welded steel construction, with heavy duty spherical seat in oil bath and compression platens 310x510x50 mm suitable for testing blocks and all other standard specimens. Tested for stability conforming to EN 12390-4. Complete with front door and rear transparent fragment guard.

### EN 772-1 Heavy duty compression frames 4000 | 5000 kN for blocks

50-C69Z00 and 50-C79Z00, 4000 and 5000 kN cap., These models featuring four column rigid welded steel construction, are fitted EN Premium heavy duty spherical seat and block platens 310x510x90 mm. They include a specifically designed explosion-proof test kit comprehending: safety cables securing the upper platen to the frame, metallic perforated fragment guard and bottom platen anti-fall safety system thickness and Heavy duty premium spherical seat.

### EN Four prestressed column Testing frames

High stiffness frames particularly suitable for research purposes. 50-C86Z00 and 50-C86Z10 models are identical except for the load cell incorporated in the piston of the 50-C86Z10 version, providing very high accuracy starting from the very beginning of load scale. Heavy duty spherical seat in oil bath, tested for stability to EN 12390-4. Complete with front door and rear transparent fragment guard.

For compression platens details, see TECHNICAL SPECIFICATIONS table

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### Standards

- EN 12390-4

### Specifications

#### EN 12390-4 Testing frames for cylinders, cubes

Models	50-C46Z00	50-C56Z00	50-C68Z00**	50-C78Z00**
Capacity kN	2000	3000	4000	5000
Platens dia. mm	300	300	305x305 (sq.)	305x305 (sq.)
Surface hardness <sup>(1)</sup>	53 HRC	53 HRC	53 HRC	53 HRC
Flatness tolerance, mm	0.03	0.03	0.03	0.03
Ram travel mm	50	50	50	50
Max. vertical daylight mm*	350	350	520	520
Horizontal daylight mm	350	370	425	425
For specimen size cm				
Cubes:	10, 15, 20	10, 15, 20	15, 20, 30	15, 20, 30
Cylinders:	10x20, 15x30, 16x32	10x20, 15x30, 16x32	15x30, 16x32, 25x50	15x30, 16x32, 25x50
Overall dim. (lxdxh) mm	530x310x1500 (incl. pedestal)	600x370x1500 (incl. pedestal)	705x445x1500	705x445x1500
Weight approx. kg	740	970	1950	1950

\* To be adjusted using the suitable distance pieces. See accessories.

\*\* If this frame and a second frame (cement or flexural) are both connected to AUTOMAX or PILOT Smart-Line control console, the pressure regulator model 65-L1400/X5 has to be used.

(1) Hardness certificate available on request

#### EN 12390-4, EN 772-1 Testing frames for cylinders, cubes, and blocks

Models	50-C47Z00	50-C57Z00	50-C69Z00**	50-C79Z00*
Capacity kN	2000	3000	4000	5000
Platens dim.	310x510x50 mm	310x510x50 mm	310x510x90mm	310x510x90mm
Surface hardness <sup>(1)</sup>	55.5 HRC	55.5 HRC	55.5 HRC	55.5 HRC
Flatness tolerance, mm	0.05	0.05	0.05	0.05
Ram travel mm	50	50	50	50
Max. vertical daylight mm*	360	350	310	310
Horizontal daylight mm	350	370	425	425
For specimen size cm				
Cubes:				
Cylinders:	10, 15, 20	10, 15, 20	15, 20, 30	15, 20, 30
Blocks	10x20, 15x30, 16x32 up to 500x300	10x20, 15x30, 16x32 up to 500x300	15x30 up to 500x300	15x30 up to 500x300
Overall dim. (lxdxh) mm	650x610x1530 (incl. pedestal)	740x640x1550 (incl. pedestal)	845x570x1550	845x570x1550
Weight approx. kg	725	1100	2000	2000

\* To be adjusted using the suitable distance pieces. See accessories.

\*\* If this frame and a second frame (cement or flexural) are both connected to AUTOMAX or PILOT Smart-Line control console, the pressure regulator model 65-L1400/X5 has to be used.

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(1) Hardness certificate available on request

### EN 12390-4, 4-prestressed-columns testing frames

Models	50-C86Z00	50-C86Z10*
Capacity kN	3000	3000
Platens dia. mm	300	300
Surface hardness <sup>(1)</sup>	53 HRC	53 HRC
Flatness tolerance, mm	0.03	0.03
Ram travel mm	50	50
Max. vertical daylight mm*	350	350
Horizontal daylight mm	330	330
For specimen size cm		
Cubes:	10, 15, 20	10, 15, 20
Cylinders:	10x20, 15x30, 16x32	10x20, 15x30, 16x32
Overall dim. (lxdxh) mm	560x380x1400 (incl. pedestal)	560*380x1400 (incl. pedestal)
Weight kg	approx. 1040	1150

\*Strain gauge load cell incorporated in the piston

(1) Hardness certificate available on request



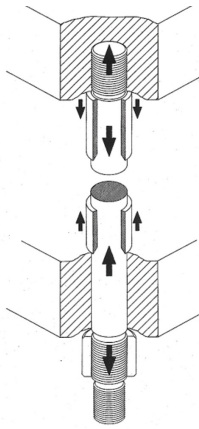
EN 4000kN compression frame model 50-C68Z00



EN high stiffness pre-stressed 3000kN compression frame model 50-

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C86Z00 (steel base not included)



Schematic balanced pre-tensioning system



EN 2000kN compression frame model 50-C47Z00 connected to AUTOMAX Smart Line control console for block testing (steel base not included)



EN high stiffness 5000kN frame model 50-C79Z00 for block testing

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Lifting device for bottom block compression platen model 50-C9060/b

## Products

### 50-C46Z00

2000 kN cap. compression frame for testing cylinders up to 160 x 320 mm and cubes up to 200mm. Conforming to EN 12390-4.

### 50-C56Z00

3000 kN cap. compression frame for testing cylinders up to 160 x 320 mm and cubes up to 200mm. Conforming to EN 12390-4.

### 50-C68Z00

4000 kN cap. compression frame for testing cylinders up to 250 x 500 mm and cubes up to 300mm. Conforming to EN 12390-4.

### 50-C78Z00

5000 kN cap. compression frame for testing cylinders up to 250 x 500 mm and cubes up to 300mm. Conforming to EN 12390-4.

### 50-C47Z00

2000 kN cap. compression frame for testing blocks, cylinders up to 160 x 320 mm and cubes up to 200mm. Conforming to EN 12390-4 and EN 772-1. - High-stiffness 4-welded-columns frame

### 50-C57Z00

3000 kN cap. compression frame for testing blocks, cylinders up to 160 x 320 mm and cubes up to 200mm. Conforming to EN 12390-4 and EN 772-1.

### 50-C69Z00

4000 kN cap. compression frame for testing blocks, cylinders up to 150 x 300 mm and cubes up to 300mm. Conforming to EN 12390-4 and EN 772-1.

### 50-C79Z00

5000 kN cap. compression frame for testing blocks, cylinders up to 150 x 300 mm and cubes up to 300mm. Conforming to EN 12390-4 and EN 772-1.

## Accessories and consumables

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### 50-C0050/HRD4

Supply of the compression machine with dia.300mm platens complete with traceable certificate of hardness of testing platens surfaces (upper and bottom platen certification included). Available only for ordering with compression machine.

### 50-C0050/HRD6

Supply of the compression machine with 305x305 mm platens complete with traceable certificate of hardness of testing platens surfaces (upper and bottom platen certification included). Available only for ordering with compression machine.

### 50-C0050/HRD7

Supply of the compression machine with 310x510x50 mm platens complete with traceable certificate of hardness of testing platens surfaces (upper and bottom platen certification included). Available only for ordering with compression machine.

### 50-C9080/68

Distance piece dia.200x68mm complete with both central centering pin for simple stacking up and two screws for solid fixing.

### 50-C59/FGH

Upgrading of the 50-C57xxx and 50-C56xxx series compression frames with metallic perforated front door instead of standard transparent one

### 50-C59/FGH1

Upgrading of the 50-C56Fxx e 50-C56Fxx/M series compression machines with metallic perforated front door instead of standard transparent one

### 50-C69/FGH

Upgrading of the 50-C78xxx and 50-C68xxx series compression frames with metallic perforated front door instead of standard transparent one

### 50-C9080

Distance piece dia 200 x 30 mm

### 50-C9080/30

Distance piece dia.200x30mm complete with both central centering pin for simple stacking up and two screws for solid fixing.

### 50-C9082

Distance piece dia 200 x 50 mm

### 50-C9080/50

Distance piece dia.200x50mm complete with both central centering pin for simple stacking up and two screws for solid fixing.

### 50-C9083

Distance piece dia 200 x 68 mm

### 50-C9086

Distance piece dia 200 x 100 mm.

### 50-C9080/100

Distance piece dia.200x100mm complete with both central centering pin for simple stacking up and two screws for solid fixing.

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