

DATA SHEET

General utility compression frames

GENERAL DESCRIPTION

General utility standalone frames for testing cubes and cylinders

50-C13Z00, 50-C23Z00 and 50-C34Z00, 1500kN, 2000kN and 3000kN cap, frames consist of a rigid welded steel structure, with spherical seat and platens suitable for testing cylinders and cubes (see TECHNICAL SPECIFICATIONS table). Supplied complete with pressure transducer, flexible plastic fragment guards and connection kit for separate control console. Pedestal and rigid front door not included, see **Accessories**.

50-C43Z00 and 50-C54Z00 frames, 2000 and 3000 kN cap., further to the performance above mentioned, feature a high stiffness structure which is more suitable for central and research laboratories. Supplied complete with pressure transducer, connection kit for separate control console and rigid front door. Pedestal not included, see **Accessories**.

General utility standalone frames for cubes, cylinders and blocks

50-C25Z00 and 50-C35Z00 feature a rigid welded steel structure, with spherical seat and compression platens 310x510 mm suitable for blocks, cylinders up to dia.160x320mm and cubes up to 200mm (see TECHNICAL SPECIFICATIONS table).

For compression platens details, see TECHNICAL SPECIFICATIONS table

TECHNICAL SPECIFICATIONS

GENERAL UTILITY TESTING FRAMES FOR CUBES AND CYLINDERS

Models 50-	C13Z00	C23Z00	C43Z00** High stiffness frame
Capacity, kN	1500	2000	2000
Platens dim. mm	Dia. 216	Dia. 216	Dia. 216
Surface hardness ⁽¹⁾	55 HRC	55 HRC	55 HRC
Flatness tolerance, mm	0.03	0.03	0.03
Ram travel mm	50	50	50
Max. vertical daylight mm*	340	350	375
Horizontal daylight mm	280	340	350
For specimen size:			
Cylinders cm (dia.xh)	15x30 (6"x12"), 16x32	15x30 (6"x12"), 16x32	15x30 (6"x12"), 16x32
Cubes cm	15	15	15

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Overall dim. (lxdxh) mm	445x365x1090	540x400x1090	650x450x1150
Weight approx. kg	270	500	665
Pedestal (optional)	50-C99/B	50-C29/B	50-C49/B
Rigid front door (optional)	50-C19/FG	50-C29/FG	Included

Models 50-	C34Z00	C54Z00** High stiffness frame
Capacity, kN	3000	3000
Platens dim. mm	Dia. 300	Dia. 300
Surface hardness ⁽¹⁾	55 HRC	55 HRC
Flatness tolerance, mm	0.03	0.03
Ram travel mm	50	50
Max. vertical daylight mm*	350	375
Horizontal daylight mm	370	370
For specimen size: Cylinders cm (dia.xh) Cubes cm	15x30 (6"x12"), 16x32 15, 20	15x30 (6"x12"), 16x32 15, 20
Overall dim. (lxdxh) mm	440x450x1160	740x505x1150
Weight approx. kg	715	1035
Pedestal (optional)	50-C39/B	50-C59/B
Rigid front door (optional)	50-C39/FG	Included

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

**High stiffness four column welded frame

(1) Hardness certificate available on request, see **Upgrading options**

GENERAL UTILITY TESTING FRAMES FOR CUBES, CYLINDERS AND BLOCKS

Models 50-	C25Z00	C35Z00
Capacity, kN	2000	3000
Platens dim. mm	310x510	310x510
Surface hardness ⁽¹⁾	55.5 HRC	55.5 HRC
Flatness tolerance, mm	0.05	0.05

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Ram travel mm	50	50
Max. vertical daylight mm*	350	350
Horizontal daylight mm	340	370
For specimen size:		
Cylinders cm (dia.xh)	15x30 (6"x12"), 16x32	15x30 (6"x12"), 16x32
Cubes cm	15, 20	15, 20
Blocks	Within platen dim.	Within platen dim.
Overall dim. (lxdxh) mm	540x555x1090	440x600x1160
Weight approx. kg	575	775
Pedestal (optional)	50-C29/B	50-C39/B
Rigid front door (optional)	50-C25/FG	50-C35/FG

*To be adjusted using the suitable distance pieces. See accessories
 (1) Hardness certificate available on request, see **Upgrading options**

ORDERING INFO

General utility testing frames for cubes and cylinders

1500 kN cap.

50-C13Z00 1500 kN cap. compression frame for cylinders up to dia., 160x320 mm, and cubes up to 150 mm. Supplied complete with connection kit to separate control console (including pressure transducer). Pedestal not included.

2000 kN cap.

50-C23Z00 2000 kN cap. compression frame for cylinders up to dia., 160x320 mm, and cubes up to 150 mm. Supplied complete with connection kit to separate control console (including pressure transducer). Pedestal not included.

2000 kN cap. (high stiffness frame)

50-C43Z00 2000 kN cap., high stiffness four welded column compression frame for cylinders up to dia. 160x320 mm and cubes up to 150 mm. Supplied complete with connection kit to separate control console (including pressure transducer).

3000 kN cap.

50-C34Z00 3000 kN cap. compression frames for cubes up to 200 mm and cylinders up to dia. 160x320 mm. Supplied complete with connection kit to separate control console (including pressure transducer). Pedestal not included

3000 kN cap. (high stiffness frame)

50-C54Z00 3000 kN cap. high stiffness four column welded frame for cubes up to 200 mm and cylinders up to Dia. 160x320 mm. Supplied complete with connection kit to separate console (including pressure transducer).

General utility Testing frames for cubes, cylinders and blocks

2000 kN cap.

50-C25Z00 2000 kN cap. compression frame for blocks, cubes up to 200 mm and cylinders up to dia. 160x320 mm. Supplied complete with connection kit to separate control console (including pressure transducer). Pedestal not included.

3000 kN cap.

50-C35Z00 3000 kN cap. compression frame for blocks, cubes up to 200 mm and cylinders up to dia. 160x320 mm. Supplied complete with connection kit to separate control console (including pressure transducer). Pedestal not included.

ACCESSORIES

TEST ACCESSORIES

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Splitting tensile test devices

50-C9000/C

Splitting tensile test device for cylinders up to dia. 160x320 mm (6.3"x12.6"). Conforming to EN 12390-6 and ASTM C496

50-C9002

Hardboard strips 4 x 14 x 345 mm for 50-C9000/C conf. to EN Standards. Pack of 50.

50-C9002/A

Hardboard strips 4 x 14 x 345 mm for 50-C9000/C conf. to ASTM Standards. Pack of 50.

50-C9070/C

Splitting tensile test device for concrete block pavers and concrete cubes. Conforms to EN 1338 and EN 12390-6.

Compression devices for cement and mortars

50-C9030/H

Compression device to test portions of 40x40x160 prisms broken in flexure to EN 196-1. High stiffness model. Total height 225mm.

50-C9030

Compression device to test portions of 40x40x160 prisms broken in flexure to EN 196-1. Total height 192mm.

50-C9032/H

Compression device to test 50mm (2") cubes to ASTM C109. High stiffness model. Total height 225mm.

50-C9032

Compression device to test 50mm (2") cubes to ASTM C109. Total height 192mm.

Flexural test device for concrete beams

50-C9010/C

Flexural test device for concrete beams 100x100x400/500 and 150x150x600/750 mm, to EN 12390-5, ASTM C78, ASTM C293 and AASHTO T97

Distance pieces to adjust the vertical daylight

50-C9080

Distance piece dia. 200x30 mm

50-C9082

Distance piece dia. 200x50 mm

50-C9083

Distance piece dia. 200x68 mm

50-C9086

Distance piece dia. 200x100 mm

Note: The above distance pieces are also available with threaded centering pin which are recommended for testing high strength/explosive failures specimens. They are identified adding the suffix /P after the code number.

MACHINE ACCESSORIES

Pedestals

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50-C99/B Pedestal for C13Z00

50-C29/B Pedestal for C23Z00 and C25Z00

50-C39/B Pedestal for C34Z00 and C35Z00

50-C49/B Pedestal for C43Z00

50-C59/B Pedestal for C54Z00

Lifting assembly for block testing platens

This accessory is used for easier placement of distance pieces which can be used, when necessary, to reduce the vertical clearance of the machines/ frames.

50-C9060/A

Lifting device for bottom block platen for easier placement pieces compatible platen size 310 x 510 x 50 mm thickness. Weight: 19 kg (approx.)

Rigid front door

50-C19/FG Rigid front door for C13Z00

50-C25/FG Rigid front door for C25Z00

50-C29/FG Rigid front door for C23Z00

50-C35/FG Rigid front door for C35Z00

50-C39/FG Rigid front door for C34Z00

UPGRADING

PLATENS HARDNESS CERTIFICATE

50-C0050/HRD3

Supply of the compression machine complete with traceable certificate of hardness of testing platens surfaces (upper and bottom platen certification included). Available only for ordering with compression machine. Valid for GENERAL UTILITY concrete compression machine with **round platens 216 mm dia.**

50-C0050/HRD4

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

50-C0050/HRD7

Supply of the compression machine complete with traceable certificate of hardness of testing platens surfaces (upper and bottom platen certification included). Available only for ordering with compression machine. Valid for GENERAL UTILITY concrete compression machine with **rectangular platens 310X510 mm**

[Platens surface hardness certificate](#)

SPECIAL CALIBRATION PROCEDURE

50-C0050/CAL

Special calibration of load digital readout unit assuring class 1 from 1% of testing machine full scale (maximum load)

[Special calibration procedures](#)

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High stiffness Compression frame
2000 kN cap. 50-C43Z00



50-C25Z00



50-C13Z00



50-C23Z00



50-C54Z00