







# Compression-flexure cement testing frames

ASTM C109 | ASTM C349 | ASTM C348 | EN 196-1

#### **GENERAL DESCRIPTION**

Four columns robust frame with single or double test chamber. Simple effect ram with electrical limit switch. Single test chamber model 65-L17Z10 incorporate compression bearing plates with spherical seat for portion of prisms 40x40x160 mm broken in flexure conforming to EN 196-1. All the other models, single or double test chambers, are fitted with 165 mm dia. round compression plates and have to be completed with the suitable accessory. All frames are fitted with precision load cell for load measurement. The 40x40 mm platens of models 65-L17Z10 can be supplied complete with Surface hardness certificate. See Upgrading options.

#### Connection to control consoles

The 15 kN load pistons of the double test chamber model 65-L28Z10 and single chamber model 65-L58Z10 connected to Pilot and Automax Control consoles, require the 65-L1400/X5 pressure regulator which. See Upgrading options.

#### Machine/Frames precision Class. EN 12390-4, ASTM E74

All frames, when connected to a suitable control console, can be calibrated to Class 1 starting from 10% of load scale as specified in the specification table. By special calibration procedure, it is possible to obtain Class 1 starting from 3 to 300 kN (calibration code 50-C0050/CAL) and starting from 0.75 to 15 kN (calibration code 50-C0050/CAL5). This option has to be specified at time of order.

## Safety features

Model 65-L17Z10 include a cylindrical transparent fragment guard. All the other models can be completed with the relevant protection. See accessories. All models are fitted with ram travel limit switch.

#### **TECHNICAL SPECIFICATIONS**

Models 65-	L17Z10	L18Z10	L38Z10	L28Z10**	L58Z10**
Max. Load kN	300	300	300	15/300	15
Ram travel mm	50	50	50	30/50	30
Vert. span mm	50	200	350	200	200
Horiz. span mm	220	220	260	220	220
Platen dim. mm	40x40	Dia. 165	Dia. 165	Dia. 165	Dia. 165
Overall dim. Mm lxgxh	567x405x1621	567x405x1621	507x405x1771	567x405x1621	567x405x1621
Weight approx kg	190	160	170	240	150
Class 1 measuring Range from kN:	30 to 300	30 to 300	30 to 300	1.5 to 15 & 30 to 300	1.5 to 15
Class 1 measuring range from kN:*	3 to 300	3 to 300	3 to 300	0.75 to 15 & 3 to 300	0.75 to 15

<sup>\*</sup>With the special calibration procedure, code 50-C0050/CAL for the 300kN load scale and with the special procedure 50-C0050/CAL5 for the 15kN load scale. To be specified at time of order.

<sup>\*\*</sup> When connected to AUTOMAX or PILOT Smart-Line control console, the pressure regulator model 65-L1400/X5 has to be used. See Upgrading options.







# **DATA SHEET**

# **ORDERING INFO**

**65-L17Z10** Compression testing frame, 300kN cap., incorporating compression bearing plate with spherical seat for

portion of prisms 40x40x160 mm broken in flexure, conforming to EN 196-1, ASTM C348, ASTM C349. Load

measurement by precision load cell. Pedestal and connection kit for control console included.

**65-L18Z10** Compression testing frame, 300kN cap., fitted with round platens 165 mm dia., suitable to receive various

accessories for compression tests on cement, mortars and resins conforming to EN and ASTM standards. Load

measurement by precision load cell. Pedestal and connection kit for control console included.

**65-L38Z10** Compression testing frame, 300kN cap., fitted with round platens 165 mm dia., suitable to receive various

accessories for compression tests on cement, mortars and resins conforming to EN and ASTM standards. Vertical daylight 358 mm, horizontal 266mm.Load measurement by precision load cell. Pedestal and

connection kit for control console included.

**65-L28Z10** Double testing frame, external testing space 15kN cap., internal 300kN cap. Both testing stations fitted with

round platens 165 mm dia., and precision load cells for load measurement. Suitable to receive various accessories for flexural and compression tests on cement, mortars and resins conforming EN and ASTM

standards. Pedestal and connection kit for control console included.

**65-L58210** Flexural/Compression frame 15kN cap. for flexure test, using the suitable accessory, on cement, mortars and

resins, or compression test on low strength specimens. Load measurement by precision load cell. Pedestal and

connection kit for control console included.

# **ACCESSORIES**

Compression devices for cement and mortars Flexural test devices for mortar beams Distance pieces to adjust the vertical daylight

# **UPGRADING**

## Safety fragment guard

**65-L1800/P** Transparent rigid fragment guard for single chamber frame 65-L18Z10 and 65-L58Z10

**65-L3800/P** Transparent rigid fragment guard for single chamber frame 65-L38Z10 **65-L2800/P** Transparent rigid fragment guard for double chamber frame 65-L28Z10

# Fragment guard locking switch.

**50-L0050/P** To prevent the test execution with the safety guard open. It has to be factory installed directly on the transparent

fragment guard.

#### Platens surface hardness certificate

**50-L0050/HRD** Traceable hardness certificate for platens 165 mm dia. Min. hardness 55,5 HRC.

Available only for ordering with the machine

**50-C0050/HRD5** Traceable hardness certificate for platens 40x40 mm. Min. hardness 60 HRC.

Available only for ordering with the machine

#### Special calibration procedures

50-C0050/CAL Special calibration procedure to obtain class 1 from 1% of the 300kN scale
50-C0050/CAL5 Special calibration procedure to obtainclass 1 from 5% of the 15kN scale

# Hydraulic pressure regulator.

65-L1400/X5 Hydraulic pressure regulator for frames 65-L28Z10 and 65-L58Z10 connected to Pilot and Automax Smart-Line control

consoles.





# **DATA SHEET**





15/300kN Double Chamber Compression Frame Model 65-L28Z10

300kN Cement Compression Frame Model 65-18LZ10