

Concrete Embedded Strain Gauge

DESCRIPTION:

The Concrete-embedded Strain Gauge is designed to measure shrinkage and stress of cement and concrete materials.

The Strain Gauge is connected to the Datalogger using the thermocouple wire.

There are several forms and shapes of a strain gauge that can be ordered, please consult with our sales team for available options.

MAIN FEATURES:

- Strain Gauge for Static and Dynamic Applications
- Very Flexible, Mechanically Strong
- Broad Temperature Range

ORDERING:

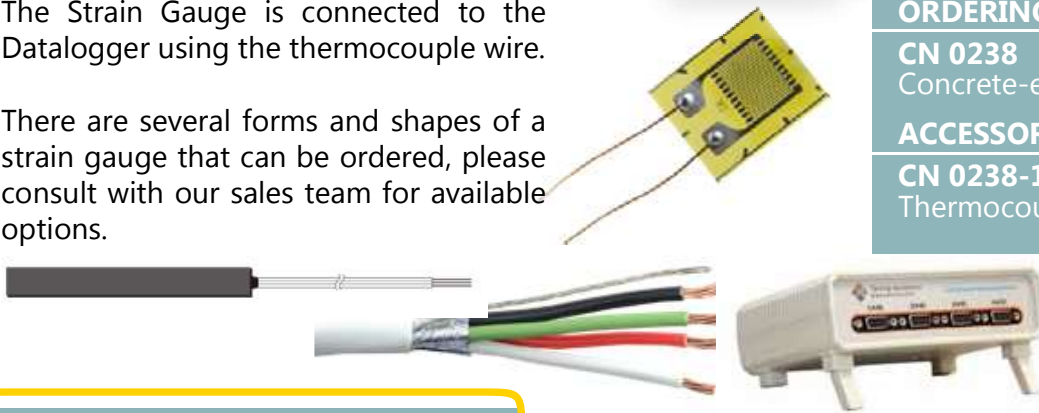
CN 0238

Concrete-embedded Strain Gauge

ACCESSORIES:

CN 0238-1

Thermocouple wire



Compression Testing Machine

EN 12390-3, 4, 5,6; EN 12504-1, 1354, 1521, 13161, 1338, 1340, 196, 772-1, -6, 13286-41, BS 1881 3892-3, 187, 6073-1, 6717 ASTM C39

DESCRIPTION:

The Compression Testing Machine is a very common testing method that is used to establish the compressive force or crush resistance of a material and the ability of the material to recover after a specified compressive force is applied and even held over a defined period of time by measuring fundamental variables, such as, strain, stress, and deformation.

There are several models and capacities available for the compression test machine designed to meet the need for reliable and consistent testing of concrete samples.

Ranging from Full automatic or Semi-automatic, hydraulic controlled or servo-controlled. Designed to meet all standards requirements, BE, EN, ASTM.

Our range of compression machines vary from 1500 KN up to 5000 KN compression capacity.

The compression frame can be purchased separately or with a hydraulic or servo-controlled power pack.

The Control Power Pack, in turn, can be connected to another frame, such as a flexural machine or another compression machine. Additional accessories such as distance pieces, Printer connection, software, block testing assembly, rail.

MAIN FEATURES:

- Designed for reliable and consistent testing of a wide range of specimens.
- User-friendly design enable an inexperienced operator to perform the test.



Compression Testing Machine

EN 12390-3, 4, 5, 6; EN 12504-1, 1354, 1521, 13161, 1338, 1340, 196, 772-1, -6, 13286-41, BS 1881 3892-3, 187, 6073-1, 6717 ASTM C39

TECHNICAL SPECIFICATIONS:

Product Code	CN 0239-CN 0249	CN 0240-CN 0250	CN 0241-CN 0251	CN 0242-CN 0252	CN 0243-CN 0253
Capacity	1500 kN	2000 kN	3000 kN	4000 kN	5000 kN
Standard	EN 12390-4	EN 12390-4	EN 12390-4	EN 12390-4	EN 12390-4
Lower Platens Dimensions	Ø300 mm	Ø300 mm	Ø300 mm	Ø300 mm	Ø300 mm
Upper Platens	Ø300 mm	Ø300 mm	Ø300 mm	Ø300 mm	Ø300 mm
Maximum vertical clearance between platens	340 mm	340 mm	340 mm	520 mm	520 mm
Piston Diameter	300 mm	300 mm	350 mm	400 mm	420 mm
Maximum piston movement	50 mm	50 mm	50 mm	100 mm	120 mm
Horizontal Clearance	385 mm	385 mm	445 mm	495 mm	515 mm
Maximum working pressure	280 Bar	280 Bar	310 Bar	315 Bar	350 Bar
Frame	CN 0259	CN 0260	CN 0261	CN 0262	CN 0263
Power Pack	CN 0269/ CN 0270	CN 0269/ CN 0270	CN 0269/ CN 0270	CN 0269/ CN 0270	CN 0269/ CN 0270
Dimensions Frame	630x660x1090 mm	630x660x1090 mm	735x670x1140 mm	805x710x1370 mm	865x640x1555 mm
Dimensions Power Pack	370x400x920 mm	370x400x920 mm	370x400x920 mm	605x455x1015 mm	605x455x1015 mm
Weight Frame	1030 kg	1030 kg	1800 kg	2350 kg	3150 kg
Weight Power Pack	85 kg	85 kg	85 kg	150 kg	150 kg
Product Code	CN 0244-CN 0254	CN 0245-CN 0255	CN 0246-CN 0256	CN 0247-CN 0257	CN 0248-CN 0258
Capacity	1500 kN	2000 kN	3000 kN	4000 kN	5000 kN
Standard	ASTM C39	ASTM C39	ASTM C39	ASTM C39	ASTM C39
Lower Platens Dimensions	Ø300 mm	Ø300 mm	Ø300 mm	Ø300 mm	Ø300 mm
Upper Platens	Ø300 mm	Ø300 mm	Ø300 mm	Ø300 mm	Ø300 mm
Maximum vertical clearance between platens	370 mm	370 mm	370 mm	520 mm	520 mm
Piston Diameter	300 mm	300 mm	350 mm	400 mm	420 mm
Maximum piston movement	50 mm	50 mm	50 mm	100 mm	120 mm
Horizontal Clearance	385 mm	385 mm	445 mm	495 mm	515 mm
Maximum working pressure	280 Bar	280 Bar	310 Bar	315 Bar	350 Bar
Frame	CN 0264	CN 0265	CN 0266	CN 0267	CN 0268
Power Pack	CN 0269/ CN 0270	CN 0269/ CN 0270	CN 0269/ CN 0270	CN 0269/ CN 0270	CN 0269/ CN 0270
Dimensions Frame	630x660x1090 mm	630x660x1090 mm	735x670x1140 mm	805x710x1370 mm	865x640x1555 mm
Dimensions Power Pack	370x400x920 mm	370x400x920 mm	370x400x920 mm	605x455x1015 mm	605x455x1015 mm
Weight Frame	1030 kg	1030 kg	1800 kg	2350 kg	3150 kg
Weight Power Pack	85 kg	85 kg	85 kg	150 kg	150 kg

The full automatic models come with a complete automatic test cycle, a closed-loop digital readout unit. Once the specimen parameters have been introduced, it is sufficient to press the START button to complete the test.

Full automatic compression machines consist of their main parts: Frame, power pack and data acquisition control system.

The compression machines consist of a heavy-duty frame, 4 columns or welded type, depending on the standard required. connected to the automatic hydraulic power pack with data acquisition and digital control system.

The digital control system Button type or touch screen models are also available, depending on the user preference.

The Full automatic compression machine can be fully controlled and operated from a PC connected directly to the machine. A small printer's connection is also available for a quick printout.



Compression Testing Machine

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DESCRIPTION:

The dual stage power pack which controlled by the control system is designed to supply the required oil pressure to the frame.

The Semi-automatic models come with a complete valve controlled test cycle, There are two valves on the oil tank. One valve is the pacing rate control valve. It is used for controlling the pacing rate. When you push it forward, the pacing rate increases fast.

To make fine-tuning, the top valve is turned clockwise to increase the load in a small amount or counter-clockwise direction to decrease.

The Semi-automatic compression machines consist of their main parts: Frame, power pack with valve control and digital readout unit.

The valve control power pack is designed to supply the required oil pressure to the frame. The very silent power pack can load specimens between 1KN/sec to 20KN/sec. On all power packs, the maximum pressure valve is used to avoid machine overloading.

The very silent power pack can load specimens between 1KN/sec to 20KN/sec. On the dual-stage pump, a high delivery low-pressure pump is used for rapid approach and delivery high-pressure radial piston pump is used for test execution. On all power packs, the maximum pressure valve is used to avoid machine overloading.

The Servo controlled hydraulic pack is an advanced system that can very accurately control the speed loading rate.

The user has full control of the load cycle before or during the test. In a way that you can set the machine preplanned cycle or change speed, even hold the load during the test cycle for a period of time.

The servo-controlled hydraulic system comes complete with a digital touch screen control system and data acquisition that can send the result either by blue tooth, email, printout or save.



Compression Testing Machine

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MAIN FEATURES:

- Pace rate control from 0.01 kN/s to 100kN/s (depend on the specimen stiffness)
- Extra channels for displacement transducers, extensometers, etc. built in the system as an addition to frame loadcell (pressure transducer) or displacement transducer
- Ethernet port for connecting to computer
- 240x320 pixel LCD digital display, Touchscreen operator panel, Can control 2 frames
- Can execute load, displacement or strain controlled tests.
- Free of charge PC software for test control and advanced report printout
- Multiple language support
- Real time clock/date

ORDERING:

CN 0239

Full Auto Compression Machine, 1500KN, EN

CN 0240

Full Auto Compression Machine, 2000KN, EN

CN 0241

Full Auto Compression Machine, 3000KN, EN

CN 0242

Full Auto Compression Machine, 4000KN, EN

CN 0243

Full Auto Compression Machine, 5000KN, EN

CN 0244

Full Auto Compression Machine, 1500KN, ASTM

CN 0245

Full Auto Compression Machine 2000KN, ASTM

CN 0246

Full Auto Compression Machine, 3000KN, ASTM

CN 0247

Full Auto Compression Machine, 4000KN, ASTM

CN 0248

Full Auto Compression Machine, 5000KN, ASTM

CN 0249

Semi Automatic Compression Machine, 1500KN, EN

CN 0250

Semi Automatic Compression Machine, 2000KN, EN

CN 0251

Semi Automatic Compression Machine, 3000KN, EN

CN 0252

Semi Automatic Compression Machine, 4000KN, EN

CN 0253

Semi Automatic Compression Machine, 5000KN, EN

CN 0254

Semi Automatic Compression Machine, 1500KN, ASTM

CN 0255

Semi Automatic Compression Machine, 2000KN, ASTM

CN 0256

Semi Automatic Compression Machine, 3000KN, ASTM

CN 0257

Semi Automatic Compression Machine, 4000KN, ASTM

CN 0258

Semi Automatic Compression Machine, 5000KN, ASTM

CN 0259

Frame 1500KN, EN

CN 0260

Frame 2000KN, EN

CN 0261

Frame 3000KN, EN

CN 0262

Frame 4000KN, EN

CN 0263

Frame 5000KN, EN

CN 0264

Frame 1500KN, ASTM

CN 0265

Frame 2000KN, ASTM

CN 0266

Frame 3000KN, ASTM

CN 0267

Frame 4000KN, ASTM

CN 0268

Frame 5000KN, ASTM

CN 0269

Full Automatic Hydraulic Power Pack, Rapid approach pump, data acquisition and control system, Digital display, pressure transducers sensors. The unit can be used for 2 frames.

CN 0270

Semi Automatic Power pack, variable output pump, Rapid approach pump, pressure transducer, digital readout unit.

CN 0271

Full Automatic Servo Hydraulic Power Pack, Rapid approach pump, data acquisition and control system, Digital display, pressure transducers sensors. The unit can be used for 4 frames.

ACCESSORIES:

CN 0239-1

Distance Piece 20mm

CN 0239-2

Distance Piece 30mm

CN 0239-3

Distance Piece 50mm

CN 0239-4

Distance Piece 90mm

CN 0239-5

Distance Piece 100mm