



**CONTROLS**

CONSTRUCTION MATERIALS TESTING

# BUYER'S GUIDE

## Load Bearing Plates

### STANDARDS

EN, BS, ASTM, CNR, DIN, SNV AND NF

[www.controls-group.com](http://www.controls-group.com)

## How to use the Buyer's Guide

CONTROLS offers a wide range of advanced concrete, cement, soil and aggregate testing equipment to fit the specific needs of a material testing laboratory.

We have developed this Buyer's Guide to help you decide which machine and configurations are right for your Bearing Plate Testing needs.

First, select and click the method you wish to use in the Index to your right. This will take you to a dedicated page for the selected method that includes a summary table with the suggested instrument and required accessories to perform the test.

INDEX	Page
How to use this Guide	2
Buyer's Guide Introduction	3
Bearing Plate Equipment Analog Versions	4
Bearing Plate Equipment Digital Versions	8
Bearing Plate Equipment Electronic Versions	12
Bearing Plate Equipment 500 kN Capacity	16
Contact Details	19

BUYER'S GUIDE | Load Bearing Plates
CONTROLS

**Load Bearing plate: 35-T1100 • Analog Configuration** 1

CNR No. 146 method A

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/100A	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and analogue manometer (100 kN)
<b>Device for displacement measurement</b>		
1	T1100/ARM	Adjustable support for displacement device
1	D1257	Dial gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
<b>Accessories</b>		
1	T1100/MT	Measuring tunnel for plate bearing test equipment
1	T1100/HC	Carrying case, trolley type, suitable for plate bearing hydraulic assembly 100 kN and 200 kN

**Load Bearing plate: 35-T1101 • Analog Configuration**

CNR No. 146 method B & BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/100A	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and analogue manometer (100 kN)
<b>Device for displacement measurement</b>		
3	T1100/ARM	Adjustable support for displacement device
3	D1257	Dial gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
<b>Accessories</b>		
1	T1100/HC	Carrying case, trolley type, suitable for plate bearing hydraulic assembly 100 kN and 200 kN

4
www.controls-group.com
4
→ BACK TO INDEX

1. Test method and configuration type
2. Name of main instrument or accessory
3. Choose one or several accessories
4. Go back to Index by clicking here "BACK TO INDEX" button

## Introduction to Load Bearing Plates

Our testing equipment is quick to install and performs load bearing testing in a safe, fast and accurate way. Each testing machine is fitted with a heavy-duty hydraulic part and high strength steel loading plates ensuring total reliability in rough site testing conditions.

We offer an extensive range of models with different levels of sophistication and load capacities, all compliant with the relevant standards.

### How to select your Loading Plate Testing Equipment

- 1 Configuration:** first, you need to decide which configuration is right for your needs: analog, digital or electronic.
- 2 Testing method:** then select the correct testing method. Testing methods are used for estimating the bearing capacity of soil under field loading conditions for a specific loading plate and depth of embedment. They also cover load tests on soil and flexible pavement components, for evaluating and designing airport and highway pavements.
- 3 Kit or individual component:** we have put together complete kits to remove the headache of choosing each single component. Each kit is identified by a single code and conforms to one of the following standards: EN, BS, ASTM, CNR, DIN, SNV and NF Standards.

Our kits can be tailor-made to adapt to your needs, alternatively, you can select each component individually.

For some testing methods, we do not provide an all-inclusive kit with a single code however you can easily select the parts you need, refer to the suggested quantities and find out the corresponding codes to help you build the configuration best suited to your testing requirements. These testing methods are described as "single codes".

#### Our kits feature:

##### Plate Bearing Apparatus

- Bearing plate kits are available as analog, digital or electronic.
- 3 capacities: 100, 200 and 500 kN.
- 3 levels of data acquisition matching all technical and budget requirements.
- Analog version with triple scale manometer: force (kN), oil pressure (Bar) and specific load (MN/m<sup>2</sup>)
- Digital version with digital read out unit featuring wide graphic display, rechargeable battery and built-in pressure transducer.
- Electronic version with pressure and displacement transducers connected to DATALOG 8 logger, battery operated rugged version ideal for field use.
- All our kits are supplied complete with calibration and conformity certificates.

→ [Explore Online](#)

## Load Bearing Plate: 35-T1100 • Analog Configuration

CNR No. 146 method A

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/100A	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and analogue manometer [100 kN]
<b>Device for displacement measurement</b>		
1	T1100/ARM	Adjustable support for displacement device
1	D1257	Dial gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
<b>Accessories</b>		
1	T1100/MT	Measuring tunnel for plate bearing test equipment
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate: 35-T1101 • Analog Configuration

CNR No. 146 method B | BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/100A	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and analogue manometer [100 kN]
<b>Device for displacement measurement</b>		
3	T1100/ARM	Adjustable support for displacement device
3	D1257	Dial gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate: 35-T11S1 • Analog Configuration

SNV 70312

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/100A	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and analogue manometer [100 kN]
<b>Device for displacement measurement</b>		
3	T1100/ARM	Adjustable support for displacement device
3	D1257	Dial gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T11S1/B	Beam mode "Y" for plate bearing Swiss method
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/AT	Anti tilting jig for hydraulic cylinder
1	T11S1/BC	Wooden carrying case for datum bar

## Load Bearing Plate: 35-T11S2 • Analog Configuration

SNV 70312

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/200A	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and analogue manometer [200 kN]
<b>Device for displacement measurement</b>		
3	T1100/ARM	Adjustable support for displacement device
3	D1257	Dial gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T11S1/B	Beam mode "Y" for plate bearing Swiss method
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/AT	Anti tilting jig for hydraulic cylinder
1	T11S1/BC	Wooden carrying case for datum bar

## Load Bearing Plate: 35-T11F2 • Analog Configuration

NF P94 117-1

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T11F2/2	Hydraulic jack 200 Kn capacity complete with centering device.
1	T11F2/3	Adjustable extension set complete with spherical seated foot
1	T11F2/4	Hand pump with pressure gauge 200 dia. graduated in bar and daN complete with connecting hose.
<b>Device for displacement measurement</b>		
1	D1255	Dial gauge 10 mm x 0,001 mm (included in T1100/BF)
<b>Loading plates</b>		
1	T1100/PF	Reinforced aluminium bearing plate 600 mm dia
<b>Reference Bar</b>		
1	T1100/BF	Benkelman beam apparatus
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate: 35-T11D1 • Analog Configuration

DIN 18184 | BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/100A	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and analogue manometer [100 kN]
<b>Device for displacement measurement</b>		
1	D1257	Dial gauge 10 mm x 0,001 mm (included in T1100/BF)
<b>Loading plates</b>		
1	T1100/PF	Reinforced aluminium bearing plate 600 mm dia
<b>Reference Bar</b>		
1	On request	Measuring bridge DIN
1	On request	DIN reaction beam
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/AT	Anti tilting jig for hydraulic cylinder
<b>Optionals (not included)</b>		
1	T1100/BC	Wooden carrying case for datum bar
1	T1100/P600	Loading plate 600 mm dia. x 20 mm reinforced with stiffeners and centring pin.
1	T1100/P762	Loading plate 762 mm dia. x 20 mm reinforced with stiffeners and centring pin.

## Load Bearing Plate: 35-T11D2 • Analog Configuration

DIN 18184 | BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/200A	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and analogue manometer
<b>Device for displacement measurement</b>		
1	D1257	Dial gauge 10 mm x 0,001 mm (included in T1100/BF)
<b>Loading plates</b>		
1	T1100/PF	Reinforced aluminium bearing plate 600 mm dia
<b>Reference Bar</b>		
1	On request	Measuring bridge DIN
1	On request	DIN reaction beam
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/AT	Anti tilting jig for hydraulic cylinder
<b>Optionals (not included)</b>		
1	T1100/BC	Wooden carrying case for datum bar
1	T1100/P600	Loading plate 600 mm dia. x 20 mm reinforced with stiffeners and centring pin.
1	T1100/P762	Loading plate 762 mm dia. x 20 mm reinforced with stiffeners and centring pin.

## Load Bearing Plate: 35-T1100/DGT • Digital Configuration

CNR No. 146 method A

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/100D	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and analogue digital readout unit [100 kN]
<b>Device for displacement measurement</b>		
1	T1100/ARM	Adjustable support for displacement device
1	D1262/B	Digital gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
<b>Accessories</b>		
1	T1100/MT	Measuring tunnel for plate bearing test equipment
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate: 35-T1101/DGT • Digital Configuration

CNR No. 146 method B | BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/100D	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and analogue digital readout unit [100 kN]
<b>Device for displacement measurement</b>		
3	T1100/ARM	Adjustable support for displacement device
3	D1262/B	Digital gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate: 35-T1102/DGT • Digital Configuration

CNR No. 146 method B | BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/200D	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and digital readout unit [200 kN]
<b>Device for displacement measurement</b>		
3	T1100/ARM	Adjustable support for displacement device
3	D1262/B	Digital gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate: 35-T1103/DGT • Digital Configuration

CNR No. 146 method B | BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/200D	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and digital readout unit [200 kN]
<b>Device for displacement measurement</b>		
3	T1100/ARM	Adjustable support for displacement device
3	D1262/B	Digital gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
1	T1100/P18	456 mm (18") dia. x 25 mm (1")
1	T1100/P24	608 mm (24") dia. x 25 mm (1")
1	T1100/P30	760 mm (30") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
1	T1100/BEX	Extension kit to extend the datum bar from 2.5 m to 5.5 m
<b>Accessories</b>		
1	T100/BOX	Wooden box for loading plates dia. 456 mm (18"); 608 mm (24") and 760 mm (30")
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate • Digital Configuration (single codes)

NF P94 117-1

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/200D	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and digital readout unit [200 kN]
<b>Device for displacement measurement</b>		
1	T1100/ARM	Adjustable support for displacement device
1	D1262/B	Digital gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/PF	Reinforced aluminium bearing plate 600 mm dia
<b>Reference Bar</b>		
1	On request	Benkelman beam apparatus (without comparator)
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate • Digital Configuration (single codes)

DIN 18184 | BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/100D	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and digital readout unit [100 kN]
<b>Device for displacement measurement</b>		
1	D1262/B	Digital gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	On request	DIN plate group 300mm diameter
<b>Reference Bar</b>		
1	On request	Measuring bridge DIN
1	On request	DIN reaction beam
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/AT	Anti tilting jig for hydraulic cylinder
<b>Optionals (not included)</b>		
1	T1100/BC	Wooden carrying case for datum bar
1	T1100/P600	Loading plate 600 mm dia. x 20 mm reinforced with stiffeners and centring pin.
1	T1100/P762	Loading plate 762 mm dia. x 20 mm reinforced with stiffeners and centring pin.

## Load Bearing Plate • Digital Configuration (single codes)

DIN 18184 | BS 1377-9

Hydraulic assembly with pressure read out unit		
1	T1100/200D	Hydraulic assembly with cylinder, pump, extension rods, spherical seats and digital readout unit [200 kN]
Device for displacement measurement		
1	D1262/B	Digital gauge 25,4 mm x 0,001 mm
Loading plates		
1	On request	DIN plate group 300mm diameter
Reference Bar		
1	On request	Measuring bridge DIN
1	On request	DIN reaction beam
Accessories		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/AT	Anti tilting jig for hydraulic cylinder
Optionals (not included)		
1	T1100/BC	Wooden carrying case for datum bar
1	T1100/P600	Loading plate 600 mm dia. x 20 mm reinforced with stiffeners and centring pin.
1	T1100/P762	Loading plate 762 mm dia. x 20 mm reinforced with stiffeners and centring pin.

## Load Bearing Plate 35-T1100/EL • Electronic Configuration

CNR No. 146 method A

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/H1	Hydraulic assembly with cylinder, pump, extension rods, spherical seats
1	P9008/F	DATALOG 8, 8 channel datalogger battery operated
2	P9008/ELT1	Single connection cable
1	T1100/PT	Pressure transducer
1	P0349/ELT	Connection cable for pressure transducer
<b>Device for displacement measurement</b>		
1	T1100/ARM	Adjustable support for displacement device
1	P0324	Linear potentiometric transducer, 50 mm travel
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
<b>Accessories</b>		
1	T1100/MT	Measuring tunnel for plate bearing test equipment
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate 35-T1101/EL • Electronic Configuration

CNR No. 146 method B

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/H1	Hydraulic assembly with cylinder, pump, extension rods, spherical seats [100 kN]
1	P9008/F	DATALOG 8, 8 channel datalogger battery operated
1	P9008/ELT	Set of four cables for connecting
1	T1100/PT	Pressure transducer
1	P0349/ELT	Connection cable for pressure transducer
<b>Device for displacement measurement</b>		
3	T1100/ARM	Adjustable support for displacement device
3	P0324	Linear potentiometric transducer, 50 mm travel
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate 35-T1102/EL • Electronic Configuration

CNR No. 146 method B

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/H2	Hydraulic assembly with cylinder, pump, extension rods, spherical seats [200 kN]
1	P9008/F	DATALOG 8, 8 channel datalogger battery operated
1	P9008/ELT	Set of four cables for connecting
1	T1100/PT	Pressure transducer
1	P0349/ELT	Connection cable for pressure transducer
<b>Device for displacement measurement</b>		
3	T1100/ARM	Adjustable support for displacement device
3	P0324	Linear potentiometric transducer, 50 mm travel
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN

## Load Bearing Plate 35-T1103/EL • Electronic Configuration

CNR No. 146 method B | ASTM D1195 D1196 | BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/H2	Hydraulic assembly with cylinder, pump, extension rods, spherical seats [200 kN]
1	P9008/F	DATALOG 8, 8 channel datalogger battery operated
1	P9008/ELT	Set of four cables for connecting
1	T1100/PT	Pressure transducer
1	P0349/ELT	Connection cable for pressure transducer
<b>Device for displacement measurement</b>		
3	T1100/ARM	Adjustable support for displacement device
3	P0324	Linear potentiometric transducer, 50 mm travel
<b>Loading plates</b>		
1	T1100/P6	160 mm (6") dia. x 25 mm (1")
1	T1100/P12	300 mm (12") dia. x 25 mm (1")
1	T1100/P18	457 mm (18") dia. x 25 mm (1")
1	T1100/P24	608 mm (24") dia x 25 mm (1")
1	T1100/P30	760 mm (30") dia x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
1	T1100/BEX	Extension kit to extend the datum bar from 2.5 m to 5.5 m.
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/BOX	Wooden box for loading plates dia. 456 mm (18"); 608 mm (24") and 760 mm (30")

## Load Bearing Plate • Electronic Configuration (single codes)

NF P94 117-1

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/H2	Hydraulic assembly with cylinder, pump, extension rods, spherical seats [200 kN]
1	P9008/F	DATALOG 8, 8 channel datalogger battery operated
2	P9008/ELT1	Single connection cable
1	P0700	Pressure transducer
1	P0349/ELT	Connection cable for pressure transducer
<b>Device for displacement measurement</b>		
1	T1100/ARM	Adjustable support for displacement device
1	P0324	Linear potentiometric transducer, 50 mm travel
<b>Loading plates</b>		
1	T1100/PF	Reinforced aluminium bearing plate 600 mm dia
<b>Reference Bar</b>		
1	On request	Benkelman beam apparatus (without comparator)
<b>Accessories</b>		
1	T1100/FC	Wooden carrying case per Benkelmann beam

## Load Bearing Plate: 35-T11D1/EL • Electronic Configuration

DIN 18184 | BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/H1	Hydraulic assembly with cylinder, pump, extension rods, spherical seats [100 kN]
1	P9008/F	DATALOG 8, 8 channel datalogger battery operated
1	P9008/ELT1	Single connection cable
1	On request	Load cell group 100 [kN]
<b>Device for displacement measurement</b>		
1	P0324	Linear potentiometric transducer, 50 mm travel
<b>Loading plates</b>		
1	On request	DIN plate group 300mm diameter
<b>Reference Bar</b>		
1	On request	Measuring bridge DIN
1	On request	DIN reaction beam
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/AT	Anti tilting jig for hydraulic cylinder
<b>Optionals (not included)</b>		
1	T1100/BC	Wooden carrying case for datum bar
1	T1100/P600	Loading plate 600 mm dia. x 20 mm reinforced with stiffeners and centring pin.
1	T1100/P762	Loading plate 762 mm dia. x 20 mm reinforced with stiffeners and centring pin.

## Load Bearing Plate: 35-T11D2/EL • Electronic Configuration

DIN 18184 | BS 1377-9

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/H2	Hydraulic assembly with cylinder, pump, extension rods, spherical seats [200 kN]
1	P9008/F	DATALOG 8, 8 channel datalogger battery operated
1	P9008/ELT1	Single connection cable
1	On request	Load cell group 200 [kN]
<b>Device for displacement measurement</b>		
1	P0324	Linear potentiometric transducer, 50 mm travel
<b>Loading plates</b>		
1	On request	DIN plate group 300mm diameter
<b>Reference Bar</b>		
1	On request	Measuring bridge DIN
1	On request	DIN reaction beam
<b>Accessories</b>		
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/AT	Anti tilting jig for hydraulic cylinder
<b>Optionals (not included)</b>		
1	T1100/BC	Wooden carrying case for datum bar
1	T1100/P600	Loading plate 600 mm dia. x 20 mm reinforced with stiffeners and centring pin.
1	T1100/P762	Loading plate 762 mm dia. x 20 mm reinforced with stiffeners and centring pin.

## Load Bearing Plate • Analog Configuration (singles codes)

ASTM D1194 | D1195

Sugg. Qty.	Model	Description
<b>Hydraulic assembly with pressure read out unit</b>		
1	T1100/H5	Plate bearing hydraulic assembly, 500 kN cap
1	T1100/A5*	Analog manometer suitable for plate bearing hydraulic kit, 500 kN
<b>Device for displacement measurement</b>		
3	T1100/ARM**	Adjustable support for displacement device
3	D1257**	Dial gauge 25,4 mm x 0,001 mm
<b>Loading plates</b>		
1	T1100/P6***	160 mm (6") dia. x 25 mm (1")
1	T1100/P12***	300 mm (12") dia. x 25 mm (1")
1	T1100/P18***	456 mm (18") dia x 25 mm (1")
1	T1100/P24***	608 mm (24") dia x 25 mm (1")
1	T1100/P30***	760 mm (30") dia x 25 mm (1")
<b>Reference Bar</b>		
1	T1100/B25	Datum bar 2.5 m long
1	T1100/BEX	Extension kit to extend the datum bar from 2.5 m to 5.5 m
<b>Accessories</b>		
1	T1100/BC	Wooden carrying case for reference bar, 2.5 m and 5.5 m
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/BOX	Wooden box for loading plates diameter 456 mm (18") 608 mm (24") and 760 mm (30")

\* Specific load values refer to a bearing plate with 300 mm dia.

\*\* Quantity in accordance with the numbers of displacement gauges used in the testing configuration, 3 pieces (recommended)

\*\*\* A minimum of four different plate sizes is recommended for pavement design or for evaluation purposes.

For evaluation purposes alone, a single plate may be used.

## Load Bearing Plate • Digital Configuration (singles codes)

ASTM D1194 | D1195

Hydraulic assembly with pressure read out unit		
1	T1100/H5	Plate bearing hydraulic assembly, 500 kN cap
1	T1100/D	Digital readout unit for plate bearing test
Device for displacement measurement		
3	T1100/ARM**	Adjustable support for displacement device
3	D1262/B**	Digital gauge 25,4 mm x 0,001 mm
Loading plates		
1	T1100/P6***	160 mm (6") dia. x 25 mm (1")
1	T1100/P12***	300 mm (12") dia. x 25 mm (1")
1	T1100/P18***	456 mm (18") dia x 25 mm (1")
1	T1100/P24***	608 mm (24") dia x 25 mm (1")
1	T1100/P30***	760 mm (30") dia x 25 mm (1")
Reference Bar		
1	T1100/B25	Datum bar 2.5 m long
1	T1100/BEX	Extension kit to extend the datum bar from 2.5 m to 5.5 m
Accessories		
1	T1100/BC	Wooden carrying case for reference bar, 2.5 m and 5.5 m
1	T1100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1100/BOX	Wooden box for loading plates diameter 456 mm (18") 608 mm (24") and 760 mm (30")

\*\* Quantity in accordance with the numbers of displacement gauges used in the testing configuration, 3 pieces (recommended)

\*\*\* A minimum of four different plate sizes is recommended for pavement design or for evaluation purposes.

For evaluation purposes alone, a single plate may be used.

## Load Bearing Plate • Electronic Configuration (singles codes)

ASTM D1194 | D1195

Hydraulic assembly with pressure read out unit		
1	T1 100/H5	Plate bearing hydraulic assembly, 500 kN cap
1	P9008/F	DATALOG 8, 8 channel datalogger battery operated
1	P9008/ELT	Set of four cables for connecting
1	P0700	Pressure transducer
1	P0349/ELT	Connection cable for pressure transducer
Device for displacement measurement		
3	T1 100/ARM**	Adjustable support for displacement device
3	P0324**	Linear potentiometric transducer, 50 mm travel
Loading plates		
1	T1 100/P6***	160 mm (6") dia. x 25 mm (1")
1	T1 100/P12***	300 mm (12") dia. x 25 mm (1")
1	T1 100/P18***	456 mm (18") dia x 25 mm (1")
1	T1 100/P24***	608 mm (24") dia x 25 mm (1")
1	T1 100/P30***	760 mm (30") dia x 25 mm (1")
Reference Bar		
1	T1 100/B25	Datum bar 2.5 m long
1	T1 100/BEX	Extension kit to extend the datum bar from 2.5 m to 5.5 m
Accessories		
1	T1 100/BC	Wooden carrying case for reference bar, 2.5 m and 5.5 m
1	T1 100/H5C	Wooden carrying case suitable for plate bearing hydraulic assembly 100 kN, 200 kN and 500 kN
1	T1 100/BOX	Wooden box for loading plates diameter 456 mm (18") 608 mm (24") and 760 mm (30")

\*\* Quantity in accordance with the numbers of displacement gauges used in the testing configuration, 3 pieces (recommended)

\*\*\* A minimum of four different plate sizes is recommended for pavement design or for evaluation purposes.

For evaluation purposes alone, a single plate may be used.

# CONTROLS Customer Care

CONTROLS is the world's leading manufacturer of construction materials testing equipment. Meticulously designed, our equipment helps you deliver the most accurate and reliable testing results possible, transforming your testing laboratory and helping you to achieve your full potential.

As a valued customer of CONTROLS, you will receive continuous, expert support and advice for your equipment. Furthermore, we can offer full installation and training in the correct operation of your equipment.

For support from our expert Customer Care Team, contact your local CONTROLS office / distributor or email [support@controls-group.com](mailto:support@controls-group.com).

For more information, please visit [www.controls-group.com](http://www.controls-group.com).

---

## CONTROLS

### Italy (HEAD OFFICE)

t +39 02 92184 1

f +39 02 92103 333

e [sales@controls-group.com](mailto:sales@controls-group.com)

[www.controls-group.com](http://www.controls-group.com)

### France

[info-fr@controls-group.com](mailto:info-fr@controls-group.com)

### Mexico

[info-mx@controls-group.com](mailto:info-mx@controls-group.com)

### Poland

[info-pl@controls-group.com](mailto:info-pl@controls-group.com)

### UK

[info-uk@controls-group.com](mailto:info-uk@controls-group.com)

### Spain

[infosp@controls-group.com](mailto:infosp@controls-group.com)

### USA

[info-usa@controls-group.com](mailto:info-usa@controls-group.com)