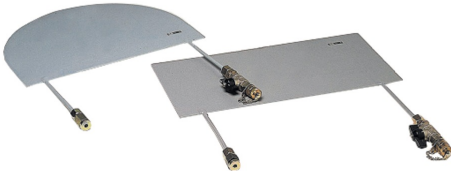


## DATA SHEET

### Flat Jacks



Flat jacks 58-D0567/E2 and 58-D0567/C2

### General description

#### Introduction

The in-situ stress, deformability and resistance feature of masonry can be determined by the flat jack method . The test is performed by making a cut to a uniform depth into the mortar courses and inserting the flat jack or couple of jacks, which are pressurized to the desired level.

#### Test modes:

For **stress determination** a single flat jack has to be used.

For **deformability and resistance determination** two flat jacks have to be used.

The flat jacks have to be pressurized and the strain measured using the **Analog** or **Digital** mode as follows:

#### Analog measurement

The following accessories have to be used:

- 58-D0568/A Hydraulic pump with gauge. See accessories.
- 58-D0567/RS Connecting hose (to connect the two jacks). See accessories.
- 58-C230/30D Mechanical strain gauge. See accessories.

#### Digital measurement

The following accessories have to be used:

- 58-D0568 Hydraulic pump, less gauge. See accessories.
- 58-P0050 Pressure transducer. See accessories
- 58-D0567/RS Connecting hose (to connect the two jacks). See accessories.
- 58-D0585 Electronic extensometer (one to three). See accessories.
- 82-P9008: DATALOG 8, 8 channels stand alone multipurpose data logger (see accessories)

**Note.** In order to fill conveniently the testing cut, use the sets of steel sheets of the same flat jack dimensions. See accessories.

Weights:

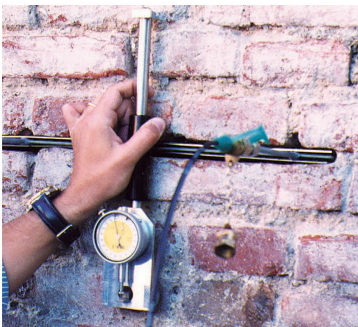
- 58-D0567/C2, 58-C0567/C20 .....kg. approx.
- 58-D0567/E2, 58-D0567/E20 .....kg. approx.

## DATA SHEET

### Specifications

	Code	Analogical system (quantity needed)		Digital system (quantity needed)	
		System with one flat jack	System with two flat jacks	System with one flat jack	System with two flat jacks
Rectangular flat jacks	58-D0567/C2	1	2	1	2
	58-D0567/C11	1 or more	1 or more	1 or more	1 or more
	58-D0567/C20	1 or more	2 or more	1 or more	2 or more
Semi-oval flat jacks	58-D0567/E2	1	2	1	2
	58-D0567/E11	1 or more	1 or more	1 or more	1 or more
	58-D0567/E20	1 or more	2 or more	1 or more	2 or more
Hydraulic pump	58-D0568/A	1	1	1	1
	82-P0050	-	-	1	1
	82-P0349/ELT	-	-	1	1
	58-D0568/4	-	-	1	1
	58-D0567/RS	-	1	-	1
Strain measurement	58-C0230/30D	1	1	-	-
	58-D0585	-	-	1 or more	1 or more
Datalogger	82-P9008/F	-	-	1	1
	82-P9008/ELT	-	-	2	2
	82-P9008/SOF	-	-	1 (optional)	1 (optional)

NOTE: Flat jacks are supplied without Km constant value.



Typical application of one flat jack with mechanical strain gauge for determining the stress condition.

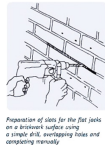
## DATA SHEET



58-D0568/A



Typical application of two semi-cylindrical flat jacks with mechanical strain gauges for determining the strength and deformability features



Preparation of slab for the flat jacks on a bracketed surface using a strap with weighting lines and connecting manually



Preparation of the cut for the semi-cylindrical and circular segment flat jacks using a cutting saw

Typical application of electronic tubular transducers 58-D0585 with pump assembly 58-D0568/A fit with pressure transducer 82-P0351 and Datalog 82-P0908/A.



## Products

### 58-D0567/C2

Rectangular flat jack 400x200 mm, 50 bar

### 58-D0567/C20

Rectangular flat jack 400x200 mm, 50 bar, less valves.

### 58-D0567/E2

## DATA SHEET

Semioval flat jack 350x260 mm, 50 bar

**58-D0567/E20**

Semioval flat jack 350x250 mm, 50 bar, less valves.

### Accessories and consumables

**58-D0567/C11**

Set of five steel sheets

**58-D0567/E11**

Set of five steel sheets for semioval flat jacks

**82-P9008/ELT**

Set of four cables for connecting load cells, pressure transducers, strain gauges, LDT / LVDT / potentiometric type displacement transducers to DATALOG 8 (82-P9008) and GEODATALOG 8 (30-WF6008)

**82-P9008/SOF**

DATACOMM 2 data acquisition software and LAN cable for PC connection of DATALOG 8 (82-P9008, P9008/F) - Up to 8 datalogger (total 64 channels) can be connected to a single PC creating a modular network (LAN hub is required)

**82-P0050**

Pressure transducer 0-50 bar (connecting cable not included)

**82-P0349/ELT**

Connecting cable for pressure transducer. Suitable for Smart-Line, Sercomp, MCC, Advantest control consoles and Compact-Line compression machines.

**82-P9008**

DATALOG 8, 8 channels stand alone multipurpose data logger. 110-230V / 50-60Hz / 1 Ph.

**58-C0230/30D**

Device for the measurement of length variation with digital dial gauge. Measuring base 300 mm. Measuring range 5 mm. Resolution 0.001 mm. Comprehends digital dial gauge with output for PC connection (special cable required). Conforming to BS 1881:206

**58-D0567/RS**

Connecting flexible hose, 700 mm length for testing two flat jacks.

**58-D0568**

Hydraulic hand pump with reservoir and flexible hose

**58-D0568/A**

Hydraulic hand pump with pressure gauge 100 bar range

**58-D0568/4**

Connecting coupling for pressure transducer

**58-D0585**

Tubular electronic extensometer.