MULTISPEED

Digital and Automatic universal testers

Suitable for CBR, Marshall*, Indirect tensile*, Unconfined compression*, Quick triaxial* and many other tests.



34-V1072 SERIES MULTISPEED DIGITAL VERSION COMPRESSION TESTER

The MULTISPEED compression tester is the ideal solution for Road testing laboratory. The 50 kN capacity and the fully variable test speed of 0.2 to 51 mm/min make it possible to perform not only the CBR and Marshall tests, but many other applications like the Indirect Tensile test, Quick Triaxial tests, Unconfined and Uniaxial soil testing and, in general, all tests to be performed under displacement control. The machine can be equipped with analogical or digital load/displacement measurement systems as well as with the specific accessories, to suit either the field or central laboratory requirement. The various test accessories and relevant Standards, are shown and listed on page 128 and 320

(digital) and Digimax TS 82-P60R02.

*For the other applications (Marshall, Indirect tensile, etc.), see page 128

Ordering information

34-V1072

MULTISPEED, digital compression tester, 50 kN capacity, testing speed steplessly adjustable from 0.2 to 51 mm min. 230 V, 50-60 Hz, 1 ph

34-V1074

Same as above but 110 V, 60 Hz, 1 ph

CBR accessories

Analogical mode

34-T0103/3

Adjustable penetration piston complete with dial holder and dial gauge 30 x 0.01 mm div.

82-T1000/50M

Load ring 50 kN capacity, fitted with dial gauge 0.001 mm div.

Digital mode

34-V0107/CBR

Test set to perform the CBR test in digital mode, including:

82-P0375

Load cell, 50 kN capacity

82-P0375/C

Adapter to fit load cell (two pieces)

82-P0322

Displacement transducer, 25 mm travel

34-T0104/81

Adjustable transducer holder

34-T0103/1

Adjustable CBR penetration piston

All above items can be ordered individually.





Examples of screenshots

82-SW/CMU

PC software for CBR, Marshall, Indirect tensile and general purpose tests.

Note: The Multispeed 34-V1072 Series also requires data acquisition system. See Digimax TS 82-P60R02 on page 129



34-V1172 equipped with CBR digital testing accessories



34-V1172 equipped with Marshall digital testing accessories

MAIN FEATURES

» Stand-alone automatic digital load frame 50 kN capacity

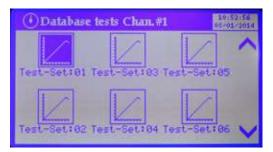
MULTISPEED AUTOMATIC

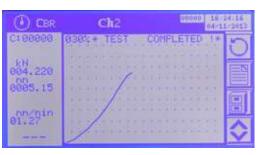
- » Closed-loop speed control
- » Four channel on board data acquisition
- » Large touchscreen graphic display: 240 x 128 pixel
- » CBR and MARSHALL test speed can be selected by default
- » Infinitely variable speed from 0.05 to 51 mm/min can be easily set by keyboard
- » Data download: using LAN port (ASCII, TXT or Controls format)
- » USB port for USB memory stick data storage

34-V1172 SERIES MULTISPEED AUTOMATIC VERSION UNIVERSAL TESTER

The 34-V1172 Series MULTISPEED is a versatile stand-alone machine; an ideal solution for road testing laboratories and generally for any test that requires displacement/speed control. The 50kN capacity and fully variable speed of 0.05 to 51 mm/min make it possible to perform not only CBR and Marshall tests, but also many other applications such as indirect tensile, quick undrained triaxial and unconfined/uniaxial soil tests.

No external transducer is required for displacement measurement. The firmware allows performance of transducer calibrations and setting of up to 10 test profiles, saving data onboard. A real-time test graph and transducer data are displayed on the touchscreen. The machine has built-in data acquisition with four channels dedicated to two strain gauge load cells and two potentiometric linear transducers; one of each can be used during the test.









Ordering information

34-V1172

MULTISPEED automatic compression tester, 50 kN capacity, 4 channel built-in data acquisition and variable speed from 0.05 to 51 mm/min. 230V, 50-60Hz, 1 ph

34-V1174

same as above but 110V, 60Hz, 1 ph

Technical specifications

Both machine series 35-V1072 and 35-V1172 features:

- Horizontal clearance (distance between columns): 270 mm
- Maximum vertical clearance (without accessories): 730 mm
- Platen travel: 100mm
- Overall dimensions (l x w x h): 392x495x1213 mm
- Net weight approx.: 65 kg

CBR accessories

Digital mode 34-V0107/CBR

See page 126

82-SW/CMU

PC software for CBR, Marshall, Indirect tensile and general purpose tests.

Examples of screenshots

Multispeed accessories for 34-V1072 and 34-V1172 series

To perform MARSHALL test in digital mode conforming to:

STANDARD

34

- ► EN 12697-34* ► ASTM D1559
- ▶ ASTM D5581 ▶ ASTM 6927-06
- ▶ AASHTO T245 ▶ BS 598-107
- ► NF P98-0251-2 ► DIN 1996
- ▶ CNR 30



34-V0107/MAR

Test set to perform the Marshall test in the digital mode, including:

82-P0375

Load cell 50 kN capacity

82-P0375/C

Adapter to fit load cell (two pieces)

82-P0322

Displacement transducer, 25 mm travel

34-T0104/81

Adjustable transducer holder

34-T0104/13

Compression device extension

34-T0104/10

Compression device

76-B0033/4

Stability mould

All above items can be ordered individually.

82-SW/CMU

PC software for CBR, Marshall, Indirect tensile and universal tests. (Optional).

Note: The Multispeed 34-V1072 Series also requires data acquisition system. See Digimax TS 82-P60R02 on next page.

*The EN Standard specifies that Marshall Testers must be used in digital mode with a recording unit.

To perform **CBR and MARSHALL tests** in digital mode

(To avoid duplications when both tests have to be performed)

34-V0107/CM

Test set for performing CBR and Marshall tests in digital mode, including:

Load cell, 50 kN capacity

82-P0375/C

Adapter to fit load cell (two pieces)

82-P0322

Displacement transducer, 25 mm travel

34-T0104/81

Adjustable transducer holder

34-T0103/1

Adjustable CBR penetration piston

34-T0104/13

Compression device extension

34-T0104/10

Compression device

76-B0033/4

Stability mould 4"

To perform INDIRECT TENSILE tests on bituminous mixtures conforming to:

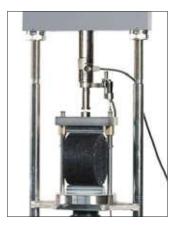
STANDARD

- ► EN 12697-12 ► EN 12697-23
- ► ASTM D4123 ► CNR 34

To perform **UNCONFINED COMPRESSION tests** on soil conforming to:

STANDARD

- ► EN 12697-12 ► EN 12697-23
- ▶ ASTM D4123 ▶ CNR 34





82-P0375

Load cell, 50kN capacity

82-P0375/C

Adapter to fit load cell (two pieces)

Displacement transducer, 25mm travel

34-T0104/81

Adjustable transducer holder

34-T0104/13

Compression device extension

34-T0104/10

Compression device

76-B0078/F

Frame for tensile splitting device. To be completed with suitable pair of loading strips.

76-B0078/F1

Pair of loading strips for 100 mm diameter samples

76-B0078/F2

Pair of loading strips for 150 mm diameter samples

82-SW/CMU

PC software for CBR, Marshall, Indirect tensile and universal tests. (Optional).

Note: The Multispeed 34-V1072 Series also requires data acquisition system. See Digimax TS 82-P60R02 on next page.



82-P0370

Load cell,2.5kN capacity

82-P0375/C

Adapter to fit load cell (two pieces)

Displacement transducer, 25mm travel

34-T0104/81

Adjustable transducer holder

70-T0108/5

Load cell extension

34-T0104/4

Platens for unconfined compression

82-SW/CMU

PC software for CBR, Marshall, Indirect tensile and general purpose tests (Optional)

Note: The Multispeed 34-V1072 Series also requires data acquisition system. See Digimax TS 82-P60R02 on next page.



If further tests have to be performed, eq. Unconfined, Quick triaxial, Compression and flexural tests on rock and cement etc, please refer to the web page universal tester accessories.