

Prüfball SPB Digital

Digital indication without battery



SPB 500L



Display of SPB 1000L

The Prüfball SPB digital combines the latest microcontroller applications with approved features of the analogue Prüfball - robust, precise and maintenance-free

- Safety casing made of solid rubber extremely impact resistant, water and dust-proof
- Maintenance-free – battery is not required
- Direct reading of all functions by LED and LCD without keypress
- Phase, phase sequence and continuity test, connectible 30 mA RCD tripping
- Reliable phase sequence test by microcontroller analysis, possible with gloves





Instrument for professional use in power engineering

The Prüfball digital is a maintenance-free voltage-continuity tester for energy supply and industry:

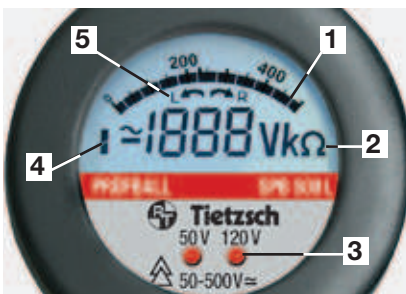
The new digital Prüfball supplements our analogue Prüfball series which is successful since 60 years.

The device provides direct reading without keypress. A load of approx. 35 mA at 230 V can be connected by actuating the push-button.

Clear display

Reliable test by two display systems and connectible load:

- bright LEDs and illuminated LCD
- high accuracy
- connectible low resistive load for RCD tripping
- no battery required



1. Bargraph
2. large numerals and symbols for voltage AC/DC and resistance
3. Light diodes
4. Indication of connected load
5. arrow for phase sequence



6. Indication when test prod applied to phase

Approved safety concepts

The case of solid rubber encloses the measuring system and switching mechanism:

- impact-resistant, impact-proof
- water- and dust-proof, outdoor type
- overvoltage protection - CAT IV
- current limiting safety components in accordance with latest standards – **without semiconductor**
- secure two-hand tripping device for low resistive checks through patented special push-button with wide contact gap

Wide range of accessories

- bags
- extensions for tests at overhead lines
- plastic casing for extensions
- test prods for test objects difficult to access
- insertion prods for underground cable
- adapter for the test lines with 4 mm standard plug



Technical data

Two-pole voltage tester tested and certified by VDE in accordance with EN/IEC 61243-3 (VDE 0682 part 401)

Type / Nominal voltage

SPB 500L	50 ... 500 V AC/DC
SPB 1000L	50 ... 1000 V

Voltage indication

high-impedance, direct reading:
 LED > 50 V ~ and > 120 V + -
 LCD > 50 V backlight
 accuracy 2,5% + 5 digit
 ⊕ low resistive connected:
 additional display symbol for connected load

Phase / Phase sequence / Polarity

capacitive, without accessible electrode
 arrows for phase sequence
 POL for phase unipolar
 tests possible with gloves
 voltage type - / ~

Frequency

0 - 2000 Hz

Input resistance

direct: 500L: 150-190 kΩ,
 1000L: 300-350 kΩ
 ⊕ switched: 4,3...7 kΩ

Current peak value

direct: < 3,5 mA
 ⊕ switched: < 300 mA
 (35 mA at 230 V – RCD tripping)

On-time

2 minutes

Continuity

0 ... 1000 kΩ

Surge voltage strength

> 12 kV case insulation to user
 > 12 kV switching mechanism between test prods

Insulation test

6 kV unit inspection of case and line

Overvoltage category

CAT IV in accordance with IEC 60664-1 (VDE 0110)

Operating temperature

-10°C ... + 55°C

Power supply

maintenance-free - without battery,
 test functions voltage, phase sequence are
 supplied from the mains, Continuity by Li-accu with
 automatic charging function

Casing

solid rubber EPDM, unbreakable display cover made
 of indestructible polycarbonate

Protection category

IP 65, device can be used in moist environments

Line

PUR control cable, 1000 V, 1m

Dimensions / weight

274 x 75 x 47 mm (display part) / approx. 415 g

Article number Type / Label

81322 Prüfball SPB 500L

81323 Prüfball SPB 1000L

81019 Thread test electrode

Accessories on page 48