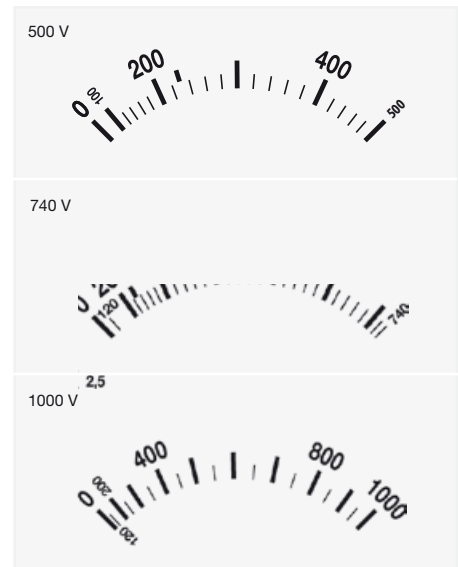


Prüfball SPB Analog

The classic with safety casing made of solid rubber



SPB 500PR



Three measurement ranges are optionally available

The Prüfball SPB is the right voltage tester for operation in energy supply - robust, precise, maintenance-free.

- One-piece safety casing made of solid rubber, extremely voltage-proof, unbreakable, dust- and waterproof
- Easy operation clear indication
- Phase, phase sequence and continuity tester, RCD tripping¹, acoustic signal²
- Reliable phase sequence test by microcontroller analysis, possible with gloves
- Without battery, maintenance-free lifelong





Instrument for professional use in power engineering

For over 60 years, the Prüfball is successfully used in operating ranges with increasing requirements:

- energy providers with high safety requirements and high accuracy demands
- industrial firms with extreme ambient conditions
- service providers who prefer robust and long life test instruments

Approved safety concepts

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

- impact resistant, shockproof
- dust- and waterproof
- overvoltage protection
- secure two-hand tripping device for low resistive checks through patented special push-button with wide contact gap

Exact, precise display

Reliable test by three display systems and connectable load:

- direct indication by LCD indicator and LEDs, clearly visible in bright and dark environments
- connectible low resistive measuring system indication and the additional load RCD tripping*
- without battery, maintenance-free lifelong



1. LED-triangle for phase sequence
2. LCD indicator with big V for hazardous voltage type of voltage continuity
3. exact analog display, connectible
4. LED signal for hazardous voltage between 50 V AC / 120 V DC and for phase indication



Three measuring ranges fully equipped

The Prüfball is available in 4 variants:

- three measurement ranges 500/740/1000 V
- phase and phase sequence test without finger contact
- continuity test
- acoustic signal for voltages
- additional load for RCD tripping (residual-current-operated protective device)



Wide range of accessories

(Accessories are not included in scope of delivery)

- 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

Art.- no. / Order data

Type overview on page 8

Accessories on page 30

Technical data

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

Type / Nominal voltage

SPB 500PR/PRA	50 ... 500 V AC/DC
SPB 740PR	50 ... 740 V AC/DC
SPB 1000P/PR	50 ... 1000 V AC/DC

Display range scale

SPB 500PR/PRA	100 ... 500 V AC/DC
SPB 740PR	120 ... 740 V AC/DC
SPB 1000PR	120 ... 1000 V AC/DC

Frequency

0...100 Hz Ω -Symbol in LCD

Voltage indication

high-impedance, direct reading:

LCD indicator, LED \geq 50 V AC / 120 V DC

⊕ low resistive connected:

moving-iron instrument, large 90° scale

100 ... 500 V, 120 ... 740 V, 120 ... 1000 V

effective value accuracy

cl. 2,5: basic accuracy 2,5% + reading errors

Acoustic signal (SPB 500PRA)*

> 57 dB interval according to ISO 3744

Continuity*

0 ... 1 M Ω Ω -symbol in LCD

Phase / Phase sequence* / Polarity

LED and LCD triangle \geq 165 V

for phase unipolar with contact sensor

for phase sequence two-pole with sensor

type of voltage + / - / - by 2 LEDs

Input resistance

direct: SPB 500PR: 303 k Ω bei 500 V

SPB 500PRA: 303 k Ω bei 500 V

SPB 740PR: 303 k Ω bei 740 V

SPB 1000PR: 294 k Ω bei 1000 V

⊕ switched: 4,3...7 k Ω tripping by 30 mA-RCDs

Current peak value

direct: < 3,5 mA

⊕ switched: < 300 mA (35 mA at 230 V – RCD tripping)

On-time

30 sec

Overvoltage category

CAT IV 600 V / CAT III 1000 V

Surge voltage strength

12 kV case insulation to user

8 kV switching mechanism between test prods

Insulation test voltage

6 kV unit inspection of case and line

Operating temperature

-15°C ... + 45°C

Power supply

maintenance-free - without battery, test functions

voltage and acoustic are supplied from the mains,

continuity, phase and phase sequence by Li-storage, refreshable

Casing

unbreakable silicone rubber, display cover made of

indestructible polycarbonate

Protection category

IP 65, device can be used in moist environments

Line

PUR control cable, 1000 V, 1m

with protective cap for electrodes

Dimensions / Weight

274 x 75 x 47 mm (display part) / approx. 420 g

*500PRA with acoustic signal for voltage without additional load for RCD tripping