

# Measurement accessories for a secure connection



The right measurement and testing equipment, as well as the appropriate measurement accessories are important components for carrying out measurements in a safe, reliable manner.

The following measurement accessories contains various test leads, probes, and crocodile clips. This ensures that any user can find the necessary tools that is required for their measurement task.

Replacement parts and fuses are listed on page 103.

## Symbols used in this chapter

**4**  
mm

Length of plug-in technology (e.g. 4 mm)



Touch protection

**CAT III**  
**1000 V**

Disclosure of measurement category in accordance with EN 61010, DIN VDE 0411

**16A**

Current-carrying capacity (e.g. 16 A)



Silicone test lead



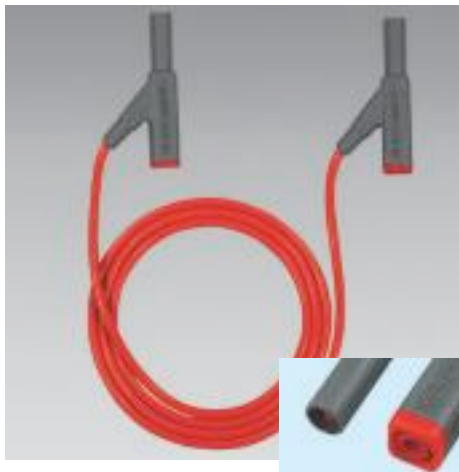
PVC test lead



Heat-resistant



Cold-resistant



**4 mm**  **600 V** **16 A**

### Test leads SML 4W 4 mm safety plug-in technology

#### Accessory information

- Safety test lead, flexible 0.8 mm<sup>2</sup>
- Current-carrying capacity 16 A
- Measurement category CAT III / 600 V

#### Design

- PVC insulation
- Two-way safety plugs with onward connection capability in accordance with DIN VDE 0411/EN 61010/IEC 61010

#### Ordering Information:

Description	Model	Article no.
Test lead ML 4W		
red - 1000mm	307111	2146495
black - 1000mm	307121	2146508
red - 2000mm	307112	3313550
black - 2000mm	307122	3313561



**4 mm**  **CAT III 1000 V** **2 A**

### Safety clamp-type test probe SKP 41 set 4 mm plug-in technology

#### Accessory information

- Approx. 155 x 49 mm
- Current-carrying capacity 2 A
- Measurement category CAT III/1000 V

#### Set, consisting of:

- 1 x SKP 41 gray/red
- 1 x SKP 41 gray/black

#### Design

- Spring wire grabber with flexible, insulated shaft
- Safety clamp-type test probe with 4-mm safety jack in accordance with DIN VDE 0411/EN 61010/IEC 61010

#### Ordering Information:

Model	Article no.
370010	2146701



**4 mm**  **CAT III 1000 V** **10 A**

### High current safety clamp-type test probe HCP 41 set 4 mm plug-in technology

#### Accessory information

- Approx. 160 x 60 mm
- Current-carrying capacity 10 A
- Measurement category CAT III/1000 V

#### Set, consisting of:

- 1 x HCP 41 gray/red
- 1 x HCP 41 gray/black

#### Design

- Safety clamp-type test probe with 4-mm safety jack in accordance with DIN VDE 0411/EN 61010/IEC 61010

#### Ordering Information:

Model	Article no.
370024	2146758



### Probes PSS set of 2

**Accessory information**

- Approx. 100 x 21 mm
- Current-carrying capacity 6 A
- Measurement category CAT III/1000 V

**Set, consisting of:**

- 1 x probe PSS 2 gray/red
- 1 x probe PSS 2 gray/black

**Design**

- Safety probe with 4-mm safety jack in accordance with DIN VDE 0411/EN 61010/IEC 61010

**Ordering Information:**

Model	Article no.
370008	2146694



### Probes PSK set of 2 2 mm probe, short version

**Accessory information**

- Approx. 102 x 10 mm
- Current-carrying capacity 16 A
- Measurement category CAT III/1000 V, CAT IV/600 V (with cover)
- Measurement category CAT II/1000 V (without cover)

**Set, consisting of:**

- 1 x probe PSK 2, gray/red (with cover)
- 1 x probe PSK 2 gray/black (with cover)

**Design**

- Safety probe with safety jack 4-mm and 2 mm stainless steel probe in accordance with DIN VDE 0411/EN 61010/IEC 61010

**Ordering Information:**

Model	Article no.
370004	2146675



### TL-300

#### Test lead set with crocodile clips (red, black, yellow), case, and temperature probe



**Technical specifications**

Current-carrying capacity	10 A
Current-carrying capacity	10 A
Measurement Category	Probes
	CAT IV/1000 V (with cover)
	CAT II/1000 V (without cover)
Crocodile clips	CAT IV/600 V, CAT III/1000 V
Pollution degree	2
Safety cert.:	DIN VDE 0411/EN 61010/IEC 61010
Temperature probes	K-type flexible wire probe
	4 mm plug (distance 19 mm)
Probe length	approx. 0.9 m
Temperature range	-20 °C...+250 °C
Accuracy	-20...0 °C: ±2.5 °C or ±1.5% rdg.
	0...250 °C: ±1.1 °C or ±0.4% rdg.

**Ordering Information:**

Model	Article no.
TL-300	4588279



## Safety crocodile clip KS 4L set

### 4 mm plug-in technology

#### Accessory information

- 94 x 42 mm
- Current-carrying capacity 16 A
- Measurement category CAT III/1000 V, CAT IV/600 V
- Opening: approx. 24 mm

#### Set, consisting of:

- 1 x KS4L gray/red
- 1 x KS4L gray/black

#### Design

- Safety crocodile clip with 4-mm safety jack in accordance with DIN VDE 0411/EN 61010/IEC 61010

#### Ordering Information:

	Model	Article no.
	370012	2146712



## Crocodile clips for conductor rails

### 4 mm safety plug-in technology

#### Accessory information

- 155 x 40.5 mm
- Current-carrying capacity 5 A
- For conductor rails up to 30 mm
- Measurement category CAT III/600 V
- Opening: 0...20 mm/10...30 mm

#### Design

- Crocodile clip for secure measurement on conductor rails
- 4 mm safety plug-in technology

#### Ordering Information:

	Model	Article no.
red	391511	2146861
black	391512	2146877



## Unidreh accessory set

### 4 mm plug-in technology

#### Accessory information

- Self-retaining probes with clamping range  $\varnothing$  4...8 mm
- Safe contacting, e.g. in CEE 16 A- and CEE 32 A sockets
- Crocodile clip included

#### Included:

- 3 x probes, black
- 1 x crocodile clip, black
- 1 x carrying case

#### Technical specifications

Current-carrying capacity	8 A
Measurement Category	
Probes (Astaco)	CAT II/1000 V
Crocodile clip (KS4L)	CAT III/1000 V, CAT IV / 600 V
Pollution degree	2
Safety cert.:	DIN VDE 0411/EN 61010/IEC 61010

#### Ordering Information:

	Model	Article no.
UNIdreh accessory set	1324	2146183



The solution for secure contacts with CES sockets.



### Professional test lead set for multimeters 2 mm safety probes

**Accessory information**

- Test lead set with 4 mm safety plug-in technology
- Ergonomic handle
- Silicone safety test lead
- Measurement category CAT IV / 1000 V (with cover)
- Measurement category CAT II / 1000 V (without cover)
- 2mm probes

**Included:**

2 x test leads, approx. 1 m long,  
2 covers



**Technical specifications**

Current-carrying capacity max. 20 A  
 Measurement category CAT IV / 1000 V (with cover)  
 CAT II / 1000 V (without cover)  
 Pollution degree 2  
 Safety cert.: DIN VDE 0411/EN 61010/  
 IEC 61010

**Ordering Information:**

	Model	Article no.
Professional test lead set with silicone insulation	1306	3313458



### Professional test lead set for multimeters 4 mm safety probes

**Accessory information**

- Test lead set with 4 mm safety plug-in technology
- Ergonomic handle
- Silicone safety test lead
- Measurement category CAT IV / 1000 V (with cover)
- Measurement category CAT II / 1000 V (without cover)
- 4mm probes

**Included:**

2 x test leads, approx. 1 m long,  
2 x covers



**Technical specifications**

Current-carrying capacity max. 20 A  
 Measurement category CAT IV / 1000 V (with cover)  
 CAT II / 1000 V (without cover)  
 Pollution degree 2  
 Safety cert.: DIN VDE 0411/EN 61010/  
 IEC 61010

**Ordering Information:**

	Model	Article no.
Professional test lead set with silicone insulation	1307	2146176



### Mini crocodile clips 2 mm plug-in technology (fits all 2 mm multimeter probes)

**Accessory information**

- 41.5 x 13 mm
- Max. voltage 33 V AC / 70 V DC
- Opening: approx. 7 mm

**Design**

- Miniature crocodile clip

**Ordering Information:**

	Model	Article no.
red	390450	2406492
black	390451	2406509







**TL36A**  
**Test lead set**  
**with crocodile clips**  
**2 mm safety probes**

- Accessory information**
- Test lead set with 4 mm safety technology
  - PVC-insulated leads
  - Threaded test probes
  - Crocodile clips with thread connection, opening approx. 10 mm

**Included:**

- 2 x test leads, approx. 1 m long, with covers
- 2 x crocodile clips

**Technical specifications**

Measurement categories  
 Test lines CAT III/1000 V, CAT IV/600 V  
 (with cover)  
 CAT II / 1000 V  
 (without cover)  
 Current-carrying capacity 10 A  
 Crocodile clips CAT III / 1000 V, CAT IV / 600 V  
 Pollution degree 2  
 Safety cert.: DIN VDE 0411/EN 61010/  
 IEC 61010



**Ordering Information:**

Model	Article no.
TL36A	3034444



**TL35B**  
**Test lead set**  
**with safety crocodile clips**  
**2 mm safety probes**

- Accessory information**
- Test lead set with 4 mm safety technology
  - PVC-insulated leads
  - Threaded test probes
  - Safety crocodile clips with thread connection, opening approx. 16 mm

**Included:**

- 2 x test leads, approx. 1 m long, with covers
- 2 x crocodile clips

**Technical specifications**

Measurement categories  
 Test lines CAT III/1000 V, CAT IV/600 V  
 (with cover)  
 CAT II / 1000 V  
 (without cover)  
 Current-carrying capacity 10 A  
 Crocodile clips CAT III / 1000 V, CAT IV / 600 V  
 Pollution degree 2  
 Safety cert.: DIN VDE 0411/EN 61010/  
 IEC 61010



**Ordering Information:**

Model	Article no.
TL35B	3068232



**EU-200**  
**Test lead set**

- Accessory information**
- Test lead set with 4 mm safety technology
  - 4 mm test probes

**Included:**

- 2 x test leads
- 2 x probes (with covers)
- 2 x crocodile clips

**Technical specifications**

Measurement categories  
 Test leads CAT III / 1000 V  
 Probes CAT IV / 600 V, CAT III / 1000 V  
 (with cover)  
 CAT II / 1000 V  
 (without cover)  
 Current-carrying capacity 16 A  
 Crocodile clips CAT III / 1000 V, CAT IV / 600 V  
 Pollution degree 2  
 Safety cert.: DIN VDE 0411/EN 61010/  
 IEC 61010

**Ordering Information:**

Model	Article no.
EU-200	2745046



## Safety set

### Accessory information

- Test lead set with 4 mm safety technology

### Included:

- 1 x safety test lead, red
- 1 x safety test lead, black
- 1 x probe, red, with cover
- 1 x probe, black, with cover
- 1 x crocodile clip, red
- 1 x crocodile clip, black

### Technical specifications

Current-carrying capacity	16 A
Measurement Category	
Safety test leads	CAT III/1000 V
Probes	CAT III/1000 V, CAT IV / 600 V (with cover) CAT II / 1000 V (without cover)
Crocodile clip	CAT III/1000 V
Pollution degree	2
Safety cert.:	DIN VDE 0411/EN 61010/IEC 61010

### Ordering Information:

	Model	Article no.
Safety set	370003	2146666



## Electronics set

### Accessory information

- Test lead set with 4 mm safety plug-in technology

### Included:

- 1 x safety test lead, red, 16A
- 1 x safety test lead, black, 16A
- 1 x crocodile clip, red, 16A
- 1 x crocodile clip, black, 16A
- 1 x safety clamp-type test probe, red, 2A
- 1 x safety clamp-type test probe, black, 2A
- 1 x safety probe, red, 6A
- 1 x safety probe, black, 6A

### Technical specifications

Current-carrying capacity	2A/6A/16A
Measurement Category	
Safety test leads	CAT III/1000 V
Probes	CAT III/1000 V
Crocodile clip	CAT III/1000 V
Clamp-type test probes	CAT III/1000 V
Pollution degree	2
Safety cert.:	DIN VDE 0411/EN 61010/IEC 61010

### Ordering Information:

	Model	Article no.
Electronics set	370001	3313577



## Electrician set

### Accessory information

- Test lead set with 4 mm safety plug-in technology

### Included:

- 1 x safety test lead, red, 16A
- 1 x safety test lead, black, 16A
- 1 x safety probe, red, 6A
- 1 x safety probe, black, 6A
- 1 x safety clamp-type test probe, red, 10A
- 1 x safety clamp-type test probe, black, 10A
- 1 x crocodile clip, red, 16A
- 1 x crocodile clip, black, 16A

### Technical specifications

Current-carrying capacity	6A/10A/16A
Measurement Category	
Safety test leads	CAT III/1000 V
Probes	CAT III/1000 V
Crocodile clip	CAT III/1000 V
Clamp-type test probes	CAT III/1000 V
Pollution degree	2
Safety cert.:	DIN VDE 0411/EN 61010/IEC 61010

### Ordering Information:

	Model	Article no.
Electrician set	370000	2146653