

# PGS10

## Test Probe with Pulse Current Generator for SECUSTAR FM+ and SECULIFE SB/SR

3-349-573-15

2/12.12

### Applications

The test probe is suitable for testing protective conductor connections at electrical consumers with contact resistance caused by, for example, oxidation. With contact resistance of this sort, protective conductor resistance might not comply with the specified values during testing with the minimum test current of 200 mA in accordance with the standard.

Measurement results with considerably lower impedance values can be obtained for a short time by exposing these connections to a higher current with a value of approx. 10 A, because resistance-increasing deposits, layers of oxidation and other contamination can thus be eliminated for a given period of time.

Use of “cleaning” by means of a current surge should be taken into consideration in the hazard evaluation for the object under test.

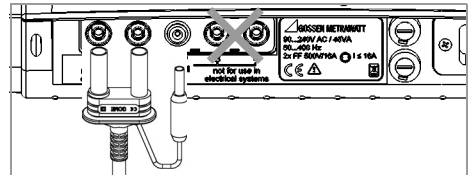


### Attention!

Determine whether or not the test probe complies with electrical safety requirements and ambient conditions for use with your test instrument. The test probe may only be used for applications which are specified in the operating instructions for your test instrument. Make certain that the connector cable, the test probe and the switch are in flawless condition, e.g. no damage to insulation, no interruptions in cables or plugs etc.

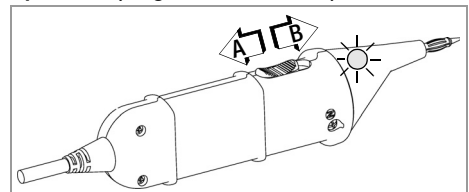
**Only perform the test with voltage-free protective conductor connections to prevent the internal fuse from blowing.**

### Connection



- Connect the test probe as follows: Insert the test probe's double plug into sockets 1 and 2 such that the plug with the white ring makes contact with socket 1, and insert the separate plug into the test current output at the test instrument (the socket between sockets 2 and 3).

### Operation (single measurement)



- With the instrument in the “Manual Test” mode, select resistance measurement  $R_{PE}$ .
- Press the start key at the test instrument in order to initialize resistance measurement.
- Wait for at least 1 second.
- Contact the measuring point with the test probe.
- Activate the current surge by briefly pushing the slider switch on the test probe into position B towards the tip of the probe (spring force must be overcome manually). The control LED flashes up briefly. The short-term, high current burns off any resistance-increasing deposits.

- ⇒ Return the slide switch to normal position A, after which test current in accordance with the standard flows via the test probe for the performance of resistance measurement.



### Note!

A waiting period with a duration of 1 second between measurements is required in order to reactivate the pulse current generator and charge the capacitor.

## Operation During Test Sequences

The following test step order must be adhered to during test sequences:

- ⇒ Start protective conductor resistance measurement.
- ⇒ Wait for at least 1 second.
- ⇒ Contact the measuring point with the test probe.
- ⇒ Briefly push the slide switch into position B (see single measurement).
- ⇒ Record the desired measured value.

A test sequence for use of the test probe in combination with a SECUSTAR FM+ or SECULIFE SB/SR test instrument is included in scope of delivery on the CF card, or can be downloaded from our website.

## Electricity Safety

Maximum rated voltage	300 V
Maximum rated current	1.5 A
Measuring category	CAT II
Fuse	Internal, 1.5 A

## Ambient Conditions (EN 61010-031)

Temperature	-20 to + 50° C
Relative humidity	Max. 90%
Elevation to	2000 meters
Pollution degree	2

## Significance of Symbols



Continuous, doubled insulation



This device may not be disposed of with the trash. Further information regarding the WEEE mark can be accessed on the Internet at [www.gossenmetrawatt.com](http://www.gossenmetrawatt.com) by entering the search term 'WEEE'.



Warning concerning a point of danger (attention, observe documentation!)



EC mark of conformity

## Mechanical Design

Dimensions	LxWxH: 190 x 40 x 40 mm
Weight	Approx. 270 g
Protection	IP 40

## Housing Maintenance

No special maintenance is required for the housing. Keep outside surfaces clean. Use a slightly dampened cloth for cleaning. Avoid the use of cleansers, abrasives or solvents.

## Repair and Replacement Parts Service Calibration Center and Rental Instrument Service

If required please contact:

GMC-I Service GmbH

### Service-Center

Thomas-Mann-Str. 20

90471 Nürnberg · Germany

Phone: +49 911 817718-0

Fax: +49 911 817718-253

e-mail: [service@gossenmetrawatt.com](mailto:service@gossenmetrawatt.com)

[www.gmci-service.com](http://www.gmci-service.com)

This address is only valid in Germany. Please contact our representatives or subsidiaries for service in other countries.

## Product Support

If required please contact:

GMC-I Messtechnik GmbH

### Product Support Hotline

Phone: +49-911-8602-0

Fax: +49 911 8602-709

e-mail: [support@gossenmetrawatt.com](mailto:support@gossenmetrawatt.com)