

TESAMODUL precision measuring unit



Technical data and other details available on request

Calibration probes



73,75 mV/mm dummy probes (half-bridge).
Suited for equipment having the following features:
Frequency to 13 ±0,65 kHz.
Voltage 3 ±0,015 Veff (2 symmetrical voltages of 1,5 Veff).
Impedance:
≤ 0,2 Ω (output) or 2000 Ω, (input).



Input impedance
970 ±50 Ω
(13 kHz) or 2150 ±50 Ω (standard 0 μm)
Phase at 13 kHz: 71 ±2°.
Input resistance:
100 ±5 Ω.



Output impedance at 13 kHz: 1000 ± 2 Ω.
Phase at 13 kHz: 0,2 °
±3 ppm/°C.
Ageing:
± 30 ppm/a
20 ±0,5 °C, stabilisation time = 8 h



10°C to 35°C
-10°C to 70°C



Calibration: 40% to 60%.
Operating: 20% to 80%.
Storage: 5% to 95%.
Non-condensing.



18 mm dia., 118 mm long
≈ 45 g



IP40 (IEC 60529)
Inspection report

Calibration devices

Designed for calibrating and setting TESA length measuring equipment fitted with standard TESA inductive probes (half-bridge).

Calibration of TESA inductive probes

The regular system consists of the following components:

- 1 Precision TESAMODUL No. S41077248.
- 1 Set of calibration probes No. S41077249 with nominal values of ±0 μm, ±100 μm and ±1000 μm.
- 1 Measuring support such as INTERAPID UP 160 (No. 01639041) equipped with the UPZ 40 measuring table (No. 01640405).
- 1 Set of gauge blocks, accurate to calibration grade K (see section J).
- 1 Precision digital voltmeter, min. 5 1/2 digits.

S41077248	TESAMODUL precision unit
<i>Consisting of:</i>	
	1 Measuring unit 429
	1 Power unit 122, 500 mA



Calibration of measuring instruments

Calibration probes available as single or in sets

	μm	in	Marked with
S41078077	± 0		03270700
S41078078		± 0	03270708
S41078079	± 3		03270704
S41078231	± 5		03270714
S41078080	(± 7,62)	± 0.0003	03270709
S41078081	± 10		03270705
S41078229	± 19		03270720
S41078082	(± 25,4)	± 0.001	03270710
S41078083	± 30		03270706
S41078331	± 50		03270715
S41078084	(± 76,2)	± 0.003	03270711
S41078228	± 100		03270701
S41078230	± 190		03270717
S41078086	(± 254)	± 0.01	03270712
S41078087	± 300		03270707
S41078332	± 500		03270716
S41078088	(± 762)	± 0.03	03270713
S41078751	± 1000		03270702
S41078752	± 1900		03270719

Calibration Probes

Also called «Dummy Probes», these probes serve as resistance dividers producing a given length dimension, electrically simulated with high accuracy.

The whole system provides both positive and negative values. All those given in the table are matching nominal values. These products, which have been adequately calibrated, come with an inspection report that shows the values (actual values) as measured during calibration with related uncertainty of measurement.

Their connection to the instrument replaces that of a regular probe. Calibration and setting operations, if needed, are subject to a number of criteria that must be respected. For a further information with regard to this, refer to the instruction manual or ask for our specialists.

	μm	μm	μm
<i>Set of 3 calibrating standards</i>			
S41078227	± 3	± 30	± 300
S41077249	± 0	± 100	± 1000
S41000429	± 30	± 300	± 1000
<i>Set for calibrating TESATRONIC</i>			
S41078654	± 190	± 1900	
S41078612	Cable for analogue output		

