



TWIN-T10

PORTABLE DISPLAY FOR INDUCTIVE PROBE

COMPACT AND HEAVY-DUTY INSTRUMENT DESIGNED FOR THE SHOP-FLOOR

TWIN-T10 autonomy offers great operating comfort in shop-floor: no daily recharge of the battery or no worry about the remaining autonomy.

TWIN-T10 has been carefully designed for best efficiency with unequivocal reading and for ease of operation. The size of the keys along with its clear tactile feedback prevents operating errors.

The high-quality elastomer overmoulding with a soft-touch finish makes the instrument wear-resistant and comfortable to hold. Maximal protection against dust and particles in production and assembly environment is ensured thanks to its IP63 rating.



UNIQUE FEATURES:

- UNEQUIVOCAL READING
- EXCEPTIONAL OPERATING AUTONOMY
- MAX, MIN, MAX-MIN, TOL FUNCTIONS
- DETAILED SEGMENTATION OF THE SCALE





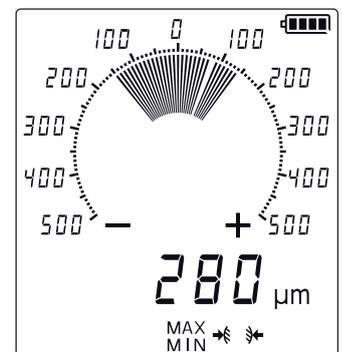
Squareness verification against a squareness reference marble

The large high-contrast display and the shape of the analogue scale have been specifically designed to visualize easily slight variations in form or to detect turnaround point.

TWIN-T10 is particularly suitable for straightness, run-out, form or geometry evaluation during fine adjustment, alignment or fitting of mechanical parts.

Application examples:

- Squareness adjustment of the Z-axis of a machine
- Alignment of guide rail to the marble bench
- Centering of a part on machine-tool
- Measurement of parallelism and perpendicularity



SPECIAL ANALOGUE SCALE

TWIN-T10 has been designed to provide effortless reading thanks to the detailed segmentation and the numbering across the scale. The 200 segments available along with its hemispherical shape enable a sensitive visualization during geometrical measurement such as straightness, run-out or parallelism.

ZOOM MODE

The zoom mode positions the measured value in the middle of the analogue scale and amplifies the value of the scale division by 5-fold. Therefore subsequent light variations around this value become obvious, which is very convenient for mechanical fine adjustment applications.

REMOTE CONTROL

With TLC-USB cable connected, TWIN-T10 can be operated remotely from a computer. Bidirectional communication allows data to be sent from the instrument to the computer or to send ASCII commands from the computer to the TWIN-T10. A foot switch can also be connected to the jack connector of TWIN-T10.

EXCEPTIONAL AUTONOMY

The very low-energy consumption of the TWIN-T10 enables an exceptional operational autonomy of up to 400 hours. The instrument automatically turns off after 10 minutes when not in use.

-  340 – 400 h
-  IP63
-  TOL
-  MIN, MAX, MAX-MIN
-  Zeroing

TECHNICAL DATA

TESATRONIC TWIN-T10	
Order number	04430013
Function	Display for TESA Inductive Probe
Number of probe entry	1
Display scales	$\pm 5, \pm 2 \text{ mm}$ $\pm 250 \pm 100 \text{ in}/1000$
	$\pm 500, \pm 200 \mu\text{m}$ $\pm 25 \pm 10 \text{ in}/1000$
	$\pm 50, \pm 20 \mu\text{m}$ $\pm 2.5 \pm 1.0 \text{ in}/1000$
	$\pm 5 \mu\text{m}$ $\pm 0.25 \text{ in}/1000$
	Auto Range Auto Range
Resolution	1 0,1 μm 0.010 0.005 in/1000
Functions	Zeroing (Offset) +A, -A
	MAX, MIN or MAX-MIN memorization value
	Measurement with tolerances
Unit	Metric (mm, μm) or inch (in/1000)
Autonomy	340 – 400 hours
IP rating	IP63
Deviation span of indication *	$\leq 1 \%$ of the measuring scale
Drift of zero point on the full measuring range *	$\leq \pm 0,005 \%$ / °C
Response time	$\leq 100 \text{ ms}$
Frequency limit	10 Hz (relative to the input signal)
Oscillator frequency	13 kHz
Digital output	RS232 through TLC connector
Data format	7 bits ASCII code
Power supply	4x AA LR6 batteries
Assigned operating T°C	+ 20 °C ± 1
Operating T°C range	+10 to +40 °C
Storage T°C range	-10 to +60 °C
EMC compatibility	according to 2004/108/EC according to EN 61326-1 annex A
Others:	
RoHS 2	according to 2011/65/EU
REACH	according to EC 1907/2006
WEEE	according to 2002/96/EC
Dimensions	170 x 100 x 38 mm
Weight	410 g / 500 g
Delivery contents	TWIN-T10, user manual, 4x AA batteries

* at 20 °C, RH $\leq 50 \%$



- 1 Analogue display
- 2 Probe and external command connectors
- 3 TLC connector for data transfer
- 4 Battery level
- 5 Send data
- 6 Metric or imperial unit
- 7 Auto range mode of the display scale
- 8 External or internal measurement
- 9 «MAX», «MIN», «MAX - MIN» memory
- 10 Measure with tolerance
- 11 Locked keypad
- 12 Calibration (CAL + ∇) or auto-calibration (CAL)



Overall Dimensions

OPTIONAL ACCESSORIES

03210802	GT 31 lever probe
04768000	Hand switch 1,8 m
04768001	Foot switch 1,8 m
04760181	TLC-USB data cable 2 m
04760182	TLC-DIGIMATIC data cable 2 m
04760180	TLC-TWIN wireless transceiver
05030012	TWIN-STATION receiver Connection to PC via a USB port Powered through USB port USB cable included
04981001	DATA-DIRECT Software Software for data acquisition, data export as .csv-files With USB dongle
04981002	STAT-EXPRESS Software Software for creating measuring protocols, real-time control charts X-R, statistics, measuring reports With USB dongle
01460008	Back support with centered lug
01460009	Back support with off-centered lug
S41078751	±1000 µm dummy probe for calibration
S41078752	±1900 µm dummy probe for calibration



GT 31 lever probe



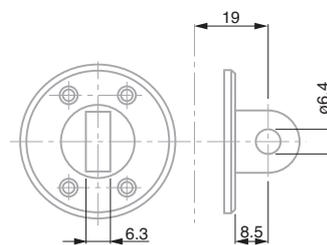
TLC-USB cable



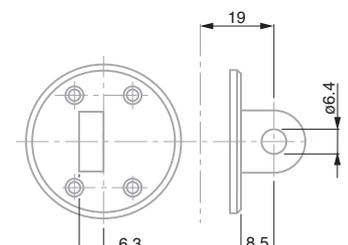
±1900 µm dummy probe



Foot switch



Centered lug back support



Off-centered lug back support



TWIN-T10 with back support



TWIN-T10 with hand switch

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About TESA

For 75 years, TESA has distinguished itself in the market through its excellent products, its unique expertise in micromechanics and precision machining as well as its proven experience in dimensional metrology.

The TESA brand is the global market leader in the field of height gauges and a pioneer thanks to its wide range of instruments, including callipers, micrometers, dial gauges, lever-type dial test indicators and inductive probes. TESA is a true benchmark for the inspection of incoming goods, as well as for production workshops and quality assurance laboratories.

About Hexagon Manufacturing Intelligence

Hexagon Manufacturing Intelligence helps industrial manufacturers develop the disruptive technologies of today and the life-changing products of tomorrow. As a leading metrology and manufacturing solution specialist, our expertise in sensing, thinking and acting – the collection, analysis and active use of measurement data – gives our customers the confidence to increase production speed and accelerate productivity while enhancing product quality.