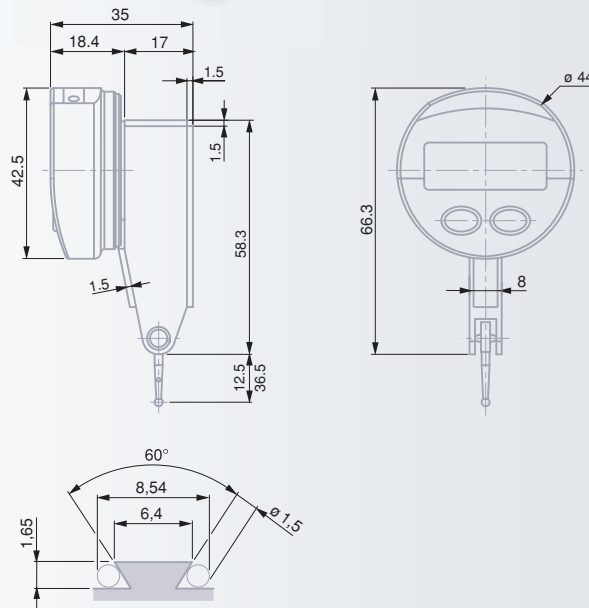


# TESA IP65 Electronic Dial Test Indicators

Provide the advantages of mechanics combined with electronics – All in one.



- Inductive measuring system, patented.
- Analogue and numerical indication.
- Numerical interval to 0,01/0,001 mm.
- Selectable scale division: 10, 20, 50  $\mu\text{m}/1, 2, 5 \mu\text{m}$ .
- Water and coolant resistant (IP65).
- Metric/inch conversion.
- RS 232 data output combined with external power supply.
- Displayed measuring modes (NOR/MIN/MAX/MAX-MIN).
- Automatic shut-down.
- Compatible with all TESATAST accessories.



No	mm	in	mm	Insert mm	N ( $\pm 15\%$ )
01830001	0,01/0,001	0.0005/0.00005	0,8	12,5	0,13
01830002	0,01/0,001	0.0005/0.00005	0,5	36,5	0,07

### Accessories

01961000	3V lithium battery, 190 mAh, type CR 2032
04761060	RS 232 connecting cable with external power supply

Compatible with TESATAST measuring inserts and accessories

- ✓
- LCD, 5 digits + sign
- Digit height 6 mm
- Resolution to 0,01/0,001 mm; .0005/.00005 in
- Zero-setting
- Max. perm. errors:  
 $f_s = 10 \mu\text{m}$   
 $f_{ps} = 13 \mu\text{m}$   
Pre-span = 0,05 mm
- Repeatability:  
 $f_r = 1 \mu\text{m}$
- Hysteresis:  
 $f_h = 3 \mu\text{m}$
- L = 12,5 mm; max. 0,05 m/s  
L = 36,5 mm; max. 0,15 m/s
- Number of measurements per second: 9
- Operating temperature range: +5°C to +40°C
- 3 V lithium battery, type CR 2032
- > 4000 hours
- RS 232
- 73 g (L = 12,5 mm)  
75 g (L = 36,5 mm)
- EN 61326-1
- Degree of protection IP65 (IEC 529)
- Supplied in a plastic case along with:  
1 Insert with a 2 mm dia. (No. 01860202)  
1 Wrench (No. 01860307)  
1 Mounting rod with a 8 mm dia. (No. 01840105)
- Identification number
- Declaration of conformity



DIN 2270  
NF E 11-053

## TESATAST Dial Test Indicators

These lever-type dial test indicators are especially intended for use on the shop floor or in the inspection room – Ideally suited for comparative measurements on a surface plate, for instance – Determine form, shape and position deviations as well as axial and runout errors.

- Bidirectional measuring with automatic reversal inside the movement.
- Continuous clockwise pointer rotation providing error-free reading.
- Insensitive to magnetic fields.
- Jewelled movement with 7 rubies.
- Ball-bearing lever system with measuring insert swivelling through to 240°.
- Very low measuring force.
- Full-metal construction giving exceptional robustness.
- Monobloc housing with 3 countersunk dovetail attachments.

### Standard Models

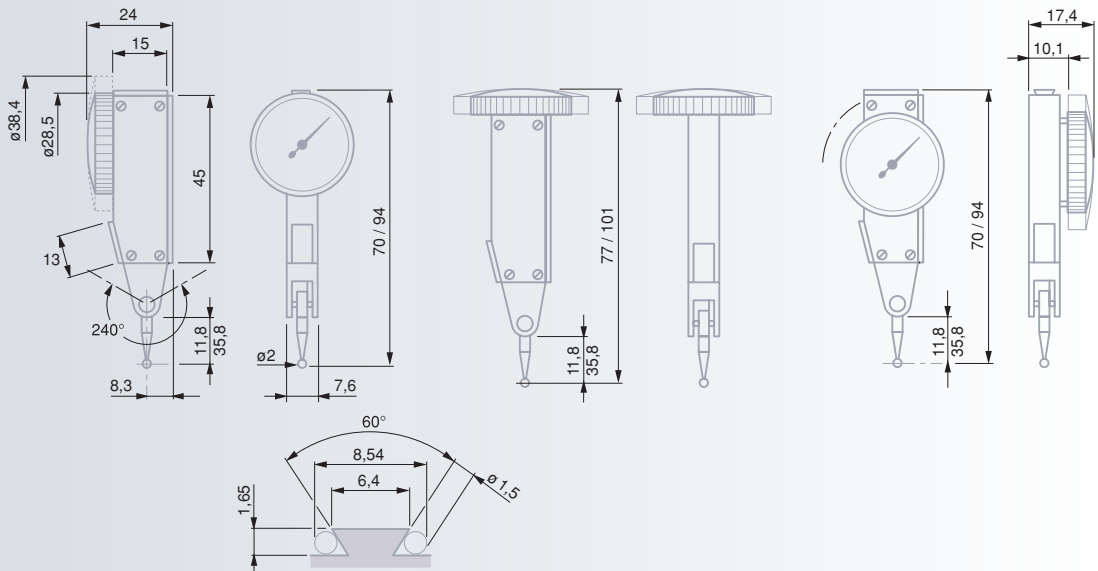
Well-proven dial test indicators with dial face mounted parallel to insert's axis.

### Perpendicular Models

Dial test indicators with dial face mounted at right angle to insert's axis.

### Lateral Models

Dial test indicators with dial face mounted parallel to insert's axis, but on the flat side of the dial housing.



### Permissible limits of a metrological characteristic (MPE/MPL)

			0,02 mm	0,01 mm	0,002 mm
	Deviation span, $f_e$		27 $\mu\text{m}$	10 $\mu\text{m}$	2 $\mu\text{m}$
	Deviation span within the local measuring span, $f_l$	0,20 mm	12 $\mu\text{m}$	5 $\mu\text{m}$	
		0,10 mm			1 $\mu\text{m}$
		0,02 mm			
Total deviation span, $f_{ges}$		31 $\mu\text{m}$	13 $\mu\text{m}$	3,5 $\mu\text{m}$	
	Repeatability limit, $f_w$		4 $\mu\text{m}$	3 $\mu\text{m}$	1 $\mu\text{m}$
	Max. hysteresis, $f_h$	4 $\mu\text{m}$	3 $\mu\text{m}$	1,5 $\mu\text{m}$	
	Measuring force with insert lengths	12,53 mm		0,15 N	0,15 N
		36,53 mm	0,06 N	0,06 N	

