



TESA MICRO-HITE Plus M 350 / 600 / 900

All TESA MICRO-HITE plus M height gauges are unique in that they have exceptional metrological capabilities and can be used intuitively with ease.

This method allows form and position error to be easily and quickly detected by means of a lever-type dial indicator – Check deviations from straightness or parallelism according to ISO 1101 when used in conjunction with TESA IG-13 linked to the Power panel plus M.

- Modular design descending from the successful TESA MICRO-HITE dynasty.
- Also equipped with the unique rotary power control located close to the rugged base. This feature serves for guiding the column that moves on an air cushion, commanding fast motion of the probe insert and triggering all main measuring functions. Its intuitive use allows accurate, easy handling of the column. A simple rotation causes the measuring head to move rapidly, approach the contact point quickly or slowly, probe up- or downward or execute bore measurement.
- Available in three different sizes with a measuring span of 365, 615 or 920 mm.
- Choice between two control panels for value processing and output.
- Metric and inch LC display with a resolution to 0,0001 and 0,001 mm, or inch equivalent.
- Autonomous run through batteries. No cumbersome cable.
- Built-in air bearing for easy displacement over the surface plate.
- Motorised measuring head for fast, accurate probing at each contact point with a constant measuring force.
- TESA μ system for matchless reliability and simplicity.
- High precision through CAA (Computer Aided Accuracy). All correction values stored in the memory still add to the mechanical precision.
- Coefficient of linear expansion matching that of steel ($11,5 \times 10^{-6} \text{ K}^{-1}$).
- RS232 data output.
- SCS calibration certificate delivered with every height gauge.

- Factory standard
- Incremental glass scale with opto-electronic data acquisition. Grating period: 20 μm . Opto-electronic input (TESA Patent)
- 1 N
- Built-in air-bearing for easy move of the column over the surface plate
- Measuring head mounted on a ball-bearing. Motorised head displacement at a varying speed from 7,5 up to 40 mm/s. Manual displacement: $\leq 600 \text{ mm/s}$. Automatic value capture with a constant measuring force.
- Rechargeable 6 V, 3,0 Ah or network adapter 100 \div 240 Vac/50 \div 60 Hz
- $\approx 12 \text{ h}$ after 8 h of charging
- Fixed zero



TESA μ System



Perpendicularity using TESA IG-13



Perpendicularity using TESATAST



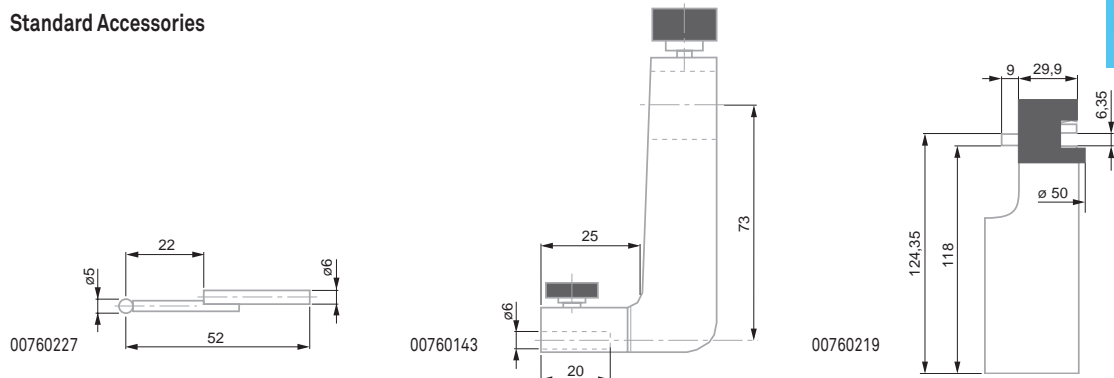
- Linear expansion
11,5 x 10⁻⁶ K⁻¹
- IP40 (CEI 60529)
- Net weight without desks or block batteries. Basic instrument 350: 33 kg, 600: 38 kg, 900: 45 kg
- Calibration certificate SCS

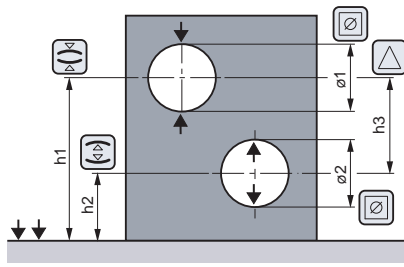
| No | = | | | |
|----------------------------|--|------------|------------|------------|
| | | mm | in | |
| 00730063 | Set MICRO-HITE plus M 350 | 365 | 14 | |
| 00730064 | Set MICRO-HITE plus M 600 | 615 | 24 | |
| 00730065 | Set MICRO-HITE plus M 900 | 920 | 36 | |
| CONSISTING OF: | | 350 | 600 | 900 |
| 00760141 | Rechargeable battery pack | ● | ● | ● |
| 00760142 | Electric pump for creating the air-cushion beneath the gauge base, already mounted | ● | ● | ● |
| 00760143 | Standard probe insert holder | ● | ● | ● |
| 00760219 | Master piece for establishing the probe constant, nominal dimension to 6,350 mm / 0.250 in | ● | ● | ● |
| 00760151 | Dust cover for TESA MICRO-HITE 350 | ● | | |
| 00760152 | Dust cover for TESA MICRO-HITE 600 | | ● | |
| 00760153 | Dust cover for TESA MICRO-HITE 900 | | | ● |
| 00760227 | Standard probe insert with shank and 5 mm dia. ball tip in tungsten carbide | ● | ● | ● |
| 04761054 | Mains adapter 100 ÷ 200 VAC / 50 ÷ 60 Hz | ● | ● | ● |
| 04761055 | Cable EU for mains adapter | ● | ● | ● |
| 04761056 | Cable US for mains adapter | ● | ● | ● |
| OPTIONAL ACCESSORY: | | | | |
| 00760157 | Rechargeable battery, 6V | | | |

Technical data

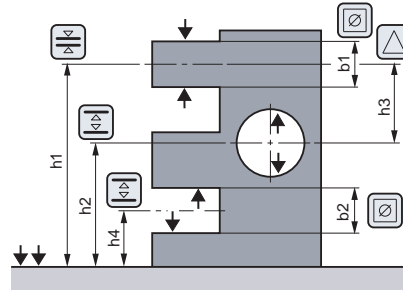
| | Models | MICRO-HITE plus M 350 | MICRO-HITE plus M 600 | MICRO-HITE plus M 900 | |
|--|--|-----------------------|---|-----------------------|--------------------|
| | | mm in | 365 14 | 615 24 | 920 36 |
| | With standard accessory | mm in | 0 ÷ 520 0 ÷ 20 | 0 ÷ 770 0 ÷ 30 | 0 ÷ 1075 0 ÷ 42 |
| | With probe insert holder No. 00760057 | mm in | 0 ÷ 575 0 ÷ 22 | 0 ÷ 825 0 ÷ 32 | 0 ÷ 1130 0 ÷ 44 |
| | With probe insert holder No. S07001622 | mm in | 0 ÷ 745 0 ÷ 29 | 0 ÷ 995 0 ÷ 39 | 0 ÷ 1300 0 ÷ 51 |
| | With standard accessory | | (1,9 + 1,5 L) µm (L in m) (0.0001 + 0.0000015 L) in (L in in) | | |
| | With standard accessory | | On flat surfaces: 2σ ≤ 0,5 µm / ≤ 0.000025 in Into bores: 2σ ≤ 1 µm / ≤ 0.00005 in | | |
| | Frontal, mechanical | µm | 5 | 7 | 9 |
| | Frontal and lateral using TESA IG-13 | in | 0,00020 | 0,00028 | 0,00035 |

Standard Accessories

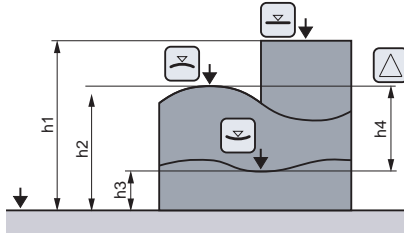




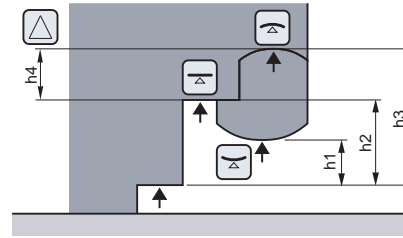
Measurement with change of the probe direction
Probe constant included, considering the culmination point



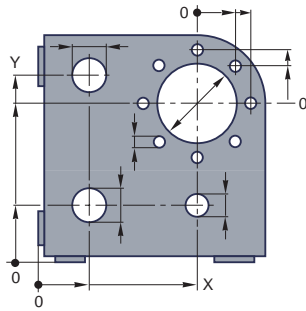
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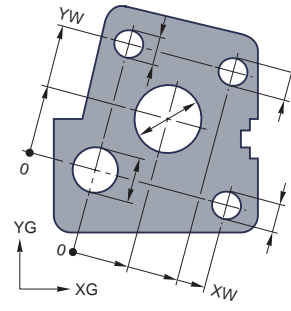
Measurement without change of the probe direction
Probe constant excluded



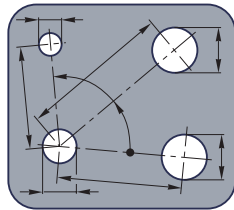
Measurement without change of the probe direction
Probe constant excluded



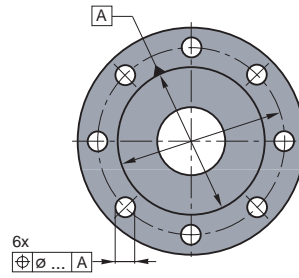
Two-Dimensional Measurement



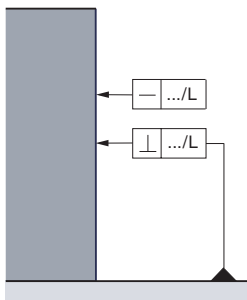
Two-Dimensional Measurement



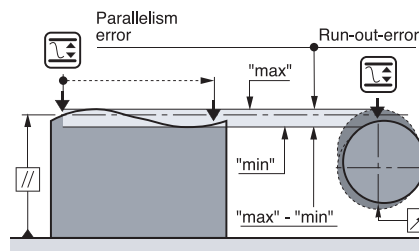
Two-Dimensional Measurement



Two-Dimensional Measurement



Measurement of form and position errors



Measurement of form and position errors



12,7 x 6,4 mm main display, 6,3 x 4,2 or 3,8 x 2,9 mm auxiliary display

mm/in conversion

Via TESA MICRO-HITE plus M

IP50 (IEC 60529)

Bidirectional RS232, optoelectronic and Centronics

LC dual display, 128 x 63 mm in size.

- Length measurement: 7-segment/digit upper display field for values plus symbols for the functions.
- Straightness or perpendicularity measurement: display field for values plus symbols (function keys). Operator controlled operations (full dot display).
- Measured values: 7-decade display plus minus sign.

PRESET function for entering a given value. Acoustic signal. Manual or automatic triggering of data transfer. Output of predefined reports with headers in 5 languages (plus a programmable one) using an external printer unit (A4 format).

Control Panels for TESA MICRO-HITE Plus M 350 / 600 / 900



| 00760220 | Power Panel for MICRO-HITE plus M with printer | 0,0001 / 0,001 / 0,01 | 0.00001 / 0.0001 / 0.001 |
|------------------------------|--|-----------------------|--------------------------|
| 00760221 | Power Panel for MICRO-HITE plus M | 0,0001 / 0,001 / 0,01 | 0.00001 / 0.0001 / 0.001 |
| OPTIONAL ACCESSORIES: | | | |
| 04765008 | Thermal paper, 57 mm wide | | |
| 04761052 | Extension cable, Sub-D 9p/f to 9p/m, 2 m | | |
| 04761063 | Sub-D 9p/m to USB cable, 2 m | | |

