



TC51 Touch Probe



Workpiece Measurement



Infrared Transmission



Bidirectional



Wear-Free Measuring Mechanism



Mass Production



Axes Compensation



Pulling Measurement

Touch Probe **TC51**

BLUM
focus on productivity



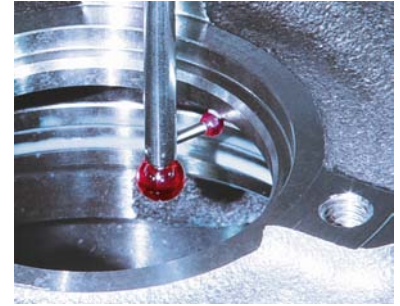
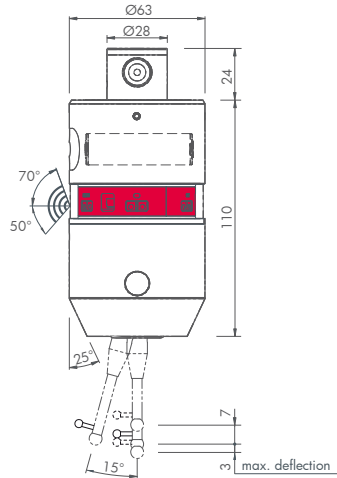
TC51 | Touch Probe | Tactile workpiece measuring system with infrared transmission

Unique – high dynamic touch probe for fast pulling measurements

- Mass production
- Measuring tasks requiring superior precision
- Extremely fast measurements
- Thermal compensation of the machine tool
- Pulling measurement of grooves, recesses and outside width
- Spindle orientation is required

Your benefit:

- Measuring speed up to 5 m/min
- Highest acceleration
- Superior precision
- No-wear, optoelectronic measuring mechanism
- Highest process reliability
- Use of two measuring systems with one IR receiver
- Extended battery life
- Precise measurement even with coolant
- Proven and robust design



TC51 – Pulling measurement



TC51 – extremely fast and precise

DUO-Mode

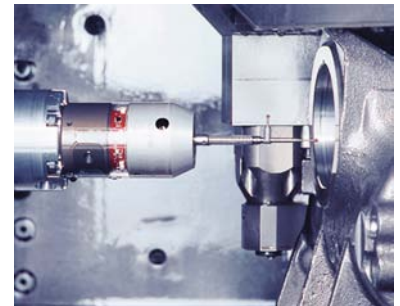
Sequential use of two measuring systems with one infrared receiver.



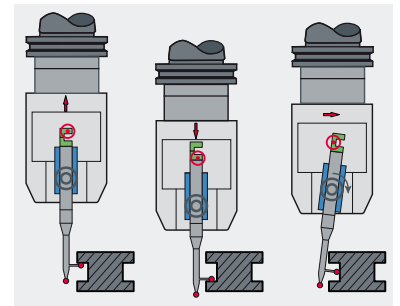
Technical data

| | |
|-------------------------------|--|
| Protection class | IP68 |
| Approach directions | XY*, ±Z |
| Measuring force in XY Z | 1,5 N** 4 N |
| Max. deflection XY +Z / -Z | 15°* 3 mm / 7 mm |
| Trigger point XY | 0,5 mm / 0,8 mm / 1,2 mm / 1,5 mm *** |
| Trigger point Z | 0,8 mm |
| Max. acceleration | 100 m/s ² |
| Repeatability | 0,3 µm 2σ |
| Max. probing speed | 5 m/min |
| Mass | 920 g |
| Signal transmission Range | Infrared ±60° in Z, 360° in X/Y |
| Battery (2 pieces) | Saft Lithium LS 14500 (AA, 3,6 V) 2600 mAh |
| Tool holder | BTH 50 (HSK, SK, BT, VDI, ...) |
| Storage/Operating temperature | -20 °C ... +70 °C +5 °C ... +50 °C |

* Via spindle orientation ** Stylus L= 50 mm
*** Stylus L= 50 mm / 100 mm / 150 mm / 200 mm



TC51 – ideal for mass production



Modern and precise measuring mechanism with optoelectronic signal generation

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