



## TC54-10 Touch Probe



Workpiece Measurement



Tool Measurement



Infrared Transmission



shark360 Technology



Wear-free Measuring Mechanism



Single & Mass Production



Axes Compensation



Pulling Measurement



Tool Length Measurement



Tool Radius Measurement



Tool Breakage Detection

# Touch Probe TC54-10

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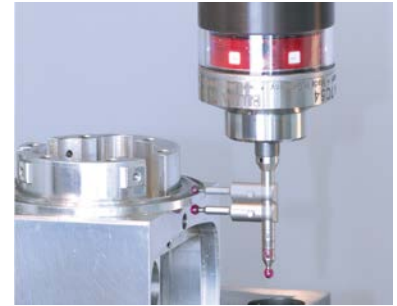
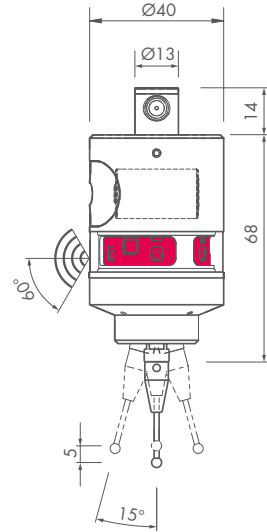
# TC54-10 | Touch Probe | Tactile workpiece & tool measuring system with infrared transmission

## Compact touch probe with revolutionary shark360 measuring mechanism

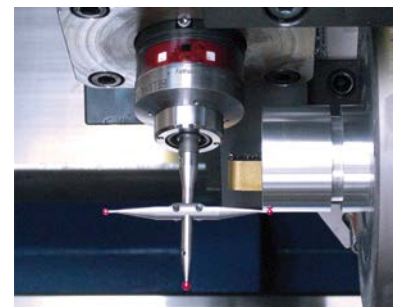
- Workpiece measurement and tool setting in turning and milling machines
- Application in turret
- Pulling measurements

### Your benefit:

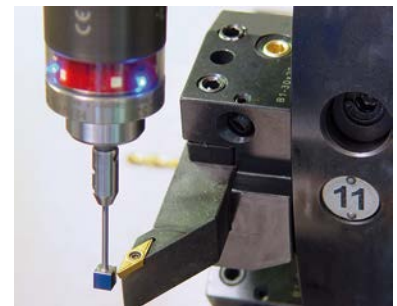
- Measuring speed up to 2 m/min
- Superior precision due to patented **shark360** measuring mechanism
- No-wear, optoelectronic measuring mechanism
- Use of two measuring systems with one IR receiver
- Extended battery life
- Shortened design
- Precise measurement even with coolant
- Proven and robust design



Pulling and pushing measurement



Workpiece measurement in turning machine



Tool measurement in turning machine

### DUO-Mode

Sequential use of two measuring systems with one infrared receiver.



### Technical data

Protection class	IP68
Approach direction	$\pm X, \pm Y, \pm Z$
Measuring force in XY   Z	1.3 N/0.9 N/0.7 N/0.5 N *   5.9 N
Measuring force (LF) in XY   Z	0.4 N/0.3 N/0.2 N/0.17 N *   2.0 N
Max. deflection in XY   Z	$\pm 15^\circ$   5 mm
Max. probing speed	2 m/min
Repeatability	0.4 $\mu\text{m}$ $2\sigma$
Max. acceleration	50 m/s <sup>2</sup>
Mass	230 g
Signal transmission   Range	Infrared   $\pm 60^\circ$ in Z, $360^\circ$ in XY
Battery (2 pieces)	Saft Lithium LS14250 , (1/2 AA, 3.6 V) 1200 mAh
Tool holder	BTH 25 (HSK, SK, BT, VDI, ...)

\* Stylus L = 30 mm/50 mm/75 mm/100 mm    LF: Low Force



shark360 measuring mechanism



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