



TC76-DIGILOG Touch Probe



Workpiece Measurement



Hardwired



shark360 DIGILOG



Wear-Free Measuring Mechanism



Modular System



Workpiece Inspection



ContourScan



Single & Mass Production

Touch Probe **TC76-DIGILOG**

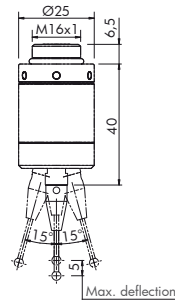
BLUM
focus on productivity



TC76-DIGILOG | Touch probe | Tactile measuring system with cable connection

Digilog touch probe with revolutionary shark360 measuring mechanism

- DIGILOG = high-precision digital measurement (in switch mode) and cyberspeed scans in analogue mode.
- Detection of machining errors by scanning process
- Workpiece measurement in grinding, turning & milling machines
- Outputs for 24V trigger signal and 0 - 10V analogue voltage

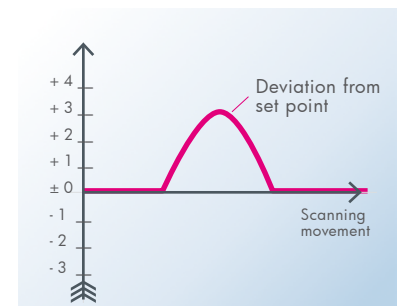
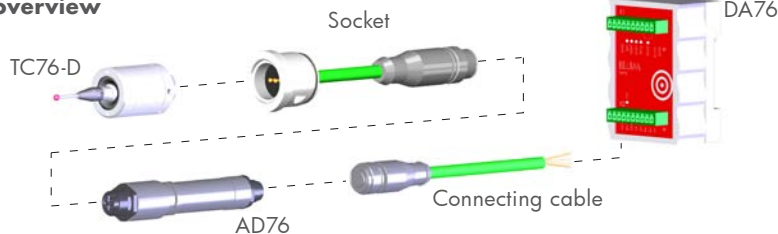


Scanning procedure for checking of workpiece surface

Your benefit:

- Extremely fast measurements (analogue & digital)
- Superior precision due to patented **shark360** measuring mechanism
- Precise, non-lobing touch characteristics
- No-wear, optoelectronic measuring mechanism

System overview



Result: Detection of machining error

Measuring resolution (TC76-D + AD76 + DA76)

Stylus [mm]	30	50	75	100
Analog stroke [μm]	475	675	925	1175
Resolution [$\text{mV}/\mu\text{m}$]	12,6	8,8	6,4	5,0
Converter resolution [$\mu\text{m}/\text{Digit}$]	0,193	0,275	0,376	0,478
Sampling rate	50 kHz / 20 μs			

Technical data

Protection class	IP68
Approach direction	$\pm X, \pm Y, \pm Z$
Measuring force in XY (Standard)	1,3 N / 0,9 N / 0,7 N / 0,5 N*
Measuring force in XY (Low Force)	0,4 N / 0,3 N / 0,2 N / 0,17 N*
Measuring force in Z (Standard) / (Low Force)	5,9 N / 2,0 N
Max. deflection XY Z	$\pm 15^\circ$ 5 mm
Repeatability	0,4 μm 2 σ
Max. probing speed	2 m/min
Mass	80 g

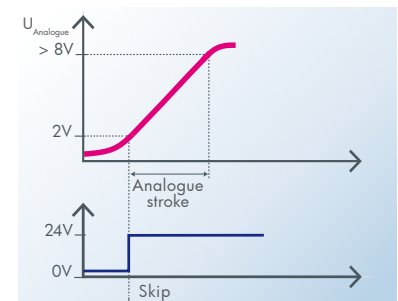
Storage temperature / operating temperature -20 °C ... +50 °C / +5 °C ... 50 °C

* Stylus L= 30 mm / 50 mm / 75 mm / 100 mm



shark360

shark360 measuring mechanism



Output signals DA76
(Trigger point / Analogue stroke)

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