



## Z-Nano IR Tool Setting Probe



Tool Measurement



Infrared Transmission



Linear Working Principle



Wear-free Measuring Mechanism



Tool Breakage Detection



Tool Length Measurement



Axes Compensation



# Tool Setting Probe Z-Nano IR

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# Z-Nano IR | Tool Setting Probe | Tactile tool setting system with infrared transmission

## Extremely precise infrared probe – flexible tool setting probe with linear working principle for monitoring of smallest tools

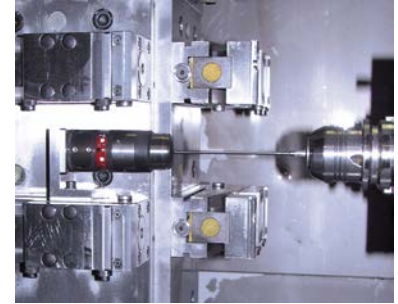
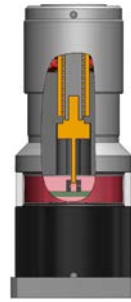
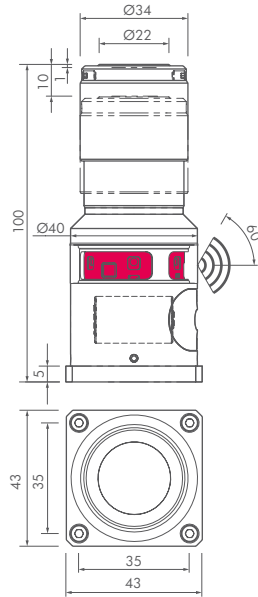
- Tool breakage detection
- Tool length measurement
- Axes compensation
- Solution for machines with pallet changer

### Your benefit:

- Extremely fast tool breakage detection
- No subsequent damage due to tool breakage
- Fast ROI
- No-wear, optoelectronic measuring mechanism
- Compact and robust design

### Linear working principle

Due to the linear working principle the probe provides a minimal and torque-free measuring force. Even the most sensitive and smallest tool diameters can be measured extremely precise.



Fast tool breakage detection on horizontal machining centre with pallet changer



Z-Nano IR and TC54-10 in DUO-Mode



Many accessories available: chip protection, cleaning nozzle and mounting system, etc.



Exchangeable measuring surface

### Technical data

Protection class	IP68
Approach direction	-Z
Meas. force vertical mounting *	2.2 N   with chip protection: 2.4 N
Meas. force horizontal mounting *	3.0 N   with chip protection: 3.2 N
Max. stroke	10 mm
Trigger point *	1 mm
Repeatability	0.5 µm 2σ
Max. probing speed	2 m/min
Min. tool diameter **	> 0.1 mm/with chip protection: 0.2 mm
Signal transmission   Range	Infrared   ±60° in Z, 360° in X/Y
Mass	290 g
Battery (2 pieces)	Soft Lithium LS14250 (½ AA, 3.6 V) 1200 mAh

\* Measuring force with chip protection & additional spring: see data sheet

\*\* Depending on geometry and material of tool. Probing force must not result in damage of tool



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