



## Z-Nano Tool Setting Probe



Tool Measurement



Hardwired



Linear Working Principle



Wear-free Measuring Mechanism



Tool Breakage Detection



Tool Length Measurement



Axes Compensation



## Tool Setting Probe Z-Nano

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## Z-Nano | Tool Setting Probe | Tactile tool setting system with cable connection

### Robust and extremely precise – tool setting probe with linear working principle for monitoring the smallest tools

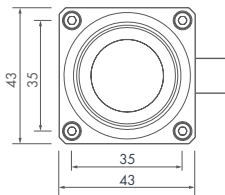
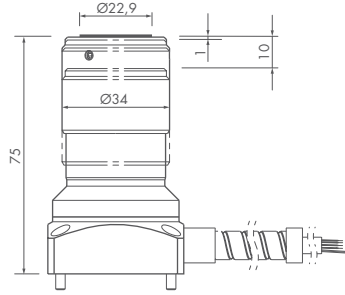
- Tool breakage detection
- Tool length measurement
- Machine axes compensation
- Temperature compensation

### 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.



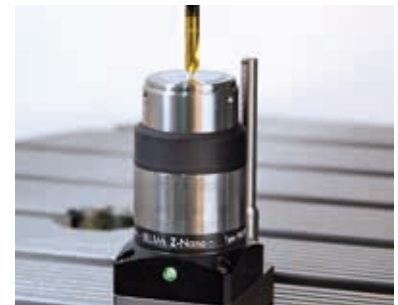
Fast tool breakage detection



Tool length measurement



Exchangeable measuring surface



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

### Technical data

Protection class	IP68
Power supply	U <sub>B</sub> = 12 ... 30 V stabilized direct voltage/100 mA
Outputs	12 ... 30 V/50 mA
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 (standard)   0.2 µm 2σ (HP)
Max. probing speed	2 m/min
Min. tool diameter **	> 0.1 mm/with chip protection: 0.2 mm
Mass	750 g (incl. 10 m cable)

\* 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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