



## 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 of smallest tools

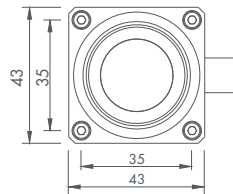
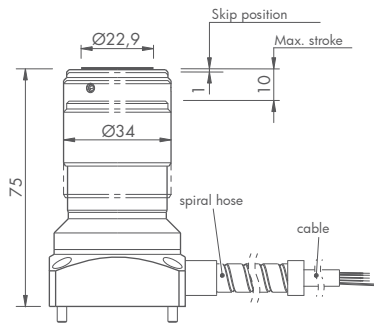
- Tool breakage detection
- Tool length measurement
- Axes compensation
- Temperature compensation

### 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

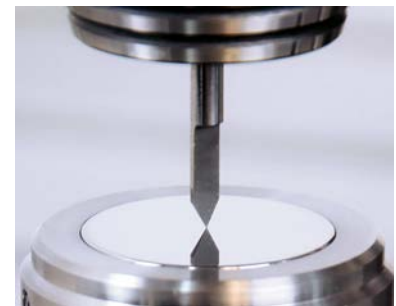
Due to the linear working principle the probe provides a minimal and torque-free measuring force. Even the most sensitive and smallest tool diameters can be measured extremely precise.



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 – 30V stabilized direct voltage / 100 mA
Outputs	12 – 30V / 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)
Storage/Operating temperature	-20 °C ... -70 °C   +10 °C ... +50 °C

\* 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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