



## Z-Nano RC Tool Setting Probe



Tool Measurement



Radio Transmission



Linear Working Principle



Wear-free Measuring Mechanism



Tool Breakage Detection



Tool Length Measurement



Axes Compensation



# Tool Setting Probe Z-Nano RC

**BLUM**  
focus on productivity



# Z-Nano RC | Tool Setting Probe | Tactile tool setting system with BRC radio transmission

## Wireless and extremely precise – flexible RC-tool setting probe with linear working principle for monitoring of smallest tools

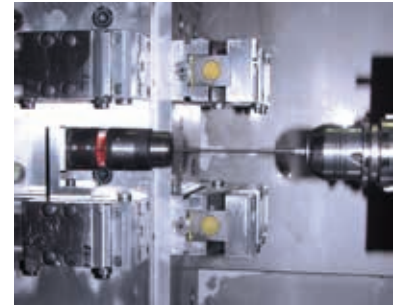
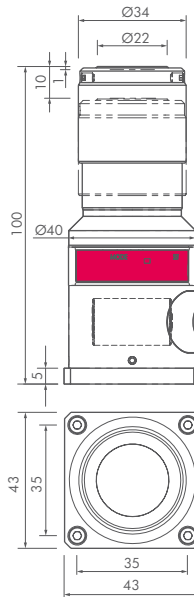
- Tool breakage detection
- Tool length measurement
- Axes compensation
- Solution for machines with pallet changers, where line of sight between probe and receiver is blocked or intermittent

### Your benefit:

- Extremely fast tool breakage detection
- No subsequent damage due to tool breakage
- Fast ROI
- No-wear, optoelectronic measuring mechanism
- Easy pairing procedure between probe and receiver
- Use of up to 6 measuring systems with one receiver
- 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



Sequential use of up to 6 measuring systems with one radio-receiver



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	Radio (BRC Technology)
Frequency band	2.4000 ... 2.4835 GHz
Transmission power   Operating range	0 dBm   15 m
Mass	290 g
Battery (2 pieces)	Saft Lithium LS14250 (1/2 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



### Blum worldwide Service & Support

More than 40 subsidiaries and service offices.

[www.blum-novotest.com](http://www.blum-novotest.com)

### Blum-Novotest Ltd.

Unit 15 Granary Wharf Business Park  
Wetmore Road, Burton upon Trent  
Staffordshire, DE14 1DU  
United Kingdom  
Phone: +44 1283 569691  
Fax: +44 1283 563687  
[info@blum-novotest.co.uk](mailto:info@blum-novotest.co.uk)

### Blum-Novotest, Inc.

4144 Olympic Boulevard  
Erlanger, KY 41018  
USA

Phone: +1 (859) 344 6789  
Fax: +1 (859) 344 6799  
[solutions@blum-novotest.us](mailto:solutions@blum-novotest.us)