




## Tool Measurement

-  Multidirectional
-  Hardwired
-  Infrared Transmission
-  Radio Transmission
-  Tool breakage detection
-  Tool length measurement
-  Tool Radius Measurement
-  Coolant Load
-  Single and Mass Production
-  Wear Compensation
-  Temperature Compensation



## Tool Setting Probes **ZX-Speed Series**

UNIVERSAL 3D TOOL SETTING PROBES

**BLUM**  
focus on productivity



# Tool Setting Probes ZX-Speed Series

## UNIVERSAL 3D TOOL SETTING PROBES

### 3D tool setting probes for precise tool measurement and breakage detection

Versatile and economic – the 3D tool setting probe series comprises universally applicable probes for the measurement of length, radius and tool breakage in the machining centre. The robust probes use a modern, optoelectronic measuring mechanism which is outstanding in its unparalleled precision and longevity.

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

#### Your benefit:

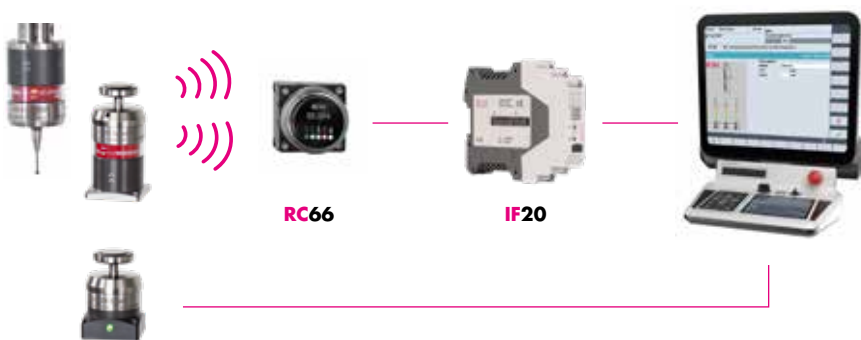
- Reliable measurement with a wide range of tool types and sizes
- Superior precision due to latest measuring mechanism technology
- No secondary damage due to unrecognised tool breakage
- Fast ROI
- No-wear, optoelectronic measuring mechanism
- Compact and robust design

#### Reliable and proven transmission technologies

Tool setting probes from BLUM are available with cable, radio or infrared technology:

- Extremely fast and reliable transmission
- Sequential use of up to 6 radio measuring systems with one receiver
- Sequential use of 2 infrared measuring systems with one receiver (DUO mode)
- Simultaneous use of 2 radio measuring systems on one machine (TWIN-Mode)

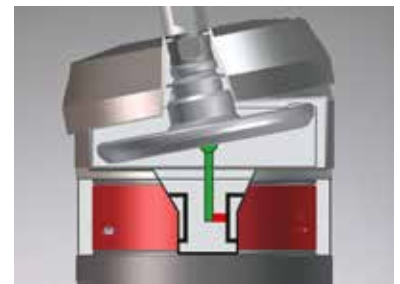
#### System overview



Tool radius measurement



Optional blow nozzles for tool cleaning



Modern and precise measuring mechanism with optoelectronic signal generation

#### Technical data

#### ZX-Speed

#### ZX-Speed IR

#### ZX-Speed RC

Technical data	ZX-Speed	ZX-Speed IR	ZX-Speed RC
Height	63.5 mm	86 mm	86 mm
Transmission type	Cable	Infrared	Radio
Repeatability	0.4 µm 2 σ	0.4 µm 2 σ	0.4 µm 2 σ
Minimum tool Ø	1 mm*	1 mm*	1 mm*

\* Depending on the geometry and material of the tool, probing force must not result in damage of tool