



## Z-3D 3D Tool Setting Probe



### Tool Measurement



Hardwired



Wear-Free Measuring Mechanism



Tool Breakage Detection



Tool Length Measurement



Tool Radius Measurement



Axes Compensation

3D Tool Setting Probe **Z-3D**

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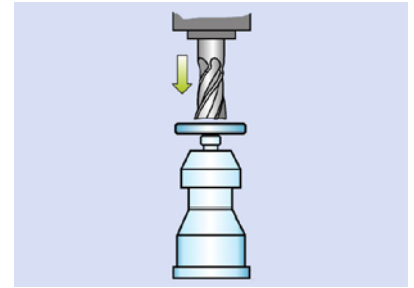
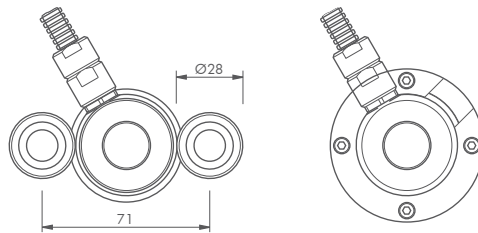
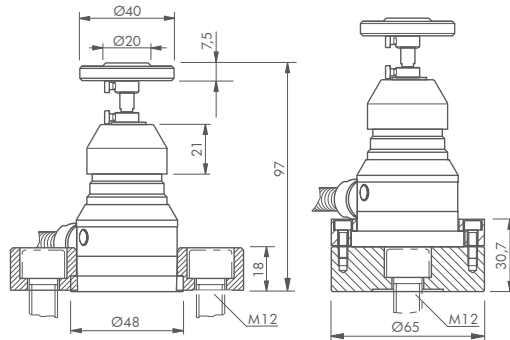
## Z-3D | 3D Tool Setting Probe | Tactile tool setting system with cable connection

### Universal standard system with proven measuring mechanism

- Tool length measurement
- Tool radius measurement
- Tool breakage detection
- Thermal compensation of the machine tool

### Your benefit:

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



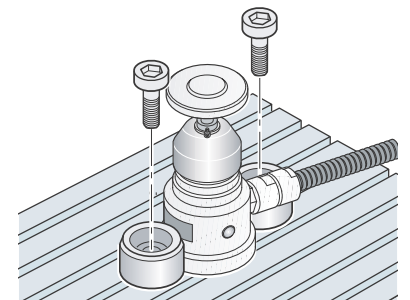
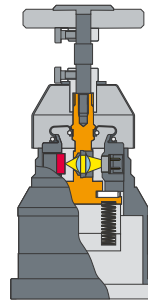
Measurement of tool length



Measurement of tool radius

### Measuring mechanism

The trigger signal is generated through a wear-free optical sensor that ensures high reliability.

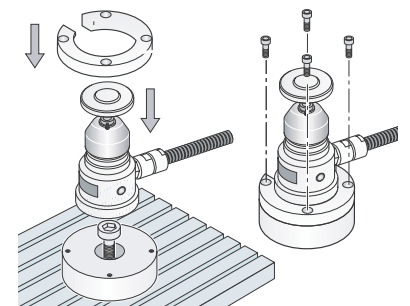


Easy mounting system

### Technical data

Protection class	IP67
Power Supply	$U_B = 10 - 30V / 100 \text{ mA}$
HTL Output $\overline{\text{STAT}}$	$U_H \geq [U_B - 4V] (I_H \leq 20 \text{ mA})$
HTL Output $\overline{\text{STAT}}$	$U_L \leq 2,8V (I_L \leq 20 \text{ mA})$
Repeatability	$1 \mu\text{m } 2\sigma$
Measuring force	axial approx. 8 N, radial approx. 1 N
Max. stroke	5 mm in all directions
Min. tool diameter	3 mm *
Storage/Operating temperature	$-20^\circ\text{C} \dots 70^\circ\text{C} \mid +10^\circ\text{C} \dots 40^\circ\text{C}$

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



Option: Compact mounting system

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