



## Workpiece Measurement



Bidirectional



Infrared Transmission



Radio Transmission



Position Measurement



Measurement of Standard Features



Pulling Measurement



Adaptive Machining



Coolant Load



Mass Production



Wear Compensation



Temperature Compensation



## Touch Probes **TC51** | **TC61**

PULLING AND PUSHING MEASUREMENT

**BLUM**  
focus on productivity



# Touch Probes TC51 | TC61

## PULLING AND PUSHING MEASUREMENT

### Unique – high dynamic touch probes for fast pulling measurements

Perfect for fast machining centres – the touch probes were specifically developed for the requirements of highly productive machines. The unique bidirectional measuring mechanism with optoelectronic signal generation possesses a superior accuracy and permits measuring speeds of up to 5 m/min. The TC51 and the TC61 are the only touch probes worldwide, that allow quick pulling measurements in Z+ repeatedly and without wear.

- Pulling measurement of grooves, recesses and outside width
- Measuring tasks requiring superior precision
- Temperature compensation of the machine tool
- Spindle indexing is required

### Your benefit:

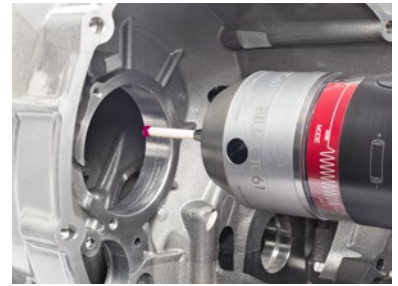
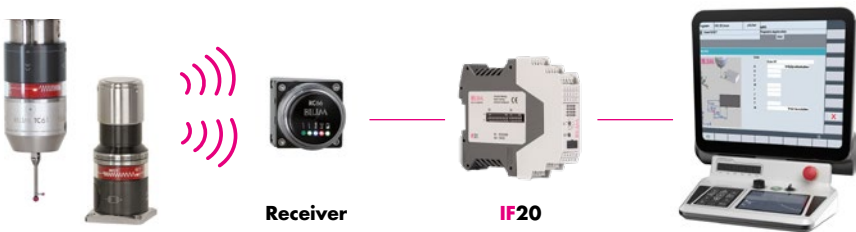
- Measuring speed up to 5 m/min
- Maximum measuring accuracy
- Reliable measurements, even under the influence of coolant
- No-wear, optoelectronic measuring mechanism
- Very long battery life
- Proven and robust design
- Enables unmanned manufacturing

### Reliable and proven transmission technologies

Touch probes from BLUM are available with 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)

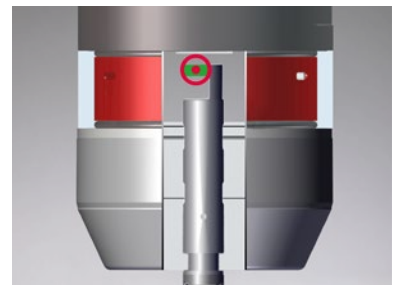
### System overview



TC51, TC61 – extremely fast and precise



Pulling and pushing measurements possible



Modern and precise measuring mechanism with optoelectronic signal generation

### Technical data

#### TC51

#### TC61

	TC51	TC61
Size	Ø 63 mm	Ø 63 mm
Length *	110 mm	110 mm
Transmission type	Infrared	Radio
Max. probing speed	5000 mm/min	5000 mm/min
Repeatability	0.3 µm 2σ	0.3 µm 2σ

\* without stylus and interface for tool holder