

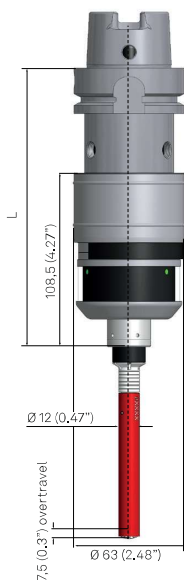
Temperature probing system RWP20.50-TP

Patented part temperature measurement

The Temperature probe measures fully automatically the workpiece temperature both before as well as during machining (patented). This allows the control of production processes and the adaptation of machining parameters during production. Temperature-dependent parameters can be reliably determined before the workpiece goes to the next machining step with tolerance specifications. This way, consistently high production quality is ensured. Detecting longer wave lengths than infrared, the radio wave probe is ideal for use on large machining centres and 5-axis machines.

Reliable determination of temperature-dependent parameters enables greater control of production processes, reducing defects and rework times AFS (Automatic Frequency Select) technology ensure fast and reliable transmission by scanning frequency ranges of the radio band and automatically selecting frequencies free from interfering signals.

- Patented technology delivers fast measurement of part temperature for precise production results
- Unique and patented technology
- Unique Dual Temperature measuring possible for double spindle machines



Technical Data	
Transmission frequency	2400-2483,5 MHz (2,4GHz)
Transmission/reception range	Up to 18m
Power supply	1 x 9 V battery block, 6LR61 Lithium: 1200 mAh, Alkaline: 550 mAh
Material	Stainless steel, POM
Weight without Shank	Approx. 920g
Temperature Range	Storage: 5 °C – 70 °C, Operation: 10 °C – 50 °C
Protection class	IP68: EN60529
Sensing Directions	-Z
Maximum Stylus Overtravel	-6,9 mm
Trigger Force	13N
Recommended Probing Feedrate	500 mm/min
Measuring accuracy	±1°C
Resolution	0,1°C
Maximum Battery Life with Lithium Battery	Operation: 440 h, Standby: 1 year

RWP20.50-G-TP | Measuring unit TP44.10



The modular probing system

The modular RWP20.50 touch probe system is suitable for a wide range of applications. The bidirectional probe serves as the perfect foundation for a measuring system. Various measuring units, different extensions and cross-probes as well as a temperature sensor and ultrasound sensor can simply be screwed in to perform wall thickness measurements.

State-of-the-art

Reliable radio-wave transmission in the 2.4 GHz range

The MDR (Multi Data Rate) technology makes it possible to transmit high data rates and large data sets in the shortest possible time. In AFS (Automatic Frequency Select) technology, the frequency ranges of the radio bandwidth are continuously scanned and partial frequencies free from interference are automatically selected. This technology not only ensures fast and interference-free independent transmission, but also prevents interference from WLAN systems or other radio sources.

Innovative Pairing Varianten

- Pairing via NC control – allows the machine manufacturer to provide an NC program for automatic pairing; the end customer merely has to start the NC program.
- Pairing via serial number and radio signal – entry of the receiver's serial number on the touch probe, radio transmission of the settings to the receiver.
- Pairing via infrared (IR) interface – previous standard

ITE-technology and One-Touch-Strategy

The radio wave probe moves at top speed to the measuring point, so that it can reliably probe at constant measuring speed with only one touch.

Enhanced activation options

In addition to the proven, reliable mechanical activation options, the RWP20.50 also offers the option of bidirectional activation. This is done using separately coded signals and is therefore not inferior to mechanical methods with regard to reliability.

Reliable radio-wave transmission

The RWR95.51 radio-wave receiver communicates with radio-wave touch probes in the 2.4 GHz range and can be easily mounted in the machine room. The receiver supports bidirectional communication for up to 8 probes on the same machine and can, thanks to Dual-Probe technology, process data from 2 probes in simultaneous use, for example on double spindle machines. This way, the number of maximum supported probes can be raised to up to 16 devices. Innovative pairing options making it simple to install new or additional probes and sensors



Determination of the workpiece temperature: Before, during and after machining.



Temperature sensors available in various lengths.



The receiver supports bidirectional communication for up to 8 probes on the same machine. Innovative pairing options making it simple to install new or additional probes and sensors.

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Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

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