



## Industrial Standard Probe

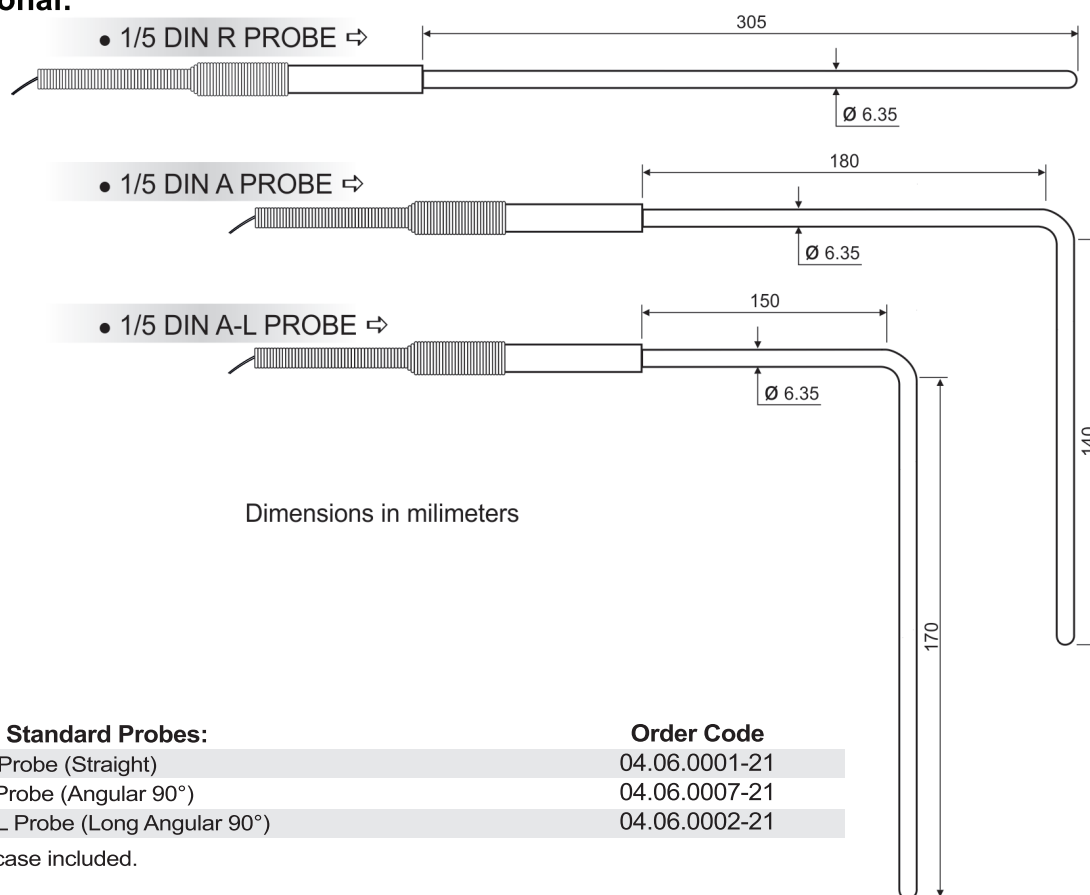
- Range from -200 to 420 °C.
- Long-term drift  $\pm 0.035$  °C.
- Accuracy of  $\pm 0.030$  °C @ 420 °C using ITS-90 parameters and accuracy of  $\pm 0.48$  °C @ 420 °C as 1/5 DIN tolerance.

The Industrial Standard Probes 1/5 DIN-R (straight), 1/5 DIN-A (angular) and 1/5 DIN-A-L (long angular) are built with selected raw materials, have high purity and are handled in a laboratory environment. Use differential bulb of high performance with mineral insulation and sheath, which gives them high vibration resistance and durability at an industrial level, with standard laboratory performing. Due to their high stability they can be used in the non-customized manner as 1/5 DIN standard or custom mode with ITS-90 or Callendar-Van Dusen coefficients, reaching very low uncertainties for long periods of time. In this situation, can be read on a accuracy compatible instrument, such as thermometers ST-501 and PT-511 models or used as reference probe for dry block calibrators.

**Technical Specifications**

<b>Resistance:</b>	100 Ω @ 0 °C (nominal).	
<b>Temperature Resistance Coefficient:</b>	0.00385 Ω / Ω / °C (nominal).	
<b>Usage Range:</b>	-200 to 420 °C maximum handle temperature of 150 °C.	
<b>Sheath material:</b>	Compacted mineral insulation of high purity sheath in 316 stainless steel.	
<b>Mounting:</b>	4 output wires with 22 AWG nickel plated copper.	
<b>Insulation Resistance:</b>	> 100 MΩ @ 50 Vdc @ 23 °C ambient temperature.	
<b>Long-term drift:</b>	± 0.035 °C @ 0 °C after 100 h of continuous use in 420 °C.	
<b>Self-Heating:</b>	50 mW / °C in an ice bath in 0 °C.	
<b>Minimal Immersion:</b>	At least 100 mm.	
<b>Dimensional:</b>	305 mm x Ø 6.35 mm (1/5 DIN-R) 140 mm from the edge to the bend x Ø 6.35 mm (1/5 DIN-A) 170 mm from the edge to the bend x Ø 6.35 mm (1/5 DIN-A-L)	
<b>Typical Accuracy ITS-90 coefficients:</b>	<b>Straight Model</b> ± 0.030 °C @ -38.0 °C. ± 0.020 °C @ 0.0 °C. ± 0.020 °C @ 232.0 °C. ± 0.030 °C @ 420.0 °C.	<b>Angular Models</b> ± 0.030 °C @ -30.0 °C. ± 0.020 °C @ 0.0 °C. ± 0.020 °C @ 180.0 °C.
<b>1/5 DIN Accuracy:</b>	± 0.02 °C @ -38.0 °C. ± 0.06 °C @ 0.0 °C. ± 0.29 °C @ 232.0 °C. ± 0.48 °C @ 420.0 °C.	

**Dimensional:**



**Industrial Standard Probes:**

	<b>Order Code</b>
1/5 DIN R Probe (Straight)	04.06.0001-21
1/5 DIN A Probe (Angular 90°)	04.06.0007-21
1/5 DIN A-L Probe (Long Angular 90°)	04.06.0002-21

\*Carrying case included.