

## Platinum-Resistance-Temperature-Detector: CRKL Series

CRKL style platinum-chip temperature sensors feature especially rigid terminal clamps for the electrical connection. One particular advantage is their high bending strength. Furthermore, the rectangular cross-section of the terminal clamps ensures excellent directional stability of the temperature sensor when assembled. CRKL style platinum-chip temperature sensors lend themselves ideally to a variety of probes for use in the HVAC sector and, since the sensor is openly positioned in the air stream. The entire temperature sensor including the solder joint is additionally coated with epoxy protective varnish, as a protection against condensation and external effects. Of course, all the positive characteristics of platinum-temperature sensors such as standardized nominal values to EN 60 751, high long-term stability and good reproducibility of the electrical properties also apply to this style, thereby ensuring universal usability and interchangeability..

<b>Type</b>	<b>CRKL Series</b>		
<b>Operating temperature range</b>	<b>-30°C ... +105°C</b>		
<b>Temperature validity range DIN EN 60571</b>	1/3B (F 0.1)	-30°C ... +105°C	
	B (F 0.3)	-30°C ... +105°C	
<b>Resistance value</b>	Pt100 Pt1000		
<b>Measuring/maximum current</b>	Pt100: 1 mA ... 1.8 mA Pt1000: 0.1 mA ... 0.5 mA		
<b>Terminal clamps</b>	The raster dimension is 1.9mm. Any kinking or bending of the terminal clamps is not permissible.		
<b>Measuring point</b>	2mm in front of the open wire end		
<b>Temperature coefficient</b>	3850 ppm/K		
<b>Long-term stability</b>	max. R <sub>0</sub> -drift 0,05 %/Jahr		
<b>Horizontal pull force at wires</b>	≤10N		



<b>Available models</b>													
<b>Temperature sensor</b>					<b>Lead wire</b>					<b>Tolerance class</b>			
Type	R <sub>0</sub> /Ω	B	L	H	Material	B1	H1	L1	R <sub>L</sub> in mΩ/mm	1/3B	A	B	2B
CRKL-4005-100	1000	4,5	15,8	1,9	CuSn6	0,55	0,25	7	1,0	•		•	
CRKL-4005-1000	1000	4,5	15,8	1,9	CuSn6	0,55	0,25	7	1,0	•		•	

Dimensional tolerances: ΔB = ± 0.3 / ΔL = ± 0.8 / ΔH = ± 0.3 / ΔD1 = ± 1,6 Dimensions in mm

<b>Self-heating coefficients and response times for CRKL Series</b>						
<b>Type</b>	<b>Self-heating coefficient E in K/mW</b>		<b>Response times in seconds</b>			
	Water (v = 0,2 m/s)	Air (v = 2 m/s)	in Water (v = 0,4 m/s)		in Air (v = 1 m/s)	
			t <sub>0,5</sub>	t <sub>0,9</sub>	t <sub>0,5</sub>	t <sub>0,9</sub>
CRKL-4005-100	0,26	-	0,7	2,4	8,3	20
CRKL-4005-1000	0,26	-	0,7	2,4	8,3	20