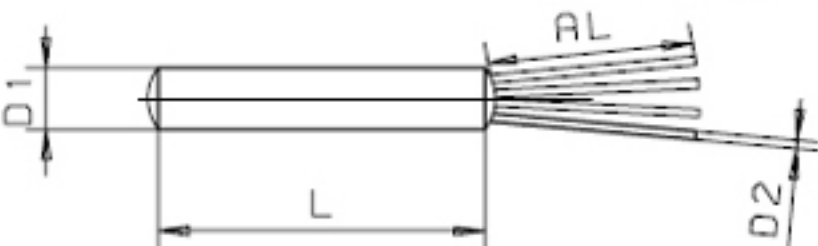


KN series ceramic platinum wire resistance temperature sensor

KN series resistance temperature sensors are suitable for all applications where an extremely high level of temperature stability over +600°C and a high temperature shock resistance are of particular importance. There is only minimal deviation from the IEC 751 characteristic curve. The small diameter tolerances of the sensor body allow easy installation in protective tubes. Applications include the chemical and power generation industries as well as analytical equipment.

Temperature range	-200°C to +600°C
Temperature coefficient	TCR = 3850 ppm/K (TCR 3916 available on request)
Contact	Platinum-gold alloy wire
Ambient conditions	Use unprotected only in dry environments
Insulation resistance	> 10 MΩ at 20°C; >1 MΩ at 500°C
Measuring current	1 mA



Type	KN	Order no.	Nominal resistance Ω at 0 °C	Dimensions in mm				Self heating K/mW at 0 °C	Response time in seconds					
				L	D1	D2	AL		Water v = 0.4 m/s		Air v = 1 m/s			
								t _{0.5}	t _{0.9}	t _{0.5}	t _{0.9}			
Class B														
1Pt 100	0815	32 206 463	100	8	1.5	0.20	10	0.28	0.2	0.5	6.7	21.8		
1Pt 100	1510	32 208 681	100	15	1.0	0.20	10	0.14	0.2	0.3	3.0	9.0		
1Pt 100	1515	32 206 455	100	15	1.5	0.20	10	0.08	0.2	0.4	5.0	15.7		
1Pt 100	2510	32 206 362	100	25	1.0	0.20	10	0.07	0.2	0.4	3.0	8.8		
1Pt 100	2515	32 206 370	100	25	1.5	0.20	10	0.07	0.2	0.4	5.3	16.0		
1Pt 100	3026	32 206 520	100	30	2.6	0.27	10	0.04	0.3	0.6	10.5	34.0		
1Pt 100	3045	32 206 530	100	30	4.5	0.27	10	0.01	0.4	1.4	26.0	90.0		
2Pt 100	3026	32 206 620	100	30	2.6	0.27	10	0.04	0.3	0.6	11.0	36.0		
2Pt 100	3045	32 206 630	100	30	4.5	0.27	10	0.01	0.4	1.4	26.8	83.7		
Class A														
1Pt 100	0815	32 206 464	100	8	1.5	0.20	10	0.28	0.2	0.5	6.7	21.8		
1Pt 100	1510	32 208 682	100	15	1.0	0.20	10	0.14	0.2	0.3	3.0	9.0		
1Pt 100	1515	32 206 456	100	15	1.5	0.20	10	0.08	0.2	0.4	5.0	15.7		
1Pt 100	2510	32 206 365	100	25	1.0	0.20	10	0.07	0.2	0.4	3.0	8.8		
1Pt 100	2515	32 206 372	100	25	1.5	0.20	10	0.07	0.2	0.4	5.3	16.0		
1Pt 100	3026	32 206 544	100	30	2.6	0.27	10	0.04	0.3	0.6	10.5	34.0		
1Pt 100	3045	32 206 533	100	30	4.5	0.27	10	0.01	0.4	1.4	26.0	90.0		
2Pt 100	3026	32 206 569	100	30	2.6	0.27	10	0.04	0.3	0.6	11.0	36.0		
2Pt 100	3045	32 206 651	100	30	4.5	0.27	10	0.01	0.4	1.4	26.8	83.7		
Class 1/3 B														
1Pt 100	0815	32 206 465	100	8	1.5	0.20	10	0.28	0.2	0.5	6.7	21.8		
1Pt 100	1510	32 208 683	100	15	1.0	0.20	10	0.14	0.2	0.3	3.0	9.0		
1Pt 100	1515	32 206 457	100	15	1.5	0.20	10	0.08	0.2	0.4	5.0	15.7		
1Pt 100	2510	32 206 368	100	25	1.0	0.20	10	0.07	0.2	0.4	3.0	8.8		
1Pt 100	2515	32 206 374	100	25	1.5	0.20	10	0.07	0.2	0.4	5.3	16.0		
1Pt 100	3026	32 206 557	100	30	2.6	0.27	10	0.04	0.3	0.6	10.5	34.0		
1Pt 100	3045	32 206 548	100	30	4.5	0.27	10	0.01	0.4	1.4	26.0	90.0		
2Pt 100	3026	32 206 647	100	30	2.6	0.27	10	0.04	0.3	0.6	11.0	36.0		
2Pt 100	3045	32 206 653	100	30	4.5	0.27	10	0.01	0.4	1.4	26.8	83.7		

Dimension tolerance: L = +2/-0, D1 = ±0.1, D2 = ±0.01, AL = ±2