

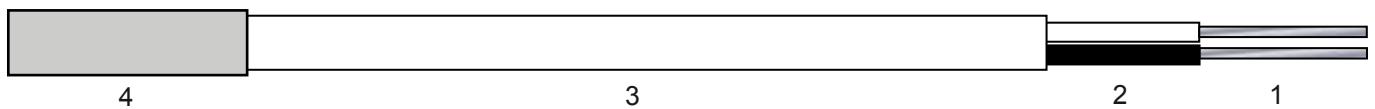
SRC NI 120 sensors Data sheet

Nickel Thin Film Temperature Sensor Ni 120 TC 6720

Nickel thin film elements are characterized by a relatively high temperature coefficient. Typical applications include bearing temperature monitoring, HVAC temperature monitoring, and stator winding temperature monitoring.

Nominal resistance R ₀	120 ohm
Temperature coefficient 0°C/100°C	6720 ppm/K
Tolerance	DIN 43760
Operating temperature range	-60°C to 260°C
Self heating in air	0,3 K/mW
Thermal response time t _{0,9} (Water 0,2 m/sec)	0,3 sec
Thermal response time t _{0,9} (air 1 m/sec)	9 sec
Operation current max.	5 mA
Connector wire material	nickel
Protective coating	high-temperature epoxy

Sensor construction details



- 1 – Tinned plated copper core – class C as per NF C 32-018
- 2 – PFA fluoropolymer insulation white & black
- 3 – PFA fluoropolymer sheath white
- 4 - Inox Sheath Ø 4,8 x 30 mm
- 5 - Encapsulated sensor to provide high strength and resistance to temperature up to 315°C

Cable construction details

Nominal cross section mm ²	Nominal stranding	Nominal diameter of singles mm	Nominal outer diameter mm	Maximum linear resistance of core at 20°C Ω / km
2 x 0.25	19 / 0.13 CuSn	1.15	2.8 ± 0.2	83

Technical data :

Thermal:	Continuous working temperature	: - 90 at +260°C
	Peak temperature	: + 280°C
Electrical :	Working voltage	: 300 / 500
	Test voltage	: 2 000 V
Mechanical :	Alternate flexion resistance	: Excellent
	Abrasion resistance	: Excellent
Chemical :	Humidity resistance	: Excellent
	Chemical agressions resistance	: Excellent
Fire Smoke	Good fire resistance according to standard IEC 60332-1 Insulation material UL 94 V-0– ILO > 30	