

Air Temperature Sensor



Description

High quality "NTC" type air temperature probe manufactured by Bosch. Overall length of 49mm, and a fitting thread of M12 \times 1.5mm pitch. The resistance of the sensor changes with temperature. For direct connection to the DL1 a "pull up resistor" is required. If the sensor is ordered with a cable, this resistor is already included and will be ready for immediate use with the DL1 or DL2.

Technical Data

Measuring Range	-10°C to +100°C
Permissible Temp	max °C +130
Electrical Resistance at 20°C (kohm)	2.5 ±5%
Electrical Resistance at:-10°C(kohm)	8.2610.56
+20°C (kohm)	2.282.72
+80°C (kohm)	0.2900.364
Nominal Voltage (V)	≤5
Measured Current,max (mA)	1
Self-heating at max. permissible power loss P=2mW and static air at T=23°C (°C)	≤2
Thermal time constant *1	approx 20s
Guide value for permissible vibration acceleration (sinusoidal vibration) (m·s-2)	100

^{*1} At 20°C. Time required to reach 63% of final value for difference in resistance, given an abrupt increase in air temperature; air pressure 1000 mbar; airflow rate 6 m · s-1