Temperature Sensor PT100 M14

This sensor is designed to measure the temperature of oil, water, fuel, air e.g. For example, this signal is used as a control value for engine control units or as a measurement value which is logged in a data acquisition system.

The PT100 resistor has linear temperature behavior. This means, that with increasing temperature the resistance rises. The housing of the temperature sensor is made of stainless steel, which are equipped with a compact connector.

The main benefit of the sensor is the very robust design for low cost applications.

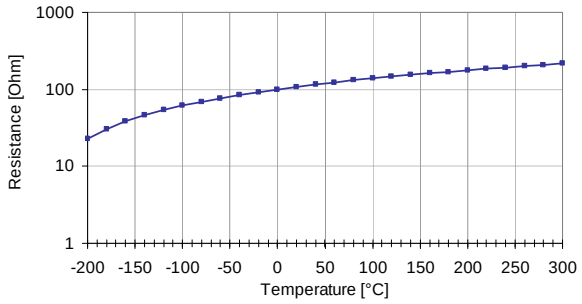
Application	
Application	-50 ... 260 °C
Storage Temperature Range	-40 ... 100 °C
Max. Vibration	-

Electrical data	
Characteristic	PT100
Nominal Resistance @ 20 °C	0,1 kΩ

Characteristic	
Accuracy @ 25 °C	± 0,4 @ 20 °C
Accuracy @ 100 °C	-
Relative Resistance Tolerance	-
Response Time τ_{63} in still water	< 10 s

Mechanical Data	
Male Thread	M12 x 1,5
Wrench Size	19 mm
Installation Torque	-
Weight w/o Cable	30 g
Sealing	-

T [°C]	R [Ω]
-200	23
-180	30,7
-160	38,4
-140	46,1
-120	53,8
-100	61,5
-80	69,2
-60	76,9
-40	84,6
-20	92,3
0	100
20	107,7
40	115,4
60	123,1
80	130,8
100	138,5
120	146,2
140	153,9
160	161,6
180	169,3
200	177
220	184,7
240	192,4
260	200,1
280	207,8
300	215,5



Connectors and Cables	
Connector	Bosch Compact
Connector Loom	D 261 205 288
Pin 1	Sig+
Pin 2	Sig-
Pin 3	-
Pin 4	-
Pin 5	-
Various military and automotive connectors on request.	

Application Hint
Each mounting orientation is possible.
Please find further application hints in the offer drawing (http://www.bosch-motorsport.com).

Part Number	
PT100 M14	**B 261 209 174**