

CLIP-ON TEMPERATURE SENSOR

TSC-Series

FEATURES

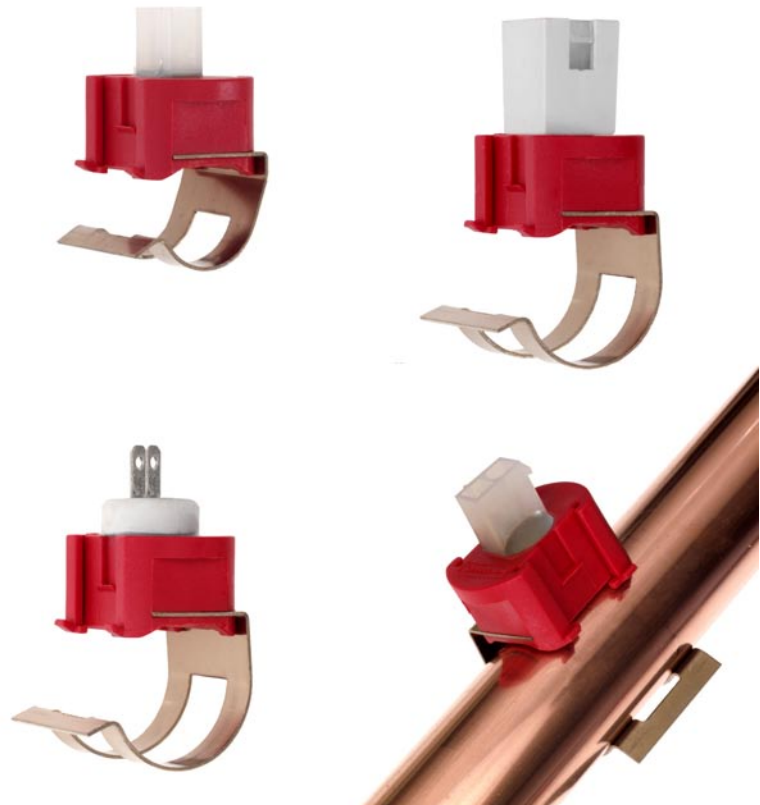
- Easy mounting
- Short response time
- High measuring accuracy
- Bracket for Ø15, 18, 22, 28 mm pipes
- EN 60730-2-9 approved

OPTIONS

- Dual sensor (2 x NTC)
- Lockable bracket

APPLICATIONS

- Boilers
- Central heating systems
- Compressors
- Heat exchangers
- Heat pumps



GENERAL INFORMATION

The Tasseron clip-on sensor is developed for indirect measurement of the medium (water) by clipping it onto a pipe. The clipping system makes a quick and certain fit which offers a cost advantage in installation and servicing. The clipping is simple and there is no chance of breaking thanks to the strong red Polyamide housing.

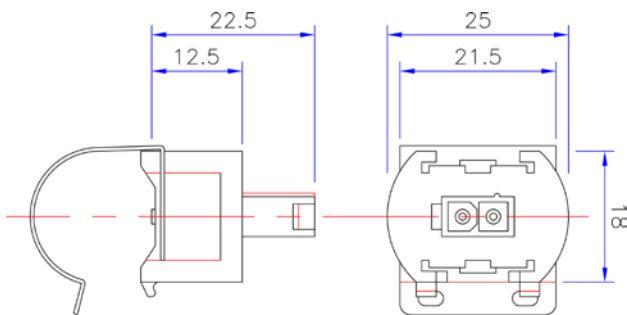
Eventhough the sensor features indirect measurement it still has a short responsetime and high accuracy as a result of the smart construction and the use of high quality materials.

Tasseron has this sensor EN 60730-2-9 approved, which means it can also be used as a safety device. Even more advantage can be achieved by having two NTC's in one housing. With complementary electronics one NTC can be used for temperature controlling and the other for safety. One product, one assembly, two functions.

GENERAL TECHNICAL INFORMATION

Characteristic	Parameter	Value	Unit
Operating temperature	T_{op}	0...105	°C
Resistance tolerance NTC (@ 60°C)	ΔR_R	±3	%
Resistance tolerance Pt1000 (Class B)	ΔR_R	±1,2	Ω
Temperature coefficient Pt1000	TCR	3850	ppm/K
Thermal time constant (67%)	τ_a	<5	s
Insulation resistance	R_{ins}	>200	MΩ
Test Voltage (t = 1s)	V_{test}	2000	V_{AC}

MEASUREMENTS & MATERIALS



Standard

Housing material : Red Polyamide (DIN: PA6 GF30)
 Bracket material : AISI 301
 Pipe mounting brackets : Ø15 mm / Ø18 mm / Ø22 mm / Ø28 mm
 Electrical connection : Molex Mini-Fit Jr.™ 5566-02A
 Faston tabs 2,8 x 0,8 mm
 Faston tabs 2,8 x 0,5 mm

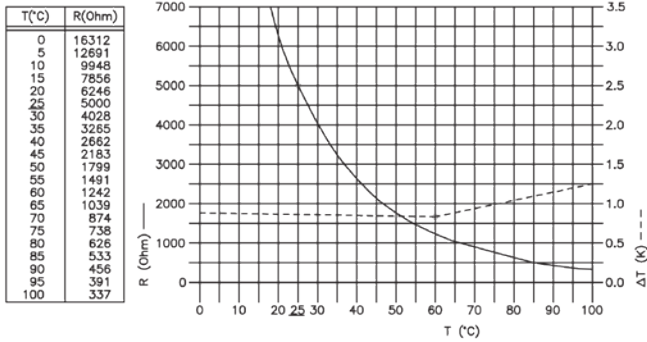
Options

Locking brackets : Ø15 mm / Ø18 mm / Ø22 mm / Ø28 mm
 Dual sensor (Duplex) : 2 x NTC with Molex Micro-Fit™ 4P Connector

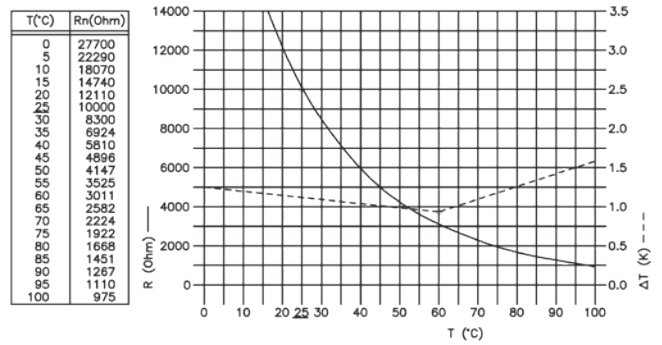
(Other brackets or connectors on request)

AVAILABLE SENSOR VALUES

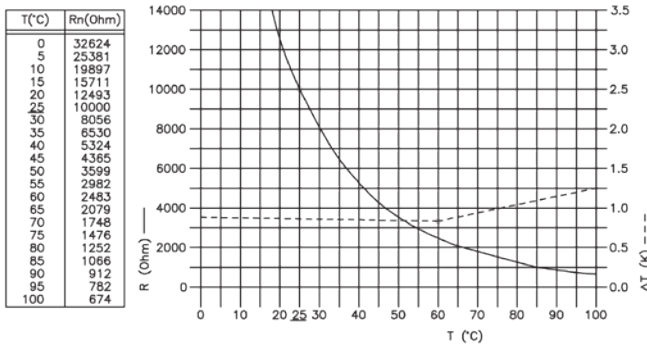
NTC 5K 3%@60°C B3977



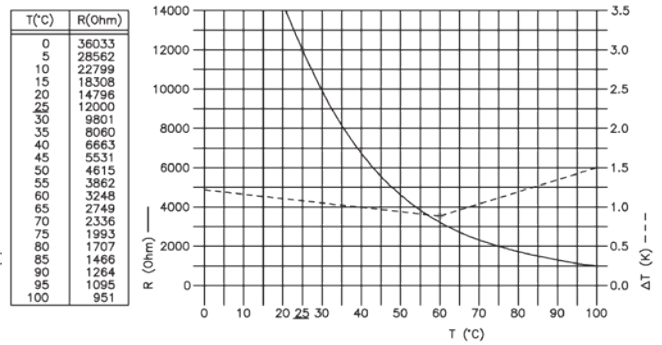
NTC 10K 3%@60°C B3435



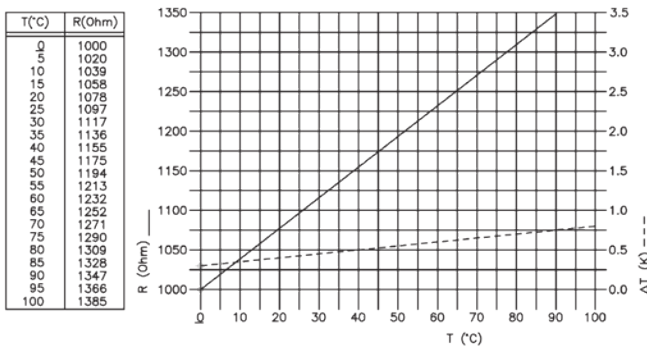
NTC 10K 3%@60°C B3977



NTC 12K 3%@60°C B3740



Pt1000 (IEC751, class B)



ORDERING INFORMATION

Example : TSC 0A I 0

Clip-on sensor
NTC 10K 3% B3977
18 mm bracket
Molex connector 0

TSC



Measuring element
05 = NTC 5K 3% B3977
0A = NTC 10K 3% B3977
0D = NTC 10K 3% B3435
0B = NTC 12K 3% B3740
45 = Pt1000 (IEC751, class B)

Bracket size
F = 15 mm
I = 18 mm
M = 22 mm
S = 28 mm

Connection
0 = Molex Minifit 5566-02R(C)
1 = Faston Tabs 2,8 x 0,8 mm
3 = Faston Tabs 2,8 x 0,5 mm

Other measuring elements and connectors on request.

Packing quantity and MOQ: 250 pieces for 15 and 18 mm brackets

200 pieces for 22 mm brackets

125 pieces for 28 mm brackets

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