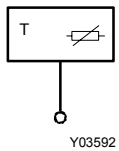
EGT 411: Clamp-on temperature detector with platinum measuring element

For taking fast, simple temperature measurements on pipes.
Housing cover of yellow and black, flame-resistant thermoplastic with spring-suspended, platinum thin-film sensor as per DIN IEC 751; connection terminals for 2 × 1.5 mm² of solid or fine-strand wire; cable inlet through a plastic grommet. Includes a band for pipes of Ø 10...100 mm and heat-conducting paste.

Type	Nominal value at 0°C	Measuring range [°C]	Weight [kg]
EGT 411 F101	1000 Ω	–30...130	0.1

Resistance values as per	DIN IEC 751, Class B	Max. temp. at head	80 °C
Tolerance at 0 °C	± 0.3 K	Degree of protection	IP 42 (EN 60529)
Mean temp. coefficient	0.00385 K^{-1}		
Self-warming	0.1 K/mW	Wiring diagram	A01632
Time characteristic (water 1 m/s) [1]		Dimension drawing	M07664
Dead time	1 s	Fitting instructions	MV 505496
Time constant	9 s		

[1] With heat-conducting paste



Operation

The resistance value of the platinum measuring resistor changes with respect to temperature. The temperature coefficient is always positive, i.e. the resistance value increases as the temperature rises. See DIN IEC 751 for Pt curve.

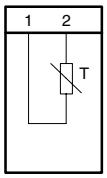
Engineering and fitting notes

Do not use pipes of more than 50 mm diameter, since layer of heat may arise; use stem or cable sensors with pocket. Heat-conducting paste should be spread onto the active copper surface and the sensor fixed with the band (quick-release mechanism) to the pipe at a spot where the metal is bare.

Additional technical data

Complies with:-	
EMC directive 89/336/EEC	EN 61000-6-1/ EN 61000-6-2 EN 61000-6-3/ EN 61000-6-4

Wiring diagram



Dimension drawing