

A very rapid and accurate temperature sensor
for district heating and district cooling

Temperature sensor SVM TCF / TSF data sheet



SVM North Node

Features

The sensor is designed to be used for temperature measurements in, for example, district heating systems, where high reliability and accuracy are needed. The sensor is following the European Norm for energy and heat metering (EN1434)

Advantages

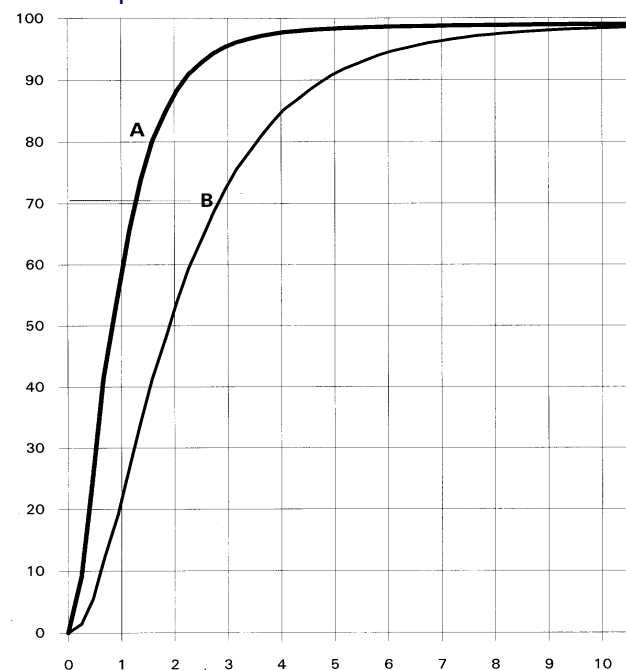
- The sensor has extreme short thermal response time.
- The new connection head is very spacious for easy connection of the wires. It is designed for 2- or 4-wires connection.

Function

The temperature sensor consists of a Pt 100 or a Pt 500 measuring element surrounded by a small metal cap. The probe is made of polymer plastic, which also works as a thermal insulator. This means that the thermal mass is small and that gives high accuracy and a very fast response. The pocket has the standardised R 1/2 " external connection thread and is made of stainless steel to be suited for most applications.

Thermal response time

Rel. temp. %



Time seconds
Curve A without pocket
Curve B with pocket (silicone paste)



A complete pair



View of the connection head

The sensors are delivered paired to a difference of less than 0.05 °C. The median value of our production and final inspection is 0.02 °C. The sensors and pockets are designed to give a good thermal bridge between the measuring element and the streaming media (water) giving a high accuracy and short response time. The cable entry in the connection head is dimensioned for max. 9 mm cable.

Ordering key

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ABB temperature sensor	T											
Delivered with pocket	C	F										
Delivered without pocket	S	F										
Pocket without sensor	P	F										
The installation length of the pocket in mm			0	8	5							
			1	2	0							
Measuring element	Pt100					-						
Measuring element	Pt500					D						
Fixed cable (max. 180°C)							C					
Connection head							H					
Cable length in dm								x		x		
2 paired sensors	0 - 90°C										C	
	20 - 140°C										N	
	20 - 170°C										H	
	0 - 180°C										T	
1 unpaired sensor											U	
Country code (see the register.)												#
Standard												0
Special												S