

# Temperature sensors for heat and cooling meters

Temperature sensor pairs with platinum precision resistance for combination with all standard calculators in measuring points for the consumption of heat and cooling energy

Temperature sensor pairs serve to determine the supply and return temperature in closed water circuits in heating and cooling systems. Depending on the measuring point requirements they can be installed in a sleeve for temperature sensor or directly in the heat carrier.

In so-called split heat meters they are connected to an electronic calculator together with a flow sensor. For special installation situations and/or large distances between the temperature sensor installation point and the calculator special cable lengths and versions with four-wire connection head are available.

All the versions have an MID type testing certificate in accordance with guideline 2014/32/EU and are supplied with a corresponding conformity assessment. Some selected versions also have a domestic type test certificate for cold metering in Germany and a conformity assessment in accordance with the PTD technical guideline K 7.2 PTB. Thus these versions can be used universally for heat and cold metering and therefore offer a substantial logistical advantage. A new kind of temperature sensor type 'Universal 6 x 60 -230' that can be used for all standard sleeves for temperature sensors with an installation length of 50 to 210 mm and an internal diameter of 6 mm.



Example: Type DS 27.5



Example: Type universal 6 x 60 - 230

## Temperature sensor for heat and cooling meter

### Overview for versions with measurement resistance Pt 500

Temperature range: 0 to 150 °C

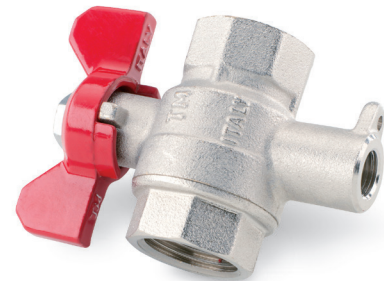
Version	Diameter (mm)	Installation length (mm)	Cable length (mm)	Fitting sleeve for temperature sensor (mm)	Order no.
	5	45	3		118686
PSC (Pocket Short Cable)	5	45	10		124763
	5.2	45	3		119227
	6	50	3		124765
DS (Direct Short) 27.5 for heat and cold measurement		27.5	1.5		120504
		27.5	5		124129
DS (Direct Short) 38 for heating and cooling measurement		38	1.5		120503
		38	5		141652
Universal 6 x 60 - 230 for heat and cold measurement, suitable for: Sleeves for temperature sensors 85, 120 and 210 mm with clamping screw	6	60 to 230	3	50 to 210	156295
Sleeves for temperature sensors 100 and 150 mm with ¼" inner thread Installation points for temperature sensor type 'DS6'	6	60 to 230	10	50 to 210	156296

Temperature sensor pairs as version with measurement resistance Pt 100 are available on request

## Temperature sensor for heat and cooling meter

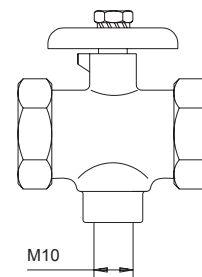
The range is rounded off with installation accessories such as special ball valves with temperature sensor mounting M10x1 and stainless steel sleeves for temperature sensors in various lengths.

The ball valve with drill bore M10x1 is ideally suited to the installation of direct sensors. If the ball valve is closed then the temperature sensor can be exchanged without draining the heating water. When open the sensor is surrounded by the heat carrier and can react quickly and reliably to changes in temperature. Ball valves without a temperature sensor mounting are available for shut off purposes.



Example: Ball valve with inner thread 1/2"

Description	Size	Order no.
Ball valve with temperature sensor mounting M10x1	IG 1/2"	100531
	IG 3/4"	100533
	IG 1"	102170
	IG 1 1/4"	115831
	IG 1 1/2"	107330



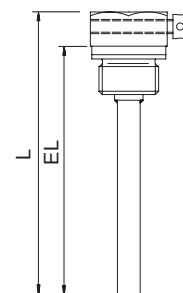
The stainless steel sleeves for temperature sensors are suitable for temperature sensors with an external diameter of 6 mm and a length from 105 mm and for the type 'Universal 6 x 60 - 230'.

When new measuring points are designed they are generally used from a nominal flow of  $q_p$  10 m<sup>3</sup>/h.

Version	Installation length EL (mm)	Order no.
Stainless steel with 1/2" connection thread and side clamping screw, including copper seal	85	110549
	120	110550
	210	112702



Example: Stainless steel sleeve for temperature sensor with installation length 85 mm and 120 mm with side clamping screw



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