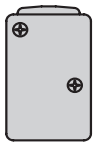
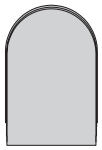
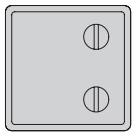
Temperature Sensors
Types 5224 to 5265

With PTC resistors

Application

Sensors for measuring the temperatures in heating, ventilation and air-conditioning systems.
Versions with PTC (positive temperature coefficient) resistors.
Basic values as specified in the technical data.

Temperature sensors with PTC resistors

Immersion sensor with thermowell		•	•	•			
Strap-on sensor					•		
Outdoor sensor						•	
Room sensor with remote control							•
Measuring range	–50 to +120 °C				•		
	–20 to +40 °C					•	
	+10 to +30 °C						•
	+5 to +105 °C	•	•	•			
PTC resistor Ω		Refer to table below					679 to 762
Length of thermowell		80	80	250	–		
Material of thermowell G ½		Brass	CrNiMo	CrNiMo	–		
Nominal pressure PN		16	40	40	–		
Permissible ambient temperature		+5 to +105 °C			–50 to +120 °C	–20 to +50 °C	+10 to +30 °C
Degree of protect. (DIN EN 60529)		IP 00 (IP 54)			IP 40	IP 42	
Type		**5264**			**5265**	**5224**	**5244**
Style							
Preferable application		Immersion sensor with 3 or 5 m connecting cable. Additional thermowell is required. Heating flow or return pipe, water heaters			Heating flow or return pipe	Exterior walls of buildings	Room sensor with set point correction and mode selector switch

Resistance values for PTC resistance thermometers of Types 5224, 5264 and 5265 Sensors

Temperature °C	–20	–10	0	10	20	30	40	50	60	70	80	90	100	110	120
Resistance Ω	693	756	824	896	971	1050	1133	1220	1311	1406	1505	1606	1713	1819	1925

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Note

The temperature sensors with PTC resistors do not require line compensation. If the line length between the sensor and the controller exceeds 100 m, the line cross-section must be minimum 1.5 mm^2.

The connecting line between the temperature sensor and the controller must be installed separately from voltage supply lines.

With Type 5264, the PVC connecting line is only approved for use in the range from +5 to +105 °C.

Type 5244 Room Sensor with remote control used to change the room temperature set point, equipped with a heating program selector switch (connection: 3 wires, refer to the mounting and operating instructions of the corresponding controller):

☼ Continuous rated operation

☾ Continuous reduced or standby operation

◷ Continuous time-controlled operation

The Type 5265 Strap-on Sensor is suitable for pipes up to ∅ 60 mm. When mounting the sensor, apply the enclosed heat transfer compound to the sensor (protecting tube made of Cu) and pipe.

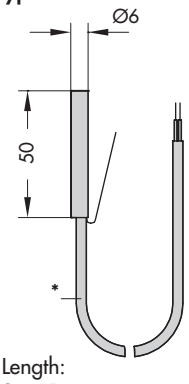
Sensor terminals (Types 5265, 5224 and 5244): maximum line cross-section 1.5 mm^2

Ordering text

Type … Temperature Sensor with PTC resistor
Thermowell for Type 5264: length … mm, brass/CrNiMo

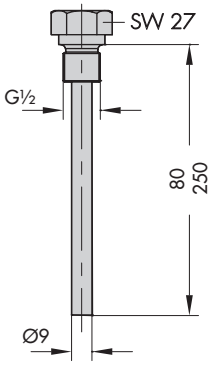
Dimensions in mm and weights

Type 5264 Immersion Sensor



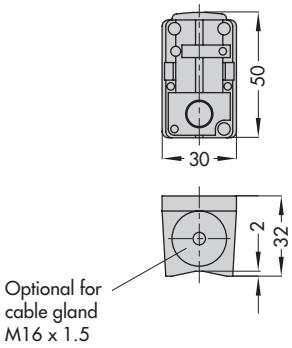
* Length:
3 or 5 m

Thermowell



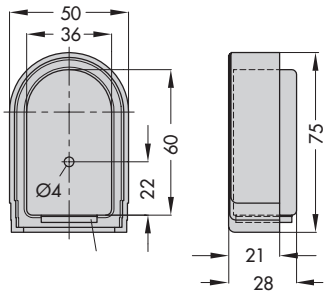
Weight: approx. 0.23 kg for l = 80 mm
approx. 0.25 kg for l = 250 mm

Type 5265 Strap-on Sensor



Weight: approx. 0.67 kg

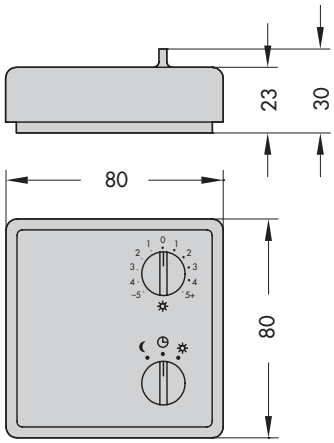
Type 5224 Outdoor Sensor



Weight: approx. 0.1 kg

Paint: RAL 9016

Type 5244 Room Sensor



Weight: approx. 0.06 kg

Paint: RAL 9010

Specifications subject to change without notice.

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