

FRODE PEDERSEN

Application

- Measurement of temperature in rooms f. inst. refrigeration, freeze and cargo stores, outdoor temperature.
- The operating range is from -40 to 80°C
- Fields of application
 - Refrigeration industry
 - Heating and ventilation (HVAC)
 - Engine room

Technical features

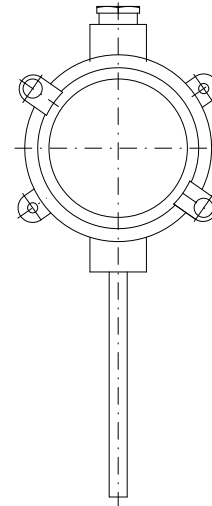
- Pt100 resistance thermometer acc. to IEC 751
- 3-wire connection is standard
- Wall -mounting
- Sensor tube in stainless steel AISi 316
- Can be supplied with transmitter as an option

Ordering

The requested sensor is selected from the table below
The colour code means:

- Standard: Built of standard modules (short delivery time)
- Variant: Modified standard modules
- Special: Special versions and material. We are specialist in temperature measurement. Please contact us and we shall do our utmost to solve your specific measuring task

RM 2



Ordering information

Specification number	1815-	Sensor				4mA:	°C	Transmitter		20mA:	°C	2)
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Type

RM 2 Outdoor, refrigeration freeze and cargo stores.....	1
Special.....	s

Measuring range

-40 +80°C.....	0
Special:.....	s

Resistance value (ohm) acc. to IEC 751

1xPt100.....	0
1xPt1000.....	2
Special:.....	s

Electrical connection

0	Terminals with screws
1	Transmitter FPTM. (Sensor only 3-wire)
3	Transmitter FPTU galvanic isolated
4	Transmitter FPTU galvanic isolated. EEXiallCT4/6.
s	Special:

Note 2: Please specify measuring range in °C

Connection. Wiring configuration

0	3-wire
1	4-wire
2	2-wire

Tolerance acc. to IEC 751 1)

0	Class B, i.e. $\pm (0.3^\circ\text{C} + 0.005 \times t_{\text{actual}})^\circ\text{C}$
1	Class A, i.e. $\pm (0.15^\circ\text{C} + 0.002 \times t_{\text{actual}})^\circ\text{C}$
2	1/3 Class B @ 0°C, i.e. $\pm (0.10^\circ\text{C} + 0.005 \times t_{\text{actual}})^\circ\text{C}$
3	1/6 Class B @ 0°C, i.e. $\pm (0.05^\circ\text{C} + 0.005 \times t_{\text{actual}})^\circ\text{C}$
s	Special:

Note 1: Pt1000, only as class B

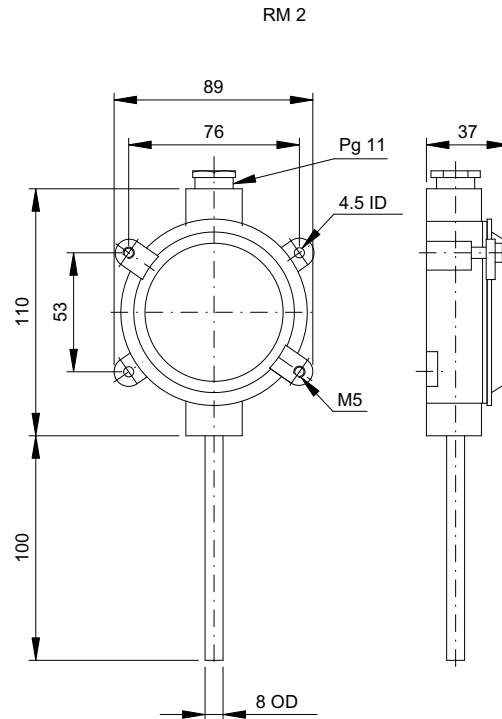
Accessories

Transmitter: See data sheet 9168

Customer information

Name:
Tel.:

Dimensions



Enclosure

RM 2	silumin, grey.	Degree of protection: IP67
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Response time

Protective tube	Response time in seconds (guidelines)	
	In air @ 3m/sec.	
	$t_{0.5}$	$t_{0.9}$
8 OD	60	190

Note:

The 0.5/0.9 time is the time that it takes the sensor to reach 50%/90% of the final value of a temperature change of a medium.

If media and velocity are different from the ones stated, the time can change significantly.

Connection diagram

