



PRIGNITZ 
MIKROSYSTEMTECHNIK

Product OVERVIEW



TEMPERATURE
SENSOR
SOLUTIONS

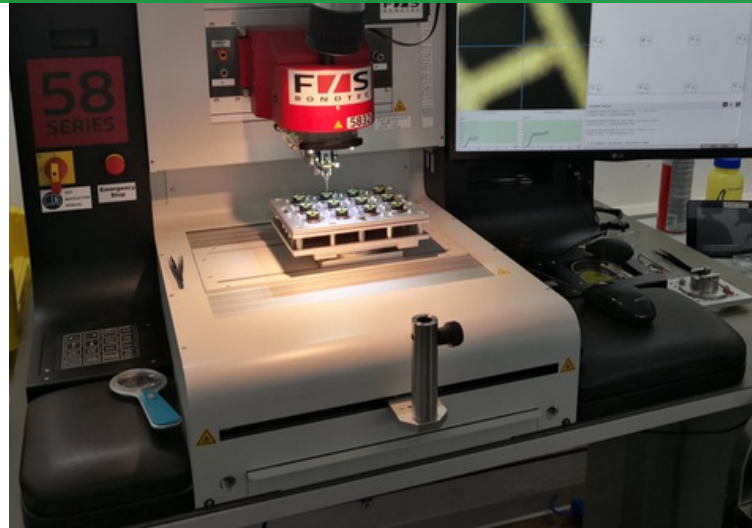
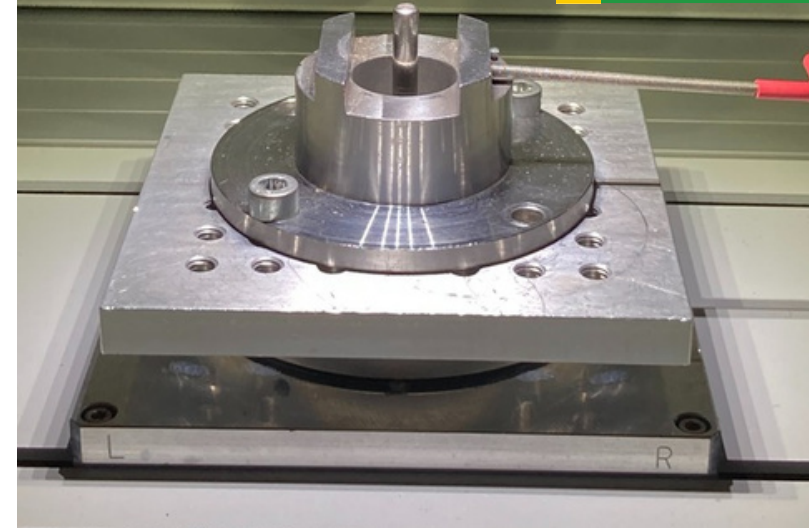
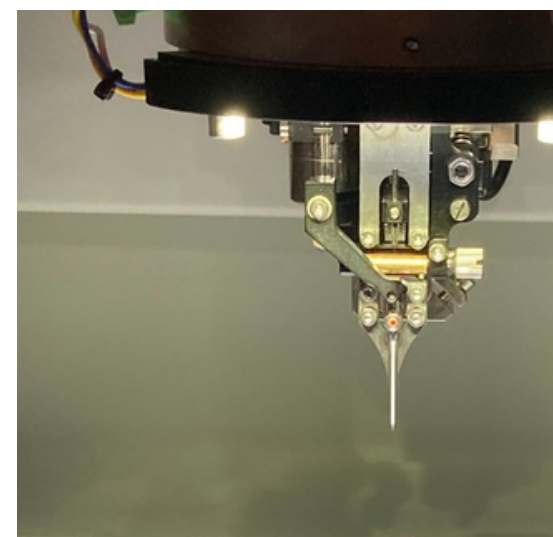


Prignitz Mikrosystemtechnik develops, manufactures, and sells pressure sensors, temperature transmitters, and level probes with very high added value “from chip to calibrated transmitter”. We have a sales and service network covering more than 40 countries.

Based on our R&D, we offer our customers from a variety of industries the best possible customized solutions that fully meet their needs.

We are based on our unique scientific developments. Employees of our company have international patents, which make our products highly competitive and unique in the market. The world's largest companies in the fields of off-road mobile equipment, renewable energy, transport, marine and offshore, industrial automation, and medical technology trust our technologies and solutions.

We invite you to our Galaxy!



Prignitz Mikrosystemtechnik develops and manufactures high-quality temperature sensor solutions for demanding industrial applications.

Our product portfolio includes:

- **Temperature sensors with integrated signal transmitters for precise and stable temperature measurement**
- **Compact temperature sensors without transmitters for space-saving installations**
- **Temperature sensors for explosion-hazardous areas, certified for safe use in critical environments**

All our sensors are designed for reliability, accuracy, and long-term performance in harsh industrial conditions.

OVERVIEW OF FUNCTIONS AND TECHNICAL PARAMETERS

Measuring element:	Pt100, class B; options: Pt1000, PTC, NTC, KTY, others
Measuring ranges:	from -50 to 200 °C
Output signal:	• typical: Pt100, 4-20 mA • optional 0-10V, 0-5V, 1-5V, ratio 10-90% V_c, etc.
Sensor length:	10 ... 500 mm
Housing material:	stainless steel 316L (1.4404)
Max. static pressure:	160 bar
Process connection:	G1/2", G1/4", 1/4"-18 NPT, 9/16-18 UNF SAE J514
Electrical connection:	M12x1, DIN803-A, DT04-4P, PACKARD MP, cable
Additional functions:	Digital probes featuring online range configuration and enhanced accuracy, with optional AISI 316 stainless steel thermowells

Temperature sensors with integrated signal transmitters

PMT-S111



DATASHEET:

APPLICABLE FOR HYDROGEN

Sensor type:	Pt100 with signal transmitter
Typical applications:	neutral and aggressive media
Measurement range:	-40 ... 200 °C
Output signal:	4-20mA, 0-10V, ratio 10-90% Vc
Sensor length:	10 ... 500 mm
Measurement error:	≤ 1% FS at 25°C, ≤ 2% FS over the full measuring range
Sensor material:	stainless steel 316L (1.4404)
Max. static pressure:	160 bar
Process connection:	G1/2", G1/4", 1/4"-18 NPT, 9/16-18 UNF SAE J514
Electrical connection:	M12x1, DIN803-A, DT04-4P, PACKARD MP, cable

PMT-S111-Exi



DATASHEET:

APPLICABLE FOR HYDROGEN

Sensor type:	Pt100 z przetwornikiem sygnału
Typical applications:	Neutral and aggressive media
Measurement range:	-40 ... 200 °C
Output signal:	4-20mA, 0-10V, Ratio 10-90% Vc
Sensor length:	10 ... 500 mm
Measurement error:	≤ 1% FS @25°C, ≤ 2% FS w całym zakresie pomiar.
Sensor material:	Stainless steel 316L (1.4404)
Max. static pressure:	160 bar
Process connection:	G1/2", G1/4", 1/4"-18 NPT, 9/16-18 UNF SAE J514
Electrical connection:	M12x1, DIN803-A, DT04-4P, PACKARD MP, kablowe
Certification	CSA, ATEX II 2G Ex ia IIC T3 Gb -40°C ≤ Ta ≤ 85°C

Compact temperature sensors

PMT-C111



DATASHEET:

APPLICABLE FOR HYDROGEN

Sensor type:	Pt100, Class B; options: Pt1000, NTC, PTC, KTY, others
Typical applications:	Neutral and aggressive media
Measurement range:	-50 ... 200 °C
Output signal:	Resistive Pt100 (other types optional)
Sensor length:	10 ... 500 mm
Sensor material:	Stainless steel 316L (1.4404)
Max. static pressure:	160 bar
Process connection:	G1/2", G1/4", 1/4"-18 NPT, 9/16-18 UNF SAE J514
Electrical connection:	M12x1, DIN803-A, DT04-4P, PACKARD MP, cable

EXAMPLE CONFIGURATIONS

The strength of Prignitz Mikrosystemtechnik lies in its extensive knowledge and experience, the wide range of applied technologies, and the ability to create products perfectly tailored to your individual requirements. To make your selection easier, the following pages present product codes for selected configurations — those commonly used in general industrial applications, as well as other examples illustrating different design possibilities.

For ordering information and a complete overview of all available configurations for each sensor, please refer to the datasheet.

However, it is important to note that the product portfolio is NOT limited to the models shown on the following pages.



Temperature sensors with integrated signal transmitters

PMT-S111

Common parameters for the products listed below

Sensor material: Stainless steel 316L (1.4404)

Measurement error @ 25°C: ≤ 1% FS, ≤ 2% FS over the full measuring range

Sensor outer diameter: 6 mm

Other parameters: Page 24 and product datasheet

Option: Additional AISI 316 stainless steel thermowell

Electrical connection: DIN 803-A connector



The following listings show example product configurations.

Sensor length: mm	Thread: mm	Measurement range: °C	Output signal:	Product code:
10	G 1/4"	0 ... 150	4 - 20 mA	96211146
25	1/4-18 NPT	0 ... 100	4 - 20 mA	96211150
50	G 1/4"	-20 ... 80	4 - 20 mA	96211020
75	R 1/2"	0 ... 100	4 - 20 mA	96211147
100	G 1/4"	-20 ... 80	4 - 20 mA	96211021
150	G 1/4"	0 ... 100	4 - 20 mA	96211130
250	G 1/4"	-50 ... 100	4 - 20 mA	96211032
400	G 1/4"	-20 ... 80	4 - 20 mA	96211022

- Electrical connection: M12 × 1

The following tables present example product configurations only.



Sensor length: mm	Thread: mm	Measurement range: °C	Output signal:	Product code:
20	G 1/2"	-40 ... 120	4 - 20 mA	96212011
20	G 1/4"	-20 ... 80	4 - 20 mA	96212019
50	G 1/4"	-40 ... 120	4 - 20 mA	96212008
50	G 1/2"	-40 ... 120	4 - 20 mA	96212012
100	G 1/4"	-40 ... 120	4 - 20 mA	96212009
100	G 1/2"	-40 ... 120	4 - 20 mA	96212013
100	G 1/4"	-20 ... 80	4 - 20 mA	96212021
150	G 1/4"	-50 ... 50	4 - 20 mA	96212076
250	G 1/4"	-20 ... 80	4 - 20 mA	96212083
400	G 1/4"	-40 ... 120	4 - 20 mA	96212010
400	G 1/2"	-40 ... 120	4 - 20 mA	96212014

HOW TO ORDER

PMT-S111-XX-(XX..XX)-XX-XXX-XX-XX

FAMILIES

S = STT Family

MEASURING ELEMENT

1 = PT100, class B

MATERIAL

1 = Stainless Steel

ELECTRICAL OUTPUT

I2 = 4 ... 20 mA 2L

UR = ratiometric

0U5 = 0 ... 5 V

1U5 = 1 ... 5 V

0U10 = 0 ... 10 V

TEMPERATURE RANGES

e.g.

-20 ... 150

-40 ... 85

0 ... 100

UNIT

19 = Celsius

20 = Fahrenheit

23 = Kelvin

ELECTRICAL CONNECTION

00 = customized

01 = Packard Metri-Pack

02 = MVS/A

03 = MVS/C

05 = M12x1 (S763-4)

09 = DT04-3P

C2 = Cable 4P

PROCESS CONNECTIONS

00 = customized

01 = G1/4"A form E

08 = 1/4"-18 NPT

33 = 7/16-20 UNF

10 = 9/16-18 UNF

TIP LENGTH

e.g.

5mm

0,2in

0,1ft

Please note that :

In mm:

min = 5mm

max = 500 mm

In Inch

min = 0,2in

max = 20in

In Feet

min = 0,1ft

max = 1,6ft

Other upon request.

Compact temperature sensors

PMT-C111

Common parameters for the products listed below

- **Sensor material:** Stainless steel 316L (1.4404)
- **Sensor type:** Pt100
- **Accuracy class:** B
- **Sensor outer diameter:** 6 mm
- **Other parameters:** Page 24 and product datasheet
- **Option:** Additional AISI 316 stainless steel thermowell
- **Electrical connection:** DIN 803-A connector



The following tables present example product configurations only.

Sensor length: mm	Thread: mm	Measurement range: °C	Number of wires	Product code:
40	G 1/4"	-50 ... 200	3	96301007
50	G 1/4"	-50 ... 200	2	96301003
60	G 1/4"	-50 ... 200	3	96301008
100	G 1/4"	-50 ... 200	2	96301004
100	G 1/2"	-50 ... 200	2	96301005
100	G 1/4"	-50 ... 200	3	96301006

- **Electrical connection:** M12 × 1

The following tables present example product configurations only.



Sensor length: mm	Thread: mm	Measurement range: °C	Number of wires:	Product code:
25	G 1/2"	-50 ... 200	2	96302008
30	G 1/2"	-50 ... 200	2	96302005
50	G 1/4"	-50 ... 200	2	96302008
50	G 1/2"	-50 ... 200	2	96302003
70	G 1/2"	-50 ... 200	2	96302001
100	G 1/2"	-50 ... 200	2	96302004

HOW TO ORDER

PMT-C111-XX-(XX..XX)-XX-XXX-XX-XX

FAMILIES

C = CTS Family

MEASURING ELEMENT

1 = PT100, class B

MATERIAL

1 = Stainless steel

ELECTRICAL OUTPUT

Ohm

TEMPERATURE RANGES

e.g.

-20 ... 150

-40 ... 85

0 ... 100

UNIT

19 = Celsius

20 = Fahrenheit

23 = Kelvin

ELECTRICAL CONNECTION

01 = Packard Metri-Pack

02 = MVS/A

03 = MVS/C

05 = M12x1 (S763-4)

09 = DT04-3P

C2 = Cable 4P

PROCESS CONNECTION

00 = customized

01 = G1/4"A form E

08 = 1/4"-18 NPT

33 = 7/16-20 UNF

10 = 9/16-18 UNF

TIP LENGTH

e.g.

5mm

0,2in

0,1ft

Please note that :

In mm:

min = 5mm

max=500 mm

In Inch

min = 0,2in

max= 20in

In Feet

min = 0,1ft

max= 1,6ft

Other upon request.

PRIGNITZ

MIKROSYSTEMTECHNIK



PRESSURE



LEVEL



TEMPERATURE



**CALIBRATION &
SERVICE**

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