TEMPERATURE

PRIGNITZ MIKROSYSTEMTECHNIK

STT-Family (Standard temperature transmitters Family)

PMT-S111

Datasheet

There are stainless steel, safe temperature transmitters.
In addition to its rugged construction and a good price- to- performance ratio this series will be the solution for temperature measurement for a very wide variety of applications.


Example of product

MAIN FEATURE

- Hi- strength stainless steel construction
- Wide operating measuring range: -40 °C ... 200 °C (-40 °F ... 392 °F)
- Material: Stainless Steel
- Low static and thermal errors
- Compatible with a wide range of liquids and gases
- High grade of EMI/RFI protection grade
- Several electrical connection available

APPLICATION

OIL PLATFORMS

OIL & GAS EQUIPMENT

REMOTE PROCESS CONTROL

POWER STATIONS

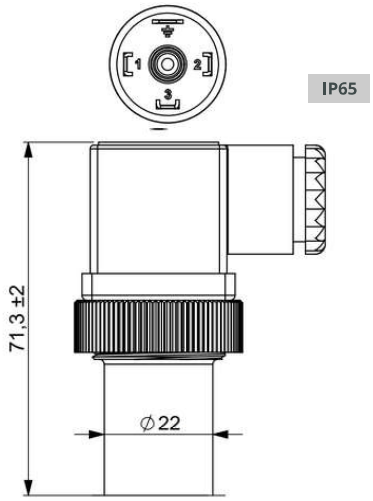
TECHNICAL SPECIFICATIONS

INPUT PARAMETERS			
Mechanical connections *	G1/4 Form E, 1/4"-18NPT, 7/16"-20 UNF, 9/16"-18 UNF		
Temperature tip*	stainless steel tip with diameter 6 mm (0.24") 10 mm ... 500 mm (0.4" ... 1.64 ft)		
Wetted parts	stainless steel		
Body material	stainless steel		
Max.operating pressure	static 160 bar		
Media temperature range	- 40 °C ... 200 °C (-40 °F ... 392 °F)		
Measuring element	1 x PT100, class B		
OUTPUT SIZES			
Electrical connections *	EN 175 301-803-A /-C; M12x1 (Binder S763); Deutsch DT04-3P; Packard Metri-Pack; cable outlet;		
Output signal	4 ... 20 mA	0/1 ... 5 V DC; 0/1 ... 6 V DC; 0/1 ... 10 V DC	0,5 ... 4,5 V DC ratiometric
Supply voltage (DC)	10 ... 32 V	8 ... 32 V (Vout x ... 5 V) 10 ... 32 V (Vout x ... 6 V) 14 ... 32 V (Vout x ... 10 V)	5 V DC +/- 5 %
Load resistance	< (Vcc-10 V)/20 mA	> 5 kOhm	> 2,5 kOhm
Current consumption	< 22 mA	typ. 10 mA	typ. 10 mA
Performance Characteristics			
Accuracy (25°C)	+/- 1 % FS		
Overall accuracy	+/- 2 % Fs		
Long-term stability	±0.1 % FS per year in referential condition		
Ambient temperature	- 40 °C ... 125 °C (- 40 °F ... 257 °F)		
Storage temperature	- 40 °C ... 125 °C (- 40 °F ... 257 °F)		
Shock resistance	EN/IEC 60068-2-32 (1 m free fall)		
Vibration resistance	20 g / 3 axes to EN/IEC 60068-2-6		
Protection class	depending on electrical connection, see drawing of electrical connectors		
EMI/RFI emmission	EN 61326-1:2013-section 7		
	EN 61326-2-3:2013		
EMI/RFI susceptibility	EN 61326-1:2013 - section 6		
	EN 61326-2-3:2013		
Overvoltage Protection	yes		
Reverse Protection	yes		

*others on request

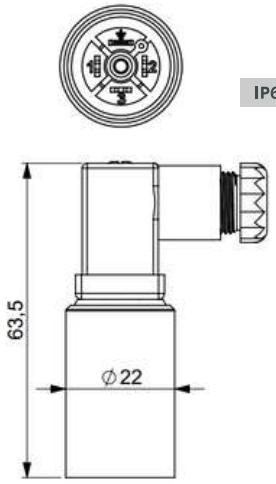
ELECTRICAL CONNECTION

EN 175 301-803-A



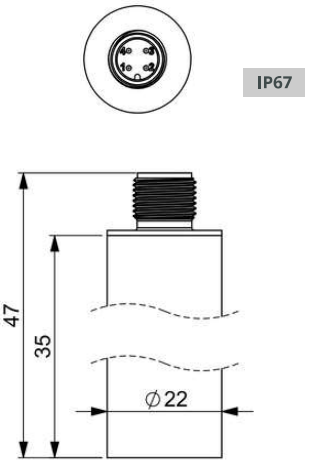
Output	Pin1	Pin2	Pin3
Volt	+	-	Vout
mA	+	-	nc

EN 175 301-803-C



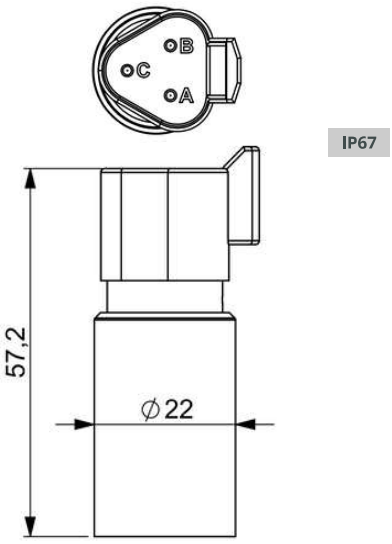
Output	Pin1	Pin2	Pin3
Volt	+	-	Vout
mA	+	-	nc

M12x1 (S763)



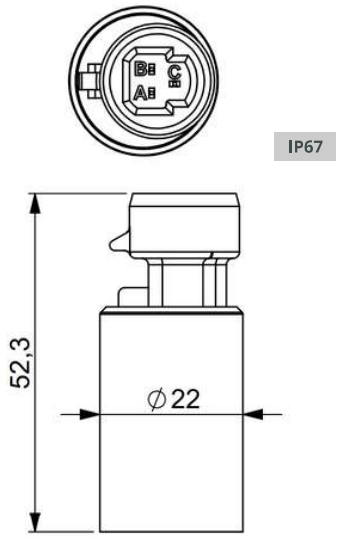
Output	Pin1	Pin3	Pin4
Volt	+	-	Vout
mA	+	-	nc

Deutsch DT04-3P



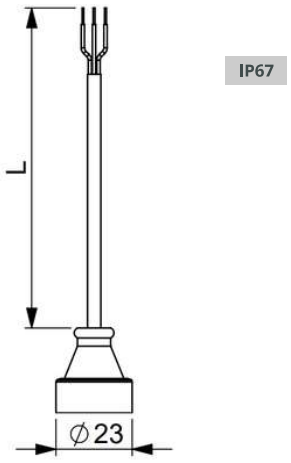
Output	PinA	PinB	PinC
Volt	-	+	Vout
mA	-	+	nc

Packard Metri-Pack



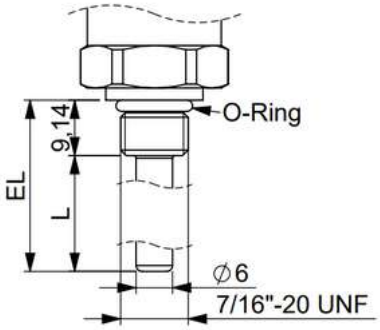
Output	PinA	PinB	PinC
Volt	-	+	Vout
mA	-	+	nc

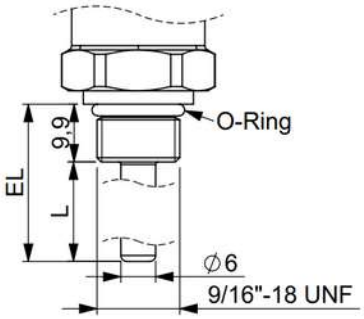
Cable

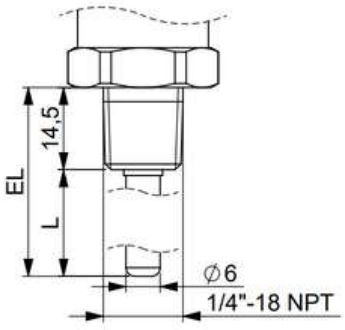


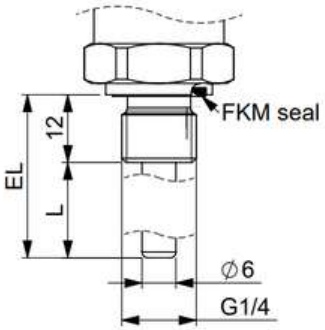
Output	Red	Black	White
Volt	+	-	Vout
mA	+	-	nc

PROCESS CONNECTION









EL: installation length
L: tip length

Before installation and operation, ensure that the appropriate pressure sensor has been selected in terms of pressure range, design and specific measuring conditions. Non compliance can result in serious injure and/or damage to the equipment.

WARNING: Prignitz Mikrosystemtechnik reserve the right to modify their products without notice to customers. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate testes, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.

CUSTOMIZED SOLUTIONS

An indisputable advantage of the products from Prignitz Mikrosystemtechnik is that in addition to the specified parameters, a variety of specific customer requests can be implemented:

- other process and electrical connections available in a wide range of options
- analog output signals can be customized upon request.

Feel free to ask us. We are ready to implement individual solutions for you.