

## EPTTE5100

- Combined pressure and temperature measurement
- Pressure range up to 600 bar
- High strength, rugged stainless steel design
- Highly reliable, no internal transmission media



This intelligent solution combines two transmitters which are capable of measuring pressure and temperature at the same time and independently.

The **EPTTE5100** has excellent characteristics for its stainless steel membrane and semi-conductor thin-film technology. The stainless steel membrane is absolutely vacuum-tight and applicable with all standard media used in hydraulics, pneumatics, etc. as far as they are compatible with stainless steel. Its robust design guarantees high reliability also in rugged environments such as plant and automation engineering.

With low static and thermal errors and high resistance to shock and vibration as standard, the **EPTTE5100** assures trouble free operation at temperatures from  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

### Specification

#### Performance

##### Working temperature range:

Temp. sensing element	- 50° to +200° C
Pressure cell	-50° to +150° C
Accuracy@ RT	≤ 0,5% of the range, option ≤ 0,25 (only valid for pressure), BFSL ≤ 0,125
Non-linearity	≤ 0,15 %
Repeatability	≤ 0,10 %
Stability / year	≤ 0,10 %

#### Electronics

Output signals	Temperature		Pressure
	4 - 20 mA	with	4 - 20 mA
	0 - 10 V	with	0 - 10 V
Power rating	12-32 VDC		
Response time	< 1ms for pressure, 10-20 sec for temperature		
Withstand voltage	50 V		

#### Environment

Temperature electronics	- 40° to + 125° C
Housing	304 stainless steel
Wetted parts	17-4PH stainless steel
Shock resistance	1000 g
Vibration resistance	20 g
Sealing	IP 67
Pressure port	see table below
Electrical connection	see table below
Weight	ca. 80 g

# Multi-Function Pressure - Temperature Sensor



Eurosensor

## EPTTE5100

### Ordering Information

(Please use the characters in the chart below to construct your product code)

Sample Code: **EPTTE5100 - G12A - 01000 - B - 2 - A - 1**

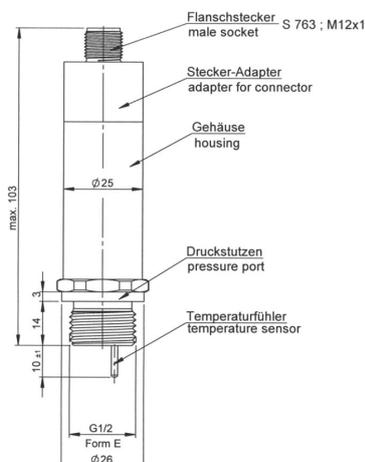
Series	Port Configuration	Measurement Range	Pressure Unit	Output Signal	Electrical Interface	length temp. sensor
EPTTE5100	<b>G12A</b> - G1/2" Form E, with 4.2 mm OD Temp. probe <b>G14A</b> - G1/4" A Form E with 2.8 mm OD Temp. probe <b>M18</b> - M18 x 1.5 male with 4.2 mm OD Temp. probe <b>M20</b> - M20 x 1.5 male, with 4.2 mm OD Temp. probe	see table below	B - gauge pressure	1 = 0 - 10 VDC 2 = 4...20 mA	A - 600 mm standard cable F - M12 x 1.5 pin connector	1 - 10 mm

Custom options available on request

The EPTTE5100 series is backed by a 1 Year Warranty. The purchaser is responsible for compatibility of the media, functional adequacy and correct installation of the transmitter.

Measuring range (bar)	Pressure range								Temperature Probe
	4	6	10	40	60	100	400	600	
Pressure Port:									
G1/4A Form E	x	x	x	x	x	x			2.8 mm OD
G1/2 Form E	x	x	x	x					4.2 mm OD
M20x1.5	x	x	x	x	x	x			4.2 mm OD
M18x1.5							x	x	4.2 mm OD
Overload pressure (bar)	8	12	20	80	120	200	800	800	
Burst pressure (bar)	12	18	30	120	180	300	1000	1000	
Order Code	00400	00600	01000	04000	06000	10000	40000	60000	

### Dimensions



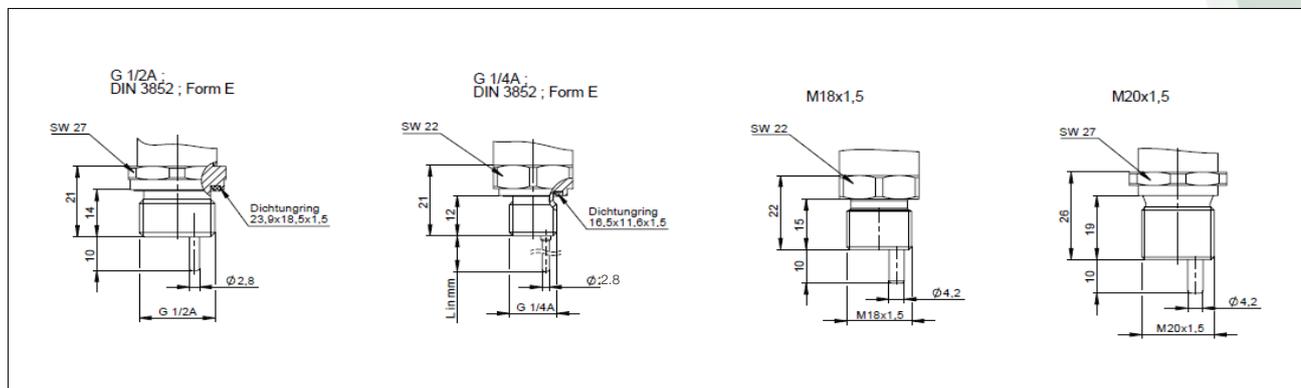
# Multi-Function Pressure - Temperature Sensor



Eurosensor

## EPTTE5100

### Pressure Connections



### Pressure and temperature output

#### Zero Point:

Pressure: 0 bar → 0 V or 4 mA  
 Temperature: -50° → 0 V or 4 mA

#### Max. Value:

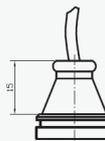
Pressure: selected pressure range 10 V or 20 mA  
 Temperature: +200° C → 10 V or 20 mA

### Connectors

male socket  
 M12x1  
 (S 763)



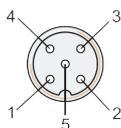
cable output  
 plastic



### Connections

Connector M12x1  
 5-Pin

Cable output



#### Voltage:

1: + Supply	red:	+ Supply
2: Not connected	black:	- Supply
3: - Supply	white:	Output Pressure
4: Output Pressure	green:	Output Temperature
5: Output Temperature	white /blue:	Not connected

#### Current:

1: P+	red:	P+
2: T+	black:	P-
3: P-	green:	T+
4: Not connected	white:	T-
5: T-	white/blue:	Not connected

