



## Temperature Transmitter ETS 7200

Integrated temperature probe

Accuracy 1 %

### Description:

The ETS 7200 is an electronic temperature transmitter which, because of its compact design, is particularly suited to measuring temperature in hydraulic applications in the industrial and mobile sectors. Based on a silicon semiconductor device and corresponding evaluation electronics, the temperature sensor is designed to measure temperatures in the range -25 .. +100 °C.

Various analogue output signals, e.g. 4 .. 20 mA or 0 .. 10 V, are available on the standard version for integration into modern controls. These can be output to the periphery via an M12x1 connector.

The pressure resistance up to 600 bar and excellent EMC characteristics make the ETS 7000 ideal for use in harsh conditions.

### Technical data:

Input data	
Measuring range	-25 .. +100 °C
Probe length	10 mm
Probe diameter	6.7 mm
Pressure resistance	600 bar
Mechanical connection	G1/4 A ISO 1179-2
Tightening torque, recommended	20 Nm
Parts in contact with fluid	Mech. connection: Stainless steel Seal: FKM
Output data	
Output signal, permitted load resistance	4 .. 20 mA, 2-conductor $R_{Lmax} = (U_B - 8 V) / 20 \text{ mA}$ [kΩ] 0 .. 10 V, 3-conductor $R_{Lmin} = 2 \text{ kΩ}$
Accuracy (at room temperature)	≤ ± 1.0 % FS typ. ≤ ± 2.0 % FS max.
Temperature drift (environment)	≤ ± 0.02 % FS / °C
Response time acc. to DIN EN 60751	$t_{50}$ : 4 s $t_{90}$ : 8 s
Environmental conditions	
Operating temperature range	-25 .. +80 °C
Storage temperature range	-40 .. +100 °C
Fluid temperature range <sup>1)</sup>	-40 .. +100 °C / -25 .. +100 °C
CE mark	EN 61000-6-1 / 2 / 3 / 4
ULus mark <sup>2)</sup>	Certificate no. E318391
Vibration resistance acc. to DIN EN 60068-2-6 at 10 .. 500 Hz	≤ 20 g
Shock resistance acc. to DIN EN 60068-2-27	100 g / 6 ms
Protection class acc. to DIN EN 60529 <sup>3)</sup>	IP 67
Other data	
Supply voltage	8 .. 30 V DC 2-conductor 12 .. 30 V DC 3-conductor
when applied acc. to UL specifications	- limited energy - acc. to 9.3 UL 61010; Class 2; UL 1310/1585; LPS UL 60950
Residual ripple supply voltage	≤ 5 %
Current consumption	≤ 25 mA
Weight	~ 50 g

Note: Reverse polarity protection of the supply voltage, overvoltage, overcurrent and short circuit protection are provided.

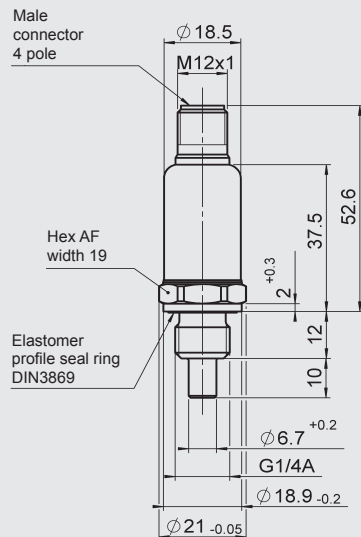
FS (Full Scale) = relative to complete measuring range

<sup>1)</sup> -25 °C with FKM seal, -40 °C on request

<sup>2)</sup> Environmental conditions acc. to 1.4.2 UL 61010-1; C22.2 No. 61010-1

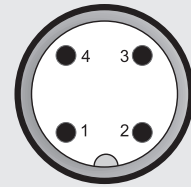
<sup>3)</sup> With mounted mating connector in corresponding protection class

## Dimensions:



## Pin connections:

M12x1



Pin	ETS 7246-A	ETS 7246-B
1	Signal +	+U <sub>B</sub>
2	n.c.	n.c.
3	Signal -	0 V
4	n.c.	Signal

## Model code:

ETS 7 2 4 6 - X - 010 - 000

### Mechanical connection

4 = G1/4 A ISO 1179-2

### Electrical connection

6 = male M12x1, 4 pole  
(mating connector not supplied)

### Signal

A = 4 .. 20 mA, 2-conductor  
B = 0 .. 10 V, 3-conductor

### Probe length

010 = 10 mm

### Modification number

000 = standard

### Accessories:

Appropriate accessories, such as mating connectors, can be found in the Accessories brochure.

## Note:

The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

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