



## Electronic Temperature Transmitter ETS 7000

### Description:

The ETS 7000 is an electronic temperature transmitter which, due to 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 to +100 °C.

The sensor has various analogue output signals as standard, e.g. 4 .. 20 mA or 0 .. 10 V to enable integration into modern controls through an M12x1 connector.

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

### Special features:

- Ideal for OEM applications
- Very compact design
- Excellent EMC characteristics
- Long-term stability
- Standard protection class IP 67

### Technical specifications:

Input data	
Measuring principle	Silicon semiconductor device
Measuring range	-25 .. +100 °C
Pressure resistance	600 bar
Overload pressure	900 bar
Mechanical connection	G1/4 A DIN 3852
Torque value	20 Nm
Parts in contact with medium	Mech. conn.: Stainless steel Seal: FPM
Output data	
Output signal, permitted load resistance	4 .. 20 mA, 2 conductor $R_{Lmax} = (U_B - 8 \text{ V}) / 20 \text{ mA [k}\Omega\text{]}$ 0 .. 10 V, 3 conductor $R_{Lmin} = 2 \text{ k}\Omega$
Accuracy	$\leq \pm 1.5 \% \text{ FS}$
Rise time to DIN EN 60751	$t_{50}: 4 \text{ s}$ $t_{90}: 8 \text{ s}$
Environmental conditions	
Ambient temperature range	-25 .. +80 °C
Storage temperature range	-40 .. +100 °C
Fluid temperature range	-25 .. +100 °C
CE mark	EN 61000-6-1 / 2 / 3 / 4
Vibration resistance to DIN EN 60068-2-6 at 10 .. 500 Hz	$\leq 20 \text{ g}$
Protection class to DIN 40050	IP 67
Other data	
Supply voltage 2 conductor	8 .. 32 V DC
Supply voltage 3 conductor	12 .. 32 V DC
Residual ripple of supply voltage	$\leq 5 \%$
Current consumption 3 conductor	approx. 25 mA
Weight	approx. 50 g

Note: Reverse polarity protection of the supply voltage, excess voltage, override, short circuit protection are provided.  
FS (Full Scale) = relative to complete measuring range

Model code:

ETS 7 2 4 6 - X - 000

**Mechanical connection**  
4 = G1/4 A DIN 3852 (male)

**Electrical connection**  
6 = M12x1, 4 pole, male  
(connector not supplied)

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

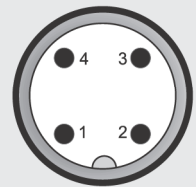
**Modification number**  
000 = Standard

**Note:**  
On instruments with a different modification number, please read the label or the technical amendment details supplied with the instrument.

**Accessories:**  
Appropriate accessories, such as electrical connectors can be found in the Accessories section.

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

Dimensions:

