



Electronic Temperature Transmitter ETS 7000

Description

The ETS 7000 is an electronic temperature transmitter which due to its compact design is used to measure temperature in hydraulic applications in the industrial and mobile sectors.

The temperature sensor, based on a silicon semiconductor device and corresponding evaluation electronics, is capable of measuring temperatures in the range -25 °C to +100 °C.

The sensor has an analogue output signal of 4 .. 20 mA available as standard to enable integration into modern controls through an M12x1 connector, or flying leads.

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
- Small, compact design
- Excellent EMC characteristics
- Long-term stability
- Standard protection class IP67 or IP 69K is possible as an option

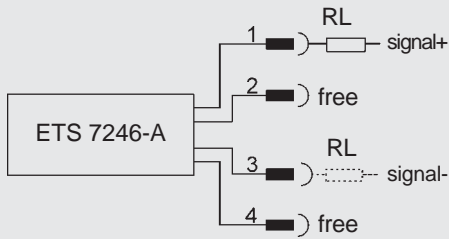
Technical specifications

Input data	
Measuring principle	Silicon semiconductor device
Measuring ranges	-25 °C .. +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 media	Stainless steel, seal: FPM
Output data	
Output signal	4 .. 20 mA
Accuracy	≤ ±1.5 % FS
Rise time t_{90}	≤ 15 s
Ambient conditions	
Fluid temperature range	-25 °C .. +100 °C
Operating temperature range	-25 °C .. +80 °C
Storage temperature range	-40 °C .. +100 °C
CE mark	EN 61000-6-1, EN 61000-6-2 EN 61000-6-3, EN 61000-6-4
Vibration resistance to IEC 68-2-6 at 10 Hz .. 500 Hz	≤ 20 g
Other data	
Supply voltage	8 V .. 32 V DC
Electrical connection	M12x1 or flying leads
Safety type to DIN 40050	IP 67, optionally IP69K
Material of housing	Stainless steel
Weight	approx. 50 g

Note: **FS (Full Scale)** = relative to the full measuring range
Special models on request

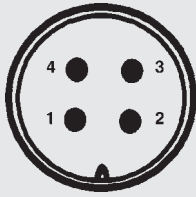
Electrical connection

2 conductor 4 .. 20 mA



$$R_{Lmax.} = \frac{U_B - 8 V}{20 \text{ mA}} \quad [\Omega]$$

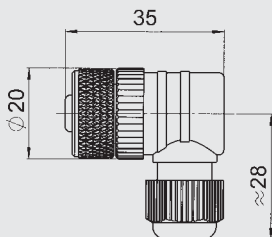
Pin connections (ETS 7246)



	Pin 1	Pin 2	Pin 3	Pin 4
ETS 7246	Signal+	free	Signal-	free

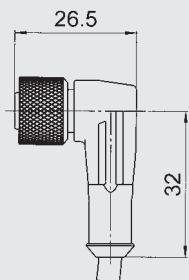
Electrical accessories

ZBE 06 (4 pole)
Right-angled connector M12x1



ZBE 06-02 (4 pole)
Right-angled connector with 2m cable,
M12x1

ZBE 06-05 (4 pole)
Right-angled connector with 5m cable,
M12x1

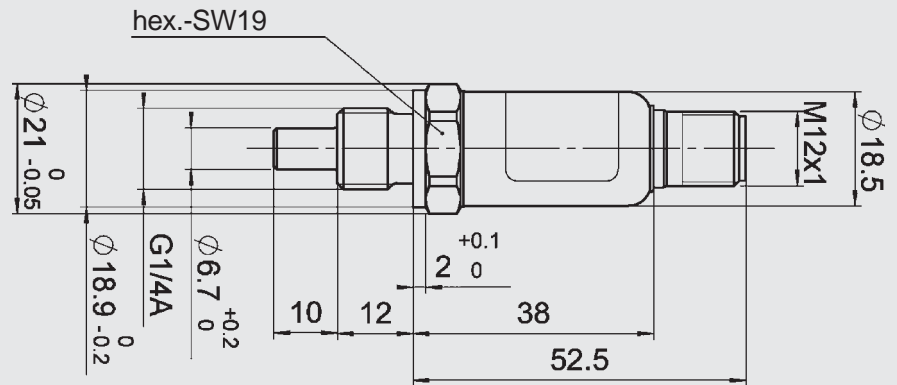


Colour code

Pin 1: brown
Pin 2: white
Pin 3: blue
Pin 4: black

Dimensions

ETS 7246, shown with M12 x 1 connection



Model code

ETS 7 2 4 6 - A - 000

Type of connection, mechanical

4 = G1/4 A

Type of connection, electrical

6 = M12x1 (w/o connector)

Connectors ZBE 06, ZBE 06-02 with 2 m cable,
or ZBE 06-05 with 5 m cable must be ordered separately

Signal technology

A = 2 conductor, 4 .. 20 mA

Modification number

000 standard

Important:

On units with a different modification number, please read the label or the technical amendment details supplied with the unit.

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.



HYDAC ELECTRONIC GMBH

Hauptstraße 27, D-66128 Saarbrücken
Telefon +49 (0)681 7099-0, Telefax +49 (0)681 7099-202
E-Mail: electronic@hydac.com, Internet: www.hydac.com