

## ETS 4000 Series Temperature Transducer



### Applications



### Description

The ETS 4000 is a robust electronic temperature transmitter which is particularly well suited to measuring temperature in hydraulic applications in industry.

The temperature sensor, based on a PT 100 and corresponding evaluation electronics, is capable of measuring temperatures in the range -13° to 212°F.

The sensor has analog output signals of 4 to 20 mA and 0 to 10 V available as standard to enable integration into modern controls.

The pressure resistance up to 9000 psi and excellent EMC characteristics make the ETS 4000 ideal for use in harsh conditions.

### Special Features

- Ideal for industrial applications
- Robust design
- Excellent EMC characteristics
- Good long-term stability
- Standard protection class IP 65

### Approvals



CE mark is a mandatory conformity mark on many products placed on the single market in the European Economic Area

### Technical Details

Sensor Specifications	
Measuring range	-13° to 212°F (-25° to 100°C)
Rated pressure -psi (bar)	9000 (600)
Overload pressure - psi (bar)	13,000 (900)
Mechanical connection	G1/4A DIN 3852 male
Tightening torque	15 lb-ft (20 Nm)
Parts in contact with media	Stainless steel, FPM seal
Accuracy	≤ ±1.8°F (1°C) max
Weight	Approximately 200 g
Output signal	4 to 20 mA, 2 wire, $R_{Lmax} = (UB - 10V) / 20 \text{ mA}$ [kΩ] 0 to 10 V, 3 wire, $R_{Lmin} = 2 \text{ kΩ}$
Reaction Time T90 / T50	9 s / 3 s
Environmental Condition	
Ambient temperature range	-22° to 158°F (-30° to 70°C)
Storage temperature range	-40° to 212°F (-40° to 100°C)
Media temperature range	-22° to 212°F (-30° to 100°C)
CE mark	EN 61000-6-1 / 2 / 3 / 4
Vibration resistance to DIN EN 60068-2-6 at 10 to 500 Hz	≤ 20g
Environmental protection	IP 65
Electrical Specifications	
Supply voltage, 2-wire	10 to 30 VDC
Supply voltage, 3-wire	12 to 30 VDC
Residual ripple supply voltage	≤ 5%
Current consumption	approximately 25 mA
Reverse polarity protection of the supply voltage, excess voltage, override and short circuit protection	Standard

## Model Code

### Mechanical Connection

4 G1/4 A DIN 3852 male

### Electrical Connection

4 4 pole plug M18x1, Binder Series (*connector not included*)

6 M12x1 plug, 4 pole (*connector not included*)

### Output

A 4-20mA, 2-wire

B 0-10VDC, 3-wire

### Modification Number

000 Standard

ETS 4 1 4 X - X - 000

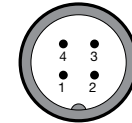
## Pin Connections

### Binder 714 M18



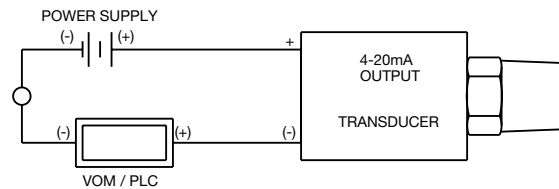
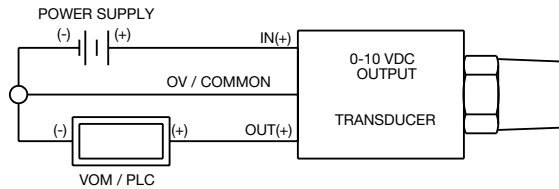
Pin	4144-A	4144-B
1	nc	+U <sub>B</sub>
2	Signal +	Signal
3	Signal -	0V
4	nc	nc

### M12x1



Pin	4146-A	4146-B
1	Signal +	+U <sub>B</sub>
2	nc	nc
3	Signal -	0V
4	nc	Signal

## Circuit Diagram



## Dimensions

