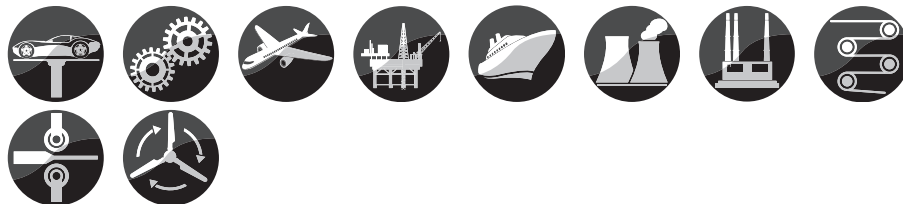


## ETS 3200 Series Temperature Switch for Inline and Tank Mounting



### Applications



### Description

The ETS 3200 is a compact electronic temperature switch with 4-digit digital display.

Pressure resistant to 8700 psi, this model has an integral 18 mm temperature probe and can be screwed directly inline or into a hydraulic block.


Different output models with one or two switching outputs, optionally with an additional analog output signal, offer a variety of application possibilities. The switching points and the associated hystereses can be adjusted very quickly and easily using the keypad.

For optimum adaptation to the particular application, the unit has many additional adjustment parameters (e.g. switching delay times, N/C / N/O function, etc.).


### Special Features

- 2 switching outputs, up to 1.2 A load per output
- Analog output selectable (4 to 20 mA / 0 to 10 V)
- 4-digit digital display
- Optimum alignment - display can be rotated in two planes (axes)
- Switching / reset points and many useful additional functions can be set using keypad
- Display of temperature and unit of measurement in °C or °F

### 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)
Probe length - pressure resistance	18 mm probe 9000 psi 100 mm probe 725 psi 250 mm probe 725 psi 350 mm probe 725 psi
Mechanical connection	G1/2 A DIN 3852 male
Tightening torque	33 lb-ft (45 Nm)
Parts in contact with media	Stainless steel, FPM seal
Accuracy (display, analog output)	2°F (1°C)
Temperature drift (ambient)	≤ ±0.0085% FS / °F max. zero point ≤ ±0.0085% / °F max. range
Weight	with 18 mm probe Approximately 135g with 100 mm probe Approximately 150g with 250 mm probe Approximately 185g with 350 mm probe Approximately 210g
Output signal (selectable)	4 to 20 mA, ohmic resistance max. 500 Ω 0 to 10 V, ohmic resistance min. 1 kΩ corresponds in each case to -25 to 100°C
Switching Specifications	
Type	PNP transistor
Switching current	1.2A per output
Switching cycles	≥ 100 million
Rise time to DIN EN 60751	18mm probe T50 : 3s / T90 : 9s other probes T50 : 8s / T90 : 15s
Environmental Condition	
Operating temperature range	-13° to 176°F (-25° to 80°C) -13° to 140°F (-25° to 60°C) with UL rating
Storage temperature range	-40° to 185°F (-40° to 85°C)
Media temperature range	-40° to 212°F (-40° to 100°C)
CE mark	EN 61000-6-1 / 2 / 3 / 4
 mark (Environmental conditions to 1.4.2 UL 61010-1; C22.2 No. 61010-1)	Certificate no. E318391
Vibration resistance to DIN EN 60068-2-6 at 10 to 500 Hz	≤ 10g
Environmental protection	IP 67 (ZBE 06 / 08 molded cable)
Electrical Specifications	
Supply voltage -limited energy- according to:	9 to 35 VDC without analog output 18 to 35 VDC with analog output 9.3 UL 61010; Class 2; UL 1310/1585; LPS UL 60950
Residual ripple supply voltage	≤ 5%
Current consumption	max. 2.455 A total max. 35 mA with inactive switching outputs max. 55 mA with analog output and inactive switching outputs
Reverse polarity protection of the supply voltage, excess voltage, override and short circuit protection	Standard
Display	7 segment LED display, 4 digits

## Model Code

ETS 3 2 2 X - X - XXXX - 400

### Mechanical Connection

2 = G 1/2 A DIN 3852, male with integral sensor

### Electrical Connection

6 = M12x1 plug, 4 pole for output codes 2 & 3 (connector not included)

8 = M12x1 plug, 5 pole for output code 5 (connector not included)

### Output

2 = 2 Switching Outputs (only with electrical connection 6)

3 = 1 Switching Output with 1 analog output (only with electrical connection 6)

5 = 2 Switching Outputs with 1 analog output (only with electrical connection 8)

### Probe Length

0018 = 18mm (0.71")

0100 = 100mm (3.93")

0250 = 250mm (9.84")

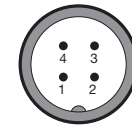
0350 = 350mm (13.8")

### Modification Number

400 = Standard (preset to °F)

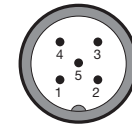
## Pin Connections

### M12x1, 4 pole



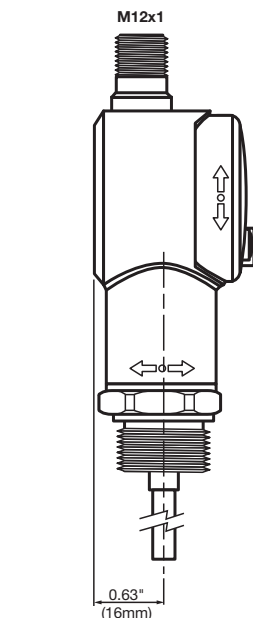
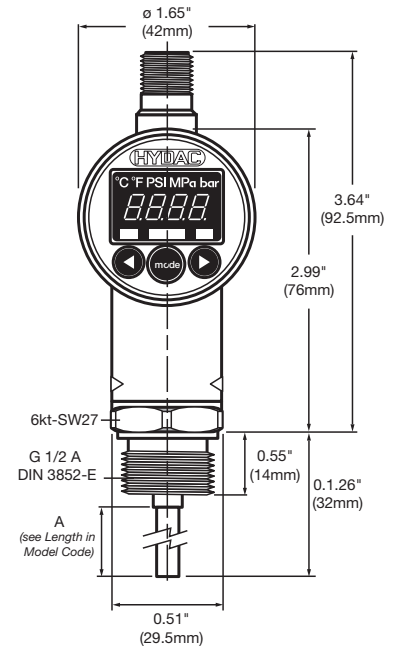
Pin	3226-2	3226-3
1	+U <sub>B</sub>	+U <sub>B</sub>
2	SP 2	analog
3	0 V	0 V
4	SP 1	SP 1

### M12x1, 5 pole



Pin	3228-5
1	+U <sub>B</sub>
2	analog
3	0 V
4	SP 1
5	SP 2

## Dimensions



## Circuit Diagram

