

# TEMPERATURE SENSOR/ TRANSMITTER



TX6273  
REMOTE  
TEMPERATURE  
SENSING PROBES



TX6274  
INTEGRAL AIR  
TEMPERATURE  
SENSING PROBE

high accuracy  
temperature sensor with  
integral signal transmitter



**ATEX**  
**M 1**  
GROUP I & II  
INTRINSICALLY  
SAFE

**TUNNELS**



**MINING**



**TRENCHES**



**VESSELS**



**CONTAINERS**



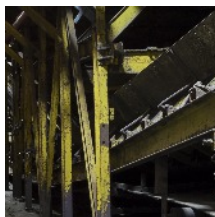
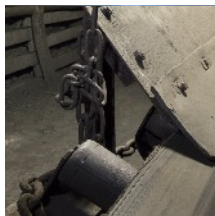
**PROCESS PLANTS**



**STORAGE AREAS**



**CONFINED AREAS**



### fast response

for temperature protection in pipes, vessels, bearings, power packs, gearboxes, drive heads, hydraulic circuits, brake shoes, and ambient air temperature.

### reliable

Long signal transmission distance with automatic stability control.

### choice

- 4...20mA • 0.4...2V • 5...15Hz analogue output signal.
- Optional LCD temperature readout.
- Use with integral or remote sensors.
- Semiconductor sensor or PT100 sensing element compatibility.



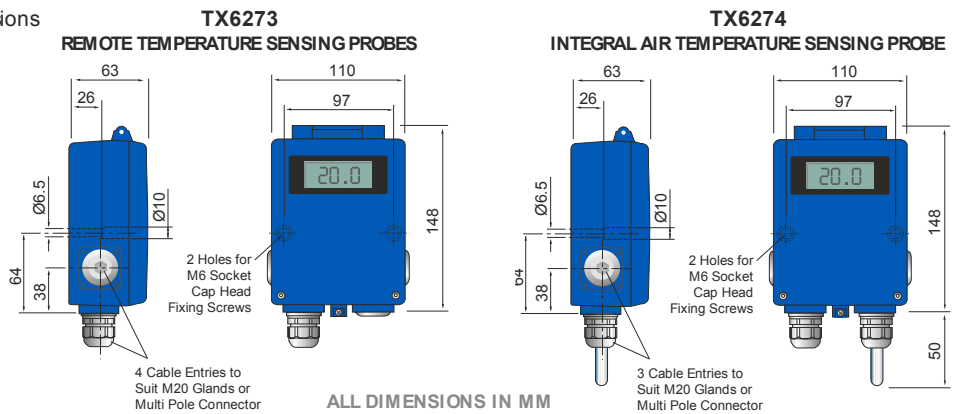
**ATEX  
M 1**  
 GROUP I & II  
 INTRINSICALLY  
 SAFE

...simple  
 safety  
 monitoring

**technical data...**

	SENSOR INPUT TYPES	
	Semi-conductor	PT100 (TX6273 only)
Temperature Measuring Range:	0...100°C	0...200°C
Overall Accuracy:	±2%	1% (dependent on class of probe)
Repeatability:	±1%	1%
Ambient Temperature Limits:	-10...70°C	
Housing Material:	Stainless steel filled Polyamide 6	
Indicator:	Green 'Power on' LED (on versions without LCD)	
Protection Classification:	Dust and waterproof to IP65	
Electrical Connections:	4mm barrier terminals	
Nett Weight:	500g	
Information Display:	3 1/2 digit LCD calibrated in °C	

**Dimensions**



**electrical data...**

**GENERAL PURPOSE AND Ex GROUP II APPLICATIONS (24V dc)**

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<b>Output:</b>	<b>4...20mA</b>	
<b>Max Load</b>	600 ohms at 24V dc	
<b>Supply</b>	10...30V dc	
<b>Current</b>	Loop powered	

**Ex GROUP I APPLICATIONS (12V dc)**

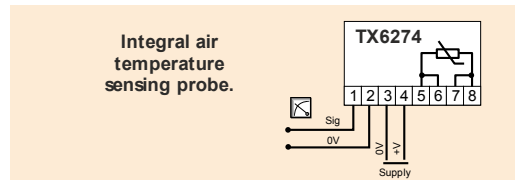
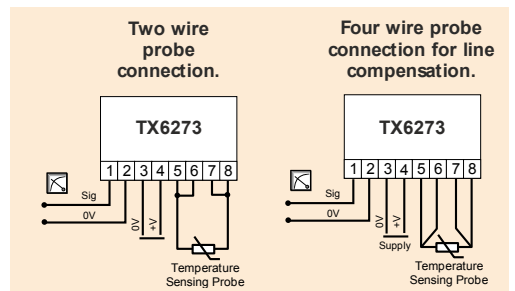
**TX6273 • TX6274**

<b>Output:</b>	<b>0.4...2V</b>	
<b>Min Load</b>	10k ohms	
<b>Supply</b>	9...16.5V dc	
<b>Current</b>	<10mA	

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<b>Output:</b>	<b>5...15Hz</b>	
<b>Max Load</b>	200 ohms at 12V dc	
<b>Supply</b>	9...16.5V dc	
<b>Current</b>	Loop powered	

**connections...**




The output signal from terminals 1 and 4 is a conventional 4...20mA two wire current regulated signal loop. Sensor/transmitter using PT100 or semiconductor sensing probes have very low power consumption so the same loop can be used to also power the sensor. No separate power supply is needed.

**Ex**  
**ATEX**  
**M 1**  
 GROUP I & II  
 INTRINSICALLY  
 SAFE

**order reference...**

**TX6273 TEMPERATURE SENSOR/ TRANSMITTER**  
 Remote Sensing Temperature Probe



**Please specify:**

**CERTIFICATION**

Intrinsically Safe Group I	(01)
Intrinsically Safe Group II	(02)
General Purpose	(03)

**OUTPUT SIGNAL**

0.4...2V (Group I only)	(11)
4...20mA	(12)
5...15Hz output available to special order (Group I only)	

**SENSOR TYPE**

KTY21-6 Semiconductor	(21)
PT100 Resistive	(23)

**DISPLAY**

With Display	(45)
Without Display	(46)

**SENSING PROBES**  
 Please order separately from Technical Datasheet TX2070.



**TX6274 TEMPERATURE SENSOR/ TRANSMITTER**  
 Integral Air Temperature Sensing Probe



**Please specify:**

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**OUTPUT SIGNAL**

0.4...2V (Group I only)	(11)
4...20mA	(12)
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**DISPLAY**

With Display	(45)
Without Display	(46)

**certification & approval...**

	<b>Group I TX6273 TEMPERATURE SENSOR/TRANSMITTER:</b>	GROUP I EEx ia I
	<b>Group II TX6274 TEMPERATURE SENSOR/TRANSMITTER:</b>	GROUP II EEx ia IIC T4
	Designed to comply with the requirements of the EC directive:	<ul style="list-style-type: none"> <li>• ATEX directive 94/9/EEC</li> <li>• EMC directive 89/336/EEC</li> </ul>

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