

# Bearing Temperature Sensor

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## ADB Series

### Adjustable Depth Bearing Temperature Sensor

**NEW  
PRODUCT**

#### APPLICATION

For use on any application where bearing temperature monitoring is desired or required.

#### METHOD OF OPERATION

The ADB series have been designed to allow the depth of the sensor to be adjustable depending on your application. Three standard versions are available with probe lengths of 2, 4 and 8 inches (other lengths available for special order).

The sensors screw directly into a bearing housing through the existing grease zerk thread. Each sensor is fitted with a grease zerk to allow lubrication of the bearing without the need for removal of the sensor.

The ADB style sensors are available with a standard NTC thermistor for 4B's Hotbus and Watchdog systems, or a 4-wire PT100 - RTD type for PLC and DCS systems. Both types allow for continuous temperature monitoring.

The sensors are supplied with a nine foot cable. The connections are not polarity sensitive therefore special connection requirements are eliminated, and the cable can be extended in the field.



ADB Sensor  
(CSA Class II Div 1 Approved)

#### FEATURES

- ▶ Adjustable Sensor Depth
- ▶ Screw in Positive Mount Installation
- ▶ Grease Zerk for Bearing Lubrication
- ▶ 1/2" NPT Conduit Entry (Steel Body)
- ▶ NTC or PT100 - RTD Types
- ▶ CSA Class II Div 1 Approved



ATEX Approved  
Versions Available

#### PART NUMBERS

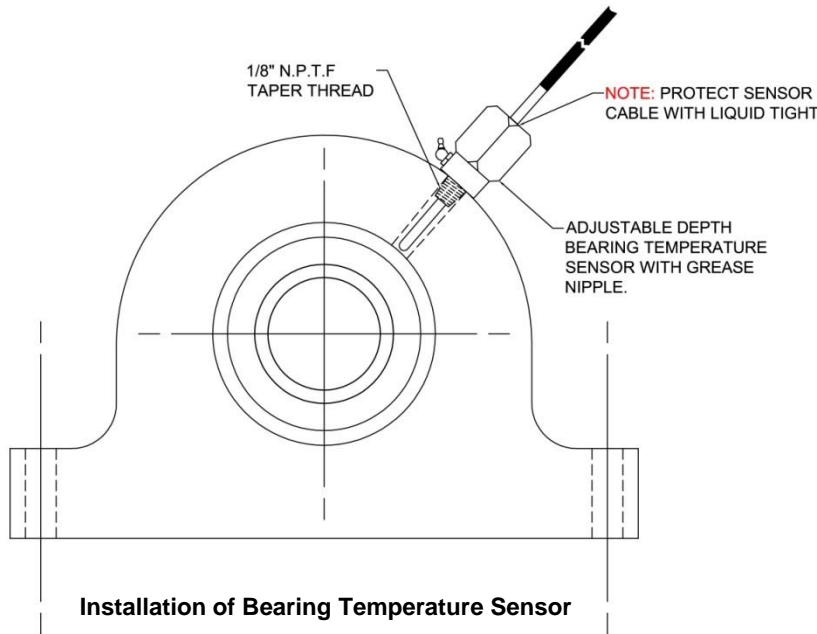
- ▶ ADB20V3C NTC Type: 4 Inch Probe (Standard)
- ▶ ADB20V3C/D2 NTC Type: 2 Inch Probe
- ▶ ADB20V3C/D8 NTC Type: 8 Inch Probe
- ▶ ADB29V3C/D2 PT100 - RTD Type: 2 Inch Probe
- ▶ ADB29V3C PT100 - RTD Type: 4 Inch Probe
- ▶ ADBW Probe Depth Adjustment Tool



ADB Probe Depth  
Adjustment Tool

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Bearing Sensor on Belt Conveyor



Example of Bearing Failure

## TECHNICAL SPECIFICATIONS ADB Series - Bearing Temperature Sensors

NTC Type	
Resistance at 77°F:	10,000 Ohms
Resistance at 140°F:	2,487 Ohms
Resistance at 194°F:	916 Ohms
Sensing Voltage:	5 to 24 VDC
Current Draw:	1 ma
Fixing Thread:	1/8" NPT
Minimum Temp:	-22°F
Maximum Temp:	230°F
Approval:	CSA Class II Div 1

PT100 - RTD Type	
Resistance at -22°F:	88.22 Ohms
Resistance at 140°F:	123.24 Ohms
Resistance at 212°F:	138.50 Ohms
Sensing Voltage:	5 to 24 VDC
Current Draw:	1 ma
Fixing Thread:	1/8" NPT
Minimum Temp:	-22°F
Maximum Temp:	230°F
Approval:	CSA Class II Div 1

Temperature Sensors can be used with the following 4B Hazard Monitoring Systems



T500 Hotbus Elite



Watchdog Elite



T400 Elite

Detailed specification, wiring diagrams and installation/operating instructions available upon request.

Please refer to instruction manual for correct installation.  
Information subject to change or correction. Jan 2010.