

Bearing Temperature Sensors

BETTER BY DESIGN

ADB Series

Adjustable Depth Bearing Temperature Sensors

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.

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.

FEATURES

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

PART NUMBERS/ACCESSORIES

- | | |
|----------------|---------------------------------|
| ▶ ADB20V3C/D2 | NTC Type: 2 Inch Probe |
| ▶ ADB20V3C/D3 | NTC Type: 3 Inch Probe |
| ▶ ADB20V3C | NTC Type: 4 Inch Probe |
| ▶ ADB20V3C/D6 | NTC Type: 6 Inch Probe |
| ▶ ADB20V3C/D8 | NTC Type: 8 Inch Probe |
| ▶ ADB20V3C/D10 | NTC Type: 10 Inch Probe |
| ▶ ADB20V3C/D12 | NTC Type: 12 Inch Probe |
| ▶ ADB29V3C/D2 | PT100 - RTD Type: 2 Inch Probe |
| ▶ ADB29V3C/D3 | PT100 - RTD Type: 3 Inch Probe |
| ▶ ADB29V3C | PT100 - RTD Type: 4 Inch Probe |
| ▶ ADB29V3C/D6 | PT100 - RTD Type: 6 Inch Probe |
| ▶ ADB29V3C/D8 | PT100 - RTD Type: 8 Inch Probe |
| ▶ ADB29V3C/D10 | PT100 - RTD Type: 10 Inch Probe |
| ▶ ADB29V3C/D12 | PT100 - RTD Type: 12 Inch Probe |
| ▶ ADBT2 | ADB Sensor Tester |
| ▶ ADBW | ADB Probe Wrench |



ATEX Approved
Versions Available



ADB Probe Wrench

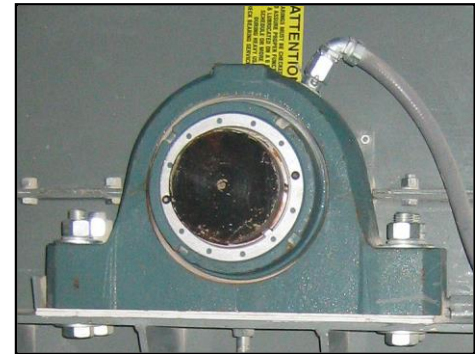
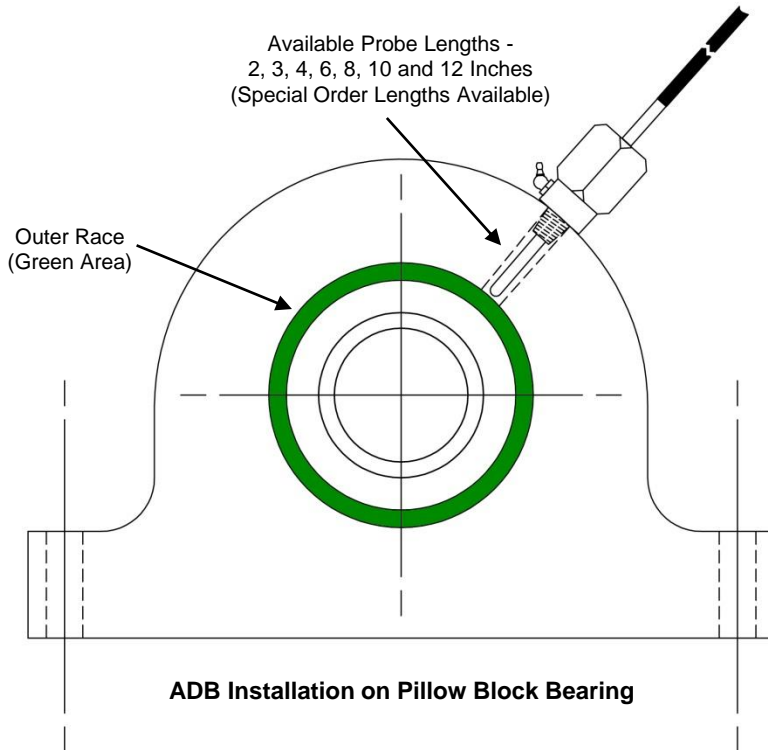
ADB Sensor Tester

During planned maintenance or periodic testing, the ADB sensor tester can be used as a diagnostic tool to verify the alarm and shutdown sequences of the control unit are functioning as expected.



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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:	3,043 Ohms
Resistance at 194°F:	1,264 Ohms
Sensing Voltage:	5 to 24 VDC
Current Draw:	1 mA
Fixing Thread:	1/8" NPT
Minimum Temp:	-22° F (-30° C)
Maximum Temp:	220° F (105° C)
Approvals:	CSA Class II Div 1 (USA & Canada)

PT100 - RTD Type	
Resistance at 77°F:	109.73 Ohms
Resistance at 140°F:	123.24 Ohms
Resistance at 194°F:	134.70 Ohms
Coefficient	3850 PPM/K (385)
Sensing Voltage:	5 to 24 VDC
Current Draw:	1 mA
Fixing Thread:	1/8" NPT
Minimum Temp:	-22° F (-30° C)
Maximum Temp:	220° F (105° C)
Approvals:	CSA Class II Div 1 (USA & Canada)

Temperature Sensors can be used with an existing PLC/DCS or with the following 4B Hazard Monitoring Systems



T500 Hotbus Elite



Watchdog Super Elite



T400N Elite