

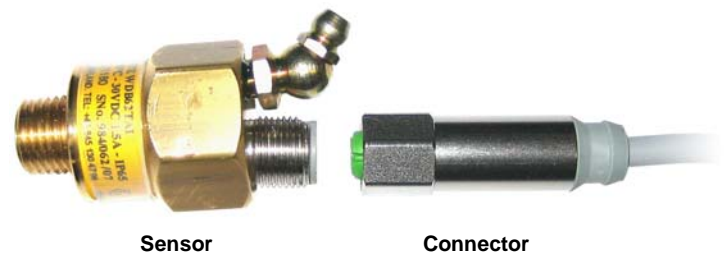
WDB6 Series Bearing Temperature Sensors

APPLICATION

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

METHOD OF OPERATION

The WDB 6 series is a range of bearing sensors manufactured to screw directly into a bearing housing through the existing 1/4" BSPT threaded grease zerk (can be installed in 1/8" NPT grease zerk fitting with an adapter). Each sensor is fitted with a grease zerk to allow lubrication of the bearing without the need for removal of the sensor. The sensor is fitted with a M12 connector for use with a separately supplied cable and socket assembly which can be attached connected directly to a PLC or to a hazard monitoring system, such as 4B's T500 Hotbus Elite, Watchdog Elite, or T400 Elite. The connections are not polarity sensitive therefore special connection requirements are eliminated. Four versions are available, a NTC thermistor model or PT100 type for continuous temperature monitoring, and PTC or Contact thermistor models with five trip points (122°F, 140°F, 158°F, 176°F, 194°F).



Sensor

Connector



FEATURES

- ▶ Screw in Installation
- ▶ Grease Zerk for Bearing Lubrication
- ▶ Wiring Connector
- ▶ NTC Version – Continuous Temperature
- ▶ PTC or Contact Versions – Trip Points from 122°F to 194°F
- ▶ PT100 Version

PART NUMBERS

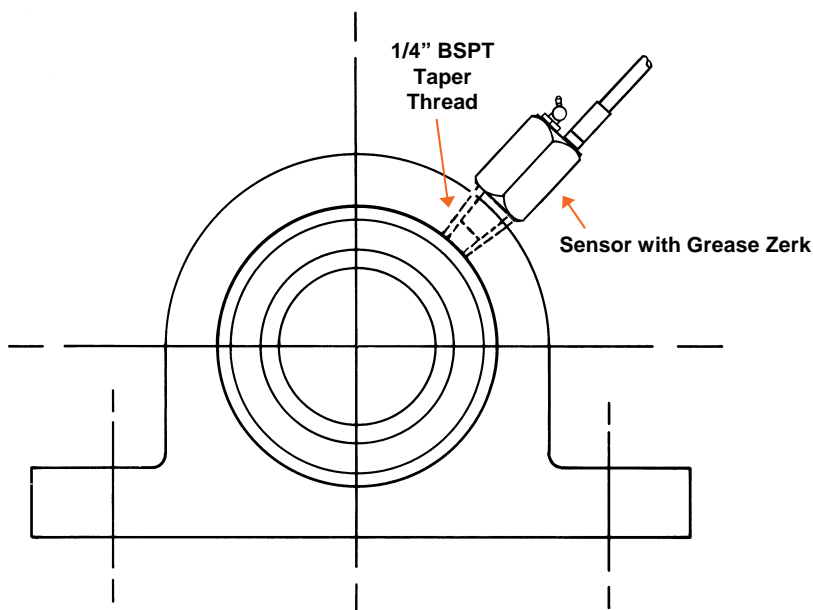
- ▶ WDB60AI – NTC Type (Continuous)
- ▶ WDB61AI – PTC Type (122°F Trip)
- ▶ WDB62AI – PTC Type (140°F Trip)
- ▶ WDB63AI – PTC Type (158°F Trip)
- ▶ WDB64AI – PTC Type (176°F Trip)
- ▶ WDB65AI – PTC Type (194°F Trip)
- ▶ WDB61TAI – Contact Type (122°F Trip)
- ▶ WDB62TAI – Contact Type (140°F Trip)
- ▶ WDB63TAI – Contact Type (158°F Trip)
- ▶ WDB64TAI – Contact Type (176°F Trip)
- ▶ WDB65TAI – Contact Type (194°F Trip)
- ▶ WDB6PAI – PT100 Type (Continuous)

ACCESSORIES

- ▶ CA4SW03AI – 10 ft. 4 Core M12 Socket Cable, Bare Wire End
- ▶ CA4SW05AI – 16 ft. 4 Core M12 Socket Cable, Bare Wire End
- ▶ CA4SW10AI – 32 ft. 4 Core M12 Socket Cable, Bare Wire End
- ▶ CA4SW30AI – 98 ft. 4 Core M12 Socket Cable, Bare Wire End
- ▶ CA4SP03AI – 10 ft. 4 Core M12 socket Cable, M12 Plug End
- ▶ CA4SP05AI – 16 ft. 4 Core M12 socket Cable, M12 Plug End
- ▶ CA4SP10AI – 32 ft. 4 Core M12 socket Cable, M12 Plug End
- ▶ CA4SP30AI – 98 ft. 4 Core M12 socket Cable, M12 Plug End

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

Please refer to instruction manual for correct installation. Information subject to change or correction. March 2008.



Installation of Bearing Temperature Sensor



Example of Bearing Failure

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

TECHNICAL SPECIFICATIONS

WDB6 Series Bearing Temperature Sensors

NTC Sensors	
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

PTC Sensors	
Resistance at 140°F:	≤ 250 Ohms
Resistance at Trip Point:	≥ 2,000 Ohms
Sensing Voltage:	5 to 25 VDC
Current Draw:	20 ma

Contact Sensors	
Resistance at 140°F:	≤ 2 Ohms
Resistance at Trip Point:	Open Circuit
Sensing Voltage:	24v DC Typical
Current Draw:	1.5 amps

PT100 Sensors	
Resistance at 32°F:	100 Ohms
Resistance at 176°F:	131 Ohms
Sensing Voltage:	5 to 24 VDC
Current Draw:	1 ma



T500 Hotbus Elite



Watchdog Elite



T400 Elite

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