

Bently Nevada 3500/40M 135489-04

Four-channel Proximitor monitor component

Overview

The Bently Nevada 3500/40M is a four-channel Proximitor Monitor for proximity-based vibration and position measurements including radial vibration, thrust position, eccentricity, differential expansion and REBAM.

01 / FUNCTION

Accepts one to four proximity-transducer signals.

02 / FUNCTION

Supports radial vibration, thrust, eccentricity, differential expansion and REBAM channel types.

03 / FUNCTION

Provides buffered transducer outputs and 4-20 mA recorder outputs.

04 / FUNCTION

Compares conditioned measurements with configurable Alert and Danger setpoints.

PUBLIC PRODUCT FIELD	OFFICIAL VALUE
Exact I/O identity	Internal barriers; internal terminations
Channels	1 to 4 proximity-transducer inputs
Power consumption	7.7 W typical
Standard input impedance	10 kOhm
Radial/thrust/eccentricity sensitivity	3.94 or 7.87 mV per micrometre
Differential-expansion sensitivity	0.394 or 0.787 mV per micrometre

Technical parameter dashboard

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PARAMETER	OFFICIAL VALUE	PARAMETER	OFFICIAL VALUE	PARAMETER	OFFICIAL VALUE
Exact I/O identity	Internal barriers; internal terminations	Differential-expansion sensitivity	0.394 or 0.787 mV per micrometre	Direct filter selections	4-4000 Hz or 1-600 Hz, channel dependent
Channels	1 to 4 proximity-transducer inputs	REBAM sensitivity	40 or 80 mV per micrometre	Typical accuracy	+/-0.33% of full scale
Power consumption	7.7 W typical	Transducer supply	-24 Vdc nominal	Maximum accuracy error	+/-1% of full scale
Standard input impedance	10 kOhm	Buffered-output impedance	550 Ohm	Operating temperature	-30 to +65 degrees C
Radial/thrust/eccentricity sensitivity	3.94 or 7.87 mV per micrometre	Recorder output	4-20 mA proportional to full scale		

Official evidence boundary

Official evidence: 3500/40M Proximitor Monitor Datasheet, 141535 Rev. R. Technical statements in this document are limited to that manufacturer publication and the exact ordering identity shown.

Common applications and Product Precautions

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Radial shaft vibration

Condition proximity-probe dynamic motion for machinery-protection alarming.

Thrust position

Monitor axial position with a matched proximity system and configured alarm limits.

Differential expansion

Measure relative thermal growth using the documented paired-channel configuration.

Eccentricity or REBAM

Apply the appropriate sensitivity and filtering to slow-roll or bearing measurements.

01 / CHECK

Identify the exact I/O type and termination method before disturbing field wiring.

02 / CHECK

Match every channel to its documented proximity probe, extension cable and Proximitor Sensor.

03 / CHECK

Restore transducer sensitivity and channel type before setting alarm values.

04 / CHECK

Verify gap voltage and buffered output before accepting dynamic measurements.

05 / CHECK

Keep recorder wiring within the 4-20 mA load specification and preserve grounding.

06 / CHECK

Confirm selected filters and full-scale ranges against the machine configuration.

07 / CHECK

Run a controlled functional test of Alert, Danger and Not-OK behavior.

08 / CHECK

Archive final gap, scale, alarm and recorder-output results before return to service.

Engineering FAQ

Eight exact-model answers with official evidence

What distinguishes the barrier-equipped identity of 3500/40M 135489-04?

135489-04 is the internal-barrier, internal-termination I/O variant and must remain paired with the documented 3500/40M channel configuration.

How do internal barriers change the pre-energization check for 3500/40M 135489-04?

Confirm the approved barrier circuit, compatible transducer system, grounding and hazardous-area documentation before applying rack power.

Which position measurements may be configured through 3500/40M 135489-04?

The monitor supports thrust position, eccentricity and differential expansion in addition to vibration functions.

How should the 10 kOhm input characteristic be considered for 3500/40M 135489-04?

Use the documented proximity-transducer interface and avoid test equipment that would disturb the standard 10 kOhm input path.

What alarm test is appropriate for a barrier channel on 3500/40M 135489-04?

Inject or simulate a controlled input through an approved method and verify Alert, Danger and Not-OK response without bypassing the barrier design.

Why must the -24 Vdc supply be checked at the field side of 3500/40M 135489-04?

Bias at the installed transducer verifies power, polarity, barrier path and field continuity together.

What mismatch would a buffered-output comparison reveal on 3500/40M 135489-04?

A difference from the expected raw transducer signal can indicate wiring, barrier, sensitivity or configuration problems before processed alarms are tested.

Which hazardous-area records belong with 3500/40M 135489-04 after commissioning?

Retain the exact barrier I/O identity, channel wiring, compatible transducer, configuration, gap, alarm test and authorization evidence.

Related products and contact

Catalogue navigation separate from technical evidence

NO.	RELATED APTERPOWER PRODUCT	LINK
01	Bently Nevada 169459-01	Bently Nevada 169459-01
02	Bently Nevada 3500-05-02-05-00-00-01	Bently Nevada 3500-05-02-05-00-00-01
03	Bently Nevada 330101-00-48-50-02-05	Bently Nevada 330101-00-48-50-02-05
04	Bently Nevada 3500-50	Bently Nevada 3500-50
05	Bently Nevada 3500-33-149986-01	Bently Nevada 3500-33-149986-01
06	Bently Nevada 3500-15-133292-01	Bently Nevada 3500-15-133292-01

Compatibility notice

A related ApterPower page is not an approved substitute. Verify the exact manufacturer ordering code, installed interfaces and configuration before procurement or maintenance release.

APTER POWER CONTACT

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