

Bently Nevada 3500/40M 125680-01

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-termination I/O module
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

Bently Nevada 3500/40M 125680-01

PARAMETER	OFFICIAL VALUE	PARAMETER	OFFICIAL VALUE	PARAMETER	OFFICIAL VALUE
Exact I/O identity	Internal-termination I/O module	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 Proximity 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

Why must internal terminal numbers be preserved when replacing 3500/40M 125680-01?

This exact I/O variant terminates field circuits internally, so the installed channel-to-terminal mapping must be captured before removal.

Which measurement families can the 3500/40M assembly using 3500/40M 125680-01 support?

Documented types include radial vibration, thrust position, eccentricity, differential expansion and REBAM.

How is proximity sensitivity selected for channels connected through 3500/40M 125680-01?

Choose the configured sensitivity for the actual proximity system; radial, thrust and eccentricity use documented 3.94 or 7.87 mV per micrometre options.

What gap-related check should precede alarm testing on 3500/40M 125680-01?

Verify probe gap or bias and the buffered transducer output before accepting processed vibration or position values.

Which direct-filter choices may appear with 3500/40M 125680-01?

The datasheet identifies 4-4000 Hz and 1-600 Hz direct-filter selections depending on the configured channel type.

What accuracy envelope should be used to review a channel using 3500/40M 125680-01?

The published reference is +/-0.33% typical and +/-1% maximum of full scale under the stated conditions.

How is the recorder output from 3500/40M 125680-01 verified?

Check the 4-20 mA signal against the configured full scale and confirm the field circuit preserves the approved grounding path.

Which results close an internal-termination replacement of 3500/40M 125680-01?

Record terminal identity, probe system, gap, sensitivity, filter, full scale, alarms and recorder response for every active channel.

Related products and contact

Catalogue navigation separate from technical evidence

NO.	RELATED APTERPOWER PRODUCT	LINK
01	Bently Nevada 3500-22-01-01-01	Bently Nevada 3500-22-01-01-01
02	Bently Nevada 350610-00-05	Bently Nevada 350610-00-05
03	Bently Nevada 3500-15-106M2686-00	Bently Nevada 3500-15-106M2686-00
04	Bently Nevada 3500-54M-286566-01	Bently Nevada 3500-54M-286566-01
05	Bently Nevada 9571-12	Bently Nevada 9571-12
06	Bently Nevada 21504-000-032-10-02	Bently Nevada 21504-000-032-10-02

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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