

Bently Nevada 3500/40M 126615-01

Four-channel Proximitor monitor component

Product identity and system role

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.

IDENTITY FIELD	VERIFIED VALUE
Exact I/O identity	External-termination I/O module
Channels	1 to 4 proximity-transducer inputs
Power consumption	7.7 W typical
Standard input impedance	10 kOhm

Official technical parameters

Bently Nevada 3500/40M 126615-01 / manufacturer-published values

PARAMETER	OFFICIAL VALUE
Exact I/O identity	External-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
REBAM sensitivity	40 or 80 mV per micrometre
Transducer supply	-24 Vdc nominal
Buffered-output impedance	550 Ohm
Recorder output	4-20 mA proportional to full scale
Direct filter selections	4-4000 Hz or 1-600 Hz, channel dependent
Typical accuracy	+/-0.33% of full scale
Maximum accuracy error	+/-1% of full scale
Operating temperature	-30 to +65 degrees C

Official evidence boundary

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

Applications and engineering checks

Bently Nevada 3500/40M 126615-01

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 / PRECAUTION

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

02 / PRECAUTION

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

03 / PRECAUTION

Restore transducer sensitivity and channel type before setting alarm values.

04 / PRECAUTION

Verify gap voltage and buffered output before accepting dynamic measurements.

05 / PRECAUTION

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

06 / PRECAUTION

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

07 / PRECAUTION

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

08 / PRECAUTION

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

Model-specific engineering FAQ

Eight evidence-mapped decisions

What extra hardware is required when 3500/40M 126615-01 uses external terminations?

The external-termination I/O requires the documented termination block and cable arrangement; retain those identities during replacement.

Why can 3500/40M 126615-01 not be exchanged blindly with an internal-termination spare?

The field interface, cable and termination-block arrangement differ even though the monitor family performs the same measurements.

How should differential-expansion sensitivity be checked for 3500/40M 126615-01?

Use the configured 0.394 or 0.787 mV per micrometre option and the installed probe-system calibration.

What evidence supports a REBAM channel connected through 3500/40M 126615-01?

Confirm the 40 or 80 mV per micrometre sensitivity, probe geometry, filter and baseline response documented for the bearing measurement.

Which supply condition should be measured at the external circuit of 3500/40M 126615-01?

The monitor provides a nominal -24 Vdc transducer supply; verify channel bias at the termination arrangement.

Why is buffered-output impedance relevant to testing 3500/40M 126615-01?

The 550 Ohm published impedance informs the temporary measurement interface and helps avoid loading the buffered signal.

How can external cable restoration for 3500/40M 126615-01 be accepted?

Check continuity, shield routing, polarity and terminal-block identity before comparing gap and dynamic response with the pre-work baseline.

What commissioning package should accompany 3500/40M 126615-01?

Retain the external block and cable IDs, channel configuration, probe calibration, gap, full scale, alarm test and recorder-output results.

EVIDENCE MAP A

FAQ 01 — pp. 9-11

FAQ 03 — pp. 3-6

FAQ 05 — pp. 3-4

FAQ 07 — pp. 3-11

EVIDENCE MAP B

FAQ 02 — pp. 9-11

FAQ 04 — pp. 3-6

FAQ 06 — pp. 3-4

FAQ 08 — pp. 1-11

Related products and contact

Verified ApterPower navigation links; not approved substitutes

NO.	RELATED APTERPOWER PRODUCT	LINK
01	Bently Nevada 3500-05-01-01-00-00-01	Bently Nevada 3500-05-01-01-00-00-01
02	Bently Nevada 136719-01-304719	Bently Nevada 136719-01-304719
03	Bently Nevada 3500-61-C2-A0133811-02	Bently Nevada 3500-61-C2-A0133811-02
04	Bently Nevada 3500-04-C2-A0136719-01-C2-A0128275-01F	Bently Nevada 3500-04-C2-A0136719-01-C2-A0128275-01F
05	Bently Nevada 3500-04-136719-01-128275-01	Bently Nevada 3500-04-136719-01-128275-01
06	Bently Nevada 130118-0050-02	Bently Nevada 130118-0050-02

Navigation boundary

These links provide nearby catalogue references only. Confirm the complete machine, rack, I/O, transducer and ordering-code requirements before selecting any alternate article.

Official evidence boundary

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