

Bently Nevada 3500/70M 135489-01

Four-channel reciprocating impulse/velocity monitor I/O module

Overview

Bently Nevada 3500/70M 135489-01 is an internal-barrier I/O module with four Prox/Accel channels for a reciprocating impulse/velocity monitoring assembly.

01 / FUNCTION

Supports impulse acceleration, acceleration 2, reciprocating velocity and low-frequency velocity functions.

02 / FUNCTION

Accepts one to four signals with channels programmed in pairs.

03 / FUNCTION

Provides buffered transducer outputs and per-channel 4-20 mA recorder signals.

04 / FUNCTION

Applies to crankcase and crosshead vibration monitoring on reciprocating machinery.

PUBLIC PRODUCT FIELD	OFFICIAL VALUE
Exact I/O identity	135489-01 internal barriers; internal terminations; four Prox/Accel channels
Channels	1 to 4 signals; programmed in pairs
Channel functions	Impulse acceleration, acceleration 2, reciprocating velocity and low-frequency reciprocating velocity
Acceleration input impedance	10 kOhm
Velocity input impedance	Greater than 1 MOhm
Special-inhibit input	5 Vdc at 390 microampere

Technical parameter dashboard

Bently Nevada 3500/70M 135489-01

PARAMETER	OFFICIAL VALUE	PARAMETER	OFFICIAL VALUE	PARAMETER	OFFICIAL VALUE
Exact I/O identity	135489-01 internal barriers; internal terminations; four Prox/Accel channels	Velocity input impedance	Greater than 1 MOhm	Buffered-output impedance	550 Ohm
Channels	1 to 4 signals; programmed in pairs	Special-inhibit input	5 Vdc at 390 microampere	Recorder output	4-20 mA; 12 V maximum; 600 Ohm maximum; under 100 ms
Channel functions	Impulse acceleration, acceleration 2, reciprocating velocity and low-frequency reciprocating velocity	Power consumption	7.7 W typical		
Acceleration input impedance	10 kOhm	Transducer supply	-22 Vdc minimum; 40 mA maximum		

Official evidence boundary

Official evidence: 3500/70M Recip Impulse/Velocity Monitor Datasheet, 166766 Rev. L. Technical statements in this document are limited to that manufacturer publication and the exact ordering identity shown.

Common applications and Product Precautions

Bently Nevada 3500/70M 135489-01

Crankcase impulse monitoring

Detect impact-like acceleration events on reciprocating machinery.

Crosshead vibration

Measure reciprocating velocity at a documented casing or crosshead location.

Low-frequency velocity

Apply the low-frequency channel type for the intended reciprocating operating band.

Channel-pair protection

Configure paired channels for matching or separate functions as the machine design requires.

01 / CHECK

Confirm 135489-01 belongs to the 3500/70M assembly and not another monitor family using the same base part number.

02 / CHECK

Preserve the four internal-barrier Prox/Accel channel assignments.

03 / CHECK

Match acceleration or velocity input impedance to the configured transducer type.

04 / CHECK

Restore paired-channel functions and special-inhibit logic from the approved record.

05 / CHECK

Verify transducer supply, bias and buffered outputs before commissioning alarms.

06 / CHECK

Check recorder load and output scaling on every active channel.

07 / CHECK

Prove impulse or velocity alarm behavior with a controlled test appropriate to the selected channel type.

08 / CHECK

Retain baseline vibration, alarm response, inhibit state and acceptance evidence.

Engineering FAQ

Eight exact-model answers with official evidence

How is 3500/70M 135489-01 distinguished from identical base-number I/O modules used by other 3500 monitors?

Confirm the complete 3500/70M identity and the four internal-barrier Prox/Accel channel configuration rather than relying on the 135489-01 number alone.

Which measurements can the installed 3500/70M assembly perform with 3500/70M 135489-01?

Configured functions include impulse acceleration, acceleration 2, reciprocating velocity and low-frequency reciprocating velocity.

Why must channel pairing be preserved when replacing 3500/70M 135489-01?

The monitor programs channels in pairs, and paired channels may carry matching or different reciprocating measurement functions.

What input-impedance distinction matters for 3500/70M 135489-01?

Acceleration inputs use 10 kOhm while velocity inputs exceed 1 MOhm; the I/O and transducer configuration must agree.

What is the documented special-inhibit input condition for 3500/70M 135489-01?

The special-inhibit input is specified at 5 Vdc and approximately 390 microampere; verify the installed logic before relying on inhibition.

Which transducer-supply limit should be checked on 3500/70M 135489-01?

The published supply is -22 Vdc minimum with a 40 mA maximum; verify bias and current for each active channel.

How should the recorder interface from 3500/70M 135489-01 be accepted?

Confirm 4-20 mA scaling, no more than 600 Ohm load, 12 V maximum compliance and response under 100 ms.

What final evidence proves the reciprocating channels using 3500/70M 135489-01?

Retain the channel type, paired configuration, baseline waveform, inhibit state, alarm response and recorder-output results.

Related products and contact

Catalogue navigation separate from technical evidence

NO.	RELATED APTERPOWER PRODUCT	LINK
01	Bently Nevada 3500-23E	Bently Nevada 3500-23E
02	Bently Nevada 3500-50E	Bently Nevada 3500-50E
03	Bently Nevada 3500-42E	Bently Nevada 3500-42E
04	Bently Nevada 149992-01	Bently Nevada 149992-01
05	Bently Nevada 140471-01	Bently Nevada 140471-01
06	Bently Nevada 3500-77M-140734-07	Bently Nevada 3500-77M-140734-07

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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