

3500/42M Proximator*/Seismic Monitor

Product Datasheet

Bently Nevada* Asset Condition Monitoring



Description

The 3500/42M Proximator*/Seismic Monitor is a four-channel monitor that accepts input from proximity and seismic transducers, conditions the signal to provide various vibrations and position measurements, and compares the conditioned signals with user-programmable alarms.

You can program each channel using the 3500 Rack Configuration Software to perform the following functions:

- Radial vibration
- Thrust position
- Differential expansion
- Eccentricity
- REBAM
- Acceleration
- Velocity
- Shaft absolute
- Circular acceptance region



The monitor channels are programmed in pairs and can perform up to two of the listed functions at a time. For example, Channels 1 and 2 can perform one function while channels 3 and 4 perform another or the same function.

The primary purpose of the 3500/42M Proximator*/Seismic Monitor is to provide the following:

- Machinery protection by continuously comparing monitored parameters against configured alarm setpoints to drive alarms
- Essential machine information for both operations and maintenance personnel

Each channel, depending on configuration, typically conditions its input signal to generate various parameters called **static values**. You can configure **alert setpoints** for each active static value and **danger setpoints** for any two of the active static values.



imagination at work

Part Number: 143694-01
Rev. P

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Output Supply Parameters

The following values are accurate regardless of external barrier connections.

I/O Part and Order Options	Description	Configuration	Supply Parameters		
			U (V)	I (mA)	P (W)
128229-01 A 01	Prox/Seismic I/O Module with Internal Terminations	Prox/Accel	23.9	45.5	1.09
		Velomitor	23.9	45.5	1.09
		Seismoprobe	6.82	2.75	0.02
128240-01 A 02	Prox/Seismic I/O Module with External Terminations	Prox/Accel	23.9	45.5	1.09
		Velomitor	23.9	45.5	1.09
		Seismoprobe	6.82	2.75	0.02
138708-01 A 07	Shaft Absolute I/O Module with Internal Terminations	Prox & Velomitor	23.9	45.5	1.09
		Prox & Seismoprobe	6.82	45.5	0.31
138700-01 A 08	Shaft Absolute I/O Modules with External Terminations	Prox & Velomitor	23.9	45.5	1.09
		Prox & Seismoprobe	6.82	45.5	0.31
140471-01 A 09	Prox/Velom I/O Module with Internal Terminations	Prox/Accel	23.9	45.5	1.09
		Velomitor	23.9	45.5	1.09
140482-01 A 10	Prox/Velom I/O Module with External Terminations	Prox/Accel	23.9	45.5	1.09
		Velomitor	23.9	45.5	1.09

Ordering Information



For the detailed listing of country and product specific approvals, refer to the **Approvals Quick Reference Guide**, document 108M1756, at www.GEmeasurement.com.

Proximitor Seismic Monitor 3500/42 - AXX - BXX

A: I/O Module Type

See **I/O Module Types** on page 12.

B: Agency Approval

- 00** None
- 01** CSA / NRTL / C (Class 1, Division 2)
- 02** ATEX / IECEx / CSA (Class 1, Zone 2)

External Termination Blocks

125808-02	Proximitor ET Block Euro Style Connectors
128015-02	Proximitor ET Block Terminal Strip Connectors
128702-01	Recorder External Termination Block Euro Style connectors
128710-01	Recorder External Termination Block Terminal Strip connectors
140993-01	Shaft Absolute External Termination Block Euro Style connectors
141001-01	Shaft Absolute External Termination Block Terminal Strip
125808-08	Proximitor / Velomitor External Termination Block Euro Style connectors

Cables

3500 Transducer XDCR signal to External Termination Block Cable 129525 - AXXXX - BXX

A: I/O Cable length

- 0005** 5 feet (1.5 metres)
- 0007** 7 feet (2.1 metres)
- 0010** 10 feet (3.0 metres)
- 0025** 25 feet (7.6 metres)
- 0050** 50 feet (15.2 metres)
- 0100** 100 feet (30.5 metres)

B: Assembly instructions

- 01** Not assembled
- 02** Assembled

3500 Recorder Output to External Termination Block Cable 129529 - AXXXX - BXX

A: I/O Cable length

- 0005** 5 feet (1.5 metres)
- 0007** 7 feet (2.1 metres)
- 0010** 10 feet (3.0 metres)
- 0025** 25 feet (7.6 metres)
- 0050** 50 feet (15.2 metres)
- 0100** 100 feet (30.5 metres)

B: Assembly instructions

- 01** Not assembled
- 02** Assembled

Spares

176449-02	3500/42M Proximito*/Seismic Monitor
128229-01	Prox/Seismic I/O Module with internal terminations
128240-01	Prox/Seismic I/O Module with external terminations
00530843	3500/42M Prox/Seismic I/O Module four-pin connector shunt
143489-01	3500/42M Monitor Manual
135489-01	I/O Module with Internal Barriers (internal terminations, 4 x Prox/Accel)
135489-02	I/O Module with Internal Barriers (internal terminations, 2 x Prox/Accel and 2 x Velomitor)
135489-03	I/O Module with Internal Barriers (internal terminations, 4 x Velomitor)
138708-01	Shaft Absolute I/O Module with internal terminations
138700-01	Shaft Absolute I/O Modules with external terminations
00517018	3500/42M Shaft Absolute I/O Module 8-pin connector shunt
140471-01	Prox/Velom I/O Module with internal terminations
140482-01	Prox/Velom I/O Module with External Terminations
00561941	3500/42M Prox/Velom I/O Module 10-pin connector shunt
00580434	Internal I/O Module connector header, Euro style, 8-pin Used on I/O modules 128229-01 and 138708-01
00580432	Internal I/O Module connector header, Euro style, 10-pin Used on I/O modules 128229-01 and 138708-01
00502133	Internal I/O Module connector header, Euro style, 12-pin

Firmware & Software Requirements

	3500/01 software, version 2.50 or later
3500/42M Proximito*/Seismic Monitor	3500/02 software, version 2.20 or later 3500/03 software, version 1.21 or later
Internal Barrier I/O Modules	See the 3500 Internal Barrier datasheet (part number 141495-01)
Shaft Absolute	3500/42M Module Firmware, revision B 3500/01 Software, version 2.61 DM2000 Software, version 3.10 The 3500 Proximito / Seismic Monitor, version M
REBAM	3500/40M Module Firmware – Revision 2.1 3500/01 Software, version 3.30 3500/02 Software, version 2.40 3500/03 Software, version 1.40 DM2000 Software, version 3.40 The 3500 Proximito Monitor, version M
Acceleration II, Velocity II, Circular Acceptance Region	3500/42M Module Firmware, revision 2.10 3500/01 Software, version 3.20 DM2000 Software, version 3.30 The 3500 Proximito Monitor, version M

I/O Module Types

AXX Ordering Option	I/O Part Number	I/O Description	Transducer Type
01	128229-01	Prox/Seismic I/O Module with internal terminations	Seismoprobe Prox/Accel and Velomitor are supported but are not recommended.
02	128240-01	Prox/Seismic I/O Module with external terminations	Seismoprobe Prox/Accel and Velomitor are supported but are not recommended.
04	135489-01	I/O Module with internal Barriers, internal terminations, 4 x Prox/Accel	Prox/Accel on channels 1 through 4
05	135489-02	I/O Module with internal barriers, internal terminations, 2 x Prox/Accel and 2 x Velomitor	Prox/Accel on channels 1 and 2 Velomitor on channels 3 and 4
06	135489-03	I/O Module with internal barriers, internal terminations, 4 x Velomitor	Velomitor on channels 1 through 4
07	138708-01	Shaft Absolute I/O Module with internal terminations	Prox/Accel or Velomitor or Seismorprobe
08	138700-01	Shaft Absolute I/O Modules with external terminations	Prox/Accel or Velomitor or Seismorprobe
09	140471-01	Prox/Velom I/O Module with internal terminations	Prox/Accel, Velomitor or HTVS
10	140482-01	Prox/Velom I/O Module with external terminations	Prox/Accel, Velomitor or HTVS



External termination blocks cannot be used with Internal Termination I/O Modules. When ordering I/O modules with external terminations, order the external termination blocks and cable separately for each I/O module.