Bently Nevada 126615-01

Proximitor I/O Module with External Terminations

Bently Nevada 126615-01 is the external-termination Proximitor I/O module for the 3500/40M machinery-protection monitor. It provides the rear-rack interface between proximity transducers and the monitor, with field signals routed through external termination blocks and cables. In the 3500/40M assembly, these signals provide radial vibration, eccentricity, thrust position and differential expansion measurements. The monitor continuously compares measured values with programmed alarm setpoints and supplies machinery-condition information to operations and maintenance personnel.



Technical Specifications

Product Identity	
Manufacturer	Bently Nevada
Complete part number	126615-01
Compatible monitor	3500/40M; monitor spare 176449-01
I/O dimensions	241.3 × 24.4 × 99.1 mm (H × W × D)
Rack space	One full-height rear I/O slot
Functional Configuration	
Termination	External; blocks and cables ordered separately
Signal interface	Up to four proximity-transducer channels in the monitor assembly
Performance & Power	
Standard I/O input impedance	10 kΩ
Transducer power	–24 Vdc
Environment	
Operating temperature	–30 to +65 °C
Storage temperature	–40 to +85 °C

Selected original manufacturer pages follow on pages 3–5.

Compatibility & Selection Guide

System compatibility. 126615-01 operates with the four-channel 3500/40M and 3500 Rack Configuration Software. Channels 1/2 and 3/4 form two programmable pairs, allowing two measurement functions in one monitor. The general minimum software versions are 3500/01 v2.50, 3500/02 v2.20 and 3500/03 v1.21. REBAM operation uses 3500/40M firmware Rev. 2.1 or later, 3500/01 v3.30, 3500/02 v2.40, 3500/03 v1.40 and DM2000 v3.40 or later.

Wiring & Installation Reference

Field connections

Use the external-transducer connector with the matched external termination block and cable.

125808-01 provides Euro-style connectors; 128015-01 provides terminal-strip connectors.

Installation and replacement

Confirm the assembly. Match 126615-01 to the 3500/40M and record the existing external block and cable.

Check rack allocation. Allocate one full-height rear I/O slot aligned with the associated monitor.

Verify connections. Follow the 3500/40M user guide and actual terminal markings before commissioning.

Installation precautions. Use the applicable 3500 monitor user guide and the actual module markings for terminal assignments and service procedures. Match the complete I/O part number, monitor revision and transducer configuration before reconnecting field circuits.

View connection reference (PDF) · PDF page 5 | View module reference · PDF page 5

Manufacturer sources: 3500/40M Proximitor Monitor 141535 Rev. R.

Environmental Limits

Operating Temperature	When used with Internal/External Termination I/O Module: -30°C to +65°C (-22°F to +150°F) When used with Internal Barrier I/O Module (Internal Termination): 0°C to +65°C (32°F to +150°F)
Storage Temperature	-40°C to +85°C (-40°F to +185°F).
Humidity	95%, noncondensing

Physical

Monitor Module (Main Board)	
Dimensions (Height x Width x Depth)	241.3 mm x 24.4 mm x 241.8 mm (9.50 in x 0.96 in x 9.52 in)
Weight	0.91 kg (2.0 lb)
I/O Modules (non-barrier)	
Dimensions (Height x Width x Depth)	241.3 mm x 24.4 mm x 99.1 mm (9.50 in x 0.96 in x 3.90 in)
Weight	0.20 kg (0.44 lb)
I/O Modules (barrier)	
Dimensions (Height x Width x Depth)	241.3 mm x 24.4 mm x 163.1 mm (9.50 in x 0.96 in x 6.42 in)
Weight	0.46 kg (1.01 lb)

Rack Space Requirements

Monitor	1 full-height front slot
I/O Modules	1 full-height rear slot

Barrier Parameters

The following parameters apply to CSA-NRTL/C and ATEX / IECEx approvals.

Proximitor Barrier	
Circuit Parameters	Vmax (PWR) = 26.25V (SIG) = 13.65 V Imax (PWR) = 110.48 mA (SIG) = 2.74mA Rmin (PWR) = 237.6 Ω (SIG) = 4985 Ω
Channel Parameters (entity)	Vmax = 27.45 V Imax = 113.24 mA Rmin (PWR) = 237.6 Ω (SIG) = 4985 Ω

Alarms

Alarm Setpoints	Use Rack Configuration Software to set alert levels for each value measured by the monitor and Danger setpoints for any two of the values measured by the monitor. Alarms are adjustable from 0 to 100% of full-scale for each measured value. However, when the full-scale range exceeds the range of the transducer, the range of the transducer will limit the setpoint.
Accuracy of alarm setpoints	Within 0.13% of the desired value

Alarm Time Delays



You can program alarm delays using **Rack Configuration Software.**

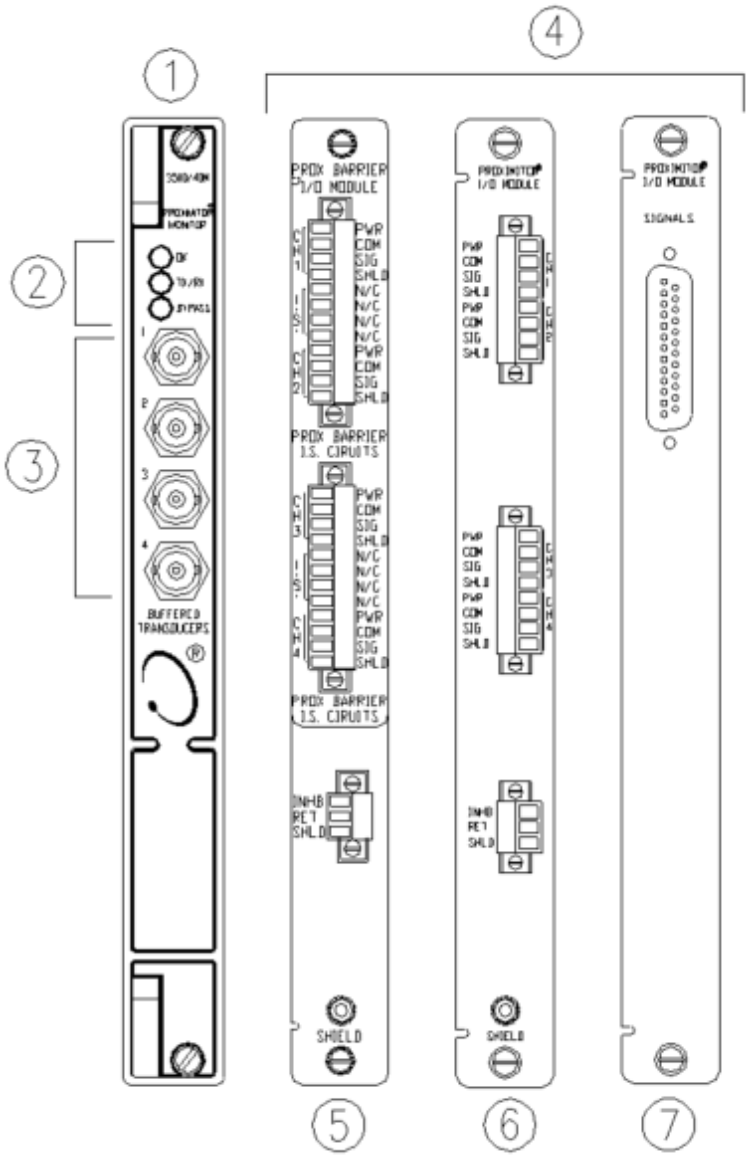
Baker Hughes

0007	7 feet (2.1 meters)
0010	10 feet(3.0 meters)
0025	25 feet (7.6 meters)
0050	50 feet (15.2 meters)
0100	100 feet (30.5 meters)
B: Assembly Instructions	
01	Not assembled
02	Assembled

Spares

176449-01	3500/40M Proximitor Monitor
125680-01	Proximitor I/O Module with Internal Terminations
126615-01	Proximitor I/O Module with External Terminations
135489-04	Proximitor I/O Module with Internal Barriers and Internal Terminations
143488	3500/40M Monitor User Guide
00580434	Internal I/O Module connector header, Euro style, 8-pin
00502133	Internal I/O Module connector header, Euro style, 12-pin
166M4363	Connector header, push-in-spring type (alternative for PN 00580441)
166M2389	Connector header, push-in-spring type (alternative for PN 00580434)

Graphs and Figures



1. Main Module Front View
2. Status LEDs
3. Buffered Transducer Outputs
4. I/O modules
5. Barrier I/O module, Internal Termination
6. I/O Module, Internal Termination
7. I/O Module, External Termination

Figure 1: Assorted 3500/40M Proximitor Monitor Views