

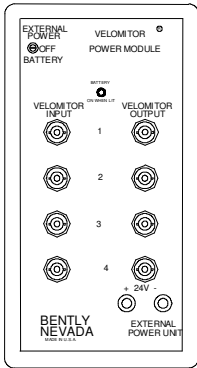
123135 Velomitor® Power Module Kit

Bently Nevada™ Asset Condition Monitoring

Description

The Velomitor® Power Module Kit supplies temporary power to as many as four Velomitor transducers, and provides a convenient interface from the Velomitor transducers (via BNC connector) to machinery diagnostic instrumentation, such as an oscilloscope. The Velomitor Power Module (VPM) is specifically designed for field use where portability and ease of operation are important.

The VPM is powered by an internal 9-volt transistor battery, or it can be powered by an external +24 Vdc source. The VPM will shut itself off when the battery voltage is too low to provide adequate power to the Velomitor transducer. When operated in the EXTERNAL POWER mode, the VPM requires a +24 Vdc power input, which it converts to a constant current dc power source for use by the Velomitor transducer. Coaxial signal cable is used to connect the Velomitor transducer to the VPM and to diagnostic instrumentation. Two BNC connectors are provided on the front of the VPM for each channel; one each for input and output. A 4.6 m (15 ft) cable assembly is supplied with each kit for interfacing a Velomitor transducer to the VPM. Additional cable assemblies can be ordered as needed. Standard coaxial cable assemblies (male BNC connectors at each end) are used to connect the VPM's transducer signal to the diagnostic instrument.



imagination at work

Specifications and Ordering Information
Part Number 141634-01
Rev. C (04/07)

Specifications

Power Requirements

Internal Mode

Source:

9-volt alkaline battery

Battery Life:

4 to 7 hours, powering 4
Velomitor velocity sensors.

Low Battery Control:

If the battery voltage drops below
5.4 Vdc during continuous
operation, the low battery circuit
will shut off the sensor power
supply circuit. Battery start up
voltage must be greater than 6.3
Vdc.

External Mode

Source:

+24 Vdc, TK15.

Environmental Limits

Operating

Temperature:

0°C to +50°C (+32°F to +122°F).

Battery capacity is reduced below
0°C (+32°F).

Storage

Temperature:

-20°C to +70°C (-4°F to +158°F).

Relative

Humidity:

5% to 90%, non-condensing,
operating and stored.

Physical

Height:

33 mm (1.3 in).

Width:

102 mm (4.0 in).

Depth:

193 mm (7.6 in).

Weight:

0.6 kg (1.3 lb).

Ordering Information

Velomitor Power Module Kit

123135-01

Includes:

- 1 Velomitor Power Module
- 1 4.6 m (15 ft) Extension Cable
- 2 9-volt alkaline batteries
- 1 Carrying Case
- 1 User Guide

Notes:

1. If a +24 Vdc power supply is not available, a floating -24 Vdc power supply may be used. An example of a floating negative power supply is the TK15 Keyphasor® conditioner and power supply.
2. Bently Nevada TK15 cannot be used to power a Proximitor® Sensor and a Velomitor Power Module, off of the -24 Vdc supply terminals concurrently. If Proximitor Sensors and a Velomitor Power Module are to be powered by a TK15, use the -24 Vdc to power the Proximitor Sensor, and use the +15 Vdc to power the Velomitor Power Module. See Figure 2, or the user's guide, for how to connect a Velomitor Power Module to the TK15's +15 Vdc terminals.

Accessories

122385-XX

Velomitor Velocity Sensor-to-Velomitor Power Module extension cable.

XX = length in feet, minimum length is 5 feet (1.5 metre), maximum length is 99 feet (30 metres).

109897-01 Velomitor Power Module
01810700

9-volt alkaline battery

04160101

Carrying Case

122384-01

User Guide

Wiring Diagrams

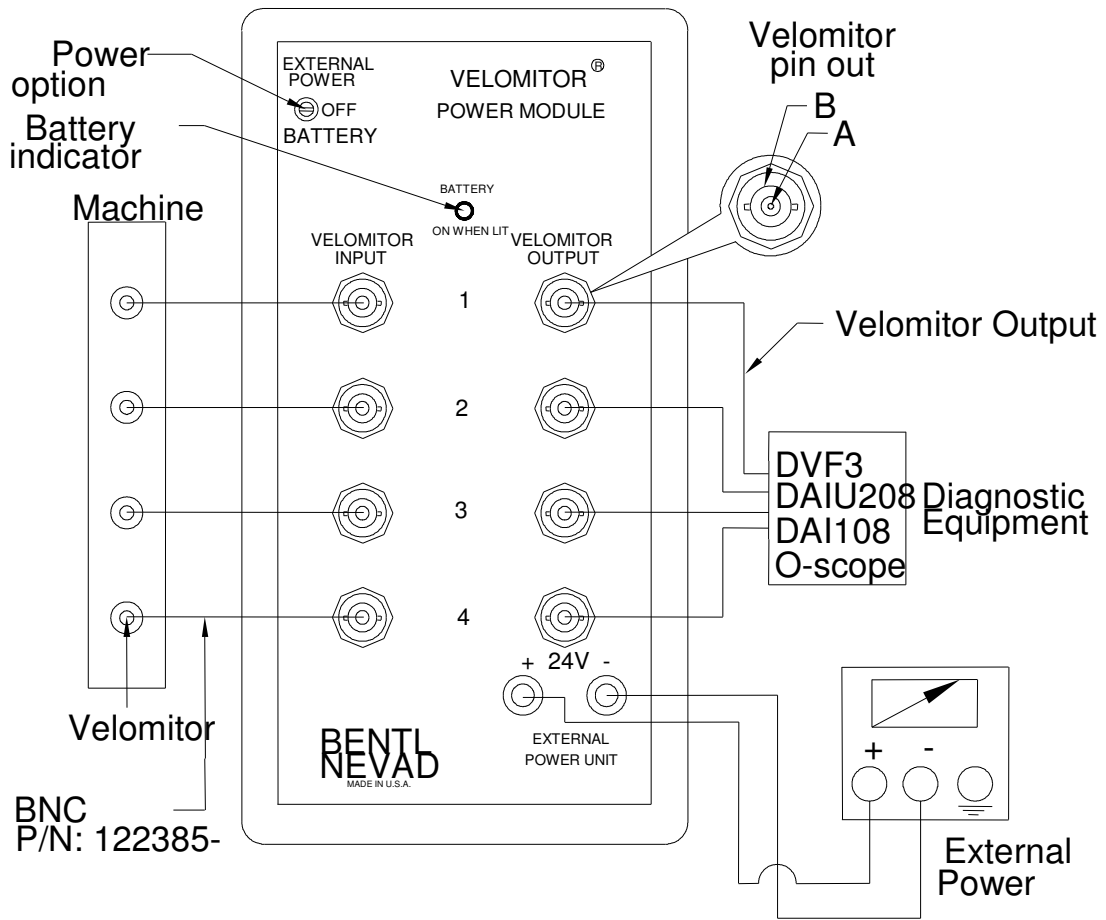


Figure 1: Velomitor Power Module connected to an external power supply.

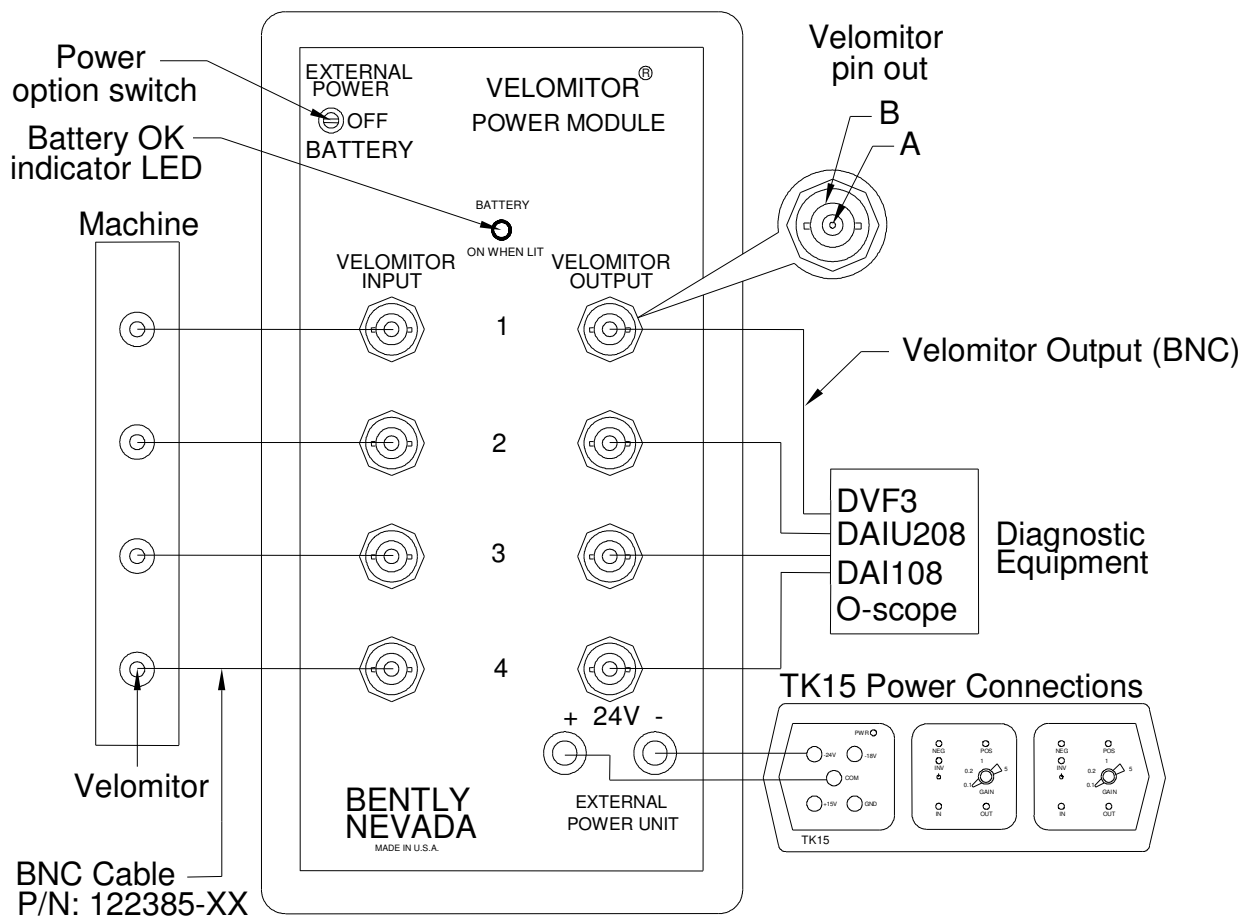


Figure 2: Velomitor Power Module connected to a TK15

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