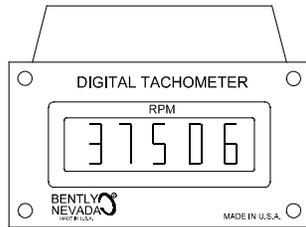


# Specifications and Ordering Information

## 37506A Digital Tachometer



### Description

The 37506A Digital Tachometer can be used as a stand-alone unit for speed indication or in conjunction with any permanently installed monitoring system as a remote speed indicator. It is often used when a machine is controlled locally and speed indication is required at the machine, but either a permanent monitoring system is located some distance away (e.g. in a control room) or no permanent monitoring system is installed.

A compact unit, the digital tachometer contains its own power supply, which powers either a Tach Driver (+15 Vdc) or Proximitor® (-18 Vdc). It also accepts signal and common wires from an externally-powered Keyphasor® (such as may be available when a permanent monitoring system is installed). The wires can be connected in parallel with the Keyphasor® input on the monitor rack or the Keyphasor® itself.

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### Specifications

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#### Inputs

<i>Signal:</i>	From any Bently Nevada Proximitor® or Tach Driver.
<i>Threshold:</i>	Automatic adjustment
<i>Hysteresis:</i>	0.4 Vdc to 3.1 Vdc, field-adjustable.
<i>Slew Rate:</i>	10,000 rpm/s accelerating, 5,000 rpm/s decelerating.
<i>Events Per Turn:</i>	1 to 99, field-programmable.
<i>Power:</i>	95 to 125 Vac, 60 Hz (250mA) 195 to 250 Vac, 50 Hz (125 mA).

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#### Outputs

##### Display

<i>Type:</i>	5-digit vacuum fluorescent, 7 segments per digit. Digit height is 15.2 mm (0.6 in).
<i>Range:</i>	50 to 99,999 rpm
<i>Resolution:</i>	1 rpm

*Accuracy:* Adjustable to  $\pm 1$  rpm.

*Proximito<sup>®</sup>/Tach Driver Power:* Option selectable for -18 Vdc at 20 mA maximum for Proximito<sup>®</sup>, +15 Vdc at 30 mA maximum for Tachometer Driver.

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### Environmental Limits

*Operating Temperature:* 0°C to +60°C (+32°F to +140°F)

*Storage Temperature:* -40°C to +85°C (- 40°F to +185°F)

*Relative Humidity:* To 95%, noncondensing

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### Physical

#### Size

*Height:* 76.2 mm (3 in)

*Width:* 139.7 mm (5.5 in)

*Depth:* 169.9 mm (6.7 in)

*Weight:* 1.13 kg (2.5 lb)

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## Ordering Information

### 37506A-XX Digital Tachometer

*Power and Window Option*

**0 1** 110 Vac/18 Vdc Proximito<sup>®</sup> power. Window is louvered.

**0 2** 110 Vac/+15 Vdc Tach Driver power. Window is louvered.

**0 3** 220 Vac/18 Vdc Proximito<sup>®</sup> power. Window is louvered.

**0 4** 220 Vac/+15 Vdc Tach Driver power. Window is louvered.

**0 5** 110 Vac/18 Vdc Proximito<sup>®</sup> power. Window is non-louvered.

**0 6** 110 Vac/+15 Vdc Tach Driver power. Window is non-louvered.

**0 7** 220 Vac/18 Vdc Proximito<sup>®</sup> power. Window is non-louvered.

**0 8** 220 Vac/+15 Vdc Tach Driver power. Window is non-louvered.

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## Accessories

**38138-01** Hood to block direct sunlight.

**7072-01** Weatherproof housing with Two 1/2-in NPT fittings.

**7072-02** Weatherproof housing with Three 1/2-in NPT fittings and a 1/2-in to 1/4-in NPT bushing.

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# Application Diagrams

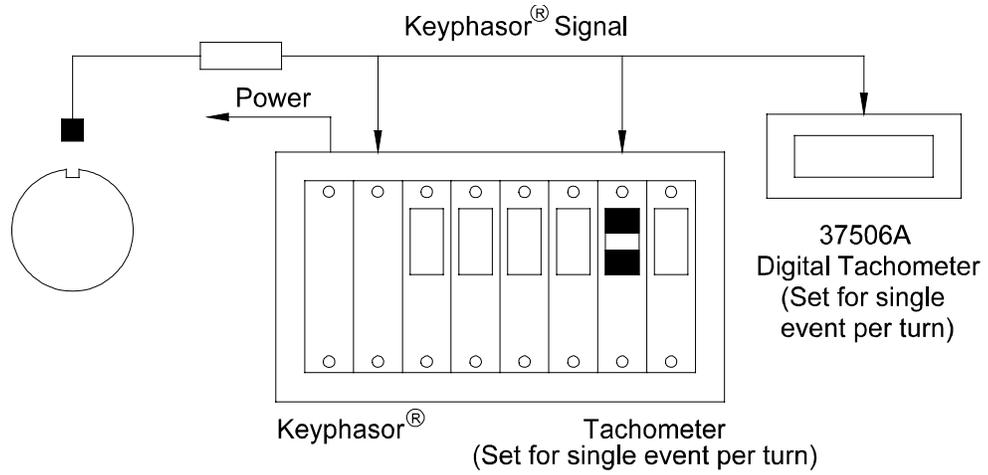


Figure 1: Connection for single event per turn Keyphasor® and single event per turn Tachometer

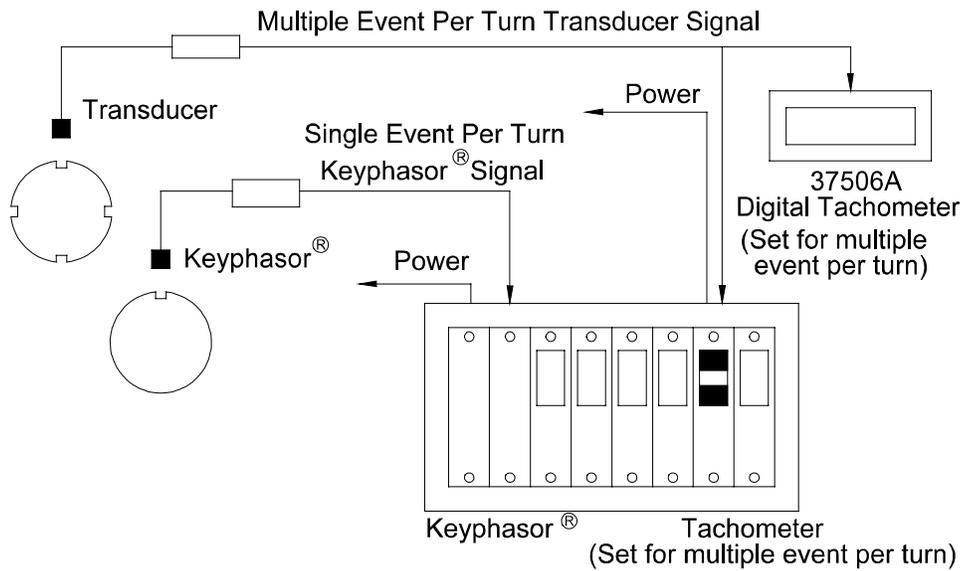
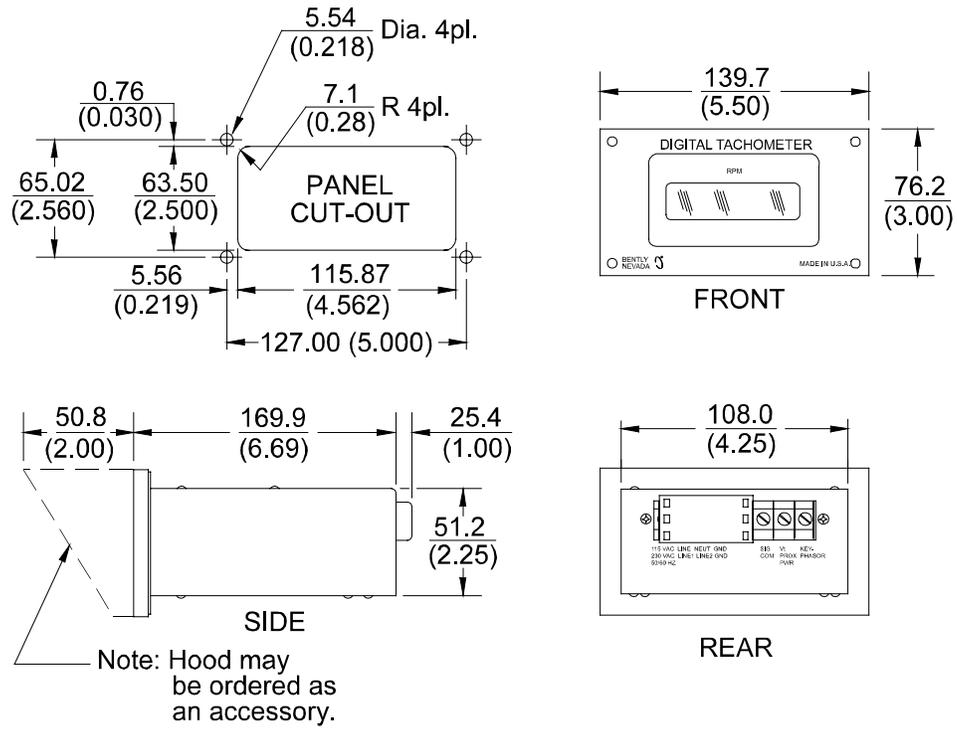


Figure 2: Connection for a single event per turn Keyphasor® and multiple event per turn transducer signal

### Dimensions for 37506A



**Figure 3: Dimensional drawings**  
 Dimensions are in millimetres (inches)