Description

The TACH100 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 permanent monitoring system is located some distance away (e.g., in a control room) or when no permanent monitoring system is installed and speed indication is required at the machine.

The digital tachometer is a compact unit, containing its own power supply that can power a Proximitor* Sensor [–24 Vdc]. The tachometer also accepts signal and common wires from an externally-powered Keyphasor* Proximity Probe (such as may be available when a permanent monitoring system is installed). The wires can be connected in parallel with the Keyphasor Proximity Probe input on the monitor rack or to the Keyphasor Proximity Probe itself.
# Specifications

## Inputs

**Signal:**
From any Bently Nevada Proximitor Sensor.

**Threshold:**
Automatic adjustment.

**Hysteresis:**
0.2 Vdc to 2.5Vdc, field-adjustable.

**Events Per Turn:**
1 to 99, field-adjustable.

**Power:**
110-230 Vac, 50-60 Hz, 1.5Amps.

## Outputs

**Display Type:**
6-digit LED, 7 segments per digit. Digit height is 14.22 mm (0.56 in)

**Measurement Range:**
1 to 999,999 rpm.

**Measurement Resolution:**
1 rpm

**Measurement Accuracy:**
Accurate to within 0.015% of true RPM.

**Proximitor* Power:**
-24 Vdc at 20 mA maximum.

## 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

## Physical

**Size**
- **Height:** 76.2 mm (3 in)
- **Width:** 139.7 mm (5.5 in)
- **Depth:** 149.1 mm (5.8 in)
- **Weight:** 1.13 kg (2.5 lb)

## CE Mark Directives

The TACH100 Digital Tachometer has been tested and approved for installation within the European Union and European Environmental Agency regions. This device has been designed and tested to meet the following directives.
EMC Directives

EN61000-6-4
Radiated Emissions:
EN5501, Group 1 Class A

Conducted Emissions:
EN5501, Group 1 Class A

EN61000-6-2
Electrostatic Discharge:
IEC 61000-4-2, Criteria B
Radiated Susceptibility
IEC 61000-4-3, Criteria A
Electrical Fast Transient
IEC 61000-4-4, Criteria B
AC Power Surge Susceptibility
IEC 61000-4-5, Criteria B
AC Power Flicker Emissions
IEC 61000-3-3, Criteria A
RF Conducted Susceptibility
IEC 61000-4-6, Criteria A
Voltage Interrupt Susceptibility
IEC 61000-4-11, Criteria B
Voltage Dip Susceptibility
IEC 61000-4-11, Criteria A

EMC Standards

Certificate of Conformity
Registration Number:
AE 72062927 0001

Ordering Information

Part Numbers
TACH100
Standalone Digital Tachometer

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.
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
Figure 3: Dimensional Drawings for Digital Tachometer

Dimensions are in millimeters (inches)
Figure 4: Dimensional Drawings for Weatherproof Housing

Figure 5: Dimensional Drawings for Weatherproof Housing Cutout

Dimensions are in millimeters (inches)