

**Continuous  
machinery  
monitoring  
is as easy  
as 1 - 2.**

**This compact  
Vibration Transmitter  
protects your vital  
rotating equipment,  
using a simple 2-wire  
process loop for easy,  
economical installation.**



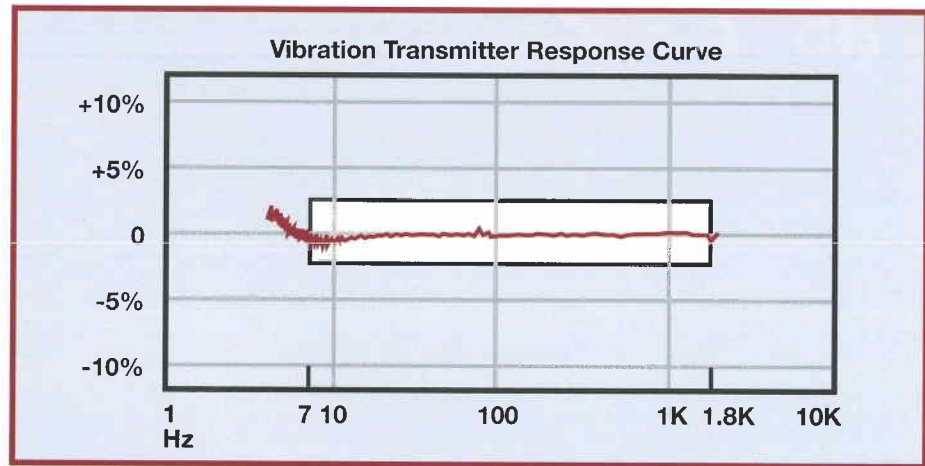


## ***Vitec simplifies vibration monitoring on:***

- Blowers • Compressors
- Electric Motors • Fans
- Generators • Pumps
- Turbines

## ***With exceptional response:***

- Better than  $\pm 5\%$  response at 7 to 1,800 Hz (420 to 108,000 CPM)
- Better than  $\pm 2\%$  response at 10 to 1,600 Hz (600 to 96,000 CPM)



## ***Outstanding performance:***

- 1.0 in/sec. to 5.0 in/sec.
- Wide temperature capability: operating from  $-40^{\circ}$  to  $+185^{\circ}$  F
- Repeatability better than  $\pm 2\%$

## ***Plant floor practicality:***

- No special wiring
- Process loop-powered
- Solid-state, epoxy-sealed
- Trend/Alarm via PLC, computer, data logger
- Integral and/or remote meters
- Field calibration eliminated
- Durable stainless steel case
- Permanently etched nameplate data

## ***Ease of installation:***

- Simply connect transmitter to power source and receiving device
- Family of 11 mounting types
- Choice of 6 adapter plates (27 bolt hole patterns)
- Elbow connector for easy wiring

## ***You get reliable protection of vital equipment over a simple two-wire current loop.***



*Sealed transmitter case is stainless steel for long life in corrosive environments.*

*Capped elbow conduit connector simplifies field wiring.*

This compact transmitter is designed for use where continuous monitoring is needed and trending or alarm functions will be handled by a PLC, computer or data logger.

Mounted right on the machine being monitored, the transmitter generates a 4 to 20 mA signal directly proportional to the velocity of the machine's vibration. This signal, the accepted international standard for rotating machinery condition, is made available to other devices over a simple, two-wire current loop that is highly resistant to ambient electrical noise (see Fig. 3 on page five for typical wiring diagram). Using a current loop also permits long cable runs (up to 15 miles) without any special boosters or amplifiers.

### ***Weather, corrosion, explosion-proof.***

The Vitec Vibration Transmitter meets explosion-proof certification compliance of CSA and Factory Mutual (pending). It is rated NEMA 4X as supplied; Class I, Groups B, C, and D; Class II, Groups E, F, and G; and Class III; Division 1 and 2. There's no need or cost for additional, special enclosures.

### ***Simplified field connection.***

Beyond the mounting choices shown on the following page, there are several more customizing opportunities available for your use with the Vitec Vibration Transmitter.

Convenient capped elbow conduit connector simplifies adding the transmitter to new or existing two-wire loops. The connector is suitable for Class I, Groups C and D; Class II, Groups E, F, and G; and Class III; Division 1 and 2.

Another style of capped elbow features an integral, digital meter for on-site readings of the machine's vibration level.

### ***You get custom—without the cost.***

Anticipation Engineering is a design philosophy at Vitec. At the very outset of a product's development, we survey the end users and Plant Engineers to determine the many different applications where the product is to be installed, and to establish the different configurations that will be needed. Then we engineer it with modular techniques that let you specify the combination of accuracy, range, and mounting that your application requires.

Your costs are reduced since you don't buy what you don't need. Performance is enhanced since you match the features to the job. In essence, you get customized design at an off-the-shelf price.



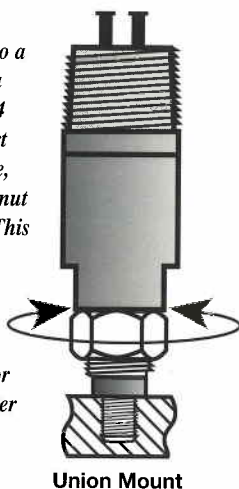
## Compact design: Fast, low-cost installation.

Single-point mounting directly to the machine is standard, so you don't have the problem of trying to install big, costly plates that are difficult to mount on round bearing caps. The 1" NPT thread at the top of the transmitter body permits universal connection to a wide range of conduit, junction boxes, and elbows. Weatherproof and explosion-proof installations are simplified.

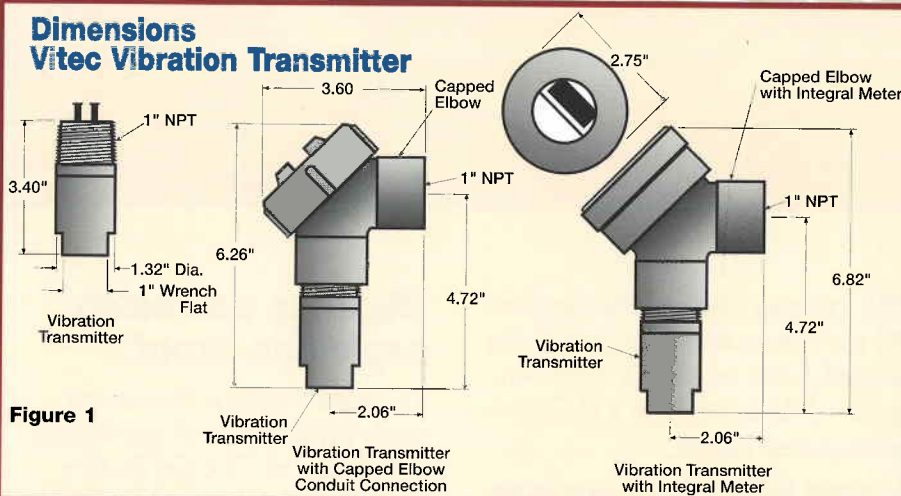
And, as shown in Fig. 2, Vitec gives you the industry's widest selection of mounting options so you can take advantage of points that may already be on the machine, or modify the mounting the way you prefer. Over 25 bolt hole patterns are also available, to simplify replacing outdated switches or other devices. The result is faster, surer, lower-cost installations,

instead of spending three times as much for installation as you did for the product. Vitec's selection of V-Blocks, Union Mounts, and Adapter Plates allow the transmitter to be removed from the machine without disturbing the electrical connections.

Vitec's U1 Mechanical Union Mount, similar to a plumbing fitting, uses a combination of a 3/8-24 stud and threaded insert attached to the machine, and a free-turning locknut set on the transmitter. This design not only speeds installation but also allows the machine to be removed for repair without disconnecting or disturbing the transmitter wiring set-up.



### Dimensions Vitec Vibration Transmitter



### Vitec Mounting Selector Dimensions in inches (a)

	U1 Union Mount	S1 3/8-24 Stud	S2 1/4-20 Stud	S3 1/4-28 Stud	S4 3/4-10 Stud w/ Jam Nut	S5 1/4-NPT Stud	S6 1/2-NPT Stud	V1 Small V-Block	V2 Large V-Block	AP Adapter* Plates	M1 Magnetic**
(Height of VT is 3.40 inches)											
Height Added by Mounting	0.75	0	0	0	1.25 (a)	0.75 (a)	0.97 (a)	0.47 (a)	0.47 (a)	0.19	2.18
Installed Height	4.15	3.40	3.40	3.40	4.65	4.15	4.37	3.87	3.87	See Adapter Plate Brochure or*	5.58
Height with Capped Elbow	7.01	6.26	6.26	6.26	7.51	7.01	7.23	6.73	6.73		8.44
Height with Integral Meter	7.57	6.82	6.82	6.82	8.07	7.57	7.79	7.29	7.29		9.00

\*Consult Customer Service.

\*\*Recommended for temporary installations only.

Figure 2

(a) Approximate, depends on penetration into machine or radius of surface mounted to.