

The Flowserve IPS Beacon is a data acquisition, logging and visual alert device that monitors power-end vibration (x-y-z axis) plus temperature.

### A Cost-Effective Means of Increasing Uptime and Extending Mean Time Between Failure

It is estimated that less than 10% of all pump failures are attributable to normal bearing wear and fatigue. That means nearly all bearing failures are avoidable. IPS Beacon power-end condition monitor can simply and effectively provide early warning notification, enabling proactive action to extend L-10 bearing life to the ISO/ASME “design rating” and beyond.

### Straightforward Visual Alert

Mounted on top of the bearing housing, the intrinsically safe IPS Beacon monitors the temperature and vibration against pre-set limits. When an alert takes place, the time and date stamp is logged.

- Blinking green LED indicates normal operation.
- Blinking red LED indicates a current alert condition.
- Blinking red and green LEDs indicate a past alert condition has occurred but current condition is normal.
- Last alarm event log



### User Configurable and Expansion Capability

**External USB Docking Plus PC-based Software** provides the ability to change alarm set points and read all state of health data from the IPS Beacon such as past alerts (time and date) for the corresponding x-y-z vibration and temperature values along with current battery voltage.

**Take-away Memory Module (TAM)** provides the IPS Beacon with expanded data logging capability. The data can then be downloaded through the USB Docking Device to provide the user with each time-stamped measurement value for up to one year of readings, depending on the configuration of the IPS Beacon.

**Easy Retrofit Capability** means the IPS Beacon can provide cost-effective condition monitoring of large populations of rotating equipment.

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Houston, TX 77064 USA



IECEX SIR 12.0074  
Sira 12ATEX2188  
Ex ia IIC T4 Ga  
Ex ia IIIC T135°C Da  
-40°C ≤ Ta ≤ +85°C

Model: VB-105 Beacon



CSA 2012 2554102  
CI I, Division 1, Grps A, B, C, D; T4  
CI I, Zone 0, Ex ia IIC T4  
CI I, Zone 0, AEx ia IIC T4  
Tem. Code T4  
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Part of:  
IECEX SIR 12.0074  
Sira 12ATEX2188

Model: VB-105 TAM

### **Features and Benefits**

**Three-axis Vibration Sensor** measures overall vibration readings in velocity 0 to 25.4 mm/s (0–1 in/s) RMS.

**Temperature Sensor** measures surface temperature readings from -40°C to 93.3°C (-40°F to 200°F).

**Material of Construction** is 316L stainless steel housing with borosilicate glass-protected LEDs that provide vivid status indications in chemical environments.

**14-day Fault Indication** provides extended visual notification of an alert condition, even if monitored levels return to normal.

**Battery Life** can be more than four years, depending on the environment and operating parameters.

**Certifications:** include CE, CSA (CL 1, Div. I, Groups A, B, C, D, E, F and G), ATEX and IECEx (CL 1 Zone 0).

### **IPS Beacon Transformation Capability for More Advanced Monitoring Needs**

IPS Beacon is designed so that it can be transformed from a local monitoring and alert system by integrating into an IPS Wireless Series 103 multi-point device. With this integration, the IPS Beacon sensor data can be sent “wirelessly,” allowing the user instant access to information without having to be at the pump.

#### **IPS Wireless Series 103 Multipoint**

The connection of the IPS Beacon to one of the IPS Wireless Series 103 ports allows up to four additional monitoring points through the four remaining ports (e.g., temperature, pressure, etc.) to be monitored.

#### **Data Integration and Management**

A local wireless network is provided through the IPS Wireless repeater, receiver/interface systems. Integration of wireless data and information is seamless to either a local monitoring system or to the Flowserve Technology Advantage Platform. Through the platform, the customer can gain access to Flowserve technical experts who also have access to the information. Flowserve personnel can assist plant operations in building custom performance monitoring solutions or with the identification of cost-effective corrective measures. The result is extended Mean Time Between Failure of the customer’s equipment.



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