



IPS Beacon[™] 2

Condition Monitor



Easily monitor bearing housing vibration (x-y-z), temperature and rotating equipment runtime

By augmenting reliability-centered maintenance programs, the IPS Beacon 2 provides a cost-effective means of increasing uptime and extending mean time between failure (MTBF). It is estimated that less than 10 percent of all pump failures are attributable to normal bearing wear and fatigue. That means nearly all bearing failures are avoidable—if prompt actions are taken from the condition monitor alerts.

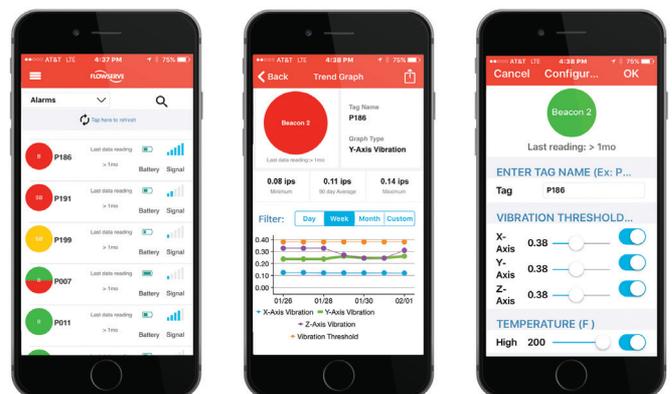
Straightforward visual alert enables efficient use of maintenance and reliability resources

The IPS Beacon 2 enables operators and maintenance personnel to quickly see which assets are in need of attention using LED visual alerts. This approach improves reliability by helping customers allocate maintenance resources to focus on equipment that needs attention, instead of spending time checking data or performing maintenance on healthy equipment.

- Blinking green LED indicates normal operation.
- Blinking red LED indicates a current alert condition for temperature and/or vibration.
- Blinking red and green alternating LEDs indicate a past alarm has occurred, but the current condition is normal.
- Blinking yellow LED indicates that the runtime has exceeded the limit and maintenance of the rotating equipment is *required*.

Optional Bluetooth Module provides the IPS Beacon 2 with *Bluetooth*[®] communication plus expanded data logging capability. The data can be accessed through the IPS Mobile Insight app. At the default log rate of once every five minutes, a user can access 90 days of data. The log interval is adjustable and enables a user to increase the granularity of logged readings down to one minute.

IPS Mobile Insight[™] app provides the ability to custom configure and access logged data for the IPS condition monitors through Bluetooth connectivity. The app resides on an iOS or Android mobile device and enables changes to be made to the alarm levels for vibration (x-y-z), temperature and runtime along with the alarm averaging scheme, read rate and log rate.



The *Bluetooth*[®] word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Flowserve is under license. Other trademarks and trade names are those of their respective owners.

Enterprise scalability

In addition to interfacing with the IPS Beacon 2, the IPS Mobile Insight app works seamlessly with the IPS Insight hosted portal, which acts as a centralized place for customers to access data downloaded from IPS Beacon products in the field. Data visualization, trends and reporting are made easy. Whether monitoring multiple assets in one plant or thousands across an enterprise, the IPS product family is designed to scale with your specific requirements now and in the future.

Condition monitoring that meets customer needs

Flowserve has a wide range of monitoring and reliability solutions to meet broad-ranging customer needs.

The Flowserve battery- and AC-powered condition monitors accept multiple channels of data from a variety of sensor inputs*. These solutions take the data logging and visual alert capabilities of the IPS Beacon 2 and scale to a wide variety of applications.

The Flowserve innovative active monitoring solutions enable performance management of rotating equipment and pumps at a much lower cost than traditional solutions. These monitoring systems help customers reduce or eliminate unplanned failures and optimize operation of rotating equipment assets.

**Example applications include: vibration, temperature, pressure, flow, level, discrete, 4-20 mA signal and others.*

Specifications

Three-axis Vibration Sensor measures overall vibration readings in velocity 0 to 25.4 mm/s (0–1 in/s) RMS. Frequency range: 6–1000 Hz (3,60–6,000 cpm).

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

Internal Runtime Calculator measures runtime based on sensing vibration levels of the rotating equipment.

Material of Construction is polycarbonate housing with borosilicate glass-protected lens.

Retrofit Capability mounting options include direct drill and tap or 316 epoxy mount stainless steel pad.

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

702-1001-01^

Certificate Number:	CML 16ATEX2024X	
Notified Body:	Certification Management Limited	
Markings:	<p>Flowserve Houston, TX 77064 USA Model: VB-107 Beacon</p> <p>  0518  II 1GD  Ex Ia </p> <p> IECEx CML 16.0018X CML 16ATEX2024X Ex Ia IIC T4 Ga Ex Ia IIIC T135°C Da -40°C ≤ Ta ≤ +85°C </p> <p> Cl I, Division 1, Grps A, B, C, D; T4 Cl II, Division 1, Grps E, F, G; T135°C Cl I, Zone 0, AEx Ia IIC T4 Ga Cl I, Zone 20, AEx Ia IIIC T135°C Da Electrical Ratings: 4.0 Vdc, 87mA -40°C ≤ Ta ≤ +85°C "INTRINSICALLY SAFE" "SECURITE INTRINSEQUE" </p>	

Flowserve Corporation
5215 North O'Connor Blvd.
Suite 2300
Irving, Texas 75039-5421 USA
Telephone: +1 937 890 5839

PSS-90-11.18b (E/A4) March 2018
© 2018 Flowserve Corporation

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation Instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative purposes only and should not be considered certified or as a guarantee of satisfactory results by reliance thereon. Nothing contained herein is to be construed as a warranty or guarantee, express or implied, regarding any matter with respect to this product. Because Flowserve is continually improving and upgrading its product design, the specifications, dimensions and information contained herein are subject to change without notice. Should any question arise concerning these provisions, the purchaser/user should contact Flowserve Corporation at any one of its worldwide operations or offices.

©2018 Flowserve Corporation. All rights reserved. This document contains registered and unregistered trademarks of Flowserve Corporation. Other company, product, or service names may be trademarks or service marks of their respective companies.