# **PUMPS &** SUBMERSIBLE PUMPS

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## PUMPS & SUBMERSIBLE PUMPS

There are many different types of submersible pumps and

applications but industrial accelerometers can often help

the maintenance professional to diagnose issues with pump

operation, such as cavitation, recirculation and resonance.

A good rule of thumb is to select an accelerometer that has a linear high frequency response capability to three times

the pump's vane pass frequency (vane pass frequency =

# of vanes x RPM). IMI<sup>®</sup> has a wide range of submersible

accelerometers as well as sensors and cabling that will

**ICP® ACCELEROMETERS** 

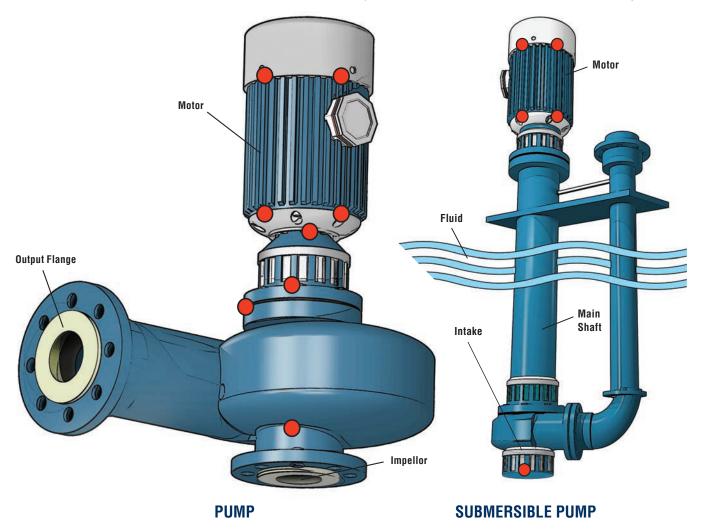
survive in corrosive environments.

## **VIBRATION TRANSMITTERS**

Pump failure can lead to costly unexpected shutdowns and expensive damage to plant processes and equipment. IMI's current output (mA) transmitters offer continuous protection to critical equipment and provide maintenance professionals information between scheduled walk-around data collection.

Suggested Sensor Placement

Transmitters provide an easy and low cost continuous monitoring solution and are directly compatible with PLC, DCS, SCADA and PI systems. External DIN rail transmitters are an excellent solution for customers interested in both predictive maintenance and continuous monitoring.



## ICP® ACCELEROMETERS FOR PUMPS & SUBMERSIBLE PUMPS



#### **LOW COST ICP®** ACCELEROMETER MODEL 607A11

- Ideal for submersible applications
- Smallest true industrial accelerometer on the market
- Patented 360° swivel mount design



#### LOW COST ICP® ACCELEROMETER MODEL 603C01

CE

- General purpose, hermetically sealed
- IMI's most popular accelerometer
- Small installation footprint
- M12 connector version available

## **ICP® ACCELEROMETERS** FOR CRYOGENIC **APPLICATIONS**



#### **CRYOGENIC ICP®** ACCELEROMETERS MODEL 637A06, 638A06

- Sensitivity: 25 mV/g
- Frequency Response: 4-1500 Hz
- **Operating Temperature Range:** -320 to +250 °F

## 4-20 mA SENSORS FOR **PUMPS & SUBMERSIBLE PUMPS**



### 4-20 mA OUTPUT TRANSMITTER

SERIES 64X

- Multiple ranges available
- Peak or RMS, acceleration or velocity
- Intrinsically safe version available
- 24 volt loop-powered



VIBRATION TRANSMITTER MODEL 682C03

- Outputs 4-20 mA signal proportional to acceleration, velocity, or displacement
- ICP<sup>®</sup> accelerometer input
- Analog vibration output via front BNC



#### **BEARING FAULT DETECTOR** MODEL 682C05

- Provides early warning of rolling element bearings faults
- Outputs 4-20 mA signals for peak acceleration and overall unbalance vibration
- Requires ICP® input





**3425 Walden Avenue, Depew, NY 14043-2495 USA** Toll-Free in the USA: **1 800 959 4464** Phone: **1 716 684 0003** | Email: **imi@pcb.com**  IMI Sensors, a division of PCB Piezotronics, Inc. manufactures industrial vibration monitoring instrumentation, such as accelerometers, vibration transmitters and switches that feature rugged stainless steel housings and survive in harsh environments like paper and steel mills, mines, gas turbines, water treatment facilities and power plants. Integrating with portable analyzers and PLC's, IMI instrumentation helps maintenance departments reduce downtime and protect critical machinery. Visit IMI Sensors at www.pcb.com. PCB Piezotronics, Inc. is a wholly owned subsidiary of MTS Systems Corporation. Additional information on MTS can be found at www.mts.com.

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