



Rotary Screw Compressors

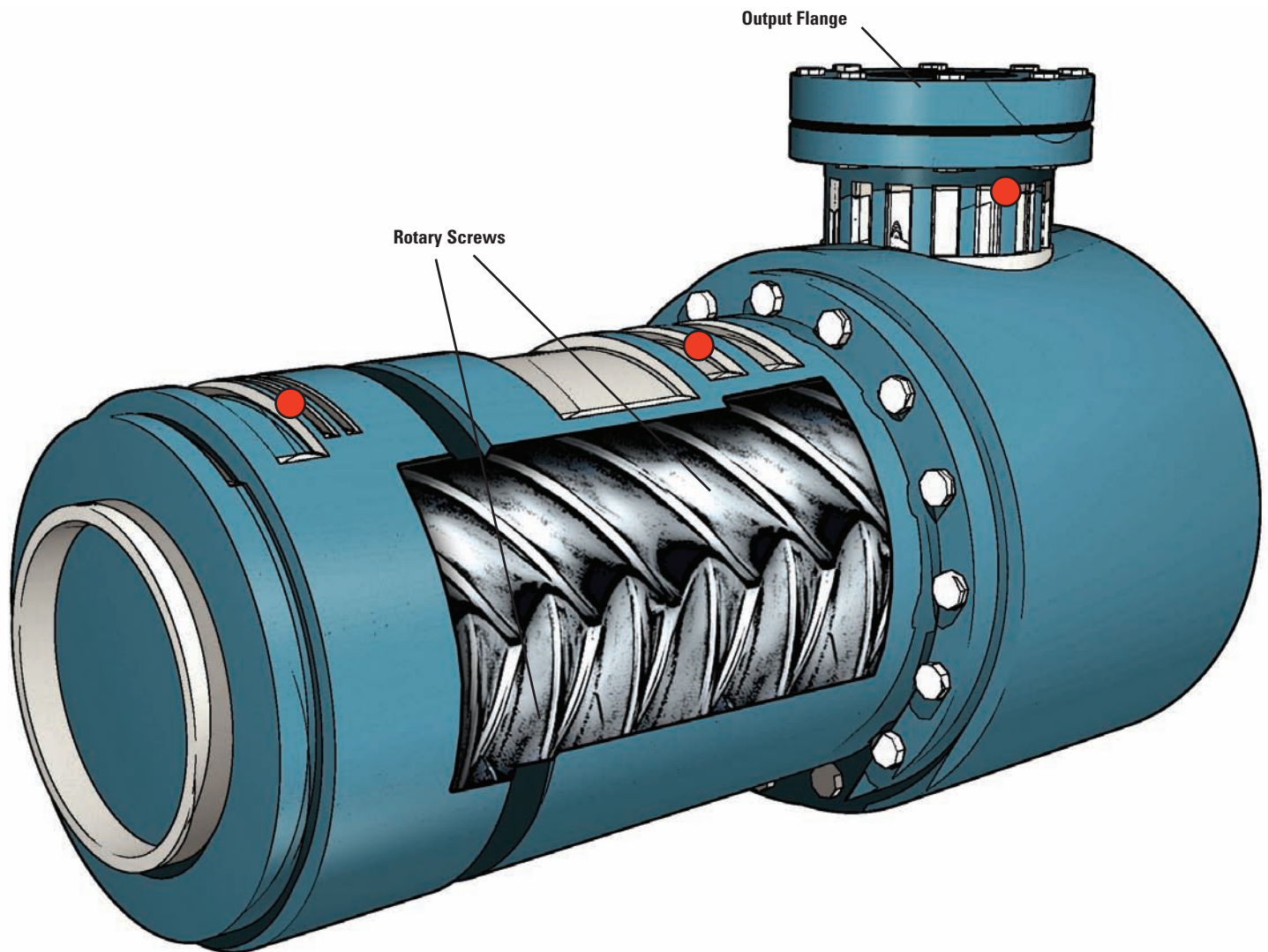
High Frequency Accelerometers Capable of Capturing Rotor Mesh and Bearing Faults



 **IMI SENSORS**
A PCB PIEZOTRONICS DIV.

Predictive Maintenance Rotary Screw Compressors

Rotary screw compressors, both oil-free and oil-flooded, can provide a unique set of challenges to the predictive maintenance professional. Accelerometers used in these applications must be capable of detecting vibration through a very wide frequency band allowing the user to pickup faults such as pitting in the race of the bearings, oil injection issues or rotor mesh. Mounting is generally recommended on the casing of the compressor as close to the radial bearings as possible. A comprehensive predictive maintenance program that includes monitoring vibration on typically critical rotary screw compressors can improve downtime and increase efficiency with maintenance scheduled in advance of catastrophic failure.



● Suggested Sensor Placement



Photo Courtesy of Abby Services, Inc.

ICP® Accelerometers - Predictive Maintenance



Very High Frequency Accelerometer
Model 621B40

- 30 kHz frequency, even with magnet
- Titanium housing
- Smallest available footprint



Precision Accelerometer
Model 622B01, Model M622B01

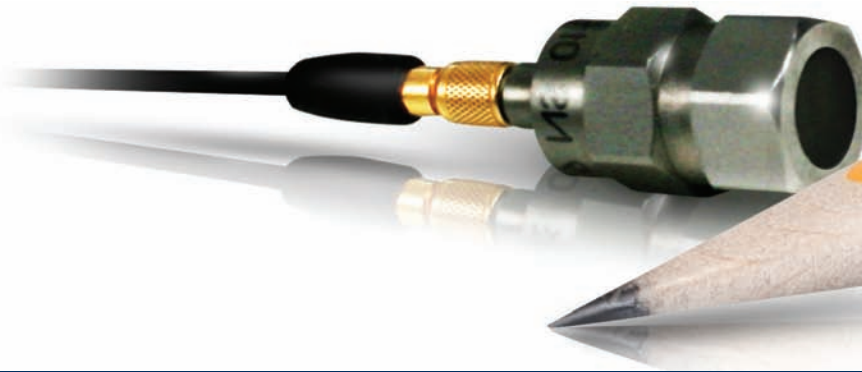
- Full frequency sweep calibration: 5% sensitivity deviation tolerance
- 15 kHz high frequency response ideal for early detection of bearing fluting conditions
- Ideal for route-based data collection

Product Spotlight

Very High Frequency Accelerometer Kit
Model 600A12

This high frequency 10 mV/g accelerometer kit features a very small accelerometer with a magnet and cable assembly

- High frequency response to 30 kHz, even when mounted magnetically
- Supplied with 5 ft. cable with BNC plug termination
- Kit features Model 621B40 accelerometer with titanium housing



Complete specifications available at www.imi-sensors.com

Toll-free in the USA 800-959-4464 716-684-0003



Rotary Screw Compressors Accessories

Cables & Connectors



Coiled TPE Cable with BNC Plug to 2-Pin MIL Connector
050LQ006AC Cabling

Polyurethane Cable with BNC Plug to 2-Pin MIL-style Connector
052BR010AC Cabling

Lightweight Coaxial Cable with BNC Plug to 5-44 Microdot Plug
018C05 Cabling

Mounting Hardware



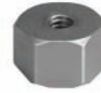
Sensor Mounting Pad
Model 080A93: Ø0.75"
Model 080A118: Ø1.0"



Flat Surface Magnet
Model 080A121



Curved Surface Magnet
Model 080A131: Ø1.0"
Model 080A132: Ø1.5"



High Frequency Magnet
Model 080A157

Enclosures



BNC Termination Enclosure
Model 691A51/04



BNC Termination Enclosure
Model 691A50/12



BNC Switch Box
Model 691B41



BNC Switch Box
Model 691B42



A PCB PIEZOTRONICS DIV.

Corporate Headquarters

3425 Walden Avenue Depew, NY 14043-2495 USA

Toll-free in the USA 800-959-4464

24-hour SensorLineSM 716-684-0003

Fax 716-684-3823 ■ **Email** imi@pcb.com

Website www.imi-sensors.com

AS9100 CERTIFIED ■ ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

The Global Leader in Sensors & Instrumentation For All Your Industrial Applications!

- Motor Vibration
- Pumps & Submersible Pumps
- Paper Machines & Conveyors
- Combustion Dynamics Instrumentation
- Cooling Towers & HVAC
- Gearboxes
- Wind Turbine Condition Monitoring
- Oil & Gas Wells and Pipelines
- Vibration Screens & Feeders
- Reciprocating Machinery
- Machine Tool Spindles
- Steel Rolling & Annealing
- Rotary Screw Compressors
- Nuclear Power Instrumentation
- Shock Monitoring

