# C A BRIGGS COMPANY THE LEVELWORKS® PEOPLE

Level, Flow, Pressure, Temperature and Gas Dection Solutions for Industrial Process, Machine Control and Gas Distribution

## POWER GENERATION - GENERATOR SETS – GEMS 3100 SERIES LOW LUBE OIL PRESSURE



### Dec 13, 2021

Demand has been increasing in the <u>Power Generation</u> sector, particularly in the Generator Set (or Gen Set), to add more feedback as to what is happening with the engine running the generator. The Gen Set manufacturers and customers not only want to monitor liquid levels and temperatures when they are too high to too low but also get a continuous feedback at actual levels. Traditionally, a <u>pressure switch</u> (on/off) would be used when oil levels got to be too low. Now, they need to provide a continuous output like 4 to 20 mA, 0 to 5 V, 0 to 10V, 0.5 to 4.5 V, etc. that they can feed into a controller or display.

**Challenge:** Finding a heavy duty and <u>reliable continuous pressure sensor</u> that can survive a high vibration environment of a Generation Set.

As the Gen Set is running, a high amount of vibration can be felt throughout the engine and engine compartment. It is challenging to find a commercially available and reasonably cost pressure sensor that can survive in this type of environment

**Solution:** The Gems Sensors 3100 Series Pressure Sensors



The 3100 Pressure Sensors utilizes a capacitive pressure sensing technology that is highly vibration resistant. They are tested to 20G Random Sine 0.1G<sup>2</sup>/Hertz Vibration and 50G @ 11 ms Shock to ensure long life on an engine.

Also, the electrical back end of the 3100 Series Pressure Sensors are sealed and tested to the IP67 standard. With this high sealing rating, if the owner of the Gen Set needs to power wash it to keep It clean, they will not have to worry about any water or soap ingress into the sensor.



### **Features of the Gems 3100 Series Pressure Sensors:**

- Exceptional Long-Term Stability = No need for costly field calibration or replacement
- Thermally compensated = Consistent performance under wide temperature conditions
- 304 Stainless Steel body = Able to with stand harsh chemicals and gasses
- Sealed to IP67 = heavy water spray, power-washing
- Enhanced RFI, EMI, and ESD Protection = Clear uninterrupted signal in harsh electrical environments
- Computer Controlled Calibration = High 1:1 Interchangeability from unit to unit
- Passes 40G Vibration test and IEC Free Fall test = Rugged design to handle excessive shock and vibration conditions

#### **Industries:**

- Power Generation
- Specialty & Off-Highway Vehicles
- <u>Transportation</u>
- Alternative energy
- Marine