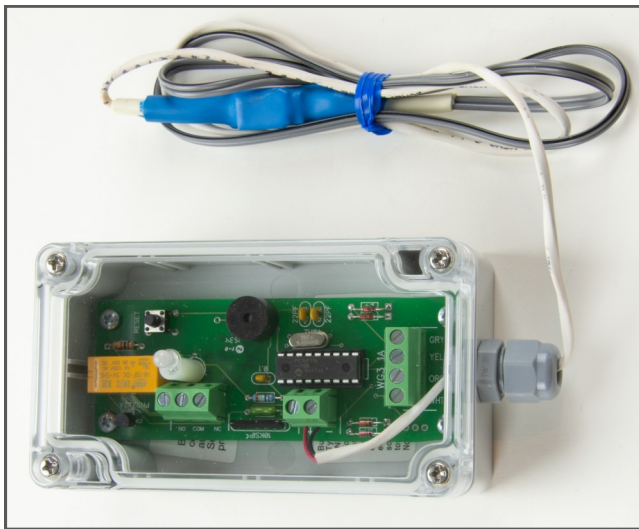


## DM-2 Diaphragm Monitor System

The Yamada® DM-2 Diaphragm Monitoring System is designed to protect your pump and its environment against damage from corrosive, aggressive, or otherwise harmful fluids pumped. Powered by standard line current, the DM-2 can automatically shut off the air supply to the pump and / or activate an indicator (whistle or alarm) the moment a diaphragm leak is detected. Alternate indicators not supplied by Yamada.

### Advantages



### Applications

- **Detects Diaphragm Leaks Instantly:** Sensitive moisture probes respond quickly to liquid in the pump air chamber to help keep leaks from causing pump damage or product contamination.
  - **Automatic Shutdown or Alarm Capability:** The DM-2 can be connected to a solenoid valve, alarm, or control system to not only stop the pump but also alert the operator the moment the leak is detected.
  - **Compact and Simple:** Moisture probes are easily located at the bottom of each pump air chamber. Lights displaying LT or RT, indicate a diaphragm breach. Remote control enclosure is standard in NEMA 4X (watertight) and measures just 2-1/2" W x 3 -3/4" L x 2-1/4" D. The enclosure can be easily mounted to any flat surface.
  - **Sensitivity and Inspection:** The DM-2 operates at a fixed sensitivity for the fluid being pumped. The system can be easily inspected by removing the probe from the pump air chamber and immersing the pumped fluid.
- When positive head pressure is on the pump fluid inlet.
  - When pumping hazardous or toxic fluids for working & environmental safety.
  - Expensive fluids.

# Principles of Operation

The DM-2 Diaphragm Monitoring System senses liquid entering the non-wetted portion of the Yamada Pump via a leaking diaphragm. A sensitive moisture sensor, which operates on the principal of fluid conductance, is installed at the lowest point of each air chamber. In the event of a diaphragm rupture, liquid enters the airside of the pump and begins to collect at the bottom of the air chamber where the probe is located. This liquid is detected by the sensor and a signal is transmitted to a remote master control. The controller, in turn, activates any connected alarm system, solenoid valve, or electronic device. The DM-2 Diaphragm Monitoring System can be factory installed on any Yamada industrial or FDA, NDP-20/25/40/50/80, or DP-10 Series pump. It can also be used on the NDP-5/15, NDP-20(PP) and NDP-25(PP) center bodies, typically installed after the exhaust of the pump. The system operates on either DC (with transformer) or AC power.

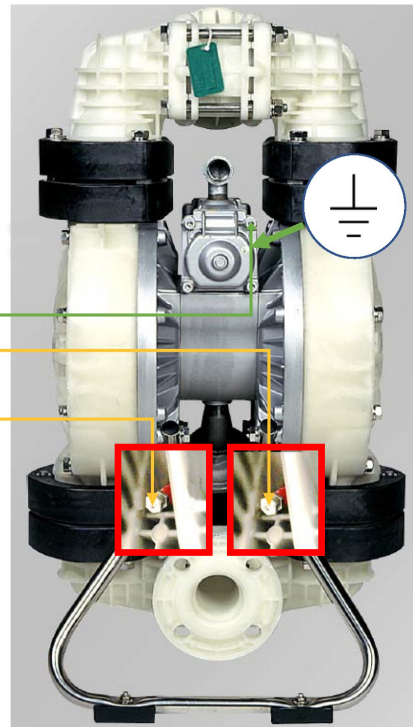
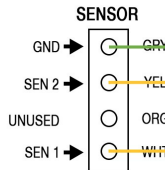
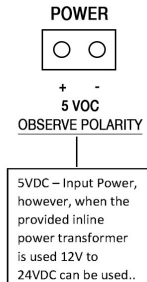
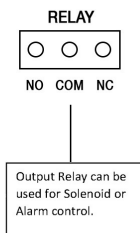
## Performance Specifications

- Materials of Construction:* ABS Plastic
- Enclosure:* NEMA 4X / IP66
- Mounting:* Flat Surface, #10 Fasteners
- Weight:* 8.1 oz.
- Power Supply:* 1 Phase, 50/60 Hertz,  
AC or DC, 12 or 24 Volt
- Optional Transformer:* 1 Phase, 50/60 Hertz  
120/12 VAC
- Operating Temperature Range:* 0° to 125°F
- Sensitivity Range:* 0-100,000 Ω (0-5 Volt)
- Cable Length (probes):* Standard 2',  
Optional up to 100'
- Cable Power & Alarm (user to supply):*  
4-Wire, 18 Gauge, Non-Shield

**NOTE:** DM-2 is to be utilized when pumping electrically conductive fluids ONLY.

DM-2 Wiring Example.

Note: Wire Gauge (AWG) 18 thru 24 is acceptable.



Label:

