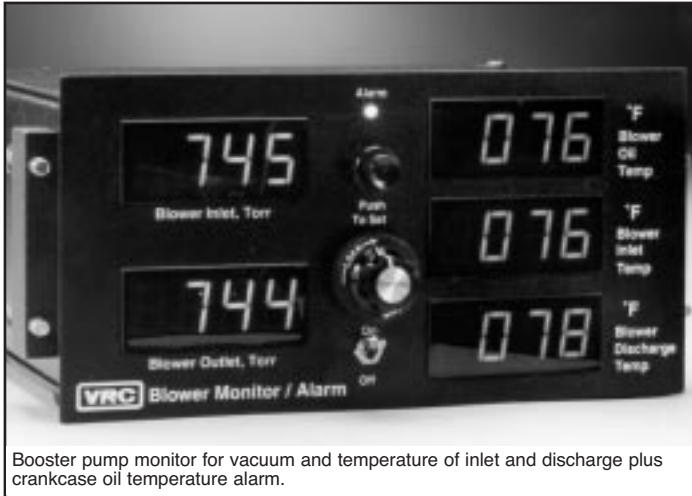




# Vacuum Booster Pump Monitor and Alarm System



Booster pump monitor for vacuum and temperature of inlet and discharge plus crankcase oil temperature alarm.

- Continuous Display Plus Analog Outputs
- Pirani, Diaphragm, or T/C Gauges for Vacuum
- Type J or K Thermocouples for Temperature
- Vacuum in Microns, Torr, Pascal, or mBar
- Specify Either °C or °F for Temperature
- High Level Output for PLCs or Recorders
- Adjustable Alarms Optional On All Channels
- 1/2 DIN Enclosures for Bench or Panel Mount
- Alarm Relays, SPDT, 3A @ 115 or 230 VAC

VRC combines their vacuum and temperature measurement experience to provide compact monitors for any vacuum booster pump. The large bright LED displays are easy to read in even the most dimly lit locations. Interfacing the VRC monitor with PLCs, recorders or other data systems is easy because all temperatures and pressures have high level linear analog outputs. Standard sensor cables are 10 feet (3 m) long, but can be extended to 500 feet (150 m) without affecting calibration.

## Vacuum Measurement

Diaphragm and Pirani Gauges provide accurate readings of inlet and discharge pressures from  $10^{-5}$  Torr to two atmospheres. These instruments can be calibrated to read in Torr, PSIA, inches Hg, mbar, microns or Pascal. Sensors are all stainless steel, and our diaphragm sensors come with snubber baffles to prevent premature fatigue failure due to pulsation.

## Temperature Measurement

Type J thermocouples are standard for temperatures from 0 °F to 1200 °F (0° to 700 °C), but type K thermocouples are also available with ranges from -300 °F to 2000 °F (-200° to 1200 °C).

## Specifications

**Temperature Measurement Display:** 3 1/2 Digit L.E.D. Display  
**Temperature Range:** Type J: 0 °F to 1200 °F or 0 °C to 700 °C  
 Type K: -300 °F to 2000 °F or -200 °C to 1200 °C

**Vacuum Measurement:** Select from the VRC Vacuum Gauge Catalog the instrument that best suits the vacuum in your system.

**Diaphragm Gauges:** 1 to 1500 Torr or 30 in. Hg to Atmosphere

**Pirani Gauges:** .01 to 20 Torr (mmHg) or 1 to 2000 mTorr (microns)

**Dimensions:** Panel 96 mm X 192 mm; 180 mm F to B.

**Mounting:** Bench mount enclosure is standard. Panel mount hardware is included. Panel cutout required 92 mm X 184 mm.

**Vacuum Sensor Cables:** 10 ft. (3m) is standard. Cables to 500 ft. can be provided.

**Line Cord:** 3 wire, 65 inch (170 cm) attached.

**Net Weight:** 5 lb. (2.3 kg)

**Shipping Weight:** 8 lb. (3.6 kg)

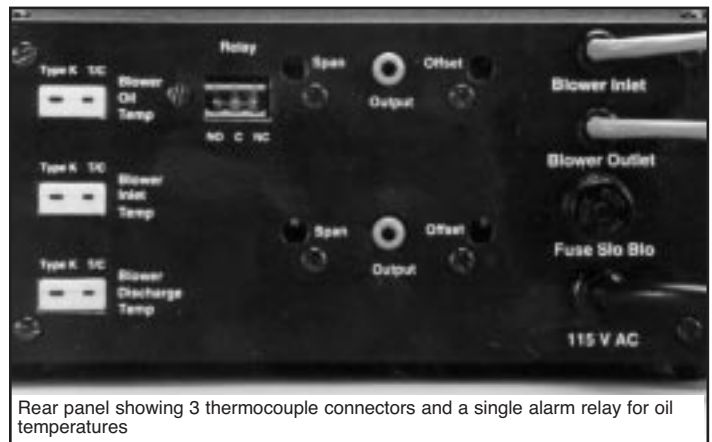
Exposed junction thermocouples are usually used for air measurement to minimize sheath heat sink effects. Sheathed thermocouples are used for crankcase oil temperature, and can also be used for air measurement in some cases.

## Ordering Information

The measurement needs for booster pump monitors vary widely, and each monitor is configured after your requirements have been carefully considered. Following are the basic questions to address.

- The number of vacuum/pressure channels
- The sensor type required for your vacuum/pressure range
- The number of temperature channels and range
- The thermocouple type, sheath and lead length
- The number of adjustable alarm set points

Of course, we would be happy to discuss these details with you, and once the decisions have been made, the VRC factory can quickly provide a firm price quotation. Delivery is typically made within a few weeks of receiving your order.



Rear panel showing 3 thermocouple connectors and a single alarm relay for oil temperatures