



### **GENERAL INFORMATION**

Every PGS100 has been tested and calibrated before shipment. Greystone's PGS100 pressure transducers sense gauge pressure and convert this pressure value to a linear, proportional high level analog output.

### **ELECTRICAL INSTALLATION**

The PGS100 pressure transducer is a true 2-wire, 4-20 mA current output device and delivers rated current into any external load of 0-800 ohms. The 4-20 mA units are designed to have current flow in one direction only. The PGS100A comes complete with a 2 foot cable electrical termination.

### **MECHANICAL INSTALLATION**

#### **Media Compatibility:**

PGS100 transducers are designed to be used with any gases or liquids compatible with 17-4PH stainless steel. 17-4PH stainless steel has excellent corrosion resistance. Corrosion tests and service experience have shown that in all aged conditions it is superior to standard hardenable stainless grades such as 420, 431 and 410 stainless. Its corrosion resistance is comparable to grade 304 stainless. Note it is not recommended for Hydrogen applications.

#### **Environment:**

The operating temperature limits of the PGS100 are  $-40^{\circ}$  to  $+185^{\circ}\text{F}$  ( $-40$  to  $+85^{\circ}\text{C}$ ). The compensated temperature range is  $-4$  to  $+176^{\circ}\text{C}$  ( $-20$  to  $+80^{\circ}\text{C}$ ). The rugged weather – resistant transducer is designed to withstand harsh environments. The electronics are sealed from the environment at the inlet of the 2 foot wire lead. For complete protection from excessive moisture migration through the wire lead the “B” enclosure is recommended.

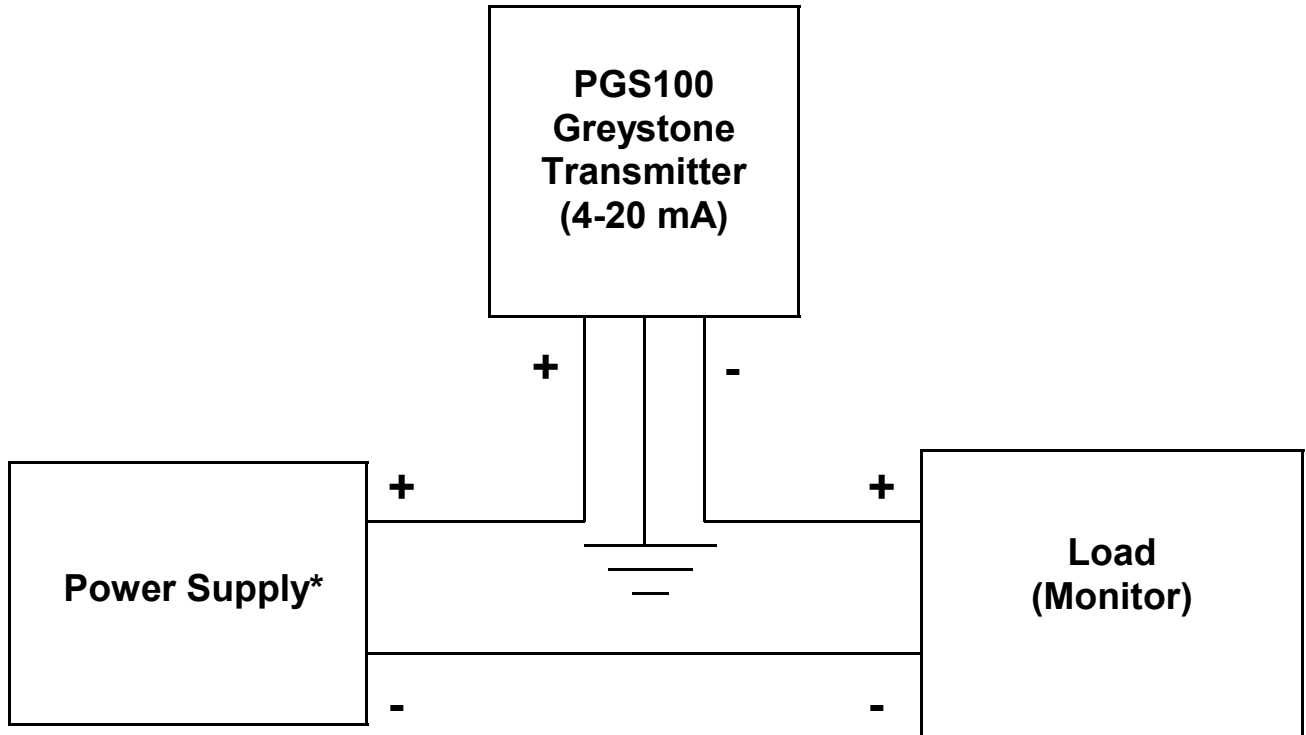
#### **Pressure Fittings:**

Typically, standard pipe fittings and procedures should be used. However, for pressure ranges in excess of 500 psig, we suggest the use of a sealant such as Loctite Hydraulic Sealant. Excessive torquing of metal fittings may cause a slight zero shift. The use of plastic fittings typically results in no noticeable zero shift. Torquing does not appreciably affect linearity or sensitivity.

#### **Venting:**

Because the reference pressure in a sealed gage transducer will vary due to changes in temperature and will affect overall accuracy (especially in units less than 500 psig range), all PGS100 transducers are vented through the cable.

**PLEASE OBSERVE POLARITY.** We suggest that the electrical cable shield be connected to the system's loop circuit ground to improve electrical noise rejection. The electrical connection is as follows:



The PGS100 has a 2-wire cable, where red is positive and black is negative

\* Minimum supply voltage (Vdc) =  $9 + 0.02 \times \text{Resistance of receiver plus line}$   
Maximum supply voltage (Vdc) =  $30 + 0.004 \times \text{Resistance of receiver plus line}$



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