

Absolute Process Instruments, Inc.

Manufacturer of Quality Signal Conditioners Transmitters & Isolators

Application Notes

- General Info
- Temperature
- Pressure
- Flow
- Speed
- Weighing
- Process

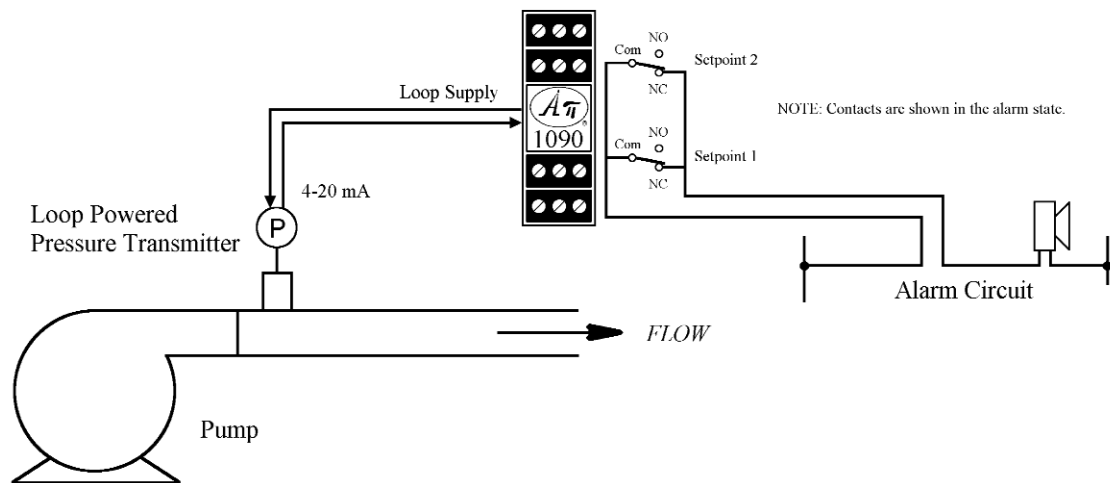
Pumping System High/Low Pressure Alarm

PROBLEM

A pump is required to maintain line pressure within set tolerances. Excess pressure may indicate a blockage or restriction in the line, while low pressure may indicate pump failure or a major leak in the line. If the pressure exceeds or drops below the normal pressure range, a remote alarm must be activated.

SOLUTION

A loop powered pressure transducer is installed at the discharge side of the pump. The pressure transducer is connected to an **API 1090 DIN** DC Input, Field Selectable, Dual Setpoint Alarm module.



The **API 1090 DIN** provides the loop power for the 4-20 mA pressure transducer from its built-in loop excitation supply. Setpoint 1 is adjusted to the low pressure limit, and Setpoint 2 is adjusted to the high pressure limit. The relay contacts are wired in parallel such that if the pressure is not between the setpoints (which in this application is the safe operating condition), a single remote alarm is activated. The standard heavy-duty relay contacts are rated 7A @ 240 VAC and can directly control most devices.

Did You Know...?

Selected Api transmitters have 20V output compliance.

FREE APPLICATION ASSISTANCE

Call  Customer Service

800-942-0315

