

CATEGORY:

- ☐ Temperature
- ☒ Pressure
- ☐ Flow
- ☐ Speed
- ☐ Weighing
- ☐ Other

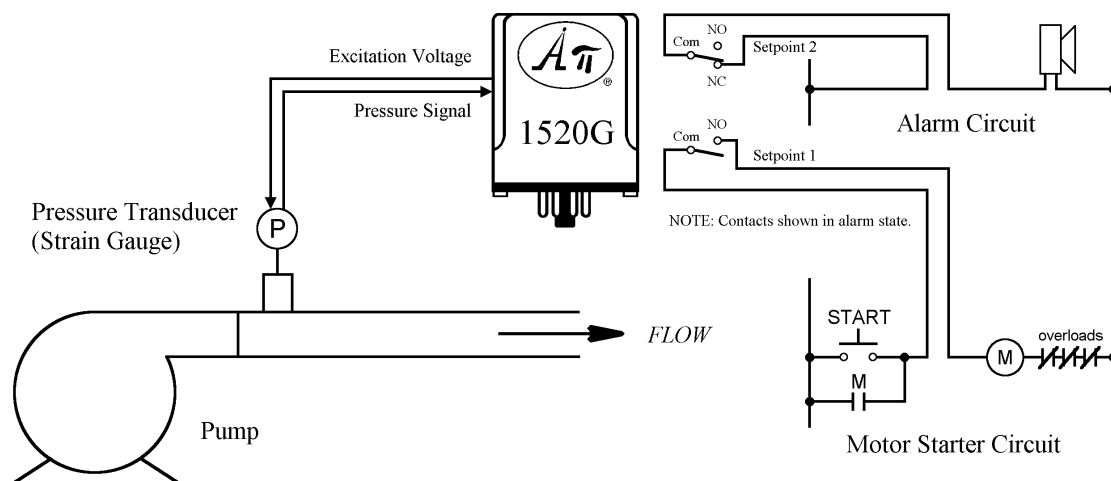
PUMPING SYSTEM HIGH/HIGH PRESSURE ALARM AND SHUTDOWN

PROBLEM:

A pump is supplying liquid to a process which requires the line pressure to be maintained below some maximum value. If the pressure exceeds a preset warning limit, an alarm must be activated. If the pressure exceeds a preset shutdown limit, the pump must be stopped.

SOLUTION:

A pressure transducer is installed in the line on the discharge side of the pump. The pressure transducer is connected to an Api Model 1520G Strain Gauge (Bridge) Input Dual Alarm Trip module which provides two independent setpoints and two independent isolated Form C (NO/NC) relay contacts. One set of these contacts is wired to an alarm or annunciator panel to alert the proper personnel of the overpressure condition. The other set of contacts is wired in series with the coil of the pump motor starter and shuts down the pump when tripped.



The Api Model 1520G provides the stable excitation voltage for the pressure transducer from its built-in excitation supply. Setpoint 2 is adjusted to the warning pressure limit, and Setpoint 1 is adjusted to the pressure shutdown limit. The standard heavy-duty relay contacts are rated 7A @ 240 VAC and can directly control most devices. Both setpoints are adjustable from 0-100% of the input span.

Did You Know ... ?

Api will do non-standard and special ranges on all of our products.