API-Cecomp Group n'fo Technical & Application Note A148

Application:Split signals for separate alarming and monitoringType of Company:Natural Gas Distribution CompanyLocation:Illinois

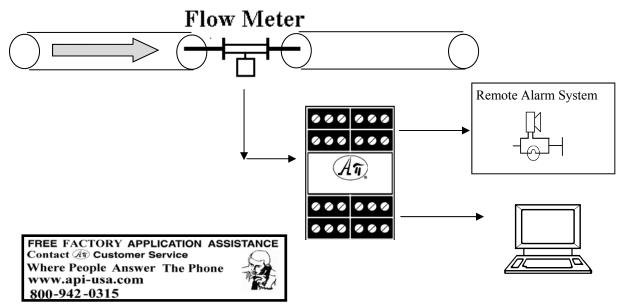
<u>Problem</u>: The natural gas distribution company has to send a 4-20 mA signal from their main gas flow meter to a remote alarm monitoring system for the customer. The customer is requesting that they furnish this same signal to the building automation system. The distribution company cannot add another flow meter and has discovered that both isolation and increased drive capability are required for this signal.

Solution: API furnished the customer an APD 4393 Iso-Splitter. The APD 4393 accepts the 4-20 mA signal from the flow meter and provides two optically isolated outputs that are linearly related to the input. The input signal is filtered, amplified, split, and then passed through an opto-coupler to both output stages. Each output channel has 20 V compliance (1000 Ω drive). The two isolated output channels provide an economical solution where more than one output device needs to be connected to the same input signal.



DC to DC Isolated Signal Splitter





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