Model 4570

Differential Pressure
Remote Alarm Monitoring Panel

Sigma Design Company introduces the SIGMA Differential Pressure (DP) Alarm Panel for Differential Pressure monitoring needs.

The SIGMA DP Alarm Panel is a simple, easy-to-install, and configured solution that monitors the pressure drop across a filtration media or other pressure-sensitive processes and is suitable for liquid process systems. It can be used to monitor any filtration or process equipment where knowing the differential pressure across the device is a critical process parameter.

Using our 5-button HMI Touch Screen, the operator can easily:

- Monitor inlet/outlet pressure on a continuously updating display with 0.1 PSI accuracy both locally and remote
- Dynamically adjust the DP alarm setpoint
- Monitor the current DP up to 20 PSID

Regulatory Compliance:

Many industries are subject to strict standards related to process conditions. Differential pressure measurement can provide documentation of compliance by demonstrating that pressure differentials are being maintained within specified ranges.

Benefits

Monitoring differential pressure in process applications is essential for maintaining process efficiency, ensuring product quality, ensuring safety, controlling processes, monitoring equipment health, optimizing energy usage, complying with regulations, and troubleshooting issues. The SIGMA DP Alarm Panel provides critical insights that enable operators to make informed decisions and take actions to keep the process running smoothly and safely.

Safety: By monitoring pressure differentials, operators can take immediate action to prevent accidents, equipment damage, and potential harm to personnel.

Efficiency: Monitoring differential pressure with the SIGMA DP Alarm Panel enables assessment of the efficiency of the fluid process and can identify potential issues such as blockages, leaks, or flow restrictions. This information can help optimize the process to ensure that it operates at its maximum efficiency.

Quality Control: Deviations in pressure can indicate changes in the composition, viscosity, or density of the fluid being processed, which can affect the quality of the end product. Regular monitoring with the SIGMA DP Alarm Panel allows for quick detection and correction of any issues that might compromise product quality.

Process Control: The SIGMA DP Alarm Panel lets operators adjust control valves and other equipment to maintain the desired pressure differentials, ensuring that the process operates within the specified parameters.

Equipment Health Monitoring: By regularly monitoring pressure differentials across filters, heat exchangers, and other components, maintenance teams can schedule preventive maintenance activities and the likelihood of unexpected breakdowns and downtime.

Energy Efficiency: Monitoring differential pressure with the SIGMA DP Alarm Panel can help optimize energy consumption in systems where pumps and compressors are used to maintain fluid flow.

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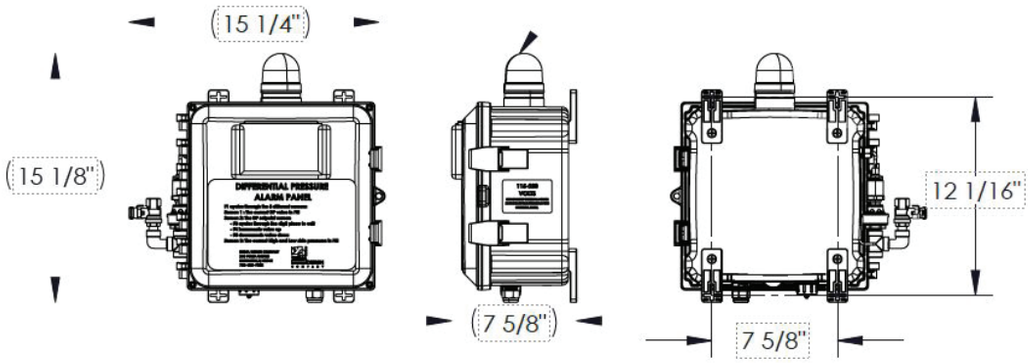
A red LED stack light turns on when the current DP pressure exceeds the setpoint value. The light can be configured to turn on solid or blink. An optional audible alarm module can be added for non-visual indication. Additionally, a “dry” set of relay contacts will close (Ø1, 6A, 250 VAC). These contacts can be used to power ancillary equipment or remotely communicate with other industrial systems. Diaphragm seals are installed to protect the transducers, and ¼” ball port sampling valves function as both a vent to bleed out entrained air and as sample outlets for the two-process streams.

The system is configurable with 0- 30, 0-60, 0-100, or 0-200 PSIG pressure transducers. System accuracy is +/- .5% of the full range scale of the selected transducer. The panel can be integrated into plant controls systems to remotely monitor information such as Inlet Pressure, Outlet Pressure, DP Pressure, and alarm status in real time over Ethernet/IP.

The enclosure is polycarbonate, UL508a listed, and designed to NEMA/ Type 4X standards. The input voltage range is 115-230 VAC, Ø1.

For detailed information and technical specifications, download the cut sheet .

Model 4570 Product Dimensions



Learn more about our Industrial Water and Filtration Systems

About Sigma Design Company

Sigma Design is a leading one-stop design, engineering, and manufacturing resource for the development of specialty equipment and engineered systems. Our mission is to provide clients with creative, affordable and easily manufactured designs and manufacturing assembly solutions that achieve their product, business and revenue goals. Our clients have included hundreds of leading global brands and manufacturing firms across a wide array of industries. Based in New Jersey for more than 20 years, we have transformed more than 1,000 design and design/build projects into successful products and specialty equipment in use across the world.

SERVICES INCLUDE:

- Design and engineering
- Testing
- Manufacturing

Your trusted one-stop resource for end-to-end product development and commercialization solutions, on time and on budget.

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