



Dual DMY-2017 Pressure Indicator

- Ranges: 0 to 10"H₂O, 1psi, 5psi, 15 psi, 30psi, 100psi, 250psi, 500psi and 1000psi gage or absolute pressure, including vacuum.
- Single or dual pressure version. DMY-2017 Pressure Indicator with only one pressure input offer one universal standard input for RTD, thermocouples, 0-55mV, 4-20mA, 1-5Vdc and 0-10Vdc.
- · Many optional modules are available
 - Up to two analog output modules of 4-20mA, 1-5Vdc and 0-10Vdc.
 - Up to four SPDT and SPST relay alarm modules.
 - Water-proof front-panel.
 - RS-232 or RS-422/485 communication.
- Indicates 2 variables simultaneously.
- Its robust construction makes it tough enough for the most hostile environment.
- Power supply from 90 to 240Vac, 50/60Hz or dc levels.
- · High accuracy.
- Linearization of RTD, thermocouple and also square root extraction.
- Fully configurable by front-panel push-buttons.
- ACK button.
- Configuration stored in non-volatile memory.

The design of DMY-2017 Pressure Indicators is characterized by high reliability and precision, electrical noise and EMI immunity, besides well elaborated technical manual. These features make them ideal for industrial applications in Instrumentation and Process Control.

They have an extruded aluminum case and use the best origin components and parts, proven by rigorous tests and specified according to the strictest worldwide norms. One or two pressure inputs; gage or absolute pressure, including vacuum. When in single pressure version, they offer one standard universal input that can be 4-20mA, 0-55mV, 1-5Vdc, 0-10Vdc, thermocouples and RTD; also standard is the 24Vdc power supply for two wire transmitter.

Available for use with air and inert gases or sealed for fluids compatible with 316L stainless steel. Power supply is universal and can be connected from 90 to 240Vac or dc levels when specified. Flexibility and modularity concepts are clear due to the variety of modules available meeting the widest applications. Up to four alarm modules. One or two analog output of 4-20mA. 1-5Vdc or 0-10Vdc. Serial communication.



Order Code: DMY-2017 - [] - [Input 1 I Range ⊢ 1 - 0 to 10"H₂O (1)2 - 0 to 1psi 3 - 0 to 5psi 4 - 0 to 15psi -(2)5 - 0 to 30psi 6 - 0 to 100psi 7 - 0 to 250psi 8 - 0 to 500psi (3)9 - 0 to 1000psi -Pressure Type F 1 - Gage 2 - Absolute 3 - Vacuum (0 to 1atm) I Sensor Type F 1 - For air and inert gases 2 - Sealed for fluids compatible with 316L stainless steel I Input 2⊢ Same code of Input 1. For single pressure version, put 0-0-0 for auxiliar universal input for RTD, TC, 4-20mA, 0-55mVdc, 1-5Vdc and 0-10Vdc. I Output 1 ⊢ 0 - None 1 - 4-20mA 2 - 1-5Vdc 3 - 0-10Vdc 4 - SPST Relav 5 - Open Collector Voltage I Output 2 ⊢ Same code of Output 1 I Output 3 F 0 - None 1 - SPDT Relay 2 - Open Collector Voltage I Output 4 ⊢ Same code of Output 3 I Power Supply ⊢ 1 - 90 to 240Vac or 130 to 340Vdc 2 - 24Vdc 3 - 12Vdc 4 - Others, under consult I Communication ⊢ 0 - None 1 - RS-232 2 - RS-485 3 - RS-422

Specifications

Inputs

One or two pressure inputs for gage, absolute and vacuum pressures. Ranges from $10^{\circ}\text{H}_2\text{O}$ to 1000ps gage pressure. Absolute pressure ranges from 15psi to 1000psi. Vacuum ranges up to 1atm. Ranges up to 15psi used with air and inert gases. From 15psi to 250psi one can use air or fluids compatible with 316L stainless steel. Sealed for use with fluids for ranges above 250psi. Single pressure version offers auxiliar universal input for thermocouple (J, K, T, E, R or S under ITS-90), 0-55mV, RTD under DIN 43760, 4-20mA, 1-5Vdc and 0-10Vdc selected by user.

Input impedance of 250 $\!\Omega$ for mA, 10 M $\!\Omega$ for 5Vdc and 2 M $\!\Omega$ above 5Vdc.

Outputs

4-20mA (750Ω maximum load), 1-5Vdc or 0-10Vdc analog retransmitter. Up to two optional modules galvanically isolated to 300Vac from power supply and input. Up to four SPST and SPDT relays rated for 3A at 220Vac. Logic signal, open collector transistor, 40mA/24Vdc maximum with isolation.

Note: There are 4 fitting connectors internally, so, the total number of optional output modules is 4. See order code.

Serial Communication

RS-232 or RS-422/485 with 50Vdc isolation.

Indication

Two 14mm red leds displays with four digits which can be configured together with the decimal point.

Configuration

By front-panel push-buttons and internal jumpers.

Sampling Rate

120 ms standard. One second display update rate.

Accuracy

- ± 1% of full scale for 10"H₂0 range.
- $\pm~0.1\%$ of full scale for others pressure ranges.
- $\pm~0.1\%$ of full scale for TC, RTD, mA, mV and Vdc input. $\pm~0.5\%$ of full scale for analog retransmitter output.
- Linearization

 $\pm~0.1\%$ of full scale for RTD and $\pm~0.2\%$ of full scale for TC.

Square Root Extration

 $\pm~0.5\%$ of reading, for input above 10% of span. Cut-Off programmable from 0 to 5%.

Digital Filters

First order digital filters applied to the inputs with time constant from 0.0 to 25.0 seconds.

Cold Junction Compensation

 \pm 2.0°C at range from 0 to 50°C ambient temperature.

2-Wire Transmitter Power Supply

24Vdc/50mA maximum, isolated from output with short circuit protection.

Span Temperature Coefficient at 25°C ambient tempera-

- $\pm~0.01\%$ of full scale for °C, pressure inputs.
- $\pm~0.005\%$ of span for °C, auxiliar input.

Power Supply

90 to 240Vac 50/60Hz, 24Vdc, 12Vdc or other values. 10W nominal. See order code.

Operating Ambient

0 to 50°C temperature and 90% maximum relative humidity.

Dimensions

 $1/4\ \mathrm{DIN}\ (96\mathrm{x}96\mathrm{x}170\mathrm{mm})\ \mathrm{HxWxD},\ (92\mathrm{x}92\mathrm{mm})\ \mathrm{HxW}\ \mathrm{panel}$ cutout.

Weight

(1) air and inert gases

(3) sealed

(2) air and inert gases or sealed

1.0kg nominal.

Warranty

One-year warranty.

I Case Protection Grade H

1 - Front aspersion-proof

2 - Weather-proof

0 - General usage, protected place