

Analog-Digital Pressure Indicator

Model GT435



- Universal Pressure Indicator** The Gentran model GT435 analog-digital indicator/power supply is designed for use with any four leg, 350 ohm Wheatstone bridge pressure transducer. Zero and span can be easily adjusted without removing the module. Shunt calibration is a standard feature.
- Easy To Read Analog & Digital Displays** The large 240 degree arc international scale makes the analog meter easy to read. Custom face plates, which have specific engineering units or other markings, can be easily added. A 4½ digit LED digital display provides the accuracy needed for setpoints.
- Dual Alarm Setpoints** Two alarms can be selected for above or below setpoint control. Relays provide N.O. (normally open) and N.C. (normally closed) contacts for maximum flexibility. Adjustments are made through pots on the faceplate.
- Versatility** The GT435 provides a choice of recorder outputs, damping constant, transducer sensitivities, input power, shunt-resistor calibrations, peak-hold, and reset options.
- Easy Installation** The easy-to-mount aluminum housing fits a 1/4 DIN cutout. Slide-type metal brackets hold the case firmly in place and can be installed quickly. The electronic module can be easily removed for option selection or service.

Ordering Information

TYPICAL PART NUMBER

| GT435 D -10 AB 8 -10K | | | | | | | | | | |
|---|--------------------|-------------------------|-----------------------|---|---------------------|---|----------------------|------------------------|--------------------------|---------|
| Series GT435 Analog-Digital Pressure Indicator | Alarm Setpoints | | Recorder Outputs | | Control Sequence | | Shunt Calibration | | Pressure Range * | |
| | | None | No Alarm Setpoints | 1 | 0-1 VDC | None | None | 7 | Gentran (54.9 Kohm) | 5C |
| | D | Dual Alarm Setpoints | 2 | 0-2 VDC | AA | Control I above Control II above | 8 | Gentran (30.1 Kohm) | 1K | 0-1,000 |
| | | | 5 | 0-5 VDC | | | 9 | Dynisco (External) | 3K | 0-3,000 |
| | | | 6 | 4-20 mA | AB | Control I above Control II below | | | 5K | 0-5,000 |
| | | | 10 | 0-10 VDC | BA | Control I below Control II above | | | 7.5K | 0-7,500 |
| | | | BB | Control I below Control II below | | 10K | 0-10,000 | | | |
| | | | | | | | | 15K | 0-15,000 | |
| | | | | | | | | 350 BAR | 0-350 BAR | |
| | | | | | | | | 700 BAR | 0-700 BAR | |
| | | | | | | | | 500 KG | 0-500 Kg/cm ² | |
| | | | | | | | | 700 KG | 0-700 Kg/cm ² | |

*Other ranges available upon request.

The Gentran model GT435 analog-digital pressure indicator/power supply is a combination transducer power supply, indicator, and signal conditioner. It is housed in a 1/4 DIN standard-size case of extruded aluminum, which protects against EMI and RFI noise, heat dispersion, and physical damage. The large 6 inch, 240 degree analog meter is styled for ease of reading and incorporates the new international face. The digital display provides a 4½ digit LED display for quick, accurate readings or adjustment of set-points.

The GT435 is designed for use with a Gentran pressure transducer or any 4 leg, 350 ohm Wheatstone bridge strain-gage transducer. A calibration pushbutton allows for a quick span check and adjustment when you adjust zero at zero pressure. The complete electronic assembly can be removed and/or replaced from the front without disturbing the wiring in back. Various options are furnished as standard, dip-switch selectable. These options include various recorder outputs, transducer input sensitivity, power supply (120 or 240 VAC), dual setpoints, various calibration resistor values, manual or automatic reset on alarms, and overall response time.

The dual setpoint option can be used to give a preliminary warning before an actual shutdown sequence is initiated. You can program HI/HI, LO/LO, LO/HI, and HI/LO. The relays are isolated during a set-point change or calibration check to prevent accidental emergency shutdown.

Specifications: GT435

Performance Characteristics

Standard Ranges:

0-500 psig, 0-1,000 psig, 0-1,500 psig,
0-3,000 psig, 0-5,000 psig, 0-7,500 psig,
0-10,000 psig, 0-15,000 psig, 0-350 BAR,
0-700 BAR, 0-500 Kg/cm², 0-700 Kg/cm²

Special Ranges:

Other ranges available upon request.

Accuracy:

Analog: $\pm 2.0\%$ of full scale

Digital: $\pm 0.1\%$ of full scale or one digit

Recorder Output:

Accuracy: $\pm 0.1\%$ of full scale

Repeatability: $\pm 0.1\%$ of full scale

Linearity: $\pm 0.1\%$ of full scale

Stability: $\pm 0.1\%$ of full scale

Physical Characteristics

Size:

1/4 DIN

Meter:

Six (6) inch scale 240 degree arc

Operating Temperature:

0-140°F

Weight:

2.5 lbs.

Electrical Characteristics

Power:

106-125 or 200-250 VAC, 50/60 hz,
1/8 Amp maximum

Zero Adjustment:

$\pm 35\%$ with panel pot

Sensitivity Adjustment (Span):

1-2.5 mV/V or 2.5-5.0 mV/V,

Switch selectable and fully adjustable.

Shunt Resistance Calibration:

Selectable for Gentran or Dynisco

Response Time (Damping):

Selectable at 0.3 or 5.0 seconds

Recorder Outputs:

Standard: 0-1 VDC, 0-2 VDC, 0-5 VDC
& 0-10 VDC

Optional: 4-20 mA, Load from
15-600 ohms

Transducer Power Supply:

8.2 VDC $\pm 5.0\%$

Control Characteristics

Dual Relays:

2 SPDT (Single Pole Double Throw)

Control Characteristics (Cont.)

Relay Rating:

8 Amp @ 125/250 VAC

5 Amp @ 30 VDC

Set Point Range:

1-100% of full scale

Accuracy:

$\pm 0.3\%$ of full scale

Hysteresis:

$\pm 0.5\%$ of full scale

Indication:

Front panel LED

Mode:

Above or below set point

Reset:

Automatic or manual

Peak Hold:

Optional

