VEEDER-ROOT

Process Indicators & Controls

S628 AWESOME Strain Gauge



Blazing bright, large, color-changing display... accepts 6 wire strain gauge input

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The Veeder-Root brand S628 Strain Gauge is a member of a family of 1/8 DIN instruments which offer breakthrough display technology as well as easy-to-program user setup. Its large LED display features the ability to change color based on process status such as exceeding an alarm value. Therefore, when monitoring process variables in applications using analog signals, the S628 provides operators with an instant visual alert to changes in the application's status.

- AWESOME 0.71" high digit LED display (27% larger than other 1/8 DIN units)
- Programmable color change display based on an event
- Programmable help function and secondary legend display
- High and low alarm outputs
- Compatible with 6 wire strain gauge inputs
- Field selectable 5 or 10 Volt, 60 mA excitation voltage
- Tare function
- Standard outputs: 2 NPN transistors & 1 relay (optional 2nd relay)
- 100 ms sample time with 0.03% accuracy
- Optional RS-485 plug in card
- CE approved

The S628 Strain Gauge is designed to accept low level DC signals and power them with a bridge excitation supply. The ability to accept a 6 wire input enables the unit to compensate for errors due to lead resistance or drift in the excitiation voltage.

SPECIFICATIONS

Process Input: 0-100 mVDC Accuracy: ±0.03% of span Sample Rate: 100 ms Resolution: 14 bits

Sensor Break: Detected within 2 seconds **Control Inputs:** Sourcing, Edge Sensitive Logic Low ≤ 2.0 VDC, Logic High ≥ 3.0 Impedance: 4.7 K Ω to + voltage - Sourcing

Response Time: 25 ms Function: Programmable

Outputs: Solid State: NPN open collector, 30 VDC max., 100 mA max.

Relay: SPDT, 5A resistive@ 110 VAC Latency: 75 μ seconds, plus 8 ms for relay pull-in

Linear Outputs: 0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V Accuracy: $\pm 0.25\%$ (mA at 250Ω V at $2k\Omega$); degrades linearly to $\pm 0.5\%$

Resolution: 8 bits in 250ms (10 bits in 1s typ.)

Update: Approximately 4/s

Load Impedence: mA ranges: 500Ω max.; V ranges: 500Ω min. **Communication:** RS-485; Serial asynchronous, UART to UART; Open ASCII: One start bit, even parity seven data bits, one stop bit; Baud Rate selectable from 9600, 4800, 2400, or 1200

Maximum Zones: 99

Supply Voltage: 90-264 VAC, 50/60 Hz, or 20-50 VAC/VDC; 4 Watts Accessory Power Supply: Selectable 5 or 10 VDC @ 60 mA

Display: Red/Green, 7 segment LED

Primary display: 5 digits, 0.71" (18mm) height Secondary display: single digit, 0.3" (7mm) height Annunciators: Output 1 & Output 2 status

Dimensions: 48mm x 96mm, 110mm deep

Mounting: Panel mount (mounting bracket supplied), 45mm x 92mm

cutout

Connections: Screw type terminals - combination head

Front Panel Rating: NEMA 4X/IEC IP65

Case Material: GE Lexan 940

Weight: 0.56 lbs.

Operating Temp.: 0° to 55° Celsius, 32° to 131° Fahrenheit Storgage Temp.: -20° to 80° Celsius, -4° to 176° Fahrenheit

Relative Humidity: 20% to 95% non-condensing

Approvals: CE



