



**AWESOME** preset & batch counters with large, blazing bright, color changing displays

CE

The Veeder-Root brand C628 Counters are members of a family of 1/8 DIN instruments which offer breakthrough display technology as well as easy-to-program user setup. The large LED display features the ability to change color based on process status such as exceeding the count preset. Therefore, when monitoring count, position, length, or other critical values, the C628 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
- Batch units - Independent display of background total
- Programmable help function and secondary legend display
- Dual preset units - Preset 1 programmable as absolute value or prewarn which tracks Preset 2
- Choice of NPN or PNP primary input
- Filter speed settable for 20, 200, or 10,000 Hz
- Standard Outputs: 1 NPN transistor (2 NPN transistors on Dual & Batch units) & 1 relay (optional 2nd relay on Dual & Batch units)
- Front panel reset enable and preset lockout
- Optional RS-485 plug in card
- CE approved

Single (C628-7XXX) and dual (C628-8XXX) preset models are available with programmable latched or timed output operation. A batch model (C628-9XXX) also has a preset tied to output 1 as well as a batch preset tied to output 2. This model displays count, batch value, and background total.

## SPECIFICATIONS

**Count Inputs:** Sinking/Sourcing or Contact Closure

Frequency: 10 kHz max.

Logic Low  $\leq$  2.0 VDC, Logic High  $\geq$  3.0, 30V max.

Impedance: 10 K $\Omega$  to common - Sourcing; 4.7 K $\Omega$  to +Voltage - Sinking

**Calibrator:** Multiplier 0.0001 to 9.9999

**Control Inputs:** Sinking, Edge Sensitive

Logic Low  $\leq$  2.0 VDC, Logic High  $\geq$  3.0

Impedance: 4.7 K $\Omega$  to +Voltage

Response Time: 25 ms

Functions: Input 1 - Remote Reset; Input 2 - Security Lockout

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

Relay: SPDT, 5A resistive @ 110 VAC

Latency: 75  $\mu$  seconds, plus 8 ms for relay pull-in

**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:** 9-15 (unregulated VDC), 125 mA max.

**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 (for Dual & Batch units) 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.

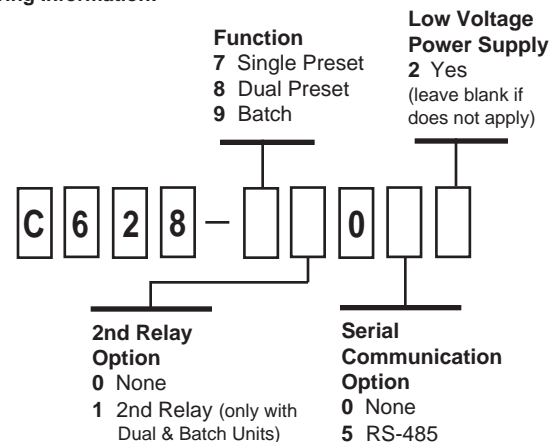
**Operating Temp.:** 0° to 55° Celsius, 32° to 131° Fahrenheit

**Storage Temp.:** -20° to 80° Celsius, -4° to 176° Fahrenheit

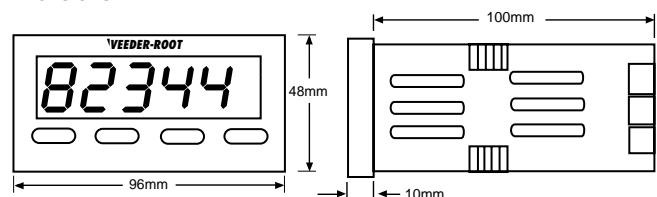
**Relative Humidity:** 20% to 95% non-condensing

**Approvals:** CE

## Ordering Information:



## Dimensions:



Panel Cutout: 45mm x 92mm (1.77" x 3.62")



*Full-featured position indicator with large, blazing bright, color-changing display... 2 alarm outputs*



The Veeder-Root brand C628 Position Indicator is a member of a family of 1/8 DIN instruments which offer breakthrough display technology as well as easy-to-program user setup. The large LED display features the ability to change color based on process status such as exceeding the high alarm value. Therefore, when monitoring actual position status or another critical value, the C628 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
- Optional linear output relative to position
- Accepts encoder inputs
- Reset to a value other than zero enables establishment of a home position
- Filter speed settable for 20, 200, or 10,000 Hz
- Standard Outputs: 2 NPN transistors & 1 relay (optional 2nd relay)
- Front panel reset enable and alarm lockout
- Optional RS-485 plug in card
- CE approved

The high and low alarms each activate an NPN output and a relay output. In addition, position information can be transferred to a PLC or computer via optional RS-485 serial or linear output boards.

## SPECIFICATIONS

### Count Inputs: Quadrature

Frequency: 5 kHz max.

Logic Low  $\leq 2.0$  VDC, Logic High  $\geq 3.0$ , 30V max.

Impedance: 10 K $\Omega$  to common - Sourcing; 4.7 K $\Omega$  to +Voltage - Sinking

### Calibrator: Multiplier 0.0001 to 9.9999

### Control Inputs: Sinking, Edge Sensitive

Logic Low  $\leq 2.0$  VDC, Logic High  $\geq 3.0$

Impedance: 4.7 K $\Omega$  to +Voltage

Response Time: 25 ms

Functions: Input 1 - Remote Reset; Input 2 - Security Lockout

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

Relay: SPDT, 5A resistive @ 110 VAC

Latency: 75  $\mu$  seconds, plus 8 ms for relay pull-in

### Linear Outputs: Ranges: 0-20mA, 2-20mA, 0-10V, 2-10V, 0-5V, 1-5V

Accuracy:  $\pm 0.25\%$  (mA at 250 $\Omega$ , V at 2k $\Omega$ ) degrades linearly to  $\pm 0.5\%$

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

Load Impedance: mA ranges 500 $\Omega$  max.; V ranges 500 $\Omega$  min.

Update: Approx. 4/s

### 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

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Annunciators: Output 1 & Output 2 status

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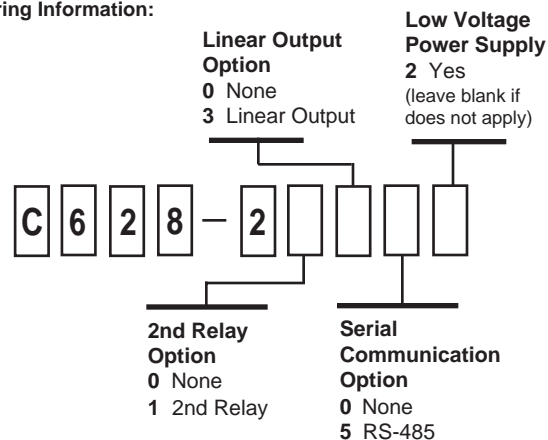
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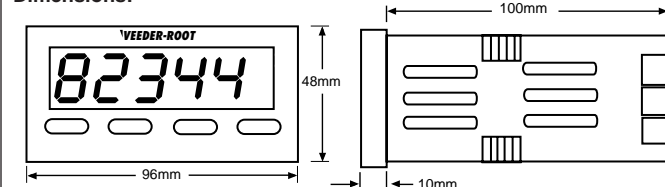
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