

Powerful, full-featured rate meter with large, bright display which changes color on alarm activation



All in the family - Matching C628 series products in other sections of this catalog:

C628 Totalizers:	Section 1
C628 Counters & Position Indicators:	Section 2
C628 Elapsed Timers:	Section 5

File No.: E185087



The Veeder-Root brand C628 Rate Meters are members 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 a preset alarm value. Therefore, when monitoring rates of line-speed, flow, machinery RPM and other critical rates, the C628 can provide operators with an instant visual alert to changes in the application's status.

High/Low alarms also activate relay and transistor output channels for direct control of electrical circuits. Start up suppression prevents "false" outputs during initial process acceleration.

- **AWESOME** 0.71" high digit LED display (27% larger than other 1/8 DIN units)
- Programmable color change display based on an event
- Universal power supply operates at all popular AC and DC voltages
- Display configurable for rate mode (A or A/B), update time, minimum number of pulses, and forced zero time
- Optional linear output relative to rate
- Choice of NPN, PNP or magnetic primary input
- Independent calibration of rate & total
- 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, UL, CUL recognized

The C628 is available with a count totalizing feature letting you instantly switch display between production rate and total – at the touch of a button. A process time mode lets the unit show travel time in minutes and seconds for applications such as food and beverage processing (inverse speed calculation).

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 Ω to common - Sourcing; 4.7 K Ω to +Voltage - Sinking; Magnetic Input: 0.5 to 30V peak

Calibrators: Rate Multiplier: 0.0001 to 99999

Total 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 Ω to +Voltage

Response Time: 25 ms

Functions: Input 1 - Display Hold (Rate Meter) and Remote Reset (Rate Meter with Total); Input 2 - Security Lockout

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

Relay: SPDT, 2 resistive @ 110 VAC

Latency: 75 μ seconds, plus 8 ms for relay pull-in

Linear Outputs: Ranges: 0-20mA, 4-20mA, 0-10V, 2-10V, 0-5V, 1-5V

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

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

Load Impedance: mA ranges 500 Ω max.; V ranges 500 Ω 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

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 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.

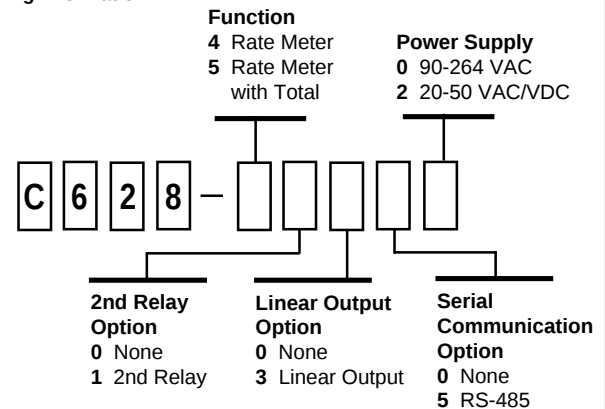
Operating Temp.: 0° to 55° Celsius, 32° to 131° Fahrenheit

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

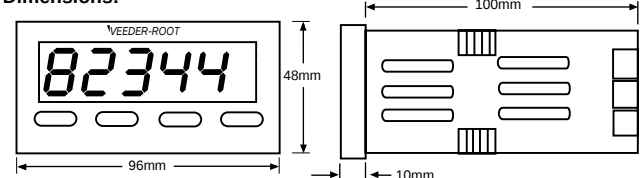
Relative Humidity: 20% to 95% non-condensing

Approvals: CE, UL Recognized, File No.: E185087

Ordering Information:



Dimensions:



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