

# 9100 PREDETERMINING COUNTER/RATEMETER

Electronic  
Predetermining Counters

NEW

The versatile 9100 multi-function instrument is a multi-preset, totalising, batch counter with Device Net/CAN and back-lit display



9100 IN COUNTER MODE

Simultaneous operation in different modes is now possible with this recent development of the highly successful 9000 multi-function counter. Additional enhancements include 3-line display, more keys, Device Net/CAN, enhanced programming, EEPROM memory avoiding the need for a battery, and on-screen programming prompts in four languages.

- Simultaneously maintains any 3 of the following: Count preset, count pre-warn, batch preset, overspeed, under-speed condition and additionally displays count, total and speed.
- EEPROM retains program and data for 40 years with no power.
- 3 line Supertwist LCD display viewable from any angle.
- Easily programmed in English, German, French or Spanish using simple menu structure and 10-key keypad.
- Counts in any of 7 modes: A-B, A+B, A/B, count and direction, quadrature x1, x2 & x4.
- CAN bus DEVICE NET interface (as an option).
- Displayed values, choice of engineering units and 12 characters of user programmable text can be printed directly from the IBM/Epson compatible serial printer port.
- Can be powered from 85 - 260VAC for world wide use.
- Multiplying and dividing prescalers enable display directly in the required (engineering) units.
- Manual, remote and automatic resets available.
- Remote counter inhibit and remote keyboard disable.
- Fast electronic or slow contact closure inputs. Contact closure inputs are de-bounced.
- Auxiliary 12VDC 100mA power output to power sensor.
- Environmental protection to IP65/NEMA4
- CE approved. UL and cUL approval pending.

As a counter this instrument unit is a bi-directional, 3 set point, 3 output predetermining counter. The relay annunciators in the display indicate when each relay is activated. The three relays P1, P2 and P3 are all assignable to any function.

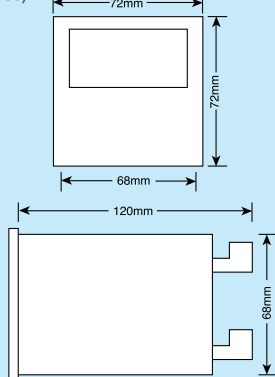
P1 can also be set as a batch counter and the 9100 will count batches and maintain total at the same time. It will also control rate and monitor motion at the same time as counting and these aspects are illustrated where the 9100 is featured as a ratemeter in section 4 of this catalogue.

## Typical Applications

- \*Repetitive filling of containers where control of flow rate is important
- \*Applications where pre-warn for speed change is required
- \*Position sensing and robotic control
- \*Production counting
- \*Cut to length production
- \*Batching and stop/start control
- \*Gear selection and control
- \*Numerical position control
- \*Fluid blending
- \*Form/fill/seal systems
- \*Coil winding and wire cutting
- \*Packaging

## Dimensions

72 x 72mm (2.83in) DIN case  
Depth behind panel: 120mm (4.72in) incl external connections  
Panel Cut-out 68 x 68mm (2.68in) +0 -0.5mm (0.02in) (DIN 43700)



## Specification

**Power Supply**  
85 - 265VAC  
**Auxiliary Output**  
12VDC  $\pm 10\%$  100mA for powering sensors  
**Display**  
3 line high contrast supertwist backlit:  
LINE 1: 8 numeric LCD. LINE 2: 12 alphanumeric  
LINE 3: 12 alphanumeric  
**Keyboard**  
Sealed elastometric keyboard with 10 keys  
**Connections**  
1x9 way and 1x10 way plug in terminal strips with wire clamps. Each way capable of accepting up to 2 OFF 2.5mm<sup>2</sup> (0.1in<sup>2</sup>) conductors  
**Count Inputs**  
Uni-directional count A and direction B. A-B, A+B, A/B, bi-directional quadrature x1, x2 or x4. 10 - 30VDC. Duty cycle 40:60 or 60:40. Max freq 10kHz  
**Control Inputs** External reset, count inhibit, keyboard disable. Maximum 30Hz contact closure or solid state input. 10 - 30VDC opto-isolated  
**Prescaler**  
Multiply 0.00250 - 9.99999; Divide 1 - 99999  
**Rate Multiplier**  
0.00250 - 9.99999

**Manual Reset**  
Can be disabled on installation or remotely  
**Remote Reset** Contact closure or pulse (max 30Hz)  
**Automatic Reset**  
Program to reset to zero on reaching preset 3 or vice versa  
**Control Outputs** 3 SPST relays. Contacts 5A 260VAC, 220VDC 1300VA/150W. Programmable for pulsed, latched or disabled  
**Front Panel Sealing**  
IP65/NEMA4 when properly mounted using gasket supplied  
**Operating Temp.** -10°C to +60°C  
**Storage Temp.** -20°C to +70°C  
**Relative Humidity**

## Ordering Information

Order by type number:

9100 multi-function counter  
9100 CAN with CAN interface  
For suitable printers please refer to factory