

MICROCONTROLLER BASED INSTRUMENTS

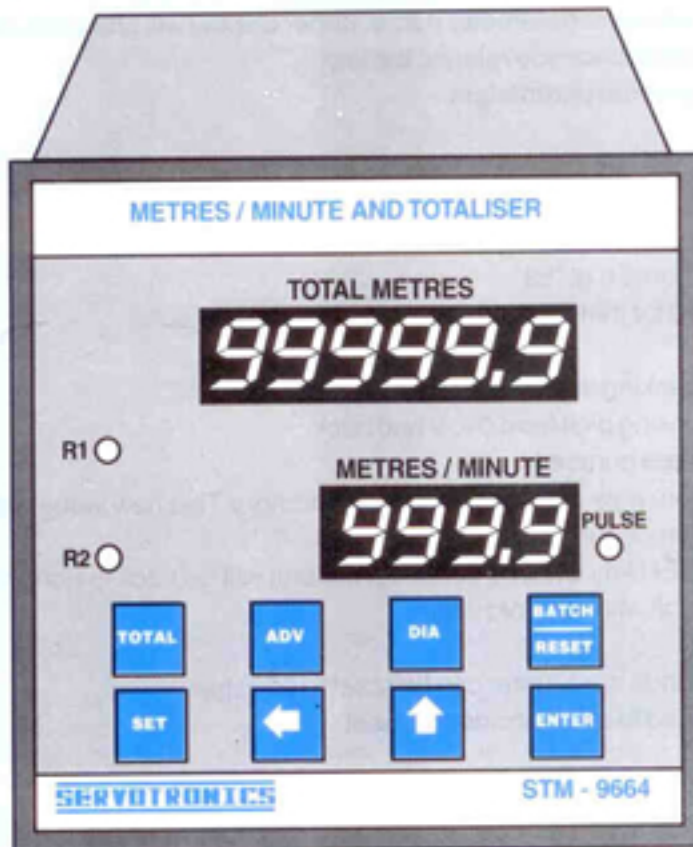
USER FIRENDLY - 8 KEYS OPERATION

SERVOTRONICS

These microcontroller based instruments have been designed to provide industry with

- ★ ACCURATE ★ RELIABLE ★ VERSATILE ★ COMPACT ★
tools for various control applications.

LENGTH COUNTER TOTALISER AND METRES / MINUTE



MODEL NO. STM - 9664

SPECIAL FEATURES

- Our eight key concept makes parameter entry, very simple. There is a separate key for each parameter entry. It also helps to check parameter value without disturbing set values.

- All set parameters are stored in non volatile memory.

- At power down the counter data is stored in nonvolatile memory, which is restored back at power up.

DISPLAYS

1. There are two sets of displays.
 - a). Upper six digit displays indicate current reading of TOTAL metres (0-99999.9).
 - b). Lower Four digit displays indicate current reading of RATE metres/minute (0-999.9).

2. LEDs

R1 - indicates buzzer (or relay) ON for advance metres.

R2 - indicates relay ON for total metres.

PULSE - indicates input signals from proximity switch.

■ WORKING PRINCIPLE

A proximity switch senses the revolutions of the roller and gives the counts to the instrument. The instrument calculates the TOTAL length passing over the roller.

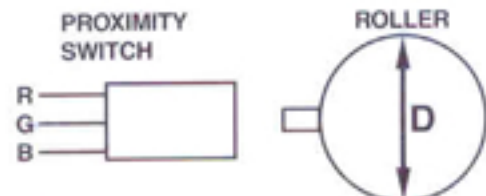
Total Metres = $\pi \times D \times \text{No. of Revolutions of the Roller}$
Rate (Metres / Minute) = $\pi \times D \times \text{Roller speed in RPM}$
Where D is the set value of Roller diameter in mm.

The diameter setting must not be changed, once SET correctly for a given application.

The Diameter value must be set correctly for every application having different roller diameters.

■ APPLICATION

For use with Plastic, Textile, Printing and other continuous process machinery.



D = ROLLER DIAMETER IN mm.

A WIDE RANGE TO SELECT FROM TO SUIT YOUR SPECIFIC APPLICATION AND YOUR BUDGET

■ SPECIFICATION

1. Model No. : STM - 9664 Length Counter (Totaliser & Metres/Minute)
2. Input : NPN Proximity Switch (Optional : Optical sensor)
3. Output : A). Buzzer On For Advance set. Relay optional. B). Relay On at Total Metre setting.
4. Supply : 230 Volt AC, 50 Hz. (+/- 15%)
5. Size : 96mm (H) x 96mm (W) x 110mm (D)
6. Case Style : M.S Sheet body, ABS front bezel, Panel mounting by 2 side clamps.



■ OPERATING INSTRUCTION

The unit has two modes : 1 Check mode 2 Set mode

Check mode : In this mode upper four keys are operational. By pressing any of the four keys you can check entered parameters for that key. The lower display will show parameter name, upper display will show actual parameter value. The unit will go back to normal function once you release the key.

Set mode : in this mode you can change previously entered parameters.

The procedure is as follows

- * Press SET key : The lower display will show "SET".
- * Press any of upper four key to change desired parameters.
- * The lower display will show "S" and parameter name e.g. "tot".
- * The upper display will show actual value entered for that parameter.
- * The right most digit will start blinking.
- * By pressing SHIFT key  you can shift the blinking digit from right to left and back.
- * BY pressing UP key  you can scroll the blinking digit from 0 to 9 and back.
- * With help of SHIFT and UP key you can set desired number.
- * After setting new value press ENTER key to store new value in non-volatile memory. This new value will be effective till you change again by the above procedure.
- * After setting new values if you fail to press ENTER key within 5 seconds, the unit will go back to normal function rejecting new entries. In this case the unit will retain old value.

RESET key : By pressing this key for 3 to 5 seconds the counter can be reset to 00 value.

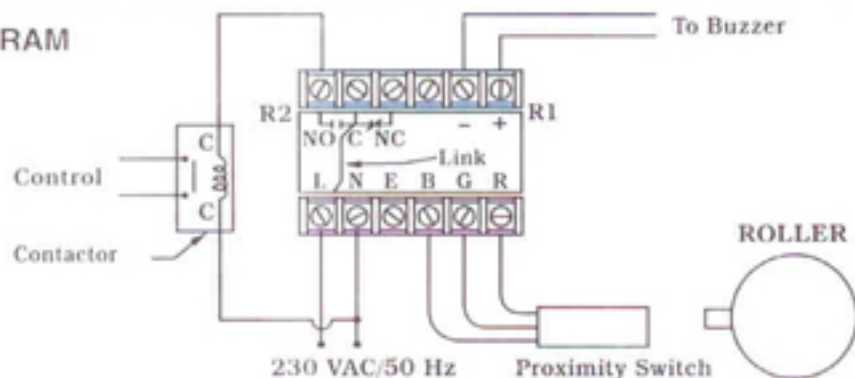
The 3 seconds time delay is provided to avoid accidental reset.

RELAY & BUZZER OPERATION

Buzzer : Buzzer will operate when incoming pulses = Total set value - Advance set value.

Relay : Relay will operate when incoming pulses = Total set value.

SCHEMATIC WIRING DIAGRAM



SERVOTRONICS

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Continuous developments to suit the latest design techniques may necessitate change in the above details without notice.