

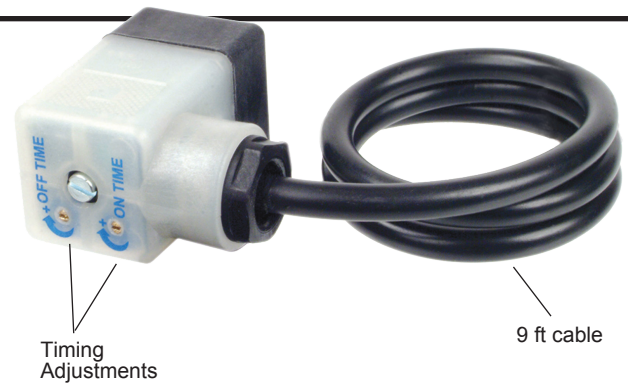
**canfield connector**  
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 Youngstown, Ohio 44514  
 (330) 758-8299 Fax: (330) 758-8912  
 www.canfieldconnector.com

## SERIES 5800 MICRO LOGIC TIMER (MLT)

DIN CONNECTOR WITH  
 INTERNAL TIMER CIRCUIT

### General Description

The Canfield Connector Micro Logic Timer is a solid state electronic timing unit incorporated inside the standard MINI and DIN 43650 Form "A" / ISO 4400, EN175301-803:2000 electrical connectors. The MLT allows precise timing and logic functions in a small, easily mounted enclosure. There are eight standard timer types. Each timer incorporates circuitry for AC or DC operation with a wide voltage range.



### Dimensional Data

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

ISO Connector	MINI & ISO Profile View	MINI Connector

### Features

- Makes any logic valve multifunctional
- Easy installation pre-wired timers mount directly to valve
- Built-in surge suppression
- Custom configurations available
- High range of adjustability
- Highly compact design
- Load indicator light, standard
- Interchangeable AC/DC power supply
- NEMA 4 and IP 65 rated
- Polycarbonate Makrolon housing material
- Quick disconnect design
- Timer repeat accuracy +/- 0.5% under normal conditions
- Wide operating voltage range
- 9 ft PVC cable standard



Consult factory for available versions listed by Canadian Standards Association for use with certified electrical equipment.

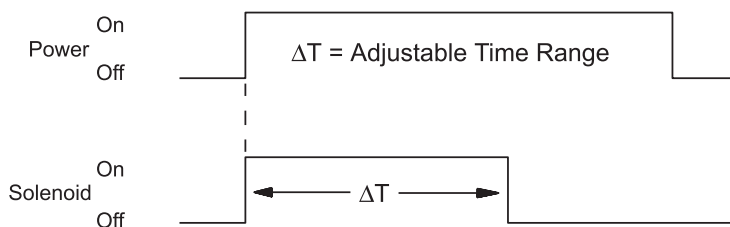
## Technical Data

- Input Voltage Range: 12-240 VDC  
24-240 VAC (50/60 Hz)
- Maximum timer current draw: 15 mA
- Maximum input voltage tolerance: +/-10%
- Maximum output current: 1 Amp
- Frequency: AC 50/60 Hz or DC
- Ambient temperature range: -20° to +60°C
- 15 turn time adjustment potentiometers for accuracy
- Wire gauge: 20 AWG standard
- Time ranges: 0.1 seconds to 33 minutes in standard versions, other times available upon request

## Timing Diagrams

### Interval Delay/(One Shot)

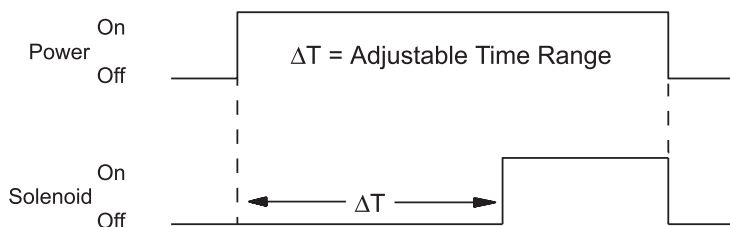
### Timer Type 1



Solenoid is energized for  $\Delta T$  upon application of power. Reset occurs when power is removed.

### On Delay/(Delay On Make)

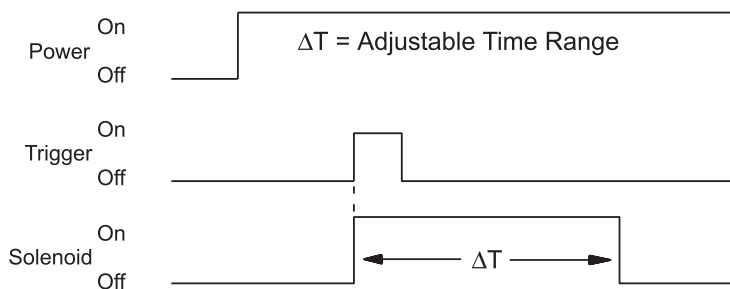
### Timer Type 2



Solenoid remains OFF for  $\Delta T$  upon application of power. Reset occurs when power is removed.

### Off Delay/(Triggered One Shot)

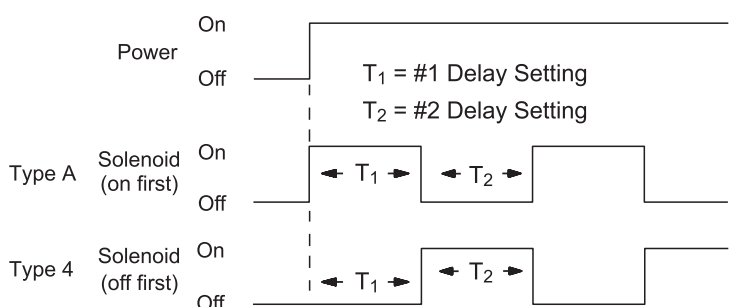
### Timer Type 3



When power is applied, solenoid remains OFF. Solenoid is energized for  $\Delta T$  only upon closure of a normally open momentary contact switch (trigger). Reset occurs when solenoid is OFF and trigger is re-applied.

### Cycle Timer

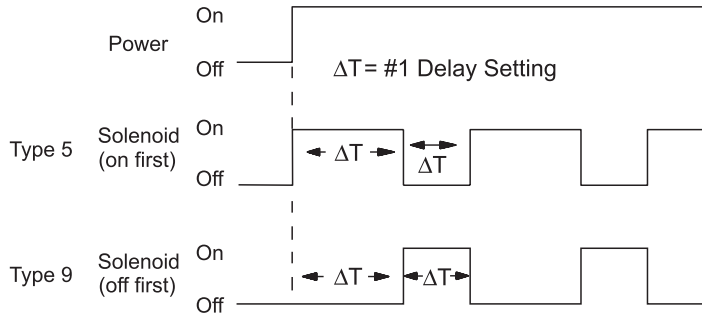
### Timer Type 4 / Type A



Solenoid cycles  $\Delta T_1$  OFF and  $\Delta T_2$  ON when power is applied. Reset occurs when power is removed. Timer is available in normally on (Type A) or normally off (Type 4) versions.

Square Wave Cycle Timer

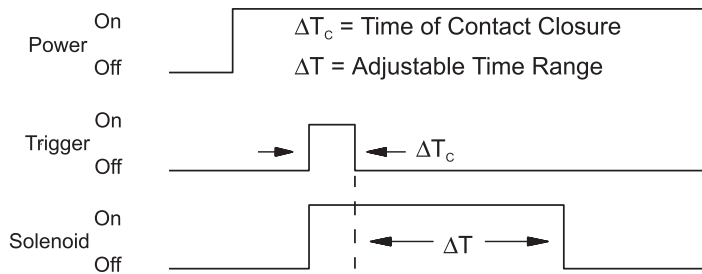
Timer Type 5 / Type 9



Solenoid cycles with equal ON and OFF times when power is applied. Reset occurs when power is removed. Timer is available in normally on (Type 5) or normally off (Type 9) versions.

Delay On Break Normally Off

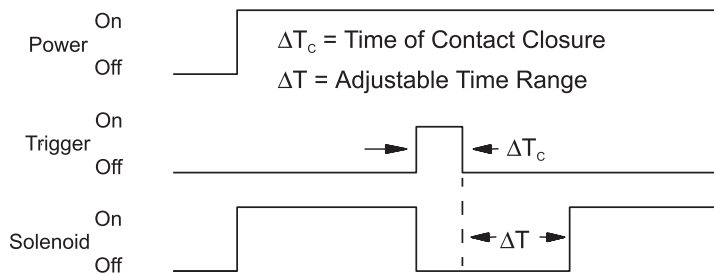
Timer Type 6



When power is applied, solenoid remains OFF. Solenoid is energized for  $\Delta T_c + \Delta T$  when trigger switch is closed and opened. Reset occurs when solenoid is OFF and trigger is re-applied.

Delay On Break Normally On

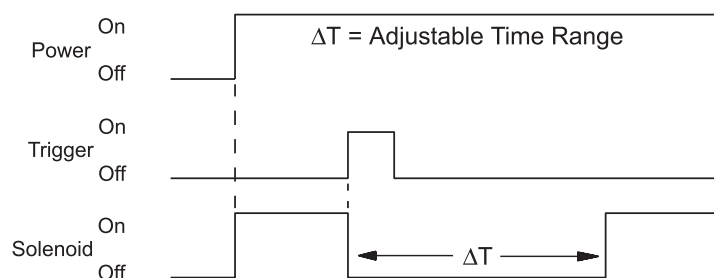
Timer Type 7



When power is applied, solenoid is energized and remains energized until the trigger switch is closed. Solenoid is then OFF for  $\Delta T_c + \Delta T$ . Reset occurs when solenoid is ON and the trigger is re-applied.

Triggered One Shot Normally On

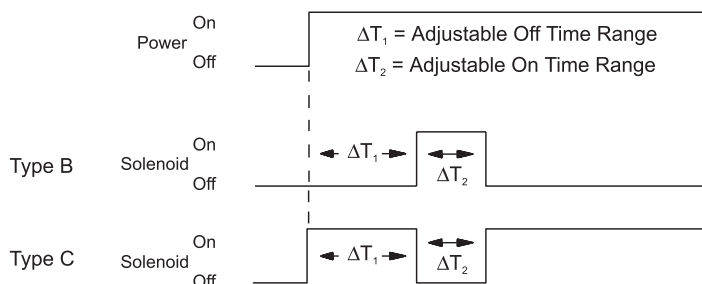
Timer Type 8



When power is applied, the solenoid is energized. Solenoid de-energizes for  $\Delta T$  only upon closure of a normally open momentary contact switch (trigger). Reset occurs when solenoid is ON and the trigger is re-applied.

Single Cycle Timer

Timer Type B / C



Solenoid cycles  $\Delta T_1$  OFF and  $\Delta T_2$  ON when power is applied. Reset occurs when power is removed. Timer is available in normally off (Type B) or normally on (Type C) versions.

## Ordering Information

5 8 □ □ - 9 1 0 □ 3

### Timer Type

- 1 - Interval delay  
one shot
- 2 - On delay  
delay on make
- 3 - Off delay  
triggered one shot
- 4 - Cycle timer  
normally off
- 5 - Square wave cycle timer  
normally on
- 6 - Delay on break  
normally off
- 7 - Delay on break  
normally on
- 8 - Triggered one shot  
normally on
- 9 - Square wave cycle timer  
normally off
- A - Cycle timer  
normally on
- B - Single cycle timer  
normally off
- C - Single cycle timer  
normally on

### Period Delay

- A - 0.5 to 5 seconds
- B - 0.5 to 25 seconds
- C - 0.5 to 50 seconds
- D - 0.5 to 100 seconds
- E - 2.0 to 20 seconds
- F - 2.0 to 200 seconds
- G - 2.0 to 400 seconds
- H - 5.0 to 50 seconds
- I - 5.0 to 500 seconds
- J - 10.0 to 100 seconds
- K - 10.0 to 1000 seconds
- L - 10.0 to 2000 seconds
- Z - 0.1 to 5 seconds

### Connector Orientation

- 1 - ISO ground up & down
- 2 - ISO ground right & left
- 3 - MINI ground down
- 4 - MINI ground up

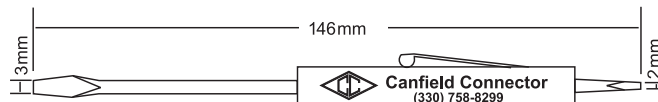
Each kit contains fastening hardware and gasket assembly.

Custom Time Ranges are Available.  
Consult Factory for Details.

### Ordering Example:

5811-910A3

Interval Delay, ISO ground up & down,  
0.5 to 5 second delay



Optional Adjustment Tool  
part # 5000-TOOL