TIMERS FOR ALL APPLICATIONS

AutomationDirect now offers solid-state timers brought to you by two leaders in the industry, FUJI and Koyo.

FUJI Electric has been in business since 1923 and has been selling timers in the U.S. since 1970. All FUJI products are produced under ISO9001 and ISO14000 criteria. Koyo has been selling timers for over 30 years. All timers meet UL and CE conformity. Whether you need a miniature DIN timer, a 1/16 DIN timer, or a full-blown 1/16 DIN digital timer, and whether you need to time in seconds or hours, *AutomationDirect* can supply a timer that fits your needs.

FUJI multi-mode timers feature:

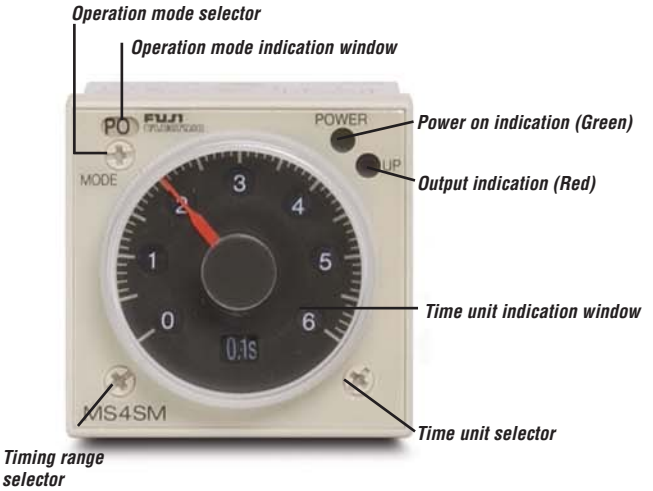
Ease of use: How many times have you had to perform a math test just to determine your time range? In our unit, as the time range is adjusted, the corresponding display changes. This feature makes it very easy for the operator to set and read.

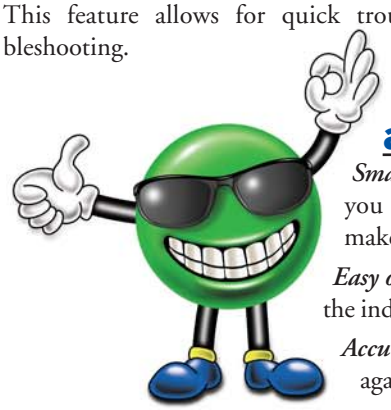
Full functionality: Up to four output modes can be selected simply with the turn of a screw. All outputs contain 5A, DPDT relays. This power allows you to minimize your inventory and maximize your flexibility.

LED indicators: Simply by looking at the face panel, you can tell if the timer is working properly.

Startup ease: When the dial is set to zero, the output turns on automatically. This feature allows for quick troubleshooting.

FUJI multi-mode timers with full features





Miniature DIN timers are small and accurate

Small size: Measuring under one inch wide, these timers will save you much needed room in your enclosure. DIN rail mounting makes for easy installation.

Easy operation: A simple dial allows easy setup for the operator. With the indicating LEDs, an operator can easily check for proper operation.

Accuracy: The timer will perform its timing function, over and over again, with repeatable accuracy of +/- 1% of the setting.

Fuji 1/16 DIN Super Timers

Overview

The MS4S series super timers are 1/16 DIN style timing relays designed for process control, machine tool control, safety control and many other types of applications. The timers are plug-in 8-pin or 11-pin surface/DIN rail mountable with up to four selectable modes of operation and four selectable timing ranges.

Features

MS4SM

- Multi-mode timer with mode indication. On-delay (PO), flicker (FL), one-shot (OS), or signal off-delay (SF)
- 11-pin plug-in with start, reset and gate (interrupt) input signals and a DPDT contact output.
- Timing range from 0.05 seconds to 60 hours
- Timer scale with selectable ranges of 0-6, 0-12, 0-30 and 0-60
- Timing units in selectable ranges of 0.1s, sec, min and hrs
- Power on LED indicator (green) flickers during timing operation UP (red) LED is on when normally open contact is closed.

MS4SA

- On-delay timer
- 8-pin plug-in with a DPDT contact output
- Timing range from 0.05 seconds to 60 hours
- Timer scale with selectable ranges of 0-6, 0-12, 0-30 and 0-60
- Timing units in selectable ranges of 0.1s, sec, min and hrs
- Power on LED indicator (green) flickers during timing operation UP (red) LED is on when normally open contact is closed.

MS4SC

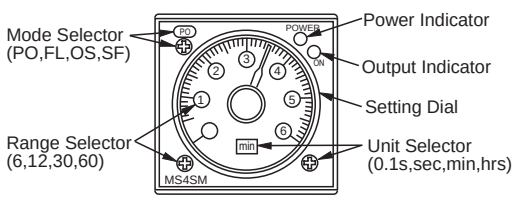
- On-delay timer
- 8-pin plug-in with a SPDT timed contact output and a SPDT instantaneous contact output
- Timing range from 0.05 seconds to 60 hours
- Timer scale with selectable ranges of 0-6, 0-12, 0-30 and 0-60
- Timing units in selectable ranges of 0.1s, sec, min and hrs
- Power on LED indicator (green) flickers during timing operation UP (red) LED is on when normally open contact is closed.

1-800-633-0405

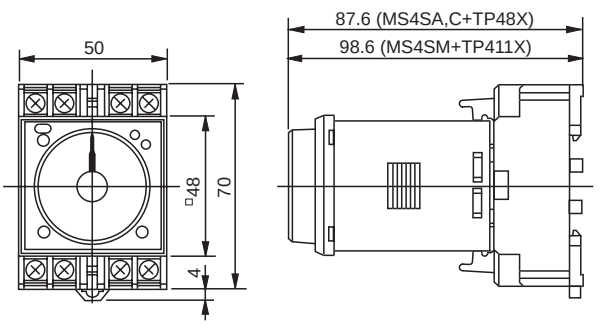
Product Selection Guide

Part Number	Description	Voltage	Time Range	Price
MS4SM-AP-ADC	Multi-mode timer with selectable timing range from 0.05s to 60 hours. Input power is 100 - 240 VAC. DPDT relay output. 11-pin connection. UL, CSA , TÜV approved	100-240VAC	0.05 seconds to 60 hours	$81.00
MS4SA-AP-ADC	On-delay timer with selectable timing range from 0.05s to 60 hours. Input power is 100 - 240 VAC. DPDT relay output. 8-pin connection. UL, CSA, TÜV approved		0.05 seconds to 60 hours	$81.00
MS4SC-AP-ADC	On-delay timer with selectable timing range from 0.05s to 60 hours. Input power is 100 - 240 VAC. SPDT timed relay output and SPDT instantaneous relay output. 8-pin connection. UL, CSA, TÜV approved		0.05 seconds to 60 hours	$81.00
MS4SM-CE-ADC	Multi-mode timer with selectable timing range from 0.05s to 60 hours. Input power is 24 VDC/ VAC DPDT relay output. 11-pin connection. UL, CSA , TÜV approved	24 VDC/VAC	0.05 seconds to 60 hours	$81.00
MS4SA-CE-ADC	On-delay timer with selectable timing range from 0.05s to 60 hours. Input power is 24 VDC/ VAC. DPDT relay output. 8-pin connection. UL, CSA, TÜV approved		0.05 seconds to 60 hours	$81.00
MS4SC-CE-ADC	On-delay timer with selectable timing range from 0.05s to 60 hours. Input power is 24 VDC/ VAC. SPDT timed relay output and SPDT instantaneous relay output. 8-pin connection. UL, CSA, TÜV approved		0.05 seconds to 60 hours	$81.00
TP411X	Surface mount socket for MS4SM series timers. UL, CSA, TÜV approved	N/A	N/A	$10.00
TP411SBA	Flush mount socket for MS4SM series timers. UL, CSA, TÜV approved			$10.00
TP48X	Surface mount socket for MS4SA and MS4SC series timers. UL, CSA, TÜV approved			$10.00
TP48SB	Flush mount socket for MS4SA and MS4SC series timers. UL, CSA, TÜV approved			$10.00

Control



Dimensions (Timer and Socket Shown Attached)



Fuji 1/16 DIN Super Timers

MS4SM-AP-ADC
MS4SM-CE-ADC

MS4SA-AP-ADC
MS4SA-CE-ADC

MS4SC-AP-ADC
MS4SC-CE-ADC

TP48X

TP48SBA

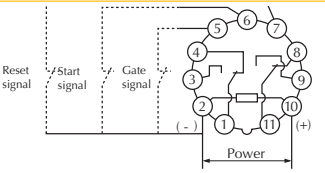
TP411X

TP411SBA

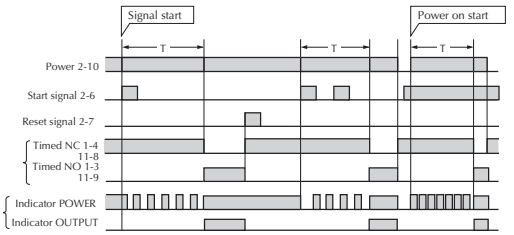
Specifications		
Approvals	UL file no.: E44592, CSA file no.: LR20479, TÜV license no: R9551800	
Repeat Accuracy	±0.3% at maximum setting time	
Reset Time	0.1 second or less	
Operating Voltage Range	85-264VAC MS4SM-AP-ADC MS4SA-AP-ADC MS4SC-AP-ADC	20.4-26.4VDC/VAC MS4SM-CE-ADC MS4SA-CE-ADC MS4SC-CE-ADC
Operating Temperature Range	-10 to +55°C (14 to 131°F) (no icing)	
Humidity	35 to 85% (no condensation)	
Contact Ratings	5A at 30VDC resistive load, 1A @ 30VDC inductive load, 5A @ 250VAC resistive load, 2.5A @ 120VAC inductive load	
Power Consumption	Approx. 10VA at120/240VAC; 1W at 24VDC	
Insulation Resistance	100MΩ at 500 VDC insulation tested	
Dielectric Strength	2000VAC 1 min. between current carrying part and non-current carrying part 2000VAC 1 min. between output contact and control circuit 1000VAC 1 min. between open contacts	
Vibration	Malfunction durability: 10 to 55Hz, 0.5mm double amplitude Mechanical durability: 10 to 55Hz, 0.75mm double amplitude	
Shock	Malfunction durability: 100m/s^2 Mechanical durability: 500m/s^2	
Life Expectancy	Mechanical: 20 million operations (No load operation cycle: 1800/hr.) Electrical: 100,000 operations at 250VAC 5A resistive load (operation cycle: 1800/hr.)	
Weight	Approx. 100g (3.527 oz.)	

Fuji 1/16 DIN Timers Timing and Wiring Diagrams

MS4SM

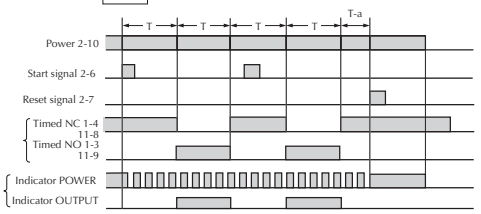


1. On-delay PO



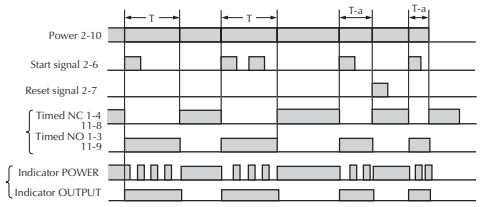
- With power off turn the mode selector until PO is displayed.
- When power is on, applying the start signal turns the timed N.O. normally open) contact on after the set time has elapsed.
- When using a power-on start, pins 2 and 6 (start signal) must be jumpered together

2. Flicker FL



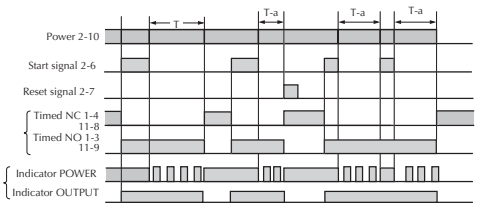
- With power off, turn the mode selector until FL is displayed.
- When power is on, applying the start signal turns the timed contact on and off repeatedly at the set time intervals.

3. One-shot OS



- With power off, turn the mode selector until OS is displayed
- When power is on, applying the start signal instantly turns the timed N.O. contact on and turns it off after the set time has elapsed.

4. Signal off-delay SF



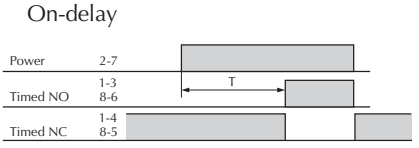
- With power off, turn the mode selector until SF is displayed.
- When power is on, applying the start signal instantly turns the timed N.O. contact on. Removing the start signal turns the contact off after the set time has elapsed.

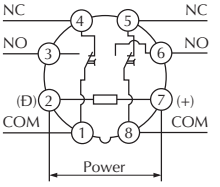
Notes:

1. ***T= set time. t = time period within set time.***
2. ***The gate signal is used to interrupt the timing operation.***

MS4SA

On-delay

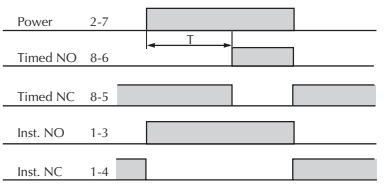


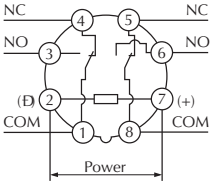


- When power is applied, the timed N.O. contacts make after the set time has elapsed.
- When power is removed, the contacts reset.

MS4SC

On-delay



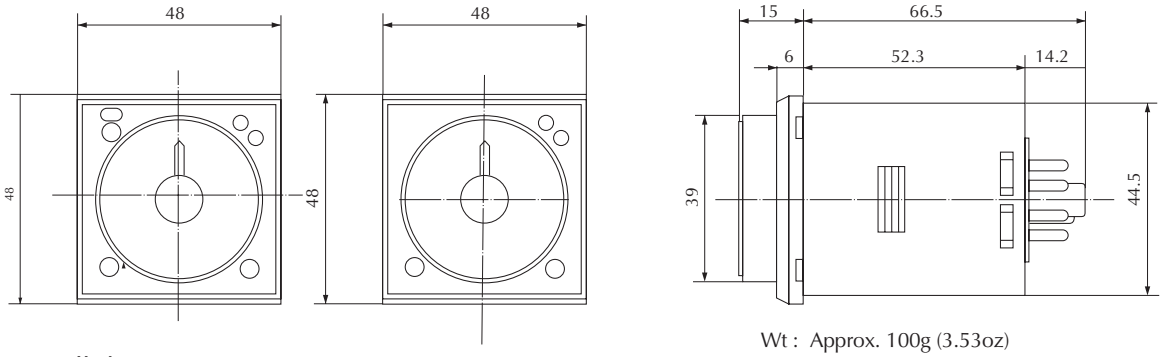


- Timed contact
  When power is applied, the N.O. contact makes after the set time has elapsed. When power is removed, the contacts reset.
- Instantaneous contact
  When power is applied, the N.O. contact makes instantly. When power is removed, the contacts reset.

Notes:

Fuji 1/16 DIN Super Timers Dimensions

MS4SM MS4SA and MS4SC Side View



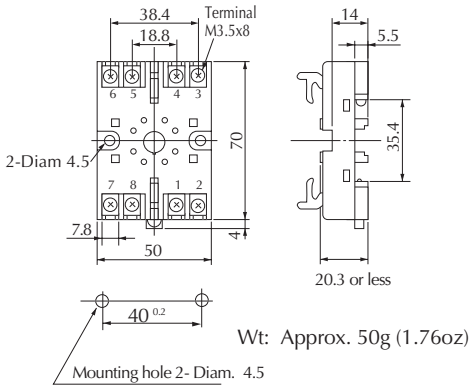
Wt : Approx. 100g (3.53oz)

All dimensions in mm

Dimensions in mm

Socket for MS4SA, MS4SC (8-pin)

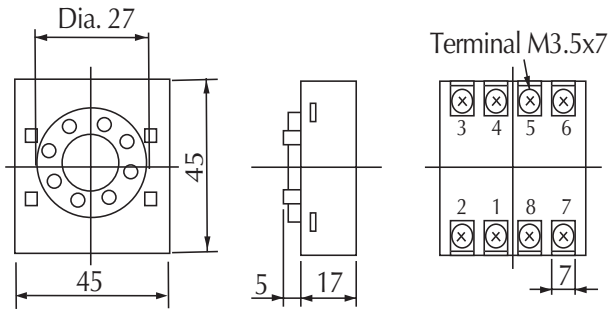
TP48X



Wt: Approx. 50g (1.76oz)

Sockets for MS4SA, MS4SC (8-pin)

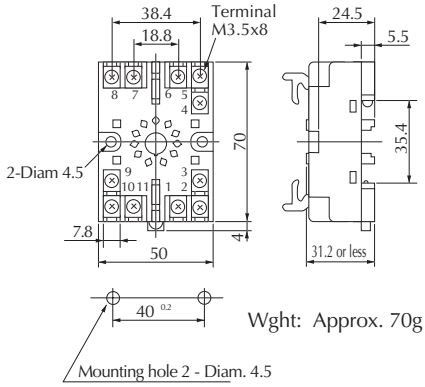
TP48SBA



Wght : Approx. 40g (1.41oz)

Socket for MS4SM (11-pin)

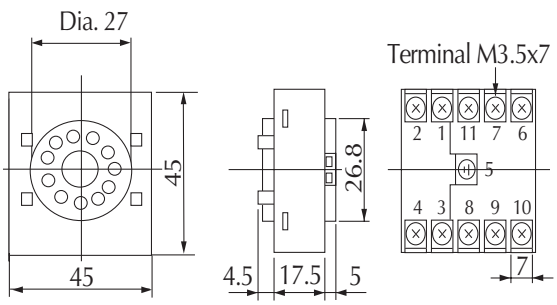
TP411X



Wght: Approx. 70g (2.47oz)

Sockets for MS4SM (11-pin)

TP411SBA



Wght : Approx. 45g (1.59oz)

Using the super timer