



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Hour Meter

## TH8 DC Hour Meter

\* Refer to our website for details of product.



RoHS compliance

Related Information

■ General terms and conditions..... F-3    ■ Selection guide ..... P.1411~



[panasonic.net/id/pidsx/global](http://panasonic.net/id/pidsx/global)

### Features

- **IP66 waterproof construction**  
The front panel surface keeps water and dust out.
- **Includes operation light (LED)**  
The operation LED illuminates so you can quickly verify operation status.

IP66

### Typical applications

- **Hour counting for leased equipment**
- **Maintenance management of various equipments**

## DC-powered hour meters with high environment resistance

### PRODUCT TYPES

Installation	Counting range	Operation light	Rated voltage	Model No.
Panel installation	0 to 9999.9 hours	LED illuminates while operating.	12 V DC	<b>TH833C</b>
			24 V DC	<b>TH834C</b>

Note: Products are UL and c-UL certified as standard. (Suffix "U" is not required on Model No. when ordering.)

- FIBER SENSORS
- LASER SENSORS
- PHOTOELECTRIC SENSORS
- MICRO PHOTOELECTRIC SENSORS
- AREA SENSORS
- SAFETY LIGHT CURTAINS / SAFETY COMPONENTS
- PRESSURE / FLOW SENSORS
- INDUCTIVE PROXIMITY SENSORS
- PARTICULAR USE SENSORS
- SENSOR OPTIONS
- SIMPLE WIRE- SAVING UNITS
- WIRE- SAVING SYSTEMS
- MEASUREMENT SENSORS
- STATIC CONTROL DEVICES
- LASER MARKERS
- PLC
- HUMAN MACHINE INTERFACES
- ENERGY MANAGEMENT SOLUTIONS
- FA COMPONENTS
- MACHINE VISION SYSTEMS
- UV CURING SYSTEMS

- Timers
- Time Switches
- Counters
- Hour Meters
- Options
- Limit Switches
- Temperature Controllers
- Solenoids
- Fan Motors

Selection Guide

LH2H

TH63/TH64

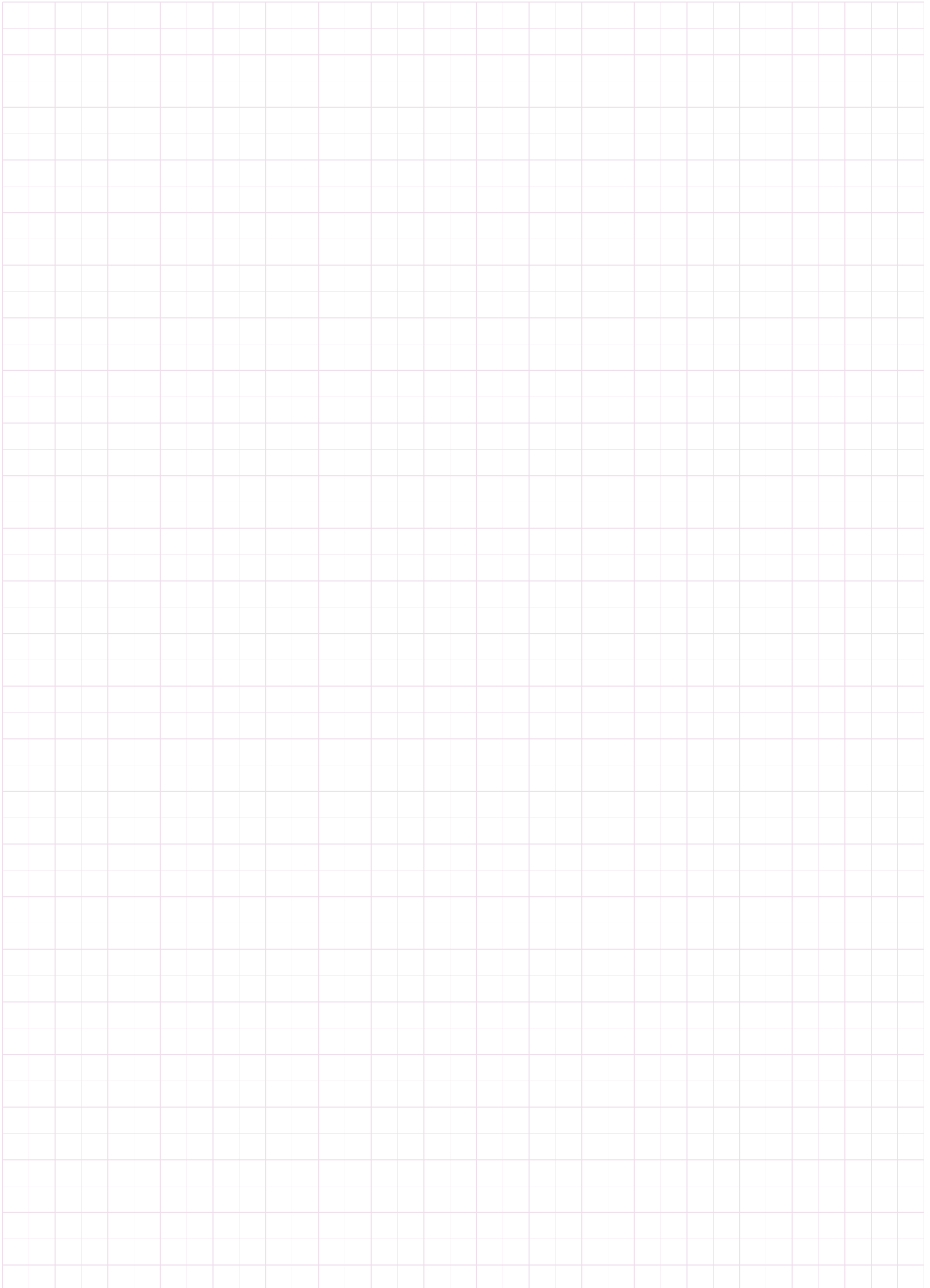
TH13/TH23

TH14/TH24

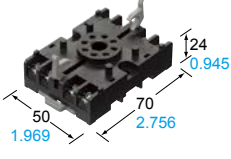
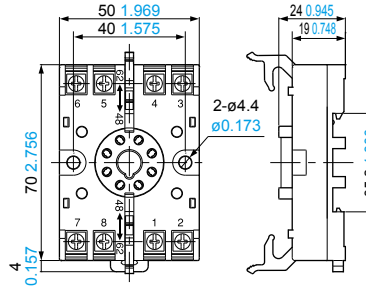
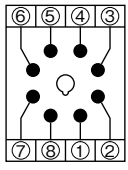
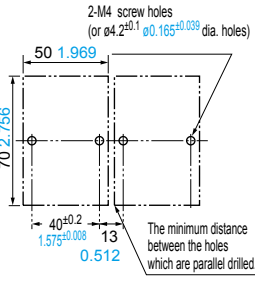
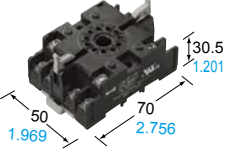
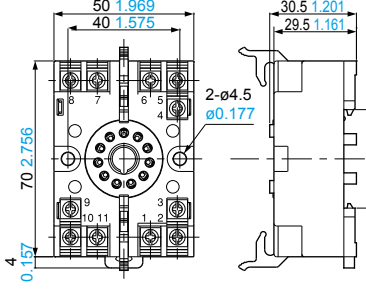
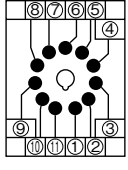
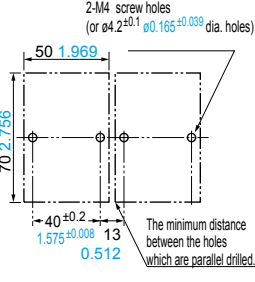
TH40

TH8

## MEMO

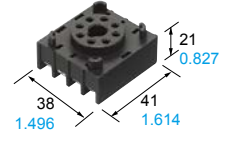
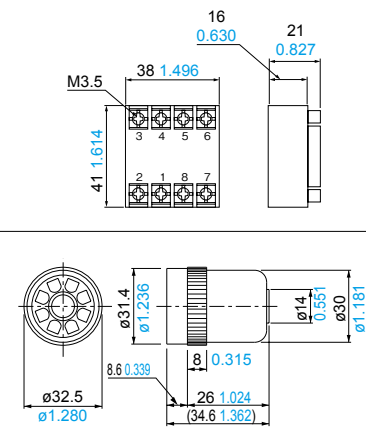
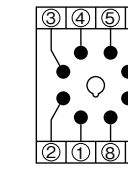
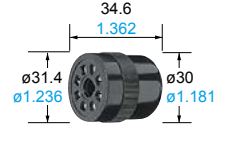
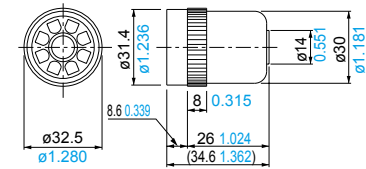
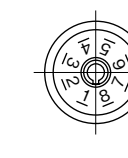
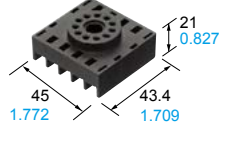
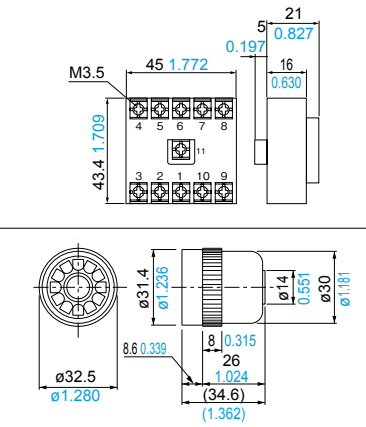
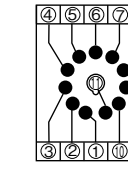
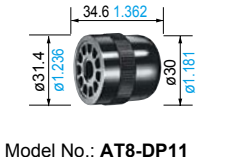
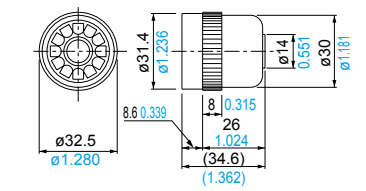
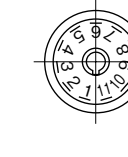


## TERMINAL SOCKETS (Unit: mm in, Tolerance: $\pm 1 \pm 0.039$ )

Type		Appearance	Dimensions	Terminal wiring (Top view)	Mounting hole dimensions
Timer	Counter				
PM4H-S PM4H-M PM4H-SD/SDM PM4H-F8 PM4H-F8R PM4H-W LT4H LT4H-L LT4H-W QM4H PM4S (8-pin type)	LC4H LC4H-L (8-pin type)	• DIN rail socket (8-pin)  Model No.: <b>AT8-DF8K</b>			
PM4H-A PM4H-F11R LT4H LT4H-W (11-pin type)	LC4H LC4H-L LC4H-S LC4H-W (11-pin type)	• DIN rail socket (11-pin)  Model No.: <b>AT8-DF11K</b>			

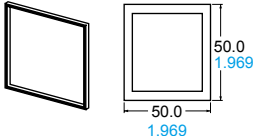
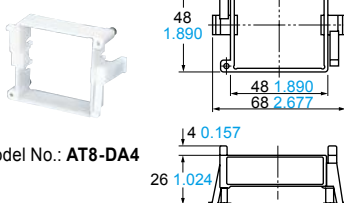


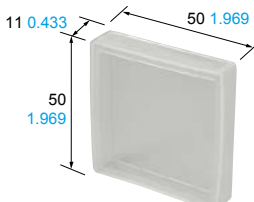
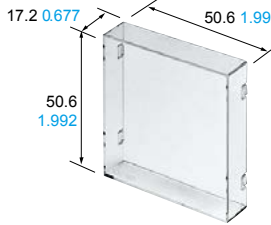

Note: The terminal numbers on the counter and timer are identical to those on the terminal socket.

## SOCKETS (Unit: mm in, Tolerance: $\pm 1 \pm 0.039$ )

Type		Appearance	Dimensions	Terminal wiring (Top view)	Mounting hole dimensions
Timer	Counter				
PM4H-S PM4H-M PM4H-SD/SDM PM4H-F8 PM4H-F8R PM4H-W LT4H LT4H-L LT4H-W PM4S QM4H	LC4H LC4H-L (8-pin type)	• Rear terminal socket  Model No.: <b>AT8-R8K</b>			—
PM4H-A PM4H-F11R LT4H LT4H-W (11-pin type)	LC4H LC4H-L LC4H-S LC4H-W (11-pin type)	• 8P cap  Model No.: <b>AD8-RC</b>			—
PM4H-A PM4H-F11R LT4H LT4H-W (11-pin type)	LC4H LC4H-L LC4H-S LC4H-W (11-pin type)	• Rear terminal socket  Model No.: <b>AT8-R11K</b>			—
PM4H-A PM4H-F11R LT4H LT4H-W (11-pin type)	LC4H LC4H-L LC4H-S LC4H-W (11-pin type)	• 11P cap  Model No.: <b>AT8-DP11</b>			—




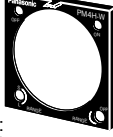

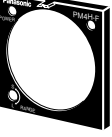
Note: The terminal numbers on the counter and timer are identical to those on the socket.

**MOUNTING PARTS (Unit: mm in, Tolerance: ±1 ±0.039)**

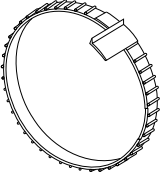
<p>•Rubber gasket</p>  <p>Model No.: <b>ATC18002</b></p> <p>Applicable for                  { Timer: PM4H series, LT4H series and Counter: LC4H series</p> <p>The rubber gasket is enclosed in                  { Timer (except IP50 type): PM4H (screw terminal type) and LT4H series                  • Counter: LC4H series</p>	<p>•Mounting frame</p>  <p>Model No.: <b>AT8-DA4</b></p> <p>Applicable for                  { Timer: PM4H series, LT4H series, QM4H series and Counter: LC4H series</p> <p>The rubber gasket is enclosed in                  { Timer (except IP50 type): PM4H (screw terminal type) and LT4H series                  • Counter: LC4H series</p>
<p>•Mounting rails (Applicable for DIN and IEC standards)</p>  <p>Model No.: <b>AT8-DLA1</b></p> <p>Length: 1 m 3.281 ft Aluminum</p>	<p>•Fastening plate</p>  <p>Model No.: <b>AT8-DLE</b></p> <p>For holding DIN rails</p>
<p>•Front protection cover for DIN 48 size (flexible type): (Timer) LT4H series, QM4H series (Counter) LC4H series</p>  <p>Model No.: <b>AQM4803</b></p>	<p>•Front protection cover for DIN 48 size (hard type): (Counter) QM4H series</p>  <p>Model No.: <b>AQM4801</b></p>
<p>•Mounting frame</p>  <p>Model No.: <b>AKW4822</b></p>	

**ACCESSORIES**

**PM4H series (Timer)  
Panel cover (Black)**

<p>Panel cover A for PM4H-A</p>  <p>Model No.: <b>ATC18011</b></p>	<p>Panel cover S for PM4H-S</p>  <p>Model No.: <b>ATC18012</b></p>	<p>Panel cover M for PM4H-M</p>  <p>Model No.: <b>ATC18013</b></p>
<p>Panel cover W for PM4H-W</p>  <p>Model No.: <b>ATC18014</b></p>	<p>Panel cover SD for PM4H-SD</p>  <p>Model No.: <b>ATC18015</b></p>	<p>Panel cover F for PM4H-F</p>  <p>Model No.: <b>ATC18016</b></p>



**Set ring**








Model No.: **ATC18001**  
a set of 2 pcs

When you control the fixed time range, the setting rings (a set of 2 pcs.) make it easy to do the time setting and keep the time range all the time. (Excluding PM4H-W)

**LT4H series (Timer)  
Panel cover (Black)**

<p>Panel cover for LT4H/LT4H-L</p>  <p>Model No.: <b>ATL58011</b></p>	<p>Panel cover for LT4H-W</p>  <p>Model No.: <b>ATL68011</b></p>
----------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------

**LC4H series (Counter)  
Panel cover (Black)**

<p>Panel cover for LC4H/LC4H-L (4 digits)</p>  <p>Model No.: <b>AEL58011</b></p>	<p>Panel cover for LC4H/LC4H-L (6 digits)</p>  <p>Model No.: <b>AEL58012</b></p>	<p>Panel cover for LC4H-S (4 digits)</p>  <p>Model No.: <b>AEL58013</b></p>	<p>Panel cover for LC4H-S (6 digits)</p>  <p>Model No.: <b>AEL58014</b></p>	<p>Panel cover for LC4H-W</p>  <p>Model No.: <b>AEL68011</b></p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------

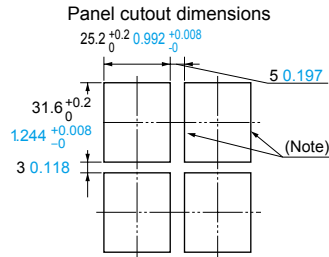
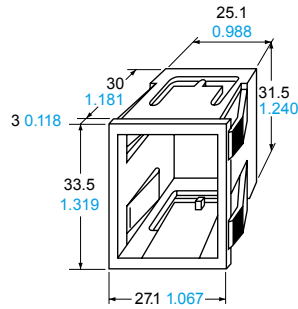
The black panel cover is also available so that you can change the appearance of the panel by changing the panel cover. The color of the standard panel cover is ash gray.

- FIBER SENSORS
- LASER SENSORS
- PHOTO-ELECTRIC SENSORS
- MICRO PHOTO-ELECTRIC SENSORS
- AREA SENSORS
- SAFETY LIGHT CURTAINS / SAFETY COMPONENTS
- PRESSURE / FLOW SENSORS
- INDUCTIVE PROXIMITY SENSORS
- PARTICULAR USE SENSORS
- SENSOR OPTIONS
- WIRE-SAVING UNITS
- WIRE-SAVING SYSTEMS
- MEASUREMENT SENSORS
- STATIC CONTROL DEVICES
- LASER MARKERS
- PLC
- HUMAN MACHINE INTERFACES
- ENERGY MANAGEMENT SOLUTIONS
- FA COMPONENTS
- MACHINE VISION SYSTEMS
- UV CURING SYSTEMS

- Timers
- Time Switches
- Counters
- Hour Meters
- Options
- Limit Switches
- Temperature Controllers
- Solenoids
- Fan Motors

## Accessory (Unit: mm in)

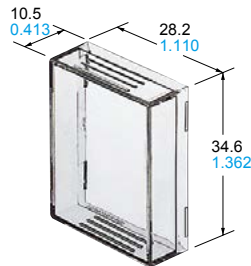
- Mounting frame (for panel mounting type)



Board thickness 1 to 3 mm **0.039 to 0.118 in**  
 Note: Make sure the holes area stays as right angles.

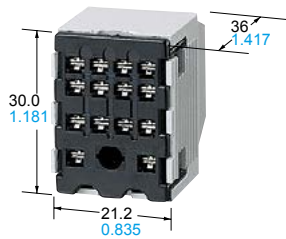
Model No.:  
**ADX18002** (Titanium-gray)  
**ADX18006** (Gray)  
**ADX18007** (Black)

- Protective cover



Model No.: **ADX18008**

- Cap block



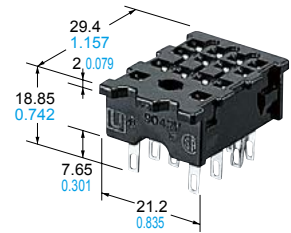
Model No.: **ADX18011**

- Cap for cap block



Model No.: **ADX18004**

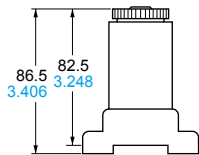
- Socket for cap block



Model No.: **ADX18003**  
 [Use **HC2-PS-K** (2c) or **HC4-PS-K** (4c) for PC board mounting]

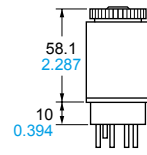
### Terminal socket (Unit: mm in)

- HC2 slim DIN terminal socket (Uses both wire springs and leaf springs)



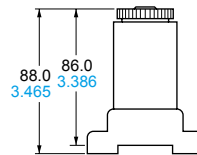
Model No.: **HC2-SFD-S**

- HC4 socket (Wire spring)



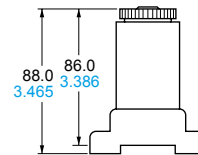
Model No.: **HC4-SS-K**

- HJ2 terminal socket



Model No.: **HJ2-SFD**  
**HJ2-SFD-S**

- HJ4 terminal socket



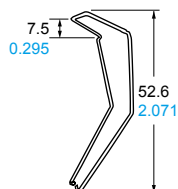
Model No.: **HJ4-SFD**  
**HJ4-SFD-S**

### Socket leaf holding clip (Unit: mm in)

ADX18012		AD68002	
Appearance	Dimensions	Appearance	Dimensions
	4.5 (0.177), 61.6 (2.425)		63.8 (2.512), 4.5 (0.177)
(2 pieces per set)		(2 pieces per set)	

\* Each of **ADX18012, AD68002** has two springs.

### Socket line holding clip for S1DXM-A/M (Sold separately)



**ADX28005**

### Application

Type	Common for S1DX, S1DXM-A/M		S1DXM-A/M only	S1DX only
	ADX18012	AD68002	ADX28005 (Note 2)	ADX18005 (Note 3)
Terminal socket				
For HC relay	<b>HC2-SFD-S</b> (Note4)	—	○	○
	<b>AP3822K</b>	—	—	○
	<b>AP3882K</b>	—	—	○
	<b>AP3824K</b>	—	—	○
For HJ relay	<b>HC4-SS-K</b>	—	○	○
	<b>HJ2-SFD</b> (Note4)	○	—	—
	<b>HJ2-SFD-S</b> (Note4)	○	—	—
	<b>HJ4-SFD</b> (Note4)	△	—	—
<b>HJ4-SFD-S</b> (Note4)	△	—	—	

○: Available, —: Not available

- Notes: 1) The triangles "△" indicate that removal will be slightly difficult when installed laterally in succession.  
 2) The socket line holding clip (**ADX28005**) is not included with the S1DXM-A/M timer.  
 3) The socket line holding clip **ADX18005** is enclosed in the S1DX timer.  
 4) For use where there is a lot of vibration and shock, please use a compliant socket leaf holding clip or socket line holding clip.

FIBER SENSORS  
 LASER SENSORS  
 PHOTO-ELECTRIC SENSORS  
 MICRO PHOTO-ELECTRIC SENSORS  
 AREA SENSORS  
 SAFETY LIGHT CURTAINS / SAFETY COMPONENTS  
 PRESSURE / FLOW SENSORS  
 INDUCTIVE PROXIMITY SENSORS  
 PARTICULAR USE SENSORS  
 SENSOR OPTIONS  
 SIMPLE WIRE-SAVING UNITS  
 WIRE-SAVING SYSTEMS  
 MEASUREMENT SENSORS  
 STATIC CONTROL DEVICES  
 LASER MARKERS  
 PLC  
 HUMAN MACHINE INTERFACES  
 ENERGY MANAGEMENT SOLUTIONS  
 FA COMPONENTS  
 MACHINE VISION SYSTEMS  
 UV CURING SYSTEMS  
 Timers  
 Time Switches  
 Counters  
 Hour Meters  
 Options  
 Limit Switches  
 Temperature Controllers  
 Solenoids  
 Fan Motors

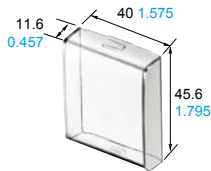
**FLUSH TYPE (Unit: mm in)**

**Flush type mounting frame**

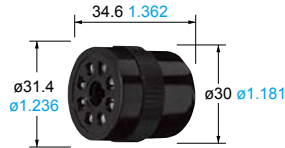
Appearance	Color	Model No.
	Gray	<b>N-TF-H-GR</b>
	Black	<b>N-TF-H-B</b>
	Silver gray	<b>N-TF-H-SG</b>
	Gray	<b>N-TF-K-GR</b>
	Black	<b>N-TF-K-B</b>
	Silver gray	<b>N-TF-K-SG</b>
	Gray	<b>N-TF-YC-GR</b>
	Black	<b>N-TF-YC-B</b>
	Silver gray	<b>N-TF-YC-SG</b>
	Gray	<b>N-TF-Y-GR</b>

Note: The thickness of all applicable panels ranges from 1.0 to 3.5 mm 0.039 to 0.138 in.

- Compact timer protective cover
- 8P cap



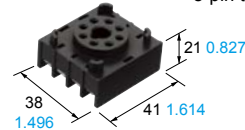
Model No.: **N-TC**



Model No.: **AD8-RC**

- Rear terminal socket: M3.5

Tolerance:  $\pm 1 \pm 0.039$  Applicable for 8-pin type

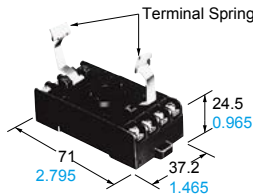


Model No.: **AT8-R8K**

**Applicable for the exposed type plug-in and stand-up type timers (PMH)**

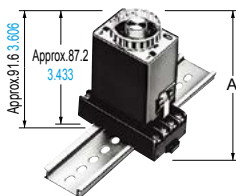
- DIN terminal socket: M3.5

Tolerance:  $\pm 0.5 \pm 0.020$



Model No.: **AT8-RFD**

When installing the terminal socket



- Mounting rail (Applicable for DIN and IEC standards)



Model No.: **AT8-DLA1**

- Fastening plate

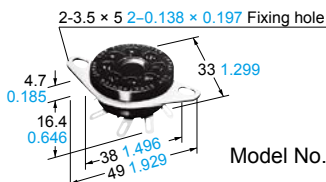


Model No.: **AT8-DLE**

Length: 1 m  
3.281 ft  
Aluminum

- GT pipe socket

Tolerance:  $\pm 0.5 \pm 0.020$



Model No.: **AW68102**

FIBER SENSORS

LASER SENSORS

PHOTO-ELECTRIC SENSORS

MICRO PHOTO-ELECTRIC SENSORS

AREA SENSORS

SAFETY LIGHT CURTAINS / SAFETY COMPONENTS

PRESSURE / FLOW SENSORS

INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

SIMPLE WIRE-SAVING UNITS

WIRE-SAVING SYSTEMS

MEASUREMENT SENSORS

STATIC CONTROL DEVICES

LASER MARKERS

PLC

HUMAN MACHINE INTERFACES

ENERGY MANAGEMENT SOLUTIONS

FA COMPONENTS

MACHINE VISION SYSTEMS

UV CURING SYSTEMS

Timers

Time Switches

Counters

Hour Meters

Options

Limit Switches

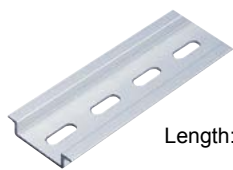
Temperature Controllers

Solenoids

Fan Motors

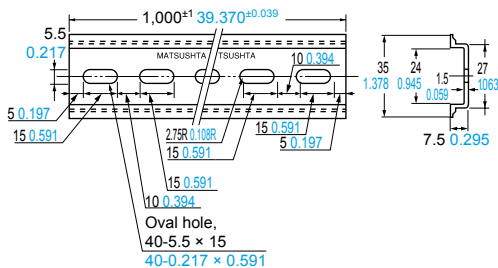
## Mounting parts (Unit: mm in, Tolerance: $\pm 1 \pm 0.039$ )

- Mounting rails (Applicable for DIN and IEC standards)

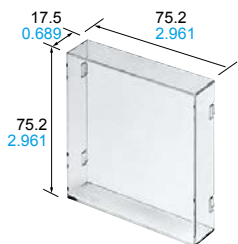


Length: 1 m  
3.281 ft  
Aluminum

Model No.: **AT8-DLA1**



- Protective cover for DIN 72 size



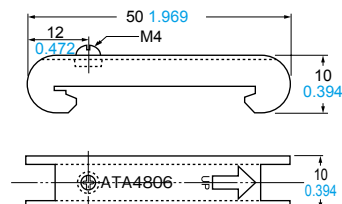
Model No.: **AQM7801**

Applicable for flat time switch A-TB72 / A-TB72Q

- Fastening plate



Model No.: **AT8-DLE**



For holding DIN rails

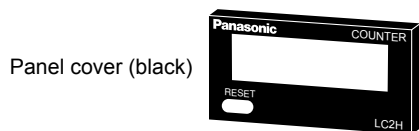
- FIBER SENSORS
- LASER SENSORS
- PHOTO-ELECTRIC SENSORS
- MICRO PHOTO-ELECTRIC SENSORS
- AREA SENSORS
- SAFETY LIGHT CURTAINS / SAFETY COMPONENTS
- PRESSURE / FLOW SENSORS
- INDUCTIVE PROXIMITY SENSORS
- PARTICULAR USE SENSORS
- SENSOR OPTIONS
- SIMPLE WIRE-SAVING UNITS
- WIRE-SAVING SYSTEMS
- MEASURE-MENT SENSORS
- STATIC CONTROL DEVICES
- LASER MARKERS
- PLC
- HUMAN MACHINE INTERFACES
- ENERGY MANAGEMENT SOLUTIONS
- FA COMPONENTS
- MACHINE VISION SYSTEMS
- UV CURING SYSTEMS

- Timers
- Time Switches
- Counters
- Hour Meters
- Options
- Limit Switches
- Temperature Controllers
- Solenoids
- Fan Motors



**LC2H series OPTIONS**

**Accessories**  
(for LC2H total counter)

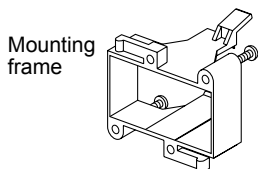


Model No.: **AEL3801**

You can change the design of the front panel by replacing it with this black panel cover. The counter comes with an ash gray panel cover as standard.

Note: No panel cover accessory (black) is available for LC2H preset counter.

**Installation parts**  
(Suitable for LC2H total counter\* and LC2H preset counter)



Model No.: **ATH3803**

\* Packaged with the mounting bracket type LC2H total counter

**Lithium battery (3 V)**  
(for LC2H total counter)



Model No.: **ATH3802**



- Make sure the "+" and "-" polarities are positioned correctly.
- Do not throw the old battery into a fire, short circuit it, take it apart, or allow it to come into contact with heat.
- The battery is not rechargeable.

Note: Packaged with LC2H (excluding the PC board mounting type).

**Rubber gasket**  
(Suitable for LC2H total counter\* and LC2H preset counter)

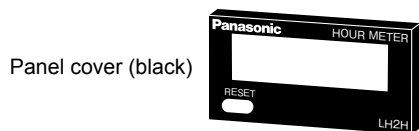


Model No.: **ATH3804**

\* Packaged with the mounting bracket type LC2H total counter

**LH2H series OPTIONS**

**Accessories**  
(for LH2H hour meter)

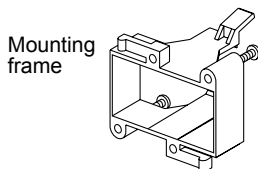


Model No.: **ATH3801**

You can change the design of the front panel by replacing it with this black panel cover. The counter comes with an ash gray panel cover as standard.

Note: No panel cover option (black) is available for LH2H preset hour meter.

**Installation parts**  
(Suitable for LH2H hour meter\* and LH2H preset hour meter)



Model No.: **ATH3803**

\* Packaged with the mounting bracket type LH2H hour meter

**Lithium battery (3 V)**  
(for LH2H hour meter)



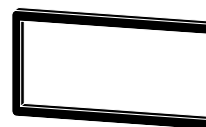
Model No.: **ATH3802**



- Make sure the "+" and "-" polarities are positioned correctly.
- Do not throw the old battery into a fire, short circuit it, take it apart, or allow it to come into contact with heat.
- The battery is not rechargeable.

Note: Packaged with LH2H (excluding the PC board mounting type).

**Rubber gasket**  
(Suitable for LH2H hour meter\* and LH2H preset hour meter)



Model No.: **ATH3804**

\* Packaged with the mounting bracket type LH2H hour meter

FIBER SENSORS

LASER SENSORS

PHOTO-ELECTRIC SENSORS

MICRO PHOTO-ELECTRIC SENSORS

AREA SENSORS

SAFETY LIGHT CURTAINS / SAFETY COMPONENTS

PRESSURE / FLOW SENSORS

INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

SIMPLE WIRE-SAVING UNITS

WIRE-SAVING SYSTEMS

MEASUREMENT SENSORS

STATIC CONTROL DEVICES

LASER MARKERS

PLC

HUMAN MACHINE INTERFACES

ENERGY MANAGEMENT SOLUTIONS

FA COMPONENTS

MACHINE VISION SYSTEMS

UV CURING SYSTEMS

---

Timers

Time Switches

Counters

Hour Meters

Options

Limit Switches

Temperature Controllers

Solenoids

Fan Motors