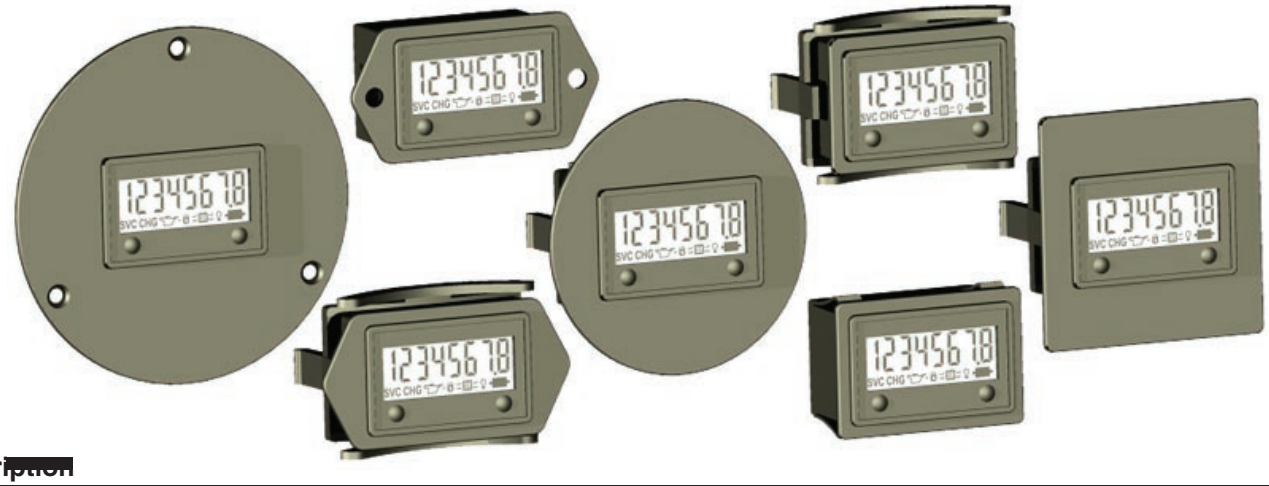


Description

The Redington Model 34 LCD Hour Meter provides a large display, with 0.28" [7mm] high characters, in the industry size housings. The Hour Meters are available in 8 different housings, including a surface mount inductive input model. All models are totally sealed and are capable of submersion in 6' [2 meters] of water. A wide operating voltage, 10-300VDC and 20-300VAC, and inductive input make the Model 34 versatile for all indoor and outdoor applications. All models are NEMA 4/4X, 12, & IP66 rated when used with the optional gasket and have a polarized lens which assures high visability in an outdoor environment.

Maintenance Meters are offered with a maximum of 3 "Redi-Alerts" to alert users when service is due. Models are available with front panel field or factory programmable alerts. Not only does the display flash to get attention, but it displays a choice of 7 different .08"[2mm] maintenance icons. Models are available as a Preset Timer with a MOSFET output for the actuation of external alarms or indicator lamps. Users can program or specify the service interval and flash duration for each Redi-Alert. Flash duration is the amount of time in hours that the specific icon flashes before and after the service interval. If a front panel manual reset of the Redi-Alert is required the front panel models with switches must be specified.

Features

- Totally sealed from moisture and dirt
- AC or DC voltage input in the same unit
- Tachometer/Hour Meter versions
- Compact depth
- Programmable output thresholds
- Preset Hour Meter/time up or down
- Up to 3 Redi-Alerts/7 icons
- Fits in existing panel openings
- Always on display
- A choice of 8 housings
- A choice of reset modes
- Front panel programmable
- Preset Timer with output
- Can be programmed with starting time
- 15+ Year Battery Life

Specifications

Display: LCD with large 0.28" [7mm] high figures black on light background

Run indicator: Blinking decimal point

Reset: Remote, manual and non-reset (remote reset not available on surface mount housing)

Hour Meter Resolution: 0.01 or 0.1 Hour, displayed; 1 second, internal

Accuracy: ± 0.1% @ room temperature
± 0.2% over the specified temperature range

Records & Displays: 9999999.9 - hours & 1/10's or
999999.99 - hours & 1/100's

Inputs: 10-300VDC and 20-300VAC-50/60Hz
VIH 20VAC or 10VDC minimum
VIL 3VAC or 3VDC maximum

Power: Self powered - battery life 15+ years

Terminations: Standard 0.250" [6.4mm] spades
1 meter wire (inductive)

Output: Format: Open-Drain MOSFET with Source connected to Common (see note 3)
Maximum Withstanding voltage: 30VDC, reference to Common
Maximum Load current: 0.1Amp

Environmental:
Temperature: (Storage and Operating) -40 to +185˚F [-40 to +85˚C]
Humidity: 95% RH per SAE J1378
Vibration: 20g @ 10 to 80 Hz per SAE J1378
Shock: 44 to 55g's per SAE J1378
Dielectric: 1000VAC 50/60 Hz for 1 minute
Compliance: Compliant to the European WEEE and RoHS Directives

Sealing: Totally sealed

EMC Compliance: EN61326:1997 with A1:1998 and A2:2001 for industrial environments

Protection Against: Alternator load dump: 150V EMI (Electromagnetic Interface): +400V @ 500Hz inductive switching and reverse polarity

Enclosure: Totally sealed from moisture and dirt, NEMA 4/4X, 12, & IP66 compliant from the front when properly mounted using the optional gasket. (Not applicable to Snap-In Model)

Approvals: UL and cUL Recognized (file # ELIY2.E36690), CE, SAE, NEMA 4/4X compliant

Weight: 1oz [28g]

Functions

Preset Hour Meter: The preset function is centered on the output signal. When the time reaches the preset value, the output signal is turned “on”. The Preset function is time “up”.Upon reaching the preset value the preset can be automatically reset, or it can await an external reset.

Inductive Models: The surface mount Inductive unit is designed with an inductive interface. The unit will sense the firing of a spark plug on most small gasoline powered internal combustion engines. The wire lead from the unit is wrapped around the spark plug wire. Inductive models are available with and without tachometers. Most small engines provide 1 spark per RPM, in which case the maximum RPM is 30,000. Some small engines provide 2 sparks per RPM, the maximum RPM is then 15,000. Models are available that can be field (front panel switches) or factory programmed for 1.0, 2.0, or 0.5 sparks/pulses per RPM.

Front Panel Switch Functions: Front panel switches can be used for reset, display selection and programming. The two front Panel switches are used as follows:

SEL: During programming this switch is used to select options. The SEL switch is used during programming to move horizontally in the programming flow chart.

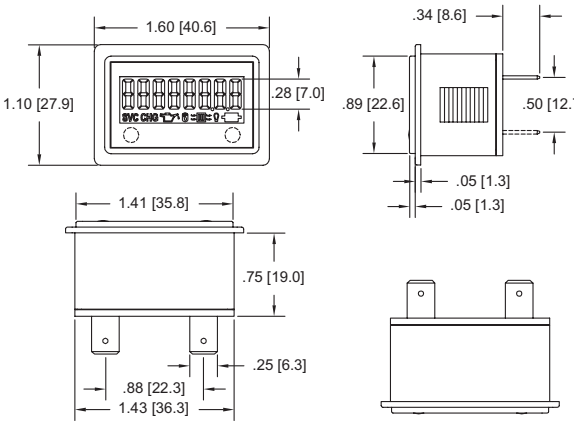
RST: This is the reset switch during normal operation. During programming the RST switch is used to enter an option. The RST switch is used during programming to move vertically in the programming flow chart.

Available Icons

SVC	SERVICE		OIL		AIR FILTER		MUFFLER
CHG	CHANGE		OIL FILTER		LAMP		

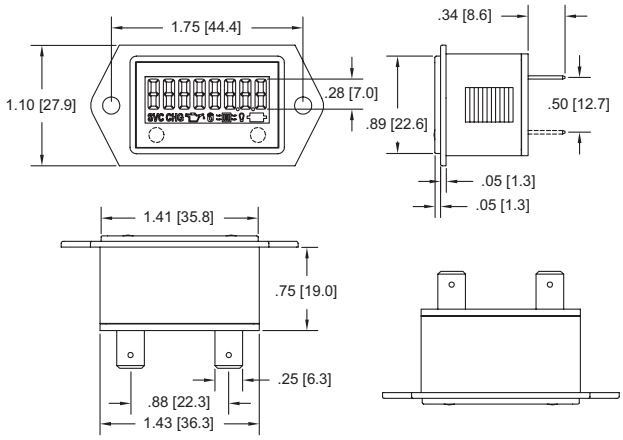
Dimensions

Rectangular Flush Mount



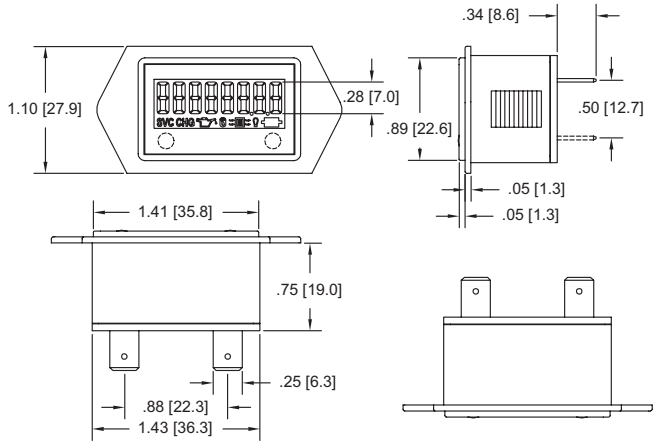
Panel Cutout: 1.45” [36.8mm] x 0.95” [24.1mm]
Maximum Panel Thickness: 0.375” [9.5mm]

2-Hole Mount



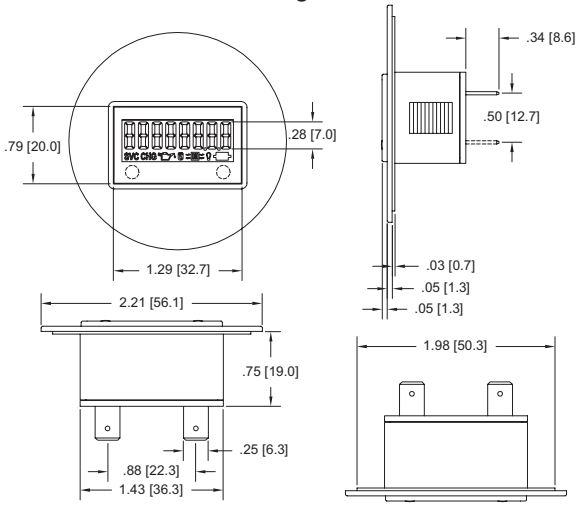
Panel Cutout: 1.45” [36.8mm] x 0.95” [24.1mm]

2-Hole No-Hole Mount



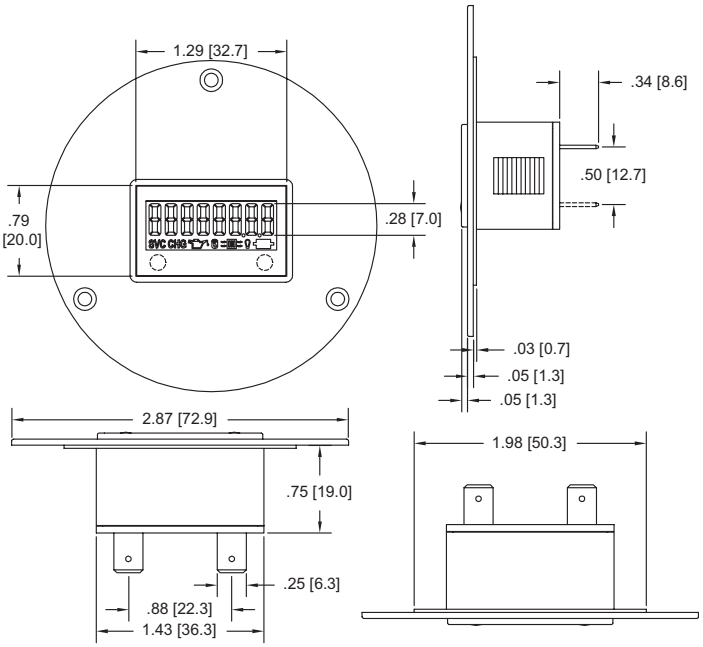
Panel Cutout: 1.45” [36.8mm] x 0.95” [24.1mm]
Maximum Panel Thickness: 0.375” [9.5mm]

Flush Rectangular Mount



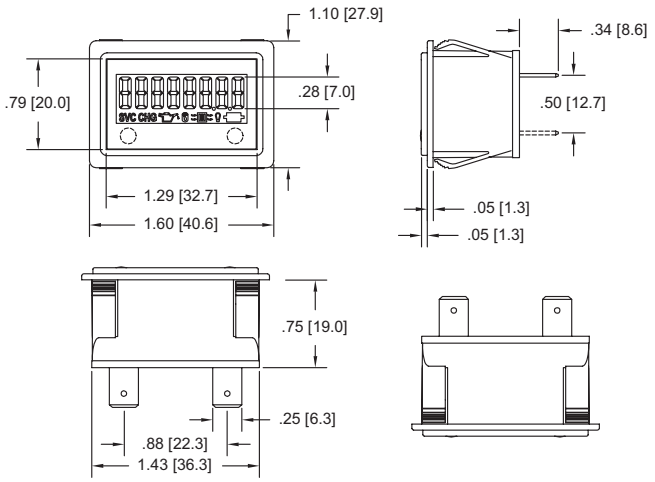
Panel Cutout: 1.45” [36.8mm] x 0.95” [24.1mm]
Maximum Panel Thickness: 0.375” [9.5mm]

3-Hole Mount



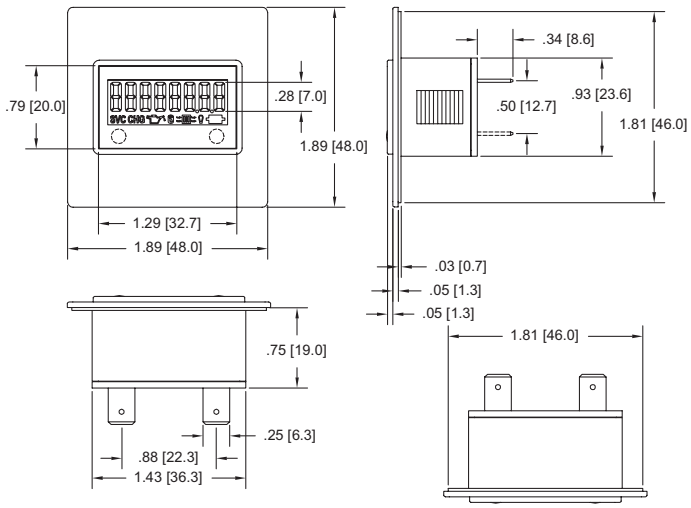
Panel Cutout: 1.45” [36.8mm] x 0.95” [24.1mm]

Snap-In Mount



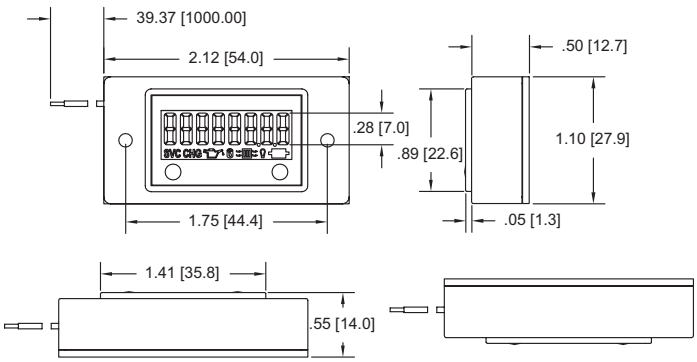
Panel Cutout: 1.46” [37mm] x 0.95” [24.1mm]
Minimum Panel Thickness: 0.04” [1.0mm]
Maximum Panel Thickness: 0.125” [3.18mm]

Square Flush Mount



Panel Cutout: 1.45” [36.8mm] x 0.95” [24.1mm]
Maximum Panel Thickness: 0.375” [9.5mm]

Surface Mount



Notes

1. When interfacing the Model 34 with a Solid State Relay or AC Sensor, the leakage current needs to be considered. Contact the factory or see the application note at www.redingtoncounters.com

2. Exceeding the Absolute Voltage Range and the Absolute Maximum Limits may result in damage to the unit.

3. The open-drain MOSFET acts like an open-collector NPN trasistor. Care should be taken since there is no current limiting protection in the unit.

Applications

Medical Devices | Generators | Control Panels | Production Equipment | Garden Tractor | Marine Equipment