



Description

The Redington Model 34 LCD Frequency/Hour Meter provides a large display, with 0.28" [7mm] high characters, in industry size housings. The Model 34 keeps track of operational hours accumulated on equipment when a frequency input is applied. The unit counts the number of pulses per second. As long as pulsing continues the unit accumulates hours. The input interface handles AC or DC inputs. The Frequency/Hour Meters are available in 7 different housings. 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, makes 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 visibility in an outdoor environment.

Maintenance Meters are offered with a maximum of 3 "Redi-Alert's" icons 0.08" [2mm] to alert users when service intervals are due or other periodic timed events are 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 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
- Frequency/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 (1.45 x 0.95" [36.8 x 24.1mm])
- Always on display
- A choice of 7 housings
- A choice of reset modes
- Front panel programmable
- Preset Timer with output

Specifications

Display:	LCD with large 0.28" [7mm] high figures black on light background	Maximum Withstanding voltage: 30VDC, reference to Common Maximum Load current: 0.1Amp
Run indicator:	Blinking decimal point	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
Reset:	Remote, manual and non-reset	Sealing: Totally sealed, use panel gaskets for NEMA 4/4X, 12, & IP66 compliance
Hour Meter Resolution:	0.01 or 0.1 Hour, displayed; 1 second, internal	EMC Compliance: EN61326:1997 with A1:1998 and A2:2001 for industrial environments
Accuracy:	± 0.1% @ room temperature ± 0.2% over the specified temperature range	Protection Against: Alternator load dump: 150V EMI (Electromagnetic Interface): +400V @ 500Hz inductive switching and reverse polarity
Records & Displays:	9999999.9 - hours & 1/10's or 999999.99 - hours & 1/100's	Enclosure: Totally sealed from moisture and dirt, NEMA 4/4X/IP66 compliant from the front when properly mounted using the optional gasket
Maximum pulse rate:	500 pulses per second Accuracy is Resolution Dependent, better than 1% for inputs greater than 12 Hz	Approvals: UL and cUL Recognized (file # ELIY2.E36690), CE, SAE, NEMA 4/4X, &, IP66 compliant
Inputs:	10-300VDC and 20-300VAC-50/60Hz VIH 20VAC or 10VDC minimum VIL 3VAC or 3VDC maximum	Weight: 1oz [28g]
Power:	Self powered - battery life 15+ years	
Terminations:	Standard 0.250" [6.4mm] spades	
Output:	Format: Open-Drain MOSFET with Source connected to Common (see note 3)	



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 can be either a time "up" or time "down". In addition to the preset function models are also available with 3 Redi-Alert set points. Upon reaching the preset value the preset can be automatically reset, or it can await on an external reset.

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



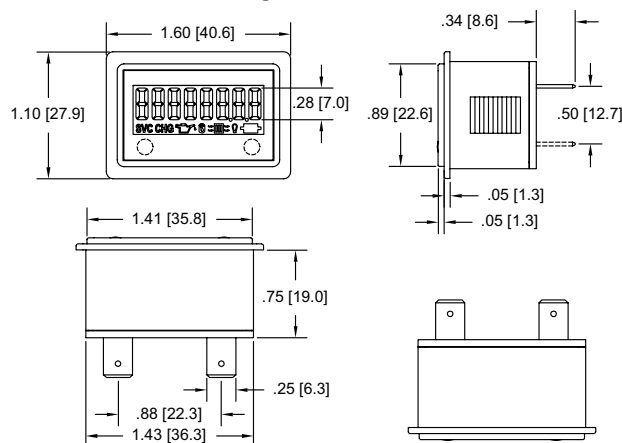
OIL FILTER



LAMP

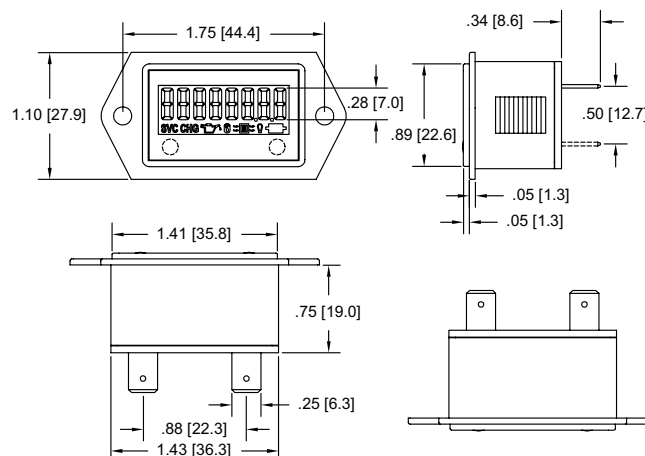
Dimensions

Rectangular Flush Mount



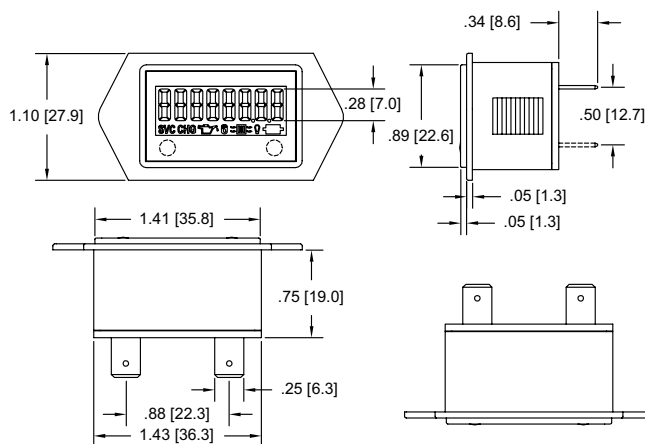
Panel Cutout: 1.45" [36.8mm] x 0.95" [24.1mm]
Maximum Panel Thickness: 0.375" [9.5mm]

2-Hole Mount



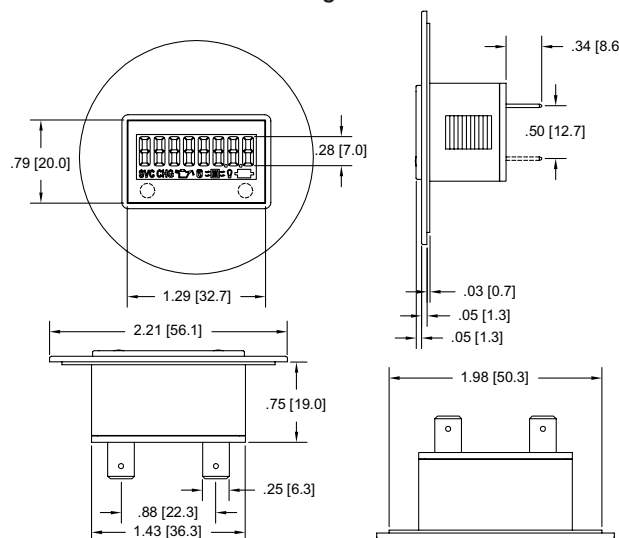
Panel Cutout: 1.45" [36.8mm] x 0.95" [24.1mm]
Maximum Panel Thickness: 0.375" [9.5mm]

2-Hole No-Hole Mount



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

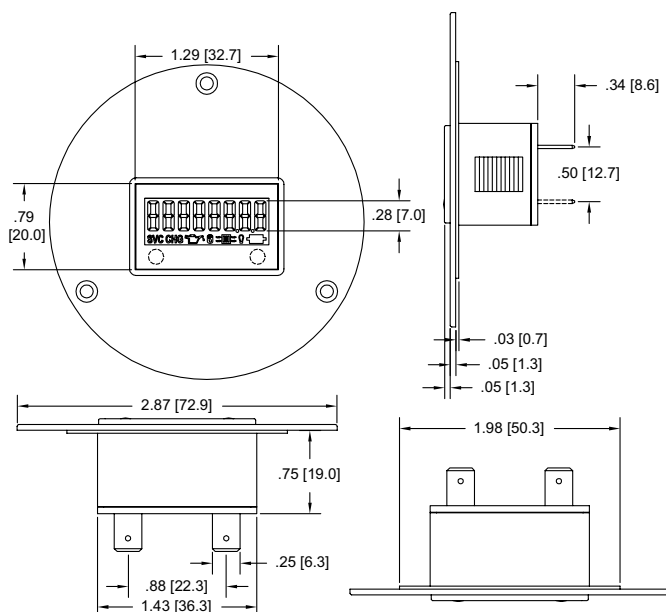
Flush Rectangular Mount



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

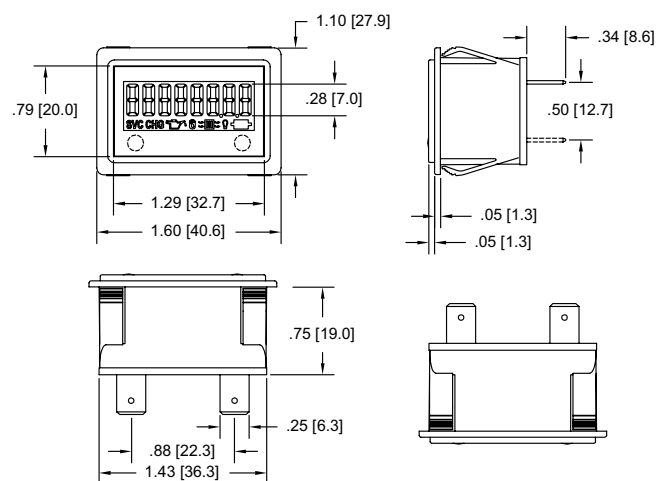


3-Hole Mount



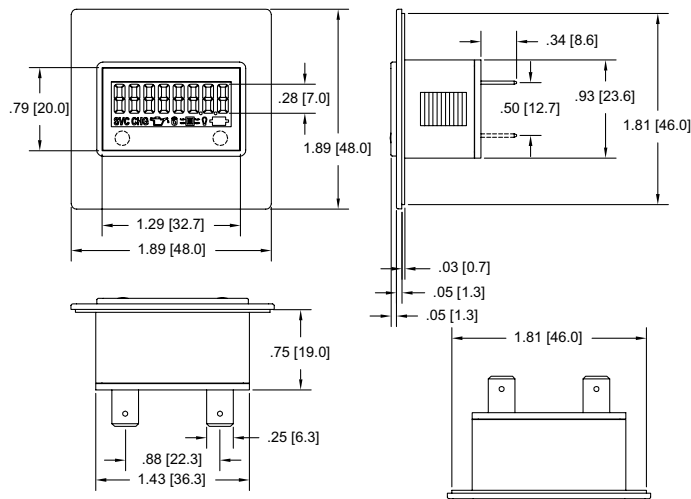
Panel Cutout: 1.45" [36.8mm] x 0.95" [24.1mm]
Maximum Panel Thickness: 0.375" [9.5mm]

Snap-In Mount



Panel Cutout: 1.45" [36.8mm] 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]

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 transistor. Care should be taken since there is no current limiting protection in the unit.

Applications

Medical Devices



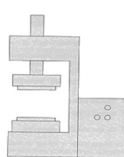
Test Equipment



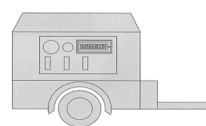
Control Panels



Production Equipment



Generator



Secondary Equipment

