GRÄSSLIN

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CSA

UWZ 48 - L   24-30V~ 60Hz

1 2 3 4

Grässlin Hour Meters

As a pioneer for hour meters, Grässlin by Intermatic decisively placed its stamp on this product market. The time-tested Grässlin Hour Meters from the FWZ, GZ, RZ, & UWZ lines are maintenance-free, robust and reliable for years to come. We offer a fully developed range of hour meters for use within or externally to industrial control panels, pumps, machinery, heaters, and other various applications which require load usage monitoring for preventive maintenance scheduling. The hour meters from Grässlin guarantee safe and highly reliable load usage monitoring.

Contents

Grässlin Hour Meters
Flush Panel Mount AC Hour Meters (Non-Reset Type)

The FWZ Series AC Hour Meters are flush panel mountable designed to fit into tight locations. They are non-resettable and flush panel mounted with watertight/dust-tight sealed bezels designed to withstand IP54 environmental rating (with use of a gasket). All models are black plastic (except FWZ72B which is blue-silver on colorless frosted polycarbonate) with white numerals on a black background. Tenths and hundredths numerals are yellow.

Black

Blue Silver

FWZ53 Series
Flush Panel Mount

Ratings	
Voltage Available	24, 120 or 220 VAC
Frequency	60 Hz 50 Hz available on 120, 220 VAC only
Power Consumption	1 VA
Bezel	2.09" x 1.02" (53 mm x 26 mm)
Capacity	99,999.99 hours
Digits	0.16" high numerals
Operating Temperature	-40° F to 160° F (-40° C to 72° C)
Termination	Combination ¼" spade and screw clamp
Panel Opening	1.50" x 1.00" rectangular (38 x 25 mm)
Mounting	Flush panel retainer mounted (2) 0.150" holes for #6 screws
Material	Black plastic
Weight	1.2 oz.
Gasket Model #	G-53U (sold separately)
Ordering Information	FWZ53 + Desired Voltage + Frequency + U

Dimensions
FWZ53

FWZ55 Series
Flush Panel Mount

| Ratings	
Voltage Available	120, 220 or 240 VAC
Frequency	60 Hz 50 Hz available on 220 VAC only
Power Consumption	1 VA
Bezel	2.17" x 1.18" (60 mm x 30 mm)
Capacity	99,999.99 hours
Digits	0.16" high numerals
Operating Temperature	-40° F to 160° F (-40° C to 72° C)
Termination	Combination ¼" spade and screw clamp; Rear access screw terminals available (Model "K")
Panel Opening	2.06" x 1.08" rectangular (52 mm x 27.5 mm)
Mounting	Flush-panel retainer mounted with slip-on retaining bracket
Material	Black plastic
Weight	1.8 oz.
Gasket Model #	G-55U (sold separately)
Ordering Information	FWZ55 + K* + Desired Voltage + Frequency + U

Rear access screw terminals

Dimensions
FWZ55

FWZ72 Series
Flush Panel Mount

| Ratings	
Voltage Available	24, 120 or 240 VAC
Frequency	60 Hz
Power Consumption	1 VA
Bezel	2.83" round (72 mm), 3 hole
Capacity	99,999.99 hours
Digits	0.16" high numerals
Operating Temperature	-40° F to 160° F (-40° C to 72° C)
Termination	Combo ¼" spade and screw clamp; Rear access screw terminals available (Model "K")
Panel Opening	1.75" (44.5 mm) round or 1.50" x 1" rectangular (38 mm x 24 mm)
Mounting	Flush panel mounted with (3) 0.185" holes for #8 screws
Material	
FWZ72	Black plastic, 24 or 120 VAC
FWZ72K	Black plastic, 240 VAC
FWZ72B	Blue/silver/clear frosted polycarbonate, 120 or 240 VAC
FWZ72C	Clear frosted polycarbonate, 120 VAC
Weight	1.8 oz.
Gasket Model #	G-72U (sold separately)
Ordering Information	FWZ72 + Suffix K*, B, or C + Desired Voltage + Frequency + U
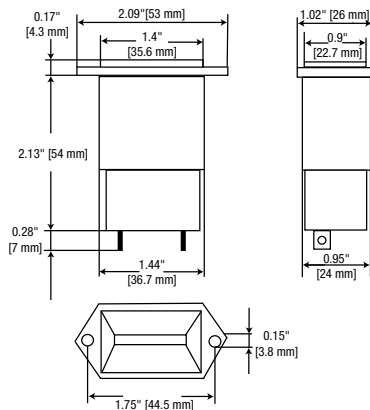
Rear access screw terminals
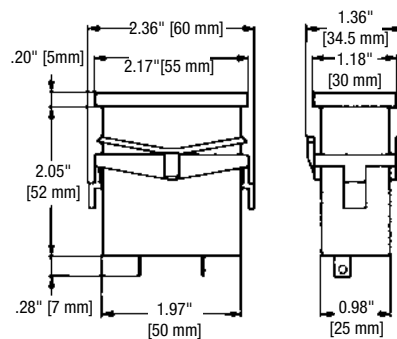
Dimensions
FWZ72
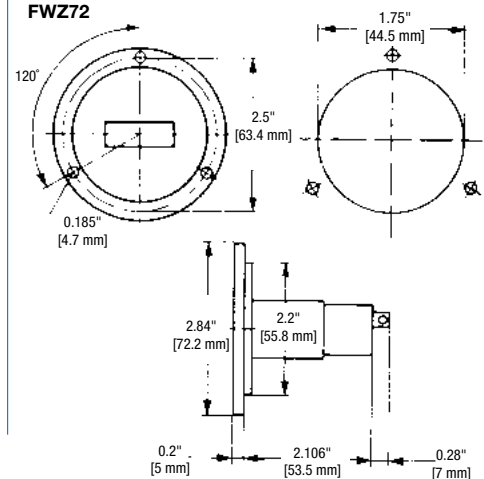
Ordering Example:
To build a model #, choose the Hour Meter Series at the frequency you want. Add a "K" suffix for rear access screw terminals (on applicable models). Then specify voltage. Only 50 Hz models need to be denoted in the model #. Voltages not currently available will be considered on a case by case basis.

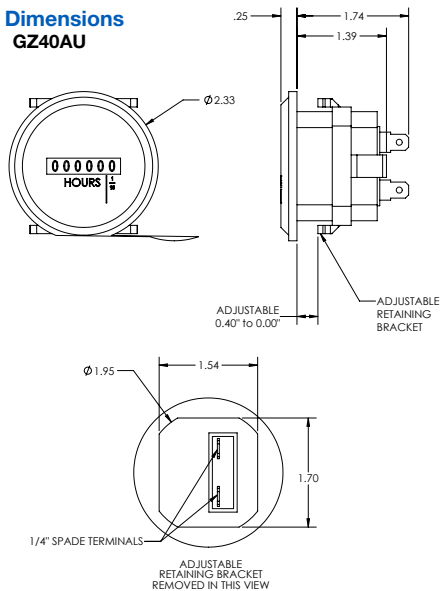| Series	+	VAC	+	Hz	+	Unit Pack	=	Model #
FWZ53	+	220	+	/50	+	U	=	FWZ53-220/50U

INTERMATIC

The Grässlin GZ Series DC Hour Meters are the answer to applications requiring low power load usage metering. Compact, tamperproof GZ40 meters are sealed against the environment (IP rated up to IP66) to provide years of service. Accumulated load usage hours are stored in the mechanical indicating counter; therefore, no battery is required to maintain elapsed time. An input diode provides polarity protection. A quartz crystal time base ensures accurate, long-term timekeeping.

GZ40AU
Flush Mount

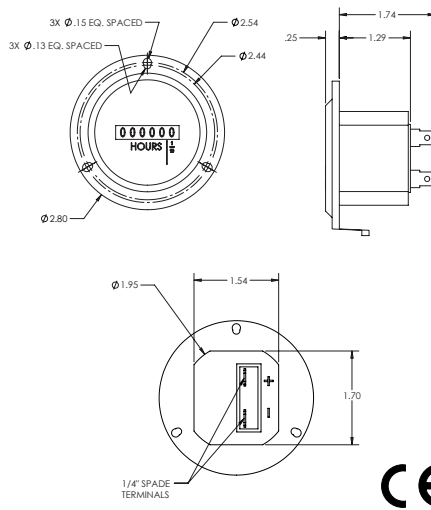| Ratings	
Voltage Available	10-80 VDC
Power Consumption	.03 W, 12 VDC; .70 W, 48 VDC
Bezel	SAE, 2.31" Dia (59 mm)
Capacity	99,999.9 hours
Digits/Display	(6) 0.125" high numerals-hours: white on black, tenths: red on white
Vibration Resistance	10-75 Hz, 1-8 g
Operating Temperature	-22° F to 150° F (-30° C to 65° C)
Electrical Connection	¼" spade termination
Mounting	Flush with Bracket
Protected From	Reverse polarity, inductive switching
Environmental Rating	IP66
Weight	2 oz.
Model #	GZ40AU

GZ40BU
Flush Mount

Ratings	
Voltage Available	10-80 VDC
Power Consumption	.03 W, 12 VDC; .70 W, 48 VDC
Bezel	3-Hole, 2.80" Dia (72 mm)
Capacity	99,999.9 hours
Digits/Display	(6) 0.125" high numerals-hours: white on black, tenths: red on white
Vibration Resistance	10-75 Hz, 1-8 g
Operating Temperature	-22° F to 150° F (-30° C to 65° C)
Electrical Connection	¼" spade termination
Mounting	Flush
Protected From	Reverse polarity, inductive switching
Environmental Rating	IP66
Weight	2 oz.
Model #	GZ40BU

GZ52BU
Flush Mount

Ratings	
Voltage Available	8-30 VDC
Power Consumption	.03 W, 12 VDC
Current Consumption	< 3 mA, 12 VDC
Bezel	2.28" Dia (58 mm)
Mechanical Movement	2-Phase step motor
Capacity	99,999.9 hours
Digits/Display	(6) 0.125" high numerals-hours: white on black, tenths: red on white
Vibration Resistance	DIN EN60068-2-64
Accuracy	+/-0.5 sec/day at 20° C
Operating Temperature	-40° F to 185° F (-40° C to 85° C)
Storage Temperature	-40° F to 194° F (-40° C to 90° C)
Electrical Connection	¼" quick connectors
Mounting	Flush Bracket (Screw Type)
Operating Indicator	LED
Protected From	Reverse polarity, inductive switching
Environmental Rating	IP65
Weight	2 oz.
Model #	GZ52BU

Dimensions
GZ40AU

Dimensions
GZ40BU
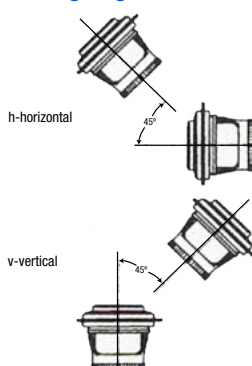

Dimensions
GZ52BU
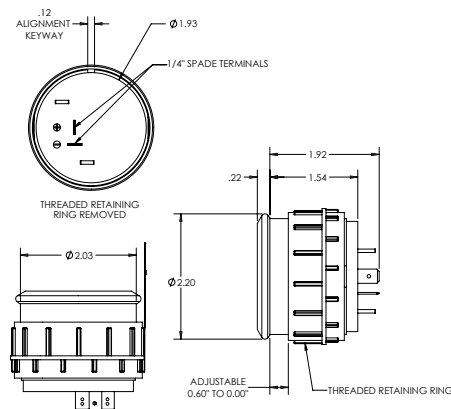
No electrical connection required. The RZ Series Vibration Hour Meters convert vibrations into energy to drive the minute hand. This sensitive hour meter can operate from the slightest vibrations, such as a moving car. Horizontal or vertical mounting position to 45°.
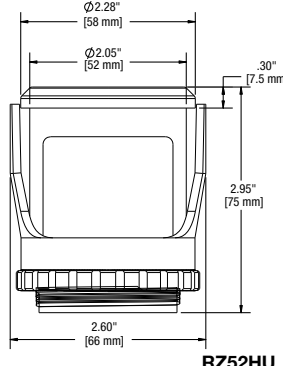
RZ52 Series
Flush Mount Vibratory Hour Meters

Mounting Angles

h-horizontal

v-vertical

Dimensions

RZ52HU

Ratings	
Capacity	99,999.9 hours
Digits/Display	(6) 0.125" high numerals
Vibration Sensitivity	.18 g at 15 Hz
Accuracy	+/- 3% at uninterrupted operation
Ambient Temperature	-20° F to 140° F (-28° C to 60° C)
Dimensions Dia x D	2.28" x 2.95" (58 mm x 75 mm)
Panel Cutouts	Ø 2.04" (52 mm)
Mounting Depth	2.95" (75 mm)
Mounting Position	H to 45° V to 45°
Environmental Rating	IP65
Weight	3.5 oz
Model #	
Horizontal Mount	RZ52HU
Vertical Mount	RZ52VU

INTERMATIC®

Grässlin Hour Meters
Surface/DIN Rail Mount AC Hour Meters (Non-Reset Type)

The UWZ Series AC Hour Meters are designed to meet IP20 environmental ratings for indoor applications. All models are light gray in color with white numerals on a black background. Tenths and hundredths numerals are yellow. An orange dial adjacent to the hundredths digit provides running indication.

UWZ48 Series
Plug-in Surface Mount

The UWZ48 Surface Mount Hour Meter uses a plug-in base where terminal protection is not necessary. The socket base is easy to install and connect. Simply plug the meter into the base and secure with a screw.

Ratings	
Voltage Available	24, 120, or 240 VAC
Frequency	60 Hz
Power Consumption	1 VA
Bezel	1.89" x 1.89" (48 mm x 48 mm)
Capacity	99,999.99 hours
Digits	0.16" high numerals
Operating Temperature	-40° F to 160° F (-40° C to 72° C)
Electrical Connection	Screw lugs
Mounting	Surface
Material	Light gray plastic
Weight	2.5 oz.
Ordering Information	UWZ48 + Desired Voltage + U

UWZ48A Series
Enclosed Surface Mount

The UWZ48A Enclosed Surface Mount is used with a terminal cover for added safety. Installation requires fixing the base to a wall or panel with two screws, wiring the base, and plugging in the meter with the terminal cover.

Ratings	
Voltage Available	24 or 120 VAC
Frequency	60 Hz
Power Consumption	1 VA
Bezel	1.89" x 1.89" (48 mm x 48 mm)
Capacity	99,999.99 hours
Digits	0.16" high numerals
Operating Temperature	-40° F to 160° F (-40° C to 72° C)
Electrical Connection	Screw lugs
Mounting	Surface
Material	Light gray plastic
Weight	2.5 oz.
Ordering Information	UWZ48A + Desired Voltage + U

UWZ48V Series
DIN Rail Mount

A special snap-on socket base allows for fast positioning onto a DIN rail.

Ratings	
Voltage Available	24 or 120 VAC
Frequency	60 Hz
Power Consumption	1 VA
Bezel	1.89" x 1.89" (48 mm x 48 mm)
Capacity	99,999.99 hours
Digits	0.16" high numerals
Operating Temperature	-40° F to 160° F (-40° C to 72° C)
Electrical Connection	Combination ¼" spade and screw clamp
Mounting	DIN Rail
Material	Light gray plastic
Weight	2.5 oz.
Ordering Information	UWZ48V + Desired Voltage + U

Dimensions
UWZ48
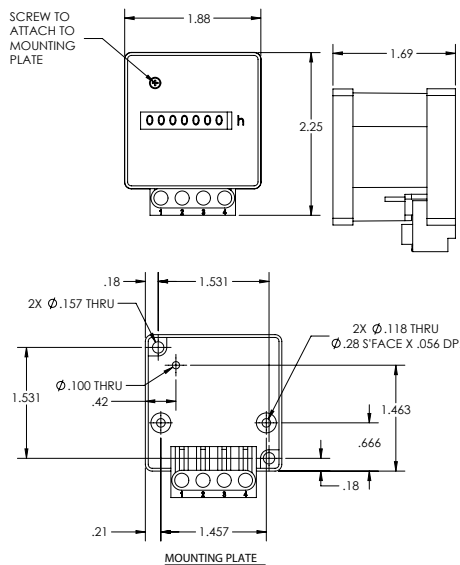
SCREW TO ATTACH TO MOUNTING PLATE

1.88
1.69
2.25

.18   1.531
2X ⌀.157 THRU
2X ⌀.118 THRU ⌀.28 S'FACE X .056 DP.
⌀.100 THRU
1.531   .42
1.463
.666
.18
.21   1.457
MOUNTING PLATE

Dimensions
UWZ48A

1.46" [37 mm]
1.22" [31 mm]
1.97" 50 mm
0.126" [3.2 mm]
1.89" [48 mm]
1.77" [45 mm]
2.72" [69 mm]
1.89" [48 mm]
.92" [23.5 mm]

Dimensions
UWZ48V

1.89" [48 mm]
1.97" [50 mm]
1.18" [30 mm]
2.36" [60 mm]
2.44" [62 mm]
1.77" [45 mm]
1.34" [34 mm]
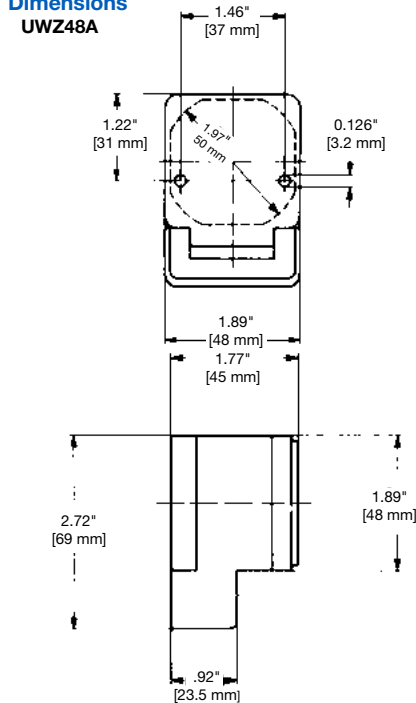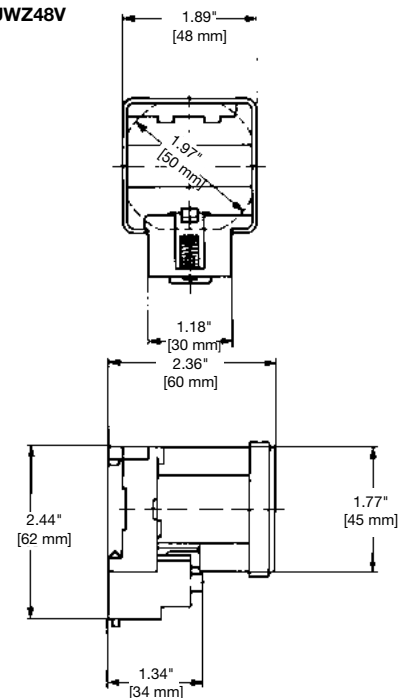
Ordering Example:
To build a model #, choose the Hour Meter Series at the voltage you need and add a U suffix. All models are 60 Hz.

Series	+ VAC	+ U	= Model #
UWZ48	+ 240	+ U	= UWZ48-240U

CSA C US #151753

UL #E22587

CE

INTERMATIC

UWZ Accessories

55 mm Bezel
for UWZ48E

BEZ55-GRAYU BEZ55-BLACKU

72 mm Bezel
for UWZ48E

BEZ72U Gray
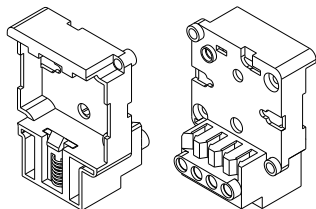
72 mm Bezel with 3 Pins
for round 3-bolt hole opening for UWZ48E
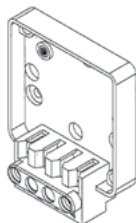
BEZ72PU Gray

DIN Rail Mounting Base
for UWZ48E

MB–48V

Flush Mount Base
for UWZ48

691

UWZ48E Series
Flush Mount

Flush mounted with bracket, the UWZ48E unit fits into a 1.79" x 1.79" (45.5 x 45.5 mm) cutout. The thickness of the panel for flush mounting can be up to .35" (9 mm). The unit is secured in position by a plastic slip-on retaining bracket. The unit also fits square or round openings for 72 mm with optional 72 mm bezel.

| Ratings	
Voltage Available	24, 120, 220 or 240 VAC
Frequency	50 or 60 Hz
Power Consumption	1 VA
Bezel	1.89" x 1.89" (48 mm x 48 mm)
Capacity	99,999.99 hours
Digits	0.16" high numerals
Operating Temperature	-40° F to 160° F (-40° C to 72° C)
Electrical Connection	Combination ¼" spade and screw clamp
Material	Light gray plastic
Weight	2.1 oz.
Ordering Information	UWZ48E + Desired Voltage + Frequency + U

Dimensions UWZ48E
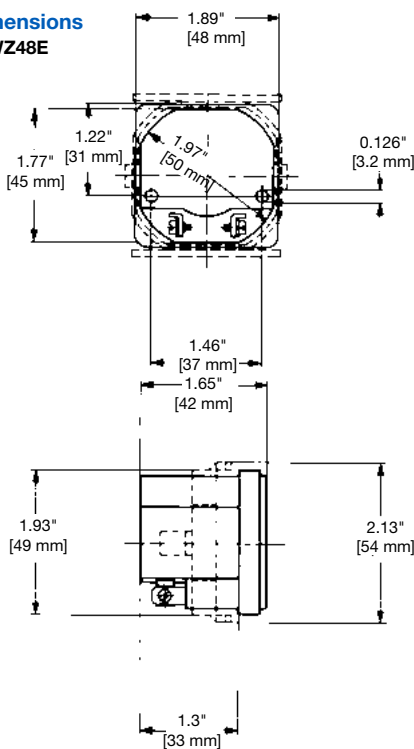
UWZ52E Series
Flush Mount

Flush mounted with bracket, the UWZ52E with round face is fastened with a plastic slip-on retaining bracket.

Ratings	
Voltage Available	120 VAC
Frequency	60 Hz
Power Consumption	1 VA
Bezel	2.28" Ø (58 mm)
Capacity	99,999.99 hours
Digits	0.16" high numerals
Operating Temperature	-40° F to 160° F (-40° C to 72° C)
Electrical Connection	Combination ¼" spade and screw clamp
Material	Light gray plastic
Weight	2.1 oz.
Ordering Information	UWZ52E + Desired Voltage + Frequency + U

Dimensions UWZ52E
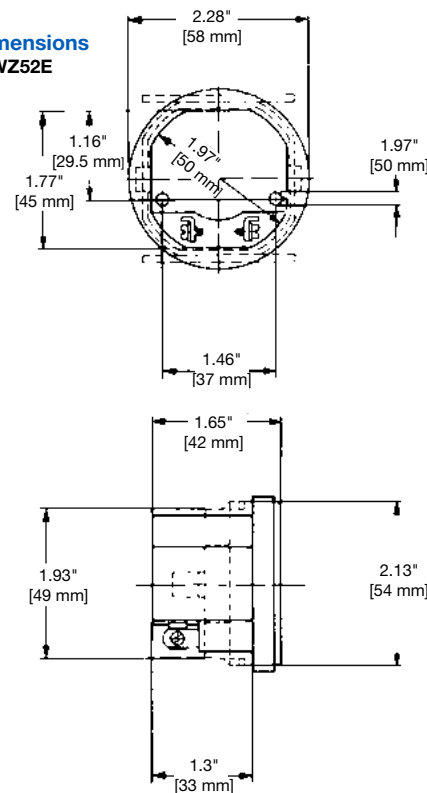
#151753

#E22587

Ordering Example:
To build a model #, choose the Hour Meter Series at the frequency you want. Then specify voltage and add a U suffix. Only 50 Hz models need to be denoted in the model #.

Select:	Series	+ VAC	+ Hz	= Model #
50 Hz Models:	UWZ48E	+ 220	+ /50U	= UWZ48E-220/50U
60 Hz Models:	UWZ48E	+ 24	+ (60)	= UWZ48E-24U