

BAT D/T

Battery, Loop or DC Powered Dual Totalizer

Features

- Magnetic Pickup Input, Contact Closure Input, DC Pulse Input (Optically Isolated)
- Displays 5 Digit Resettable Total
8 Digit Grand Total
- Powered From Internal Battery, External DC Supply or 4-20 mA Output Loop
- 10 Pt. Linearization
- New & Improved Isolated Scaled Pulse Output
- Intrinsically Safe Option
- New, Attractive NEMA4 Wall Mount Enclosure

Description

Featuring 5 digits of resettable total and 8 digits of grand total, the BAT D/T is a battery powered indicator capable of accepting magnetic pickup, DC pulse and switch closure inputs.

Specifications

POWER:

BATTERY POWERED

Supplied with 2 C size Lithium battery pack.

EXTERNAL POWER INPUT

Voltage: 8.5 to 30 VDC

Current: Less than 5 mA

Supplied with 1 C size lithium battery

Protection: Reverse Polarity Protection on DC Power Input

LOOP POWERED

Voltage: 8.5 to 30 VDC

Supplied with 1 or 2 C size lithium battery(ies)

Protection: Reverse Polarity Protection on Current Loop

Loop Burden: 8.5V maximum

Battery Life Expectancy

	RUN TIME			
	Idle	2hrs/day	8hrs/day	24hrs/day
BATDT A or AC	5 yrs	4.5 yrs	3.5 yrs	2.1 yrs
BATDT A 4	5 yrs	3.7 yrs	2.7 yrs	1.5 yrs
BATDT B or C Standby Operation	2.5 yrs	2.25 yrs	1.75 yrs	1 yr
BATDT B or C External or Loop Power	10 years			

All of the above values are calculated with the pulse output ON.
Turn the pulse output OFF to prolong battery life up to 30%.

DISPLAY:

Resettable Total Display

5 Digits (99999), 0.35" High, Display updates once every two seconds

Grand Totalizer Display: (selectable decimal)

8 Digits (99999999), 0.2" High

Totalizer Descriptors: GAL, LIT, FT3, M3, "blank"

Warning Displays: Low battery warning "BAT"

ACCURACY:

±1 count

Listing:

CE Compliant,
CSA(NRTL/C)(File No. LR91109) (x-proof only)

UL IS Pending



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PULSE OUTPUT:

The pulse output advances with the least significant digit of the totalizer or decimal multiples thereof (see Pulse output divider).

Type: Isolated photomos relay

Max. voltage (off state): 30 VDC

Current (on state): 100mA

Pulse Duration: 62.5 mSec (max. output speed: 8 Hz)

Pulse output divider: User selectable, +1, +10, +100 or OFF

NOTE: Select OFF for max. battery life.

MOUNTING STYLES:

- 0- Circuit Board - OEM option (consult factory)
- 1- Panel Mount - NEMA 4X Front
- 2- Wall Mount - NEMA 4X Enclosure with BAT D/T mounted behind clear cover
- 3- Explosion Proof - Class I, Division I, Groups B, C & D
Class II, Division I, Groups E, F & G
- 5- Wall Mount - NEMA 4X with keypad mounted outside opaque cover

ENVIRONMENTAL:

OPERATING TEMPERATURE

-4°F (-20°C) to +158°F (70°C)

Extended Temp: -22°F (-30°C) to +158°F (70°C)

HUMIDITY

0 - 90% Noncondensing

INPUTS:

MAGNETIC PICKUP INPUT

Frequency Range: 0 to 3500 Hz

Trigger Sensitivity: 30 mV p-p

Over Voltage Protected: ± 30 VDC

OPTO-ISOLATED DC PULSE INPUT

High (logic 1): 4-30 VDC

Low (logic 0): Less Than 1 VDC

Minimum Current: .5 mA

Hysteresis: 0.4 VDC

Frequency Range: 0 to 5 kHz

Min. Pulse Width: 0.1 msec

CONTACT CLOSURE INPUT (contact closure to common)

Internal Pullup Resistor: 100 KΩ to +3.6 VDC

High (logic 1): Open or 4-30 VDC

Low (logic 0): Less Than .5 VDC

Internal Switch Debounce Filter: 0 to 40 Hz

RESET INPUT (contact closure to common)

Internal Pullup Resistor: 100 KΩ to +3.6 VDC

High (logic 1): Open or 4-30 VDC

Low (logic 0): Less Than .5 VDC

Minimum On : 25 msec

K-FACTOR

Range: 0.001 to 59999

Decimal Point Locations: XX.XXX to XXXXX

10 Point Linearization Option

This feature allows the user to enter 10 different frequencies with 10 different corresponding K-Factors to linearize non linear signals.

ANALOG OUTPUT OPTION:

Type: 4-20 mA follows flow rate, Two wire hookup

Scaling: scaled per second, minute or hour.

0.000 to 59999 (selectable decimal)

Accuracy: 0.15% Full Scale at 20° C

Temperature Drift:

50 ppm/°C Typical

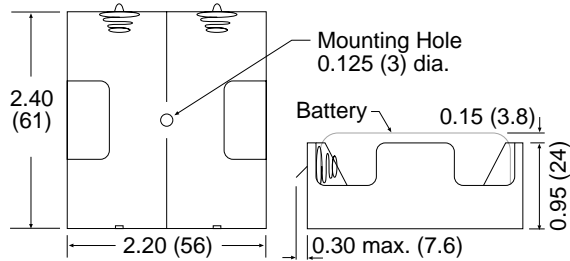
200 ppm/°C Worst Case

Reverse Polarity Protected

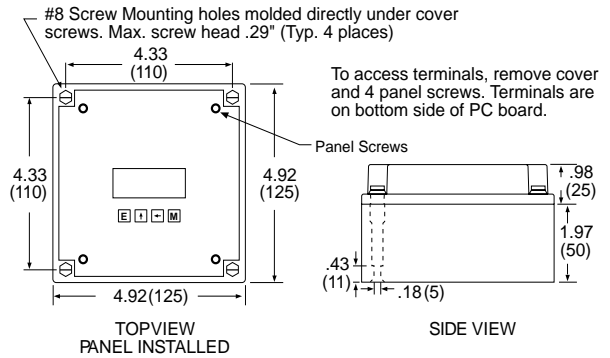
NOTE: The BAT D/T uses the 4-20 mA loop power as its power source when this option is used. The battery is still required to power the display.

DIMENSIONS:

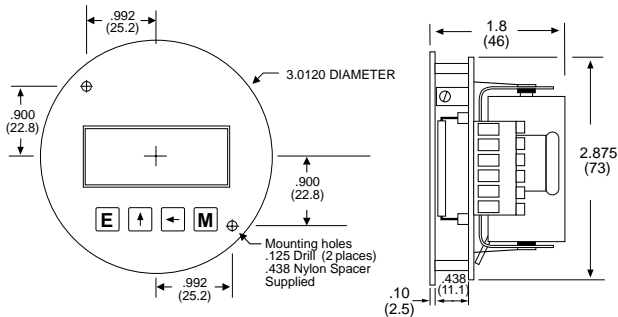
BATPACK



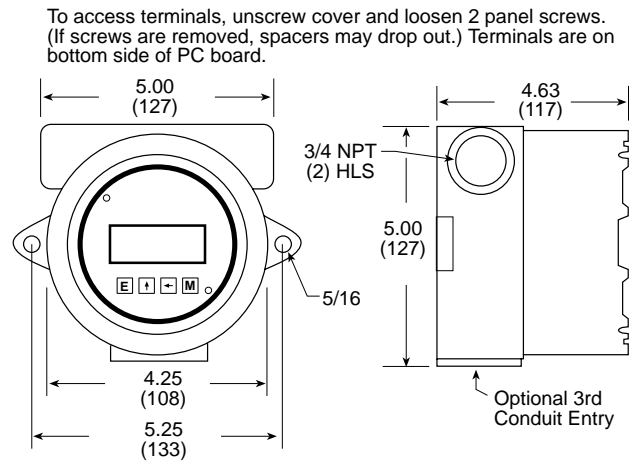
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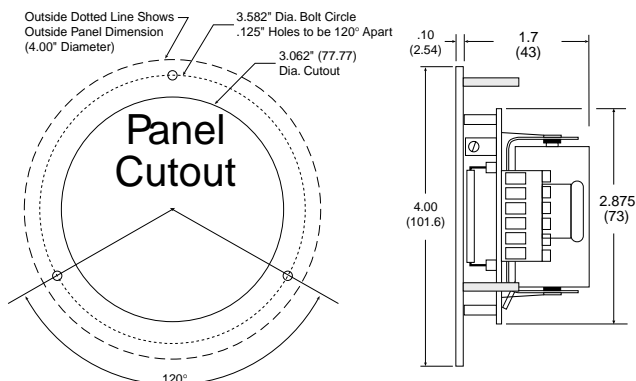
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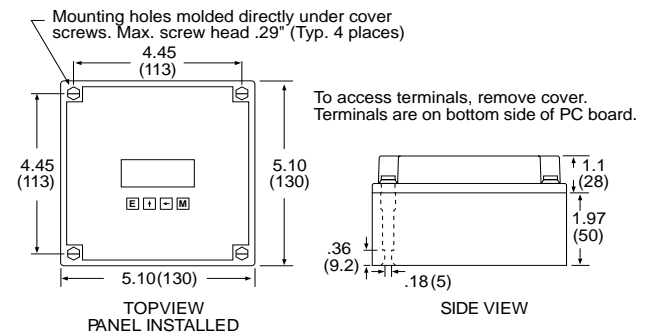
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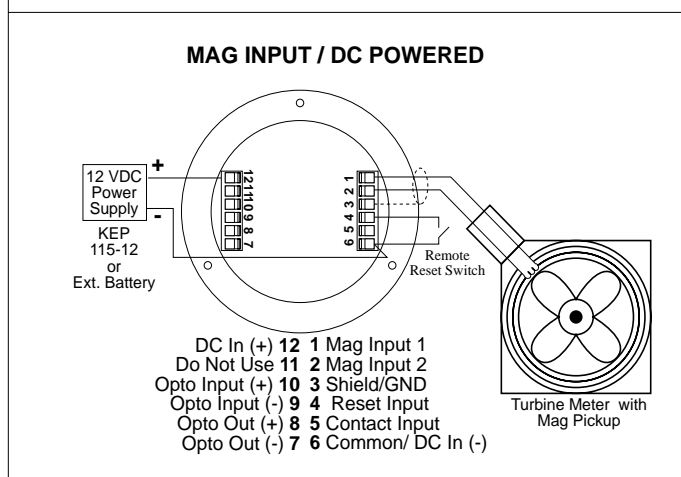
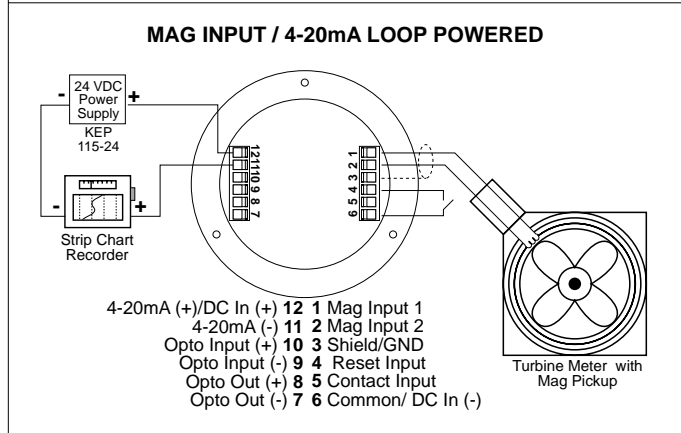
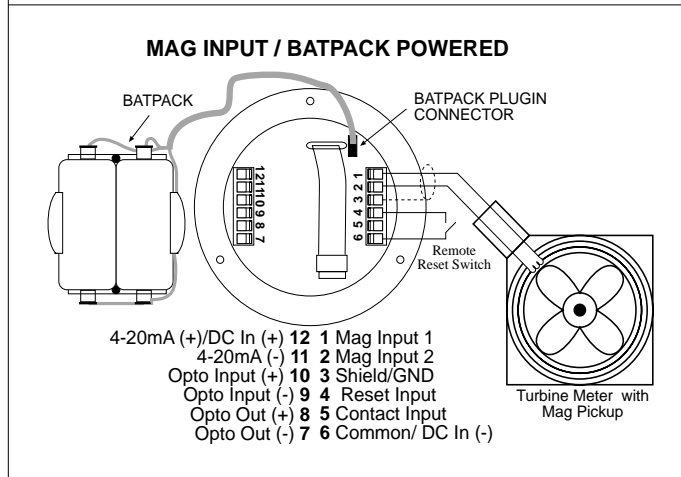
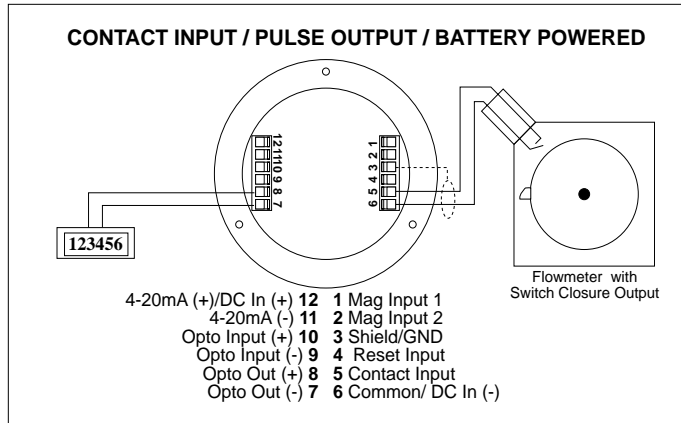
BATDT-1



BATDT-5



TYPICAL APPLICATIONS



Ordering Information

EXAMPLE: BATDT 3 A 4 ET

Series: _____
Mounting: _____
 * 0 = OEM
 * 1 = Panel Mount
 2 = NEMA 4X Box (Bat D/T behind clear cover)
 3 = Explosion Proof Housing
 5 = NEMA 4X Box (Bat D/T outside opaque cover)
 6 = Double Ended Explosion Proof Housing

Power Supply: _____
 * A = Battery (2 supplied)
 B = External Power Supply (8.5 to 30 VDC)
 C = Loop Powered with 4-20 mA Output
 AC = Loop Powered with 4-20 mA Output and 2 Batteries

Options (Multiple Options Available)
 4 = 10 Point Linearization
 ET = Extended Temp.: -22°F to 158°F (-30°C to 70°C)
 CE = CE Approved Version
 CSA = CSA Approved Version (explosion proof)
 IS** = Intrinsically Safe
 TRX = NEMA7 Explosion Proof Reset Switch
 RN = External Magnetic Reset
 T = Third Conduit Entry in Ex-Proof Housing
 H2 = 0.875" Hole for mounting styles 2 and 5
 HF2 = 0.5" Female NPT Hub fitting
 H3 = 1.125" Hole for mounting styles 2 and 5
 HF3 = 0.75" Female NPT Hub fitting

Accessories:
 BATPACK= External Battery Pack with Two C Size Batteries & 12" leads
 BATC = Single Battery: Tadiran P/N TL2200/S 3.6V 5500mAh or equal
 115-24 = 115 VAC to 24 VDC power supply
 * External battery pack supplied with models BATDT0A & BATDT1A
 ** Contact factory for latest information

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