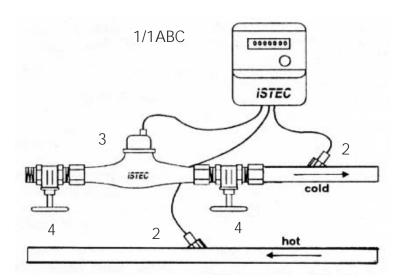
# **BTU METERS**

# 4000 Series



#### **Applications**

- Heating Systems
- Cooling systems
- District Heating/Cooling systems
- Cogeneration Systems
- Solar Systems
- Efficiency Measuring/Verification
- Geothermal systems
- Heat Reclaimers

#### **Product Overview**

ISTEC's BTU Meters measure the total energy used or transferred in a liquid system. BTU's are calculated by multiplying the temperature difference ( $\Delta$ T) between the supply and return lines by the flow rate (gpm) through these lines.

BTU =  $\Delta T \times Flow$ 

The illustration above shows a typical system:

- 1. Calculating Unit with Power Supply
- 2. Wells for supply & return
- 3. Flow Meter with Pulse
- 4. Stop Valves (recommended)

#### How to Order

1) BTU Calculating Unit:

10' Probe - # 4001

15' Probe - # 4002

30' Probe - # 4003

1A) Power Supply:

24VAC Converter - # 4010

Transformer (110 to 24 VAC) - #4018

1 Year Battery - # 4011

6 Year Battery - #4016

2) Temperature Sensor Wells – 3/8" NPT

Short - # 4020 (for pipe sizes up to 1-1/2") Long - # 4022 (for pipe sizes 2" and up)

3) Flow Meter with Pulse (see pages 5 & 6)

## Technical Specifications

Minimum Temperature of Liquid	32°F
Maximum Temperature of Liquid	250°F
Minimum $\Delta T$ (temp. difference)	2°F
Maximum ΔT (temp. difference)	180°F
Ambient Temperature	14°F - 250°F
Temperature Sensor Resistance:	500Ω @ 32°F
	700 <b>Ω</b> @ 212°F

## **Options**

- 1B) Pulse Output Module # 4072
- 1C) Pulse/4-20mA Output Module # 4075

#### **Dimensions**

