LIQUID FLOW METER

DESIGNED TO WITHSTAND THE MOST RIGOROUS FLOW MEASUREMENT APPLICATIONS
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TURBINE FLOW METER

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MODEL 1100
QUIKsert®
MODEL BK2800
MODEL BK2900
MODEL BK3000

For more information please visit Kimray.com
LIQUID FLOW METER

MODEL 1100
TURBINE FLOW METER

QUIKSETR®
TURBINE FLOW METER

MODEL BK2800
MONITOR

MODEL BK2900
MONITOR

MODEL BK3000
MONITOR

EXPLOSION-PROOF ENCLOSURE

EXPLOSION-PROOF ENCLOSURE
INTRODUCTION

The Model 1100 Turbine Flow Meter is designed to withstand the demands of the most rigorous flow measurement applications. Originally developed for the secondary oil recovery market, the Model 1100 is an ideal meter for liquid flow measurement on or off the oilfield.

The meter features a rugged 316 stainless steel housing and rotor support assemblies, CD4MCU stainless steel rotor, and abrasive-resistant tungsten carbide rotor shaft and journal bearings. The Model 1100 maintains measurement accuracy and mechanical integrity in the corrosive and abrasive fluids commonly found in oilfield water flood projects and many industrial applications.

Designed to operate with the Model B2800 Flow Monitor, the Model 1100 turbine meter meets a wide range of measurement requirements. This makes it ideal for applications such as pipelines, production/injection fields, in-situ mining operations, offshore facilities and other industrial applications.

HOW IT WORKS

Fluid entering the meter passes through the inlet flow straightener which reduces its turbulent flow pattern and improves the fluid’s velocity profile. Fluid then passes through the turbine, causing it to rotate at a speed proportional to fluid velocity. As each turbine blade passes through the magnetic field at the base of the transducer, an AC voltage pulse is generated in the pickup coil. These pulses produce an output frequency proportional to the volumetric flow through the meter.

ACCUKIM®

While the standard Kimray turbine meter is highly accurate and precise, sometimes you need more. Kimray offers AccuKim® flow meters for those situations. AccuKim has an accuracy rating of ±0.5% of reading. AccuKim is available in all the same sizes available with the standard Kimray Turbine Meters. Simply add “HA” to the end of the order code when ordering. (i.e. KSB110-375HA)

KEY DESIGN FEATURES

- Rugged 316 stainless steel construction offers long service life in severe operating environments
- Available in NPT, BSP, Victaulic, Flange, or Hose Barbed end connections
- Field replaceable repair kits allow for turbine replacement without loss of accuracy
- Offers accurate and repeatable flow measurement in ranges from 0.6 to 5000 GPM (20 - 171,000 BPD)
- Both the Flow Meter and the repair kits are factory calibrated

For more information please visit Kimray.com
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Body</th>
<th>316 Stainless Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotor</td>
<td>CD4MCU Stainless Steel</td>
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<tr>
<td>Rotor Support</td>
<td>316 Stainless Steel</td>
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<tr>
<td>Rotor Shaft</td>
<td>Tungsten Carbide</td>
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- **Turndown Ratio**: 10:1
- **Flow Accuracy - Standard**: ±1% of reading
- **Flow Accuracy - AccuKim**: ±0.5% of reading
- **Repeatability**: ± 0.1%
- **Calibration**: Water (NIST traceable calibration)
- **Pressure Rating**: 5,000 psi (maximum)
- **Turbine Temperature**: -150 °F to +350 °F (-101 °C to 177 °C)
- **End Connections**: NPT, Victaulic®, Flange, Hose Barbed

### ORDER CODE

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<th>METER SIZE</th>
<th>END CONNECTION</th>
<th>END TO END LENGTH</th>
<th>FLOW RANGES</th>
<th>APPROX. K-FACTOR PULSES/GAL.</th>
<th>REPAIR KIT PART NUMBER</th>
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</tbody>
</table>

Sizes up to 10 inch available in NPT, Victaulic®, Flange, Hose Barbed. Contact Kimray for prices.
TURBINE FLOW METER

INTRODUCTION

The QuikSert in-line turbine flow meter was developed for applications where accuracy and dependability are of concern to the operator. QuikSert’s stainless steel body incorporates a helical turbine with tungsten carbide shaft and bearings. It provides an efficient, long service life and a cost-effective solution for your measurement requirements.

Simple in design and construction, QuikSert utilizes modified upstream and downstream flow straighteners for a high degree of flow accuracy. Its between-the-flange design eliminates the need for mating flanges, requiring less space in the flow line, lowering costs and providing easy, one-man installation.

The meter produces a sine-wave signal proportional to its volumetric flow rate. With optional Kimray electronics, QuikSert provides local flow rate and volume totalization and will interface with most instruments, PLCs and computers.

HOW IT WORKS

Fluid entering the meter first passes through an inlet flow straightener that reduces its turbulent flow pattern. Fluid then passes through the turbine, causing the turbine to rotate at a speed proportional to fluid velocity. As each turbine blade passes through the magnetic field generated by the meter’s magnetic pick-up, an AC voltage pulse is generated. These pulses provide an output frequency that is proportional to volumetric flow.

ACCUKIM®

While the standard Kimray turbine meter is highly accurate and precise, sometimes you need more. Kimray offers AccuKim flow meters for those situations. AccuKim has an accuracy rating of ±0.5% of reading. AccuKim is available in all the same sizes available with the standard Kimray Turbine Meters. Simply add “HA” to the end of the order code when ordering. (i.e. KSB131-038HA)

KEY DESIGN FEATURES

- Modified flow straighteners for enhanced fluid dynamics
- Unique “between-the-flange” design eliminates need for mating flanges
- Superior materials of construction for high performance in aggressive environments
- Accurate (± 1% of reading standard, ± 0.5% optional) and reliable (repeatability ± 0.1%) flow measurement solution
- Wafer-style mounting configuration allowing for limited space requirements
- Both the Flow Meter and the repair kits are factory calibrated

For more information please visit Kimray.com
### Specifications

- **Body and internal wetted parts**: 316L Stainless Steel
- **Bearings**: Tungsten Carbide
- **Turbine**: CD4MCU Stainless Steel
- **Shaft**: Tungsten Carbide

- **Turndown Ratio**: 10:1

- **Flow Accuracy - Standard**: ±1% of reading
- **Flow Accuracy - AccuKim**: ±0.5% of reading

- **Repeatability**: ±0.1%

- **Calibration**: Water (NIST traceable calibration)

- **Turbine Temperature**: -150 °F to +350 °F (-101 °C to 177 °C)
  Temperatures to +450 °F (+232 °C) with high-temp pickup, consult Kimray for details

- **End Connections**: Wafer-style ASME/ANSI B16.5-1996

### Order Code

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<th>DIMENSIONS DIAMETER X LENGTH (IN)</th>
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**Turbine Flow Meter**
**MONITOR**

**MODEL BK2800**

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**INTRODUCTION**

The BK2800 is an advanced microprocessor-based flow monitor that is also low cost and simple to operate. When ordered with a Kimray turbine meter, the BK2800 is configured at the factory for units of rate and total. Or, the unit may be easily programmed in the field. The monitor has a large two-line display and is available in power and mounting options to suit almost any application.

**HOW IT WORKS**

The BK2800 flow monitor accepts a low-level frequency input, such as the input from a Kimray turbine meter, to calculate flow rate and total. These calculations are then displayed in user selected units of measurement. All BK2800 flow monitors come pre-calibrated from the factory if ordered with a Kimray flow meter. However, they can be easily reconfigured in the field. The BK2800 is available in a battery-powered or loop-powered version. The battery version utilizes one “D” size, 1.5 volt alkaline battery that provides up to 3-1/2 years of service.

The loop-powered BK2800 offers a 2-wire 4-20 mA output for electronic integration. The meter mount, remote, swivel and hand-held monitors are equipped with a large 8 digit 3/4” numerical LCD making extended range viewing practical. The second 8 character 3/8” alphanumeric display provides for selectable units viewing in run mode and prompts variables in programming mode. Additionally, the user can choose between displaying rate, total or alternating between both rate and total.

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**KEY DESIGN FEATURES**

- User friendly front panel programming NEMA 4X enclosure suitable for outdoor monitoring (meter, remote and swivel mount versions)

- Large 8 digit 3/4” display for easy viewing

- Battery (1.5 VDC) and Loop-powered (4-20 mA) versions available

- Six mounting options: meter, remote, swivel, hand-held, panel or explosion-proof

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For more information please visit Kimray.com
SPECIFICATIONS

LCD Display
Rate & total, fixed or toggle modes of operation
8 digit, 0.7 inches (18 mm) numeric (top line)
8 character, 0.35 inches (9 mm) alphanumeric
(bottom line); resettable

Battery Power
1 "D" size 1.5 VDC alkaline battery included.
Less than 1 milliwatt (~3.5 years on 1 "D" battery)

Loop-Powered
4-20 mA, two-wire current loop. 25 mA
maximum consumption

Units of Measure: (Rate/total)
(Simplified Version - user selectable)
GPM/gallons, LPM/liters, M3PD/cubic meters,
BPD/barrels, M3PH/cubic meters

Units of Measure: (Total)
(Advanced Version - user selectable)
Gallons, Oil Barrels, Liters, Cubic Meters,
MGal, Cubic Ft, MLiters,
MCF, MMCF, Acre Ft, Liquid Barrels, Lbs, Kgs

CERTIFICATIONS
CSA Intrinsically Safe
Class I, Division 1, Groups C & D
Class II, Division 1, Groups E, F & G

CE
IEC 61326-1

CSA: (Panel Mount Only)
Ordinary Area

CSA Hazardous Locations
Class I, Division 1, Groups B, C & D
(Explosion-Proof Model Only) Class II, Groups E,
F & G Class III, Type 4, T6 @ 70 C

Model B311 Meter & Flow Monitor Packages (Measured in Barrels)

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<th>METER SIZE</th>
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INTRODUCTION

The Kimray BK2900 Flow Monitor offers advanced digital signal processing technology in an easy-to-access package. Enclosed in a spacious polycarbonate NEMA 4X housing, the electronics are located on a single board, designed for straightforward and convenient field installation. The BK2900 enclosure features an LCD display with push-button programming as well as a pre-drilled hole for external wiring connections, such as Modbus RTU and other outputs.

HOW IT WORKS

This monitor can accept low-level frequency input signals typically found in turbine flow sensors. The output signal for these types of sensors is a frequency proportional to the rate of flow. The BK2900 monitor uses the frequency information to calculate flow rate and total flow. Through the use of the programming buttons, you can select rate units, total units and unit time intervals among other functions, and the monitor can easily be re-configured in the field.

KEY DESIGN FEATURES

- Robust alarm parameters provide faster warning when something changes in the process or pipeline
- Greater control and greater visibility of batch operations
- Advanced connectivity options allow you to connect meters to your network for remote monitoring and process automation capabilities
- Updated display and totalization options provide more flow information, including simultaneous display of rate and total as well as standard, batch and grand totals
- Various mounting options provide a BK2900 model for your operation

ORDER CODE | DESCRIPTION
--- | ---
KSB29AM-CS | B2900 FLOW MONITOR METER MOUNT
KSB29AR-CS | B2900 FLOW MON. REMOTE MOUNT
KSB29AS-CS | B2900 FLOW MON. SWIVEL MOUNT

For more information please visit Kimray.com
## Specifications

### Display
- Common: Simultaneously shows Rate and Total
- 5 x 7 Dot Matrix LCD, STN Fluid
- 8 Digit Rate, 0.5 inch (12.7 mm) numeric
- 7 Digit Total, 0.5 inch (12.7 mm) numeric
- Engineering Unit Labels 0.34 in. (8.6 mm)

### Annunciators
- Alarm 1(&nbsp; ), Alarm 2 (&nbsp; ), Battery Level ( ), RS485 Communications ( COM )

### Power
- Auto switching between internal battery and external loop power; includes isolation between loop power and other I/O
- Battery: 3.6V DC lithium D Cell gives up to 6 years of service life
  - Note: Modbus enabled at baud rate of 19,200 or higher without loop power reduces battery life to 1 year
- Loop: 4…20 mA, two wire, 25 mA limit, reverse polarity protected, 7V DC loop loss

### Inputs
- Magnetic Pickup
  - Frequency Range: 1…3500 Hz
  - Frequency Measurement Accuracy: ±0.1%
  - Over Voltage Protection: 28V DC
  - Trigger Sensitivity: 30 mVp-p (High) or 60 mVp-p (Low) - (selected by circuit board jumper)

### Outputs
- Analog 4…20 mA
  - 4…20 mA, two-wire current loop
  - 25 mA current limit
- Totalizing Pulse
  - One pulse for each Least Significant Digit (LSD) increment of the totalizer
  - Pulse Type (selected by circuit board jumper):
    - Opto-isolated (Iso) open collector transistor
    - Non-isolated open drain FET
  - Maximum Voltage: 28V DC
  - Maximum Current Capacity: 100 mA
  - Maximum Output Frequency: 16 Hz
  - Pulse Width: 30 mSec fixed

### Status Alarms
- Type: Open collector transistor
  - Adjustable flow rate with programmable dead band and phase.
- Maximum Voltage: 28V DC
- Maximum Current: 100 mA
- Pullup Resistor: External required: 2.2 k ohm minimum, 10 k ohm maximum

### Modbus Digital Communications
- Modbus RTU over RS485, 127 addressable units / 2-wire plus ground network, selectable baud rate: 9600, 19200, 38400, 57600 or 115200, long integer and single precision IEEE754 formats; retrieve: flow rate, job totalizer, grand totalizer, alarm status and battery level; write: reset job totalizer, reset grand totalizer

### Data Configuration and Protection
- Two four-digit user selectable passwords; level one password enables job total reset only, level two password enables all configuration and totalizer reset functions

### Certifications
- Safety: Class I Division 1, Groups C, D; Class II, Division 1 Groups E, F, G; Class III for US and Canada. Complies with UL 913 and CSA C22.2 No. 153
- Entity Parameters
  - 4…20 mA Loop: Vmax = 28V DC  Imax = 26 mA  C = 0.5 μF  L = 0 mH
  - Pulse Output: Vmax = 28V DC  Imax = 100 mA  C = 0 μF  L = 0 mH
  - Reset Input: Vmax = 5V DC  Imax = 5 mA  C = 0 μF  L = 0 mH
  - RS485: Vmax = 10V DC  Imax = 60 mA  C = 0 μF  L = 0 mH
  - Turbine Input: V = 2.5V  Isc = 1.8 mA  Ca = 1.5 μF  La = 1.65 H
- EMC: IEC61326-1; 2004/108/EC
- Measurement Accuracy
  - Common Accuracy: 0.05%
- Response Time (Damping)
  - Common Response Time: 1…100 seconds response to a step change input, user adjustable
- Environmental Limits
  - Common Limits: −22…158° F (−30…70° C); 0…90% humidity, non-condensing
- Materials and Enclosure Ratings
  - Polycarbonate, stainless steel, polyurethane, thermoplastic elastomer, acrylic; NEMA 4X/IP 66 meter, remote and swivel mount; NEMA/UL/CSA Type 4X (IP-66)
- Engineering Units
  - Liquid: US Gallons, Liters, Oil Barrels (42 gallon), Liquid Barrels (31.5 gallon), Cubic Meters, Million Gallons, Cubic Feet, Million Liters, Acre Feet
  - Gas: Cubic Feet, Thousand Cubic Feet, Million Cubic Feet, Standard Cubic Feet, Actual Cubic Feet, Normal Cubic Meters, Actual Cubic Meters, Liters
  - Rate Time: Seconds, minutes, hours, days
  - Totalizer Exponents: 0.00, 0.1, x10, x100, x1000
  - K-factor Units: Pulses/US Gallon, Pulse/Cubic Meter, Pulses/Liter, Pulses/Cubic Foot
**INTRODUCTION**

The BK3000 Series flow meter from Kimray provides you with a flexible, durable, easy-to-use platform for your flow metering applications. The BK3000 Series makes it easy to monitor flow, with a crisp dot-matrix display capable of simultaneous display of flow rate and flow total. With a wide variety of enclosure options for both liquid and gas applications, from intrinsically safe and explosion-proof (flameproof) ratings, to an innovative solar-powered model, there’s a BK3000 to suit your needs. Intrinsically safe models are housed in a UV-resistant, NEMA 4X-rated, enclosure available in direct, panel, pipe, DIN-rail or swivel mounts.

**HOW IT WORKS**

The BK3000 Series was designed with smart management of unit power in mind. All units feature extremely low power consumption in normal operating conditions and are both 4-20mA loop and battery-powered*. You’ll never have to worry about losing power, and the onboard battery will last up to 8 years.

The BK3000 Series also provides you with powerful operating features. Multi-point linearization tables are supported in all models, providing increased reading accuracy. Accessing the powerful advanced programming mode is as easy as pressing a single button. The standard communications interface is 4-20mA and total pulse, while the advanced interface adds two control alarms and Modbus RTU over RS485.

Kimray’s trusted flow metering technology is now available with more options and features than ever before with the BK3000 Series.

*Solar version available as battery-powered monitor only

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**ORDER CODE | DESCRIPTION**

<table>
<thead>
<tr>
<th>ORDER CODE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>KSB30AM-CS</td>
<td>KSB B3000 ADVANCE METER MOUNT</td>
</tr>
<tr>
<td>KSB30AR-CS</td>
<td>KSB B3000 ADVANCE REMOTE MOUNT</td>
</tr>
<tr>
<td>KSB30AS-CS</td>
<td>KSB B3000 ADVANCE SWIVEL MOUNT</td>
</tr>
<tr>
<td>KSB30BM-CS</td>
<td>MONITOR B3000 BASE BP MM</td>
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<tr>
<td>KSB30BR-CS</td>
<td>KSB B3000 BASE REMOTE MOUNT</td>
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<tr>
<td>KSB30BS-CS</td>
<td>KSB B3000 BASE SWIVEL MOUNT</td>
</tr>
<tr>
<td>KSB30SM-CS</td>
<td>KSB B3000 SOLAR METER MOUNT</td>
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<td>KSB30YR-CS</td>
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<td>KSB30ZRCS</td>
<td>MONITOR B3000 ADV BP RM XP</td>
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For more information please visit Kimray.com
## SPECIFICATIONS

### Display

<table>
<thead>
<tr>
<th>Common</th>
<th>Simultaneously shows Rate and Total</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>5 x 7 Dot Matrix LCD, STN Fluid</td>
</tr>
<tr>
<td></td>
<td>6 Digit Rate, 0.5 inch (12.7 mm) numeric</td>
</tr>
<tr>
<td></td>
<td>7 Digit Total, 0.5 inch (12.7 mm) numeric</td>
</tr>
<tr>
<td></td>
<td>Engineering Unit Labels 0.34 in. (8.6 mm)</td>
</tr>
<tr>
<td>Explosion Proof</td>
<td>6 Digit Rate, 0.37 inch (9.4 mm) numeric</td>
</tr>
<tr>
<td></td>
<td>7 Digit Total, 0.37 inch (13 mm) numeric</td>
</tr>
<tr>
<td></td>
<td>Engineering Unit Labels 0.24 inch (6.1 mm)</td>
</tr>
</tbody>
</table>

### Annunciators

- Alarm 1
- Alarm 2
- Battery Level
- RS485 Communications (COM)

### Power

- Auto switching between internal battery and external loop power; explosion proof includes isolation between loop power and other I/O

- Battery
  - 3.6V DC Lithium D Cell gives up to 6 years of service life
  - Note: Modbus enabled at baud rate of 19,200 or higher without loop power reduces battery life to 1 year

- Loop
  - 4…20 mA, two wire, 25 mA limit, reverse polarity protected, 7V DC loop loss

- Solar Battery
  - Internal battery (3.6V DC Nicd) provides up to 30 days of power after 6…8 hours exposure of the integrated photovoltaic cell to direct sunlight.

### Inputs

#### Magnetic Pickup

- Frequency Range: 1…3500 Hz
- Frequency Measurement Accuracy: ±0.1%
- Over Voltage Protection: 28V DC
- Trigger Sensitivity: 30 mVp-p (High) or 60 mVp-p (Low) - (selected by circuit board jumper)

#### Amplified Pulse

- Direct connection to amplified signal (pre-amp output from sensor)

### Outputs

#### Analog 4…20 mA

- One pulse for each Least Significant Digit (LSD) increment of the totalizer
- Pulse Type (selected by circuit board jumper): Opto-isolated (iso) open collector transistor
- Non-isolated open drain FET

- Maximum Voltage: 28V DC
- Maximum Current Capacity: 100 mA
- Maximum Output Frequency: 16 Hz
- Pulse Width: 30 mSec fixed

### Status Alarms

- Type: Open collector transistor
- Adjustable flow rate with programmable dead band and phase.

- Maximum Voltage: 28V DC
- Maximum Current: 100 mA
- Pullup Resistor: External required: 2.2 k ohm minimum, 10 k ohm maximum

### Modbus Digital Communications

- Modbus RTU over RS485, 127 addressable units / 2-wire network, 9600 baud, long integer and single precision IEEE754 formats; retrieve: flow rate, job totalizer, grand totalizer, alarm status and battery level; write: reset job totalizer, reset grand totalizer (None on Solar and Explosion Proof)

### Data Configuration and Protection

- Two four-digit user selectable passwords; level one password enables job total reset only, level two password enables all configuration and totalizer reset functions

### Certifications

#### Safety

- Class I Division 1, Groups C, D; Class II, Division 1 Groups E, F, G; Class III for US and Canada. Complies with UL 913 and CSA C22.2 No. 153
- Explosion: Class I Division 1 Groups B, C, D; Class II, Division 1, Groups E, F, G; Class III for US and Canada Complies with UL 1203 and CSA C22.2 No. 30
- ATEX II 2 G Ex d IIC T4 Gb and ATEX II D Ex tb IIIC T125 °C Db
- Complies with Directive 94/9/EC.

### Entity Parameters

<table>
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<tr>
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<th>Base</th>
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<tbody>
<tr>
<td>4…20 mA Loop</td>
<td>Vmax = 28V DC</td>
</tr>
<tr>
<td></td>
<td>Imax = 26 mA</td>
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<tr>
<td></td>
<td>Ci = 0.5 μF</td>
</tr>
<tr>
<td></td>
<td>Li = 0 mH</td>
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</table>

<table>
<thead>
<tr>
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<th>Base &amp; Solar</th>
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<tbody>
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<td>Imax = 100 mA</td>
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<tr>
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<td>Ci = 0 μF</td>
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<td>Li = 0 mH</td>
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<thead>
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<th></th>
<th>Base &amp; Solar</th>
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<tbody>
<tr>
<td>Reset Input</td>
<td>Vmax = 5V DC</td>
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<td></td>
<td>Imax = 5 mA</td>
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<tr>
<td></td>
<td>Ci = 0 μF</td>
</tr>
<tr>
<td></td>
<td>Li = 0 mH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Base &amp; Solar</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS485: Vmax = 10V DC</td>
<td>Imax = 60 mA</td>
</tr>
<tr>
<td>Pulse Type</td>
<td>Ci = 1.8 μF</td>
</tr>
<tr>
<td></td>
<td>Ca = 1.5 μF</td>
</tr>
<tr>
<td></td>
<td>La = 1.65 H</td>
</tr>
</tbody>
</table>

### EMC

- 2004/108/EC

### Measurement Accuracy

- Common Accuracy: 0.05%

### Response Time (Damping)

- Common Response Time: 1…100 seconds response to a step change input, user adjustable

### Environmental Limits

- Common Limits: -22…158° F (–30…70° C); 0…90% humidity, non-condensing

### Materials and Enclosure Ratings

- Polycarbonate, stainless steel, polyurethane, thermoplastic elastomer, acrylic; NEMA 4X/IP 66 meter, remote and swivel mount; NEMA/UL/CSA Type 4X (IP-66) EXPLOSION PROOF: Copper free, epoxy-coated, aluminum, buna seal, NEMA 4X/IP66

### Engineering Units

#### Liquid

- US Gallons, Liters, Oil Barrels (42 gallon), Liquid Barrels (31.5 gallon), Cubic Meters, Million Gallons, Cubic Feet, Million Liters, Acre Feet

#### Gas

- Cubic Feet, Thousand Cubic Feet, Million Cubic Feet, Standard Cubic Feet, Actual Cubic Feet, Normal Cubic Meters, Actual Cubic Meters, Liters

### Rate Time

- Seconds, minutes, hours, days

### Totalizer Exponents

- 0.00, 0.0, X1, x10, x100, x1000

### K-factor Units

- Pulses/US Gallon, Pulse/Cubic Meter, Pulses/Liter, Pulses/Cubic Foot
## MOUNTING OPTIONS AND DIMENSIONS

### SWIVEL MOUNT

- A: 12.25 in. (311.2 mm)
- B: 7.00 in. (177.8 mm)
- C: 5.75 in. (146.0 mm)
- D: 4.00 in. (101.6 mm)
- E: 3.45 in. (87.6 mm)
- F: 1.50 in. (38.1 mm)
- G: dia 0.875 in. (22.2 mm)
- H: 1.50 in. (38.1 mm)
- I: dia 0.875 in. (22.2 mm)

### METER MOUNT

- A: 9.25 in. (235.0 mm)
- B: 7.00 in. (177.8 mm)
- C: 5.75 in. (146.0 mm)
- D: 4.00 in. (101.6 mm)
- E: 3.45 in. (87.6 mm)
- F: 1.50 in. (38.1 mm)
- G: dia 0.875 in. (22.2 mm)
- H: 1.50 in. (38.1 mm)
- I: dia 0.875 in. (22.2 mm)

### REMOTE MOUNT

- A: 7.00 in. (177.8 mm)
- B: 7.00 in. (177.8 mm)
- C: 2.40 in. (61.0 mm)
- D: 5.75 in. (146.0 mm)
- E: 4.38 in. (111.2 mm)
- F: 1.50 in. (38.1 mm)
- G: dia 0.875 in. (22.2 mm)
- H: 25 in. dia (64 mm) 4 HOLE

Mounting options and dimensions shown above are for BK2900.
Kimray designs and manufactures oil and gas control products. Based on over 65 years of pioneering product development, we provide products and services that work better, smarter and are more inventive. We generate meaningful solutions by staying curious and engaging in customers’ needs. Our product ideas are fueled by a deep desire to make a difference that is both personal and unique to the customer.

We have made it our life’s work to provide products and services that are positively impactful. Through the years this pursuit has built strong relationships. Our customers have known that when buying from Kimray, it’s about much more than the product. The relationships between Kimray representatives and our customers extend from before the sale through the life of the product. Those relationships, along with quality Kimray products are the result of a company striving for excellence for our customers, our company and our community.

Visit Kimray.com to learn more about our company and the products we create.