

## PADDLEWHEEL FLOWMETERS

THE BW DIGI-METER® IS THE METER OF CHOICE WHEN YOUR APPLICATION REQUIRES AN INNOVATIVE, ACCURATE AND VERSATILE DIGITAL FLOWMETER.

### BW DIGI-METER® F-1000 PADDLEWHEEL FLOWMETER

BLUE-WHITE'S CAREFULLY ENGINEERED BW DIGI-METER® F-1000 SERIES INCLUDE PREMIER FEATURES AND PROVIDE OUTSTANDING PERFORMANCE.

Three versions of the BW DIGI-METER® F-1000 are offered. The F-1000RB Unit is a rate meter only; the F-1000TB Unit is a flow totalizer; and the F-1000RT Unit is both a Rate Meter and Flow Totalizer. BW DIGI-METERS are available with a number of configuration and mounting style options. If you don't see the unit that meets your requirements here, please contact our courteous and knowledgeable staff for assistance.

#### F-1000 BENEFITS

- Easy to read six digit LCD, up to four decimal positions.
- Tamper proof.
- Battery operated (2 AAA batteries included).
- Three model variations:
  - RB = RATE ONLY
  - TB = TOTAL ONLY
  - RT = RATE & TOTALIZER
- Total reset function can be disabled.
- Display update time: Rate 1.5 sec., Total 0.5 sec.
- Factory calibrated - nothing to program.
- Custom calibration units available. Contact the factory.
- Weather resistant ABS enclosure. NEMA 4X
- Calibration Units: GPM, LPM, m3/min, oz/min, GPH, LPH.
- LCD is not recommended for direct sunlight applications.

#### F-1000 SPECIFICATIONS WITH SADDLE MOUNT BODY

Max. Working Pressure ..... 300 psig (20 bar) @ 70° F (21° C)  
 Max. Fluid Temperature ..... 200° F (93° C) @ 0 PSI (all PVDF saddle fittings)  
 ..... 140° F (60° C) @ 0 PSI (all PVC saddle fittings)  
*Note: Temperature rating of F-1000 only. Actual pipe rating may vary.*  
 Full scale accuracy ..... +/- 2%  
 Saddle material ..... PVDF (1-1/2", 2", 3", 50mm, 63mm, 90mm sizes)  
 ..... PVC (all other sizes)  
 Sensor/Paddle/Axle material ..... PVDF  
 O-ring seals ..... FKM (Optional EP)  
 Max. pressure drop ..... 0 psi (no significant drop)  
 Approximate shipping wt. .... 2 lb. (.91 kg)

#### WITH SOLVENT WELD OR STAINLESS STEEL TEE BODY

Max. Working Pressure ..... 300 psig (20 bar) @ 70° F (21° C)  
 316 SS Tee fittings ..... 300 psig (20 bar) @ 70° F (21° C)  
 PVC Tee fittings ..... 200 psig (13.8 bar) @ 70° F (21° C)  
 Max. Fluid Temperature ..... 200° F (93° C) @ 0 PSI  
 316 SS Tee fittings ..... 200° F (93° C) @ 0 PSI  
 PVC Tee fittings ..... 140° F (60° C) @ 0 PSI  
 Full scale accuracy ..... +/- 2%  
 Tee material options ..... 316 Stainless Steel, PVC  
 Body, Paddle, Axle material ..... PVDF  
 O-ring seals ..... FKM (Optional EP)  
 Max. pressure drop ..... 0 psi (no significant drop)  
 Approximate shipping wt. .... 2 lb. (.91 kg)

#### WITH MOLDED IN-LINE BODY

Max. Working Pressure ..... 300 psig (20 bar) @ 70° F (21° C)  
 Max. Fluid Temperature ..... 200° F (93° C) @ 0 PSI  
 Full scale accuracy ..... +/- 2%  
 Meter body material ..... Polysulfone  
 Sensor/Paddle/Axle material ..... PVDF  
 O-ring seals ..... FKM (Optional EP)  
 Max. pressure drop ..... 8 psi (varies per model)  
 Approximate shipping wt. .... 2 lb. (.91 kg)



**BW DIGI-METER® F-1000 WITH SOLVENT TEE BODY**  
**PIPE SIZES**  
 1", 1-1/2", 2", 3"



**BW DIGI-METER® F-1000 WITH SADDLE MOUNT**  
**PIPE SIZES**  
 1-1/2", 2", 2-1/2", 3", 4", 6", 8", 10", 12"



**BW DIGI-METER® F-1000 WITH MOLDED IN-LINE BODY**  
**PIPE SIZES**  
 1/4", 3/8", 1/2", 3/4", 1", 2" M/NPT

# BW DIGI-METER® F-2000 PADDLEWHEEL FLOWMETER

THE THOUGHTFULLY ENGINEERED BW DIGI-METER® F-2000 COMBINE INNOVATIVE FEATURES AND BENEFITS, AND THE FINEST MATERIALS OF CONSTRUCTION TO PROVIDE AN ACCURATE AND VERSATILE DIGITAL FLOWMETER.

If you don't see the unit that matches your requirements listed here, please contact our courteous and knowledgeable staff for assistance.

## FOUR MODEL VARIATIONS

**RT** = Rate and Totalizer. Transformer or battery operated.

**AO** = 4-20mA, 0-10 VDC analog output, flow rate & totalizer. Transformer operated.

**PC** = Batch processing, flow rate alarm, proportional chemical metering, flow rate and totalizer. Transformer operated.

**AP** = Analog output, batch processing, flow rate alarm, proportional chemical metering, flow rate and totalizer. Transformer operated.

## F-2000 BENEFITS

- Easy to read 8 digit LCD, up to 4 decimal positions.
- Flow rate and Total flow display.
- AC/DC transformer or battery operated (RT models only). 4 AA batteries.
- Factory programmed with calibration certificate.
- Field programmable via front panel touch pad.
- Front panel security lockout.
- Total reset function can be disabled.
- Weather resistant ABS enclosure. NEMA 4X.
- Note: LCD is not recommended for direct sunlight applications.
- Panel mounting option available.
- Custom calibration units available. Contact the factory.

## F-2000 SPECIFICATIONS

### WITH SADDLE MOUNT BODY

Max. Working Pressure ..... 300 psig (20 bar) @ 70° F (21° C)

Max. Fluid Temperature ..... 200° F (93° C) @ 0 PSI  
(all PVDF saddle fittings)  
..... 140° F (60° C) @ 0 PSI  
(all PVC saddle fittings)

*Note: Temperatures rating of F-2000 only. Actual pipe rating may vary.*

Full Scale Accuracy ..... +/- 1%

Sensor/Paddle/Axle Material ..... PVDF

O-ring Seals ..... FKM

Max. Pressure Drop ..... 0 psi (no significant pressure drop)

Approx. Shipping Weight ..... 4lb. (1.8 kg)

### WITH SOLVENT WELD OR STAINLESS STEEL TEE BODY

Max. Working Pressure

316 SS Tee fittings ..... 300 psig (20 bar) @ 70° F (21° C)

PVC Tee fittings ..... 200 psig (13.8 bar) @ 70° F (21° C)

Max. Fluid Temperature

316 SS Tee fittings ..... 200° F (93° C) @ 0 PSI

PVC Tee fittings ..... 140° F (60° C) @ 0 PSI

Full scale accuracy ..... +/- 1%

Tee material options ..... 316 Stainless Steel, PVC

Body, Paddle, Axle material ..... PVDF

O-ring seals ..... FKM (Optional EP)

Max. pressure drop ..... 0 psi (no significant drop)

Approximate shipping wt. .... 4 lb. (.91 kg)

### WITH MOLDED IN-LINE BODY

Max. Working Pressure ..... 300 psig (20 bar) @ 70° F (21° C)

Max. Fluid Temperature ..... 200° F (93° C) @ 0 PSI

Full Scale Accuracy ..... +/- 1%

Sensor/Paddle/Axle Material ..... PVDF

O-ring Seals ..... FKM

Max. Pressure Drop ..... 8 psi (varies per model)

Approx. Shipping Weight ..... 4lb. (1.8 kg)

### BW DIGI-METER® F-2000 WITH MOLDED IN-LINE BODY

PIPE SIZES  
3/8", 1/2", 3/4", 1", 1-1/2", 2"



### BW DIGI-METER® F-2000 WITH SOLVENT TEE BODY

PIPE SIZES  
1", 1-1/2", 2", 3"

### BW DIGIMETER® F-2000 WITH SADDLE MOUNT

PIPE SIZES  
1-1/2", 2", 2-1/2", 3",  
4", 6", 8", 10", 12"



### BW DIGI-METER® F-2000 PANEL MOUNT



# BW DIGI-METER® F-2000 FLOW MONITORING SYSTEM

BW DIGI-METER® F-2000 SERIES ELECTRONIC INSERTION STYLE FLOWMETERS, ARE WELL SUITED FOR MONITORING FLOW IN MUNICIPAL WATER AND WASTEWATER APPLICATIONS.

The clamp on saddle fitting and insertion sensor is quickly installed on IPS (ASTM-D-1785) pipe sizes from 1-1/2" through 12" and metric (DIN 8062) pipe sizes from 50mm through 315mm. The electronic display and communication enclosure can be mounted directly to the sensor, or remotely mounted to a pipe or panel.

Standard F-2000 models display flow rate and accumulated total flow, and include an NPN open collector output for communication with data loggers, SCADA systems, and other external devices. For additional information and assistance, please contact the factory.



BW DIGI-METER®  
F-2000 FLOW MONITORING SYSTEM

# BW DIGI-METER® F-2000 WITH DIGITAL HALL EFFECT OUTPUT SIGNAL

## F-2000 BENEFITS

- > TTL/CMOS compatible, current sinking output signal.
- > Optional AC sine wave output sensor available.
- > One mile signal range without boosters.
- > NEMA 4X rated.

## F-2000 SPECIFICATIONS

Max. Working Pressure ..... 300 psig (20 bar) @ 70°F (21°C)

Max. Fluid Temperature ..... 200°F (93°C) @ 0 PSI  
(Polypro and PVDF saddles)  
140°F (60°C) @ 0 PSI  
(PVC saddles and TEE fittings)

*Note: Temperatures rating of F-2000 only. Actual pipe rating may vary.*

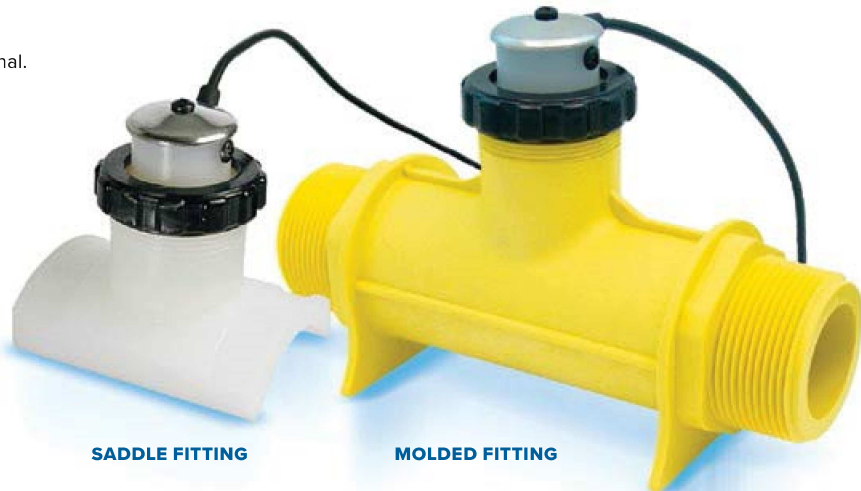
Power Requirements ..... FH: 6-24 VDC, AC/DC transformer sold separately.  
FC: None

Full Scale Accuracy ..... +/- 1%

Sensor/Paddle/Axle Material . PVDF

O-ring Seals ..... FKM (Optional EP)

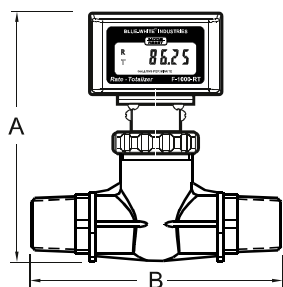
Approx. Shipping Weight .... 2 lb. (0.9 kg)



SADDLE FITTING

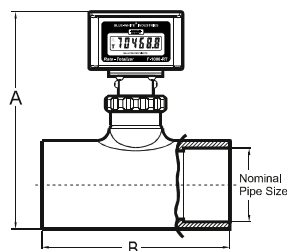
MOLDED FITTING

# BW DIGI-METER® F-1000 & F-2000 DIMENSIONS



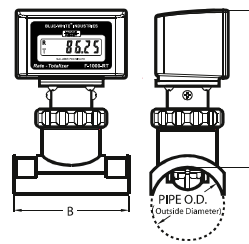
F-1000 with  
MOLDED In-Line Body

PIPE SIZE	A	B
3/8" MPT	5-3/8"	4-3/4"
1/2" MPT	5-3/8"	5-1/8"
3/4" MPT	5-3/8"	5-1/4"
1" MPT	5-3/8"	5-5/8"
1-1/2" MPT	6-1/8"	6-1/2"
2" MPT	6-3/8"	6-3/4"



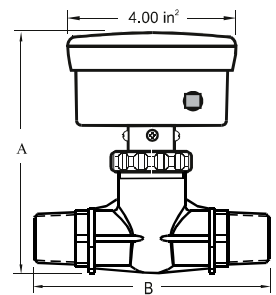
F-1000 with  
SOLVENT TEE Body

PIPE SIZE	A	B
1"	6"	4"
1-1/2"	6-5/8"	4-1/2"
2"	7-1/8"	4-3/4"
3"	8"	5-1/2"



F-1000 with  
SADDLE MOUNT Body

PIPE SIZE (mm)	A	B
150(050)	4-5/16"	3-3/16"
200(063)	4-5/16"	3-3/16"
300(090)	4-5/16"	3-3/16"
400(110)	4-5/16"	3-3/16"
600(160)	4-1/4"	3-3/16"
800(200)	4-1/4"	3-3/16"
1000(250)	4-1/4"	4-1/2"
1200(315)	4-1/4"	4-1/2"



F-2000 with  
MOLDED In-Line Body

PIPE SIZE	A	B
3/8" MPT	5-7/8"	4-3/4"
1/2" MPT	5-7/8"	5-1/8"
3/4" MPT	6"	5-1/4"
1" MPT	6"	5-5/8"
1-1/2" MPT	6-1/2"	7"
2" MPT	6-3/4"	7"

# BW DIGI-METER® F-1000 & F-2000 INSTALLATION OPTIONS

**BLUE-WHITE F-1000 AND F-2000 FLOWMETER** model numbers include a pipe fitting as part of the complete model number. Although it is possible to purchase the pipe fittings separately, it is not necessary.

## MOLDED IN-LINE

- One piece injection molded construction.
- Male pipe thread In-line installation.
- Polypropylene fittings for standard applications.
- PVDF material for highly corrosive applications.

## MOLDED IN-LINE SPECIFICATIONS

Max. PSI ..... 300 psig (20 bar) @ 70° F (21° C)  
Max. Temp ..... 200° F (93° C) @ 0 PSI

Note: Temperature rating of pipe fitting only.  
Actual pipe rating may vary.

## PIPE SIZES:

3/8", 1/2", 3/4", 1", 1-1/2", 2" M/NPT



**SADDLE FITTINGS**

## SADDLE FEATURES

- 1-1/2" thru 3" (50mm thru 90mm) injection molded PVDF.
- 4" thru 12" (110mm thru 315mm) machined from solid PVC sheet stock.
- Installs on existing pipe – no other fittings are required.
- No added pressure drop to system.
- Ships with metal clamps to secure fitting to pipe.

## SADDLE SPECIFICATIONS

Max. PSI ..... 300 psig (20 bar) @ 70° F (21° C)

Max. Temp ..... 200° F (93° C) @ 0 PSI (PVDF)

140° F (60° C) @ 0 PSI (PVC)

Note: Temperature rating of pipe fitting only. Actual pipe rating may vary.

## I.P.S. PIPE SIZES:

1-1/2", 2", 2-1/2", 3", 4", 6", 8", 10", 12"

## METRIC PIPE SIZES:

50, 63, 90, 110, 160, 200, 250, 315MM



**MOLDED FITTINGS**



**TEE FITTINGS**

## TEE FEATURES

- Easy to install.
- No added pressure drop to system.

## TEE SPECIFICATIONS

Max. PSI

316 SS TEE ..... 300 psig (20 bar) @ 70° F (21° C)

PVC TEE ..... 200 psig (13.8 bar) @ 70° F (21° C)

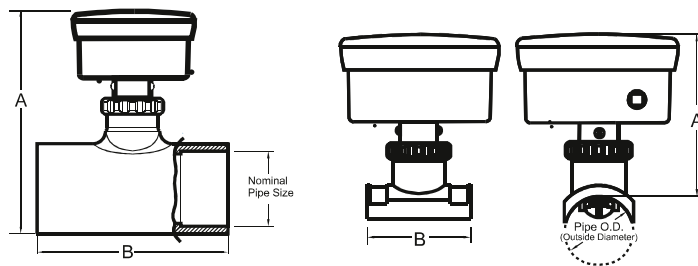
Max. Temp

316 SS TEE ..... 200° F (93° C) @ 0 PSI

PVC TEE ..... 140° F (60° C) @ 0 PSI

## PIPE SIZES:

1", 1-1/2", 2", 3"



### F-2000 with SOLVENT TEE Body

PIPE SIZE	A	B
1"	6"	4"
1-1/2"	6-5/8"	4-1/2"
2"	7-1/8"	4-3/4"

### F-2000 with SADDLE MOUNT Body

PIPE SIZE (mm)	A	B
150(050)	4-1/2"	3-3/16"
200(063)	4-1/2"	3-3/16"
300(090)	4-1/2"	3-3/16"
400(110)	4-1/2"	3-3/16"
600(160)	4-3/8"	3-3/16"
800(200)	4-3/8"	3-3/16"
1000(250)	4-3/8"	4-1/2"
1200(315)	4-1/2"	4-1/2"