

# F-2000

## Digital Paddlewheel Flow Meter



### Features

- > 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
- > Front panel security lockout
- > 4-20ma and 0-10VDC output models
- > Batch Processing and Flow Rate Alarms

Video link: 

**NEMA 4X**

### Highlights

#### Flow range

.4 - 8,000 GPM  
1 to 27,000 LPM

#### Pressures

300 PSI  
(20 bar)

#### Pressure drop

0 - 8 PSI  
(varies per model)

#### Full Scale Accuracy

+/- 1%

#### Power supply

15-24 VDC  
115V/230V60z, 220V/50Hz  
Battery operated

#### Warranty

1 Year

### Available Models



Molded Fittings



Saddle Mount  
Fittings

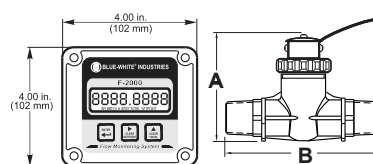
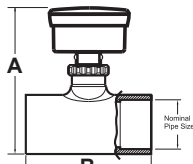
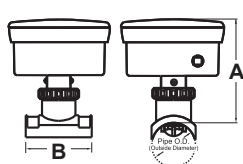


PVC Fittings



<b>Maximum Working Pressure</b>	300 PSI (20 bar) @ 70 °F (21 °C)
	200 °F (93 °C) @ 0 PSI (PVDF saddles and PP Molded fittings)
<b>Maximum Fluid Temperature</b>	140 °F (60 °C) @ 0 PSI (PVC saddles and PVC Tee fittings)
	<b>NOTE:</b> Temperature rating of F-2000 only. Actual pipe rating may vary.
<b>Maximum Ambient Temperature</b>	14 °F to 110 °F/ -10 °C to 43 °C
<b>Maximum Pressure Drop</b>	up to 8 PSI (varies per model)
<b>Full Scale Accuracy</b>	+/- 1%
<b>Power Requirement</b>	15 VDC Nominal (15 - 24 VDC Absolute)
<b>Model RT units only</b>	4 AA batteries or 15 - 24 VDC plug-in transformer
<b>All units</b>	15 - 24 VDC (plug-in transformer supplied)
<b>Signal Distance</b>	AC sine wave sensor = 200 ft (60 m) Hall Effect sensor = 1 mile (1.6 km)
<b>Signal Cable</b>	3 conductor shielded. Included 25 ft(7.6 m)(Option for 50 ft and 100 ft)
<b>Approximate Shipping Weight</b>	4 lb. (1.8 kg)
<b>Enclosure</b>	NEMA 4X (IP56)
<b>RoHS Compliant</b>	Yes
<b>BABAA Compliant</b>	Yes

## Dimensions



Saddle Fittings		
Pipe Size	A	B
1-1/2"(50mm)	4-1/2"	3-3/16"
2"(63mm)	4-1/2"	3-3/16"
3"(90mm)	4-1/2"	3-3/16"
4"(110mm)	4-1/2"	3-3/16"
6"(160mm)	4-3/8"	3-3/16"
8"(200mm)	4-3/8"	3-3/16"
10"(250mm)	4-1/2"	4-1/2"
12"(315mm)	4-1/2"	4-1/2"

PVC Tee		
Pipe Size	A	B
1"	6"	4"
1-1/2"	6-5/8"	4-1/2"
2"	7-1/8"	4-3/4"

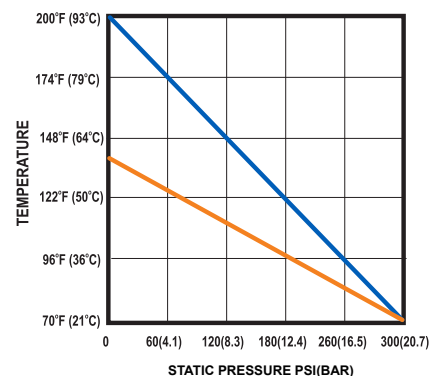
Molded Fittings		
Pipe Size	A	B
3/8"	3-3/4" (95)	4-3/4" (121)
1/2"	3-3/4" (95)	5-1/8" (130)
3/4"	4" (102)	5-1/4" (133)
1"	4" (102)	5-5/8" (143)
1-1/2"	4-1/2" (114)	6-1/2" (165)
2"	4-3/4" (121)	6-3/4" (171)

## Performance

### Digital Paddlewheel Flow Meter

— PVC Saddles & PVC Tees  
— PVDF Saddles & PP Tees

Maximum Temperature vs. Pressure



<b>Saddle material:</b>	PVDF ( 1-1/2", 2", 3", 50mm, 63mm, 90mm sizes) PVC (other sizes)
<b>In-Line Molded Tee:</b>	Polypropylene
<b>Sensor, paddlewheel, axle:</b>	PVDF
<b>Sensor O-ring seals:</b>	FKM (optional EP)

## Ordering Information

### Molded In-Line Pipe Fittings

Pipe Size M/NPT	GPM Flow Range	LPM Flow Range	M³/HR Flow Range	Fitting Number		Flow Range
				MNPT (MI)	MBSPT (MB)	
<b>3/8"</b>	.8 to 8	3 - 30	0.2 - 1.8	38M1	38MB1	<b>1</b>
<b>3/8"</b>	.4 to 4	1 - 10	0.1 - 0.6	38M2	38MB2	<b>2</b>
<b>1/2"</b>	2 to 20	7 - 70	0.4 - 4.2	50M1	50MB1	<b>1</b>
<b>3/4"</b>	3 -30	11 - 110	0.7 - 6.6	75M1	75MB1	<b>1</b>
<b>1"</b>	5 to 50	20 - 200	1.2 - 12	10M1	10MB1	<b>1</b>
<b>1-1/2"</b>	6 to 60	25 - 250	1.5 - 15	15M2	15MB2	<b>2</b>
<b>2"</b>	10 to 100	40 - 400	2.4 - 24	20M3	20MB3	<b>3</b>
<b>2"</b>	20 to 200	70 - 700	4.2 - 42	20M4	20MB4	<b>4</b>

### TEE Pipe Fittings (PVC)

Pipe Size	GPM Range	LPM Range	Fitting Number
			Solvent Weld PVC Tee (AT)
<b>1"</b>	6 to 60	25 - 250	10AT
<b>1-1/2"</b>	15 to 150	60 - 600	15AT
<b>2" *</b>	30 to 300	100 - 1000	20AT
<b>3" *</b>	60 to 600	230 - 2300	30AT

### Saddle Mount Pipe Fittings

Pipe Size IPS	GPM Range	M³/HR Flow Range	Material	Fitting Number	
				Sch 40 (S4)	Sch 80 (S8)
<b>1-1/2"</b>	15 to 150	3.5 - 34.5	PVDF	15K4	15K8
<b>2"</b>	30 to 300	6.9 - 69.0	PVDF	20K4	20K8
<b>2-1/2"</b>	40 to 400	9.2 - 92.0	PVC	25A4	25A8
<b>3" *</b>	60 to 600	13.8 - 138	PVDF	30K4	30K8
<b>4" *</b>	100 to 1000	23.0 - 230	PVC	40A4	40A8
<b>6" *</b>	250 to 2500	57.5 - 575	PVC	60A4	60A8
<b>8" *</b>	400 to 4000	92.0 - 920	PVC	80A4	80A8
<b>10" *</b>	600 to 6000	138 - 1380	PVC	100A4	100A8
<b>12" *</b>	800 to 8000	184 - 1840	PVC	120A4	120A8

DIN 8062	LPM	M³/HR Flow Range	Material	Metric PN10 (P0)	Metric PN16 (P6)
<b>50mm</b>	70 to 700	4.2 - 42.0	PVDF	05K0	05K6
<b>63mm *</b>	110 to 1100	6.6 - 66.0	PVDF	06K0	06K6
<b>75mm *</b>	150 to 1500	9.0 - 90.0	PVC	08A0	08A6
<b>90mm *</b>	230 to 2300	13.8 - 138	PVDF	09K0	09K6
<b>110mm *</b>	350 to 3500	21.0 - 210	PVC	11A0	11A6
<b>160mm *</b>	720 to 7200	43.2 - 432	PVC	16A0	16A6
<b>200mm *</b>	1150 to 11500	69.0 - 690	PVC	20A0	20A6
<b>250mm *</b>	1700 to 17000	102 - 1020	PVC	25A0	
<b>315mm *</b>	2700 to 27000		PVC	31A0	

\* Not available in GPD (gallons per day) or LPD (liters per day)

# F-2000 Model Number Matrix

F-2000

RT	S	B	38	M1	GM	1	-				Sample Model Number																																										
<div> <div> <b>Variations</b> <p><b>RT</b> = Flow Rate and Totalizing</p> <p><b>AO</b> = Analog Output, Flow Rate and Totalizing</p> <p><b>PC</b> = Batch Processing, Flow Rate Alarm, Proportional Metering, Flow Rate and Totalizing</p> <p><b>AP</b> = Analog Output, Batch Processing, Flow Rate Alarm Proportional Metering, Flow Rate Alarm and Flow Totalizing</p> <p><b>FC</b> = Flow Sensor - AC Coil - 200 ft. range</p> <p><b>FH</b> = Flow Sensor - Hall Effect - 1 mile range</p> </div> <div> <b>Display Mounting</b> <p><b>S</b> = Meter Mounted on AC Coil Sensor</p> <p><b>P</b> = Meter Panel Mounted, AC Coil Sensor, 200 ft. range, includes 25 Ft. of cable</p> <p><b>H</b> = Meter Panel Mounted, Hall Effect Sensor, 1 mile Range, includes 25 ft. of cable</p> <p><b>X</b> = Sensor only (without Display Meter)</p> </div> <div> <b>Power (AO, PC, AP models must use transformer power supply)</b> <p><b>B</b> = Battery Holder with 4 AA cells (<b>RT model only</b>)</p> <p><b>1</b> = U.S. Transformer, AC 115V60Hz/15Vdc, NEMA 5/15 plug</p> <p><b>2</b> = Europe Transformer, AC 230V50Hz/15Vdc, CEE 7/VII plug</p> <p><b>3</b> = U.S. Transformer, AC 230V60Hz/15Vdc, NEMA5/15 plug</p> <p><b>X</b> = No Selection (Customer must supply power)</p> </div> <div> <b>Pipe Sizes M/NPT (Ensure pipe size chosen is available for the fitting type)</b> <table border="1"> <thead> <tr> <th>Imperial Pipe Sizes</th> <th>Metric Pipe Sizes</th> </tr> </thead> <tbody> <tr><td>38 = 3/8" IPS</td><td>05 = 50mm</td></tr> <tr><td>50 = 1/2" IPS</td><td>06 = 63mm</td></tr> <tr><td>75 = 3/4" IPS</td><td>07 = 75mm</td></tr> <tr><td>10 = 1" IPS</td><td>09 = 90mm</td></tr> <tr><td>15 = 1-1/2" IPS</td><td>11 = 110mm</td></tr> <tr><td>20 = 2" IPS</td><td>16 = 160mm</td></tr> <tr><td>25 = 2-1/2" IPS</td><td>20 = 200mm</td></tr> <tr><td>30 = 3" IPS</td><td>25 = 250mm (PN10 only)</td></tr> <tr><td>40 = 4" IPS</td><td>31 = 315mm (PN10 only)</td></tr> <tr><td>60 = 6" IPS</td><td></td></tr> <tr><td>80 = 8" IPS</td><td></td></tr> <tr><td>100 = 10" IPS</td><td></td></tr> <tr><td>120 = 12" IPS</td><td></td></tr> </tbody> </table> <p><b>* Calibration Range</b> Molded In-line fittings - Use last number of fitting #. All other fittings - Use Range 1</p> </div> </div>											Imperial Pipe Sizes	Metric Pipe Sizes	38 = 3/8" IPS	05 = 50mm	50 = 1/2" IPS	06 = 63mm	75 = 3/4" IPS	07 = 75mm	10 = 1" IPS	09 = 90mm	15 = 1-1/2" IPS	11 = 110mm	20 = 2" IPS	16 = 160mm	25 = 2-1/2" IPS	20 = 200mm	30 = 3" IPS	25 = 250mm (PN10 only)	40 = 4" IPS	31 = 315mm (PN10 only)	60 = 6" IPS		80 = 8" IPS		100 = 10" IPS		120 = 12" IPS		<b>Cable Feet</b> <p><b>Blank</b> = Standard 25 feet</p> <p><b>50FT</b> = 50 feet of signal cable</p> <p><b>100FT</b> = 100 feet of signal cable</p>														
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<b>Optional Accessories and Components</b> <p>71000-294 Panel Mount Kit Bracket</p> <p>71000-514 Mounting Conversion Kit, Sensor Mount to Panel Mount.</p> <p>71000-301 Wall Mount Adapter Kit. Cable Not Included.</p> <p>71000-302 Wall or Pipe Mounting Kit (3/8" - 1.5 " Pipe). Cable Not Included.</p> <p>71000-303 Wall or Pipe Mounting Kit (2" Pipe). Cable Not Included.</p> <p>71000-304 Wall or Pipe Mounting Kit (3" Pipe). Cable Not Included.</p> <p>71000-305 Wall or Pipe Mounting Kit (4" Pipe). Cable Not Included.</p> <p>71000-306 Wall or Pipe Mounting Kit (6" Pipe). Cable Not Included.</p> <p>71000-307 Wall or Pipe Mounting Kit (8" Pipe). Cable Not Included.</p> <p>71000-414 Wall or Pipe Mounting Kit (10" Pipe). Cable Not Included.</p> <p>71000-415 Wall or Pipe Mounting Kit (12" Pipe). Cable Not Included.</p> <p>71000-322 Battery Back-up Kit</p>																																																					

P.N. 85000-171      REV 8      20250909

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TEL 714-893-8529 | FAX 714-894-9492 | [www.blue-white.com](http://www.blue-white.com) | [sales@blue-white.com](mailto:sales@blue-white.com)