Blue-White®

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

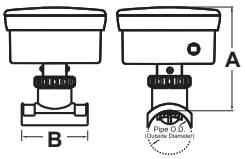
PVC Fittings

For more help and information regarding **F-2000**, please visit www.blue-white.com or scan this QR code.

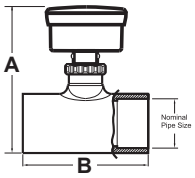
Engineering Specifications

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

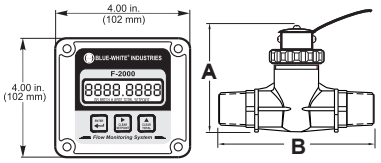
Dimensions



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”



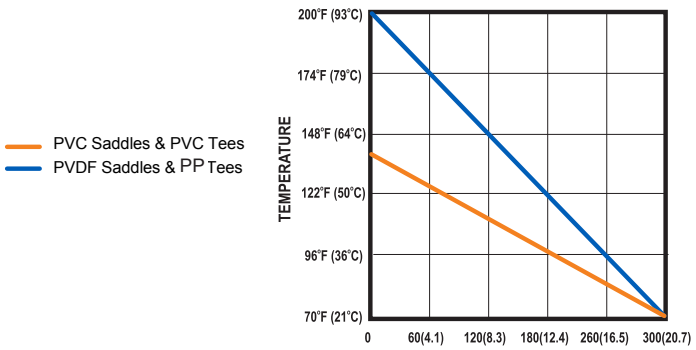
PVC Tee		
Pipe Size	**A**	**B**
1”	6”	4”
1-1/2”	6-5/8”	4-1/2”
2”	7-1/8”	4-3/4”



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



Materials of Construction

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

Ordering Information

Molded In-Line Pipe Fittings

Pipe Size	GPM Flow Range	LPM Flow Range	M^3/HR Flow Range	OZ/Min Flow Range	Model Number	
M/NPT					MNPT	MBSPT
3/8"	.8 to 8	3 - 30	0.2 - 1.8	106 - 1058	38M1	38MB1
3/8”	.4 to 4	1 - 10	0.1 - 0.6	35 - 353	38M2	38MB2
1/2"	2 to 20	7 - 70	0.4 - 4.2	247 - 2469	50M1	50MB1
3/4"	3 -30	11 - 110	0.7 - 6.6	388 - 3880	75M1	75MB1
1"	5 to 50	20 - 200	1.2 - 12	705 - 7054	10M1	10MB1
1-1/2"	6 to 60	25 - 250	1.5 - 15	885 - 8818	15M2	15MB2
2”	10 to 100	40 - 400	2.4 - 24	1411 - 14108	20M3	20MB3
2”	20 to 200	70 - 700	4.2 - 42	2469 - 24689	20M4	20MB4

TEE Pipe Fittings

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

Saddle Mount Pipe Fittings

Pipe Size IPS	GPM Range	M^3/HR Flow Range	Model Number	
			Sch 40	Sch 80
1-1/2"	15 - 150	3.5 - 34.5	15K4	15K8
2"	30 - 300	6.9 - 69.0	20K4	20K8
2-1/2"	40 to 400	9.2 - 92.0	25A4	25A8
3"	60 to 600	13.8 - 138	30K4	30K8
4"	100 - 1000	23.0 - 230	40A4	40A8
6"	250 - 2500	57.5 - 575	60A4	60A8
8"	400 - 4000	92.0 - 920	80A4	80A8
10"	600 - 6000	138 - 1380	100A4	100A8
12"	800 - 8000	184 - 1840	120A4	120A8

DIN 8062	LPM	M^3/HR Flow Range	Metric PN10
50mm	70 - 700	4.2 - 42.0	05K0
63mm	110 - 1100	6.6 - 66.0	06K0
75mm	150 - 1500	9.0 - 90.0	07A0
90mm	230 - 2300	13.8 - 138	09K0
110mm	350 - 3500	21.0 - 210	11A0
160mm	720 - 7200	43.2 - 432	16A0
200mm	1150 - 11500	69.0 - 690	20A0
250mm	1700 - 17000	102 - 1020	25A0
315mm	2700 - 27000	162 - 1620	31A0

F-2000 Model Number Matrix

RT	S	B	38	M1	GM	1	-				Sample Model Number

Variations

RT = Flow Rate and Totalizing
AO = Analog Output, Flow Rate and Totalizing
PC = Batch Processing, Flow Rate Alarm, Proportional Metering, Flow Rate and Totalizing
AP = Analog Output, Batch Processing, Flow Rate Alarm Proportional Metering, Flow Rate Alarm and Flow Totalizing
FC = Flow Sensor - AC Coil - 200 ft. range
FH = Flow Sensor - Hall Effect - 1 mile range

Display Mounting

S = Meter Mounted on AC Coil Sensor
P = Meter Panel Mounted, AC Coil Sensor, 200 ft. range, includes 25 Ft. of cable
H = Meter Panel Mounted, Hall Effect Sensor, 1 mile Range, includes 25 ft. of cable
X = Sensor only (without Display Meter)

Power

B = Battery Holder with 4 AA cells
1 = U.S. Transformer, AC 115V60Hz/15Vdc, NEMA 5/15 plug
2 = Europe Transformer, AC 230V50Hz/15Vdc, CEE 7/VII plug
3 = U.S. Transformer, AC 230V60Hz/15Vdc, NEMA5/15 plug
X = No Selection (Customer must supply power)

Pipe Sizes M/NPT

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	

*** Calibration Range**
Molded In-line fittings - Use last number of fitting #.
All other fittings - Use Range 1

Cable Feet

Blank = Standard 25 feet
50FT = 50 feet of signal cable
100FT = 100 feet of signal cable

Pipe Fitting

Blank = Standard
P = No pipe fitting*

O-rings

Blank = Standard
E = EPDM

Calibration Range (see pipe fitting detail)

1 = Range 1	2 = Range 2	**3** = Range 3	4 = Range 4

Calibration Units

GM = U.S. Gallons per minute	**LH** = Liters per hour
GH = U.S. Gallons per hour	**LD** = Liters per day
GD = U.S. Gallons per day	**MH** = Cubic Meters per hour
OM = U.S. Ounces per minute	**IM** = Imperial Gallons per minute
AD = Acre Feet per day	**IH** = imperial Gallons per hour
LM = Liters per minute	

Saddle Pipe Fitting Type

SADDLE, SCH40 (I.P.S.) PVC or IRON pipe
K4 = 1-1/2", 2", 3" PVDF
A4 = 2-1/2", 4", 6", 8" PVC
A4 = 10", 12" PVC
SADDLE, SCH80 (I.P.S.) PVC pipe
K8 = 1-1/2", 2", 3" PVDF
A8 = 2-1/2", 4", 6", 8" PVC
A8 = 10", 12" PVC
SADDLE, PN10 METRIC (DIN 8062) pipe
K0 = 50mm, 63mm, 90mm PVDF
A0 = 75, 110, 160, 200 PVC
A0 = 250,315mm PVC
SADDLE, PN16 METRIC (DIN 8062) pipe
K6 = 50mm, 63mm, 90mm PVDF
A6 = 75, 110, 160, and 200, PVC

Inline Pipe Fitting Type

INLINE INJECTION MOLDED PP AMERICAN M/NPT
M1 = Range #1, **M2** = Range #2
M3 = Range #3, **M4** = Range #4
3/8", 1/2", 3/4", 1" M/NPT polypropylene
1-1/2" M/NPT polypropylene
2" M/NPT polypropylene
INLINE INJECTION MOLDED PP BRITISH M/BSPT
MB1 = Range #1, **MB2** = Range #2
MB3 = Range #3, **MB4** = Range #4
3/8", 1/2", 3/4", 1" M/BSPT polypropylene
1-1/2" M/BSPT polypropylene
2" M/BSPT polypropylene
INLINE INJECTION MOLDED TEE PVC SLIP/SOCKET
AT = 1", 1-1/2", 2" Female slip glue/weld
3" Female slip glue/weld

Optional Accessories and Components

71000-294 Panel Mount Kit Bracket $30
71000-514 Mounting Conversion Kit, Sensor Mount to Panel Mount.
71000-301 Wall Mount Adapter Kit. Cable Not Inlcuded.
71000-302 Wall or Pipe Mounting Kit (3/8" - 1.5 " Pipe). Cable Not Included.
71000-303 Wall or Pipe Mounting Kit (2" Pipe). Cable Not Included.
71000-304 Wall or Pipe Mounting Kit (3" Pipe). Cable Not Included.
71000-305 Wall or Pipe Mounting Kit (4" Pipe). Cable Not Included.
71000-306 Wall or Pipe Mounting Kit (6" Pipe). Cable Not Included.
71000-307 Wall or Pipe Mounting Kit (8" Pipe). Cable Not Included.
71000-414 Wall or Pipe Mounting Kit (10" Pipe). Cable Not Included.
71000-415 Wall or Pipe Mounting Kit (12" Pipe). Cable Not Included.
71000-322 Battery Back-up Kit

TDS# 85000-171 REV 6 20231206

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