

Blue-White®

Engineering and Technical Data

F-1000

Digital Paddlewheel Flow Meter



Features

- > High accuracy digital paddlewheel technology
- > 3/8", 1/2", 3/4", 1", 1-1/2", and 2" molded inline tee models
- > Up to 12" pipe size with saddle mount units
- > Tamper proof factory programming
- > Easy to read 6 digit LCD display, up to 4 decimal places
- > Very low pressure drop
- > Total reset function can be disabled

NEMA 4X

Highlights

Flow range

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

Pressures

300 PSI
(20.7 bar)

Pressure drop

0 - 8 PSI
(varies per model)

Full Scale Accuracy

+/- 2%

Power supply

Battery operated

Warranty

1 Year

Available Models



Molded Fittings



Saddle Mount
Fittings



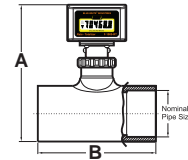
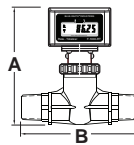
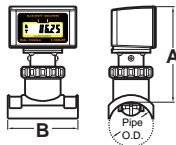
PVC Fittings

Engineering Specifications

F-1000

Maximum Working Pressure	300 PSI (20.7 bar) @ 70 °F (21 °C)
	200 °F (93.3 °C) @ 0 PSI (Polypropylene Tees and PVDF saddles)
Maximum Fluid Temperature	140 °F (60 °C) @ 0 PSI (all PVC saddles and PVC Tee fittings)
	NOTE: Temperature rating of F-1000 only. Actual pipe rating may vary
Maximum Ambient Temperature	14 °F to 110 °F/ -10 °C to 43 °C
Maximum Pressure Drop	up to 8 PSI (polypropylene tees) no pressure drop on saddle models
Full scale Accuracy	+/- 2%
Power Requirement	2 AAA batteries (included)
Approximate Shipping Weight	2 lb. (.91 kg)
Enclosure	NEMA 4X (IP56)
RoHS Compliant	Yes

Dimensions

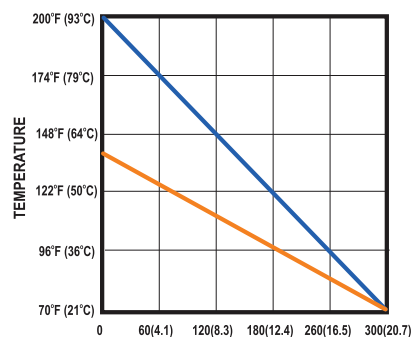


Saddle Fittings			Molded Fittings			PVC Tee		
Pipe Size	A	B	Pipe Size	A	B	Model	A	B
1.5"(50mm)	4-5/16"	3-3/16"	3/8"	5-3/8"	4-3/4"	RB-100	4"	6"
2"(63mm)	4-5/16"	3-3/16"	1/2"	5-3/8"	5-1/8"	RB-150	4-1/2"	6-5/8"
2.5"(75mm)	4-5/16"	3-3/16"	3/4"	5-5/8"	5-1/4"	RB-200	4-3/4"	7-1/8"
3"(90mm)	4-5/16"	3-3/16"	1"	5-5/8"	5-5/8"			
4"(110mm)	4-5/16"	3-3/16"	1-1/2"	6-1/8"	6-1/2"			
6"(160mm)	4-1/4"	3-3/16"	2"	6-3/8"	6-3/4"			
8"(200mm)	4-1/4"	3-3/16"						
10"(250mm)	4-1/4"	4-1/2"						
12"(315mm)	4-1/4"	4-1/2"						

Performance

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

Maximum Temperature vs. Pressure



Materials of Construction

F-1000

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

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	
					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	Material	Model Number	
			Schedule 40	Schedule 80
1-1/2"	15 to 150	PVDF	15K4	15K8
2"	30 to 300	PVDF	20K4	20K8
2-1/2"	40 to 400	PVC	25A4	25A8
3"	60 to 600	PVDF	30K4	30K8
4"	100 to 1000	PVC	40A4	40A8
6"	250 to 2500	PVC	60A4	60A8
8"	400 to 4000	PVC	80A4	80A8
10"	600 to 6000	PVC	100A4	100A8
12"	800 to 8000	PVC	120A4	120A8

DIN 8062	LPM	Material	Metric PN10	Metric PN16
50mm	70 to 700	PVDF	05K0	05K6
63mm	110 to 1100	PVDF	06K0	06K6
75mm	150 to 1500	PVC	08A0	08A6
90mm	230 to 2300	PVDF	09K0	09K6
110mm	350 to 3500	PVC	11A0	11A6
160mm	720 to 7200	PVC	16A0	16A6
200mm	1150 to 11500	PVC	20A0	20A6
250mm	1700 to 17000	PVC	25A0	
315mm	2700 to 27000	PVC	31A0	

F-1000 Model Number Matrix

F-1000

RB	-	375	MI	-	GPM	1	-			Sample Model Number
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Variations
RB = Rate Only
TB = Total Only
RT = Rate and Total

Pipe Fitting
Blank = Standard
P = No pipe fitting

Pipe Sizes M/NPT	
Imperial Pipe Sizes	Metric Pipe Sizes
375 = 3/8" IPS	050 = 50 mm
500 = 1/2" IPS	063 = 63 mm
750 = 3/4" IPS	075 = 75 mm
100 = 1" IPS	090 = 90 mm
150 = 1-1/2" IPS	110 = 110 mm
200 = 2" IPS	160 = 160 mm
250 = 2-1/2" IPS	200 = 200 mm
300 = 3" IPS	250 = 250 mm
400 = 4" IPS	315 = 315 mm
600 = 6" IPS	
800 = 8" IPS	
1000 = 10" IPS	
1200 = 12" IPS	

O-rings / Elastomers
Blank = Standard
E = EPDM O-rings

Calibration Range (see pipe fitting detail)	
1 = Range 1	3 = Range 3
2 = Range 2	4 = Range 4
Molded In-line fittings - Use last number of fitting #.	
All other fittings - Use Range 1	

Calibration Units
GPM = U.S. Gallons per minute
GPH = U.S. Gallons per hour
GPD = U.S. Gallons per day
OZM = U.S. Ounces per minute
CFM = Cubic Feet per minute
AFD = Acre Feet per day
LPM = Liters per minute
LPH = Liters per hour
LPD = Liters per day
M3H = Cubic Meters per hour
IGM = Imperial Gallons per minute
IGH = Imperial Gallons per hour

Pipe Fitting Type	
S4 = SADDLE, SCH40 (I.P.S.) PVC or IRON pipe	MI = INLINE INJECTION MOLDED PP AMERICAN M/NPT
1-1/2", 2", 3" PVDF	3/8", 1/2", 3/4", 1" M/NPT, polypropylene
2-1/2", 4", 6", 8" PVC	1-1/2" M/NPT, polypropylene
10", 12" PVC	2" M/NPT, polypropylene
S8 = SADDLE, SCH80 (I.P.S.) PVC pipe	MB = INLINE INJECTION MOLDED PP BRITISH M/BSPT
1-1/2", 2", 3" PVDF	3/8", 1/2", 3/4", 1" M/BSPT, polypropylene
2-1/2", 4", 6", 8" PVC	1-1/2" M/BSPT, polypropylene
10", 12" PVC	2" M/BSPT, polypropylene
P0 = SADDLE, PN10 METRIC (DIN 8062) pipe	AT = INLINE INJECTION MOLDED TEE PVC SLIP/SOCKET
50 mm, 63 mm, 90 mm PVDF	1", 1-1/2", 2" PVC
75, 110, 160, 200 mm PVC	3" PVC
250, 315 mm PVC	
P6 = SADDLE, PN16 METRIC (DIN 8062) pipe	
50 mm, 63 mm, 90 mm PVDF	
75, 110, 160, 200 mm PVC	
250, 315 mm PVC	