New Electronic Digital Flowmeters

New digital flowmeters install quickly into existing pipe systems to provide accurate flow and totalizing at a very affordable price. The large LCD display and keypad simplify setup. Select one of four different monitoring and control packages. The molded polypropylene fittings adapt easily to your flow system.

These paddlewheel flowmeters are factory calibrated with the engineering units that you require. The precise digital technology in the sensor is used to accurately monitor flow rates from 1.0 to 20 ft/sec. The meters are constructed of corrosion-resistant materials. Once installed maintenance is minimal. Non-volatile memory. Weather-resistant ABS housing. One year warranty.

INSTALLATION NOTE: Accuracy of measurement is affected by disturbances such pumps, elbows, tees, valves in flow stream. Install the flowmeter in a straight of pipe **as far as possible** from any disturbances. Typical minimum pipe length requirements start at 10 x Pipe ID Inlet and 5 x Pipe ID Outlet. Horizontal or vertical mounts acceptable. Pipe should be full at all times.

Flow Rate and Totalizing
Analog Output
Batch Processing
Flow Rate Alarm
Proportional Metering

Enjoy easy, accurate flow measurement and control with the FD201 flowmeter.

APPLICATIONS
Water treatment
Batch control
Proportional control
Cooling systems

SPECIAL FEATURES
Select from 4 models-RT, AO, BP, TP
Large 8-digit LCD display
NEMA 4X enclosure-use outdoors
Front panel security lockout
Standard calibration units: LPM, GPM, M3/Hour, Oz/Min, GPH, LPH

SPECIFICATIONS

Measurement Range:	See ordering table
Display/Resolution:	8-digit, 0.39"H LCD
Accuracy:	±1% full scale
Repeatability:	±1% full scale
Sensor:	Paddlewheel
Max. Fluid Temp.:	93ºC (200ºF)
Max. Fluid Pressure:	300 psig (20 bar)
Max. Fluid Debris Size:	0.5 mm (0.020") diameter
Operating Temp.:	0 to 43ºC (32 to 110ºF)
Enclosure:	NEMA 4X (acceptable for outdoors)
Wetted parts:	PVDF, PP, Hastelloy C, Viton®
Output:	open collector signal (NPN)
	0 to 10Vdc, 4 to 20mA (AO, TP only)
Power:	15 Vdc nom. (16-24 Vdc absolute)
	Wall-mt power supplies provided.
	(Battery only option for RT models).
Dimensions(Controller):	102 x 102 x 82.6 mm
(L x W X D)	(4 x 4 x 3.25 in.)
Weight (meter):	approx 1.4 kg (3 lbs)
Shipping Wt:	approx 1.8 kg (4 lbs)

Control Module Features

Flow Rate and Totalizer – Built-in to all models, TTL/CMOS square wave pulsed output signal is counted by the controller and multiplied by scaling factors to display flow rate and total. This signal is also output as an open collector signal (NPN) that is proportional to flow.

Analog Output – Record flow rate or control external devices with 4 to 20 mA or 0 to 10 Vdc signal. Linear, non-isolated, powered loop. 250 ohm max for 4 to 20 mA; 500 ohms minimum for 0 to 10 Vdc.

Batch Processing – Use relay (specs below) to switch an external pump or valve manually or automatically. Manually started batch energizes relay until batch volume is reached. Automatically started batch energizes relay after batch volume is reached with pre-programmed time for 0 to 999 seconds.

Flow Rate Alarm – Use relay (specs below) to switch an external buzzer or alarm. High alarm only, low alarm only or both high and low alarm options. Latching or automatic release options.

Proportional Chemical Feed Operation – Use relay (specs below) to switch an external pump on at the end of a batch to add a predetermined amount of chemical. Timer control of pump from 0 to 999 seconds. Automatic cycle.

SPDT Relay (BP, TP models) – One NO / NC relay with switching load of 8 A / 115 Vac, 220 Vac, 230 Vac; 7 A / 30 Vdc (resistive load). Relay setpoints must be assigned to either rate mode, batch (total) mode, or turned off.

FD201PS-1AC-p1

FD201 - Flowmeters

Control Module Features

	RT	AO	BP	TP
Flow Rate and Totalizer	✓	✓	✓	✓
Analog Output (0 to 10Vdc, 4 to 20mA)		✓		✓
Batch Processing (NO/NC relay, timed dispensing)			✓	✓
Flow Rate Alarm (high/low alarm)			✓	✓
Proportional Chemical Feed Operation			✓	✓

FD201 Ordering Information – (LPM standard; specify calibration unit at time of order)

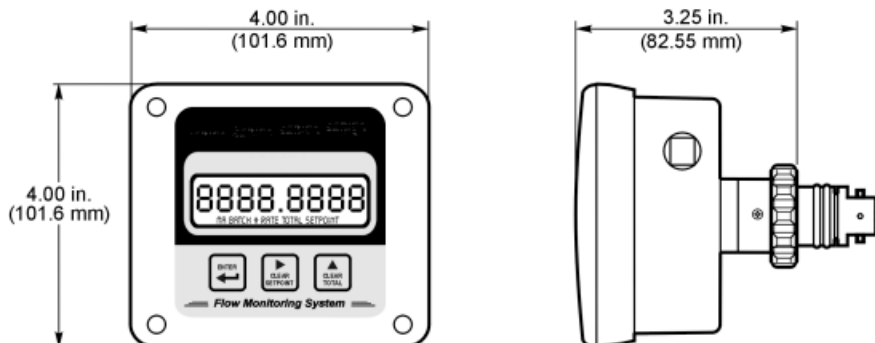| Pipe Size	Flow Range LPM	Flow Range GPM	Power 50/60 Hz	RT	AO	BP	TP
Standard Flow Range							
3/8″MPT	3.00 to 30.00	0.800 to 8.00	115 Vac	FD201.001	FD201.101	FD201.201	FD201.301
			230 Vac	FD201.002	FD201.102	FD201.202	FD201.302
1/2″MPT	7.00 to 70.00	2.00 to 20.00	115 Vac	FD201.003	FD201.103	FD201.203	FD201.303
			230 Vac	FD201.004	FD201.104	FD201.204	FD201.304
3/4″MPT	11 to 110	3.00 to 30.00	115 Vac	FD201.005	FD201.105	FD201.205	FD201.305
			230 Vac	FD201.006	FD201.106	FD201.206	FD201.306
1″MPT	20 to 200	5.00 to 50.00	115 Vac	FD201.007	FD201.107	FD201.207	FD201.307
			230 Vac	FD201.008	FD201.108	FD201.208	FD201.308
Low Flow Range							
3/8″MPT	1.00 to 10.00	0.400 to 4.00	115 Vac	FD201.009	FD201.109	FD201.209	FD201.309
			230 Vac	FD201.010	FD201.110	FD201.210	FD201.310
1/2″MPT	2.00 to 20.00	0.500 to 5.00	115 Vac	FD201.011	FD201.111	FD201.211	FD201.311
			230 Vac	FD201.012	FD201.112	FD201.212	FD201.312
3/4″MPT	3.00 to 30.00	0.800 to 8.00	115 Vac	FD201.013	FD201.113	FD201.213	FD201.313
			230 Vac	FD201.014	FD201.114	FD201.214	FD201.314
1″MPT	7.00 to 70.00	2.00 to 20.00	115 Vac	FD201.015	FD201.115	FD201.215	FD201.315
			230 Vac	FD201.016	FD201.116	FD201.216	FD201.316

For best performance and paddle life, select flowmeter with operating range **10 to 75% of rated flow.**

NOTE: 1. Add "**G**" after the Part No. for display in GPM. Contact your distributor to specify other units of measure.
2. Add "**B**" after the Part No. for RT models to specify battery operated (4AA) power supply.

Larger pipe sizes, PVDF fittings, remote mounting packages and other calibration units available. Inquire for details.

Dimensional Drawing

4.00 in. (101.6 mm)

4.00 in. (101.6 mm)

3.25 in. (82.55 mm)

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