PULSMATE™
Electronic Register

neptune
Refined Fuels

The Itron PULSMATE™ Electronic Register enhances the flow management capabilities of Type MP and magnetic drive Type S flowmeters. This battery or externally powered register displays rate and total simultaneously and includes a scalable pulse output for interfacing with supervisory control. A dual totalizer version offers locally resettable and cumulative counters. The PULSMATE combines the reliability and convenience of a local electronic display with sophisticated features usually found in flow computers.

Electronic calibration
- Faster set-up
- No need to replace change gears

Simultaneous rate and total displays
- Track both flow rate and cumulative volume
- Optional alarms signal when flow rate is not within upper or lower set point limits
- Optional 4-20 mA analog output

Selectable totalizer models
- Resettable for measuring repetitive processes
- Non-resettable (cumulative) for tracking flow over extended time
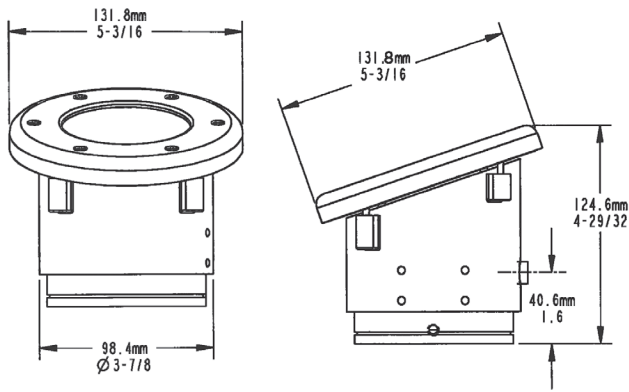
Scalable pulse output
- Enables remote totalization
- Monitor process anytime, anywhere

Retrofittable to existing flowmeters
- Enhanced capabilities plus lower life cycle cost than with mechanical registration
- Compatible with Type MP and magnetic drive Type S
- No mechanical gear trains

Durable housing
- Isoplast® enclosure combines best properties of plastic and metal
- Stable, tough and chemically inert

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Itron
Knowledge to Shape Your Future

INDUSTRIAL DYNAMICS CO   1-800-940-0453

131.8mm 5-3/16
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124.6mm 4-29/32
40.6mm 1.6
98.4mm Ø 3-7/8

Rate Display Attributes

Model	Digits	Descriptors	Min. Frequency Input, HZ	Alarm
RP	4.5	Sec, Min, Hr	0.125-10	NA
RA	4.5	Sec, Min, HR	0.125-10	Yes

Totalizer Display Attributes

Model	Resettable Digits	Cumulative Digits	Descriptors
RP	8	NA	Gal, Litres, ft³, M³
RA	8	NA	Gal, Litres, ft³, M³
DP	5	8	Gal, Litres, ft³, M³

PULSMATE Idustrial Electronic Register Ordering Information

Model Number						
X	X	X	X	X	X	Description
						Display
R						Rate/Total
D						Dual Total*
						Output*
	P					Pulse (Standard on RP and DP)
	A*					Alarm*
						Power
		E				Battery/External
		L				Loop
						Display Temperature
			S			Standard
			X			Extended
						Sensor Location
				0		Small Magnet (1/2" MP)
				L		Large Magnet (All other meters)
						Approvals
					0	Standard
					W	W&M Approved (1/2" DEF meter)

An alarm output is only available when the selected display parameter is R (Rate/Total). Therefore, DAXXOOXX is not a valid model number.

PULSMATE Specifications

Housing	Isoplast
Temperature	Operating: -4°F (-20°C) to 158°F (70°C) Extended: -22°F (-30°C) to 158°F (70°C) Humidity: 0-90%, noncondensing

Internal power supply	Battery: One "C" Size lithium battery (supplied)
	External: 8.5-30 VDC, plus one "C" Size lithium battery (supplied) to power the display.
	Protection: Reverse polarity protection on the analog loop.
	Battery life expectancy:
	    Idle - 2.5 yr
	    2 hr/day - 2.25 yr
	    8 hr/day - 1.75 yr
	    24 hr/day - 1 yr
	    If externally powered - 10 yr

External power supply	Dedicated 24V external power supply available
Hazardous area approvals	UL intrinsic safety approved
Operator interface	Menu-driven programming, four-key keypad
Local display	Three models are standard. (Low battery warning is standard to all models.) RP: Rate and total RA: Rate, total and alarm DP: Dual totalizers (resettable or cumulative)
Optional analog output	Type: 4-20 mA, following rate display, loop-powered Accuracy: 0.15% at 20°C, full scale
Pulse output (standard on RP and DP models)	The pulse output advances with the least significant digit of the totalizer. Type: Opto-isolated open collector transistor Max. voltage (pulse off): 30 VDC Current (pulse on): 5 mA at 0.9 V drop, 0.1 mA at 0.7 V drop. Pulse duration: 65 msec Pulse output dividers: User selectable - 1, 10, 100 or off. The "off" setting maximizes battery life.
Alarm output (RA model)	The alarm output activates when the rate is less than the low alarm set point or greater than the high alarm set point. External diode clamps are required when driving inductive loads. Relay type: Opto-isolated photo MOS, non-latching Max. voltage (alarm off): 100 VDC Current (alarm on): 100 mA max. on resistance less than 30 ohms
Resettable totalizer	Activated manually by external magnet
K-factor	Range: 0.001-59999 Decimal point locations: XX.XXX-XXXXX
Application	Type MP flowmeters: 1/2", 1", 2", and 3" Type S flowmeters: 1-1/2" and 2" magnetic drive

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