Battery Powered Rate Meter and Totalizer

measuring • monitoring • analyzing

EDM

- Stainless Steel, Aluminum, PVDF, or Polyamide Bodies
- Battery Powered
- Compact and Portable
- Range: 0.3...3 GPM to 30...300 GPM
- Rate and Totalizing Displays
- Optional Analog or Frequency Outputs
- Compatible with a Wide Variety of Media

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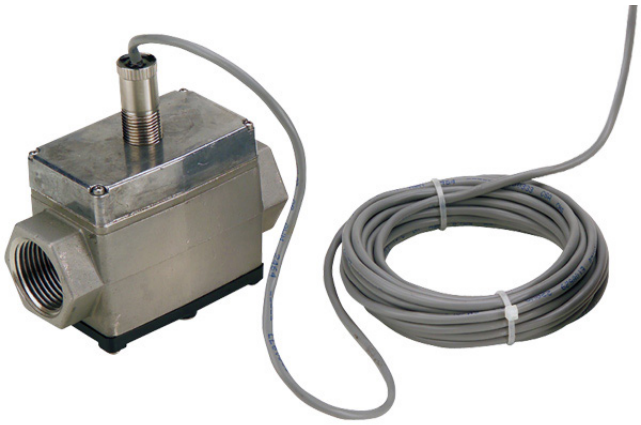
Description

The EDM turbine flowmeter measures the flow of water and other compatible, low viscosity liquids with flow rates ranging from 0.3 GPM to 300 GPM. Its replaceable 3V lithium batteries power an onboard rate meter/totalizer with the results displayed on a highly visible, 6-digit LCD readout. The versatile, modular design offers a variety of options. Available electronics include a remote display, pulse frequency output and an 4-20 mA analog output. Polyamide, Aluminum, PVDF, or Stainless Steel body construction make the EDM compatible with a wide variety of medias. The computer electronics feature the ability to individually display three useful functions: instantaneous flow rate, user resettable flow total and a non resettable flow total. Standard measuring units are field changeable between gallons and liters. The electronic display computer also has the ability to store an alternate field calibration allowing the user to easily switch between the preset 1 cP default value and one alternate calibration using the same flowmeter.



Specifications

Accuracy:	See 'Order Detail' table on page 3
Fittings	
Standard:	Female NPT
Optional:	Female ISO Thread, Flange, Tri-Clamp®
Maximum Pressure	
Stainless Steel	
Threaded:	1500 PSIG
Flanged:	Per flange rating
Tri-Clamp®:	Limited by fitting size, clamp size, and/or operating temperature
Polyamide:	150 PSIG
Aluminum:	300 PSIG
PVDF:	150 PSIG
Temperature Range (Operating)	
Onboard Display:	0...140 °F
Remote Display	
SS/Aluminum:	-40...250 °F
Polyamide/PVDF:	-20...180 °F
Display + Output:	14...140 °F (w/options: WM, PM) -40...212 ° F (SS/Aluminum w/SC) -20...180 °F (Polyamide/PVDF w/SC)
Wetted Materials	
SS Body:	316 SS, Ceramic, PVDF, Tungsten Carbide
Aluminum Body:	Aluminum, 316 SS, Ceramic, PVDF, Tungsten Carbide
Polyamide Body:	Polyamide, 316 SS, Ceramic, Tungsten Carbide, Ferrite (Manganese/Zinc)
High Flow Aluminum:	Aluminum, 316 SS, Ceramic, Polyamide, Tungsten Carbide, Ferrite (Manganese/Zinc)
PVDF Body:	PVDF (15% Carbon Fiber Filled), Ceramic, PVDF, FKM
Filtration Requirements:	½"...1" = 55 mesh (125 micron) 1½...2" = 28 mesh (500 micron)

Electrical Ratings

Onboard Display/Computers:

Input Power:	2x 3 VDC lithium batteries
Battery Life:	5 Years typical
Protection:	NEMA 4
Option - ..RD:	Remote display kit
Input Power:	Self-powered magnetic pickup
Cable Length:	10 ft supplied, 100 ft maximum
Protection:	NEMA 4

Option - ..WM: 4-20 mA Transmitter

Input Power:	7...30 V_{DC} loop powered
Output:	2-wire, 4-20 mA DC
Cable Length:	10 feet provided
Protection:	NEMA 4
Intrinsic Safety:	None

Option - ..PM: Pulse Transmitter with Display

Input Power:	0...60 V_{DC}
Output:	NPN open collector transistor
Sink Current:	100 mA maximum
Cable Length:	10 feet provided
Protection:	NEMA 4
Intrinsic Safety:	None

Option - ..SC: Pulse Transmitter, without Display

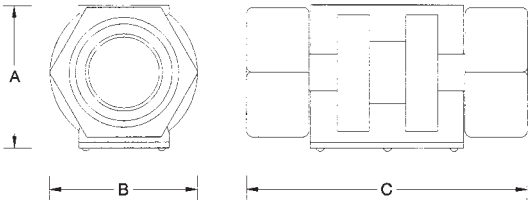
Input Power:	9...35 V_{DC}
Output:	NPN open collector transistor
Sink Current:	4 mA maximum
Cable Length:	10 feet provided
Protection:	NEMA 4
Intrinsic Safety:	None

Order Details (Example: **EDM-4202B**)

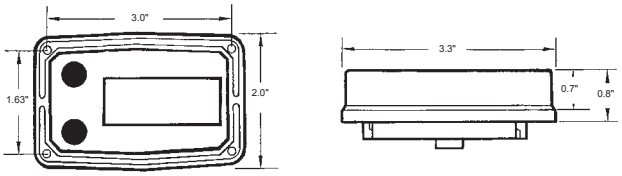
Range (Water)		Accuracy (% of Reading)	Fitting Size (NPT)	Max dP (PSI)	Model Number	
GPM	LPM					
Flowmeter with Stainless Steel or Aluminum Body						
					Stainless Steel	Aluminum
1...10	3.8...38	2.0	1/2"	8	**EDM-4201**	**EDM-4301**
2...20	7.6...76	1.5	3/4"	7.5	**EDM-4202**	**EDM-4302**
5...50	19...190	1.5	1"	5	**EDM-4203**	**EDM-4303**
10...100	38...380	1.0	1 1/2"	4	**EDM-4204**	**EDM-4304**
20...200	76...760	1.0	2"	4	**EDM-4205**	**EDM-4305**
Flowmeter with PVDF Body						
1.2...12	4.5...45	2.0	1/2"	10	-	**EDM-4401**
5...50	19...190	1.5	1"	6	-	**EDM-4403**
Flowmeter with Polyamide Body						
0.3...3	1...11	1.5	1"	2	-	**EDM-4101**
3...50	11...190	1.5	1"	5	-	**EDM-4102**
High Flow Flowmeter with Aluminum Body						
3...50	11...190	1.5	1"	5	-	**EDM-4307**
30...300	114...1135	1.5	2"	7	-	**EDM-4309**

Options	
Description	**Suffix**
Add-on Remote Mounting Kit for Displays	**..RD**
Add-on Pulse Frequency Transmitter Kit (Not for High Flow Aluminum and Polyamide meters)	**..PM**
Add-on Pulse Frequency Transmitter Kit in Place of Display	**..SC**
Add-on 4-20 mA Analog Transmitter Kit (Not for High Flow Aluminum and Polyamide Meters)	**..WM**
150 LB ANSI Flange Connection for 1", 1.5" and 2" Stainless Steel Flow Meters Only	**..F**
Tri-Clamp® Connection for St. Steel Flow Meters Only (Note: Tri-Clamp® fitting size is one size larger than fitting size)	**..T**
ISO Threads	**..B**

Flow Body Dimensions*



Display Dimensions



Fitting Size (NPT)	SS/Aluminum			Polyamide			Aluminum High Flow			PVDF		
	A	B	C	A	B	C	A	B	C	A	B	C
1/2"	1.8"	2.0"	4.2"	-	-	-	-	-	-	3.2"	2.1"	7.3"
3/4"	2.0"	2.0"	4.3"	-	-	-	-	-	-	-	-	-
1"	2.2"	2.0"	4.5"	2.53"	2.13"	4.06"	2.53"	2.13"	4.06"	3.3"	2.8"	8.1"
1 1/2"	2.8"	2.7"	5.3"	-	-	-	-	-	-	-	-	-
2"	3.2"	3.3"	6.3"	-	-	-	4.06"	3.00"	6.12"	-	-	-

* Dimensions listed are for flow body only. For meters with display, add 0.70" to dimension A.