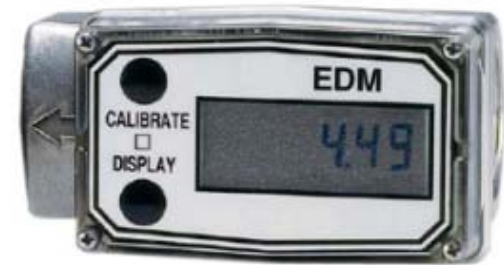


EDM - Battery Powered Rate Meter & Totalizer

Benefits and Features



- Brass, SS, Aluminum, PVDF, PVC or Nylon Bodies
- Battery Powered
- Compact and Portable
- **Ranges:** 1-10 GPM to 30–300 GPM
- Rate and Totaling Displays
- Analog or Frequency Outputs
- FM listed intrinsically Safe for Hazardous Locations
- New and Improved Computer Electronics

General Description

The EDM turbine flowmeter measures the flow of water and low viscosity liquids ranging from 0.3 GPM to 300 GPM. Its replaceable lithium battery powers an onboard rate meter/totalizer allowing installation in virtually any location, regardless of power availability. Results are displayed on a highly visible LCD readout. Except for units with a flow rate transmission feature, the EDM is also FM approved for operation in Class I, II, and III Division 1 hazardous areas.

Versatile and easy to use, the EDM's modular design allows us to offer a variety of electronic modules which further enhance its versatility. Available are options for a remote display, a frequency output, and a 4-20 mA analog transmitting output. Nylon, aluminum, PVC, PVDF or stainless steel body construction make the EDM compatible with a wide variety of process media.

Improved Computer Electronics

The upgraded computer electronics features 1 rate and 2 totaling displays. Standard measuring units are field switchable GPM or LPM. The ability to store two field calibrations allows the user to freely switch 3 different liquid viscosities with the same flowmeter.

Specifications

Accuracy (% of Reading)

See ordering information

Fittings

Standard: NPT

Optional: ISO, flanges Tri-clamp®

Maximum Pressure

Stainless Steel

- **Threaded:** 1500 PSIG

- **Flanged:** 285 PSIG

- **Tri-clamp:** 450 PSIG

Nylon: 150 PSIG

Aluminum: 300 PSIG

PVDF/PVC: 150 PSIG

Temperature Range (Operating)

Onboard Display: +14 to +140°F

Remote Display

- **SS/Aluminum:** -40 to +250°F

- **Nylon/PVDF:** -20 to 180°F

- **PVC:** +32 to 140°F

Display + Output: +14 to +140°F

Wetted Materials

SS Body: 316 SS, Ceramic, Tungsten Carbide, PVDF

Nylon Body: Nylon, Ceramic, Tungsten Carbide, Manganese/zinc, 316 SS

Aluminum Body: Aluminum, 316 SS, Tungsten Carbide, Ceramic, Manganese/zinc

PVDF Body: PVDF, ceramic, viton

PVC Body: PVC, PVDF, ceramic, viton

Electrical Ratings

Onboard Display/Computers

Input Power: Two 3 VDC lithium batteries

Battery Life: 9000 hours

Protection: NEMA 4

Intrinsic Safety: FM Approved Class I, II, III Div. 1, Group A-G

Option -RD: Remote Display Kit

Input Power: Self-powered magnetic pickup

Cable Length: 10 ft supplied, 100 ft maximum

Protection: NEMA 4

EDM - Battery Powered Rate Meter & Totalizer

Ordering Information

Water Flow Range			Fitting Size NPT	Fitting Size Max dP PSI	Model Number	
GPM	LPM	Accuracy % of Reading			Stainless Steel	Aluminum
Flowmeter with Stainless Steel Or Aluminum Body						
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 or PVC Body						
					PVDF	PVC
1.2 - 12	4.5 - 45	2.0	1/2"	10	EDM-4401	EDM-4501
5 - 50	19 - 190	1.5	1"	6	EDM-4403	EDM-4503
High Flow Flowmeter with Nylon Body						
3 - 50	10 - 190	1.5	1"	5	-	EDM-4102
High Flow Flowmeter with Aluminum Body						
3 - 50	10 - 190	1.5	1"	5	-	EDM-4307
30 - 300	100 - 1000	1.5	2"	7	-	EDM-4309
Options						
Description					Suffix	
Add-on remote mounting kit for displays (see Note 1)					- RD	
Intrinsically safe remote mounting kit for display					-ERD	
Add-on pulse frequency transmitter kit (Not for high flow aluminum and nylon meters) (see Note 1)					- PM	
Intrinsically safe pulse frequency transmitter					-EX	
Add-on pulse frequency transmitter kit in place of display (see Note 1)					- SC	
Add-on 4-20 mA analog transmitter kit (Not for high flow aluminum and nylon meters) (see Note 1)					- WM	
150 LB ANSI flange connection for stainless steel flowmeters only					-F	
Tri-clamp® connection for stainless steel flowmeters only					-T	
ISO Threads					- B	
Note 1: Use of this option invalidates the intrinsic safety rating of the flowmeter						

Electrical Characteristics of Standard Pulse and Analog Outputs

Option -WM:

4-20 mA Transmitter

Input Power: 7-30 VDC 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 VDC

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, no Display

Input Power: 9-35 VDC

Output: NPN open collector transistor

Sink Current: 4 mA maximum

Cable Length: 10 feet provided

Protection: NEMA 4

Intrinsic Safety: None

Electrical Characteristics of Intrinsically Safe Options

Intrinsically Safe Pulse Transmitter

Power Supply: 7.5-30 VDC Max. Allowable

Output: NPN open collector Cable Length: 100 Ft.

Protection: NEMA 4 Required Cable: Belden #9501 to maintain I.S. approval

Intrinsic Safety: FM approved, Class I, Div. Div. I, Gr. A,B,C,D,E,F,G

Mating Connector sold separately

Part#: EDM-ACC1135240

Intrinsically Safe Remote Kit

Max. Allowable

Cable Length: 100 Ft.

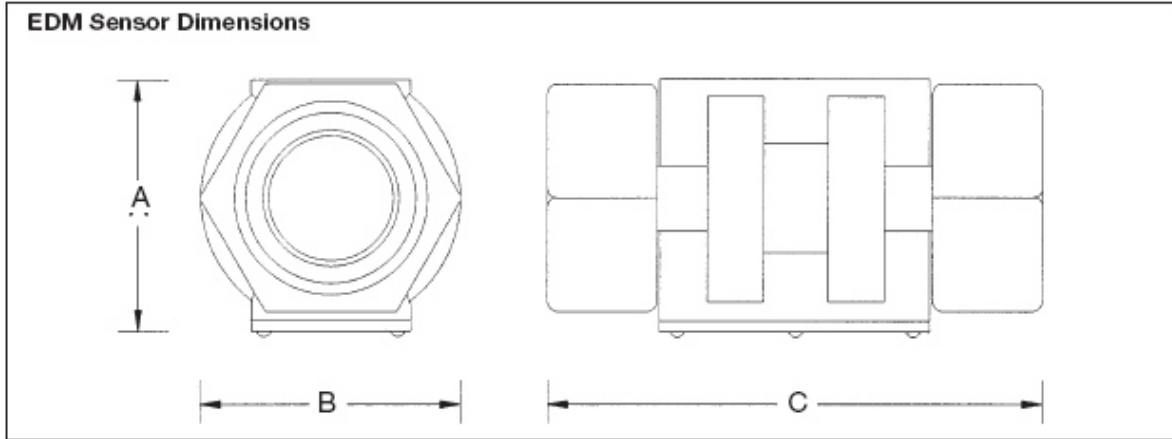
Required Cable: Belden #9501 to maintain I.S. approval

Protection: NEMA 4

Intrinsic Safety: FM approved Class I, II, III Div. 1, Gr. A,B,C,D,E,F,G

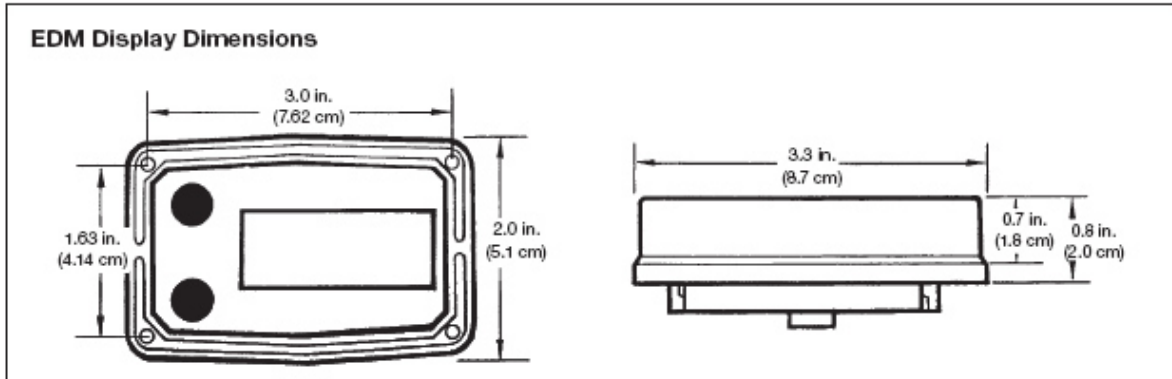
EDM - Battery Powered Rate Meter & Totalizer

↩ Dimensions



Fitting Size	SS/Aluminum			Nylon			Aluminum High Flow			PVDF/PVC		
	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	—	—	—

* Sensor portion only. For meters with display, add 0.70" to dimension A.



EDM Electronic Water Meter



- Economical PVC Construction
- Flowrate Indication with Resettable and Non-Resettable Totalizers
- Flow Ranges 1-10 GPM through 20-200 GPM Water
- Lithium Battery Powered Indicator Requires no Local Supply Power
- Excellent Replacement for Mechanical Totalizers

The EDM series water flowmeter is excellent for accurately totalizing water and other low viscosity liquids. It features an economical PVC body and lithium battery powered LCD display. The display has a resettable batch totalizer and a nonresettable grand totalizer, as well as rate indication. These displays are accessed by a toggle pushbutton on the face. The EDM is factory calibrated for water flow. This calibration is valid for low viscosity liquids up to 10 centistokes viscosity. For higher viscosity liquids, a field calibration mode exists allowing the user to dispense a known volume of liquid in order to calibrate the EDM's computer for the higher viscosity liquid.

The EDM electronic water meter is available in line sizes from 1/2 to 2 inches. Fittings available are PVC socket or NPT threads. The EDM series combines economy with a full featured electronics making it an excellent and economical replacement for metal body mechanical water totalizers.

Onboard Display Features

Flowrate indication, one user resettable batch totalizer, one non-resettable grand totalizer, field calibration routine for higher viscosity liquids (100 cPs Max.).

Specifications

Available Flow Ranges: 1-10 GPM through 20-200 GPM water

Allowable Liquids: Clean non-coating liquids compatible with wetted parts

Accuracy: ±3% of reading

Repeatability: ±0.1% of reading

Max. Pressure: 150 PSIG @70°F

Oper. Temp. Range: 32 to 140°F

Straight Piping Rqmt: 10 x D upstream, 5 x D downstream

Wetted Parts

Body: PVC

Rotor: PVDF (Kynar®)

Bearings: Ceramic

Axle: Tungsten carbide

Retaining Ring: 316 SS

Display Power Source: 2 x 1.5V lithium batteries

Battery Life: 9000 hours of continuous use

Power Saver Feature: Display blanks when flow ceases for longer than one minute.

Filtration Required

1/2" and 3/4": 55 mesh

1", 1-1/2" & 2": 28 mesh

Ordering Information

Fitting Size	Flow Range (GPM water)	DP @ Max. Flow (PSI)	Shipping Weight (LBS)	Base Model	Fitting Style
1/2"	1-10	7.9	1.1	EDM-8501...	...N = NPT ...S = Socket
3/4"	2-20	7.5	1.2	EDM-8502...	
1"	5-50	5.0	1.3	EDM-8503...	
1-1/2"	10-100	4.0	1.6	EDM-8504...	
2"	20-200	4.0	1.9	EDM-8505...	

Example Part Number: EDM-8503N