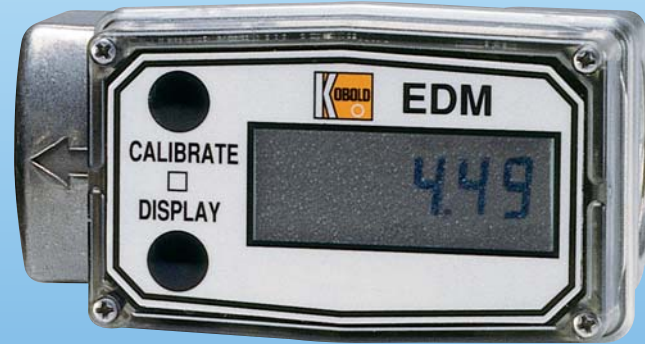


EDM BATTERY POWERED FLOW SENSOR



Flow
Pressure
Level
Temperature
measurement
monitoring
control



- 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



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Visit KOBOLD Online at
www.kobold.com

Model:
EDM



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 on-board 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 KOBOLD 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 totalizing 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.



KOBOLD EDM Flow Sensors

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

- 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

Electrical Ratings

- Onboard Display/Computers**
- Input Power:** Two 3 VDC lithium batteries



EDM 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						

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Electrical Characteristics of Standard Pulse and Analog Outputs

<p>Option -WM: 4-20 mA Transmitter</p> <p>Input Power: 7-30 VDC loop powered</p> <p>Output: 2-wire, 4-20 mA DC</p> <p>Cable Length: 10 feet provided</p> <p>Protection: NEMA 4</p> <p>Intrinsic Safety: None</p>	<p>Option -PM: Pulse Transmitter with Display</p> <p>Input Power: 0-60 VDC</p> <p>Output: NPN open collector transistor</p> <p>Sink Current: 100 mA maximum</p> <p>Cable Length: 10 feet provided</p> <p>Protection: NEMA 4</p> <p>Intrinsic Safety: None</p>	<p>Option -SC: Pulse Transmitter, no Display</p> <p>Input Power: 9-35 VDC</p> <p>Output: NPN open collector transistor</p> <p>Sink Current: 4 mA maximum</p> <p>Cable Length: 10 feet provided</p> <p>Protection: NEMA 4</p> <p>Intrinsic Safety: None</p>
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Electrical Characteristics of Intrinsically Safe Options

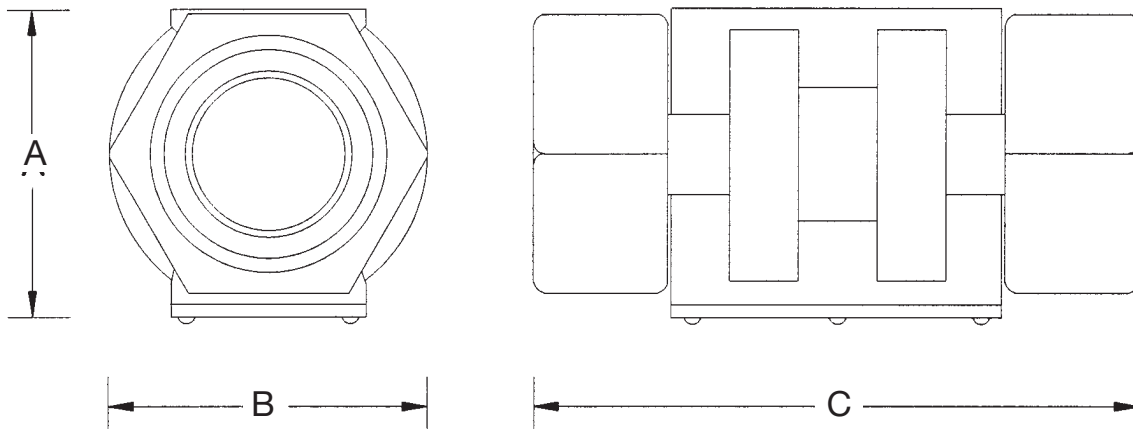
Intrinsically Safe Pulse Transmitter

Power Supply: 7.5-30 VDC
 Output: NPN open collector
 Protection: NEMA 4
 Intrinsic Safety: FM approved, Class I, 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 Sensor 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 Display Dimensions

