

# EDM BATTERY POWERED RATE METER & TOTALIZER



Flow  
Pressure  
Level  
Temperature  
Measurement  
Monitoring  
Control



- Brass, SS, Aluminum, PVDF, or Nylon Bodies
- Battery Powered
- Compact and Portable
- Ranges: 0.3-3 GPM to 30-300 GPM
- Rate and Totaling Displays
- Analog or Frequency Outputs
- New and Improved Computer Electronics



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Model:  
EDM

**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 batteries power an onboard rate meter/totalizer allowing installation in virtually any location, regardless of power availability. Results are displayed on a highly visible LCD readout.

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, 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:** 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  
**Display + Output:** +14 to +140°F

**Wetted Materials**  
**SS Body:** 316 SS, Ceramic, PVDF, Tungsten Carbide  
**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

**Electrical Ratings**  
**Onboard Display/Computers**  
**Input Power:** Two 3 VDC lithium batteries  
**Battery Life:** 9000 hours  
**Protection:** NEMA 4  
**Option -RD: Remote Display Kit**  
**Input Power:** Self-powered magnetic pickup  
**Cable Length:** 10 ft supplied, 100 ft maximum



## Ordering Details (Example: EDM-4202B)

Water Flow Range		Accuracy % of Reading	Fitting Size [NPT]	Max dP [PSI]	Model Number	
GPM	LPM					
<b>Flowmeter with Stainless Steel or Aluminum Body</b>						
					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
<b>Flowmeter with PVDF Body</b>						
1.2 - 12	4.5 - 45	2.0	1/2"	10	-	EDM-4401
5 - 50	19 - 190	1.5	1"	6	-	EDM-4403
<b>Flowmeter with Nylon Body</b>						
0.3 - 3	1 - 10	1.5	1"	2	-	EDM-4101
3 - 50	10 - 190	1.5	1"	5	-	EDM-4102
<b>High Flow Flowmeter with Aluminum Body</b>						
3 - 50	10 - 190	1.5	1"	5	-	EDM-4307
30 - 300	100 - 1000	1.5	2"	7	-	EDM-4309
<b>Options</b>						
<b>Description</b>						<b>Suffix</b>
Add-on remote mounting kit for displays						RD
Add-on pulse frequency transmitter kit (Not for high flow aluminum and nylon 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 nylon meters)						WM
150 LB ANSI flange connection for stainless steel flowmeters only						F
Tri-clamp® connection for stainless steel flowmeters only						T
ISO Threads						B

## Electrical Characteristics of Standard Pulse and Analog Outputs

## Option "WM": 4-20 mA Transmitter

**Input Power:** 7-30 V<sub>DC</sub> loop powered  
**Output:** 2-wire, 4-20 mA DC  
**Cable Length:** 10 feet provided  
**Protection:** NEMA 4  
**Intrinsic Safety:** None

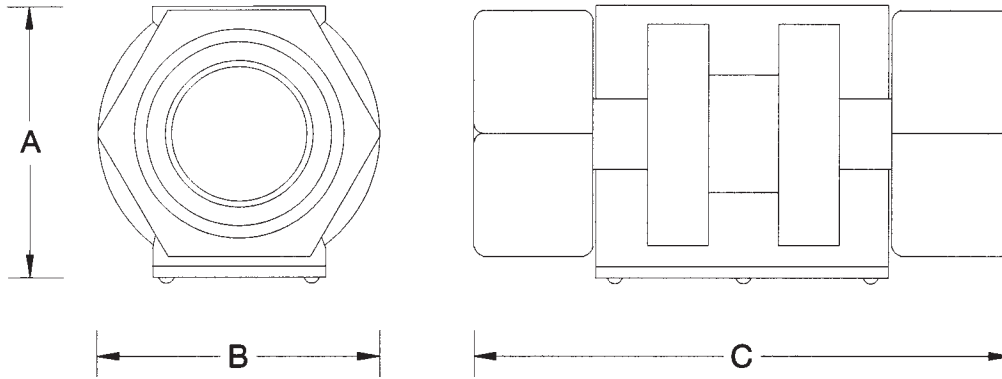
## Option "PM": Pulse Transmitter with Display

**Input Power:** 0-60 V<sub>DC</sub>  
**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 V<sub>DC</sub>  
**Output:** NPN open collector transistor  
**Sink Current:** 4 mA maximum  
**Cable Length:** 10 feet provided  
**Protection:** NEMA 4  
**Intrinsic Safety:** None

EDM Sensor Dimensions



Fitting Size	SS/Aluminum			Nylon			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"	-	-	-

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

EDM Display Dimensions

