

SENSING & CONTROL / ELECTROMAGNETIC FLOW METER

Badger Meter ModMAG® M5000

Electromagnetic flow meter for potable water, reclaimed water, ground water, and clear water-based applications – specs sourced directly from Badger Meter's Product Data Sheet MAG-DS-00175-EN-11 (June 2021).



Spec	Value
Detector Size	1/2–24 in. (DN 15–600)
Flow Range	0.1–32.8 ft/s (0.03–10 m/s), up to 44,814 GPM at 24 in.
Accuracy	±0.4% of measured value ±2 mm/s; OIML/MID ±1% ≥ 1.2 ft/s
Repeatability	±0.1%
Ambient Temperature	–4°F to 140°F (–20°C to 60°C)
Process Connection	Flange: DIN, ANSI, JIS, AWWA and more
Pressure Limit	Up to 1,450 psi (100 bar) PED
Enclosure	Standard NEMA 4X (IP67); optional submersible NEMA 6P (IP68)
Minimum Conductivity	≥ 20 µS/cm
Liner Material	PTFE (302°F remote mount) or Hard Rubber (178°F)
Electrode Material	Standard: Hastelloy® C; optional Tantalum, Platinum/Gold plated, Platinum/Rhodium, 316 stainless steel
Housing Material	Standard: carbon steel painted; optional stainless steel 304/316 or C5M coating
Communication	RS232, Modbus®, internal datalogger or M-Bus interface

Empty pipe detection: a third electrode positioned between 12 and 1 o'clock detects an uncovered condition for a minimum 5-second duration, sending an error message and halting measurement until the electrode is covered again — a real Badger Meter M5000 design feature, not a generic flow-meter claim.