

ISOIL ISOMAG MS1000

ELECTROMAGNETIC FLOW ELEMENT

Reliable flow measurement for demanding industrial service



Remote Mount Version
w/ Junction Box

BUILT FOR PERFORMANCE

- Accuracy up to $\pm 0.2\%$ of reading
- Supports pipe sizes from 1" up to 16"
- Flow ranges up to 19,813 GPM
- Wafer design for tight spaces
- Bi-directional flow measurement
- Stainless-steel meter bodies for direct burial applications



NSF61 Certified

WHY CHOOSE THE MS1000?

- Full bore technology w/o any moving parts
- Liner material options to meet most temperature and application compatibility requirements
- Multiple electrode materials for a wide variety of chemical compatibility
- Fully potted sensors for vibration resistance and water ingress prevention (IP68 / NEMA6P rated)
- Integral or remote mounted electronics
- Integrated internal meter verification through connected flow transmitter
- Flat specification accuracy calibration curve w/ long term stable measurement accuracy
- Alignment kits are available to mitigate misalignment concerns

TYPICAL APPLICATION INFORMATION

Potable Water	Wastewater Sludge	Polymer
Wastewater	Coagulants & Flocculants	Conductive Fluids ($> 5\mu\text{S/cm}$)

Jadler Industries Application Support

Let Jadler Industries support you with application guidance in terms of model number selection and with sizing reports to allow the Isoil unit to work according to the expected performance requirements

www.jader.ca

ENGINEERING SPECIFICATIONS

Consult Jadler Industries to confirm application accuracy and compatibility

Accuracy	Flow Transmitter Dependent: 0.4% for the MV110 / MV145 0.2% for the MV210
Repeatability	±0.1%
Fluid Conductivity	Flow Transmitter Dependent, ≥5μS/cm - MV110, MV210, MV145 & MV110W ≥20μS/cm – MV800
Process Connections	Wafer type design - Sandwiched between flanges
Environmental Rating	IP68 NEMA6P
Electrode Materials	Stainless-Steel, Hastelloy C-276, Tantalum, Titanium, Platinum
Liner Materials	Polypropylene, Ebonite, PTFE (limited up to 6" line sizes)
Flow Element Coating	Powder coating for std. applications or SS meter body for high saline / direct burial applications

LINER TEMPERATURE SPECIFICATIONS

Polypropylene	0°C ... 60°C 32°F ... 140°F
Ebonite	-5°C ... 80°C 23°F ... 176°F
PTFE	-20°C ... 100°C -4°F ... 212°F

LINER PRESSURE SPECIFICATIONS

Polypropylene & Rilsan	0 ... 232 PSI 0 ... 1,600 kPa 0 ... 16 Bar
PTFE	0 ... 580 PSI 0 ... 4,000 kPa 0 ... 40 Bar

FACE-TO-FACE DIMENSIONS FOR CL. 150 # FLANGED PROCESS CONNECTIONS

Line Size:	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"	10"	12"
Face-to-Face Dims. - mm (In):	100 (3.94)	100 (3.94)	100 (3.94)	100 (3.94)	150 (5.90)	150 (5.90)	150 (5.90)	180 (7.87)	200 (7.87)	250 (9.84)	300 (11.81)

More face-to-face dimensions and other dimensional information available in the Isoil datasheet – [Datasheet](#)

FLOW ELEMENT LINEAR FLOW ACCURACY FLOW RANGES

Line Size:	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"	10"	12"
Min. Linear Flow:	0.89 m3/h 3.9 GPM	1.45 m3/h 6.38 GPM	2.25 m3/h 9.9 GPM	3.5 m3/h 15.41 GPM	5.9 m3/h 25.98 GPM	9 m3/h 39.62 GPM	14 m3/h 61.64 GPM	32 m3/h 140.9 GPM	56 m3/h 246.5 GPM	88 m3/h 387.5 GPM	126 m3/h 554.8 GPM
Max. Linear Flow:	18 m3/h 79 GPM	29 m3/h 128 GPM	45 m3/h 198 GPM	72 m3/h 317 GPM	120 m3/h 528 GPM	180 m3/h 793 GPM	280 m3/h 1,233 GPM	640 m3/h 2,818 GPM	1,130 m3/h 4,975 GPM	1,770 m3/h 7,793 GPM	2,520 m3/h 11095 GPM

Linear Flow Accuracy refers to where the fluid velocity is ≥ 0.5 m/s (1.64 ft/s) up to 10 m/s (32.8 ft/s)

The Isoil flow meter will operate within the defined accuracy specification when operating within the linear flow accuracy flow range

Consult Jadler Industries for other line sizes and for application specific performance calculations.