

ISOIL ISOMAG MS2500

ELECTROMAGNETIC FLOW ELEMENT

Reliable flow measurement for demanding industrial service



BUILT FOR PERFORMANCE

- Accuracy up to $\pm 0.2\%$ of reading
- Supports pipe sizes from 1" up to 120"
- Flow range: 2.4 to 179.4 GPM+
- Class 150 and Class 300 flanges with approvals
- Bidirectional flow measurement
- Stainless steel meter bodies for direct burial applications



NSF61 &
CRN
Certified



WHY CHOOSE THE MS2500?

- Full-bore technology without moving parts
- Wide range of liner materials for temperature and application compatibility requirements
- Multiple electrode materials for broad chemical compatibility
- Fully potted sensors resist vibration and water ingress (IP68/NEMA 6P rated)
- ANSI Class 150 and Class 300 B16.5 flanges with CRN approvals. Higher-pressure flanges available upon request
- Integral or remote-mounted electronics
- Integrated internal meter verification through the connected flow transmitter
- Flat accuracy calibration curve with long-term measurement stability

TYPICAL APPLICATION INFORMATION

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

Jadler Industries Application Support

Let Jadler Industries support you with application guidance in terms of model number selection and sizing reports to help ensure the ISOIL unit performs according to the expected performance requirements

www.jadler.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	ANSI B16.5 flanged connections up to Class 2500 (CRN-certified for Classes 150 and 300)
Environmental Rating	IP68 NEMA6P
Electrode Materials	Stainless steel, Hastelloy C-276, tantalum, titanium, platinum
Liner Materials	Polypropylene, Rilsan (Hard Rubber), Ebonite, PTFE, PFA, Abral (Natural Rubber)
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
Rilsan	0°C ... 70°C 32°F ... 158°F
Ebonite	-5°C ... 80°C 23°F ... 176°F
PTFE	-20°C ... 130°C -4°F ... 266°F
PFA	-20°C ... 180°C -4°F ... 356°F
Abral	-20°C ... 70°C -4°F ... 158°F

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):	200 (7.87)	192 (7.56)	200 (7.87)	200 (7.87)	200 (7.87)	200 (7.87)	250 (9.84)	300 (11.81)	350 (13.78)	450 (17.72)	500 (19.69)

Line Size:	14"	16"	18"	20"	24"	26"	28"	30"	32"	34"	36"
Face-to-Face Dims. - mm (In):	550 (21.65)	600 (23.62)	600 (23.62)	600 (23.62)	600 (23.62)	650 (25.59)	700 (27.56)	750 (29.53)	800 (31.5)	850 (33.46)	900 (35.43)

More face-to-face dimensional information is available upon request.

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 11,095 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 operates within the stated accuracy when used within the linear flow-accuracy range.
Consult Jadler Industries for other line sizes and application-specific performance calculations.