

ISOIL ISOMAG FLOW TRANSMITTERS

MV110 | MV145 | MV210

Reliable flow measurement for demanding industrial service



Canadian Electrical Code (CEC) certified for use in
GP rated areas through Intertek special inspections



MV110 | MV210 Platform



MV145 Platform

WHICH TRANSMITTER IS THE RIGHT FIT FOR THE APPLICATION

MV110

Versatile Control

- Standard applications
- Accuracy specification: 0.4%
- Application guidance:
 - Clean water: line sizes up to 46"
 - Fluids containing solids: line sizes up to 12"
- Remote without amplifier circuit: approx. 40 m

MV145

Battery Powered

- Battery-powered specialist
- Alkaline or lithium-ion batteries
- Accuracy specification: 0.4%
- Application guidance:
 - Clean water: line sizes up to 46"
 - Not recommended for fluids containing solids
- Remote without amplifier circuit: approx. 15 m

MV210

High Performance

- Demanding applications
- Accuracy specification: 0.2%
- Application guidance:
 - Clean water: line sizes up to 120"
 - Preferred for viscous fluids or solids, including cream, sludge, and slurries
- Remote without amplifier circuit: approx. 40 m

SHARED PLATFORM ADVANTAGES

- Compatible with all ISOMAG series flow elements:
 - MS1000, MS2500, MS600, and MS501 inline elements
 - MS3780 and MS3820 insertion elements
- Bidirectional flow measurement
- Empty-pipe detection
- Low-flow cutoff
- Integral or remote-mounted installation
- Environmental protection:
 - IP67 for integrally mounted units
 - IP68 flow element with IP67 remote-mounted transmitter
- Specialized IP ratings available
- Integrated meter verification
- Quick Test and condition monitoring



Jadler Industries Configuration Support

Jadler Industries supports you with assembly and configuration services. Services include programming calibration information, configuring outputs, and setting other parameters as required.

www.jadler.ca

ENGINEERING SPECIFICATIONS

Consult Jadler Industries to confirm application accuracy and compatibility

Feature	MV110 MV210	MV145
Mounting	Integral / Remote	
Enclosure Material	Nylon Aluminum SS304 (food-and-beverage focused)	
Temp. Specification	Nylon: -10°C to 50°C Aluminum / SS304: -20°C to 60°C Enclosures were tested in Canadian winter conditions down to -40°C without operational concerns. The LCD freezes below -20°C and becomes responsive above this temperature.	
Power Options	24 ... 36 VDC 100 ... 240 VAC (power-frequency agnostic)	12 ... 48 VDC
Analog I/O Options	1x / 2x 4-20mA Output(s)	1x / 2x 4-20mA Input(s) / 1x 4-20mA Output
Digital I/O Options	1x / 2x Digital output(s)	1 ... 3 Digital Inputs & 2 ... 4 Digital Outputs
Communication Options	HART / Modbus RTU / M-Bus	Modbus RTU
Datalogging Options	4 ... 32 GB (Optional), Includes an internal battery if selected	4 ... 32 GB
Special Features	MV210: Batch controller	4 ... 32 GB

COMMON OPERATING CONDITIONS

Nylon Enclosure Temp. Spec.:	-10°C ... +50°C 14°F ... 122°F
Aluminum Enclosure Temp. Spec.:	-20°C ... +60°C -4°F ... 140°F
Temperature Specification Note:	The nylon and aluminum enclosures have operated outdoors in Canadian winter conditions down to -40°C without operational concerns. The LCD freezes below -20°C. Normal operation resumes above this temperature (typical for LCDs).
Humidity:	0 ... 100% RH

SELECTION NOTES

Jadler Industries Sizing Support

The flow transmitter operates within its specified accuracy when fluid velocity is between 0.5 and 10 m/s (1.64 and 32.8 ft/s), or within the linear accuracy range. For lower velocities, consult Jadler Industries to select the appropriate flow-element size and transmitter combination.

