

**AVFM 5.0 Area-Velocity Flow Meter**

Approximate shipping weight: 12lbs / 5 kg

Model

AVFM 5.0

**STANDARD FEATURES:**

- QZ02L sensor – measures flow Velocity and Level
- sensor cable – 25 ft / 7.6 m submersible, shielded 3-coaxial
- enclosure - watertight, NEMA4X (IP66) polycarbonate
- displays – white backlit matrix LCD
- calibration - built-in 5-key programmer
- outputs – three isolated 4-20mA/0-5V, Flow, Level and Velocity
- 2 control relays - 5 amp, SPDT - programmable for flow proportional pulse output, flow and/or level alarm
- power input - 100-240VAC 50/60Hz
- electrical surge protection and RFI filters - AC, sensor, 4-20mA
- 1 Manual - Installation and Operation

<b>POWER INPUT</b> Standard 100-240VAC 50/60Hz		A
9-32VDC		B

<b>ENCLOSURE</b> Standard NEMA4X (IP66) fiberglass		1
CXJ8106 – Explosion proof NEMA7 (non-returnable & non-refundable)		2

<b>ENCLOSURE TEMPERATURE</b> Standard (-5° to 140°F / -20° to 60°C)		A
Heater and Thermostat (115VAC, 15 watts)		B
Heater and Thermostat (230VAC, 15 watts)		C

<b>ELECTRONICS PROTECTION</b> Standard – no circuit board coating		1
Conformal Coated Electronics (partial – excludes power supply, display and optional data logger)		2

**SENSOR** (each with 25 ft / 7.6 m cable and stainless steel mounting bracket)

QZ02L Standard Sensor, submersible – measures Level and Velocity		A1
PZ12-LP Non-contacting Level plus separate QZ02L-B Submersible Velocity		B1
QZ02L-HT Hi-Temp CPVC (175°F/80°C), submersible Level and Velocity		D3
PZ12-LP Non-contacting Level plus QZ02L-B-HT Hi-Temp CPVC Velocity		B3
PZ12-LP Non-contacting Level plus SE4 Clamp-on Velocity		B2
PZ15 Non-contacting Level plus SE4 Clamp-on Velocity		F2

**INTRINSIC SAFETY BARRIERS** (built into electronics enclosure)

Standard, General Purpose locations, not rated Intrinsically Safe		1
3ISB Intrinsic Safety Barriers (3) for Sensor and cable installation in Class I,II,III, Div. I,II, Groups C,D,E,F,G hazardous rated locations		2

**SENSOR CABLE LENGTH**

Standard 25 ft. 7.6m submersible, shielded 3-coaxial		A
50 ft / 15 m submersible, shielded 3-coaxial		B
100 ft / 30 m submersible, shielded 3-coaxial		C

**DATA LOGGER**

None – Standard		1
Greyline Logger – 2 million point Data Logger (with USB output, PC software)		2

**CONTROL RELAYS**

2 – Standard		A
4 Extra Relays (6 total) rated 5 amp SPDT, fully programmable		B

**OPTIONS AND ACCESSORIES**

QTY	CODE	DESCRIPTION
	VXC	Extra sensor cable up to 500 ft / 152 m (submersible tri-coaxial)
	JB2X	Sensor cable Junction Box, NEMA4X/IP66 polycarbonate
	JB4X	Sensor cable Junction Box for separate level and velocity, NEMA4X/IP66
	PM	Enclosure Panel Mount Flange assembly
	SCR	Enclosure Sunscreen (iridite aluminum)
	PZS	Sensor Sunscreen (for optional non-contacting level sensor)
	CHS	Spare set Electronics with Mounting Chassis (standard features)
	MB-QZ	Extra submersible sensor Mounting Bracket, stainless steel
	MB12	Extra ultrasonic level Mounting Bracket, stainless steel
	MNL	Additional Manuals (one supplied with each instrument)
	SP4	Lightning/Surge Protection in NEMA4 Steel Enclosure
	GL2	Replacement 'Greyline Logger' Software (included with Data Logger option)
	VSJ6	SS Pipe Mounting Band for 6"/150 mm ID pipes (fits ±0.5"/13 mm)
	VSJ8	SS Pipe Mounting Band for 8"/200 mm ID pipes (fits ±0.5"/13 mm)
	VSJ10	SS Pipe Mounting Band for 10"/250 mm ID pipes (adjustable ±0.5"/13 mm)
	VSJ12	SS Pipe Mounting Band for 12"/300 mm ID pipes (adjustable ±0.5"/13 mm)
	VSJ14	SS Pipe Mounting Band for 14"/350 mm ID pipes (adjustable ±0.5"/13 mm)
	VSJ15	SS Pipe Mounting Band for 15"/375 mm ID pipes (adjustable ±0.5"/13 mm)
	VSJ16	SS Pipe Mounting Band for 16"/400 mm ID pipes (adjustable ±0.5"/13 mm)
	VSJ18	SS Pipe Mounting Band for 18"/450 mm ID pipes (adjustable ±0.5"/13 mm)
	VSJ20	SS Pipe Mounting Band for 20"/500 mm ID pipes (adjustable ±0.5"/13 mm)
	VSJ24	SS Pipe Mounting Band for 24"/600 mm ID pipes (adjustable ±0.5"/13 mm)
	VSJ30	SS Pipe Mounting Band for 30"/750 mm ID pipes (adjustable ±0.5"/13 mm)
	VSJ32-40	SS Half-Pipe Mounting Band for 32-40"/800-1000 mm ID pipes
	VSJ42-54	SS Half-Pipe Mounting Band for 42-54"/1100-1375 mm ID pipes
	VSJ56-72	SS Half-Pipe Mounting Band for 56-72"/1400-1800 mm ID pipes
	VD6	SS Pipe Dam Band for 6"/150 mm ID pipes (fits ±0.5"/13 mm)
	VD8	SS Pipe Dam Band for 8"/200 mm ID pipes (fits ±0.5"/13 mm)
	VD10	SS Pipe Dam Band for 10"/250 mm ID pipes (adjustable ±0.5"/13 mm)
	VD12	SS Pipe Dam Band for 12"/300 mm ID pipes (adjustable ±0.5"/13 mm)
	VD14	SS Pipe Dam Band for 14"/350 mm ID pipes (adjustable ±0.5"/13 mm)
	VD15	SS Pipe Dam Band for 15"/375 mm ID pipes (adjustable ±0.5"/13 mm)
	VD16	SS Pipe Dam Band for 16"/400 mm ID pipes (adjustable ±0.5"/13 mm)
	VD18	SS Pipe Dam Band for 18"/450 mm ID pipes (adjustable ±0.5"/13 mm)

**REPLACEMENT SENSORS**

\* Provide Instrument Serial number when ordering replacements

	QZ02L-UT-01-SD	Standard submersible Velocity/Level Sensor, PVC with 25 ft. / 7.6 m cable
	QZ02L-UT-02-SD	Optional submersible Velocity/Level Sensor, PVC with 50 ft. / 15 m cable
	QZ02L-UT-03-SD	Optional submersible Velocity/Level Sensor, PVC with 100 ft. / 30 m cable
	QZ02L-UT-01-DP	Submersible Velocity Sensor, PVC with 25 ft. / 7.6 m cable
	QZ02L-UT-02-DP	Submersible Velocity Sensor, PVC with 50 ft. / 15 m cable
	QZ02L-UT-03-DP	Submersible Velocity Sensor, PVC with 100 ft. / 30 m cable
	QZ02L-HT-01-SD	Hi-Temp submersible Velocity/Level Sensor, CPVC with 25 ft. / 7.6 m cable
	QZ02L-HT-02-SD	Hi-Temp submersible Velocity/Level Sensor, CPVC with 50 ft. / 15 m cable
	QZ02L-HT-03-SD	Hi-Temp submersible Velocity/Level Sensor, CPVC with 100 ft. / 30 m cable
	PZ12-LP	Non-contacting ultrasonic Level Sensor, PVC with 25 ft / 7.6 m cable
	PZ12-LP-25XC	Non-contacting ultrasonic Level Sensor, PVC with 50 ft / 15 m cable
	PZ12-LP-75XC	Non-contacting ultrasonic Level Sensor, PVC with 100 ft / 30 m cable
	SE4	Clamp-on Doppler Velocity Sensor with 20 ft / 6 m cable
	SE4-30XC	Clamp-on Doppler Velocity Sensor with 50 ft / 15 m cable
	SE4-80XC	Clamp-on Doppler Velocity Sensor with 100 ft / 30 m cable
	PZ15	Non-contacting ultrasonic Level Sensor, PVC with 25 ft / 7.6 m cable
	PZ15-25XC	Non-contacting ultrasonic Level Sensor, PVC with 50 ft / 15 m cable
	PZ15-75XC	Non-contacting ultrasonic Level Sensor, PVC with 100 ft / 30 m cable