AVFM 6.1 Area-Velocity Flow Meter

Approximate shipping weight: 11 lbs / 5 kg

Model   AVFM 6.1 __-__-__-__-__-__-__-__-__

STANDARD FEATURES:

- QZ02L sensor: measures flow Velocity and Level simultaneously
- Sensor cable: 25 ft / 7.6 m submersible, shielded 3-coaxial pairs
- Flow rate range: 0.1 to 20 ft/sec and reverse flow to -5 ft/sec
- Accuracy: Velocity - ± 2% of reading or ± 0.04 ft/sec (whichever is greater)
  Repeatability & Linearity ± 0.5%
  Level - ± 0.25% of reading or ± 0.08" (whichever is greater)
  Repeatability & Linearity 0.1%
- Enclosure: watertight, NEMA4X (IP66) polycarbonate
- Display: white, backlit matrix
- Totalizer: 14 digit
- 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
- Datalogger: 128 Megabyte storage capacity (6.5 million points)
- Power input: 100-240VAC 50/60Hz, 10 VA maximum
- CE, UL/CSA/EN 61010-1

POWER INPUT

Standard – 100-240VAC 50/60Hz, 10VA Maximum	A
9-32VDC, 10W Maximum	B

ENCLOSURE & ELECTRONICS PROTECTION

Standard NEMA4X (IP66) polycarbonate	1
NEMA4X polycarbonate enclosure with conformally coated electronics	2
CXJ8106 – Explosion proof NEMA7 (non-returnable & non-refundable)[1]	3

[1]*Lead Time for a AVFM 6.1 with this option is 2 weeks*

ENCLOSURE TEMPERATURE RATING

Standard (-5° to 140°F / -20° to 60°C)	A
Heater and Thermostat 115VAC, 15 VA additional to Power Input (25 VA total)	B
Heater and Thermostat 230VAC, 15 VA additional to Power Input (25 VA total)	C

INTRINSIC SAFETY

Standard – QZ02L for non-hazardous locations only	1
QTY 3 ISB Intrinsic Safety Barriers for sensor installation in Class 1,2,3 Div 1,2; Groups C,D,E,F,G hazardous locations	2

TRANSDUCERS (each with 25 ft / 7.6 m cable)

Standard – QZ02L submersible sensor, measures level and velocity	A1
PZ15-LP non-contacting level plus separate QZ02L-B-SS submersible velocity	B1
PZ15-LP Non-contacting Level plus SE4 Clamp-on Velocity	B2
PZ15 Non-contacting Level plus SE4 Clamp-on Velocity	F2

TRANSDUCER MOUNTING HARDWARE

Standard – Stainless steel mounting bracket (included with all Transducer options)	1

TRANSDUCER CABLE LENGTH

Standard – 25 ft. 7.6m, cable type matches Transducer selection	A
50 ft / 15 m, cable type matches Transducer selection	B
100 ft / 30 m, cable type matches Transducer selection	C

SERIAL COMMUNICATIONS

Standard – None	1
Modbus® RTU via RS-485	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 QZ02L sensor cable up to 500 ft / 152 m (submersible tri-coaxial)	
	DXC	Extra dual-coaxial sensor cable up to 500 ft / 152 m for optional QZ02L-B submersible velocity-only sensor	
	XC	Extra coaxial sensor cable up to 500 ft/152 m for optional PZ15-LP level sensor	
	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 PZ15-LP level sensor)	
	MB-QZ	Extra submersible sensor Mounting Bracket, stainless steel	
	MB15	Extra ultrasonic level Mounting Bracket, stainless steel	
	MNL	Additional Manuals (one supplied with each instrument)	
	SP4	Lightning/Surge Protection in NEMA13,12 Steel Enclosure	
	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

	CODE	DESCRIPTION	
	QZ02L-SS-01-SD[1]	Standard submersible Velocity/Level Sensor, 316SS with 25 ft. / 7.6 m cable	
	QZ02L-SS-02-SD[1]	Optional submersible Velocity/Level Sensor, 316SS with 50 ft. / 15 m cable	
	QZ02L-SS-03-SD[1]	Optional submersible Velocity/Level Sensor, 316SS with 100 ft. / 30 m cable	
	QZ02L-SS-01-DP[1]	Submersible Velocity Sensor, 316SS with 25 ft. / 7.6 m cable	
	QZ02L-SS-02-DP[1]	Submersible Velocity Sensor, 316SS with 50 ft. / 15 m cable	
	QZ02L-SS-03-DP[1]	Submersible Velocity Sensor, 316SS with 100 ft. / 30 m cable	
	PZ15-LP[2]	Non-contacting ultrasonic Level Sensor, PVC with 25 ft / 7.6 m cable	
	PZ15-LP-25XC[2]	Non-contacting ultrasonic Level Sensor, PVC with 50 ft / 15 m cable	
	PZ15-LP-75XC[2]	Non-contacting ultrasonic Level Sensor, PVC 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	

[1] Sensors include MB-QZ mounting bracket
[2] Sensors include MB15 mounting bracket