Greyline
Precision Flow Measurement
An ONICON Brand

AVFM 5.0 Area-Velocity Flow Meter

Model | AVFM 5.0 __-__-__-__-__-__-__-__-__

Approximate shipping weight: 11 lbs / 5 kg

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

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

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

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

ELECTRONICS PROTECTION 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
PZ15-LP Non-contacting Level plus separate QZ02L-B Submersible Velocity		B1
PZ15-LP Non-contacting Level plus QZ02L-B-SS Hi-Temp Velocity		B3
PZ15-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 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 level sensor)	
	CHS	Spare set Electronics with Mounting Chassis (standard features)	
	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	
	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-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-UT-01-DP[1]	Submersible Velocity Sensor, PVC with 25 ft. / 7.6 m cable	
	QZ02L-UT-02-DP[1]	Submersible Velocity Sensor, PVC with 50 ft. / 15 m cable	
	QZ02L-UT-03-DP[1]	Submersible Velocity Sensor, PVC 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	
	SE4-A	Clamp-on Doppler Velocity Sensor with 20 ft / 6 m cable	
	SE4-A-30VXC	Clamp-on Doppler Velocity Sensor with 50 ft / 15 m cable	
	SE4-A-80VXC	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	

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