

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

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

| | | |
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| 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 |

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|--|--|---|
| 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)

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|---|--|----|
| 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)

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|---|--|---|
| 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

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| | 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