ULTRA MAG®

MODEL UM06 AND UM08

ULTRA MAG® ELECTROMAGNETIC FLOW METER
WITH M-SERIES CONVERTER

150 PSI FLANGED TUBE METER, SIZES 2" thru 48"
300 PSI FLANGED TUBE METER, SIZES 2" thru 48"

SUGGESTED SPECIFICATIONS

METER shall be a velocity sensing electromagnetic type flanged tube meter with sealed housing for 150 PSI working pressure (UM06) or 300 PSI working pressure (UM08). The meter shall be a _____ inch Ultra Mag™ MODEL UM06/UM08 with a digital indicator having a range of 0 to _____ and shall be equipped with a 9 digit digital totalizer reading in units of _____ and shall be accurate within 0.5% of actual flow. The meter assembly shall operate within a range of 0.2 FPS to 32 FPS and be constructed as follows:

METER TUBE (SENSOR) shall be fabricated stainless steel pipe and use 150 lb. AWWA Class "D" flat face steel flanges (UM06) or 300 lb. AWWA Class "F" raised face steel flanges (UM08). The internal and external of the meter tube shall be blasted and lined with a NSF approved fusion bonded epoxy UltraLiner™, applied by the fluidized bed method. Meter tubes shall have a constant nominal inside diameter offering no obstruction to the flow. Electrodes shall be 316 stainless steel.

MAG SHIELD shall be welded to the tube providing a completely sealed environment for all coils, electrode connections and wiring harness capable of NEMA 6P/IP68 operation.

SIGNAL CONVERTER shall be pulsed DC coil excitation type with auto zeroing. The converter shall indicate direction of flow and provide a flow rate indication and a totalization of flow volume for both forward and reverse directions. Both forward and reverse totalizers shall be electronically resettable. The flow meter converter shall be microprocessor based with a keypad for instrument set up and LCD displays for totalized flow, flow rate engineering units and velocity. The converter shall power the flow sensing element and provide galvanically isolated dual 4-20mA outputs. It shall be possible, in the test mode, to easily set the converter outputs to any desired value within the range. The 4-20mA scaling, time constants, pipe size, flow proportional output, engineering units and test mode values shall be easily set via the keypad and display. Four separate fully programmable alarm outputs shall be provided to indicate empty pipe, forward/reverse polarity (normally open/close), analog over-range, fault conditions, high/low flow rates, percent of range and pulse cutoff. The converter shall periodically perform self-diagnostics and display and resulting error messages. All set up and data and totalizer values may be protected by a password. The converter shall be integrally mounted our remotely mounted up to 200 feet from the sensor, and shall be supplied in a sealed IP67 rated enclosure. Calibration will be completed at the manufacturer's location in accordance with customer supplied application-based requirements.

GROUNDING RINGS shall be 316 stainless steel and shall be supplied with the meter tube. Exception: On sensor models which use grounding electrodes, grounding rings are optional.

SERVICE & SUPPORT: Supplier must have flow calibration laboratories and personnel to perform testing and certify calibration. Personnel must also provide instruction or training as required assuring meters are supported and maintained throughout the guarantee period.

VOLUMETRIC TESTING of all meters must be performed and approved prior to shipment. The complete meter assembly and signal converter must be wet accuracy tested and calibrated. The test facility must be rigorously traceable to an accuracy of ±0.15% with the National Institute of Standards and Technology. If desired, the test shall be witnessed by the customer or their selected agent. A copy of the certified accuracy test record must be furnished at no charge to the customer.

ONE MANUFACTURER shall make all meter sizes and styles required for this contract. The meters shall be manufactured and tested in the U.S.A.

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