



MODEL UM06 AND UM08
ULTRA MAG® ELECTROMAGNETIC FLOW METER

150 psi FLANGED TUBE METER, SIZES 2" thru 48"

300 psi FLANGED TUBE METER, SIZES 2" thru 48"

SPECIFICATIONS

METER shall be a velocity sensing electromagnetic type, microprocessor based signal converter, sealed housing, flanged tube meter for 150 psi working pressure (UM06) or 300 psi working pressure (UM08). The meter shall be manufactured to highest standard available for magmeters. 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 six digit digital totalizer reading in units of _____ and shall be accurate within 0.5% of true flow. The meter assembly shall operate within a range of 0.2 FPS to 49 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 to near white metal and lined with 40 mils of NSF approved fusion bonded epoxy coating, 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 operation.

SIGNAL CONVERTER shall be pulsed dc coil excitation type with auto zeroing. The signal converter shall be remotely mounted away from the meter. 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 converter shall provide an isolated 4-20 mA output into 800 ohm load, and a frequency output of a maximum of 0-800 Hz and a scaled pulse output. The microprocessor based signal converter shall have a self diagnostic test mode and a backlit display that continuously displays "Rate of Flow" and "Total Volume". The signal converter configuration parameters shall be lockout protected, but can be changed via the front panel keypad or with the use of a personal computer with a 9-pin RS232 serial interface port. The converter shall be compatible with Microsoft Windows and other software programs with built in terminal communication capabilities. The converter shall be integrally mounted or remotely mounted up to 300/ft. from sensor, and shall be supplied in a sealed NEMA 4X case, with all calibration complete for desired requirements. Converter shall be supplied with a programmable low flow drop out and empty pipe zero return.

GROUNDING RINGS shall be 316 stainless steel and shall be supplied with meter tube. Exception: On sensor models which use a grounding button, no grounding ring shall be required.

PARTS & SERVICE: Supplier must have test facilities, spare parts, and personnel to maintain, instruct, train or whatever is necessary to assure meters will be 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 as a unit near minimum, intermediate, and maximum manufacturer's specified flow ranges of the meter. The amount of water used to conduct the test must be shown on a shipping tag attached to the meter. The test facility must be certified annually to an accuracy of $\pm 0.2\%$ and be traceable to 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, if requested.

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.