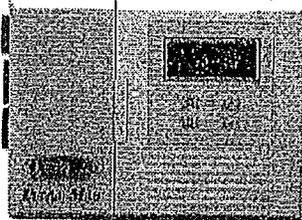
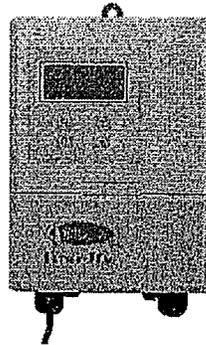




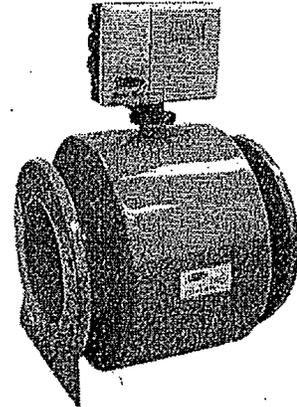
MODEL UM-06
ULTRAMAG™ ELECTROMAGNETIC FLOW METER
 150 psi FLANGED TUBE METER
 SIZES 2" thru 48"



TYPICAL SENSOR MOUNT
 SIGNAL CONVERTER



TYPICAL REMOTE MOUNT
 SIGNAL CONVERTER



DESCRIPTION

MODEL UM-06 FLANGED TUBE **ULTRAMAG™** meters are manufactured to the highest standard available for magmeters. They incorporate microprocessor technology to offer very low flows and broad rangeability. The flanged end tube design permits use in a wide range of applications with up to 150 PSI working pressure. Flanged ends are Class "D" flat face flanges. The fabricated tube is stainless steel with steel or stainless steel flanges and is NSF fusion bonded epoxy lined.

INSTALLATION is made similar to placing a short length of flanged end pipe in the line. The meter can be installed vertically, horizontally, or inclined on suction or discharge lines. The meter must have a full pipe of liquid for proper operation. Fully opened gate valves, fittings, or other obstructions that tend to set up flow disturbances, should be a minimum of five pipe diameters upstream and two pipe diameters downstream from the meter. Fluid must be ground to sensor (using Water Specialties grounding rings).*

SIGNAL CONVERTER. All converters, indicators, totalizers and 4-20 mA transmitters are factory programmed for every meter at desired requirements. The microprocessor based signal converter has a self diagnostic test mode. It features a backlit display that continuously displays "Rate of Flow" and "Total Volume". The signal converter configuration parameters are lockout protected, but can be changed via the front panel keypad or with the use of a personal computer or electronic organizer with a 9-pin RS232 serial interface port. It is compatible with Microsoft Windows and many other software programs with built in terminal communication capabilities. The signal converter may be provided with optional "Hart" protocol compatible. The converter is installed on the meter in a sealed, NEMA 4X case.

OPTIONAL Complete line of Instrumentation.
 Remote Mounting Kit to locate signal converter away from meter. (Max. 300ft.)
 Separate 4-20 mA output for reverse flow
 "Hart" protocol compatible converter
 Submersible and buriable flow sensors (NEMA 6)
 * 316 SS Grounding Rings
 300 psi Service (Model UM-08)



SPECIFICATIONS

WARRANTY	2 Years.
ACCURACY TESTS	3 point wet flow calibration of every complete flow tube with its signal converter. The test facility is certified regularly to an accuracy of plus or minus 0.2% and is traceable to the National Institute of Standards and Technology. If desired, the tests can be witnessed by the customer.
ACCURACY	Plus or minus 0.5% of actual flow.
REPEATABILITY	0.1%
HEAD LOSS	None. No obstruction in line and no moving parts.
PRESSURE RANGE	150 PSI maximum working pressure. Consult factory for high pressure requirements.
TEMPERATURE RANGE	150° F Maximum. Consult factory for special construction for higher temperatures.
VELOCITY RANGE	.2 to 34 FPS.
BI-DIRECTIONAL FLOW	Forward and reverse flow indication and totalization are standard with all meters.
AUTO ZERO	Pulsed DC field excitation principle.
CONDUCTIVITY	5 us/cm.
LINER	NSF approved fusion bonded epoxy.
ELECTRODES	Type 316 stainless steel, others optional.
POWER SUPPLY	120 or 240 VAC: negligible effect with power supply variation, 50/60 cycle.
ANALOG OUTPUT	Isolated 4-20 mA into 800 ohm load max.
FREQUENCY OUTPUT	0-800 HZ frequency and scaled pulse.
EMPTY PIPE SENSING	Zero return when electrodes are uncovered.
ALARMS	Two programmable alarm outputs.
DIGITAL TOTALIZER	Numbers reading in gallons, cubic feet, litres, cubic meters or imperial gallons. Equipped with electronic resettable totalizer.
DIGITAL RATE INDICATOR	Numbers reading in GPM, CFS, MGD or most common liquid measuring units.
REMOTE MOUNTING	Standard meters have signal converter integral with meter tube but it may be mounted up to 300 feet away from the meter depending on liquid conductivity.

#2

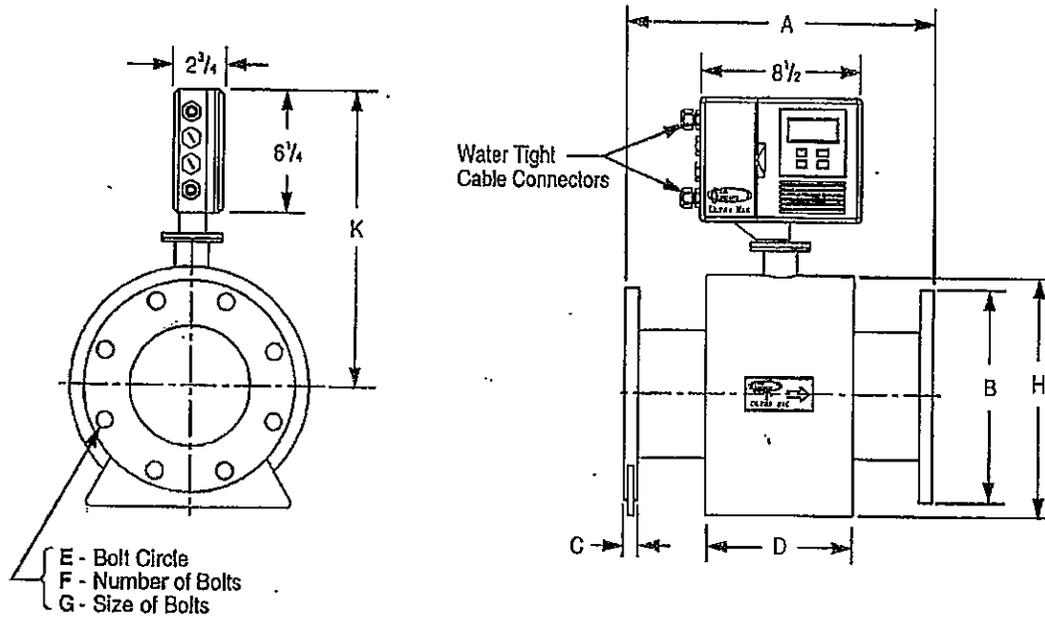
MILLER & ASSOCIATES
CONSULTING ENGINEERS, P.C.

- Approved
- Rejected
- Submit Specified Item
- Approved as Corrected
- Revise and Resubmit

This review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for dimensions to be confirmed and correlated at the jobsite information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction, coordination of the work of all trades, and for performing all work in a safe and satisfactory manner.

Date 1-9-13 By CAM
Project No. 159-05-001

MODEL UM-06
ULTRA MAG™ ELECTROMAGNETIC FLOW METER
 150 psi FLANGED TUBE METER
 SIZES 2" thru 48"



METER & PIPE SIZE	FLOW RANGES, GPM STANDARD .2 TO 34 FPS MIN. - MAX.	DIMENSIONS									SHIPPING WEIGHT POUNDS
		A	B	C	D	E	F	G	H	K	
2	2 - 352	11.0	6	.625	6.7	4.75	4	.625	7.9	12.75	55
3	5 - 831	13.4	7.5	.687	6.7	6	4	.625	9.4	13.75	60
4	8 - 1440	13.4	9	.687	6.7	7.5	8	.625	10.4	14.25	65
6	19 - 3259	14.6	11	.687	6.7	9.5	8	.750	12.5	15.25	85
8	33 - 5636	16.1	13.5	.687	9.5	11.75	8	.750	15.7	16.9	150
10	52 - 8864	18.5	16	.687	9.5	14.25	12	.875	17.8	18	175
12	74 - 12572	19.7	19	.812	9.5	17	12	.875	19.4	18.75	200
14	90 - 15223	21.7	21	.937	12.0	18.75	12	1.00	20.3	19.5	245
16	118 - 20058	23.6	23.5	1.00	14.2	21.25	16	1.00	21.10	20.5	325
18	150 - 25560	23.6	25	1.062	14.2	22.75	16	1.125	21.10	21	350
20	185 - 31532	25.6	27.5	1.125	16.2	25	20	1.125	24.8	22.5	460
24	268 - 45574	30.7	32	1.25	21.7	29.5	20	1.25	29.4	24.5	815
30	420 - 71337	35.8	38.75	1.375	26.5	36	28	1.25	35.9	27.5	1250
36	609 - 103573	46.1	46	1.625	25.6	42.75	32	1.50	42.7	31	1250
42	834 - 141803	46.1	53	1.75	29.9	49.5	36	1.625	47.3	33	1600
48	1094 - 186025	47.2	59.5	1.875	35.0	56	44	1.625	55.6	37	2240

WATER SPECIALTIES

191 W. POPLAR AVENUE • PORTERVILLE, CA 93257 • U.S.A.
 Phone 209-784-3544 • U.S.A. Fax 800-800-8804 • International Fax 209-784-1787
 VISIT OUR WEBSITE - www.waterspecialties.com