

## MODEL 2060 ELECTROMAGNETIC FLOWMETER

Aquamonix have over 35 years experience manufacturing and supporting Magnetic Flow Meters. We utilise local specialist fabrication and production providers to ensure a dependable supply chain, reduce delivery times and minimise risks associated with overseas suppliers.

The 2060 steel-bodied flow detectors offer the strength and durability of steel with a choice of chemical or abrasive resistant liners.



### MODEL 2060 STEEL-BODY FLOWMETER

#### **Features**

The 2060 flow detector uses the well proven electromagnetic method of measurement, which applies Faraday's Law as the principle of operation.

- No moving parts
- High accuracy
- Wide operating range
- No obstruction to the flow
- Little to no pressure loss
- Liners to suit chemical or abrasive applications
- A choice of electrodes to suit the process
- Variety of flange types available
- Robust construction







- Steel welded construction
- Submersible to 10 metres of water
- Suitable for buried service
- Minimal straight pipe installation requirements
- Remotely mounted electronics
- On powered sites used with the M300 transmitter which features multiple outputs and flexible programming
- On non-powered sites used with the I300 or I500 battery-powered transmitter with solar recharge

### **General Applications**

- Water production and distribution
- Waste water monitoring and treatment
- Irrigation flow measurement
- Mining slurries
- Effluent discharge
- Pulp and paper applications

### **INSTALLATION REQUIREMENTS**

#### Detector

Mounts directly into the process pipeline and can be installed in horizontal, vertical or sloped pipelines. The preferred axis of the detector measuring electrodes is horizontal. Note: For accurate flow measurement the flow detector must always be full.

Recommended installation requirements are 5 diameters of straight pipe section upstream and 3 diameters downstream.

### Associated Flow Transmitter

Can be located remotely from the detector. Model M300 up to 100 metres. Model I300 or I500 up to 30 metres.

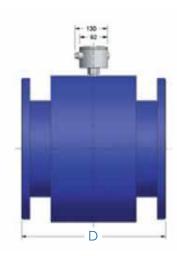




M300 Transmitter (for powered sites)

# DIMENSIONS in mm and (inches)





NOMINAL BORE				MIN FLOW RANGE	MAX FULL SCALE	MAX FULL SCALE
OA .	8	c	D	M300 & I300 L/SEC (GAL/MIN)	M300 L/SEC (GAL/MIN)	L/SEC (GAL/MIN)
50 (2)	231 (9.09)	216 (8.50)	360 (14.17)	0-1(0-16)	20 (317)	10 (158)
80 (3)	231 (9.09)	216 (8.50)	360 (14.17)	0-2.5 (0-39)	50 (792)	25 (396)
100 (4)	231 (9.09)	216 (8.50)	360 (14.17)	0-4 (0-63.4)	78 (1236)	40 (634)
150 (6)	316 (12.44)	258 (10.16)	429 (16.89)	0-8.8 (0-139)	176 (2789)	88 (1395)
200 (8)	373 (14.61)	287 (11.30)	429 (16.89)	0-15.7 (0-249)	314 (4977)	157 (2488)
225 (9)	400 (15.75)	300 (11.81)	429 (16.89)	0-20 (0-317)	397 (6293)	200 (3170)
250 (10)	421 (15.57)	311 (12.24)	429 (16.89)	0-25 (0-396)	490 (7767)	245 (3883)
300 (12)	479 (18.86)	340 (13.39)	471 (18.54)	0-35 (0-555)	707 (11206)	353 (5595)
350 (14)	582 (22.91)	391 (15.39)	543 (21.38)	0-49 (0-777)	962 (15248)	481 (7624)
375 (15)	607 (23.90)	417 (16.42)	582 (22.91)	0-56 (0-888)	1104 (17499)	552 (8749)
400 (16)	634 (24.96)	417 (16.42)	582 (22.91)	0-63 (0-999)	1256 (19909)	628 (9954)
450 (18)	685 (26.97)	443 (17.44)	607 (23.90)	0-80 (0-1268)	1590 (25202)	795 (12601)
500 (20)	736 (28.98)	468 (18.43)	683 (26.89)	0-100 (0-1585)	1963 (31114)	982 (15565)
600 (24)	838 (32.99)	520 (20.47)	785 (30.91)	0-141 (0-2235)	2827 (44808)	1414 (22412)
700 (28)	940 (37.01)	570 (22.44)	937 (36.89)	0-193 (0-3059)	3848 (60992)	
800 (32)	1040 (40.94)	620 (24.41)	1050 (41.34)	0-251 (0-3978)	5026 (79664)	
900 (36)	1140 (44.82)	670 (26.38)	1180 (46.46)	0-318 (0-5040)	6362 (100840)	
1000 (40)	1245 (49.02)	723 (28.47)	1310 (51.57)	0-393 (0-6229)	7854 (124488)	

Note: Dimensions are nominal to  $\pm$  1 mm. Contact us for other liner materials. Dimension D is based on Standard Hard Ebonite Rubber Lining. gallons = US gallons.

### Typical Specifying Sequence

#### Example: EM2060 D1 $EM = M300 \ \text{or} \ IR = I300$ Size (mm) · 80 100 150 to 1000 Flanged AD = AS2129 Table D AE = AS2129 Table E B1 = BS4504-10 B2 = BS4504-16B3 = BS4504-25 C1 = ANSI 150 C2 = ANSI 300 D1 = AS4087-16 D2 = AS4087-21 D3 = AS4087-35Lining Material 1 = Hard Ebonite Rubber 2 = (Not Available) 3 = Neoprene 4 = Linatex 5 = Polyurethane Electrodes S = 316SSH = Hastelloy 'C' T = Tungsten Tipped Earthing X = NoneS = 316SSH = Hastelloy 'C' T = Tungsten Tipped D = 304SS Discs Pipe Not Full X = NoneS = 316SSH = Hastelloy 'C' T = Tungsten Tipped Potting X = No Potting F = Potting (Cable must be ordered separately)

# Technical Data and Specifications

ACCURACY	M300	1300
Display and Outputs	0.2% of rate or 1 mm/sec (0.04 in/sec) whichever is greater	1% of rate or 2 mm/sec (0.08 in/sec) whichever is greater
Velocity Range:	0.01 to 10.0 m/sec (0.03 to 33 ft/sec)	<0.03 to >5.0 m/sec (<0.1 to >16.4 ft/sec)
Turndown from Full Scale:	>1000:1	>166:1
Pressure Effects:	Negligible effect	Negligible Effect
Repeatability:	<0.05%	<0.1%
Power Supply Variations:	Negligible	Negligible
Note: Under reference	conditions	

SPECIFICATIONS			
Sizes	50 mm-1000 mm (2-40 inch) NB		
Metering Tube	304 Stainless steel		
Lining	Hard Ebonite Rubber, Basalt, Neoprene, Linatex, Polyurethane Specials available on request		
Electrodes	316 S/S as standard, Hastelloy 'C' Tungsten tipped, Specials available on request		
Earthing	Ground Electrodes Discs or contra flanges are available on request		
Process Flange	Wide range available		
Pressure Limits	Limited by flange rating		
Temperature Limitations	Dependent on Liner selection, Hard Ebonite Rubber = 80°C (176°F)		
Environmental IP68 to 10 metres (33 feet) Protection			
Housing	All steel welded case with two part epoxy coating		