



Emflux 2060
Electromagnetic
Flow Detector

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

Features

- The Emflux flow detector uses the well proven electromagnetic method of measurement, which applies Faraday's Law as the principle of operation.
- It has no moving parts.
- High accuracy.
- Wide operating range.
- No obstruction to the flow.
- Negligible pressure loss.
- Liners to suit chemical or abrasive applications.
- A selection of electrodes to suit your 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 solar powered transmitter.

General Applications

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



M300 Transmitter
(for powered sites)

I300 Transmitter
(solar powered)

Technical Data and Specifications

Accuracy	M300	I300
Display and Outputs	0.2% of rate or 1 mm/sec (0.04in/sec) whichever is greater	1% of rate or 2mm/sec (0.08in/sec) whichever is greater
Velocity Range:	0.010 to 10.0 m/sec (0.03 to 33 feet/sec)	<0.03 to >5.00 m/sec (< 0.1 to > 16.4 feet/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	50mm - 1000mm (2 - 40 inch) NB
Metering Tube Lining	304 Stainless Steel Hard Ebonite Rubber PTFE 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 Connections	AS2129 BS4504/DIN ANSI AS4087 Others available on request
Pressure Limitations	Limited by flange rating
Temperature Limitations	Dependent on Liner selection Hard Ebonite Rubber = 80°C (176°F) PTFE = 120°C (248°F)
Environmental Protection	IP68 to 10 metres (33 feet)
Housing	All steel welded case with two part epoxy coating

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 up to 30 metres.

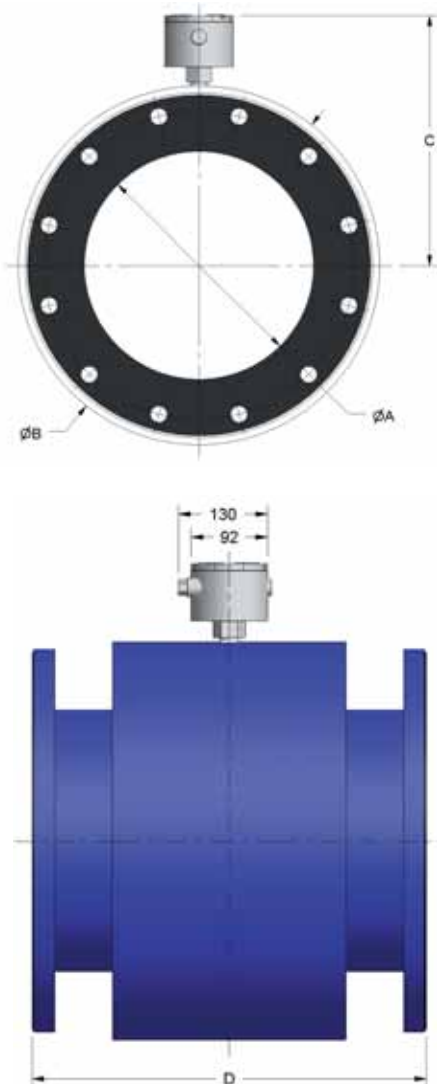
Dimensions

in mm and (inches)

Nominal Bore				Min Flow Range	Max Full Scale	Max Full Scale
ØA	B	C	D	M300 & I300 l/sec (gallons/min)	M300 l/sec (gallons/min)	I300 l/sec (gallons/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 ± 1 mm.
For other liner materials, consult the factory

Dimension D is based on Standard Hard Ebonite Rubber Lining.
gallons = US gallons.



Typical specifying sequence

Example	EM2060	080	D1	1	S	X	S	F	R
EM M300									
IR I300									
Size (mm)		↑							
50									
80									
100									
150 to 1K0									
Flanged			↑						
AD = AS2129 Table D									
AE = AS2129 Table E									
B1 = BS4504-10									
B2 = BS4504-16									
B3 = BS4504-25									
C1 = ANSI 150									
C2 = ANSI 300									
D1 = AS4087-16									
D2 = AS4087-21									
D3 = AS4087-35									
Lining Material				↑					
1 = Hard Ebonite Rubber									
2 = PTFE									
3 = Neoprene									
4 = Linatex									
5 = Polyurethane									
Electrodes					↑				
S = 316SS									
H = Hastelloy 'C'									
T = Tungsten Tipped									
Earthing						↑			
X = None									
S = 316SS									
H = Hastelloy 'C'									
T = Tungsten Tipped									
D = 304SS Discs									
Pipe Not Full								↑	
X = None									
S = 316SS									
H = Hastelloy 'C'									
T = Tungsten Tipped									
Potting									↑
X = No Potting									
F = Potting (Cable must be ordered separately)									



Australia

Head Office

Goyen Controls Co Pty Ltd
268 Milperra Road
Milperra, NSW 2214

Telephone: 1800 805 372
Facsimile: 1300 658 799

Queensland

Telephone: 1800 805 372
Facsimile: 1300 658 799

Victoria

Telephone: 1800 805 372
Facsimile: 1300 658 799

South Australia

Telephone: 1800 805 372
Facsimile: 1300 658 799

Western Australia

Telephone: 1800 805 372
Facsimile: 1300 658 799

Asia

Goyen Controls Co Pty Ltd
Shanghai Representative Office
2521 Zhao Feng World Trade Building
369 Jiang Su Road Shanghai 200050 CHINA

Telephone: 86 21 5239 8810
Facsimile: 86 21 5239 8812

Goyen Controls Co Pty Ltd
65-2 Jalan Mega Mendung
Kompleks Bandar 58200
Kuala Lumpur MALAYSIA

Telephone: 60 37 987 6839
Facsimile: 60 37 987 7839

Office

Singapore

Telephone: 65 6457 4549
Facsimile: 65 6457 4549

Europe

Goyen Controls Co UK Ltd
Unit 3B Beechwood
Chineham Business Park
Basingstoke, Hampshire, RG24 8WA
UNITED KINGDOM

Telephone: 44 1256 817 800
Facsimile: 44 1256 843 164

Tyco Umwelttechnik GmbH
Im Petersfeld 6
D-65624 Altendiez
GERMANY

Telephone: 49 6432 1001/1002
Facsimile: 49 6432 63810

USA

Goyen Valve Corporation
1195 Airport Road
Lakewood
New Jersey 08701 USA

Telephone: 1 732 364 7800
Facsimile: 1 732 364 1356