

# Electromagnetic Flowmeter

## StaMag MF200 - Insertion

### Introduction

Based upon Faraday's Law, Magnetic flowmeter MF200 is designed for general industrial applications. Benefit from stable performance and accurate measurement, this cost-effective unit is widely used in water treatment, power plant, chemical processing, and machine manufacturing industries.



### Characteristics

3"....48" / DN80...DN1200

Low cost

Easy to install

Accuracy: 1% or 2%

Liner CR, PTFE, PFA, others on request

Bi-direction measurement.

### Applications

Water / waster water treatment

Chemical processing

Power plant

Cooling system

Irrigation

Oil field

## Specifications

<b>Measuring range</b>	0.33 - 33ft/s (0.1 - 10m/s); See measuring range below for details
<b>Applicable medium</b>	Liquid with conductivity > 5µs/cm
<b>Nominal diameter</b>	3"...48" (DN80...DN1200)
<b>Accuracy</b>	2% 1% (Optional)
<b>Repeatability</b>	±0.15% of reading
<b>Operating voltage</b>	85-265VAC / 24VDC
<b>Output signal</b>	Pulse + 4...20mA Pulse + 4...20mA with HART Modbus RS485
<b>Electrode material</b>	Stainless steel 316L, Hastelloy B, Hastelloy C, Titanium
<b>Body/flange material</b>	Stainless steel 304 Stainless steel 316L; Hastelloy C
<b>Medium Temperature</b>	-4...212°F / -20...100°C
<b>Ambient Temperature</b>	Sensor: -40...176°F / -40...80°C Transmitter: -22...140°F / -30...60°C
<b>Power consumption</b>	Less than 20W
<b>Electrical connection</b>	M20x1.5
<b>Exproof</b>	Exd [ia Ga] qIIC T5 Gb
<b>Process connection</b>	Isolation valve equipped: 1-1/2" in R coupling Standard (without isolation valve): M45 x 1.5 Coupling
<b>Protection class</b>	Integrated type: IP65 Remote type: IP65(transmitter), IP68 (Sensor)

## Measuring range

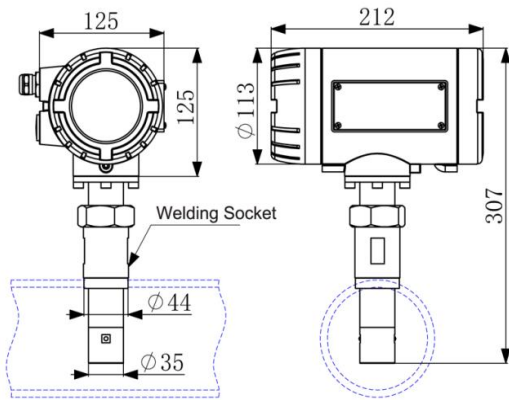
Size		Measuring range		Extended Measuring Range	
Inch	DN	gal/min	m <sup>3</sup> /h	gal/min	m <sup>3</sup> /h
3	80	23.9...796	5.43...180.86	4...955	0.91...217
4	100	37.4...1244	8.48...282.6	6.3...1493	1.4...339
5	125	58.4...1944	13.25...441.5	9.8...2333	2.2...529
6	150	84...2799	19.08...635.8	14...3359	3.2...763
8	200	149.4...4977	33.92...1130.4	25...5970	5.7...1356
10	250	233.4...7775	53...1766	39...9329	8.3...2119
12	300	336...11196	76.30...2543	56...13437	12.7...3052
14	350	457.3...15238	103.86...3461	77...18290	17...4154
16	400	597.3...19906	135.65...4521	100...23886	23...5425
18	450	756...25194	171.68...5722	126...30235	29...6867
20	500	933.3...31107	211.95...7065	156...37328	36...8478
24	600	1343.8...44791	305.2...10173	224...53751	51...12208
28	700	1827.8...60926	415.4...13847	305...73110	70...16616
32	800	2387.5...79578	542.6...18086	398...95493	91...21703
36	900	3021.5...100716	686.7...22890	504...120859	115...27468
40	1000	3730.4...124344	847.8...28260	622...149212	142...33912
48	1200	5372.4...179053	1221...40694	896...214865	204...48833

**Features**

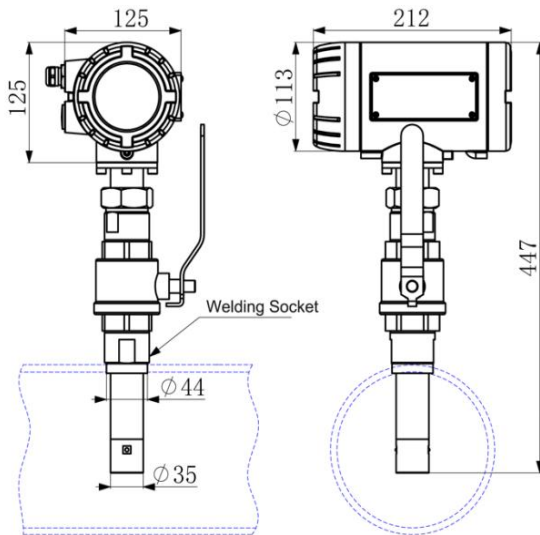
Auto "ZERO" calibration	See manual for details
Self-monitoring and diagnostic	Monitor citation circuit, electrode and transmitter malfunction
Empty and full pipe detection	Detect empty or full pipeline
Bi-directional measurement	Measuring both forward and reverse flow
Change flow direction real time	See manual for details
Flow rate unit selectable	gal/h, gal/min, m <sup>3</sup> /h, m3/min, l/h, l/m and more...
Low flow cut off	Adjustable in 0-10%, no pulse output for any signal less than settings.
Display	Instantaneous flow rate in percentage, instantaneous flow rate and total flow rate.
Totalizer reset	See manual for details
Power supply selectable	DC: 24V or AC: 85V~265V

**Dimension in mm (Insertion)**

3" ...6" (DN80...DN200)



Standard (no isolation valve)



Isolation valve equipped

\* Other sizes on request

## Order Code

Example: MF200-F100ACKS5DP0YY

### 1. MF200-

F	Integral transmitter
R	Remote transmitter

### 2. Pipe size

80	3" (DN80)
100	4" (DN100)
125	5" (DN125)
150	6" (DN150)
200	8" (DN200)
250	10" (DN250)
300	12" (DN300)
350	14" (DN350)
400	16" (DN400)
450	18" (DN450)
500	20" (DN500)
600	24" (DN600)
700	28" (DN700)
800	32" (DN800)
900	36" (DN900)
1000	40" (DN1000)
1200	48" (DN1200)

### 3. Output

A	Pulse 4-20mA
P	Pulse 4...20mA + HART
R	Modbus RS485

### 4. Accuracy

B	1%
C	2%

### 5. Electrode material

K	316L Stainless steel
B	Hastelloy B
C	Hastelloy C
T	Titanium

### 6. Body material

S	304 stainless steel
L	316L stainless steel

### 7. Protection class

5	IP65
8	IP68 (Remote version only)

### 8. Power supply

D	24VDC
T	85...265VAC

### 9. Ex-proof

P	Non-hazardous area
E	Hazardous area

### 10. Cable (remote type only: connect sensor to transmitter)

0	None
5	Cable length: 5m (16ft) Cable length options: 2-50m (6.5...164ft) Applicable to remote type only

### 11. Isolation valve (optional)

N	Standard (no isolation valve)
Y	Isolation valve equipped

### 12. Welding socket (optional)

N	None
Y	Welding socket is included.