

Electromagnetic Flowmeter

StaMag MF400 - Sanitary

Introduction

Magnetic flowmeter MF400 is for sanitary applications like food and beverage industry. Tri-clamp makes it easy to install/uninstall for cleaning; Stainless steel housing; easy to use operation.



Characteristics

3/8"...4" (DN10...DN100)

Accuracy: $\pm 0.5\%$

PTFE, PFA, others on request

Body material: stainless steel

Pulse, 4...20mA with HART, RS485

Bi-direction measurement.

Applications

Food and beverage

Pharmaceutical

Sanitary applications

Specifications

Measuring range	0.33...33ft/s (0.1...10m/s); See measuring range below for details
Applicable medium	Liquid with conductivity > 5µs/cm
Nominal diameter	3/8" ... 4" (DN10...DN100)
Accuracy	0.5%
Repeatability	±0.15% of reading
Operating voltage	24VDC / 85...265VAC
Output signal	Pulse + 4...20mA
	Pulse + 4...20mA with HART
	Modbus RS485
Electrode material	316 stainless steel, Hastelloy B, Hastelloy C, Titanium
Liner material	PTFE, PFA, other material on request.
Body	Stainless steel
Medium Temperature	-20...130°C / -4...266°F
Ambient Temperature	Sensor: -40...176°F / -40...80°C
	Transmitter: -22...140°F / -30...60°C
Ambient Humidity	≤85%RH (68°F / 20°C)
Power consumption	< 20W
Electrical connection	M20×1.5
Grounding	Grounding ring, grounding electrode, pipe grounding
Exproof	Exd [ia Ga] qIIC T5 Gb
Process connection	Tri-Clamp
Protection class	Integrated type: IP65
	Remote type: IP65(transmitter), IP68 (Sensor)

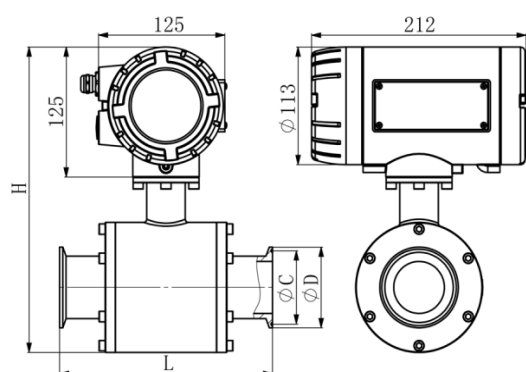
Measuring range

Pipe Size		Measuring range		Extended Measuring Range	
Inch	DN	gal/min	m³/h	gal/min	m³/h
3/8	10	0.37...12.4	0.085...2.8	0.063...15	0.0142...3.391
1/2	15	0.84...28	0.2...6.4	0.14...33	0.032...7.63
3/4	20	1.5...49	0.34...11	0.25...59	0.06...13.56
1	25	2.33...77	0.53...17	0.4...93	0.09...21.2
1-1/4	32	3.9...131	0.9...30	0.64...152	0.15...34.73
1-1/2	40	6...199	1.4...45	1...238	0.23...54.26
2	50	9.4...311	2.2...70	1.6...373	0.36...84.78
2-1/2	65	16...525	3.6...119	2.3...630	0.60...143.28
3	80	24...796	5.5...181	4...955	0.91...217.03
4	100	38...1244	8.5...283	7...1493	1.41...339.12

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 ³ /h, m ³ /min, l/h, l/m and more...
Low flow cut off	Adjustable in 0-10%, no pulse output for any signal less than settings.
Outputs selectable	4...20mA, Pulse 0...5KHz
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

Dimensions in mm



ASME BPE

Inch	L	H	D	C
3/8"	180	257	25	20.3
1/2"	180	257	25	20.3
1	180	257	50.4	43.6
1-1/2"	200	278	50.4	43.6
2"	210	294	63.9	56.3
2-1/2"	210	314	77.4	70.6
3"	210	329	90.9	83.3
4"	210	349	118.9	110.3

ISO 2852

DN	L	H	D	C
10	180	257	50.5	43.5
15	180	257	50.5	43.5
25	180	257	50.5	43.5
40	200	278	50.5	43.5
50	210	294	64	56.5
65	210	314	77.5	70.5
80	210	329	91	83.5
100	210	349	119	110

Order Code

Example: MF400-F25AKAS5DP0A

1. MF400- Sanitary Electromagnetic Flow Meter

F	Integrated transmitter
R	Remote transmitter

2. Pipe size

10	3/8" (DN10)
15	1/2" (DN15)
25	1 (DN25)
40	1-1/2" (DN40)
50	2" (DN50)
65	2-1/2" (DN65)
80	3" (DN80)
100	4" (DN100)

3. Output

A	Pulse 4-20mA
H	Pulse 4-20mA with HART
R	Modbus RS485

4. Electrode material

K	316L Stainless steel
B	Hastelloy B
C	Hastelloy C
T	Titanium
S	Other materials on request

5. Liner material

A	PFA
S	Other materials on request

6. Body material

S	Stainless steel 304
L	Stainless steel 316L

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. Connectivity from Sensor to Remote Transmitter

0	Select 0 for integral transmitter
5	Cable length: 5m / 16ft Custom cable length: 2-50m (6.5...164ft)

11. Process connection

A	ASME BPE tri-clamp
S	ISO 2852 tri-clamp