

# ELECTROMAGNETIC FLOWMETER



FMG600 Series  
Starts at

**\$3450**



Standard

- ✓ Virtually No Pressure Loss
- ✓ No Moving Parts
- ✓ ANSI 150# Flanges or Tri-Clover Sanitary Mount
- ✓ RS485 Standard
- ✓ Suitable for Pipes Up to 305 mm (12")
- ✓ High Accuracy
- ✓ 4 to 20 mA and Frequency Outputs Standard
- ✓ NIST 3-Point Calibration Included

The FMG600 Series electromagnetic flowmeters are designed for measurement of conductive liquids. With no moving parts and a PTFE lining, they can handle applications involving wastewater, pulp, food, and slurries. Standard outputs include analog, frequency, and RS485 communications. Optional sanitary tri-clamp mounting allows use of the FMG600 flowmeters in applications not previously open to magmeters. Local- and remote-display models are available.

## SPECIFICATIONS

### Flange Sizes:

150# ANSI: 19 to 305 mm (¾ to 12")

### Sanitary Tri-Clamp:

13 to 305 mm (½ to 12")

**Maximum Pressure:** 145 psi

**Minimum Conductivity:** 20 µS

**Electrode Material:** Hastelloy C4 (standard), tantalum (TGE optional)

**Environmental Temperature:**

-5 to 55°C (23 to 131°F)

**Sensor Lining:** PTFE



FMG606, 51 mm (2") meter with 150# flanges, \$3650, shown smaller than actual size.

Ω OMEGA®	
TYPE	IS 2 140
S/N	2851208
DIMENSION ANSI	2"
PROTECT	IP67
CE	
PRESSURE	232 psi
Q <sub>max</sub>	317 GPM
LIQUID TEMPERATURE	302 °F
EXCITATION	302 Hz
ELECTRODES	3 125
LINING	Hastelloy
	PTFE
K1	64 609467
K2	0 060614

### Electronics Housing:

Local or remote (optional)

### Liquid Temperature:

0 to 50°C (32 to 122°F) STD,

0 to 150°C (32 to 302°F) with

remote electronics

**Empty Pipe Alarm:** Available on

2" and larger sizes (-EPD option)

**Accuracy:** ±0.5% from 5 to 100% Qs,

±1% from 1 to 5% Qs

**Range:** 0.1 to 10 m/s

(0.328 to 32.81 fps)

**Outputs:** Adjustable from

0.1 to 1000 gallons/pulse

H-X

### Current:

4 to 20 mA with galvanic isolation

### Frequency:

0 to 1000 Hz with galvanic isolation

**Communications:** RS485

**Power:** 24 Vdc, 115/230 Vac

switchable (optional)

**Consumption:** 15 VA

**Protection:** IP67

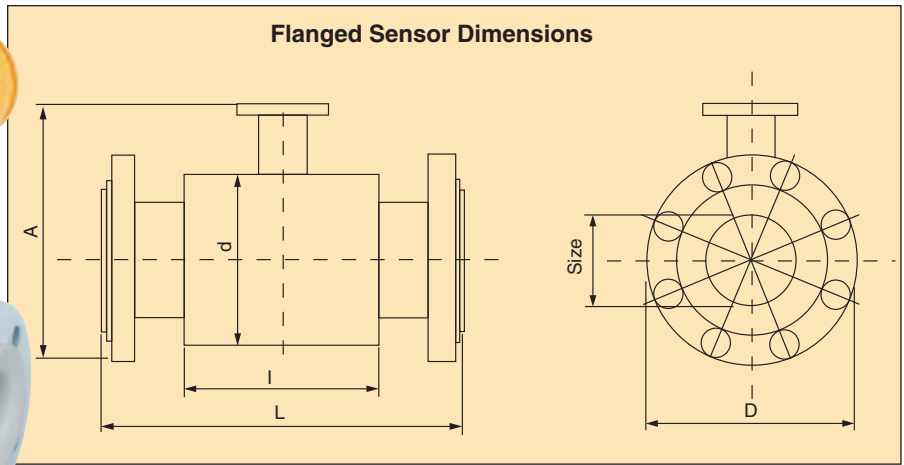
**Storage Temperature and Humidity:**

-10 to 70°C (14 to 158°F) at max;

relative humidity 70%



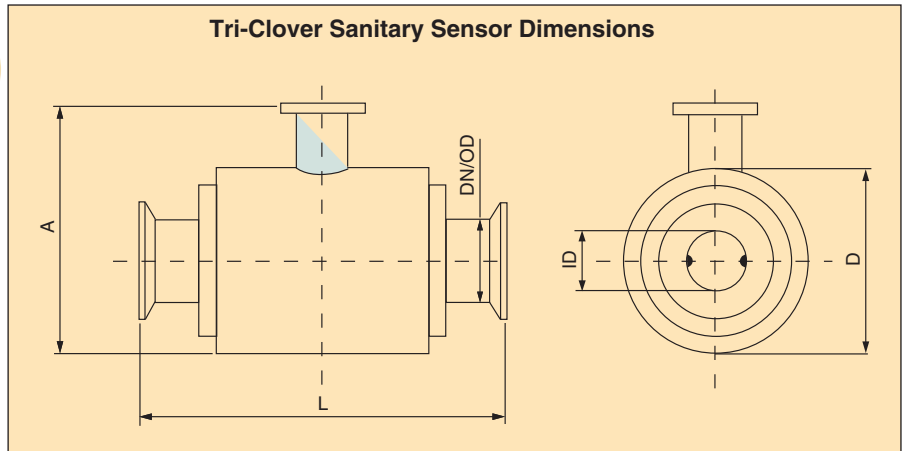
FMG605, \$3529, shown smaller than actual size.



**Flanged Sensor Dimensions**

Nominal size mm (in)	D mm (in)	d mm (in)	A mm (in)	L mm (in)	I mm (in)	Weight kg (lb)
15 (½)	89 (3.5)	62 (2.4)	164 (6.5)	200 (7.9)	66 (2.6)	3.5 (7.7)
20 (¾)	99 (3.9)	62 (2.4)	170 (6.7)	200 (7.9)	66 (2.6)	3.5 (7.7)
25 (1)	108 (4.3)	72 (2.8)	180 (7.1)	200 (7.9)	96 (3.8)	3.5 (7.7)
32 (1¼)	117 (4.6)	82 (3.2)	199 (7.8)	200 (7.9)	96 (3.8)	6 (13.2)
40 (1½)	127 (5.0)	92 (3.6)	209 (8.2)	200 (7.9)	96 (3.8)	7 (15.4)
50 (2)	152 (6.0)	107 (4.2)	223 (8.8)	200 (7.9)	96 (3.8)	8 (17.6)
65 (2½)	178 (7.0)	127 (5.0)	244 (9.6)	200 (7.9)	96 (3.8)	10 (22.0)
80 (3)	191 (7.5)	142 (5.6)	260 (10.2)	200 (7.9)	96 (3.8)	12 (26.5)
100 (4)	229 (9.0)	162 (6.4)	280 (11.0)	250 (9.8)	96 (3.8)	16 (35.3)
125 (5)	254 (10.0)	192 (7.6)	310 (12.2)	250 (9.8)	126 (5.0)	21 (46.3)
150 (6)	279 (11.0)	218 (8.6)	340 (13.4)	300 (11.8)	126 (5.0)	28 (61.7)
200 (8)	343 (13.5)	274 (10.8)	398 (15.7)	350 (13.8)	211 (8.3)	35 (77.2)
250 (10)	406 (16.0)	370 (14.6)	480 (18.9)	450 (17.7)	211 (8.3)	43 (94.8)
300 (12)	483 (19.0)	420 (16.5)	535 (21.1)	500 (19.7)	320 (12.6)	55 (121.3)

FMG601-S, \$4120, shown smaller than actual size.



**Tri-Clover Sanitary Sensor Dimensions**

Nominal Size DN mm (in)	ID mm (in)	D mm (in)	A mm (in)	L mm (in)	Weight kg (lb)
15 (½)	9.40 (0.37)	74 (2.90)	143 (5.6)	137 (5.4)	3.5 (1.6)
20 (¾)	15.75 (0.62)	74 (2.90)	143 (5.6)	137 (5.4)	3.5 (1.6)
25 (1)	22.10 (0.87)	74 (2.90)	143 (5.6)	137 (5.4)	3.7 (1.7)
40 (1½)	34.80 (1.37)	94(3.70)	163 (6.4)	137 (5.4)	4.8 (4.8)
50 (2)	47.50 (4.1)	104 (1.87)	173 (6.8)	137 (5.4)	N/A
65 (2½)	60.20 (2.37)	129 (5.10)	199 (7.8)	192 (7.6)	N/A

Weights of the sensors are approximate.

Recommended Reference Book:  
The Consumer Guide to Vortex Shedding Flowmeters,  
**FW-204, \$250**  
Visit [omega.com/bobi](http://omega.com/bobi) for Additional Books



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MODELS HIGHLIGHTED!**



**To Order (Specify Model Number)**

Model No.	Price	Size: mm (in)	Max GPM	Description
<b>FMG601-S</b>	<b>\$4120</b>	15 (½)	11	SS sanitary mount magmeter with empty pipe detection
<b>FMG601-S-R</b>	<b>4728</b>	15 (½)	11	SS Sanitary mount magmeter with empty pipe detection and remote display
<b>FMG602</b>	<b>3450</b>	20 (¾)	52	150# ANSI flange magmeter with empty pipe detection
<b>FMG602-R</b>	<b>4041</b>	20 (¾)	52	150# ANSI flange magmeter with empty pipe detection and remote display
<b>FMG602-S</b>	<b>4206</b>	20 (¾)	31	SS sanitary mount magmeter with empty pipe detection
<b>FMG602-S-R</b>	<b>4797</b>	20 (¾)	31	SS sanitary mount magmeter with empty pipe detection and remote display
<b>FMG603</b>	<b>3476</b>	25 (1)	79	150# ANSI flange magmeter with empty pipe detection
<b>FMG603-R</b>	<b>4059</b>	25 (1)	79	150# ANSI flange magmeter with empty pipe detection and remote display
<b>FMG603-S</b>	<b>4276</b>	25 (1)	61	SS sanitary mount magmeter with empty pipe detection
<b>FMG603-S-R</b>	<b>4867</b>	25 (1)	61	SS sanitary mount magmeter with empty pipe detection and remote display
<b>FMG604</b>	<b>3520</b>	32 (1¼)	132	150# ANSI flange magmeter with empty pipe detection
<b>FMG604-R</b>	<b>4102</b>	32 (1¼)	132	150# ANSI flange magmeter with empty pipe detection and remote display
<b>FMG604-S</b>	<b>4380</b>	32 (1¼)	96	SS sanitary mount magmeter with empty pipe detection
<b>FMG604-S-R</b>	<b>5041</b>	32 (1¼)	96	SS sanitary mount magmeter with empty pipe detection and remote display
<b>FMG605</b>	<b>3529</b>	40 (1½)	198	150# ANSI flange magmeter with empty pipe detection
<b>FMG605-R</b>	<b>4120</b>	40 (1½)	198	150# ANSI flange magmeter with empty pipe detection and remote display
<b>FMG605-S</b>	<b>4589</b>	40 (1½)	151	SS sanitary mount magmeter with empty pipe detection
<b>FMG605-S-R</b>	<b>5214</b>	40 (1½)	151	SS sanitary mount magmeter with empty pipe detection and remote display
<b>FMG606</b>	<b>3650</b>	50 (2)	317	150# ANSI flange magmeter
<b>FMG606-R</b>	<b>4233</b>	50 (2)	317	150# ANSI flange magmeter and remote display
<b>FMG606-S</b>	<b>4797</b>	50 (2)	281	SS sanitary mount magmeter
<b>FMG606-S-R</b>	<b>5440</b>	50 (2)	281	SS sanitary mount magmeter and remote display
<b>FMG607</b>	<b>3772</b>	65 (2½)	528	150# ANSI flange magmeter
<b>FMG607-R</b>	<b>4363</b>	65 (2½)	528	150# ANSI flange magmeter and remote display
<b>FMG607-S</b>	<b>5006</b>	65 (2½)	451	SS sanitary mount magmeter
<b>FMG607-S-R</b>	<b>5788</b>	65 (2½)	451	SS sanitary mount magmeter and remote display
<b>FMG608</b>	<b>3928</b>	80 (3)	793	150# ANSI flange magmeter
<b>FMG608-R</b>	<b>4519</b>	80 (3)	793	150# ANSI flange magmeter and remote display
<b>FMG609</b>	<b>4189</b>	100 (4)	1233	150# ANSI flange magmeter
<b>FMG609-R</b>	<b>4771</b>	100 (4)	1233	150# ANSI flange magmeter and remote display
<b>FMG610</b>	<b>4919</b>	125 (5)	1893	150# ANSI flange magmeter
<b>FMG610-R</b>	<b>5501</b>	125 (5)	1893	150# ANSI flange magmeter and remote display
<b>FMG611</b>	<b>5606</b>	150 (6)	2862	150# ANSI flange magmeter
<b>FMG611-R</b>	<b>6196</b>	150 (6)	2862	150# ANSI flange magmeter and remote display
<b>FMG612</b>	<b>8456</b>	200 (8)	5063	150# ANSI flange magmeter
<b>FMG612-R</b>	<b>9047</b>	200 (8)	5063	150# ANSI flange magmeter and remote display
<b>FMG613</b>	<b>10,533</b>	250 (10)	7925	150# ANSI flange magmeter
<b>FMG613-R</b>	<b>11,115</b>	250 (10)	7925	150# ANSI flange magmeter and remote display
<b>FMG614</b>	<b>12,896</b>	300 (12)	11,100	150# ANSI flange magmeter
<b>FMG614-R</b>	<b>13,479</b>	300 (12)	11,100	150# ANSI flange magmeter and remote display

**Optional Equipment:**

For units with switchable 115/230 Vac power, add **“-VAC”** to the model number and subtract **\$100** from the price.

For empty pipe detection on units 2" and larger, add **“-EPD”** to the model number and add **\$300** to the price.

For units with a batching option, add **“-B”** to the model number and add **\$320** to the price.

For units with tantalum electrodes, add **“-TE”** to the price and add **\$490** to the price.

If a third tantalum grounding electrode is needed, add **“-TGE”** to the model number and add **\$250** to the price.

If a third hastelloy grounding electrode is needed, add **“-HGE”** to the model number and add **\$200** to the price.

For a 4-point NIST calibration, add **“-NIST4”** to the model number and add **\$520** to the price.

For a 10-point NIST calibration, add **“-NIST10”** to the model number and add **\$1040** to the price.

Comes complete with operator's manual and 3-point NIST calibration certificate.

**Ordering Examples:** **FMG606-R-EPD**, 2", 150# flange mount magmeter with remote electronics and empty pipe detection, \$4233 + 300 = **\$4533**.

**FMG605-NIST4**, 150# flange mount magmeter with optional 4-point NIST calibration, \$3529 + 520 = **\$4049**.



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