

# ELECTROMAGNETIC FLOW METER

TRODEKS®

## FMG600 Series



Optional

- ✓ 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 flow meters 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 flow meters in applications not previously open to magmeters. Local- and remote-display models are available.

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



## 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

**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

### 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)

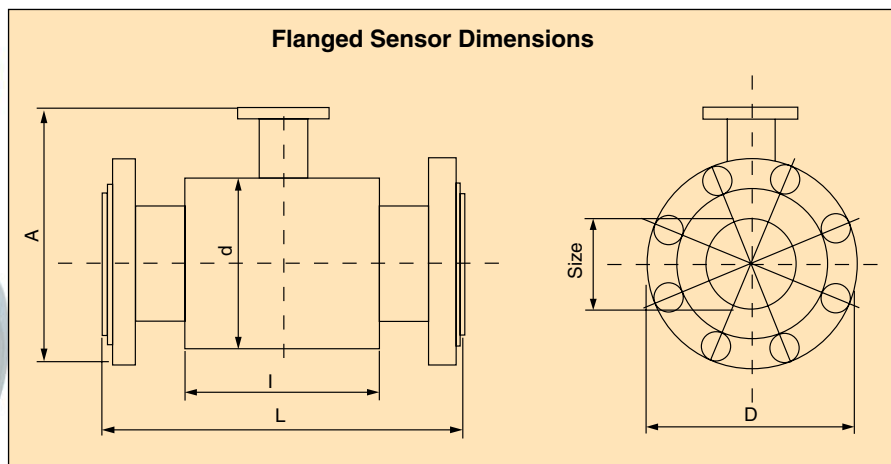
**Consumption:** 15 VA

**Protection:** IP67

**Storage Temperature and Humidity:**

-10 to 70°C (14 to 158°F) at maximum;  
relative humidity 70%

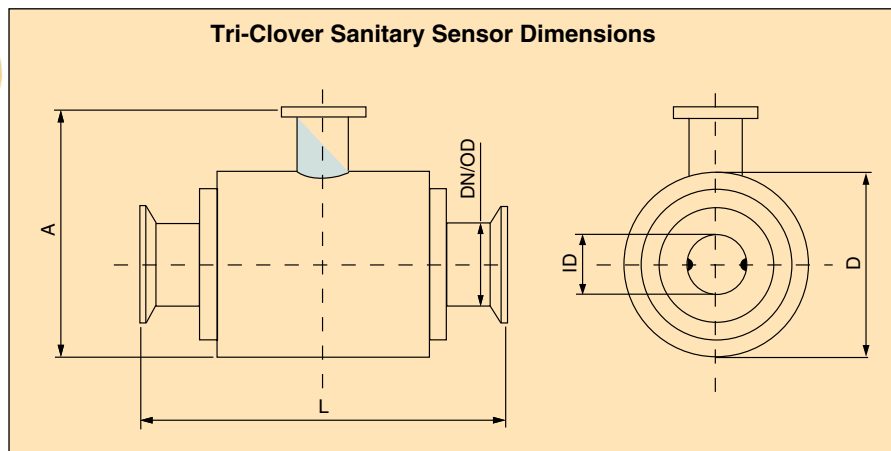
FMG605 shown smaller than actual size.



#### Flanged Sensor Dimensions

Nominal size mm (inch)	D mm (inch)	d mm (inch)	A mm (inch)	L mm (inch)	I mm (inch)	Weight kg (lb)
15 (1/2)	89 (3.5)	62 (2.4)	164 (6.5)	200 (7.9)	66 (2.6)	3.5 (7.7)
20 (3/4)	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 (1 1/4)	117 (4.6)	82 (3.2)	199 (7.8)	200 (7.9)	96 (3.8)	6 (13.2)
40 (1 1/2)	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 (2 1/2)	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 shown smaller than actual size.



#### Tri-Clover Sanitary Sensor Dimensions

Nominal Size DN mm (inch)	ID mm (inch)	D mm (inch)	A mm (inch)	L mm (inch)	Weight kg (lb)
15 (1/2)	9.40 (0.37)	74 (2.90)	143 (5.6)	137 (5.4)	3.5 (1.6)
20 (3/4)	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 (1 1/2)	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 (2 1/2)	60.20 (2.37)	129 (5.10)	199 (7.8)	192 (7.6)	N/A

Weights of the sensors are approximate.

To Order			
Model No.	Size: mm (inch)	Maximum GPM	Description
FMG601-S	15 (½)	11	SS sanitary mount magmeter with empty pipe detection
FMG601-S-R	15 (½)	11	SS Sanitary mount magmeter with empty pipe detection and remote display
FMG602	20 (¾)	52	150# ANSI flange magmeter with empty pipe detection
FMG602-R	20 (¾)	52	150# ANSI flange magmeter with empty pipe detection and remote display
FMG602-S	20 (¾)	31	SS sanitary mount magmeter with empty pipe detection
FMG602-S-R	20 (¾)	31	SS sanitary mount magmeter with empty pipe detection and remote display
FMG603	25 (1)	79	150# ANSI flange magmeter with empty pipe detection
FMG603-R	25 (1)	79	150# ANSI flange magmeter with empty pipe detection and remote display
FMG603-S	25 (1)	61	SS sanitary mount magmeter with empty pipe detection
FMG603-S-R	25 (1)	61	SS sanitary mount magmeter with empty pipe detection and remote display
FMG604	32 (1¼)	132	150# ANSI flange magmeter with empty pipe detection
FMG604-R	32 (1¼)	132	150# ANSI flange magmeter with empty pipe detection and remote display
FMG604-S	32 (1¼)	96	SS sanitary mount magmeter with empty pipe detection
FMG604-S-R	32 (1¼)	96	SS sanitary mount magmeter with empty pipe detection and remote display
FMG605	40 (1½)	198	150# ANSI flange magmeter with empty pipe detection
FMG605-R	40 (1½)	198	150# ANSI flange magmeter with empty pipe detection and remote display
FMG605-S	40 (1½)	151	SS sanitary mount magmeter with empty pipe detection
FMG605-S-R	40 (1½)	151	SS sanitary mount magmeter with empty pipe detection and remote display
FMG606	50 (2)	317	150# ANSI flange magmeter
FMG606-R	50 (2)	317	150# ANSI flange magmeter and remote display
FMG606-S	50 (2)	281	SS sanitary mount magmeter
FMG606-S-R	50 (2)	281	SS sanitary mount magmeter and remote display
FMG607	65 (2½)	528	150# ANSI flange magmeter
FMG607-R	65 (2½)	528	150# ANSI flange magmeter and remote display
FMG607-S	65 (2½)	451	SS sanitary mount magmeter
FMG607-S-R	65 (2½)	451	SS sanitary mount magmeter and remote display
FMG608	80 (3)	793	150# ANSI flange magmeter
FMG608-R	80 (3)	793	150# ANSI flange magmeter and remote display
FMG609	100 (4)	1233	150# ANSI flange magmeter
FMG609-R	100 (4)	1233	150# ANSI flange magmeter and remote display
FMG610	125 (5)	1893	150# ANSI flange magmeter
FMG610-R	125 (5)	1893	150# ANSI flange magmeter and remote display
FMG611	150 (6)	2862	150# ANSI flange magmeter
FMG611-R	150 (6)	2862	150# ANSI flange magmeter and remote display
FMG612	200 (8)	5063	150# ANSI flange magmeter
FMG612-R	200 (8)	5063	150# ANSI flange magmeter and remote display
FMG613	250 (10)	7925	150# ANSI flange magmeter
FMG613-R	250 (10)	7925	150# ANSI flange magmeter and remote display
FMG614	300 (12)	11,100	150# ANSI flange magmeter
FMG614-R	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 consult sales for cost.

For empty pipe detection on units 2” and larger, add “-EPD” to the model number, for additional cost.

For units with a batching option, add “-B” to the model number, for additional cost.

For units with tantalum electrodes, add “-TE” to the model number, for additional cost.

If a third tantalum grounding electrode is needed, add “-TGE” to the model number, for additional cost.

If a third hastelloy grounding electrode is needed, add “-HGE” to the model number, for additional cost.

For a 4-point NIST calibration, add “-NIST4” to the model number, for additional cost.

For a 10-point NIST calibration, add “-NIST10” to the model number, for additional cost.

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.

FMG605-NIST4, 150# flange mount magmeter with optional 4-point NIST calibration.