

**iMAG-SERIES**  
**Flanged Magmeter**



**FEATURES**

- Easy setup
- Minimal straight pipe
- Mounted or remote rate & total
- Tamper-evident seal
- NSF-61 approved (3" only)
- IP68 rated

**THE RIGHT METER FOR**

- Water & wastewater
- Municipal
- Treatment plants
- Pump stations
- Packaged plants
- Filtration systems
- Reclaimed Water

### GENERAL INFORMATION

The **iMAG-Series** is the most economical flanged electromagnetic flowmeter on the market. It is used in 3" to 12" pipe in municipal or industrial water, waste and reclaimed water, pump stations and packaged plant applications. The iMAG has no moving parts and electrodes are designed to discourage fouling. This magmeter requires no maintenance in applications where debris would impede mechanical meters. There are no parts to wear out. Minimal straight pipe requirements allow iMAG-Series meters to be used in piping configurations where there is little space between the meter and an elbow.

iMAG-Series meters are rated IP68 for applications where the meter may be under water up to a depth of 10 feet (3 meters) for prolonged periods of time.

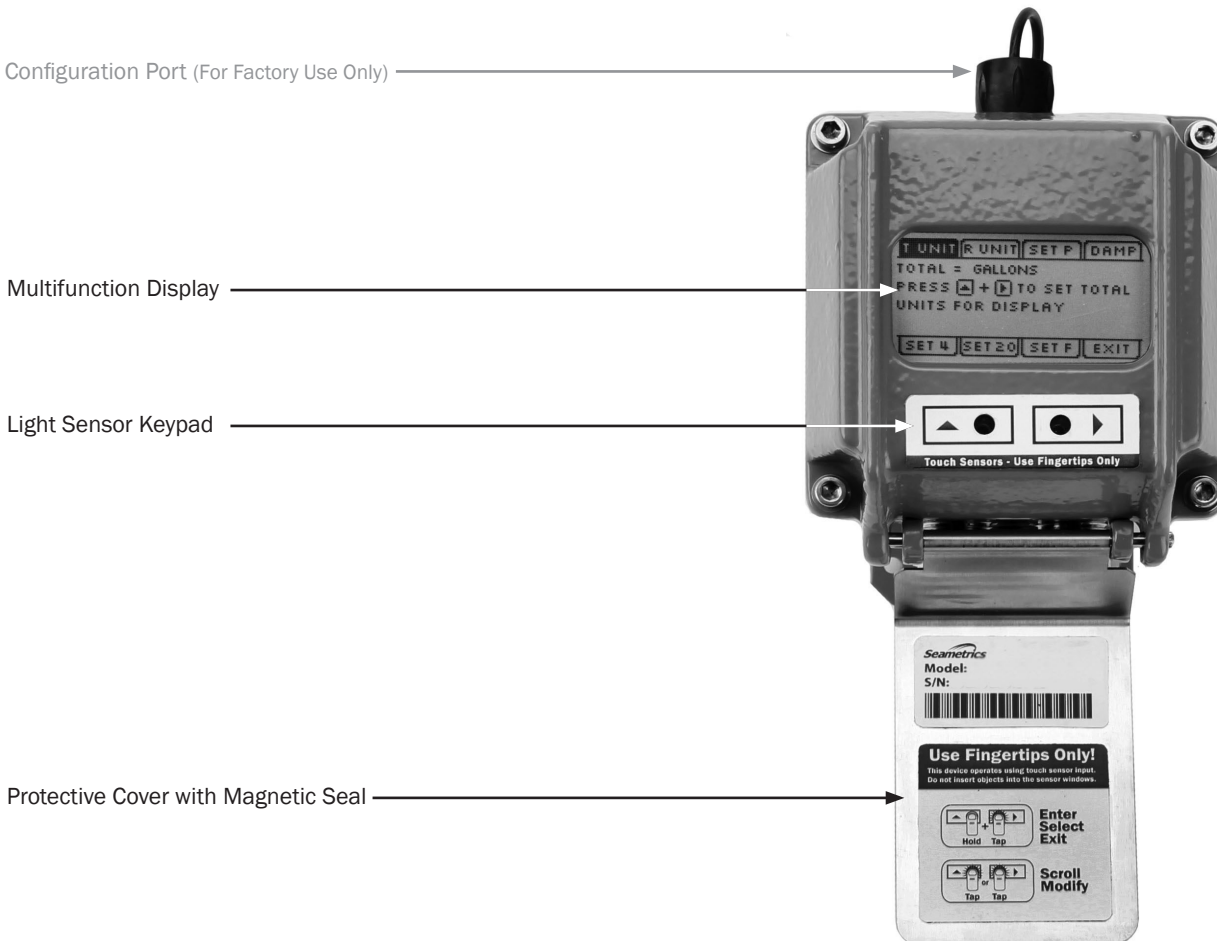
Rate and total indication are standard. Rate and total units and pulse output are settable via the front panel touch key pad by

the user. Bi-directional flow is standard. Forward, reverse and net flow can be read from the display. If forward and reverse flow data needs to be sent to another device, Modbus output is required.

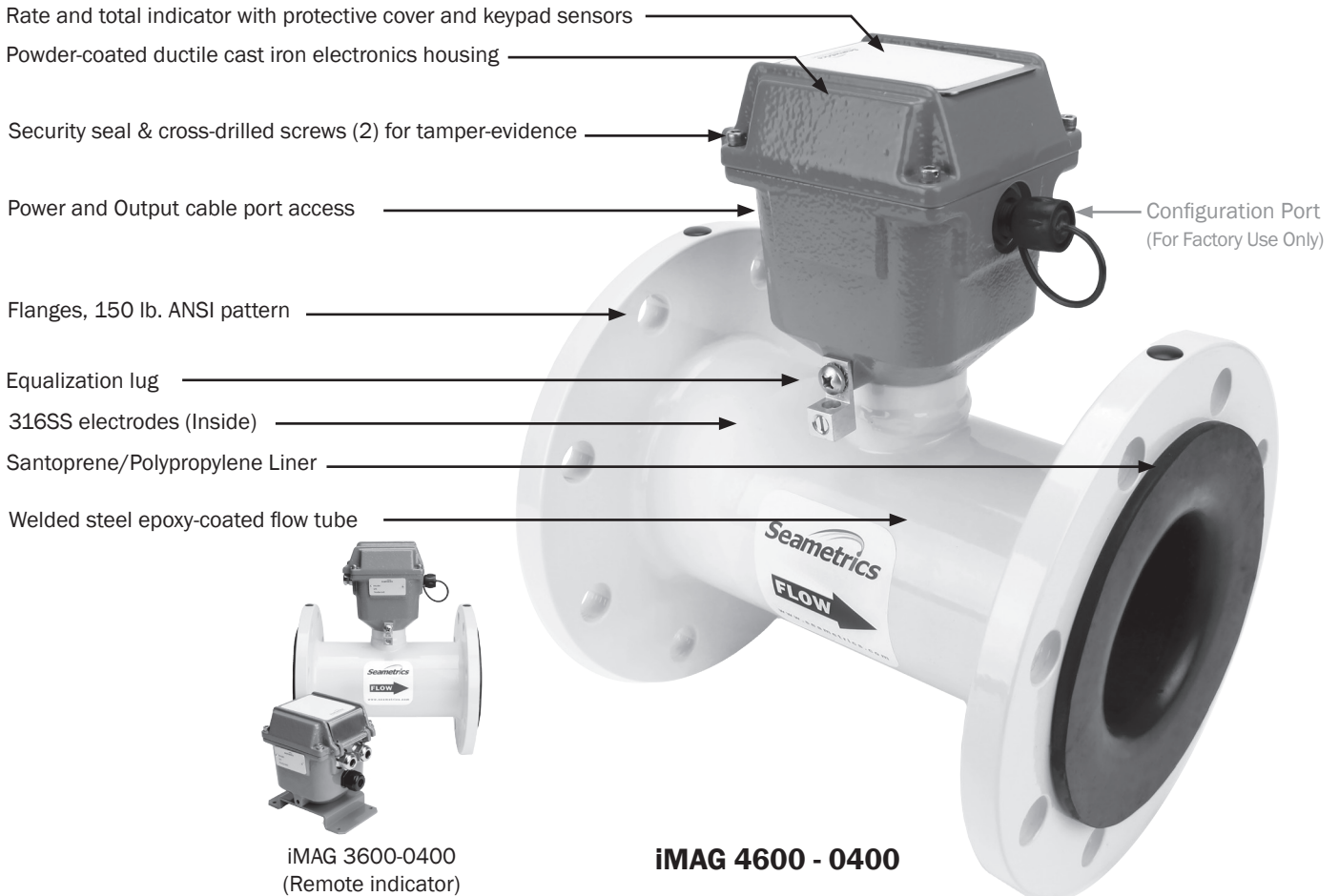
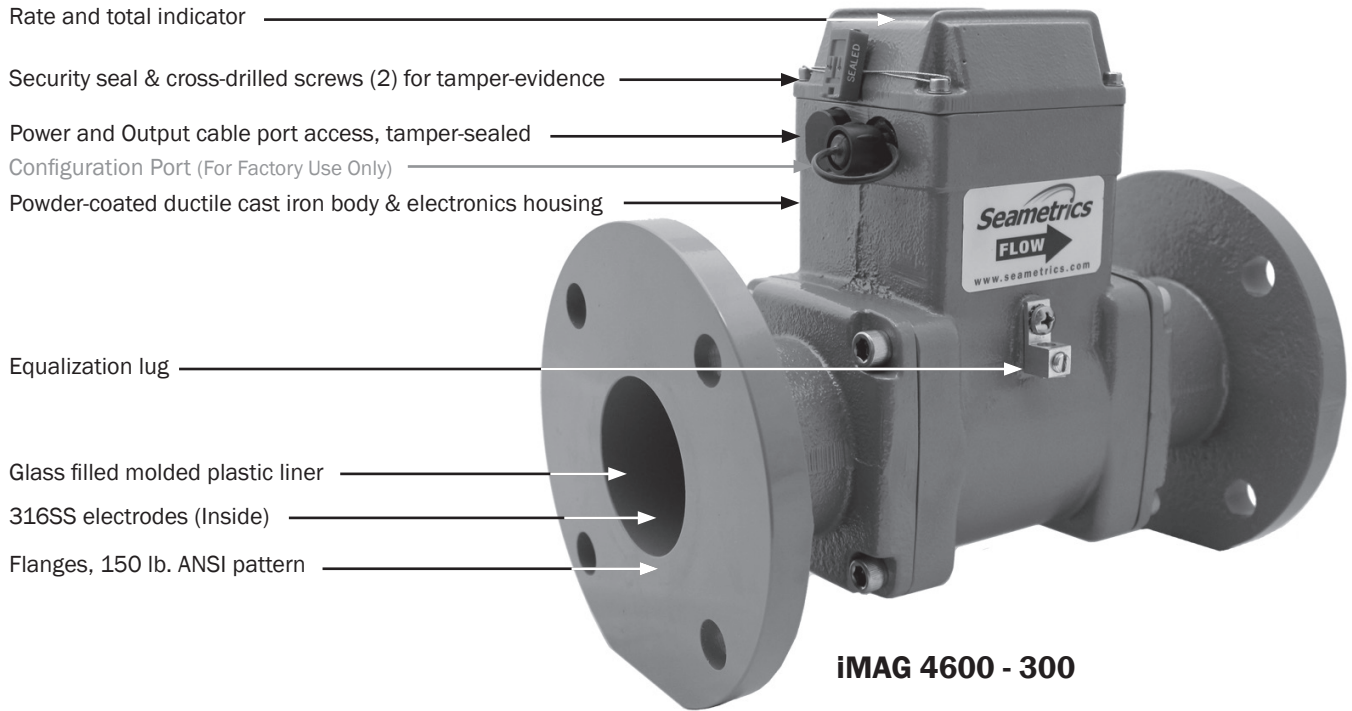
The iMAG 3600 and 4600 can be externally powered with 9-36 Vdc at 30 mA average. The 4600 is also available in a battery powered version.

The standard 20-foot (6 meter) cable also provides outputs for use with a variety of Seametrics and other displays and controls for remote reading, data logging and telemetry applications. 4-20mA passive current loop and high frequency outputs are optional on the externally powered models. Pulse output is standard on the battery powered model. The iMAG 3600 remote display meter can be supplied with an optional internal AC power supply.

### FEATURES



### FEATURES Continued





# iMAG-SERIES Flanged Magmeter

## SPECIFICATIONS\*

<b>Pipe Sizes</b>		3", 4", 6", 8", 10", 12"					
<b>Flanges</b>		150 lb. ANSI pattern					
<b>Pressure</b>		150 psi (10.3 bar) working pressure					
<b>Temperature</b>	<b>Operating</b>	10° to 130° F (-12° to 54° C)					
	<b>Storage</b>	-40° to 158° F (-40° to 70° C)					
<b>Accuracy</b>		+/- 1% of reading +/- 0.025% of full-scale flow from low flow cutoff to maximum flow rate of 10 m/sec					
<b>Low Flow Cutoff</b>		0.5% of maximum flow rate					
<b>Materials</b>	<b>Body (3" Only)</b>	Ductile cast iron, powder-coated					
	<b>Body (4"-12")</b>	Welded steel, epoxy-coated					
	<b>Liner (3" Only)</b>	Noryl®					
	<b>Liner (4"-12")</b>	Santoprene/Polypropylene					
	<b>Electronics Housing</b>	Ductile cast iron, powder-coated					
	<b>Electrodes</b>	316 stainless steel					
	<b>O-ring (3" Only)</b>	EPDM					
<b>Display</b>	<b>Type</b>	128x64 dot-matrix LCD					
	<b>Digits</b>	<b>5 Digit Rate</b>		<b>8 Digit Total</b>			
	<b>Units</b>  <i>Please Note: All iMAG meters are factory set for gallons per minute (GPM) rate and gallons total. If other units are required, they can be programmed in the field.</i>	<b>Rate Volume Units</b>		<b>Rate Time Units</b>	<b>Total Volume Units</b>		
		Gallons		Second	Gallons	Cubic Meters x 1000	
		Liters		Minute	Gallons x 1000	Cubic Feet	
		Cubic Feet		Hour	Million Gallons	Cubic Feet x 1000	
Cubic Meters		Day	Liters	Million Cubic Feet			
Million Gallons			Kilo Liters	Imperial Gallons			
Mega Liters			Mega Liters	Imperial Gallons x 1000			
Imperial Gallons			Cubic Meters	Million Imperial Gallons			
Million Imperial Gallons			Barrels (42 gallon)				
Barrels (42 gallon)							
<b>Bi-directional<sup>1</sup></b>		Forward Total, Reverse Total, Net Total					
<b>Power</b>	<b>DC Power</b>	9-36 Vdc @ 250 mA max, 30 mA average					
	<b>AC Power<sup>2</sup></b>	85-264Vac, 50/60Hz, 0.12A					
	<b>Battery<sup>3</sup></b>	Two lithium 3.6V 'D' batteries, replaceable.					
<b>Pulse Frequency Output</b>	<b>Signal</b>	Current sinking pulse, isolated, 36 Vdc at 10 mA max					
	<b>Pulse Rates</b>	User-scalable from 0.1 to 99,999.9 volume units/pulse. Pulse width is one-half of pulse period with minimum pulse width of 2.5ms, 200 pulses/sec max					
<b>Options</b>	<b>4-20mA Current Loop</b>	Isolated, passive, 6-36Vdc, error less than +/- 0.1% of pulse/frequency output, HART compliant					
	<b>Digital Output</b>	Isolated, open collector, 36Vdc @ 10mA max., frequency output at max. flow selectable as 0.5, 1, 2, 5 or 10kHz					
	<b>Serial Communications</b>	Isolated, asynchronous serial RS485 (Reconfigurable for RS232 or 3.3V CMOS), Modbus RTU protocol					
<b>Cable</b>	<b>Control Cable</b>	Six-conductor water-blocked cable, polyurethane jacket, 20ft (6m) standard length for power, pulse frequency or optional outputs (optional lengths up to 100' available)					
	<b>Remote Display Cable (iMAG 3600)</b>	33ft (10m) standard length (optional lengths up to 100' available)					
<b>Conductivity</b>		>20 microSiemens/cm					
<b>Empty Pipe Detection</b>		Hardware/software, conductivity-based					
<b>Regulatory</b>		C € (EN 61326) pending, NSF-61 on 3" ONLY					
<b>Environmental</b>		IP68 to 10ft (3m) depth					

\*Specifications subject to change. Please consult our website for the most current data ([www.seametrics.com](http://www.seametrics.com)).

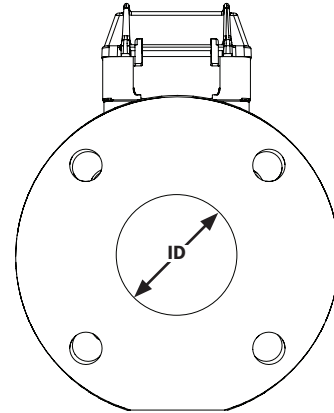
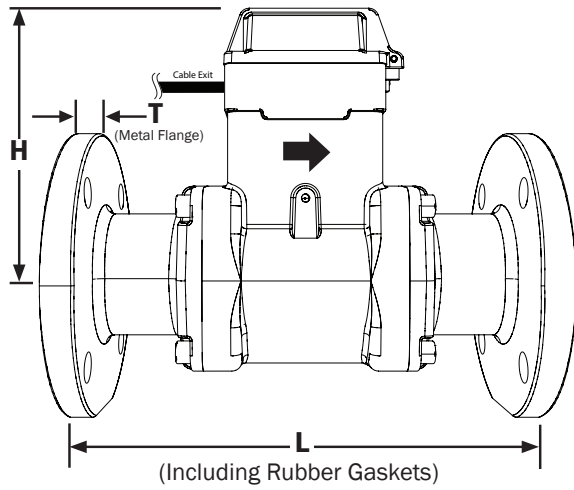
<sup>1</sup> If forward and reverse flow data needs to be sent to another device, either the -ADDX, -DDX or Modbus output is required.

<sup>2</sup> iMAG3600 only, iMAG4600 requires external AC power supply

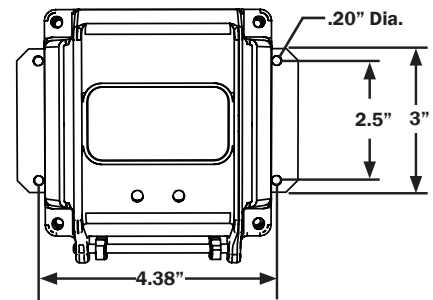
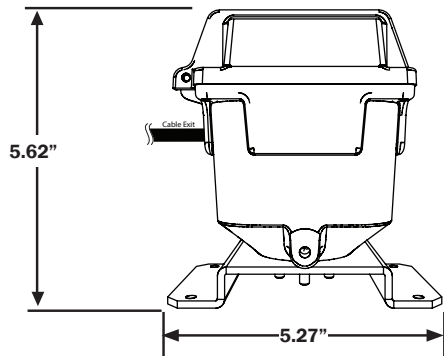
<sup>3</sup> iMAG4600 only

## DIMENSIONS

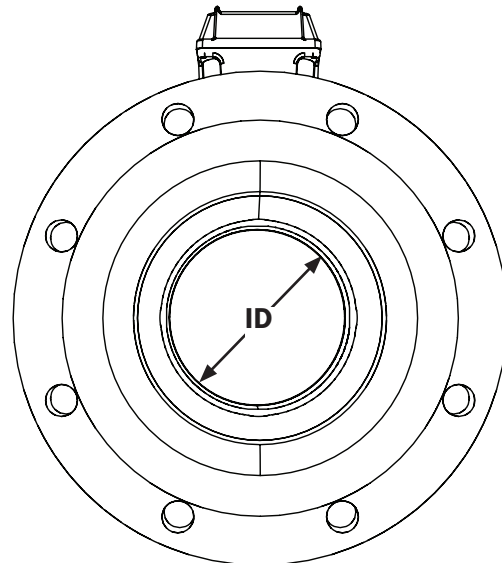
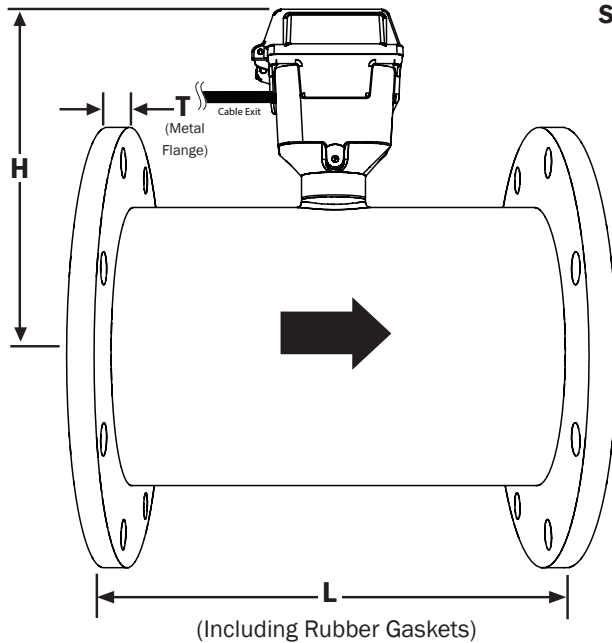
iMAG4600 - 0300 Shown



iMAG3600 Remote Shown



iMAG4600 - 0400 to 1200  
Shown





# iMAG-SERIES Flanged Magmeter

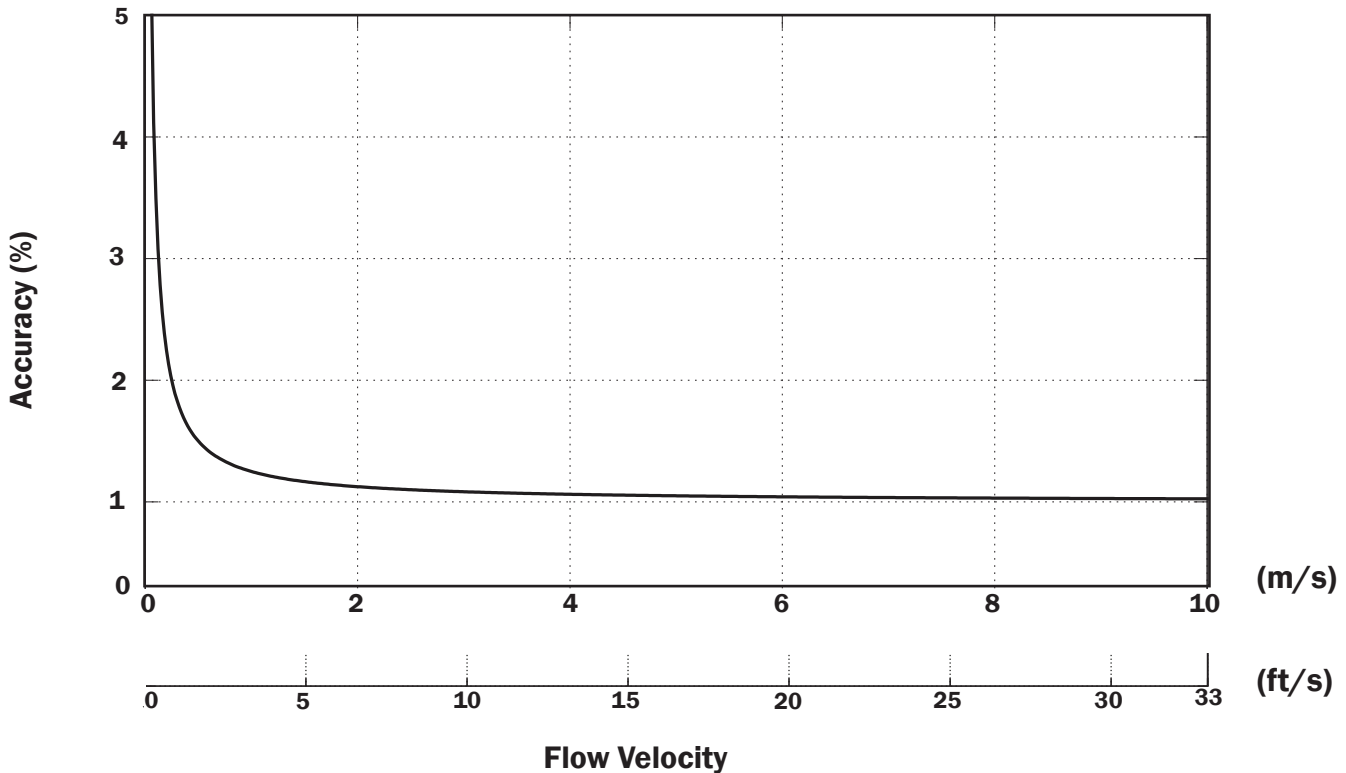
## iMAG Dimensions

iMAG Meter Size	L		H		T		ID		Shipping Weight	
	inch	mm	inch	mm	inch	mm	inch	mm	pounds	Kg
3"	12.0	305	6.80	173	.68	17.3	2.60	66.04	41	19
4"	10.24	260	8.12	206	.62	20.9	3.12	79.25	35	16
6"	12.27	312	9.22	234	.69	23.3	5.05	128.27	50	23
8"	14.24	362	10.22	260	.69	23.3	6.44	163.58	72	33
10"	18.18	462	11.22	285	.69	23.3	8.61	218.69	128	58
12"	19.68	500	12.28	312	.81	20.6	10.55	267.97	170	78
<b>Flanges</b> Standard ANSI 150 lb. drilling pattern									Cable 1 lb.	

## FLOW RANGE (3" - 12")

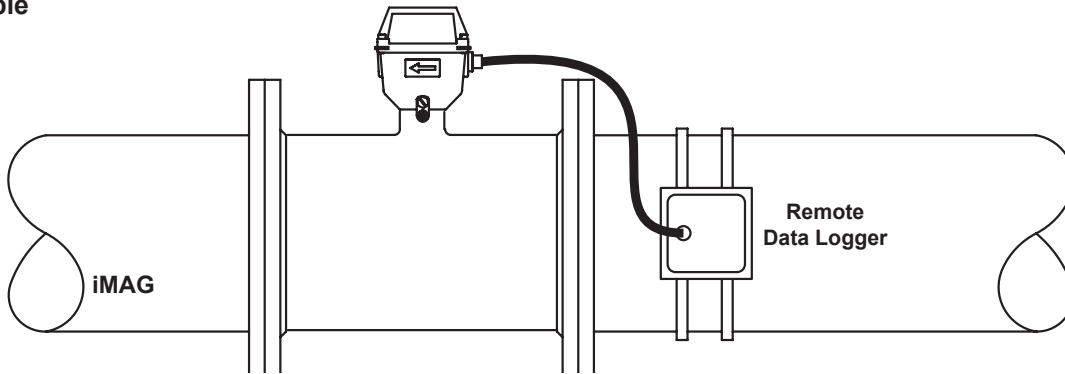
Pipe Size (Inches in diameter)	3"	4"	6"	8"	10"	12"
<b>Max Flow Rate (Gallons/Minute)</b>	<b>723</b>	<b>1285</b>	<b>2891</b>	<b>5140</b>	<b>8031</b>	<b>11565</b>
<b>Cut-off (min) Flow Rate (Gallons/Minute)</b>	<b>3.62</b>	<b>6.43</b>	<b>14.46</b>	<b>25.70</b>	<b>40.15</b>	<b>57.82</b>
<b>Max Flow Rate (Liters/Second)</b>	<b>46</b>	<b>81</b>	<b>182</b>	<b>324</b>	<b>507</b>	<b>730</b>
<b>Cut-off (min) Flow Rate (Liters/Second)</b>	<b>0.23</b>	<b>0.41</b>	<b>0.91</b>	<b>1.62</b>	<b>2.54</b>	<b>3.65</b>
<b>Max Flow Velocity (Meters/Second)</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>

## iMAG Accuracy



## OUTPUT CAPABILITIES

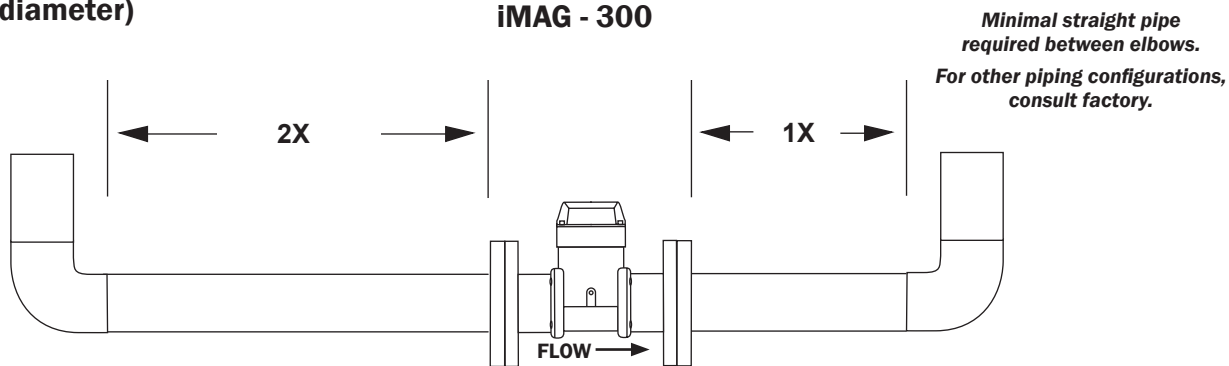
Remote Data  
Logger  
Compatible



## STRAIGHT PIPE RECOMMENDATIONS

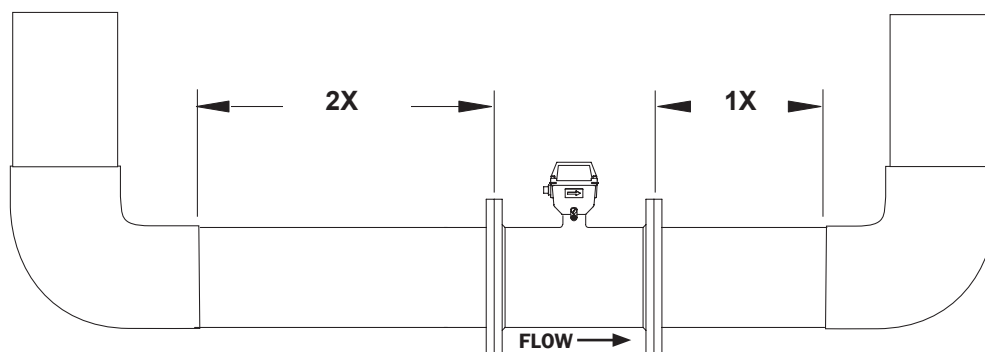
(X = pipe diameter)

iMAG - 300



(X = pipe diameter)

iMAG - 400 to 1200





# iMAG-SERIES Flanged Magmeter

## HOW TO ORDER

	①	②	③	④	⑤
<b>iMAG 3600</b> -	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>iMAG 4600</b> -	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

### iMAG 3600 (Remote Indicator) Options

① Size		② Flange/Fitting	③ iMAG 3600 Power and Communications		④ Power/Output Cable		⑤ Sensor Cable	
-0300	3"	-F1 ANSI 150#	-ADDX	AC Power, 2 Digital Outputs	-000	No Cable	-010	10 meter (33') <sup>1</sup>
-0400	4"		-ADLX	AC Power, Current Loop, Digital Output	-006	6 meter (20') <sup>1</sup>	-020	20 meter (66')
-0600	6"		-APLX	AC Power, Pulse, Current Loop	-010	10 meter (33')	-030	30 meter (100')
-0800	8"		-APXX	AC Power, 1 Pulse Output	-020	20 meter (66')		
-1000	10"		-ASSX	AC Power, Modbus	-030	30 meter (100')		
-1200	12"		-APHX	AC Power, Pulse, HART	-045	45 meter (150')		
			-DDDX	DC Power, 2 Digital Outputs	-060	60 meter (200')		
		-DDLX	DC Power, Current Loop, Digital Output					
		-DPLX	DC Power, Pulse, Current Loop					
		-DPXX	DC Power, 1 Pulse Output					
		-DSSX	DC Power, Modbus					
		-DPHX	DC Power, Pulse, HART					

### iMAG 4600 (Internal Indicator) Options

① Size		② Flange/Fitting	③ iMAG 4600 Power and Communications		④ Power/Output Cable	
-0300	3"	-F1 ANSI 150#	-DDDX	DC Power, 2 Digital Outputs <sup>3</sup>	-000	No Cable <sup>4</sup>
-0400	4"		-DDLX	DC Power, Current Loop, Digital Output <sup>3</sup>	-006	6 meter (20') <sup>1</sup>
-0600	6"		-DPLX	DC Power, Pulse, Current Loop <sup>3</sup>	-010	10 meter (33')
-0800	8"		-DPXX	DC Power, 1 Pulse Output <sup>3</sup>	-020	20 meter (66')
-1000	10"		-DSSX	DC Power, Modbus <sup>3</sup>	-030	30 meter (100')
-1200	12"		-DPHX	DC Power, Pulse, HART <sup>3</sup>	-045	45 meter (150')
			-BPXX	Battery Power, 1 Pulse Output <sup>3</sup>	-060	60 meter (200')

<sup>1</sup> 6 meter (20') power cable (iMAG 3600 or iMAG 4600) and 9 meter (30') sensor cable (iMAG 3600 only) are included at no additional charge.

<sup>2</sup> All iMAG meters are factory set for gallons per minute (GPM) rate and gallons total. If other units are required, they can be programmed in the field.

<sup>3</sup> If one of these options is selected, one of the power/output cable options is required.

<sup>4</sup> Battery power configuration only.