

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.

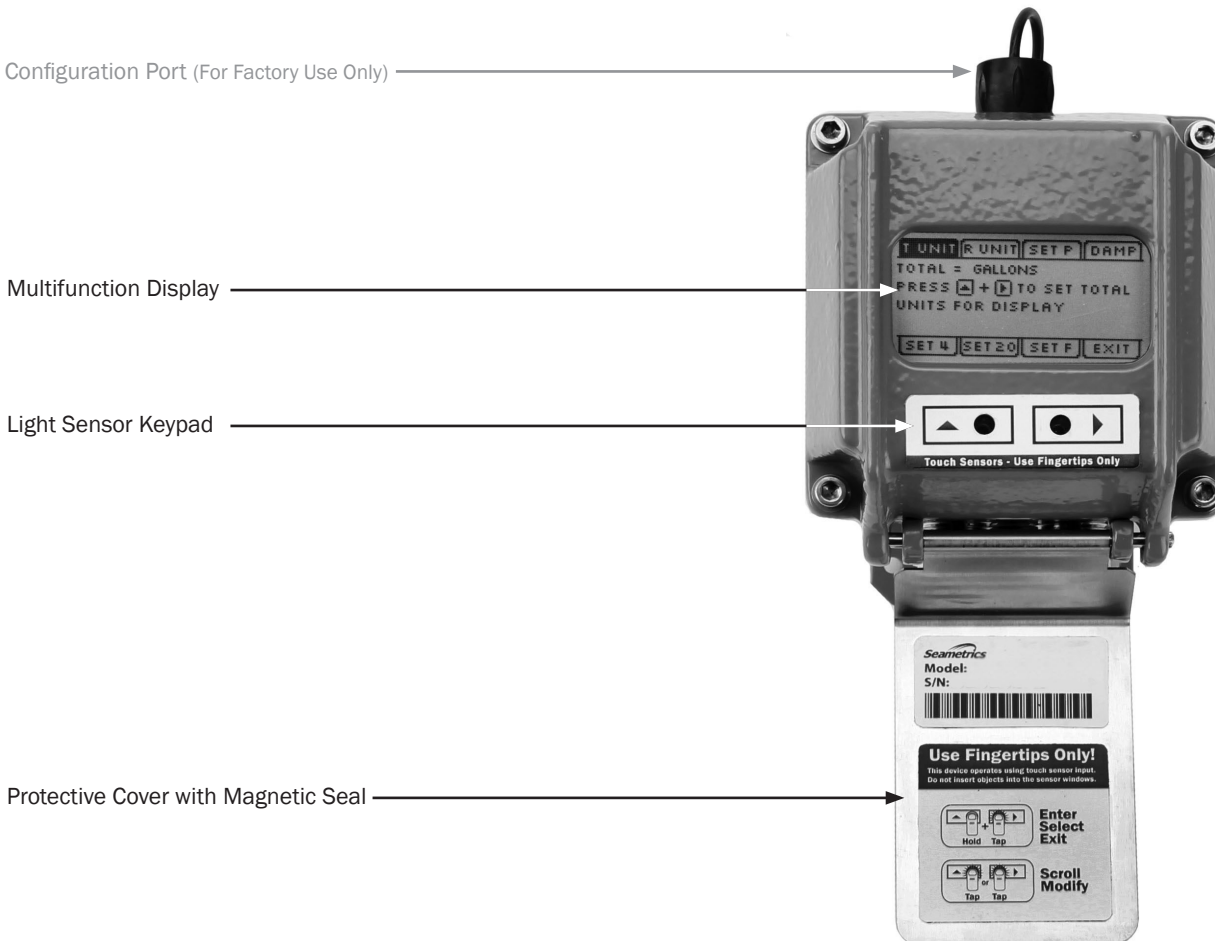
Rate and total indication are standard. Rate and total units and pulse output are settable via the front panel touch key pad by

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.

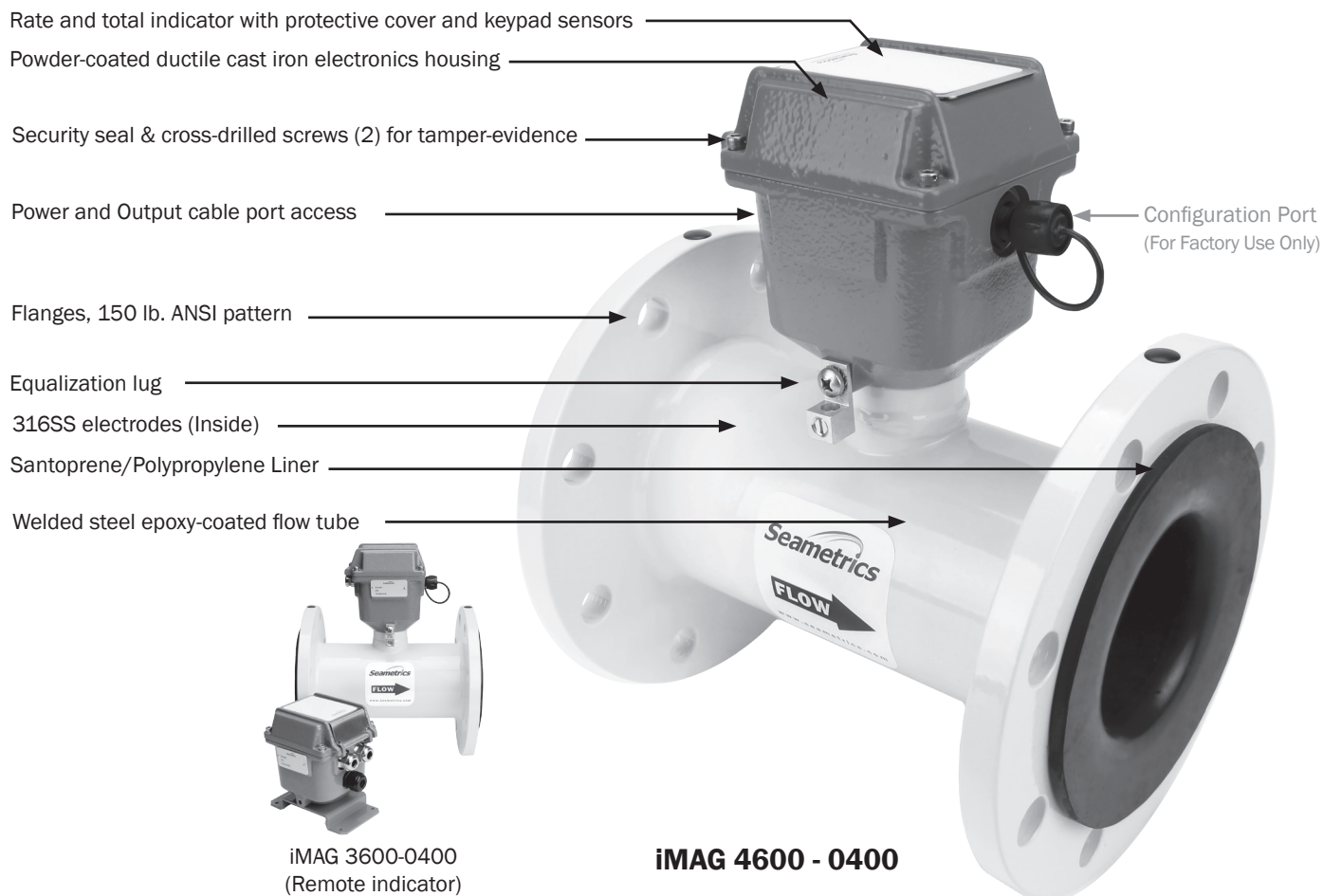
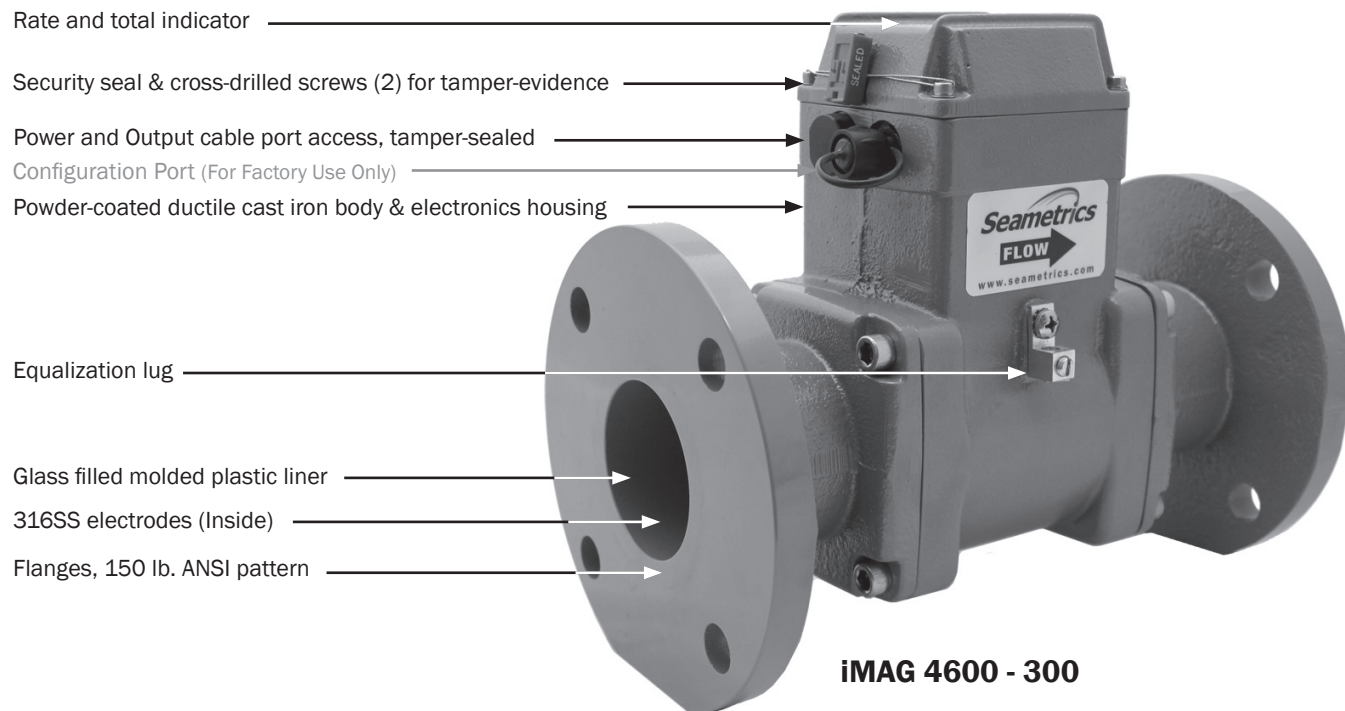
The iMAG 3600 and 4600 can be externally powered with 9-36 Vdc at 30 mA average. The 4600 is also available in a battery powered version.

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*

Pipe Sizes		3", 4", 6", 8", 10", 12"		
Flanges		150 lb. ANSI pattern		
Pressure		150 psi (10.3 bar) working pressure		
Temperature	Operating	10° to 130° F (-12° to 54° C)		
	Storage	-40° to 158° F (-40° to 70° C)		
Accuracy		+/- 1% of reading +/- 0.025% of full-scale flow from low flow cutoff to maximum flow rate of 10 m/sec		
Low Flow Cutoff		0.5% of maximum flow rate		
Materials	Body (3" Only)	Ductile cast iron, powder-coated		
	Body (4"-12")	Welded steel, epoxy-coated		
	Liner (3" Only)	Noryl®		
	Liner (4"-12")	Santoprene/Polypropylene		
	Electronics Housing	Ductile cast iron, powder-coated		
	Electrodes	316 stainless steel		
	O-ring (3" Only)	EPDM		
Display	Type	128x64 dot-matrix LCD		
	Digits	5 Digit Rate		8 Digit Total
	Units <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>	Rate Volume Units	Rate Time Units	Total Volume Units
		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)		
	Bi-directional¹	Forward Total, Reverse Total, Net Total		
Power	DC Power	9-36 Vdc @ 250 mA max, 30 mA average		
	AC Power²	85-264Vac, 50/60Hz, 0.12A		
	Battery³	Two lithium 3.6V 'D' batteries, replaceable.		
Pulse Frequency Output	Signal	Current sinking pulse, isolated, 36 Vdc at 10 mA max		
	Pulse Rates	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		
Options	4-20mA Current Loop	Isolated, passive, 6-36Vdc, error less than +/- 0.1% of pulse/frequency output, HART compliant		
	Digital Output	Isolated, open collector, 36Vdc @ 10mA max., frequency output at max. flow selectable as 0.5, 1, 2, 5 or 10kHz		
	Serial Communications	Isolated, asynchronous serial RS485 (Reconfigurable for RS232 or 3.3V CMOS), Modbus RTU protocol		
Cable	Control Cable	Six-conductor water-blocked cable, polyurethane jacket, 20ft (6m) standard length for power, pulse frequency or optional outputs (optional lengths up to 100' available)		
	Remote Display Cable (iMAG 3600)	33ft (10m) standard length (optional lengths up to 100' available)		
Conductivity		>20 microSiemens/cm		
Empty Pipe Detection		Hardware/software, conductivity-based		
Regulatory		C € (EN 61326) pending, NSF-61 on 3" ONLY		
Environmental		IP68 to 10ft (3m) depth		

*Specifications subject to change. Please consult our website for the most current data (www.seametrics.com).

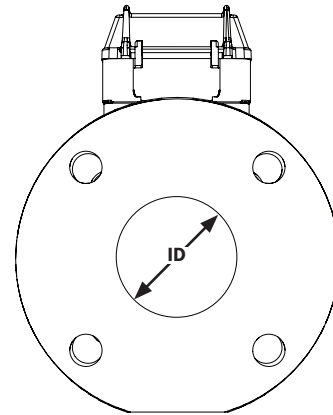
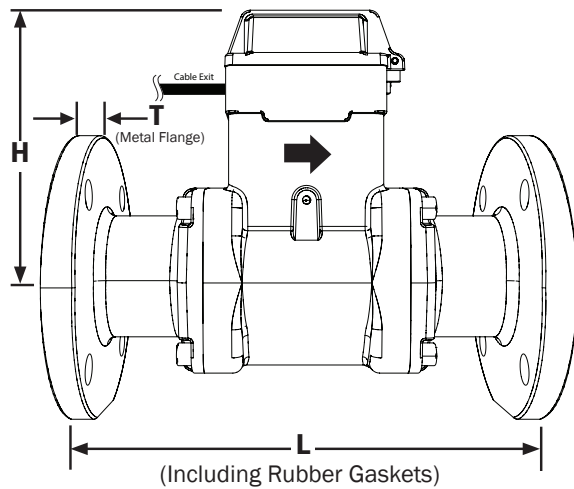
¹ If forward and reverse flow data needs to be sent to another device, either the -ADDX, -DDDX or Modbus output is required.

² iMAG3600 only, iMAG4600 requires external AC power supply

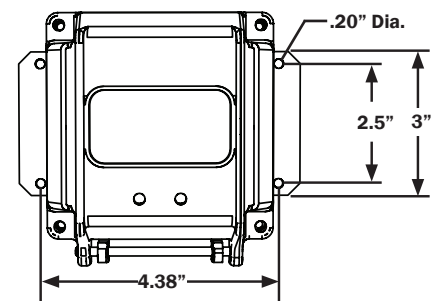
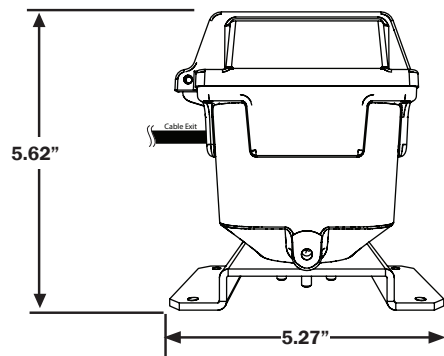
³ iMAG4600 only

DIMENSIONS

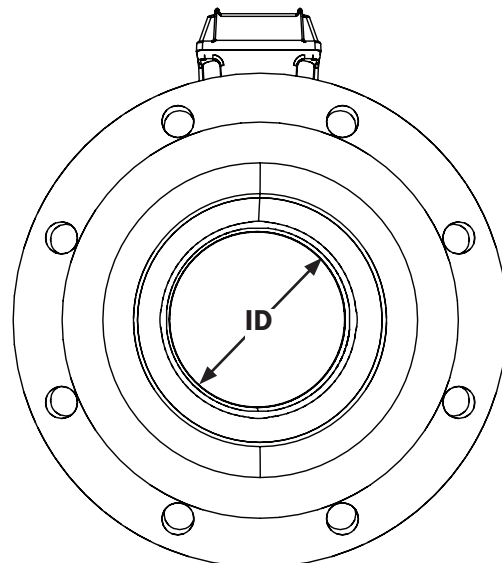
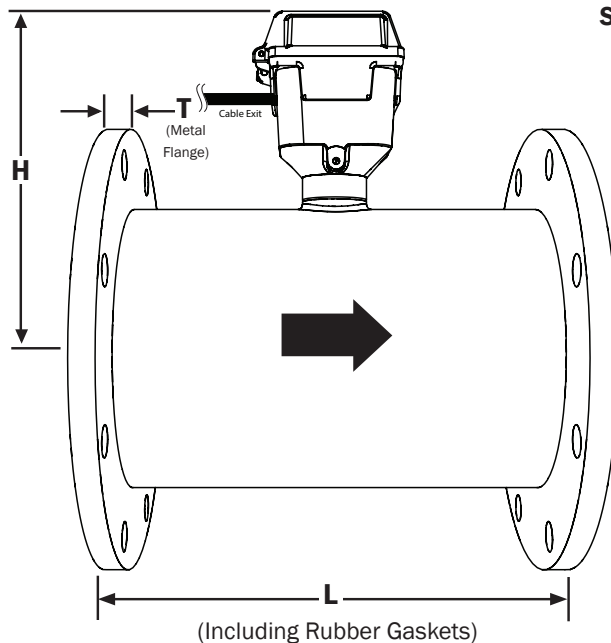
iMAG4600 - 0300 Shown



iMAG3600 Remote Shown



iMAG4600 - 0400 to 1200
Shown





iMAG-SERIES Flanged Magmeter

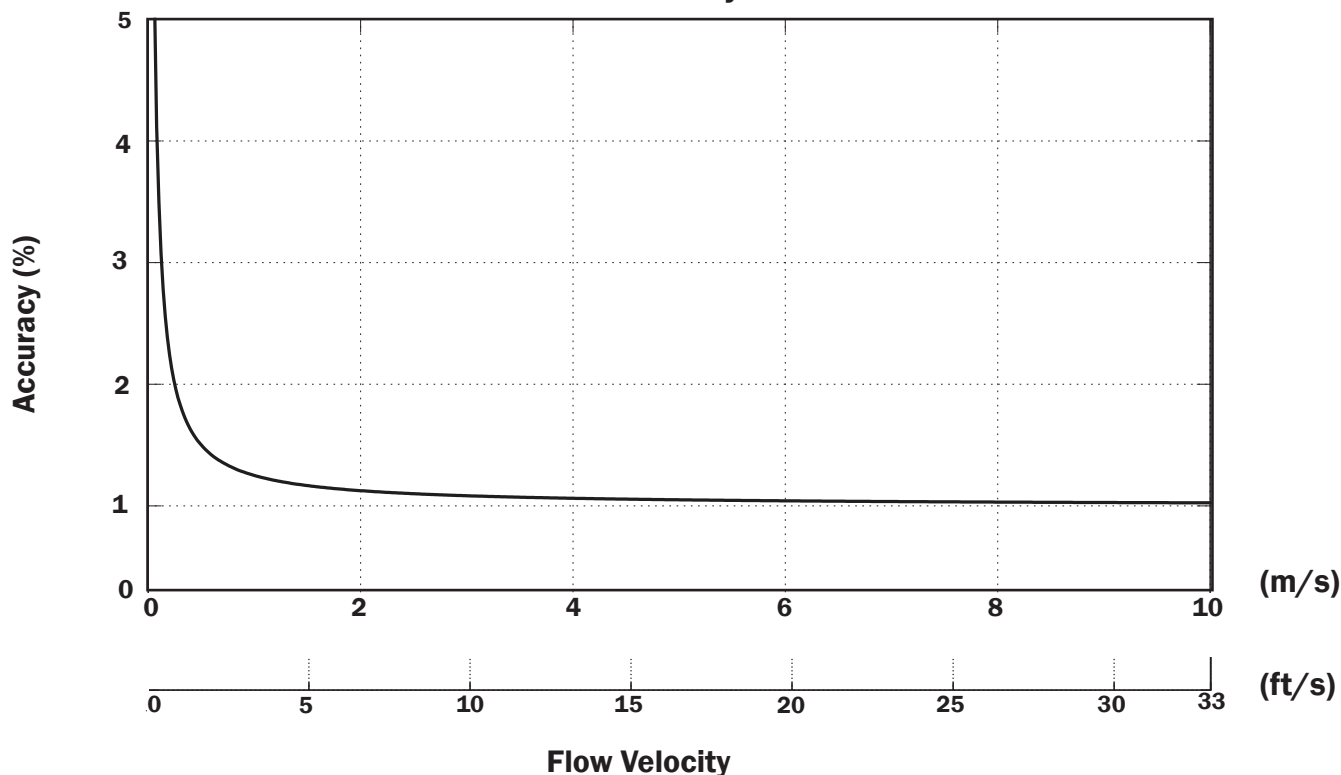
iMAG Dimensions

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
Flanges Standard ANSI 150 lb. drilling pattern									Cable 1 lb.	

FLOW RANGE (3" - 12")

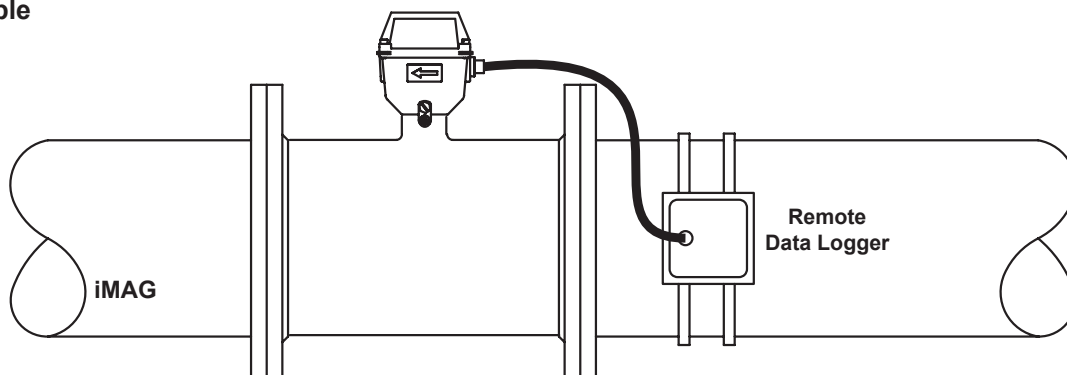
Pipe Size (Inches in diameter)	3"	4"	6"	8"	10"	12"
Max Flow Rate (Gallons/Minute)	723	1285	2891	5140	8031	11565
Cut-off (min) Flow Rate (Gallons/Minute)	3.62	6.43	14.46	25.70	40.15	57.82
Max Flow Rate (Liters/Second)	46	81	182	324	507	730
Cut-off (min) Flow Rate (Liters/Second)	0.23	0.41	0.91	1.62	2.54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

iMAG Accuracy



OUTPUT CAPABILITIES

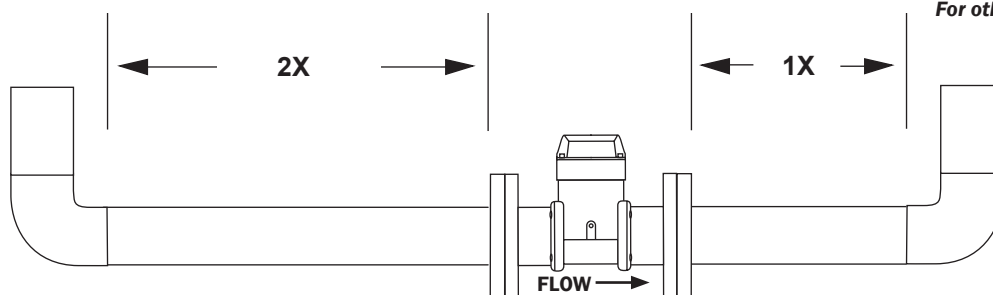
Remote Data
Logger
Compatible



STRAIGHT PIPE RECOMMENDATIONS

(X = pipe diameter)

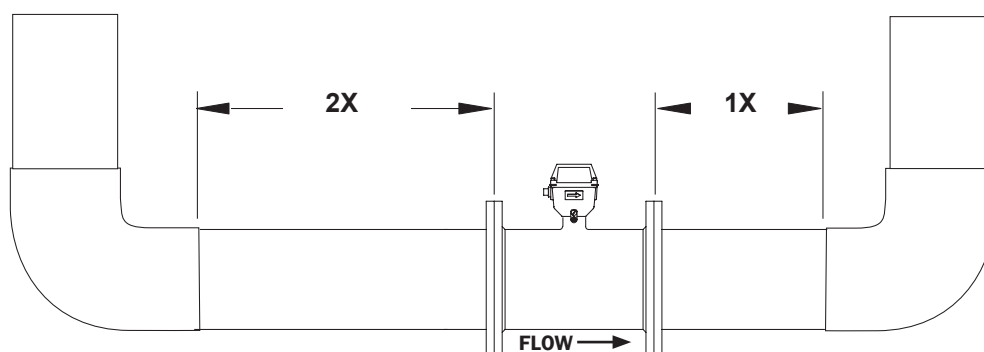
iMAG - 300



*Minimal straight pipe
required between elbows.
For other piping configurations,
consult factory.*

(X = pipe diameter)

iMAG - 400 to 1200





iMAG-SERIES Flanged Magmeter

HOW TO ORDER

	①	②	③	④	⑤
iMAG 3600 -	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
iMAG 4600 -	<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') ¹
-0400 4"		-ADLX AC Power, Current Loop, Digital Output	-006 6 meter (20') ¹	-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 ³	-000 No Cable ⁴
-0400 4"		-DDLX DC Power, Current Loop, Digital Output ³	-006 6 meter (20') ¹
-0600 6"		-DPLX DC Power, Pulse, Current Loop ³	-010 10 meter (33')
-0800 8"		-DPXX DC Power, 1 Pulse Output ³	-020 20 meter (66')
-1000 10"		-DSSX DC Power, Modbus ³	-030 30 meter (100')
-1200 12"		-DPHX DC Power, Pulse, HART ³	-045 45 meter (150')
		-BPXX Battery Power, 1 Pulse Output ³	-060 60 meter (200')

¹ 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.

² 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.

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

⁴ Battery power configuration only.