Seametrics
Flow Meters & Controls

iMAG-SERIES
Flanged Magmeter

FEATURES

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

THE RIGHT METER FOR

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

ISO 9001:2008 CERTIFIED COMPANY

PROUDLY MADE IN THE USA

iMAG-SERIES
Flanged Magmeter

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.

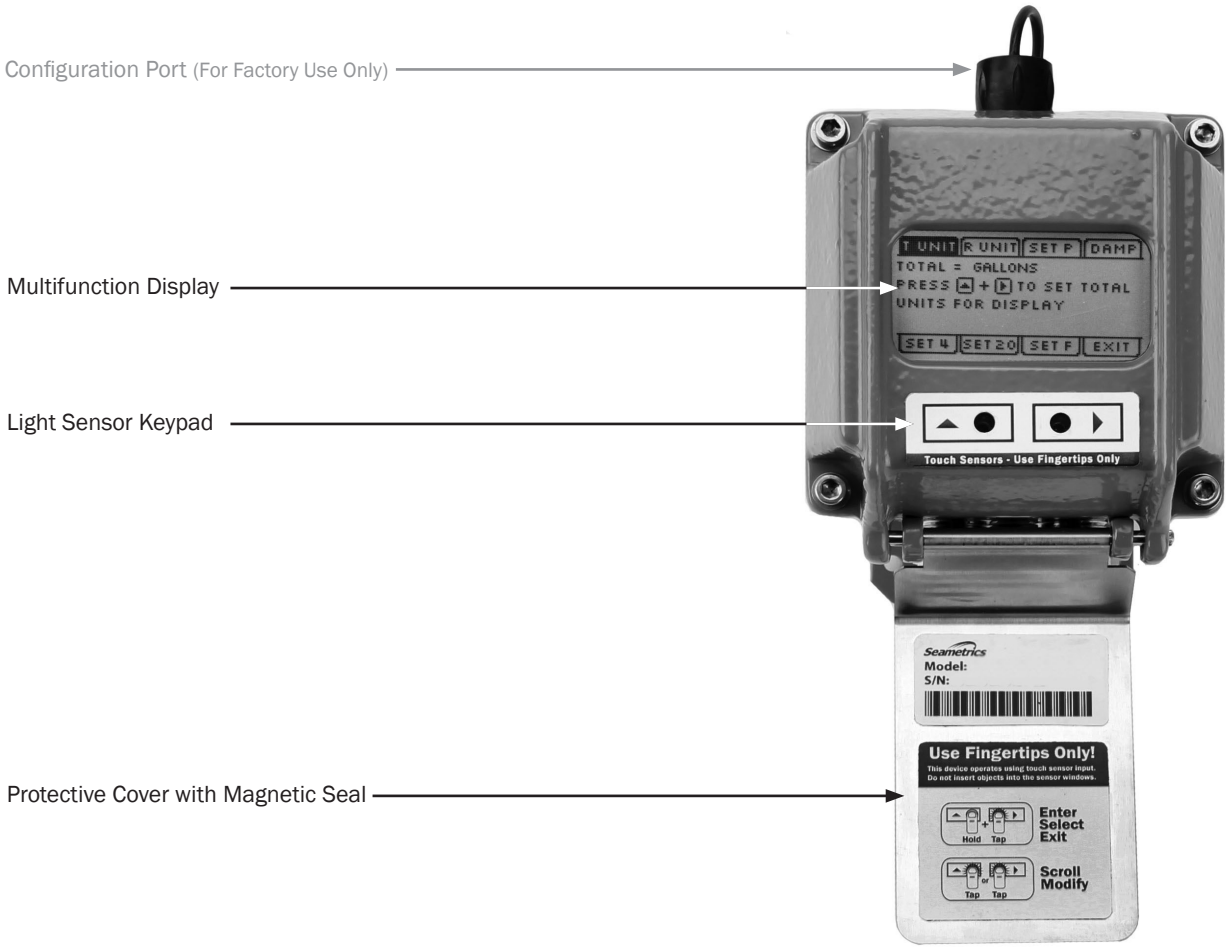
iMAG-Series meters are rated IP68 for applications where the meter may be under water up to a depth of 10 feet (3 meters) for prolonged periods of time.

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. (Battery not available on 3".)

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



iMAG-SERIES
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FEATURES Continued

Rate and total indicator

Security seal & cross-drilled screws (2) for tamper-evidence

Power and Output cable port access, tamper-sealed

Configuration Port (For Factory Use Only)

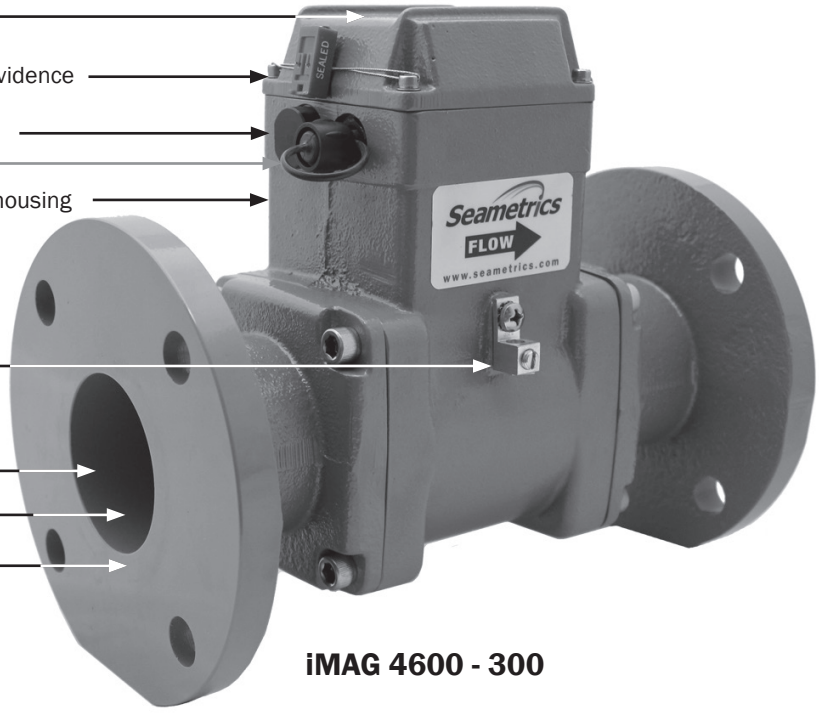
Powder-coated ductile cast iron body & electronics housing

Equalization lug

Glass filled molded plastic liner

316SS electrodes (Inside)

Flanges, 150 lb. ANSI pattern



iMAG 4600 - 300

Rate and total indicator with protective cover and keypad sensors

Powder-coated ductile cast iron electronics housing

Security seal & cross-drilled screws (2) for tamper-evidence

Power and Output cable port access

Configuration Port
(For Factory Use Only)

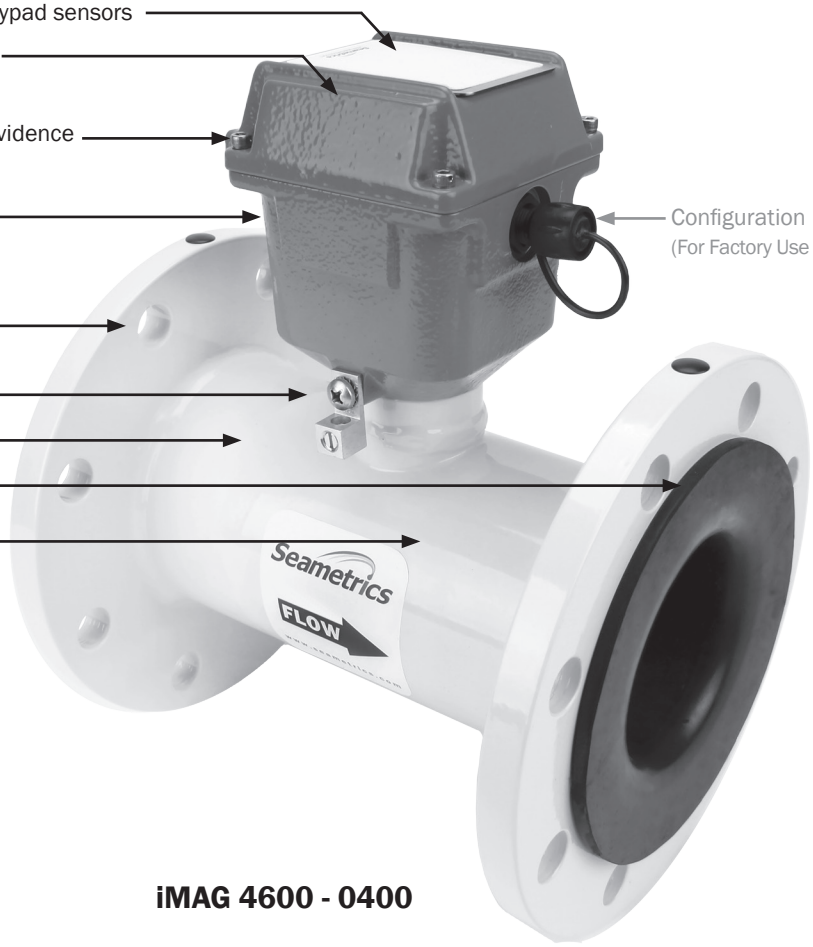
Flanges, 150 lb. ANSI pattern

Equalization lug

316SS electrodes (Inside)

Santoprene/Polypropylene Liner

Welded steel epoxy-coated flow tube



iMAG 3600-0400
(Remote indicator)

iMAG 4600 - 0400

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	**Rate Volume Units**	**Rate Time Units**	**Total Volume Units**	
	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.	Gallons Liters Cubic Feet Cubic Meters Million Gallons Mega Liters Imperial Gallons Million Imperial Gallons Barrels (42 gallon)	Second Minute Hour Day	Gallons Gallons x 1000 Million Gallons Liters Kilo Liters Mega Liters Cubic Meters Barrels (42 gallon)	Cubic Meters x 1000 Cubic Feet Cubic Feet x 1000 Million Cubic Feet Imperial Gallons Imperial Gallons x 1000 Million Imperial Gallons
	Bi-directional[1]	Forward Total, Reverse Total, Net Total			
Power	**DC Power**	9-36 Vdc @ 250 mA max, 30 mA average			
	AC Power[2]	85-264Vac, 50/60Hz, 0.12A			
	Battery[3]	Two lithium 3.6V 'D' batteries, replaceable. *(Not available on 3")*			
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		CE (EN 61326) pending, NSF-61			
Environmental		IP68 to 10ft (3m) depth			

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

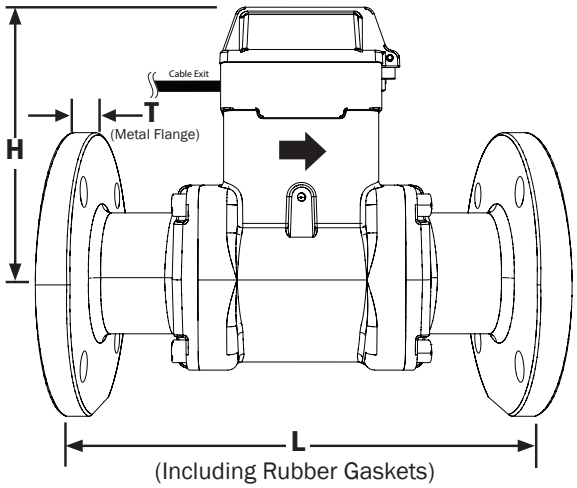
[1] If forward and reverse flow data needs to be sent to another device, either the -ADDX, -DDDX or Modbus output is required.

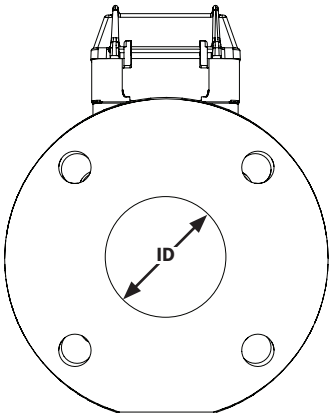
[2]iMAG3600 only, iMAG4600 requires external AC power supply

[3]iMAG4600 only

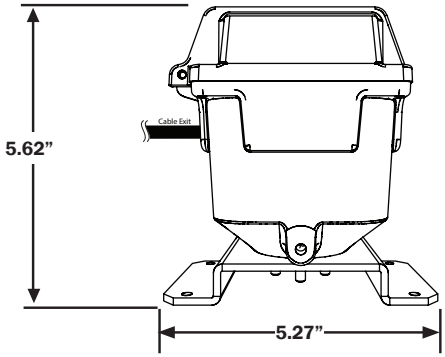
DIMENSIONS

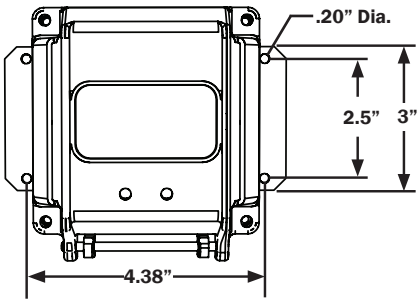
iMAG4600 - 0300 Shown



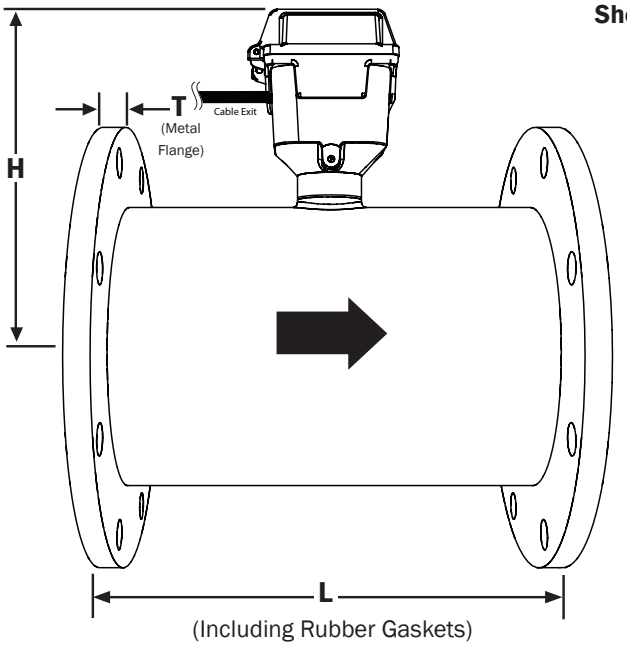


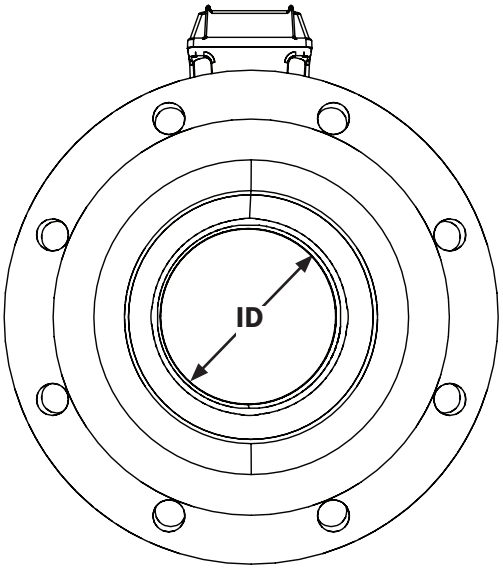
iMAG3600 Remote Shown





iMAG4600 - 0400 to 1200 Shown





Seametrics

iMAG-SERIES
Flanged Magmeter

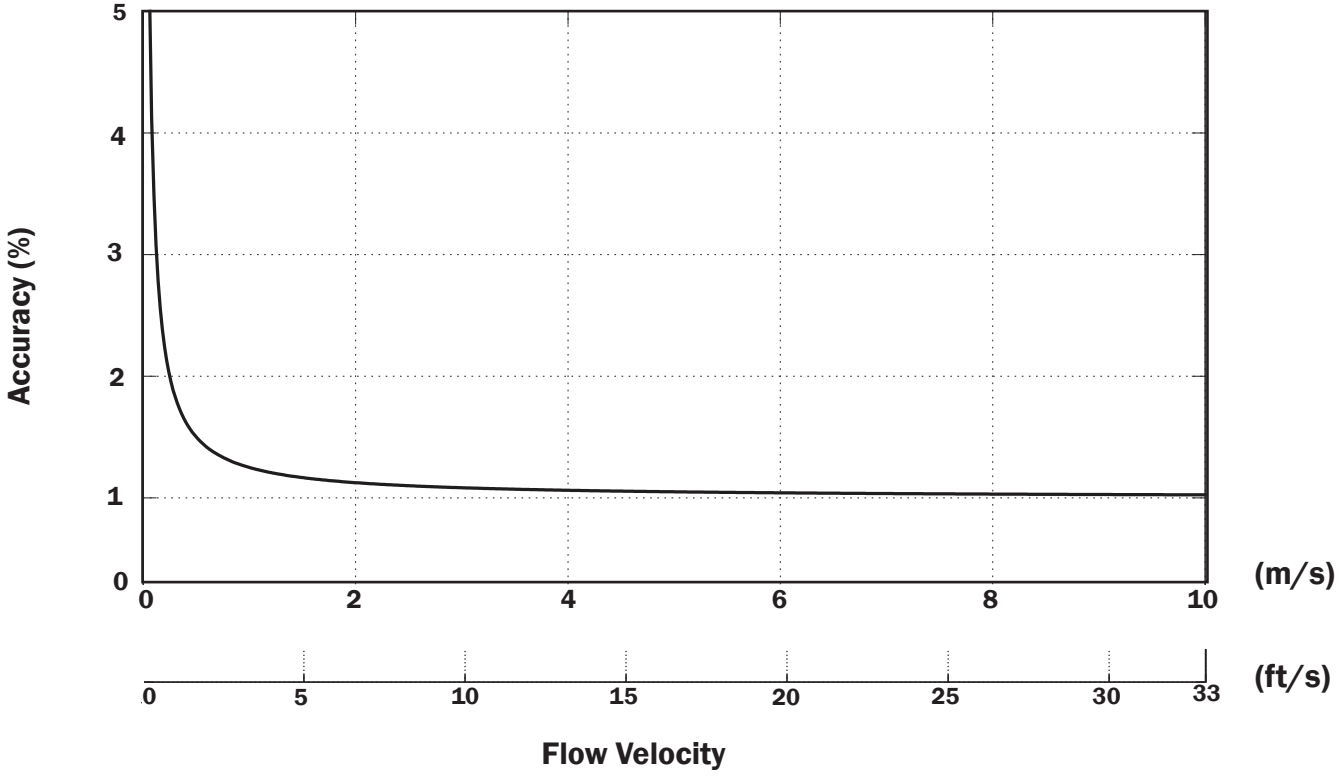
iMAG Dimensions

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”)

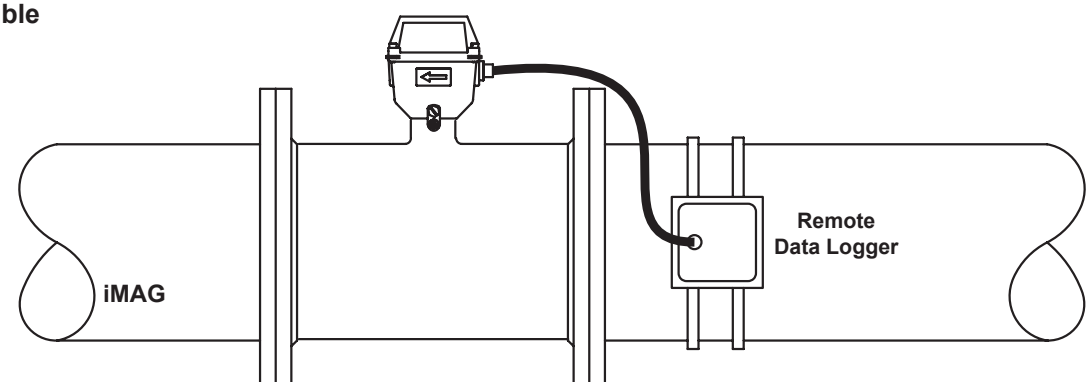
Pipe Size (Inches in diameter)	3”	4”	6”	8”	10”	12”
Max Flow Rate (Gallons/Minute)	723	1285	2891	5140	8031	11565
Cut-off (min) Flow Rate (Gallons/Minute)	3.62	6.43	14.46	25.70	40.15	57.82
Max Flow Rate (Liters/Second)	46	81	182	324	507	730
Cut-off (min) Flow Rate (Liters/Second)	0.23	0.41	0.91	1.62	2.54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

iMAG Accuracy



OUTPUT CAPABILITIES

Remote Data Logger Compatible



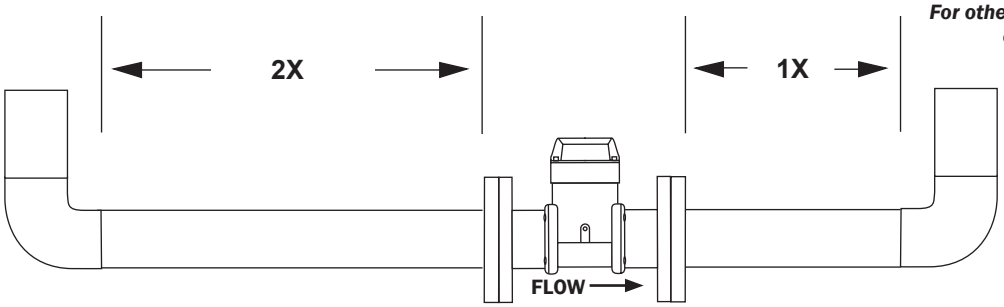
STRAIGHT PIPE RECOMMENDATIONS

(X = pipe diameter)

iMAG - 300

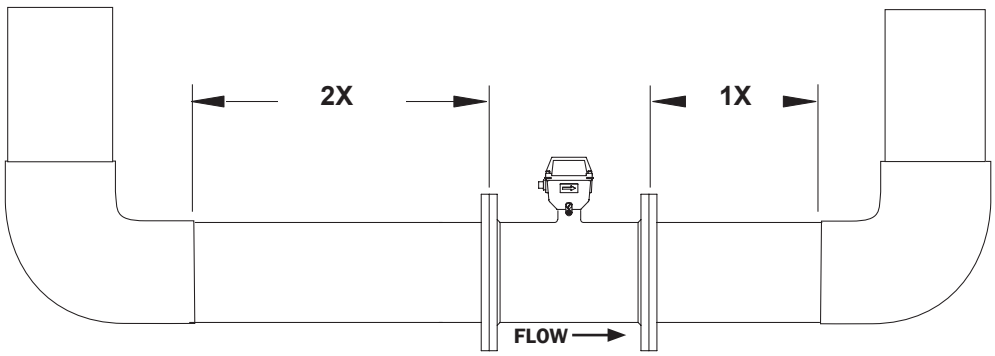
Minimal straight pipe required between elbows.

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 -	☐☐☐☐	☐☐	☐☐☐☐	☐☐☐	☐☐☐
iMAG 4600 -	☐☐☐☐	☐☐	☐☐☐☐	☐☐☐	

iMAG 3600 (Remote Indicator) Options

① Size

-0300	3”
-0400	4”
-0600	6”
-0800	8”
-1000	10”
-1200	12”

② Flange/Fitting

-F1	ANSI 150#

③ iMAG 3600 Power and Communications

-ADDX	AC Power, 2 Digital Outputs
-ADLX	AC Power, Current Loop, Digital Output
-APLX	AC Power, Pulse, Current Loop
-APXX	AC Power, 1 Pulse Output
-ASSX	AC Power, Modbus
-APHX	AC Power, Pulse, HART
-DDDX	DC Power, 2 Digital Outputs
-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

④ Power/Output Cable

-000	No Cable
-006	6 meter (20’)[1]
-010	10 meter (33’)
-020	20 meter (66’)
-030	30 meter (100’)
-045	45 meter (150’)
-060	60 meter (200’)

⑤ Sensor Cable

-010	10 meter (33’)[1]
-020	20 meter (66’)
-030	30 meter (100’)

iMAG 4600 (Internal Indicator) Options

① Size

-0300	3”
-0400	4”
-0600	6”
-0800	8”
-1000	10”
-1200	12”

② Flange/Fitting

-F1	ANSI 150#

③ iMAG 4600 Power and Communications

-DDDX	DC Power, 2 Digital Outputs[3]
-DDLX	DC Power, Current Loop, Digital Output[3]
-DPLX	DC Power, Pulse, Current Loop[3]
-DPXX	DC Power, 1 Pulse Output[3]
-DSSX	DC Power, Modbus[3]
-DPHX	DC Power, Pulse, HART[3]
-BPXX	Battery Power, 1 Pulse Output[3] *(Not available on 3”)*

④ Power/Output Cable

-000	No Cable[4]
-006	6 meter (20’)[1]
-010	10 meter (33’)
-020	20 meter (66’)
-030	30 meter (100’)
-045	45 meter (150’)
-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 seleceted, one of the power/output cable options is required.
[4] Battery power configuration only.

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