

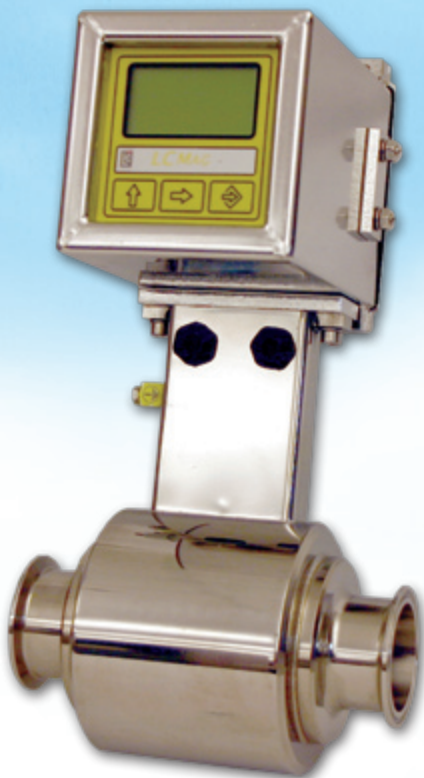
wright flow

TECHNOLOGIES

3A SANITARY FLOWMETERS

TURBINE AND MAGNETIC METERS AND SENSORS

MAGwright



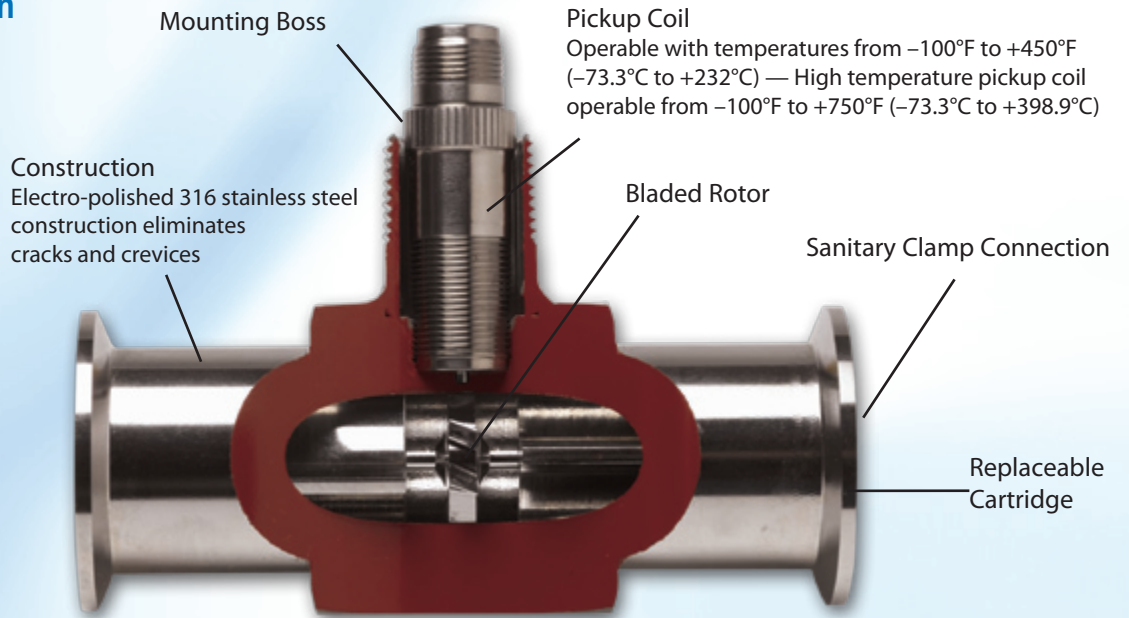
Typical Applications

Food, Dairy, Beverage, Pharmaceutical, Biotech,
and Personal Care



SteriBlade 3A Precision Turbine Flowmeters

Typical Construction



Wright Flow Technologies' 3A Sanitary Series Precision Turbine and Magnetic Flowmeters bring a new level of reliability and performance to beverage, food and pharmaceutical applications. The 3A Sanitary Series Precision Turbine Flowmeter is ideal for sampling and batch applications. The HMS2410 Magnetic Flowmeter is suitable for high-throughput manufacturing applications. Both are built to exact specifications for long and trouble-free service.

The Sanitary Series Precision Flowmeters are manufactured from 316 stainless steel and electro-polished to eliminate cracks or crevices that can cause failure and unacceptable downtime. They are available in sizes from half of an inch to four inches. Extremely versatile, our precision turbine Flowmeters can be installed horizontally or vertically.

FEATURES

- Special food-grade PTFE or Carbide sleeve bearings standard
- Clean in place with low pressure steam
- 3A Certified
- Vertical or horizontal installation
- Available in 1/2" to 4" standard
- Easy to build and repair, inside cartridge can be quickly replaced
- Can be used with non-conductive liquids or gases

TURBINE METER SPECIFICATIONS

- **Linearity:**
+/- 0.5% standard, +/- 0.25% optional
- **Repeatability:**
+/- 0.1% or better over nominal rated flow range
- **Temperature:**
 -100°F to $+450^{\circ}\text{F}$ (-73°C to 232°C);
 -100°F to $+750^{\circ}\text{F}$ (-73°C to 399°C)
with high temperature coil
- **Construction:**
Standard precision sanitary flow meters are constructed of 316 stainless steel
- **Electrical Output:**
Minimum of 30 mV pp at the bottom of the nominal flow range
- **Pressure Drop:**
4 psi at maximum nominal rated flow range
- **Calibration:**
Furnished with standard 5 point water calibration (special calibrations available)
- **Flow Ranges:**
From 0.6 to 1500 USGPM (5.68 to 5678 LPM)

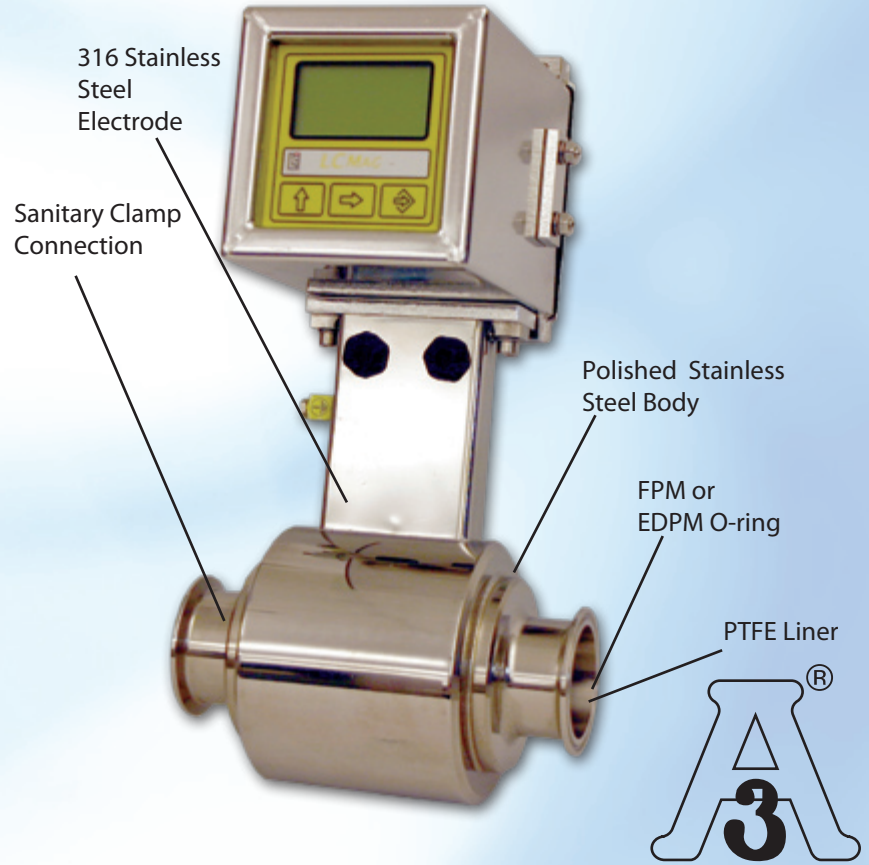
REGISTERS / TRANSMITTERS

- IT400 Model with local display w/4-20 mA Out put
- SP712-2 Model without local display w/4-20 mA Out put
- Pulse Amplifier also available (needed if register 20ft from meter)

MAG wright HMS2410 Magnetic Flowmeter with Sanitary Sensor

Typical Construction

HMS2410		
Meter Size (Inches)	Flow Range	
	USGPM	LPM
1/8	0.1 to 1	0.4 to 3.8
1/4	0.4 to 4	1.5 to 15
3/8	1.3 to 13	5 to 49
1/2	2.6 to 26	10 to 98
3/4	6 to 55	21 to 208
1	8.0 to 80.0	30 to 303
1 1/4	13 to 130	49 to 492
1 1/2	20 to 200	76 to 757
2	32 to 320	121 to 1211
2 1/2	53 to 530	201 to 2006
3	80 to 800	303 to 3028
4	120 to 1,200	454 to 4542



The HMS2410 is a 3A certified instrument specifically designed for sanitary, food-grade applications.

HMS2410 MAGNETIC FLOWMETER SPECIFICATIONS

- **Size:** 1/8" to 4"
- **Flow Range:** 0.1 to 1,200 GPM
0.4 to 4542 LPM
- **Connections:** Sanitary Clamp, DIN Sanitary, SMS
- **Nominal Pressure:** 350 PSI (25 BAR) for 1" to 1 1/2"
225 PSI (16 BAR) for 2" to 4"
- **Body Material:** 304 stainless steel, polished
- **Electrode Material:** 316 stainless steel
- **Lining Material:** PTFE
- **Liquid Temperature:** Nominal 212°F (100°C) to 300°F 148.9°C) with remote converter option
- **O-Ring Material:** FPM, EPDM
- **Protection Rating:** IP67/68 with integral converter
Complete submersion up to 5 feet (IP68) with remote converter option
- **Minimum Liquid Conductivity:** 5µS/cm

FEATURES

- No moving parts
- Minimal pressure drop
- Clean in place construction
- +/- 0.2 % accuracy over 10:1 range w/ 4ft/sec flow velocity
- Batching capability

- Multi-Language display
- Two digital outputs
- 4-20mA output
- Bi-Directional flow
- Empty pipe detection
- 3A Certified

CONVERTERS

HML210, HML110, HML4F1

HMS501 (Not 3A)

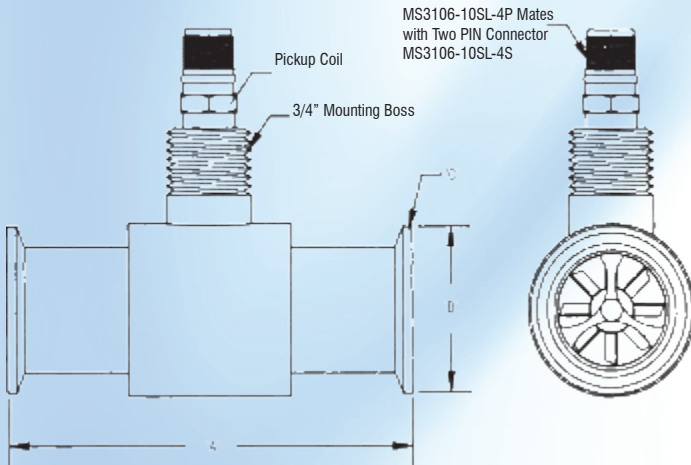
For Low Flow And Dosing Applications

- **Size:** 1/8" to 3/4"
- **Flow Range:** 0.375 to 208 LPM (0.1 to 55 GPM)
- **Nominal Pressure:** 225 PSI (16 BAR); 575 PSI (40 BAR) optional
- **Liner:** PTFE
- **Liquid Temperature:** to 212°F (100°C) to 300°F (150°C) with remote converter
- **Body Material:** 304 or 316 SS
- **Connections:** Sanitary Clamp, DIN Sanitary, others

HMS501		
Size	USGPM	LPM
1/8	0.1 to 1	0.4 to 3.8
1/4	0.4 to 4	1.5 to 15
3/8	1.3 to 13	5 to 49
1/2	2.6 to 26	10 to 98
3/4	6 to 55	21 to 208

Dimensions: 3A Precision Turbine Flowmeters

INSTALLATION DIMENSIONS



SIZE	Dimensions (Inches / cm)		End Connections
	A	B	C
1/2"	4 / 10.2	0.984 / 2.5	3/4"
3/4"	5 / 12.7	1.984 / 5.039	1 1/2"
1"	5 / 12.7	1.984 / 5.039	1 1/2"
1 1/2"	5 / 12.7	1.984 / 5.039	1 1/2"
2"	6 / 15.24	2.516 / 6.39	2"
3"	9.5 / 24.13	3.579 / 9.09	3"
4"	12 / 30.48	4.682 / 11.89	4"

Dimensions are for guidance only. Please refer to our technical office if a certified drawing is required.

FLOW RANGE

Nominal Meter Size	FLOW RANGE				METER FACTOR "K" PULSES	STANDARD ENDFITTING	OPTIONAL ENDFITTING
	USGPM / LPM						
Inches	Min Repeat	Nominal Min Linear	Nominal Max Linear	Extended Max	US Gallons	Inches	Inches
1/2"	0.6 / 2	1.25 / 5	9.5 / 36	12 / 45	3,160	3 / 4"	1 1/2"
3/4"	1.5 / 5.68	2.5 / 9.46	29 / 109.78	30 / 113.56	1,035	1 1/2"	2"
1"	2 / 7.57	4 / 15.14	60 / 227.12	75 / 283.91	500	1 1/2"	2"
1 1/2"	5 / 18.93	8 / 30.28	130 / 492.10	175 / 662.45	230	1 1/2"	2"
2"	11 / 41.64	15 / 56.78	225 / 851.72	275 / 1,040.99	133	2"	2 1/2"
3"	30 / 114	40 / 151	650 / 2,461	800 / 3,028	46.1	3"	NONE
4"	50 / 189	75 / 284	1,250 / 4,732	1500 / 5,678	20.7	4"	NONE

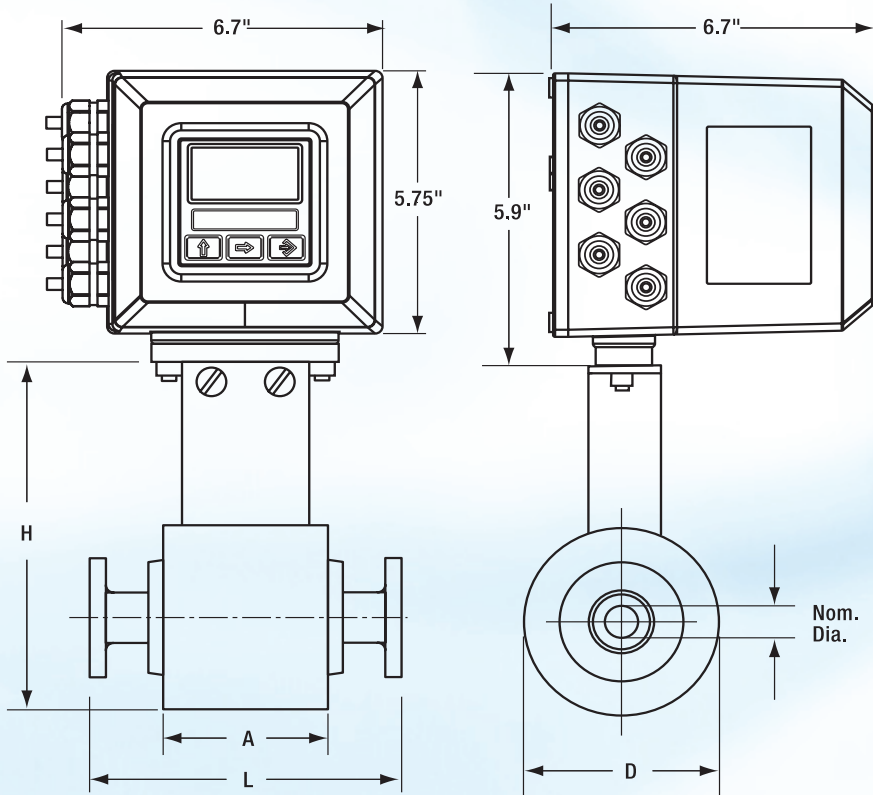
NOTE: Consult factory for non-3A Sanitary flowmeters available in many sizes.

SteriBlade 3A PRECISION TURBINE FLOWMETER SELECTION GUIDE

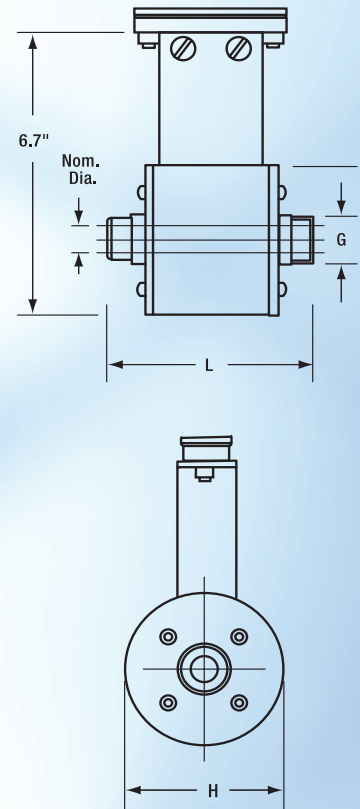
SP _____ - _____ - _____ - _____ G - _____ - X - _____ - 3A Meter Size Bearing Rotor *Endfitting (See Sizing Chart) Material Options *Include size if other than standard X = Mounting Boss			
BEARING SELECTIONS	ROTOR SELECTIONS	MATERIAL	OPTIONS
TS = PTFE Sleeve CS = Carbide Sleeve	PHL = 17-4 PH Liquid	6 = 316 SS	FB = RF - 10 Coil HT = HI Temp Coil (SC28 - 14G)

Dimensions: **MAG wright** Magnetic Flowmeter With Sanitary Sensor

HMS2410 with HML210 Converter Shown



HMS501



HMS2410 Dimensions (Inches)								
Nominal Diameter		1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Dimension	A	4	4	4	4	4	7	4
	L	7	7	7	7	7	7.9	7.9
	H	6.7	7.2	7.2	8.2	9.2	9.2	10.2
	D	3	3.5	3.5	4.5	5.5	5.5	6.5
Weight (lbs)		3.9	4.4	4.8	9.7	9.2	13.9	18.7

HMS501 Dimensions (Inches)						
Nominal Diameter		1/8"	1/4"	3/8"	1/2"	3/4"
Dimension	L	5	5	5	5	6
	H	3	3	3	3	3
	G	1/4"	3/8"	1/2"	3/4"	1
Weight (lbs)		7	7	7	7	7

NOTE: Dimensions and weights shown are not for construction use. Consult factory when certified engineering prints are required. Dimensions are for guidance only. Please refer to our technical office if a certified drawing is required.

WRIGHT FLOW TECHNOLOGIES

Our products are used across the whole of the process industries in applications as diverse as paper & pulp production through to the extreme hygiene end of the pharmaceutical industry on injectables and blood processing. We manufacture within our organization rotary lobe, centrifugal, circumferential piston, air operated double diaphragm and dosing pumps, all manufactured and designed with hygiene, cleanliness, affordability and robustness in mind. These pumps coupled with our range of hygienic turbine and magnetic flowmeters, our full range of sanitary valves and our powder mixing technology from Quadro, gives a complete package for the modern high-tech process industries of today.

For more information, contact your local authorized Wright Flow Technologies Distributor or contact us at:



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FMT ACOWFT/A4 Meters/131

TYPICAL APPLICATIONS



Food
Vegetable Oil
Vegetable Mixes
Potable Water
Molasses
Gravies & Sauces



Dairy
Milk
Yogurt
Soft Cheese
Whey



Beverage
Water
Wine & Spirits
Soft Drinks
Juices (Fruit & Vegetable)
Beer



Pharmaceutical
DI Water
Ultra Pure Water

Biotech
Broths

Personal Care

Tooth Paste
Lotions
Creams
Shampoos & Conditioners
Body Soaps
Fragrances



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TURBINE AND MAGNETIC METERS AND SENSORS