

# VersaFlow Mag 100 Electromagnetic Flow Sensor Technical Datasheet

34-VF-03-08  
September 2009

## Specification

### The Economical Solution

The VersaFlow Mag 100 flow sensor is an economical solution for a wide range of applications. VersaFlow Mag 100 can be used in applications (including various aqueous solutions), where other measurement techniques e.g. turbines, venturi, etc. were previously used.

VersaFlow is suitable for even the most demanding applications and is recognized as an industry standard.

### Highlights

- Basic and fully functional wafer design flow sensor
- Quick and easy to install and operate
- Available in sizes 3/8" - 6"
- Excellent price-performance ratio
- Excellent chemical resistance
- Maintenance free

### Industries

- Water
- Wastewater
- Heating, Ventilation & Air Conditioning (HVAC)
- Agriculture
- Machinery

### Applications

- Water circulation, distribution and treatment e.g. in swimming pools and recreation facilities
- Sprinkler irrigation systems
- Fertilizer distribution
- Fire fighting systems
- Water circuits of buildings and offices



Figure 1 – VersaFlow Electromagnetic Flow Sensor

### VersaFlow Electromagnetic Flow Converters

VersaFlow converters are compatible with all sensors  
TWM 9000



Wall Mount



Integral Mount



Field Mount



TWM 1000

All meters consist of a sensor and converter, which may be mounted integral to the sensor, or remotely mounted with a field mount kit, wall mount housing or 19" rack mount module. See Specification 34-VF-03-02 or 34-VF-03-24 for converter details

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 Technical Data

ASME [inch]	3/8"	1/2"	1"	1 1/2"	2"	3"	4"	6"
DN [mm]	10	15	25	40	50	80	100	150

**Process flange standard**

EN 1092-1 -PN40								
EN 1092-1 -PN 16								
ASME B16.5- 150 lbs RF								
ASME B16.5-300 lbs RF								
JIS20 K								
JIS10 K								
	Pressure limits in separate table.							
	Note: DN 10 (3/8") requires DN 15 (1/2") process flanges.							

**Liner**

PFA								
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**Electrodes**

Hastelloy C4								
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**Grounding rings**

Integrated st. st. 1.4571 (AISI 316 Ti)								
Separate st. st. 1.4571 (AISI 316 Ti)								

**Stud bolts and nuts**

Rubber centering sleeves								
Steel								
Stainless steel								
	Gaskets not included							

**Materials used**

Measuring tube, austenitic stainless steel								
Housing GTW-S 38 (polyurethane coated)								
Housing sheet steel (polyurethane coated)								
Connection box, die-cast aluminum (polyurethane coated)								
	Other materials on request.							

**Protection category**

IP 66/67 eq. NEMA 4/4X / 6								
IP 68 eq. NEMA 6								

**Approvals**

Non-Ex								
	Approval for flow sensor only							

**Versions**

Compact + TWM 1000 C or TWM 9000C								
Separate +TWM 1000W or TWM9000F, R, W								

■ standard ■ optional □ on request

ASME [inch]	3/8"	1/2"	1"	1 1/2"	2"	3"	4"	6"
DN [mm]	10	15	25	40	50	80	100	150

**Vacuum load**

Vacuum load	0 mbar/0 psi absolute
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**Electrical Conductivity**

Non-water	min. 5 $\mu$ S/cm
Water	min. 20 $\mu$ S/cm

standard  optional  on request

Process flange standard	Operating pressure	
	min. - max. [bar]	min. - max. [psig]
ASME B16.5 - 150 lbs RF	0-16	0-232
ASME B16.5 - 300 lbs RF	0-16	0-232
EN 1092-1 – PN 16	0-16	0-232
EN 1092-1 – PN 40	0-16	0-232
JIS 10 K	0-10	0-145
JIS20K	0-16	0-232

Temperature	Process		Ambient	
	min. [°C]	max. [°C]	min. [°C]	max. [°C]
Remote Converter TWM 1000 or TWM 9000	-25	120	-25	60
Compact with TWM 1000 or TWM 9000	-25	120	-25	50

Temperature	Process		Ambient	
	min. [°F]	max. [°F]	min. [°F]	max. [°F]
Remote Converter TWM 1000 or TWM 9000	-13	248	-13	140
Compact with TWM 1000 or TWM 9000	-13	248	-13	122

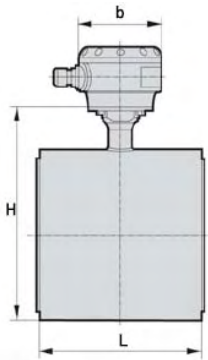
**Dimensions**

Nominal size	Dimensions [mm]						Approx. weight
DN	L	H	W	T <sub>box</sub>	T <sub>010</sub>	T <sub>300</sub>	[kg]*
10	68	137	47	214	242	292	1,7
15	68	137	47	214	242	292	1,7
25	54	147	66	224	252	302	1,7
40	78	162	82	239	267	317	2,6
50	100	151	101	228	256	306	4,2
80	150	180	130	257	285	335	5,7
100	200	207	156	284	312	362	10,5
150	200	271	219	348	376	426	15

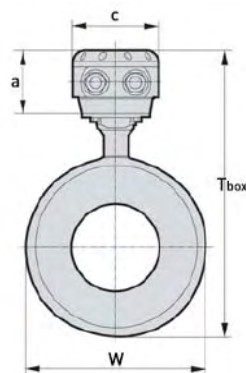
Nominal size	Dimensions [inches]						Approx. weight
ASME	L	H	W	T <sub>box</sub>	T <sub>010</sub>	T <sub>300</sub>	[lbs]*
3/8"	2,68	5,39	1,85	8,43	9,53	11,5	3,7
1/2"	2,68	5,39	1,85	8,43	9,53	11,5	3,7
1"	2,13	5,79	2,6	8,82	9,92	11,89	3,7
1 1/2"	3,07	6,38	3,23	9,41	10,51	12,48	5,7
2"	3,94	5,94	3,98	8,98	10,08	12,05	9,3
3"	5,91	7,08	5,12	10,12	11,22	13,19	12,6
4"	7,87	8,15	6,14	11,18	12,28	14,25	23,1
6"	7,87	10,67	8,62	13,7	14,8	16,77	33,1

\* Approx. weight of meter body

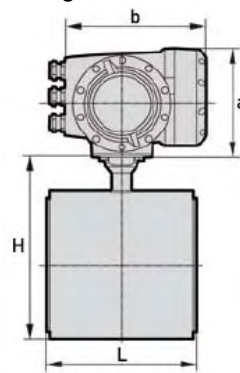
Frontview  
Remote Electronics



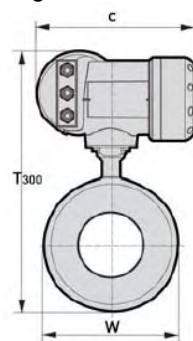
Sideview  
Remote Electronics



Frontview  
Integral Electronics



Sideview  
Integral Electronics



Note: For Sensor with TWM1000 Converter refer to Specification 36-VF-03-24



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## Ordering Information

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Contact your nearest Honeywell sales office, or

**In the U.S.:**

Honeywell Process Solutions  
Honeywell International Inc  
2500 West Union Hills Drive  
Phoenix, AZ 85027 1-800-343-0228

**In Canada:**

The Honeywell Centre  
155 Gordon Baker Rd.  
North York, Ontario M2H 3N7  
1-800-461-0013

**In Latin America:**

Honeywell Inc.  
480 Sawgrass Corporate Parkway,  
Suite 200 Sunrise, FL 33325  
(954) 845-2600

**In Europe and Africa:**

Honeywell S. A.  
Avenue du Bourget 1  
1140 Brussels, Belgium

**In Eastern Europe:**

Honeywell Praha,  
s.r.o. Budejovicka 1  
140 21 Prague 4,  
Czech Republic

**In the Middle East:**

Honeywell Middle East Ltd.  
Khalifa Street,  
Sheikh Faisal Building  
Abu Dhabi, U. A. E.

**In Asia:**

Honeywell Asia Pacific Inc.  
Honeywell Building,  
17 Changi Business Park Central 1  
Singapore 486073  
Republic of Singapore

**In the Pacific:**

Honeywell Pty Ltd.  
5 Thomas Holt Drive  
North Ryde NSW Australia 2113  
(61 2) 9353 7000

**In Japan:**

Honeywell K.K.  
14-6 Shibaura 1-chrome  
Minato-ku, Tokyo, Japan 105-0023

Or, visit Honeywell on the World Wide Web at: <http://www.honeywell.com/ps>  
*Specifications are subject to change without notice.*