



OPTIFLUX 5000

Technical Datasheet

Electromagnetic Flow Sensor

- Excellent long-term stability and accuracy
- Transfer standard of international metrological authorities
- For most aggressive and abrasive fluids
- Fully vacuum-resistant
- High-tech ceramics liner



Electromagnetic product range

OPTIFLUX converters: All converters fit to all sensors



- ① IFC 300 High-performance solution
- ② IFC 010 Economical solution

OPTIFLUX sensors



- ① OPTIFLUX 1000 Economical solution
- ② OPTIFLUX 2000 Solution for the water and wastewater industry
- ③ OPTIFLUX 4000 Standard solution for the process industry
- ④ OPTIFLUX 5000 Solution with high-tech ceramics
- ⑤ OPTIFLUX 6000 Sanitary and hygienic solution

Special-purpose flowmeters



- ① WATERFLUX 2070 Battery powered watermeter solution
- ② OPTIFLUX 4040 C 2-wire solution
- ③ TIDALFLUX 4110 PF Solution for partially filled pipelines
- ④ BATCHFLUX 5015 C Solution for volumetric filling
- ⑤ OPTIFLUX 7300 C Electrode-free solution

Nominal diameter	VN18									
ASME [inch]	1/10"	1/8"	1/4"	3/8"	1/2"	1"	1 1/2"	2"	3"	4"
DIN [mm]	2.5	4	6	10	15	25	40	50	80	100

Protection category

IP 66 / 67 eq. NEMA 4/4X / 6										
IP 68 field eq. NEMA 6P										
IP 68 factory eq. NEMA 6P										
IP 68 only available with stainless steel connection box										

Approvals

Non-Ex										
EEx - zone 1 2										
FM - class I div. 1 / 2										
CSA - GP I class I div. 1 / 2										
Please note the approvals are for flow sensors only										

Versions

Compact + IFC 300 C										
Separate + IFC 300 F W R										
Compact + IFC 010 C										
Separate + IFC 010 W										

Vacuum load

0mbar 0psi absolute										
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Conductivity

≥ 1 μS/cm [non-water]										
≥ 5 μS/cm [non-water]										
≥ 10 μS/cm [non-water]										
≥ 20 μS/cm [demineralised cold water]										

■ standard ■ optional □ on request

Dimensions and Weights

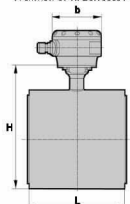
SI-Dimensions

Nominal size		Dimensions [mm]						Approx. weight [kg]**
DN	PN	L*	H	W	T			
[mm]	[bar]				box	Ø10	300	
2,5	40	65	123	44	200	228	278	1,6
4	40	65	123	44	200	228	278	1,6
6	40	65	123	44	200	228	278	1,6
10	40	65	123	44	200	228	278	1,6
15	40	65	123	44	200	228	278	1,6
25	40	58	116	68	193	221	271	1,6
40	40	83	131	83	208	236	286	2,4
50	40	103	149	101	226	254	304	2,9
80	40	153	181	133	258	286	336	6,4
100	16	203	206	158	283	311	361	8,8
* Total fitting length:								
DN 2.5-15, flowmeter with integrated rings: Dim. L + 2 x gasket thickness.								
DN 25-100, flowmeter without rings: Dim. L only (no gaskets required).								
** Approx. weight of meter body.								

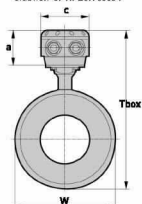
ASME-Dimensions

Nominal size		Dimensions [inches]						Approx. weight [lbs]**
ASME	Pressure	L*	H	W	T			
[inch]	[psig]				box	Ø10	300	
1/10"	580	2,56	4,84	1,73	7,67	8,98	10,94	10,94
1/8"	580	2,56	4,84	1,73	7,67	8,98	10,94	10,94
1/4"	580	2,56	4,84	1,73	7,67	8,98	10,94	10,94
3/8"	580	2,56	4,84	1,73	7,67	8,98	10,94	10,94
1/2"	580	2,56	4,84	1,73	7,67	8,98	10,94	10,94
1"	580	2,28	4,57	2,68	7,6	8,7	10,67	10,67
1 1/2"	580	3,27	5,16	3,27	8,19	9,29	11,26	11,26
2"	580	4,06	5,67	3,98	8,9	10	11,97	11,97
3"	580	6,02	7,13	5,24	10,16	11,26	13,23	13,23
4"	232	7,99	8,11	6,22	11,14	12,24	14,21	14,21
* Total fitting length:								
ASME 1/10"-1/2", flowmeter with integrated rings: Dim. L + 2 x gasket thickness.								
ASME 1"-4", flowmeter without rings: Dim. L only (no gaskets required).								
** Approx. weight of meter body.								

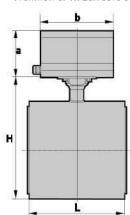
Frontview OPTIFLUX 5000 F



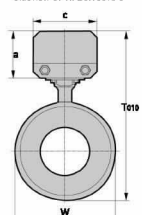
Sideview OPTIFLUX 5000 F



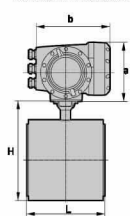
Frontview OPTIFLUX 5010 C



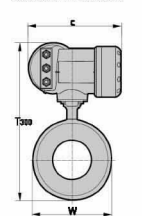
Sideview OPTIFLUX 5010 C



Frontview OPTIFLUX 5300 C



Sideview OPTIFLUX 5300 C



Dimensions housings

Type	dimension a		dimension b		dimension c	
	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
Connection box	77	3,1	111	4,4	106	4,2
IFC 010 converter	105	4,2	160	6,3	106	4,2
IFC 300 converter	155	6,1	202	7,8	260	10,2

Temperature range

Temperature range	Process [°C]		Ambient [°C]		Process [°F]		Ambient [°F]	
	min.	max.	min.	max.	min.	max.	min.	max.

DN 2,5 - 100

Separate flow sensor (OPTIFLUX 5000 F)	-60	180	-40	65	-76	356	-40	149
Compact with IFC 300 (OPTIFLUX 5300 C)	-60	140	-40	65	-76	284	-40	149
Compact with IFC 010 (OPTIFLUX 5010 C)	-25	120	-25	60	-13	248	-13	140

	Max. permissible temperature change [°C]				Max. permissible temperature change [°F]			
	10 minutes		Sudden change		10 minutes		Sudden change	
	Rising	Falling	Rising	Falling	Rising	Falling	Rising	Falling
DN2,5...15	150	120	120	90	302	248	248	194
DN25...100	150	100	120	80	302	212	248	176