



OPTIFLUX 1000

Technical Datasheet

Electromagnetic Flow Sensor

- Basis and fully functional flow sensor
- Excellent price performance ratio
- Quick and easy to install and operate



KROHNE

The economical solution

The OPTIFLUX 1000 electromagnetic flow sensor is an economical solution for a wide range of applications. OPTIFLUX 1000 can be used in applications (including various aqueous solutions), where other measurement techniques e.g. turbines, venturi, etc. were previously used.



- ① Sandwich design
- ② PFA liner
- ③ Hastelloy electrodes

Highlights

- Basic and fully functional sandwich flow sensor
- Quick and easy to install and operate
- 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

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

Technical Data

ASME [inch]									
DN [mm]	10	15	25	40	50	80	100	150	

Process flange standard

EN 1092-1 - PN 40									
EN 1092-1 - PN 16									
ASME B16.5 - 150 lbs RF									
ASME B16.5 - 300 lbs RF									
JIS 20 K									
JIS 10 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 aluminium (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 + IFC 300 C									
Separate + IFC 300 F, R, W									
Compact + IFC 010 C									
Separate + IFC 010 W									

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 µS/cm
Water	min. 20 µS/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
JIS 20 K	0-16	0-232

Temperature range	Process		Ambient	
	min. [°C]	max. [°C]	min. [°C]	max. [°C]
Separate flow sensor	-25	120	-25	60
Compact with IFC 300 OPTIFLUX 1300 C	-25	120	-25	50
Compact with IFC 010 OPTIFLUX 1010 C	-25	120	-25	40

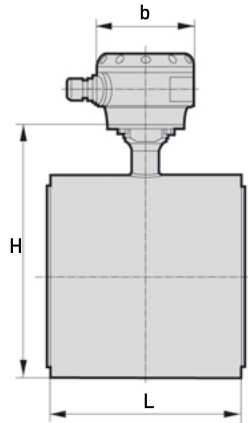
Temperature range	Process		Ambient	
	min.[°F]	max. [°F]	min. [°F]	max. [°F]
Separate flow sensor	-13	248	-13	140
Compact with IFC 300 OPTIFLUX 1300 C	-13	248	-13	122
Compact with IFC 010 OPTIFLUX 1010 C	-13	248	-13	104

Dimensions

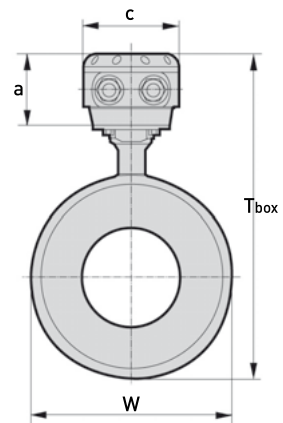
Nominal size	Dimensions [mm]						Approx.weight
DN	L	H	W	T _{box}	T ₀₁₀	T ₃₀₀	[kg] *
10	68	137	47	214	242	292	1,7
15	68	137	47	214	242	292	1,7
25	54	147	66	224	252	302	1,7
40	78	162	82	239	267	317	2,6
50	100	151	101	228	256	306	4,2
80	150	180	130	257	285	335	5,7
100	200	207	156	284	312	362	10,5
150	200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

Nominal size	Dimensions [inches]						Approx.weight
ASME	L	H	W	T _{box}	T ₀₁₀	T ₃₀₀	[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							

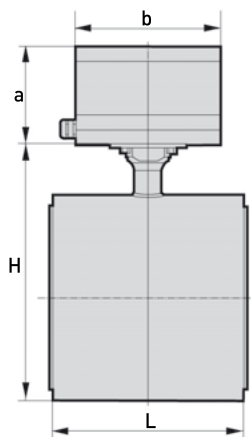
Frontview OPTIFLUX 1000 F



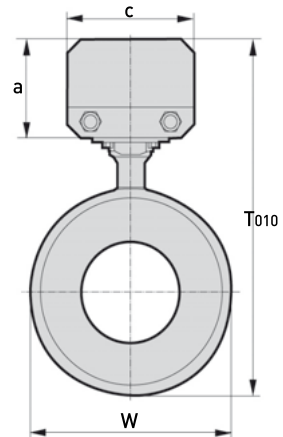
Sideview OPTIFLUX 1000 F



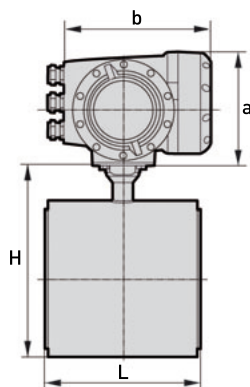
Frontview OPTIFLUX 1010 C



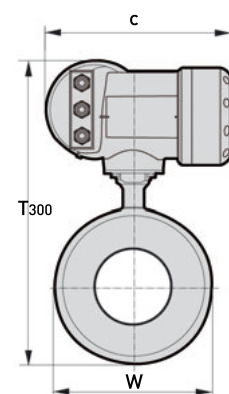
Sideview OPTIFLUX 1010 C



Frontview OPTIFLUX 1300 C



Sideview OPTIFLUX 1300 C



KROHNE Messtechnik Product Overview

- Variable area flowmeters
- Mass flowmeters
- Ultrasonic flowmeters
- Vortex flowmeters
- Flow controllers
- Level measuring instruments
- Electromagnetic flowmeters
- Pressure gauges
- Temperature measuring instruments
- Water solutions & analysis
- Oil and gas turnkey solutions

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