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КОМБИНИРОВАННЫЕ ПРИБОРЫ

SMARTMAC 200W



7.1 Technical data



INFORMATION!

- The following data is provided for general applications. If you require data that is more relevant to your specific application, please contact us or your local sales office.
- Additional information (certificates, special tools, software,...) and complete product documentation can be downloaded free of charge from the website (Downloadcenter).

Measuring system

Measuring principle	The measuring principle depends on the used sensor(s), for further information refer to the sensor manual(s).
Measuring range	The measuring range depends on the used sensor(s), for further information refer to the sensor manual(s).

Design

Construction	<ul style="list-style-type: none"> • Typical measuring system consists of: • SMARTPAT PH/ORP/COND sensors • VP2-S sensor cable • Mounting assembly
Communication protocol	HART® 7 - FSK 1200 physical layer definition on top of the current loop.
Display and user interface	
Graphic display	LC display 128 x 64 pixels
Operating elements	4 push buttons for operator control of the signal converter without opening the housing.
Operating menu	The operation menu consists of: Measuring mode: 2 pages (measuring page and error page) Menu mode: main and submenu for SMARTPAT PH/ORP/COND sensors
Operating and display languages	English, German, French, Italian, Spanish
Units	pH, mV, µS/cm, mS/cm, kOhm *cm, MOhm *cm, °C, °F, sec, days

Operating conditions

Temperature	
Ambient	-15...+55°C / +5...+131°F
	Note: the manufacturer strongly recommends to protect the signal converter from external heat sources such as direct sunlight as higher temperatures reduce the life cycle of all electronic components!
Storage	-40...+70°C / -40...+158°F

Other conditions

Humidity	5...95% rH, not condensing
Ingress protection acc. to IEC 60529:	IP66/ IP67 IP69K (stainless steel only) NEMA 4/4X

Installation conditions

Weight	Approx. 1.9 kg / 4.2 lb for die-cast aluminium Approx. 3.5 kg / 7.2 lb for stainless steel
Installation	Wall mounting; assure a vertical mounting orientation

Materials

Housing	Die-cast aluminium Stainless steel
Cable glands	M20x1.5: Plastic (polyamide 6) M20 1/2-NPT (female): Brass M20x1.5: Stainless steel (IP69K)
Mounting plate	Steel

Electrical connections

Power supply	20...30 VDC, loop powered from 4...20 mA signal input. Voltage drop max. 4V DC at 4 mA.
System requirements	250 Ω loop resistance for HART [®] communication. Note: In most Ex isolation amplifiers the 250 Ohm resistor is already integrated.

Approvals and certifications

C	
The device meets the essential requirements of the EU directives. The CE marking indicates the conformity of the product with the union legislation applying to the product and providing for CE marking.	
For full information of the EU directives and standards and the approved certifications, please refer to the EU declaration on the website of the manufacturer.	
Other approvals and standards	
NAMUR recommendation	NE 21
Shock resistance	IEC 60068-2-31

Housing stainless steel

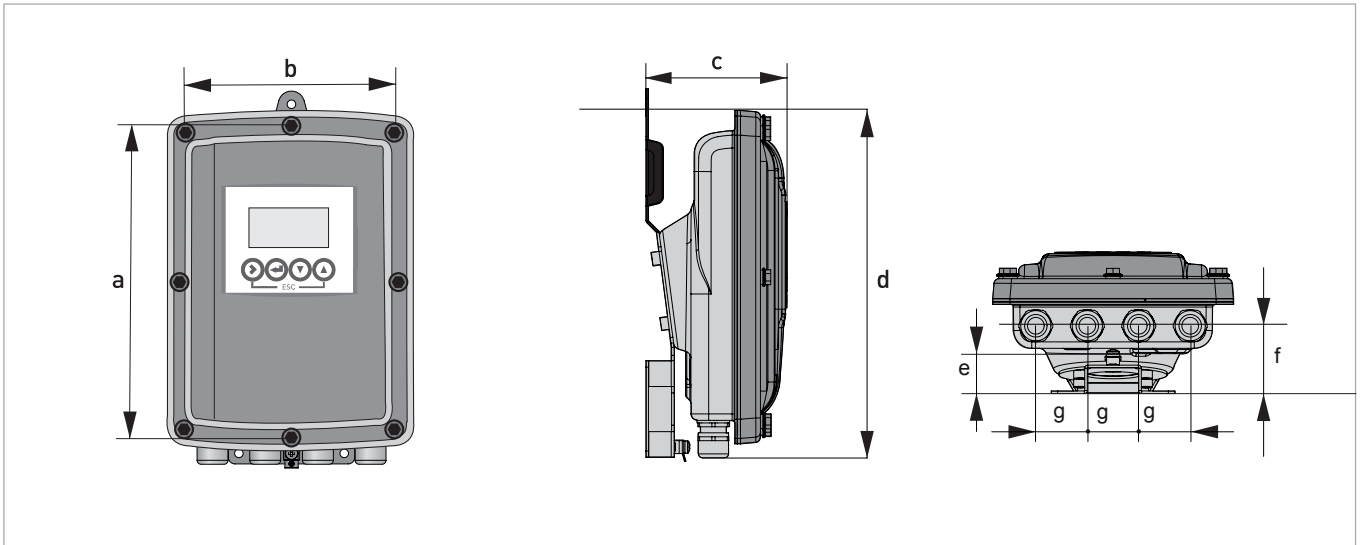


Figure 7-1: Dimensions stainless steel housing

Dimensions and weights in mm and kg

	Dimensions [mm]	Dimensions [inch]
a	268	10.55
b	187	7.36
c	110	4.33
d	276	10.87
e	29	1.14
f	53	2.09
g	40	1.57
Weight	Approx. 3.5 kg	Approx. 7.2 lb

Housing die-cast aluminium

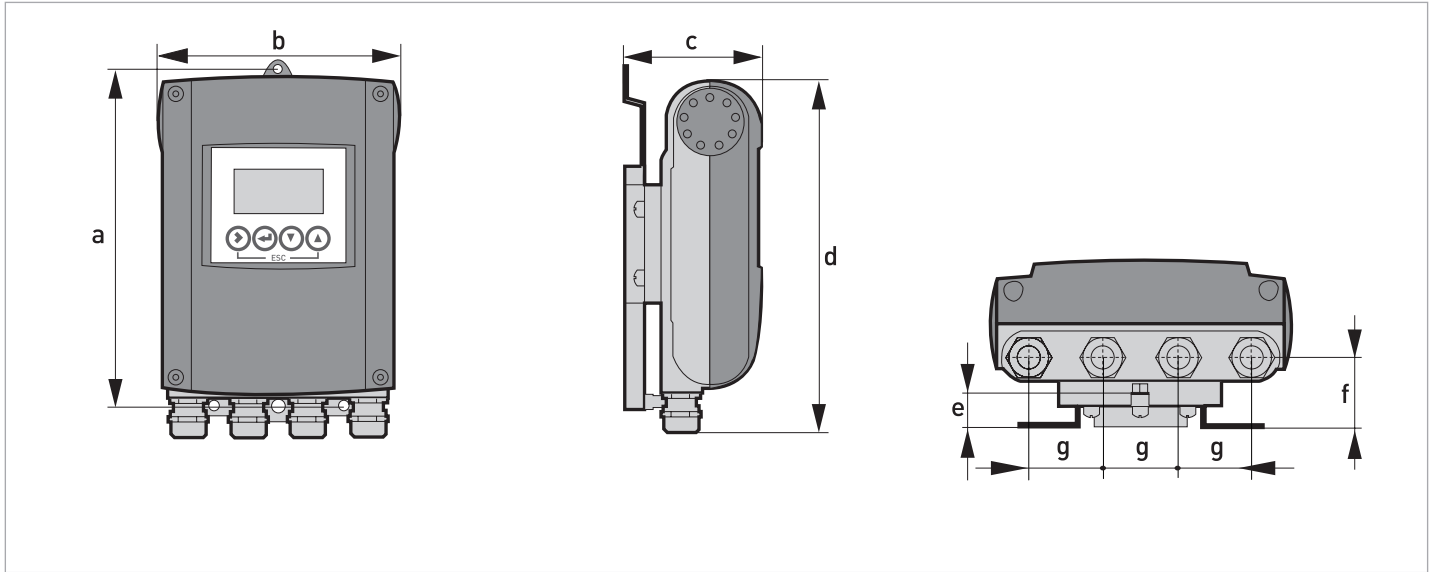


Figure 7-2: Dimensions die-cast aluminium housing

Dimensions and weights in mm and kg

	Dimensions [mm]	Dimensions [inch]
a	241	9.50
b	161	6.34
c	95.2	3.75
d	257	10.12
e	19.3	0.76
f	39.7	1.56
g	40	1.57
Weight	Approx. 1.9 kg	Approx. 4.2 lb

Housing die-cast aluminium

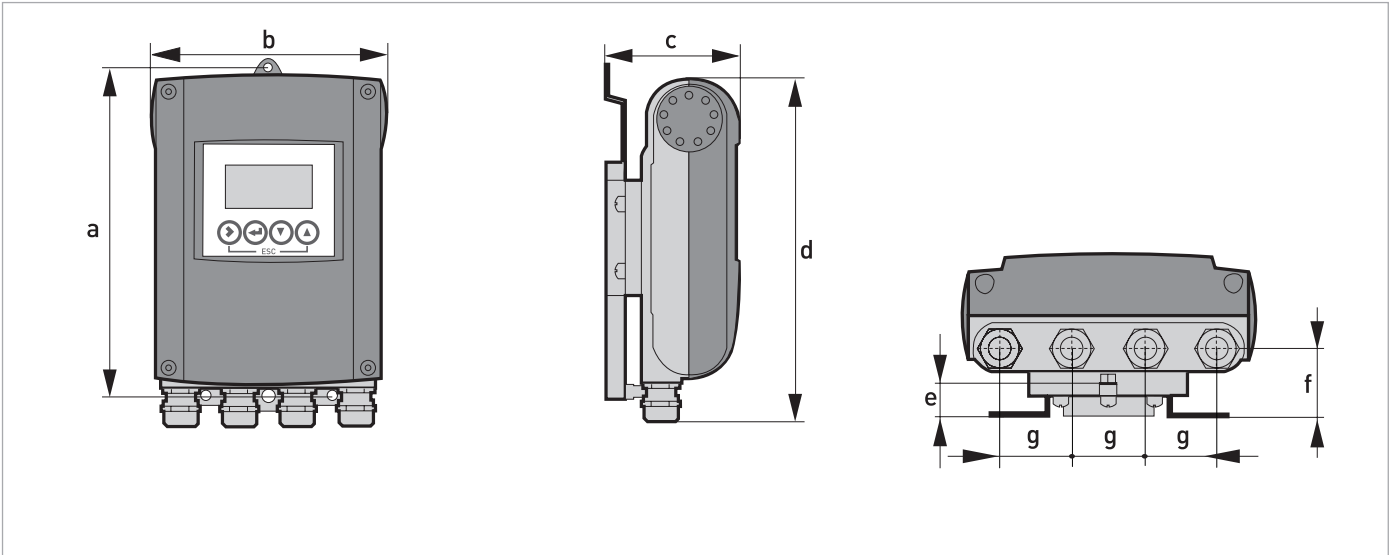


Figure 7-3: Dimensions die-cast aluminium housing

Dimensions and weights in mm and kg

	Dimensions [mm]							Weight [kg]
	a	b	c	d	e	f	g	
Wall-mounted version	241	161	95.2	257	19.3	39.7	40	1.9

Dimensions and weights in inch and lb

	Dimensions [inch]							Weight [lb]
	a	b	c	d	e	f	g	
Wall-mounted version	9.50	6.34	3.75	10.12	0.76	1.56	1.57	4.2

7.2.2 Housing stainless steel

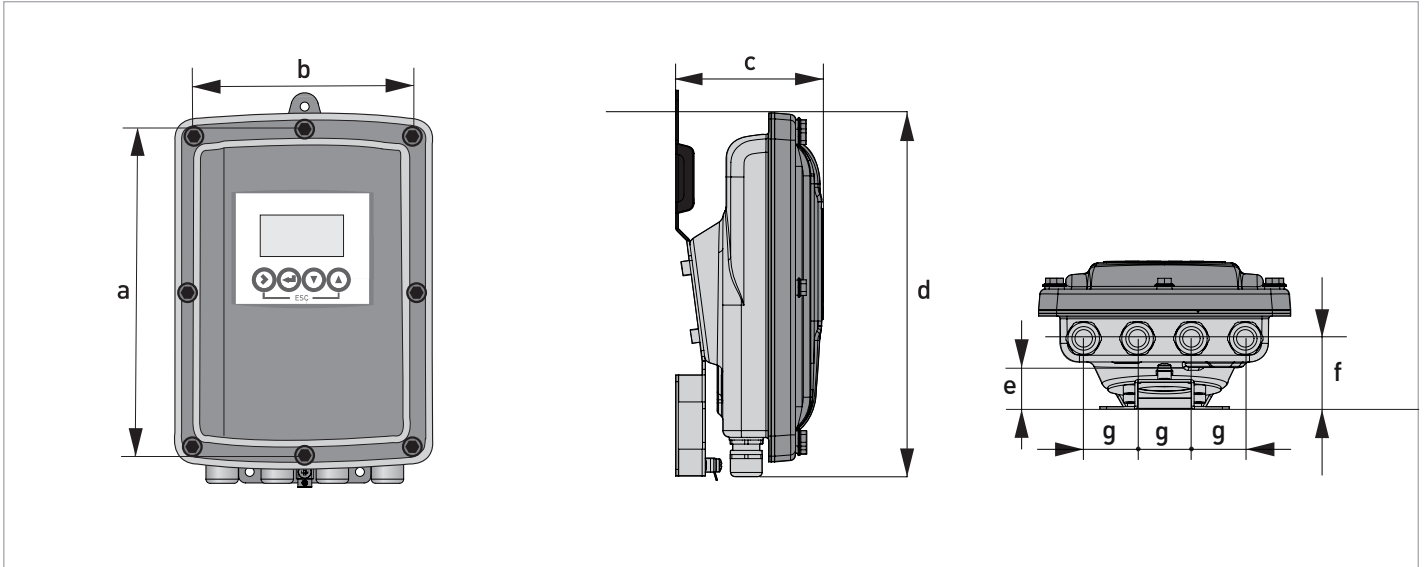


Figure 7-4: Dimensions stainless steel housing

Dimensions and weights in mm and kg

	Dimensions [mm]							Weight [kg]
	a	b	c	d	e	f	g	
Wall-mounted version	268	187	110	276	29	53	40	Approx. 3.5

Dimensions and weights in inch and lb

	Dimensions [inch]							Weight [lb]
	a	b	c	d	e	f	g	
Wall-mounted version	10.55	7.36	4.33	10.87	1.14	2.09	1.57	Approx. 7.2

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