




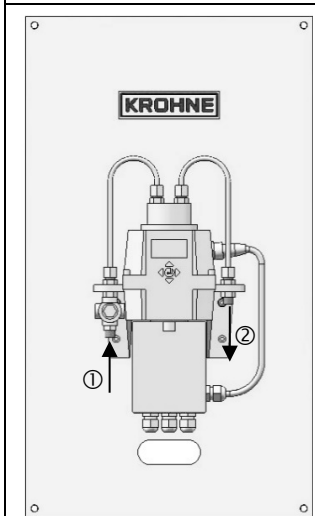
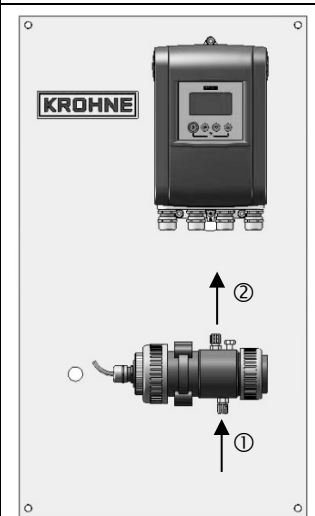
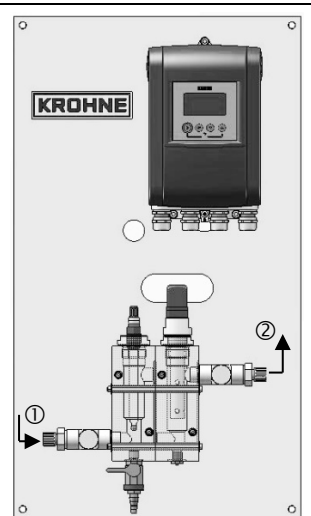


Water Analysis Panel For water quality measurement

-  Installation, assembly, start-up and maintenance may only be performed by appropriately trained personnel.
-  Check the nameplate for correct operating conditions.
-  This instrument complies with requirements of Low Voltage Directive. Instruments must not be connected to power supply before reading instructions described in the manual.
-  The responsibility as to the suitability, intended use and corrosion resistance of the used materials against the measured fluid of this device rests solely with the operator.
-  For complete documentation about the different devices mounted on the panels (manuals, supplementary manuals, data sheets and certificates) please refer to www.krohne.com/Downloads.

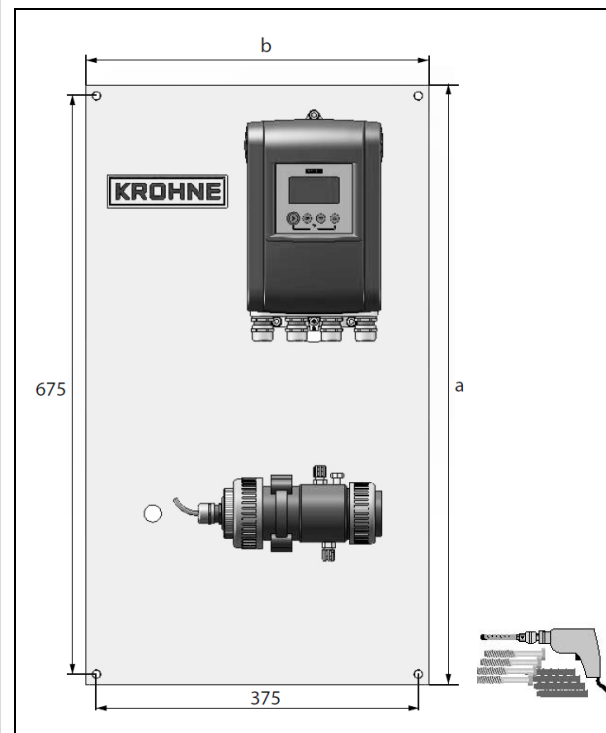
1 Module versions

Module 1	Module 2	Module 3
		
Turbidity measurement with OPTISYS TUR 1060	Measurement of dissolved oxygen with MAC 100 and OPTISENS ODO 2000 or inductive conductivity with MAC 100 and OPTISENS IND 1000	Measurement of pH/ORP or conductive conductivity with MAC 100 and OPTISENS pH/ORP or OPTISENS COND

- ① Water inlet connection for DN 6/4 mm (OD/ID) and 0.25" (OD) hoses
- ② Water outlet connection for DN 6/4 mm (OD/ID) and 0.25" (OD) hoses

2 Installation

Panel mounting



Dimensions		
	[mm]	[inch]
a	700	27.56
b	400	15.75
c (depth)	119-229	4.69-9.02

Weight			
Module		[kg]	[lb]
1	PVC	3.0	6.61
	SS	6.6	14.55
2	PVC	IND	5.1
		ODO	5.3
	SS	IND	8.7
		ODO	8.9
3	PVC	1 MC	5.4-5.6
		2 MC	5.9-6.1
	SS	1 MC	8.9-9.1
		2 MC	9.4-9.6

PVC = panel material PVC
 SS = panel material stainless steel
 MC = number of measuring cells
 Weight of Module 3 depending on sensor type (pH/ORP/Cond)

1. Mark the 4 holes with a suitable pen.
2. Drill the holes and fasten the modules securely to the wall by using the distance holders.
3. Carry out tubing with a suitable hose DN 6/4 mm (OD/ID) or 0.25" (OD) at the sample inlets and outlets.

It is advantageous to place module 1 for turbidity measurement in the left position, as a pressure reducer for max. 6 bar inlet pressure is integrated in the inlet, which protects all downstream components against overpressure.

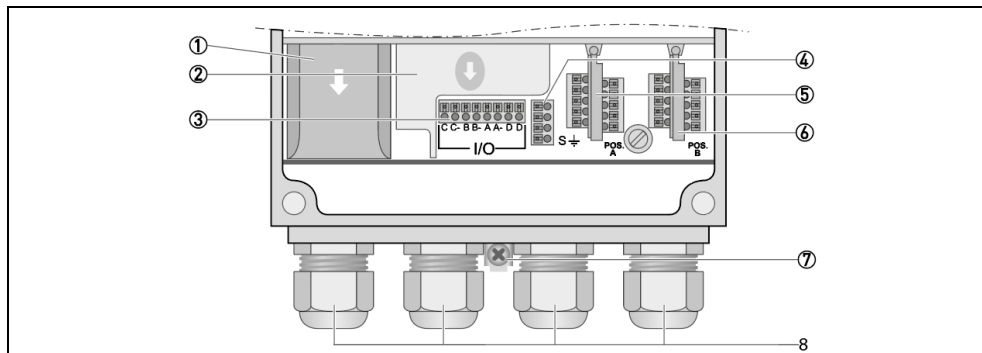
3 Electrical connection



Danger:

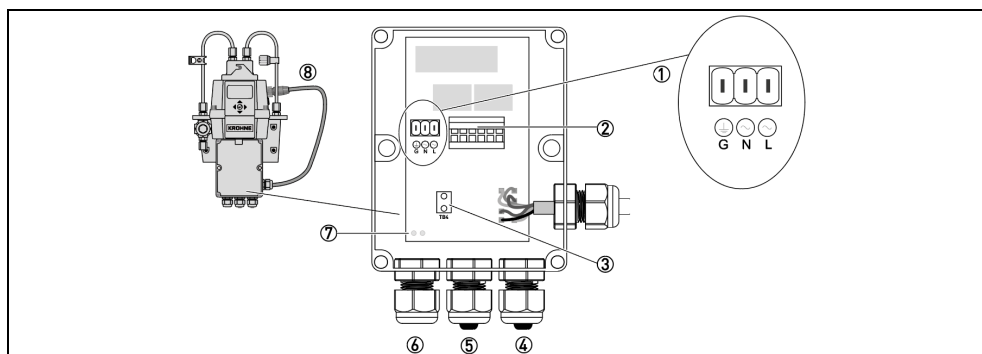
All work on the electrical connections may only be carried out with the power disconnected.
Take note of the voltage data on the nameplate.
Observe the national regulations for electrical installations.

MAC 100: Terminal compartment



① Cover of power supply terminal	⑤ Terminals for sensor input A
② Cover of relay outputs terminal	⑥ Terminals for sensor input B
③ Current output terminal	⑦ Possibility to connect a functional earth (only relevant for 24 V version)
④ Shield terminals	⑧ Cable glands

OPTISYS TUR 1060: Boards and cable glands



① Power supply terminal block	⑤ Alarm cable gland
② Alarms relay, 4...20 mA/RS 485 terminal block	⑥ Power cable gland
③ Power cable strain relief	⑦ Holes for strain relief strap
④ 4...20 mA/RS 485 cable gland	⑧ Sensor interconnect cable

5 Technical data

Installation conditions	
Installation	Wall installation with sample feed
Protection class	MAC 100: IP 66/67 OPTISYS TUR 1060: IP 66
Sample flow connections	Connections for 6/4 mm (OD/ID) and 0.25" (OD) hoses
Drill hole	10 mm / 0.39"

Inputs and outputs	MAC 100	OPTISYS TUR 1060
Current output	3 x 4...20 mA	1 x 4...20 mA
Relays	3x (optional)	2x
Control input	1x	-
Modbus	-	Bi-directional, RS-485 Modbus RTU / ASCII

Operating conditions	Module 1	Module 2	Module 3
Ambient temperature	+1...+50°C / +34...+122°F	+1...+50°C / +34...+122°F	+1...+50°C / +34...+122°F
Process temperature	+1...+50°C / +34...+122°F	+1...+50°C / +34...+122°F	+1...+50°C / +34...+122°F
Max. operating pressure	1...7 bar / 14.5...101.5 psi	6 bar at 20°C (87 psi at 68°F)	6 bar at 20°C (87 psi at 68°F) OPTISENS pH/ORP 8500: 2 bar at 20°C (29 psi at 68°F)
Min. flow rate	0,1 l/min / 0.026 gal/min	-	-
Min. conductivity	-	625 µS/cm for OPTISENS IND 1000	Depending on sensor type

Material			
Wetted parts	Nylon, borosilicate glass, silicon, polypropylene, stainless steel AISI 304, Viton, Acetyl	PVC for OPTISENS ODO 2000; PP for OPTISENS IND 1000	Flow cell: Acrylic glass Sealings: EPDM Valves: PP Sensor material: depending on sensor type
Mounting plate	PVC white or stainless steel 1.4301		

Contact

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