

Product Information

Analysis - pH/ORP

pH and ORP Converter UNICON-pH



- Field or head mounting
- Measuring range programmable -1..+15 pH / ±1500 mV
- Temperature compensation via P100/Pt1000 sensor
- Analog output 4..20 mA for pH/ORP and temperature
- 2 alarm outputs, transistor

Accuracy : ± 20 %
Reference imped. : 0..100 kΩ (non compensated)
Monitoring of the calibration interval : 1..1000 days
Display : LCD-dot matrix, 3.8 mm characters
2 lines 16 characters each

Alarm outputs
Transistor : 14..30 V DC, max.60 mA, with short-circuit-proof

Voltage drop : < 2 V

Range switch

Ri : >10 kΩ

MB1 active : U = 0..3 V DC

MB2 active : U = 12..30 V DC

Case : Head-field case

Material : Polyamide fiber glass
PA6-GF/GK 15/15, front foil polyester

Dimensions : 100 x 100 x 60 mm (WxHxD)

Weight : max. 360 g

Connection : screw terminals pressure plate,
2.5 mm² flexible, 4 mm² single wire
connection cable

Protection class : IP65, terminals IP20 acc. to BGV A3

Characteristics

The pH and ORP converter UNICON-pH is suitable for pH and ORP measurement in food technology, chemistry within pharmaceutical and sewage-water technology. The converter works with all common pH- and ORP electrodes.

Technical data

Power supply

Supply voltage : 14..30 V DC, 2-wire

Operating temperature : 0..55 °C

CE- conformity : EN 61326-1:2013

Input

pH/ORP

Output signal : 4..20 mA

Burden : $RA[\Omega] \leq (U_B - 14 \text{ V}) \div 0,02 \text{ A}$

Measuring range : -1.00..+15.00 pH or -1500..+1500 mV

Ri : >10¹² Ω

Input current : <10⁻¹² A

Accuracy : 0.2 % measuring value, ±2 Digit

Electrode zero point : 7.00 pH

Slope : 30..80 mV/pH

ORP setup : ± 200 mV

Calibration mode : - 1- or 2-point-calibration

buffer selection possible :

-Schott

- WTW

-Ingold (Mettler Toledo)

-Buffer acc. to DIN 19266

- or manual buffer input

- Data entering for zero point and slope

- ORP setup

Temperature

Output signal : 4..20 mA

Burden : $RA[\Omega] \leq (U_B - 14 \text{ V}) \div 0,02 \text{ A}$

Temperature sensor : Pt100 or Pt1000,
(2-wire)

Unit : programmable °C, °F

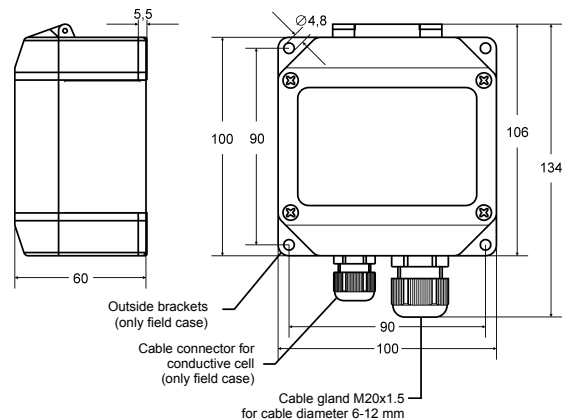
Measuring range : -40.0..+160.0 °C (-40.0..+320.0 °F)

Accuracy : ± 0.1 %, ±1Digit

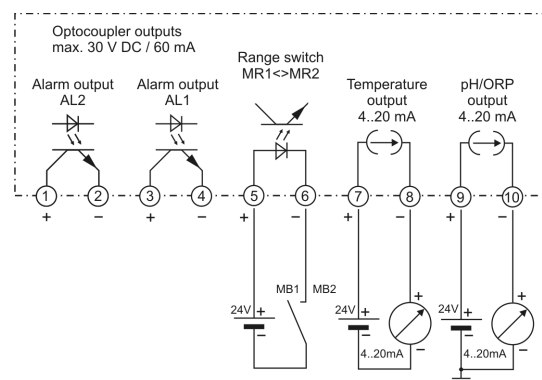
Glass impedance : 0..1 GΩ (temperature compensated)

Detection range : 0.001..2 GΩ (non compensated)

Dimensions



Connection diagram



For supplying the converter use terminals 9 and 10 as shown. If the converter is used form monitoring only, terminals 9 and 10 must be connected directly to the supply voltage.

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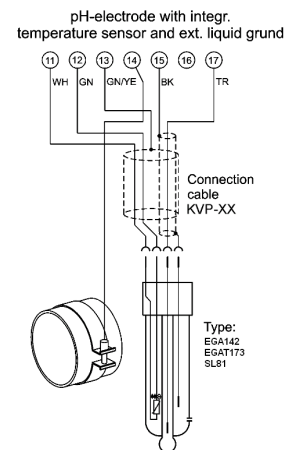
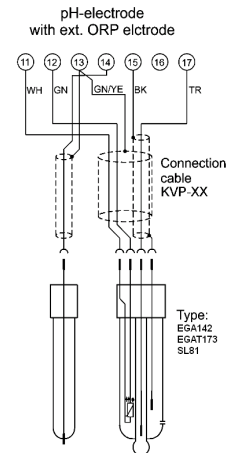
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Ordering code

UNICON-pH - 1. - 2. - 3. - 4. - 5.

1. Model	
1	output 4..20 mA for pH/ORP, 2 electronic alarm outputs
2	as 1, but 2 nd measuring range for pH/ORP, output 4..20 mA for temperature, monitoring of the glass impedance, reference electrode and the calibration interval
2. Mounting	
01	head mounting, on the electrode
02	field mounting, separate connection cable
3. Reference system	
3	all systems with electrode zero point pH7.00 e.g. silver/silver chloride
4. Temperature compensation	
13	Pt100/Pt1000 sensor via software selectable
5. Options	
00	without option



Connection diagram input UNICON-pH

