

Product Information

pH and ORP Panelmeter pH9648



- LED-Display 14,2 mm red
- Measuring range programmable -1..+15 pH / ±1500 mV
- Temperature compensation via P100/Pt1000 sensor
- Analog output 0/4..20 mA or 0/2..10 V for pH/ORP
- Max. 4 alarm outputs relay or transistor

Characteristics

The pH and ORP Panelmeter pH9648 is suitable for pH and ORP measurement in food technology, chemistry within pharmaceutical and sewage-water technology. The pH9648 operates with all common pH- and ORP electrodes. It is recommended to connect the Impedance-Converter pH40 for cable length > 5 m.

Technical data

Power supply

Supply voltage : 230 V AC ±10 %; 115 V AC ±10 %;
 24 V AC ±10 % or 24 V DC ±15 %
 Power consumption: max. 3.5 VA, with analog output 5 VA
 Operating temperature : -10..+55 °C
 CE-conformity : EN 61326-1:2013
 EN 60664-1:2007

Input

pH/ORP

Measuring range : -1.00..+15.00 pH or -1500..+1500 mV
 R_i : > $10^{12} \Omega$
 Input current : < 10^{-12} A
 Accuracy : 0.2 % measuring value, ±2 Digit
 pH setup : electrode zero point 4.00..10.00 pH
 slope 40.0..70.0 mV/pH

ORP setup

: ± 200 mV

Calibration mode

- 1- or 2-point-calibration
- Buffer selection possible:
 - Schott
 - WTW
 - Ingold (Mettler Toledo)
 - Puffer acc. to DIN 19266
 - or manual buffer input
 - Data entering for zero point and slope
 - ORP offset

Temperature

Sensor : RTD, Pt100 or Pt1000,
 (2- or 3-wire connection)
 Unit : programmable °C, °F
 Measuring range : -40.0..+160.0 °C (-40.0..+320.0 °F)
 Accuracy : ± 0.1 %, ±1Digit
 Transmitter supply : 24 V DC, R_i approx. 150 Ω ,
 max. 50 mA (25 mA with 4 relay outputs)

Display

: LED red, 14.2 mm
 Parameter display : LED 2-digit red, 7 mm
 (Parameter - and output indicator)

Output

Relay SPDT : < 250 V AC < 250 VA < 2 A,
 < 300 V DC < 50 W < 2 A
 Transistor : < 35 V AC/DC, max. 100 mA,
 short-circuit-proof
 Analog output active : 0/4..20 mA burden $\leq 500 \Omega$;
 0/2..10 V burden > 500 Ω , isolated
 automatic output changing
 (burden dependent)

Analog output passive

: 4..20 mA, ext. burden =
 $RA[\Omega] \leq (U_B - 5 \text{ V}) \div 0,02 \text{ A}$;
 supply voltage 5..30 V DC

Accuracy

: 0.1 %

Panel case

: DIN 96x48 mm, material PA6-GF; UL94V-0

Dimensions

: Front 96x48 mm, mounting depth 100 mm,

Weight

: max. 390 g

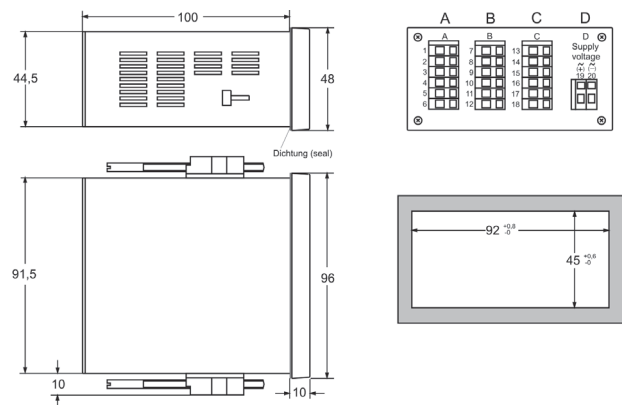
Connection

: clamp terminals, 2.5 mm² single wire,
 1.5 mm² flex wire, AWG14

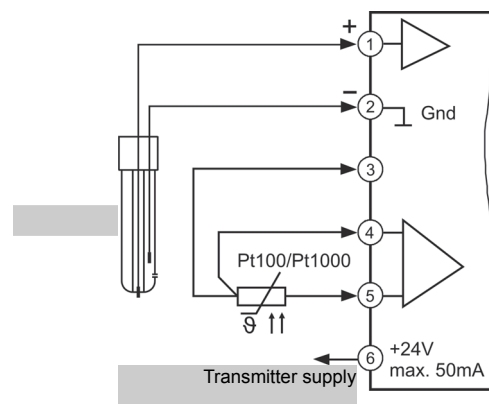
Protection class

: Front IP65, terminals IP20,
 finger save acc. to BGV A3

Dimensions



Connection diagram input



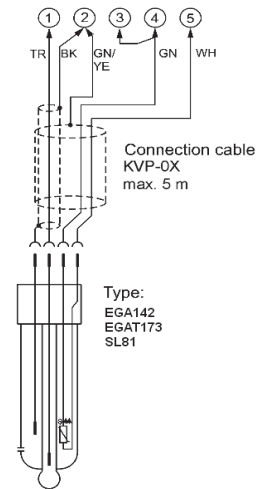
Product Information

Ordering code

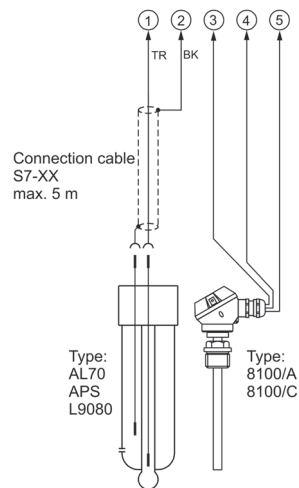
pH9648 - 1. - 2. - 3. - 4. - 5. - 6. - 7.

1. Terminal strip A	
13	input pH / ORP electrode, temperature compensation via Pt100 / Pt1000
2. Terminal strip B	
00	not installed
2R	2 relay outputs
2T	2 electronic outputs
3. Terminal strip C	
00	not installed
2R	2 relay outputs
2T	2 electronic outputs
AO	analog output 0/4..20 mA, 0/2..10 V DC
2A	2 analog outputs 4..20 mA passive
4. Terminal strip B supply voltage	
0	230 V AC ±10 % 50-60Hz
1	115 V AC ±10 % 50-60Hz
4	24 V AC ±10 % 50-60Hz
5	24 V DC ±15 %
5. Options	
00	without option
6. Unit appears in the unit field	
7. Additional text above the display (3x90 mm HxW)	

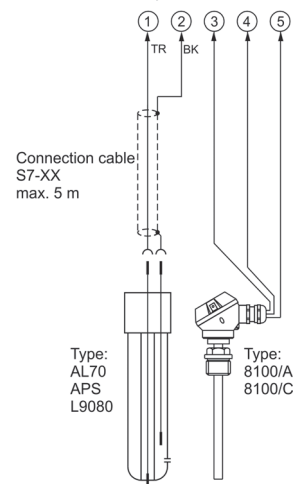
pH-electrode with ext. temperature sensor



pH-electrode with ext. temperature sensor



ORP-electrode with ext. temperature sensor



Connection examples pH9648

