Conductivity Converter UNICON®-LF

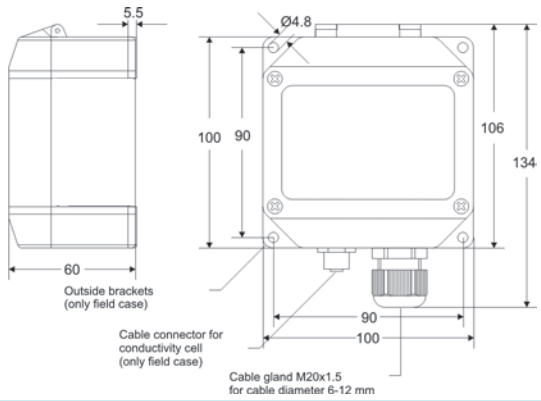
Characteristics

The Conductivity Converter UNICON-LF has been designed for the measurement of conductivity, as a degree of the purity or concentration of a liquid. In connection with 4-electrode-conductivity cells a high accuracy and insensitivity of contamination can be achieved. A further advantage is a broad range of application with only one cell. Only for measurement in ultra-pure water a special 2-electrode conductivity cell must be used.

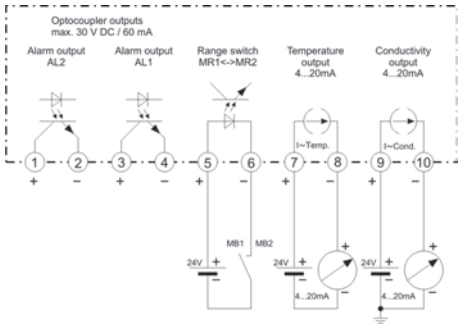
Technical data

Power supply
Loop voltage : U_B 14..30 V DC, 2-wire connection
Operating temperature : 0..50 °C
CE- conformity : EN 61326-1:2013
Conductivity output
Current : 4..20 mA
Unit : programmable µS/cm; mS/cm; kΩ/cm; MΩ/cm
Decimals : 0..3 digit (unit depending)
Indicating range : 500..9999 Digit (unit and decimals depending)
min./max. MR : 0..5.00 µS/cm bis 0..500.0 mS/cm; 0..0.500 µS/cm / 0..50.0 µS/cm with ultra-pure cell
Temperature comp. : non linear for ultra pure water and natural water or linear programmable from 0.000..8.000 %/°C
-Cell constant : 0.080..9.999
-Accuracy : ±0.5 % of the measuring value, ±2 Digit
Temperature output
Current : 4..20 mA
Burden : RA ≤ (U_B-14 V) ÷ 0.02 A
Temperature sensor : RTD Pt100 or Pt1000 acc. to DIN IEC 751
Unit : °C, °F programmable
Measuring range : -40.0..+160.0 °C
Alarm outputs
Transistor : 14..30 V DC, max. 60 mA
Voltage drop : < 2V
MR switch over
R_I : >10 kΩ
MB1 active : U = 0..3 V DC
MB2 active : U = 12..30 V DC
Display : LCD-dot matrix, 3.8mm characters
Range : 2 lines 16 characters each
Case : head case / field case
Material : case polyamide with fiber glass PA6-GF/GK 15/15, front foil polyester
Dimensions : 100 x 100 x 60 mm (WxHxD)
Weight : max. 360 g
Connection : screw terminal with pressure plate, 2.5 mm² flexible wire, 4 mm² single wire and plug-in cable for sensor
Protection class : IP65, terminals IP20 acc. to BGV A3

Dimensions



Connection diagram



Ordering code

UNICON-LF - 1. [ ] - 2. [ ] - 3. [ ] - 4. [ ] - 5. [ ]

1.	**Model**	
	1	output 4..20 mA for conductivity 2 electronic alarm outputs
	2	as 1, but 2nd measuring range for conductivity, output 4..20 mA for temperature
2.	**Mounting**	
	01	head mounting, on the cell
	02	field mounting, separate connection cable page 24
	03	as 02, but plug stainless steel
3.	**Measuring principle**	
	4	4-electrode measurement (2-electrode cell connectable)
4.	**Temperature compensation**	
	1	RTD Pt100
	3	RTD Pt1000
5.	**Options**	
	00	without option
	14	measurement/monitoring acc. to USP<645>

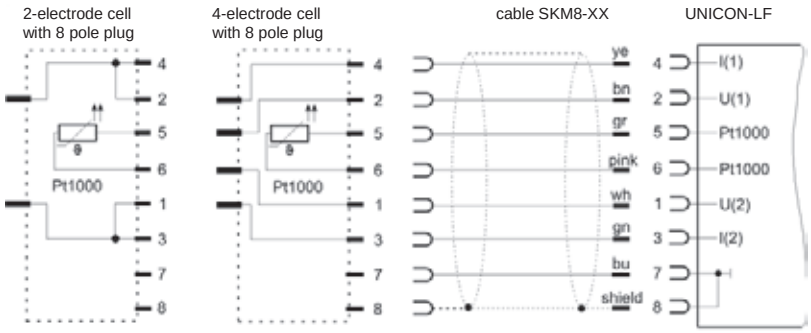
Accessories see page 24
Connection diagrams see page 9

for further information p.r.t. www.pegelmessung.de | Phone no.: +49 (0) 931 / 30408-0
- all rights reserved -

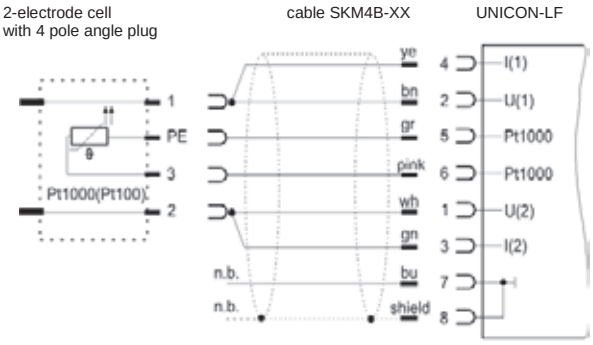
Connection Diagrams Conductivity Measurement

Connection at UNICON-LF field case

A

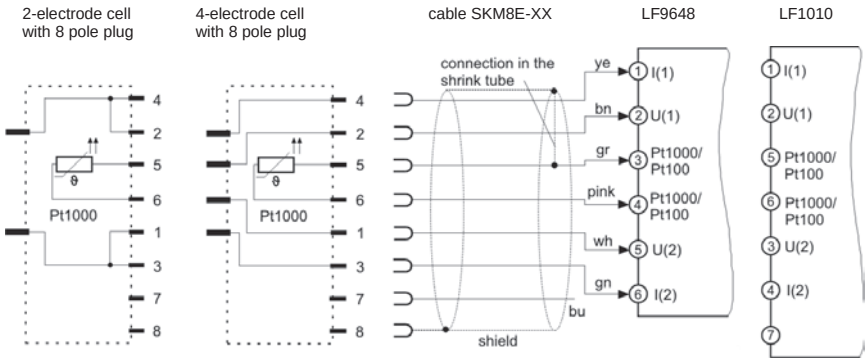


B

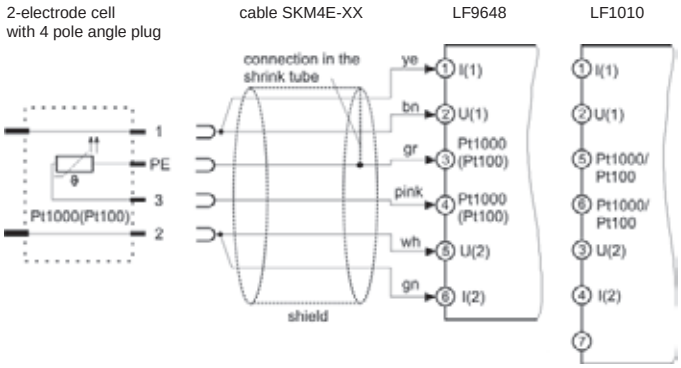


Connection at LF1010 and LF9648

D



E



for further information p.r.t. www.pegelmessung.de | Phone no.: +49 (0) 931 / 30408-0 - all rights reserved -