

# K 100 (W) CL2

## Measuring and control instrument for free chlorine

- Easy and safe operation by plain text menu guidance
- Safety by password function



### applications



Drinking Water / Beverages



Disinfection



Cooling And Boiler Feed Water



Waste Water Treatment

### description

The K 100 (W) CL2 is a sophisticated single-channel instrument for measuring and control free chlorine. Additionally temperature measurement of the measuring media is possible. The instrument is available in a panel mounted housing (K100 CL2) and in a wall mounted housing (K 100 W CL2).

### particular characteristics

- 2 limit values with delay, assigned to alarm relay
- 2 separate PI-controllers
- Dosage check
- Background illuminated two-line LC-Display for measured value and temperature
- Serial interface RS 485 optional
- Scaleable, galvanically isolated 0/4 .. 20 mA output
- Display of relay status and error messages
- Invertible alarm output, permanent or pulse contact



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## Measuring and control instrument for free chlorine

### technical data

#### measuring parameter

free Chlorine 0.0 .. 4.00 mg/l  
0.0 .. 20.00 mg/l

#### input characteristics

temperature measuring range -30 .. +140 °C

#### output characteristics

output signal 0/4 .. 20 mA (scaleable, galvanically isolated)  
load max. 500 Ohm  
registration range free scaleable within the measuring range  
serial interface RS 485 (optional)  
Baud rate 9600  
data format 8 bit

#### power supply

line voltage 24 / 117/ 230 VAC, +/-10%, 40 .. 60 Hz  
power consumption 10 VA

#### ambient conditions

ambient temperature Operation 0 .. +50 °C, storage -20 .. +65°C  
relative humidity max. 90% rH at 40°C (non-condensing)  
protection class

panel mounted housing IP 54 (front), IP 30 (housing)  
wall mounted housing IP 65

#### controller

control response on/off controller (adjustable hysteresis)  
P/PI controller (pulse-pause, pulse-frequency or continuous output)  
relays 2 relays, each with a potential-free NO contact, max. 250V, 6 A, 550 VA  
1 alarmrelay with potential-free CO/NO contact, max. 250V, 6A, 550 VA  
onset delay 0 .. 200 sec till controller active  
digital input Controller stop via external contact

#### certificates and approvals

CE-symbol Declaration of conformity: The product meets the requirements of the harmonized European standards. It thus complies with the legal requirements of the EC directives.

#### mechanical construction - panel mounted housing

material Noryl  
dimensions 90x90x116 mm  
installation dimensions 92x92x140 mm  
weight 0.75 kg  
connection push-screw terminals

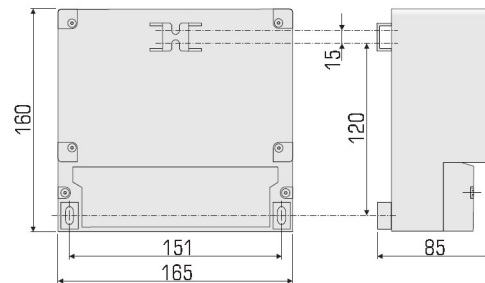
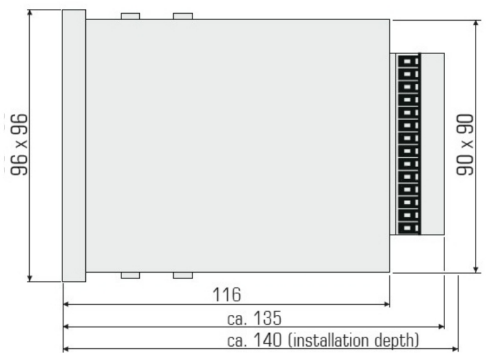


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## Measuring and control instrument for free chlorine

### mechanical construction - wall mounted housing

|            |                         |
|------------|-------------------------|
| material   | ABS                     |
| dimensions | 165x160x85 mm           |
| weight     | 0.95 kg                 |
| connection | Spring-loaded terminals |



### **order information**

| <u>name</u> | <u>description</u>                            | <u>article number</u> |
|-------------|---|-----------------------|
| K 100 CL2   | free chlorine, panel mounted housing, 230 VAC | 100200K               |
| K 100 W CL2 | free chlorine, wall mounted housing, 230 VAC  | 105200K               |



# K 100 (W) CL2

## Measuring and control instrument for free chlorine

### accessories

#### accessories

##### ASR

The cleaning is carried out electrochemically by electrolysis of water:  
 $H_2O \rightarrow O_2 + H_2$

The electrochemical cleaning acts threefold: the generated gases hydrogen and oxygen blast away even persistent coatings. Oxygen oxidises organic compounds, and hydrogen reduces rust and manganese oxide and likewise destroys organic coatings.

The produced gas volumes are small and unused gas molecules recombine automatically to the water they stem from. The cleaning is activated in the menu of the measuring and control instrument. The starting time of cleaning can be defined by the user. The cleaning cycle lasts approx. 20 seconds. The measuring value is locked for five minutes, in the display, in the output signal, and also for the controller, to give the electrode time to polarize. The cleaning can be set to 0/1/2 times per day. ASR aims at keeping the sensor clean from the beginning. It was not meant to clean already coated sensors, since with those sensors the signals will be higher after cleaning, making a recalibration necessary.

RS 485 module K 100 W

