

# AQUACON LF1i



## Inductive conductivity measurement

**AQUACON LF1i** is the first process conductivity meter type tested by TÜV Nord, suitable for measurement of conductivity in boiler feed water.

Developed particular for this application, **AQUACON LF1i** meets the qualification of:

**VdTÜV-leaflet „Wasserüberwachung 100“** for equipment with safety function in the meaning of **pressure equipment directive 97/23/EG** date 29.March 1997.

**type-test approval mark  
TÜV.WÜL.01-005**

97-23-EG valid as national law since 2002

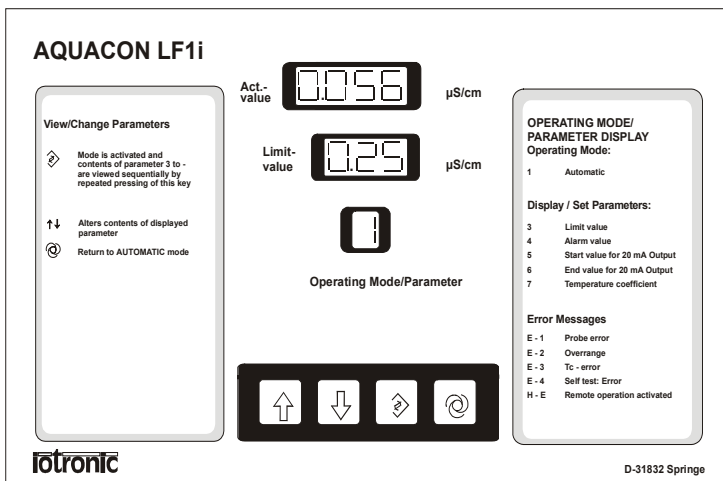


AQUACON LF1i meets the european pressure equipment directive CE/PED

- adjustable scale value for recorder output allows legal documentation of analysis result.
- adjustable limit value- and Alarmrelays.
- temperature compensation.
- safe to operate by automatic self supervision.
- reliable and less maintenance operation.
- high-level security by automatic supervision of conductivity with proof tested device !

## Working principle

The process conductivity meter AQUACON LF1i works with inductive method. Application specially for safety operation areas.



In collaboration with the measuring amplifier the microprocessor constant checks the probe for broken circuit, short circuit and impurification. In case of faulty probe the display shows an error signal and the alarm-relay is deactivated. The AQUACON LF1i detects dry run of the probe by itself. The AQUACON LF1i probe is constructed to let the probe dry run in case of break in water supply. Additional the microprocessor carries out a self-test of the measuring amplifier all 23 hours.

The AQUACON LF1i has a linear temperature compensation with selectable temperature coefficient.

The actual value of conductivity is shown on a four digit display. The nominal value is shown on an another three digit display.

## Easy operation

- alteration of nominal value and other adjustment in display via keyboard.
- automatic routine operation including self-test.
- System is delivered ready for operation.

**AQUACON LF1i** Order-No. 690 6200 01

## Technical Data

<b>Current output</b>	potential free, 0/4 - 20 mA, max.load 500 Ohm
<b>Display</b>	4-Digit LED for result, 3-Digit LED for Limit, 1-Digit LED for program
<b>Relays</b>	Alarm relay, Limit relay (potential-free 230 V 3 A)
<b>External Switching</b>	potential free, 18 V DC, approx 4 mA
<b>Power supply</b>	115 or 230 V -- 50/ 60 Hz (see label for power level)
<b>Power Consumption</b>	max. 16 VA
<b>Dimensions</b>	570 x 350 x 160 mm (H x B x D)
<b>Protection</b>	IP 65 (transmitter housing)
<b>Connections</b>	Inline terminals 1,5 mm <sup>2</sup>
<b>Temperature Range</b>	5° bis 45°C,
<b>Resolution</b>	0,25 bzw. 2,5 µS/cm



## Bescheinigung Certificate

über die Zuerkennung eines Bauteil-      for the grant of a type-test approval  
kennzeichens für                              mark in respect of

### Wasserüberwachungseinrichtung

Aufgrund einer Bauteilprüfung -      In virtue of a type-test -  
Prüfbericht des                              test report by

**TÜV Hannover/Sachsen-Anhalt vom 20./22.11.2001**

wird dem Antragsteller, der Firma      the applicant, the company

**lotronic Elektrogerätebau GmbH  
D-31832 Springe**

zuerkannt das Bauteilkennzeichen-Nr.      is granted the type-test approval mark No.

**TÜV . WÜL . 01 - 005**

für      for

### Messkammer mit induktiv Leitfähigkeitssonde und Steuergerät

Typ      type

**AQUACON LF1i**

Die Zuerkennung erfolgt in Anwendung der      The adjudication is made pursuant to  
VdTÜV-Merkblatt „Wasserüberwachung 100“ (Entwurf)

Sie ist bis zum **31.12.2006**      It expires on **2006-12-31**  
befristet und kann widerrufen werden.      and is revocable.

Die Bescheinigung vom 10.12.2001      The certificate dated 2001-12-10  
wird hierdurch ersetzt.      is replaced herewith.

Hinweis: Der Hersteller oder Importeur ist ver-  
pflichtet, den zuständigen Sachverständigen zu  
beauftragen, Armaturen aus der laufenden Ferti-  
gung auf Übereinstimmung mit dem Baumuster  
einmal jährlich stichprobenweise zu überprüfen.

Note: The manufacturer or importer is obliged  
to the competent Authorized Inspector to conduct  
a random check on the accessories concerning  
identity to the type once a year. The accessories  
have to be taken from the current production.

Essen, 19. Dezember 2001  
17/k 4.19.45

Verband der  
Technischen Überwachungs-Vereine e. V.  
Geschäftsbereich Anlagentechnik, Arbeitswelt  
- Zertifizierungen und Registrierungen -

  
Baumann