









for users regarding software updates (following the NAMUR recommendation 53)

1 Type of device

- ☑ Field device / signal processing device
- □ Monitoring- / operation system / hand held terminal etc.
- □ Modem / interface

Manufacturer : Endress+Hauser Conducta GmbH+Co

Device	:	Liquiline
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Туре : СМ442

Previous software version : 1.02.01

How can the previous software version number be identified:

- (a) with Standard HART Command #0
- (b) with Fieldcare/DTM
- (c) local operation display

2 Firmware/Software

New firm-/software version : 1.02.02

Description of the modification in comparison with the predecessor version:

Functional improvements:

general:

- Parameter up/download via service DTM
- Current output calibration via HART possible
- ultrasonic interface level
- Optimized sensor start up time (max 4 min.)
- Linear gain with automatic gain control
- Improved display of lineplotter according tank configuration
- Parameter 'sensitivity' editable
- <u>ISE</u>
- Improved calibration and standard addition
- Improved display of pH-measurement
- <u>conductivity</u>

Corrected alpha ref. Temperature

<u>pH-ISFET</u>

Corrected temperature over-compensation

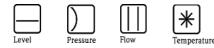
3 Compatibility

Is the newly installed firmware/software compatible with the operating tools?

🛛 Yes

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Manufacturer Information

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□ No, description:

Is a firm/software update generally recommended?

□ Yes, reasons:

The firm-/software update can be performed by means of ...

SC-card

☑ No, reasons: Update only necessary if functional enhancements are desired

4 Instruction manual

Is a new instruction manual necessary due to the modification of the firm-/software?

- 🛛 Yes
- 🗆 No

Which manual corresponds to the new firm-/software:

Device	Communication options Manual	Marking
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The new instruction manuals can be referred in Internet: <u>http://www.endress.com</u> - area "DOWNLOAD" - declaration of the device and kind of manual

5 Price

Change in price of device in comparison with the predecessor version?

 $\hfill\square$ Yes, new list price and update costs (without installation) are enclosured \boxtimes No

