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EN	Installation and Operating Instructions CONTROL-PLUS portable measuring instrument for sensors Fig. 138 00 005	» 38
FR	Instructions de montage et d'utilisation CONTROL-PLUS appareil de mesure manuel pour capteurs Fig. 138 00 005	» 74
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NL	Installatie- en bedieningshandleiding CONTROL-PLUS handmeetapparaat voor sensoren Fig. 138 00 005	» 146



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Über diese Anleitung

Lesen Sie diese Anleitung Gebrauch sorgfältig und folgen Sie den Anweisungen!

Anleitung immer an den aktuellen Nutzer weitergeben und zur späteren Verfügung aufbewahren!

Abbildungen in dieser Anleitung dienen dem grundsätzlichen Verständnis und können von der tatsächlichen Ausführung abweichen.

Haftung

Der Hersteller leistet keine Gewährleistung oder Haftung bei:

- Nichtbeachten dieser Anleitung.
- fehlerhaftem Einbau und/oder Gebrauch.
- eigenständiger Modifikation am Produkt.
- sonstiger, fehlerhafter Bedienung.

Sicherheitshinweise | Warnhinweise

Beachten und befolgen Sie die Sicherheitshinweise in der Anleitung. Das Nichtbeachten der Sicherheitshinweise kann zum Tod, zu Verletzungen oder zu Sachschäden führen.

Die Sicherheitshinweise sind durch Warnhinweise/Symbole gekennzeichnet und werden durch Signalwörter eingeleitet, die das Ausmaß der Gefährdung ausdrücken.

Kennzeichnung wichtiger Sicherheitshinweise:

**Warnung!**

Kennzeichnet Gefahren, die zu Verletzungen, Sachschäden oder Verunreinigung des Trinkwassers führen können.

**Hinweis!**

Kennzeichnet Gefahren, die zu Schäden an dem Gerät oder Funktionsstörungen führen können.

**Info**

Kennzeichnet zusätzliche Informationen und Tipps.

**Entsorgung**

Örtliche Vorschriften zur Abfallverwertung bzw. -beseitigung sind zu beachten. Produkt darf nicht mit normalem Haushaltsmüll, sondern muss sachgemäß entsorgt werden.



Altbatterien dürfen nicht in den Hausmüll. Sie sind gesetzlich verpflichtet, Batterien zu einer geeigneten Sammelstelle zu bringen.

**Warnung!**

Nationale Normen und Vorschriften zur Unfallverhütung sind vorrangig zu befolgen.

Lagerung

Lagern Sie das CONTROL-PLUS Handmessgerät wie folgt:

- verpackt,
- an einem trockenen, staubfreien Ort,
- nicht im Freien,
- vor Wärme und Kälte geschützt,
- bei einer Lagertemperatur von 0-50 °C.

1

Über das CONTROL-PLUS Handmessgerät

Bestimmungsgemäße Verwendung

Das CONTROL-PLUS Handmessgerät dient in Kombination mit den verschiedenen KEMPER-Sensoren zur Ermittlung und Dokumentation von Betriebszuständen in Trinkwasserinstallationen.

Benutzen Sie das Gerät:

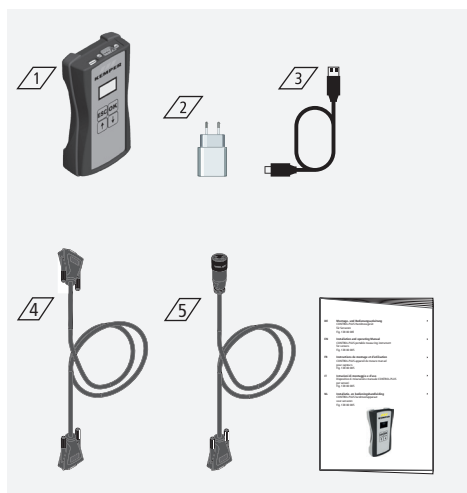
- nur in einwandfreiem Zustand
- bestimmungsgemäß.

KEMPER-Sensoren

Figur	Beschreibung
138 4G 638 4G	Durchfluss- und Temperaturmessarmatur
138 00 006	Drucksensor
138 00 011	Sensor-Messmodul
138 00 003	Hand-Temperaturfühler
138 00 004	CONTROL-PLUS Einstecktemperaturfühler

1.1

Lieferumfang



Lieferumfang

Inklusive:

- Handmessgerät ¹
- USB-Netzteil 230 V/5 V ²
- USB-C-Ladekabel ³
- Messkabel zur Verbindung mit einem Sensor-Messmodul (Figur 130 00 011) ⁴
- Messkabel zur Verbindung mit Temperatur- und Durchflussmessarmatur (Figur 138 4G) ⁵
- Montage- und Bedienungsanleitung

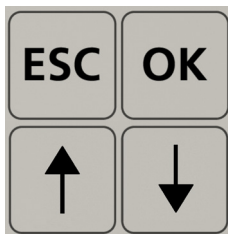
Technische Daten		
Leistungsaufnahme des Gerätes	5	W
Datalogging-Einträge	12.000	max.
Umgebungstemperaturbereich	0 bis + 50	°C
Schutzart	IP 20	
Maße des Gerätes	142x77x38,3	mm
Integrierte Bedienoberfläche (Display + 4 Tasten)	• Einstellungen • Parametrierung • Übersicht • Datentransfer	
Netzwerkschnittstelle (WLAN) für webgestützte Nutzeroberfläche	• Übersicht • Datentransfer • Update der Firmware • Update des Webservers	
USB-C-Schnittstelle	• Update der Firmware • Update des Webservers • Datentransfer • Spannungsversorgung	
Sprache Menü	• Deutsch • Englisch • Niederländisch	
Betriebsarten Messarten	• Temperatur- und Durchflussmessung • Temperaturmessung • Druckmessung • Datenaufzeichnung	

2

Bedienung

2.1

Menüführung



Tasten	Beschreibung
ESC	Verlassen des Menüs / wechseln zwischen Übersicht und Hauptmenü
↑	Rollen rückwärts
OK	Bestätigungstaste
↓	Rollen vorwärts

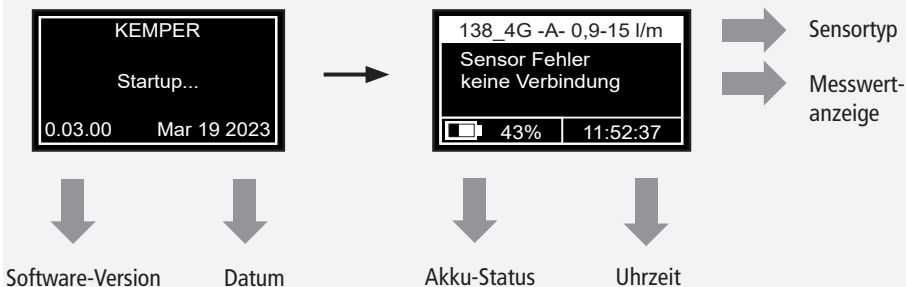
Alle Menüs sind „rollierend“ aufgebaut, das heißt, die Betätigung der „↓-Taste“ am letzten

Menüeintrag führt zu einem Sprung zum ersten Menüeintrag.

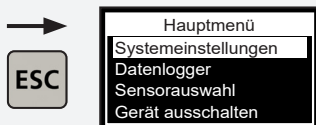
2.2

Einschalten und Übersichtsanzeige des Gerätes

Drücken Sie die „OK-Taste“ länger als 1 Sekunde, um das Gerät einzuschalten.

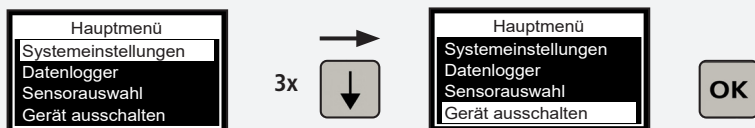


Mit der Betätigung der „ESC-Taste“ gelangen Sie in das Hauptmenü.



2.4

Ausschalten des Gerätes

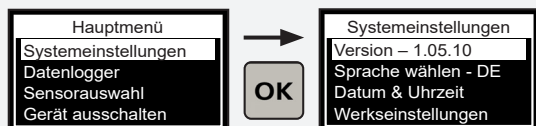


2.5

Systemeinstellungen

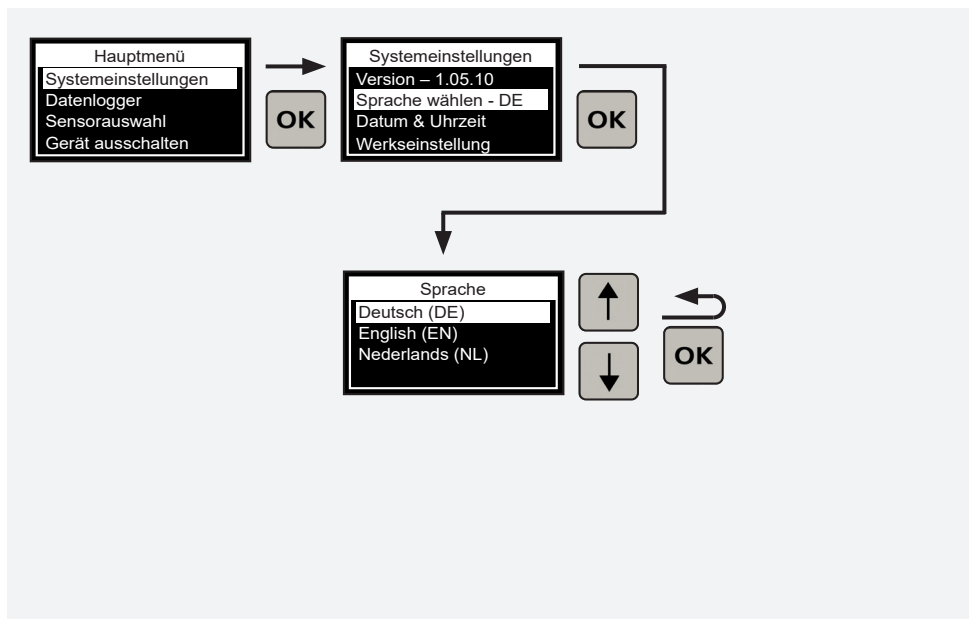
2.5.1

Versionsanzeige der Gerätesoftware



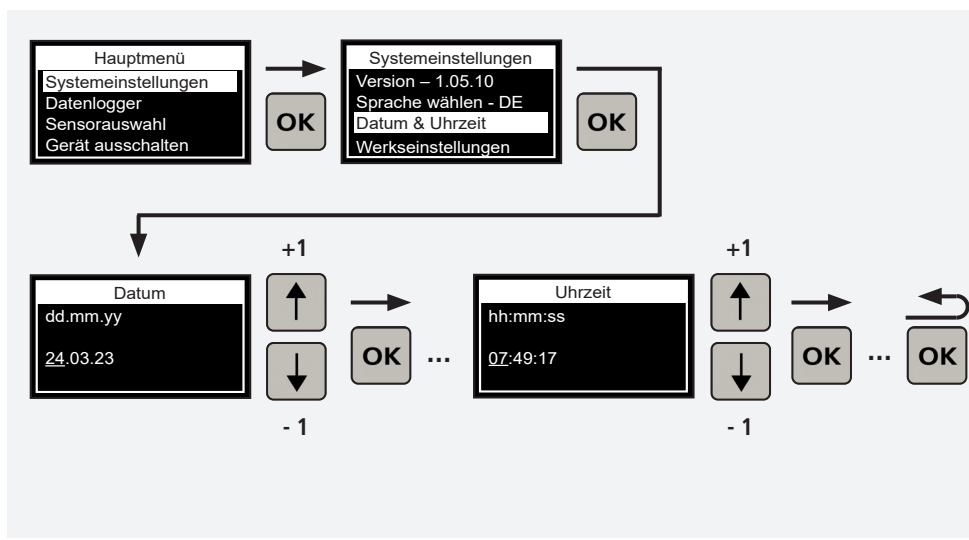
2.5.2

Sprachauswahl

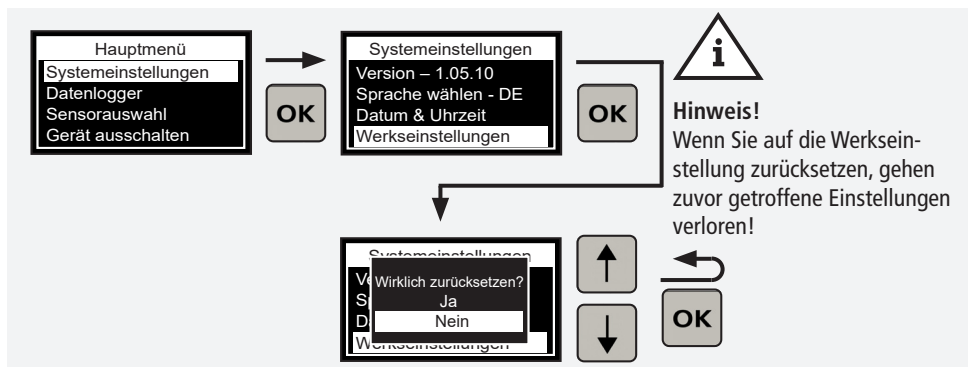


2.5.3

Datum und Uhrzeit



Werkseinstellung wiederherstellen



2.5.5

Energiespareinstellungen

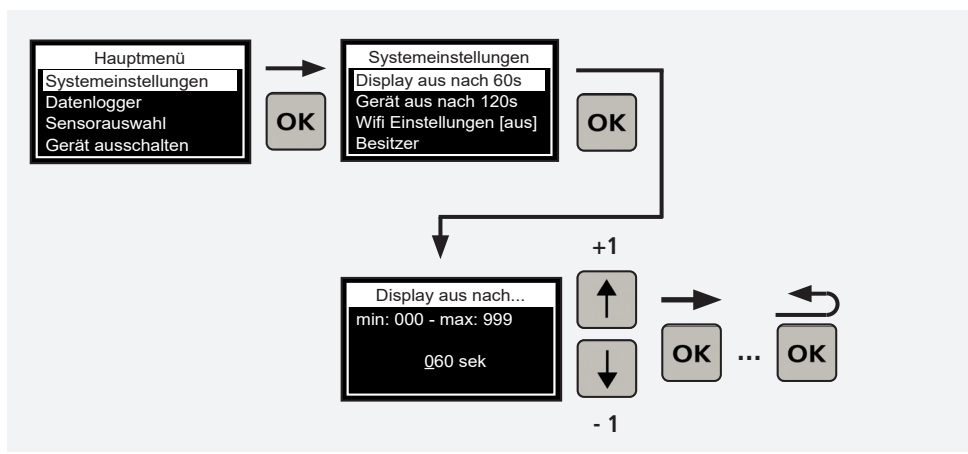
Werkseinstellungen:

- Erfolgt 60 Sekunden lang keine Eingabe, wird das Display **automatisch deaktiviert**.
- Erfolgt 120 Sekunden lang keine Eingabe, **schaltet sich das Gerät ab**.

Die Zeiten können Sie im Hauptmenü unter „Systemeinstellungen“ ändern.

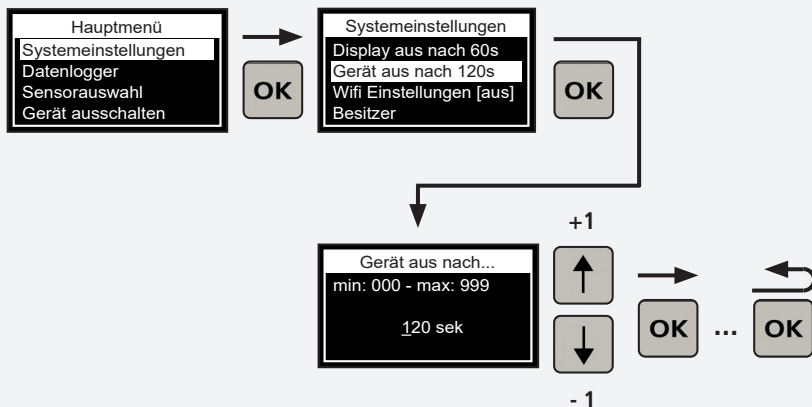
2.5.5.1

Automatische Displayabschaltung



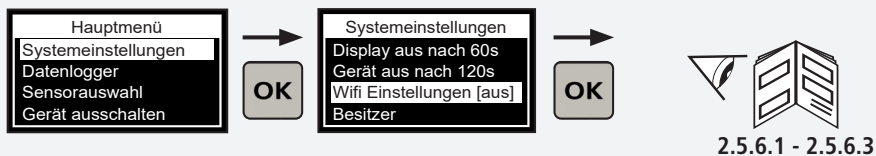
2.5.5.2

Automatische Geräteabschaltung



2.5.6

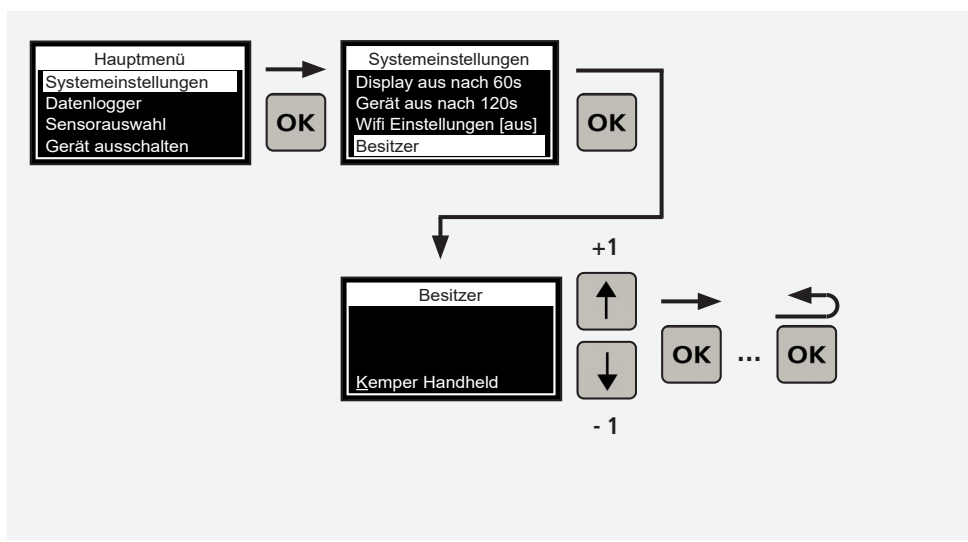
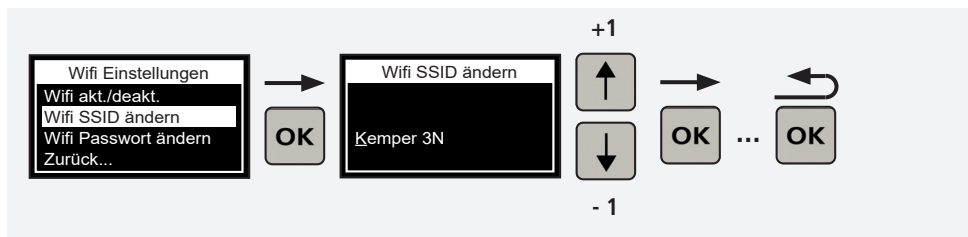
Wifi Einstellungen



2.5.6.1

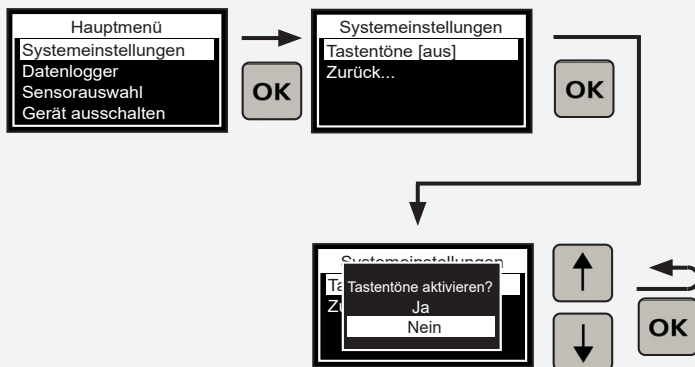
Wifi aktivieren | deaktivieren





2.5.8

Tastentöne aktivieren | deaktivieren

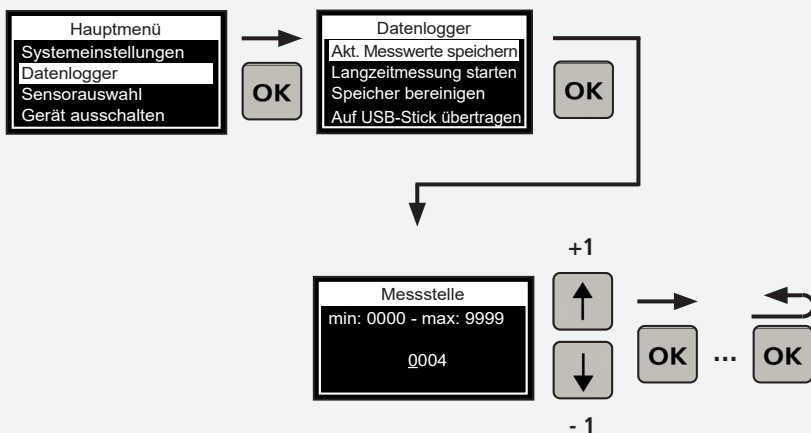


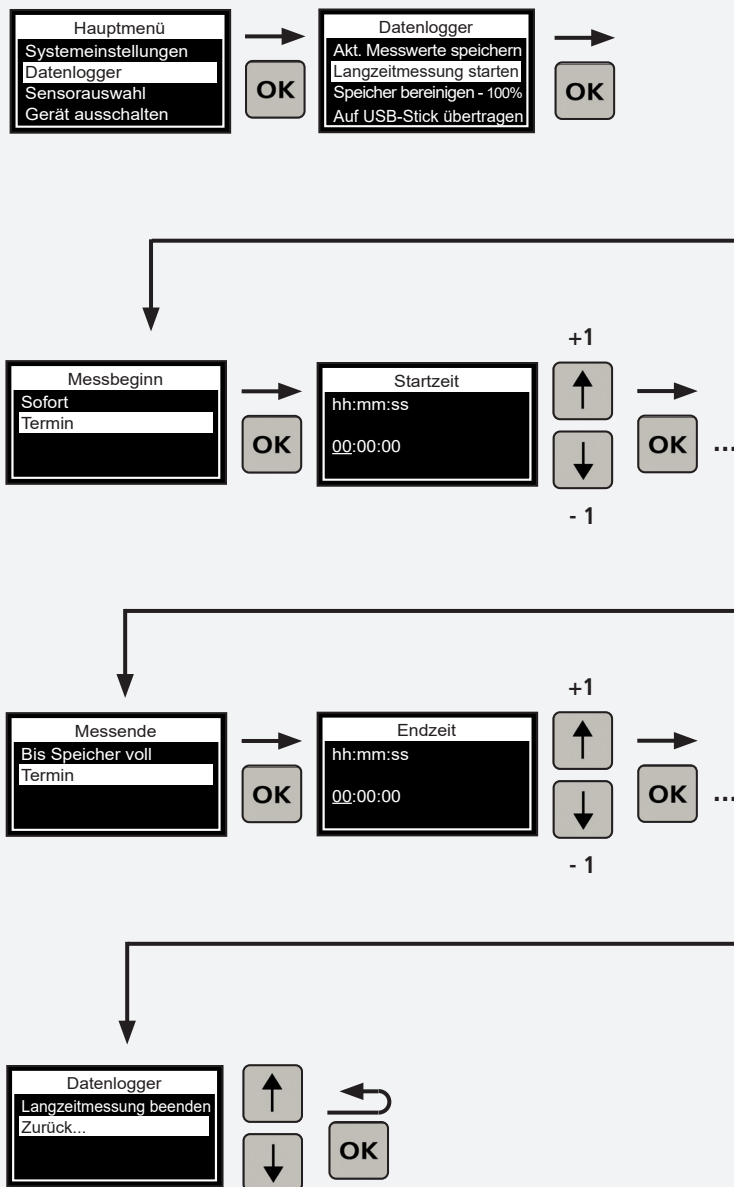
2.6

Einstellung des Datenloggers

2.6.1

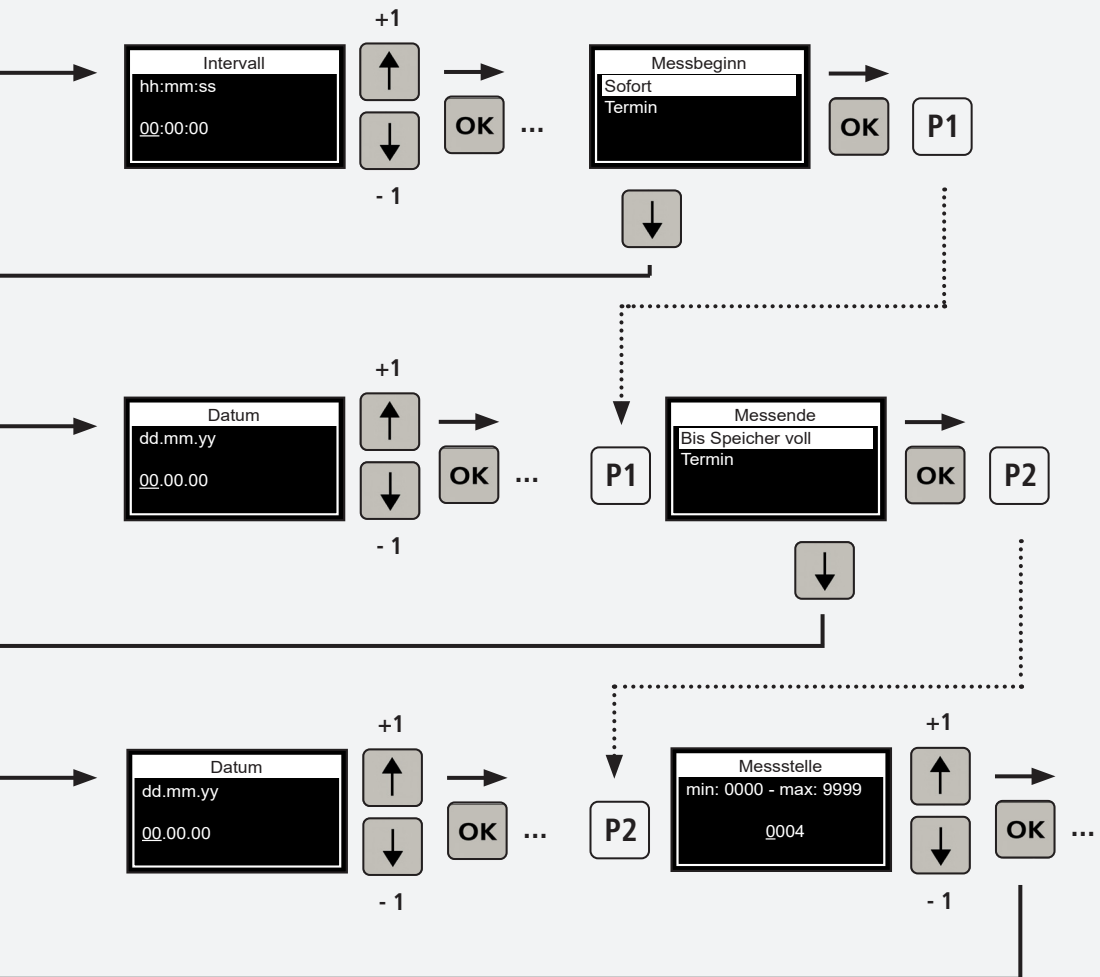
Messwerte speichern



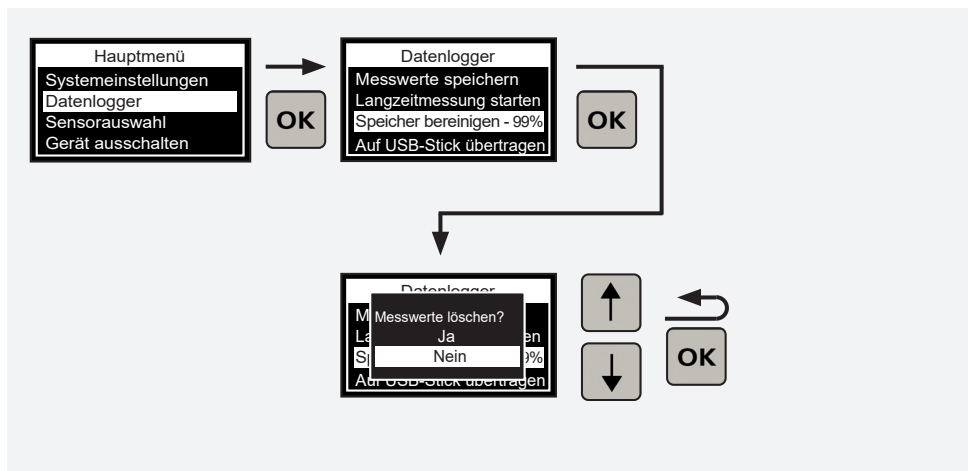


2.6.2

Langzeitmessung einrichten

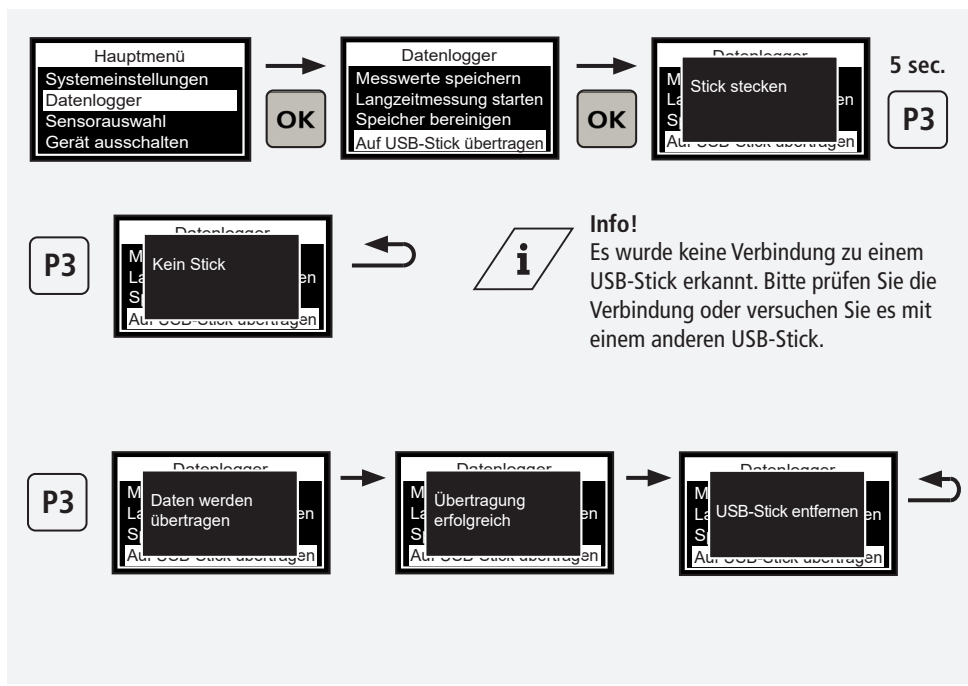


Speicherstand löschen



2.6.4

Speicherstand auf USB-Stick übertragen

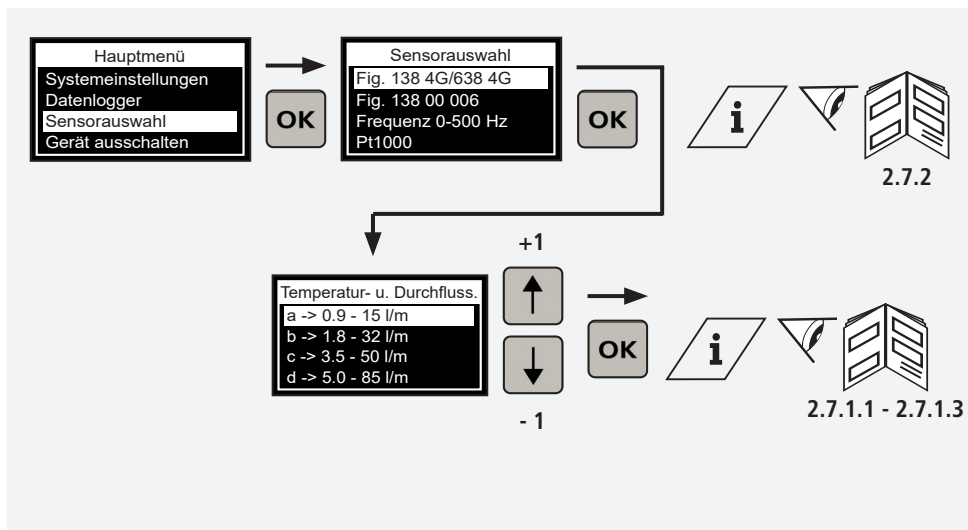


2.7

Sensorauswahl

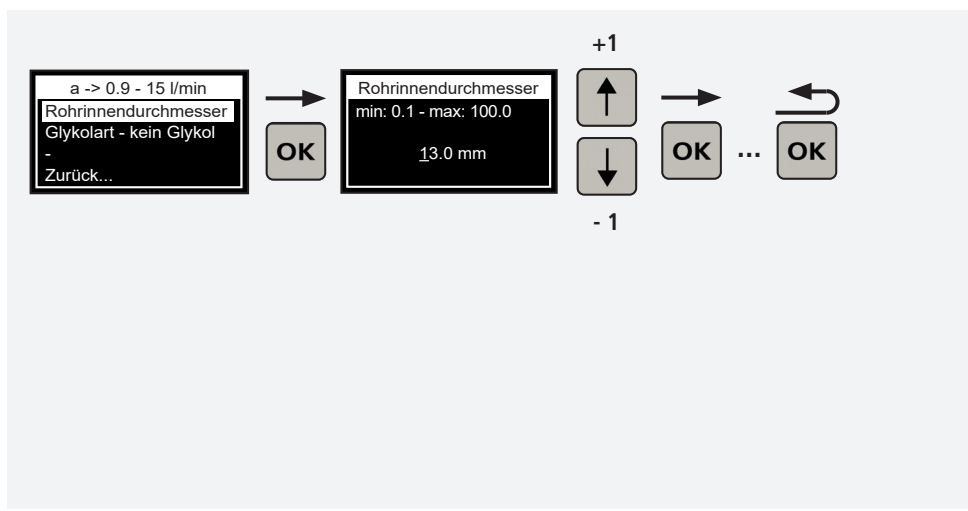
2.7.1

Durchfluss- und Temperaturmessarmatur Figur 138 4G | 638 4G



2.7.1.1

Einstellung des Rohrinneindurchmessers

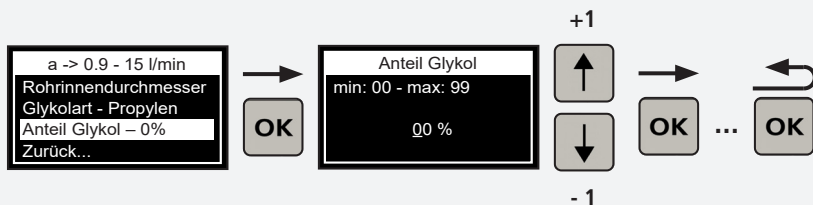


Auswahl möglicher Glykolarten im Fluid



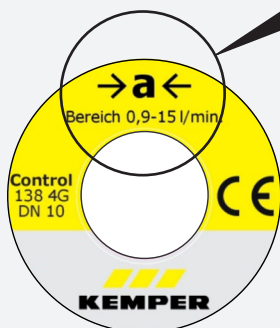
2.7.1.3

Einstellung des Glykolanteils



2.7.2

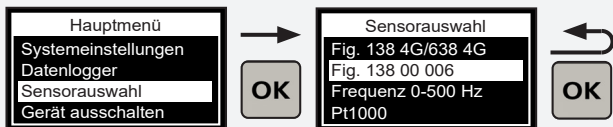
Zuordnung des Sensormessbereichs einer Durchfluss- und Temperaturmessarmatur Figur 138 4G | 638 4G



Kennzeichnung	Messbereich	Figur
→a←	0,9 - 15 l/min.	138 4G 010
→b←	1,8 - 32 l/min	138 4G 015
→c←	3,5 - 50 l/min	138 4G 020
→d←	5 - 85 l/min	138 4G 025
→e←	9 - 150 l/min	138 4G 032
→f←	11 - 188 l/min	138 4G 040
→g←	18 - 316 l/min	138 4G 050

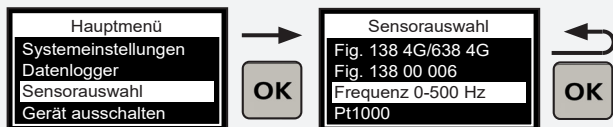
2.7.3

Drucksensor Figur 138 00 006



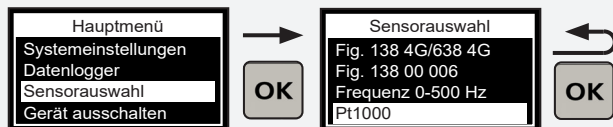
2.7.4

Frequenzausgabe eines beliebigen Frequenz-Sensors



2.7.5

Temperaturfühler Pt1000|Pt100

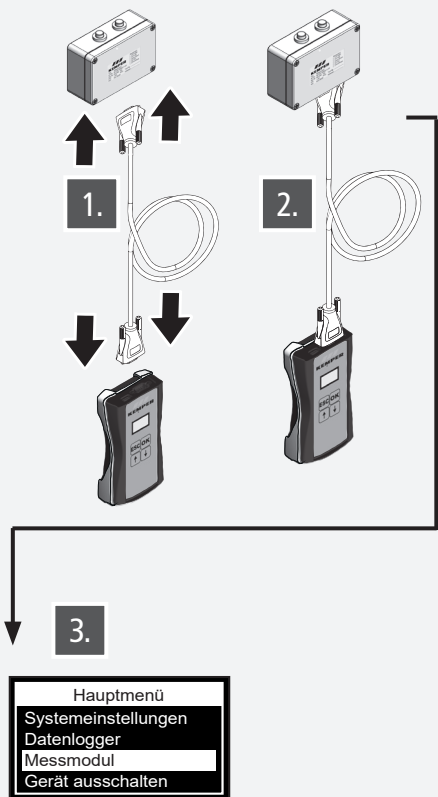


Anschluss des Handmessgerätes an ein Sensor-Messmodul Figur 138 00 011



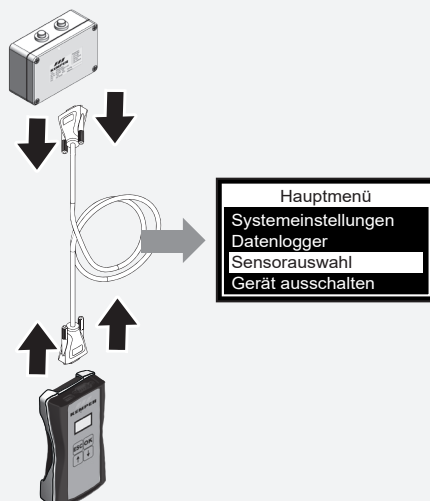
Hinweis!

Verbinden Sie das Handmessgerät mit dem D-Sub-Kabel (Lieferumfang Handmessgerät) und dem Messmodul, um die Konfiguration im Menü Messmodul durchführen zu können.



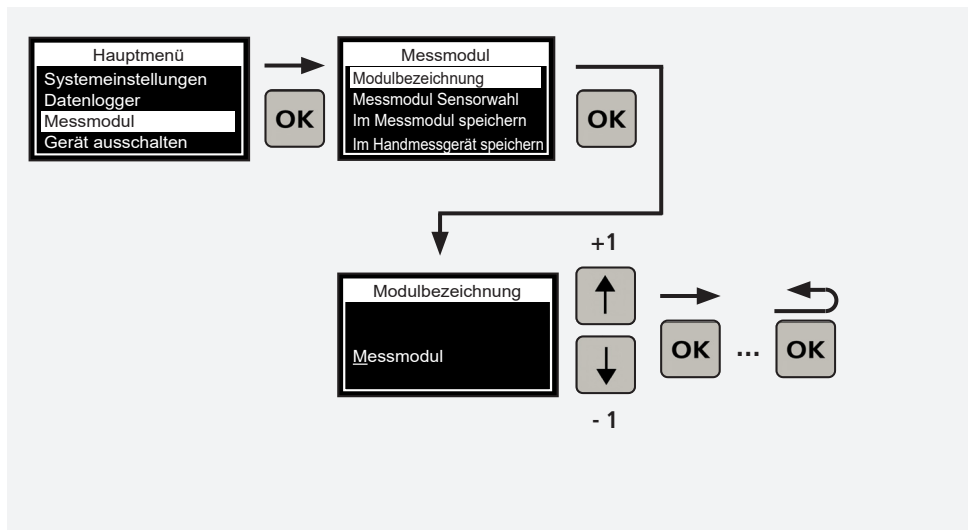
Hinweis!

Besteht keine Verbindung, wird der Menüpunkt im Hauptmenü **nicht** angezeigt!



3.1

Änderung der Bezeichnung des Sensor-Messmoduls

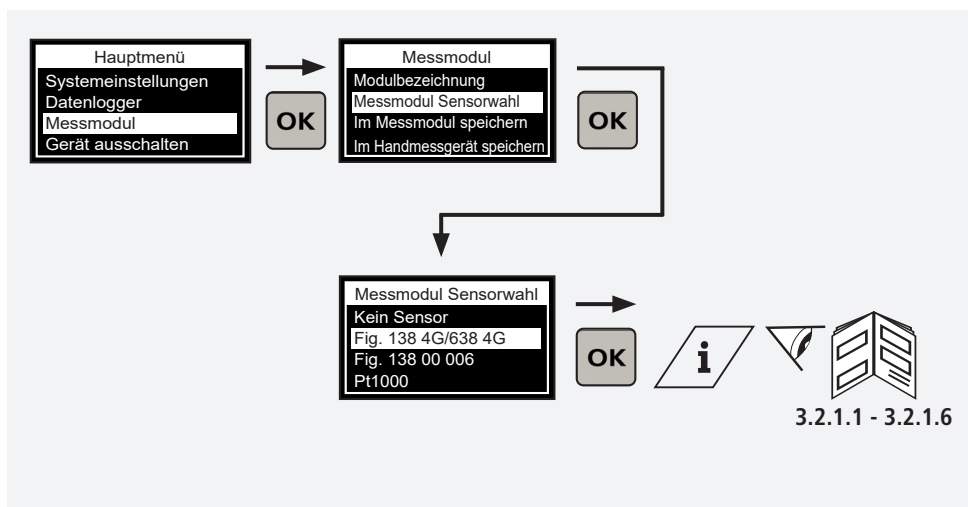


3.2

Auswahl und Einstellungen eines Sensors

3.2.1

Durchfluss- und Temperaturmessarmatur Figur 138 4G | 638 4G





Setup Fig. 138 4G/638 4G
 Sensor Messbereich
 Rohrrinnendurchmesser
 Glykolart – kein Glykol
 –

OK

Temperatur- u. Durchfluss.
 a -> 0.9 - 15 l/m
 b -> 1.8 - 32 l/m
 c -> 3.5 - 50 l/m
 d -> 5.0 - 85 l/m



OK

Setup Fig. 138 4G/638 4G
 Sensor Messbereich
 Rohrrinnendurchmesser
 Glykolart – kein Glykol
 –

OK



Setup Fig. 138 4G/638 4G
 Sensor Messbereich
 Rohrrinnendurchmesser
 Glykolart – kein Glykol
 –

OK



3.2.1.4

Angabe zum Glykolanteil

Setup Fig. 138 4G/638 4G
Sensor Messbereich
Rohrinnendurchmesser
Glykolart - Propylen
Anteil Glykol - 0%



2.7.1.3

3.2.1.5

Kabelkompensation

Alle Temperaturmessungen werden vom Handmessgerät als 2-Leitermessung ausgewertet. Die Messungen werden durch den Kabelwiderstand verfälscht.

Es wird empfohlen, die Widerstandabweichungen,

die durch die Kabelverlängerungen vom Temperatursensor zum Messmodul entstehen, durch den Menüpunkt Kabelkompensation auszugleichen.

Setup Fig. 138 4G/638 4G
Kabelkompensation
Im Messmodul speichern
Zurück...



3.2.1.5.1 - 3.2.1.5.3

3.2.1.5.1

Kabelkompensation über Länge und Querschnitt

Kabelkompensation über...
Länge x Querschnitt
Widerstands-Offset
Temperatur-Offset



Kabellänge
min: 00.00 - max: 99.99
00.00 m



...



Kabelquerschnitt
min: 00.00 - max: 99.99
00.00 mm²

+1

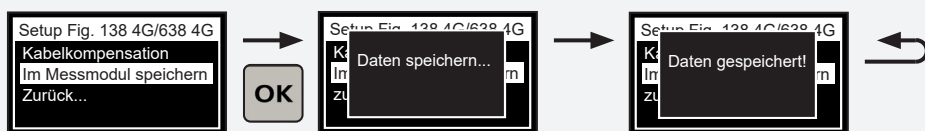
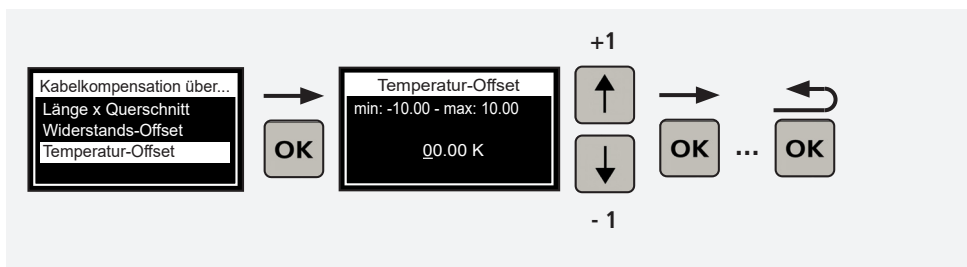
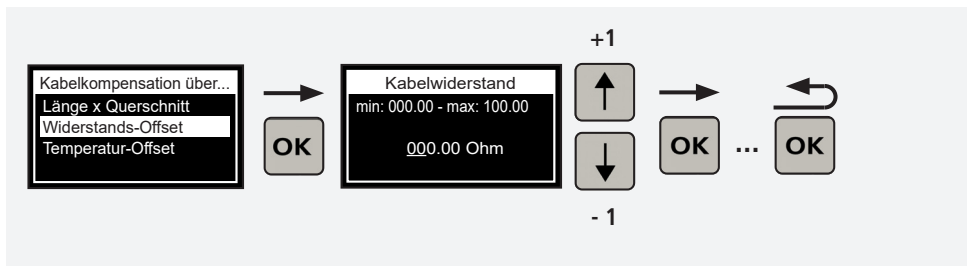


-1



...



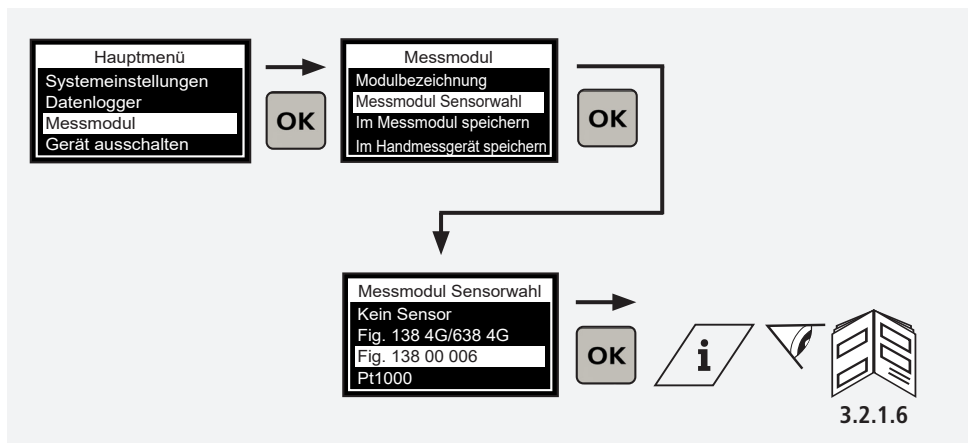
**Hinweis!**

Nach der Eingabe der Sensoreinstellungen führen Sie die Funktion „Im Messmodul speichern“ durch! Nur so wird die am Handmessgerät eingestellte Konfiguration

dauerhaft auf das Messmodul gespeichert. Wird das Schreiben nicht durchgeführt und das Messkabel vom Messmodul oder Handessgerät abgezogen, müssen Sie die Sensoreinstellungen für weitere Messungen wieder neu eingeben!

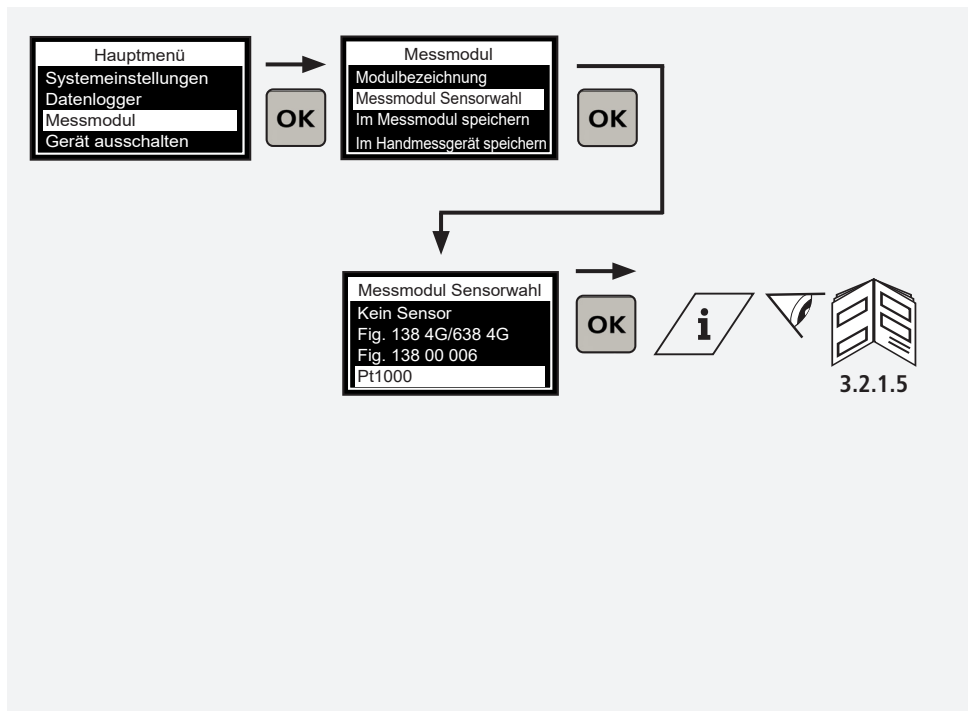
3.2.2

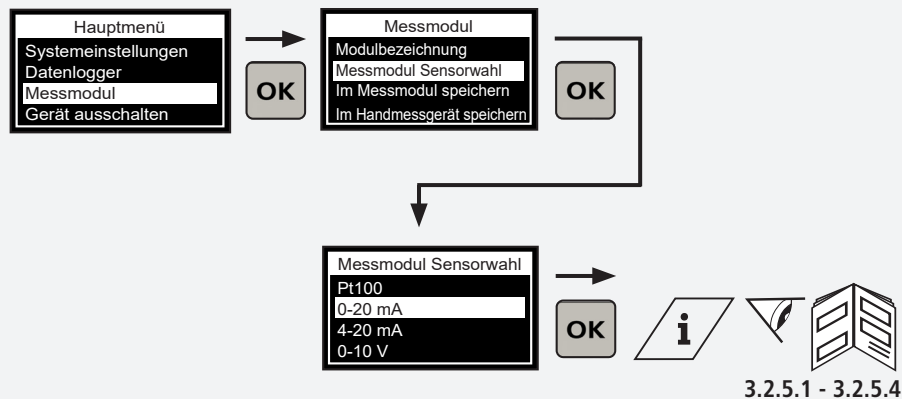
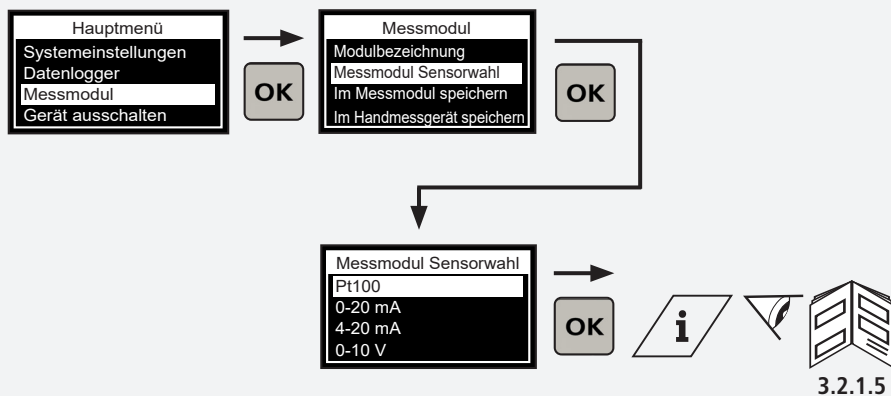
Drucksensor Figur 138 00 006

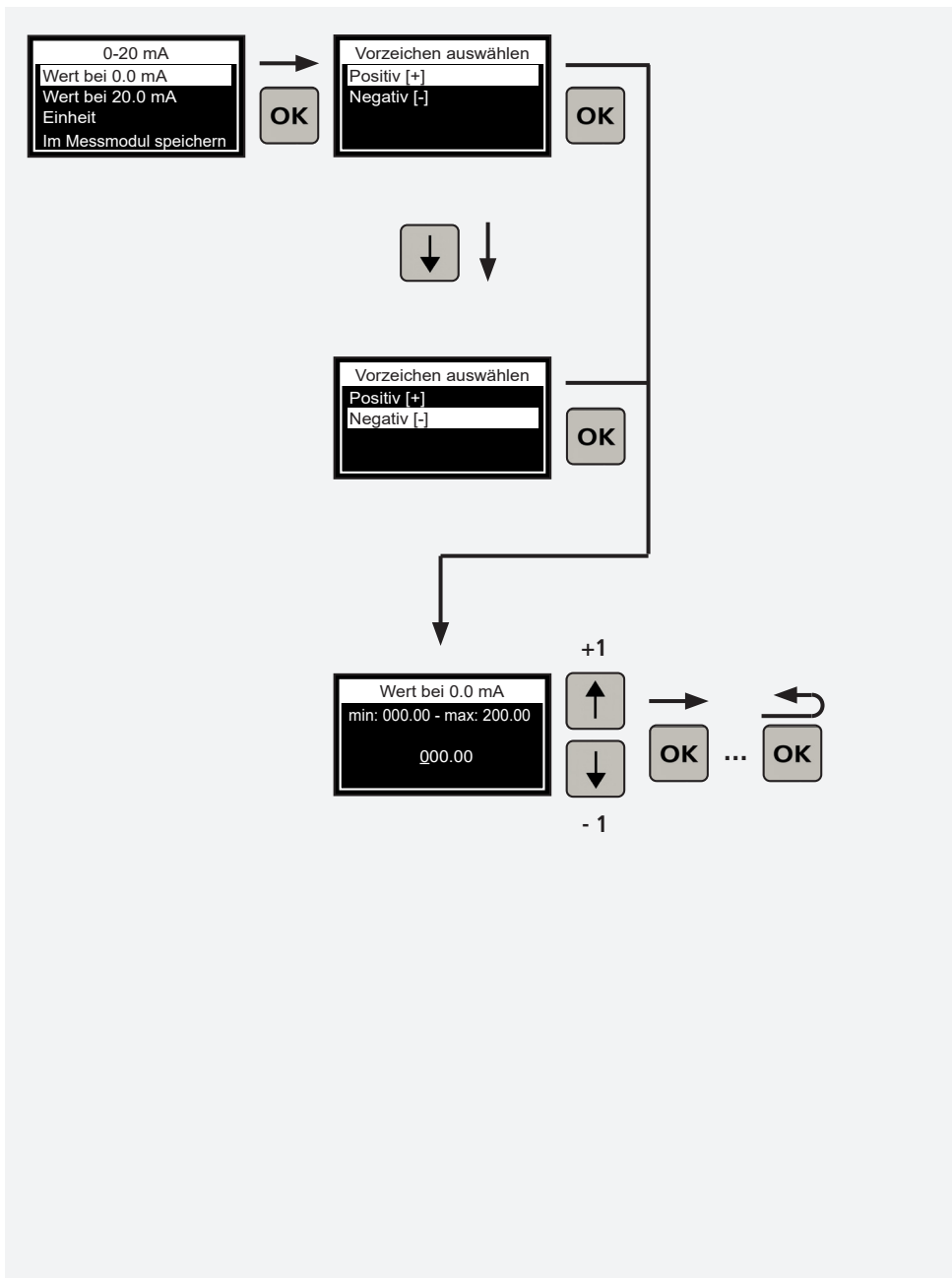


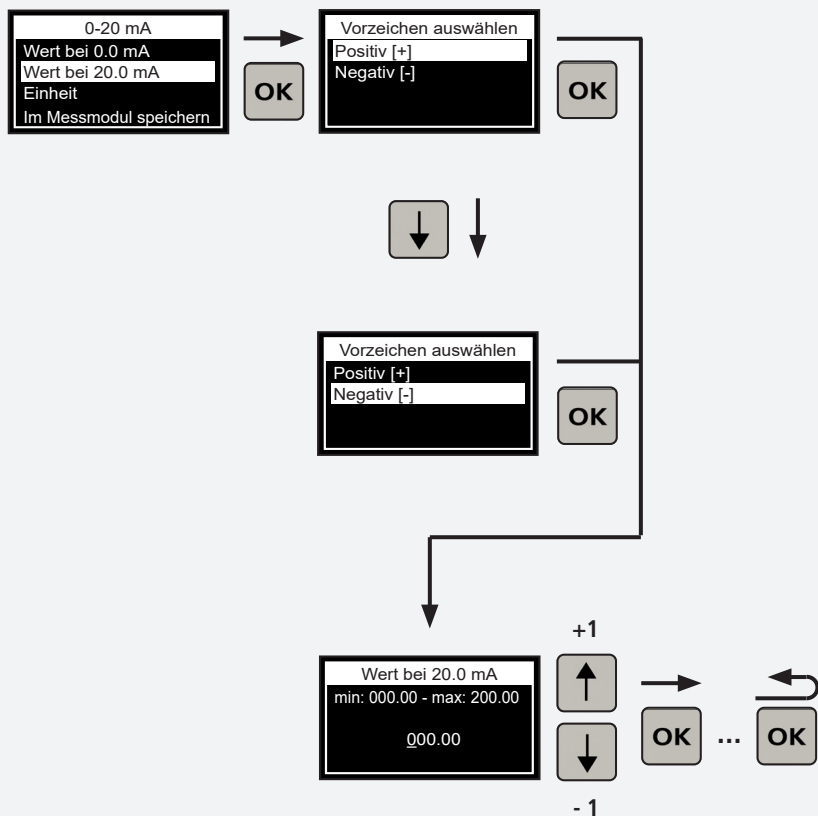
3.2.3

Temperaturfühler Pt1000



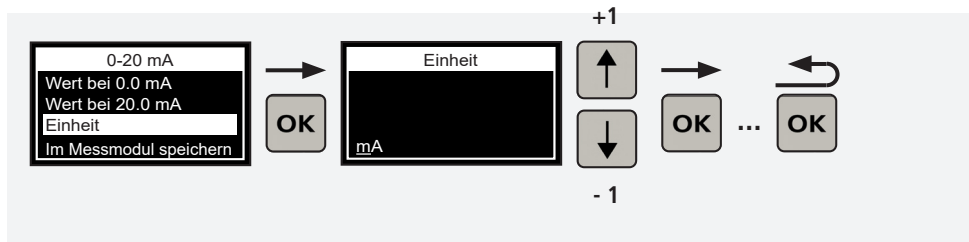






3.2.5.3

Festlegung der Einheit



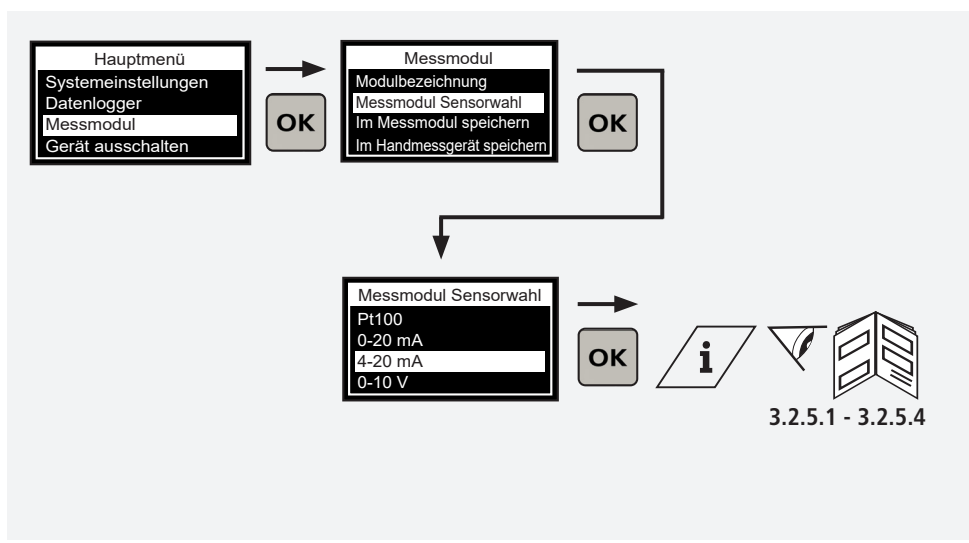
3.2.5.4

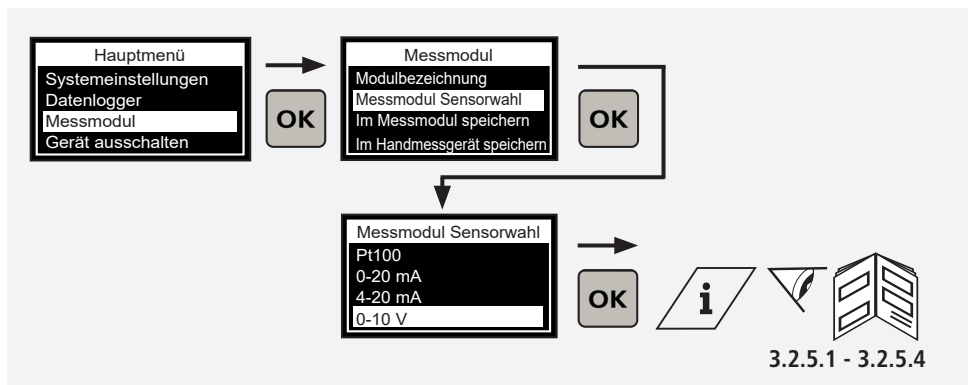
Speichern der Einstellungen



3.2.6

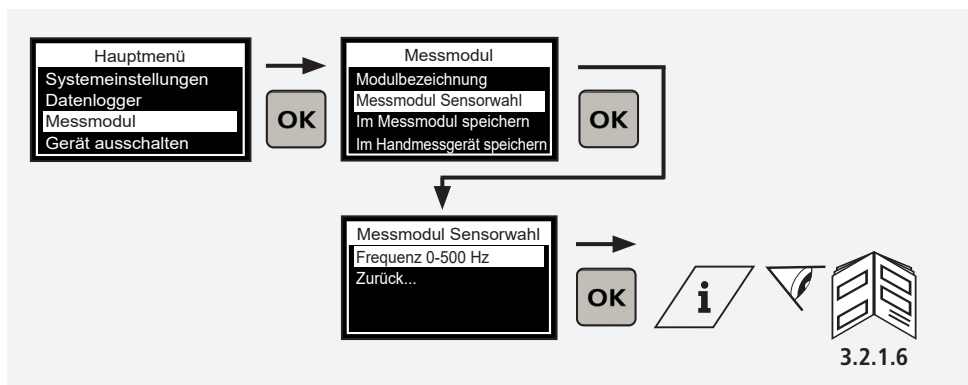
4-20 mA Sensoren





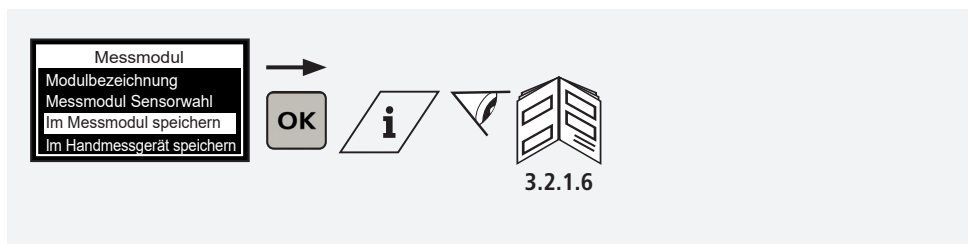
3.2.8

Frequenz-Sensoren 0-500 Hz



3.3

Einstellung im Messmodul speichern



3.4

Einstellung im Handmessgerät zwischenspeichern

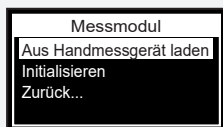


Info!

Die Konfiguration für das verbundene Messmodul werden auf den Zwischenspeicher des Handmessgeräts gespeichert. Diese kann nun für die Konfiguration weiterer Messmodule genutzt werden.

3.5

Einstellung aus dem Zwischenspeicher des Handmessgeräts laden



Hinweis!

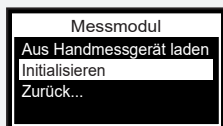
Wenden Sie eine Konfiguration aus dem Zwischenspeicher des Handmessgeräts auf das verbundene Messmodul an. **Um die Konfiguration auf dem Messmodul auch nach der Trennung des Handmessgeräts zu übernehmen, speichern Sie diese unbedingt im Messmodul!**



3.3

3.6

Messmodul initialisieren

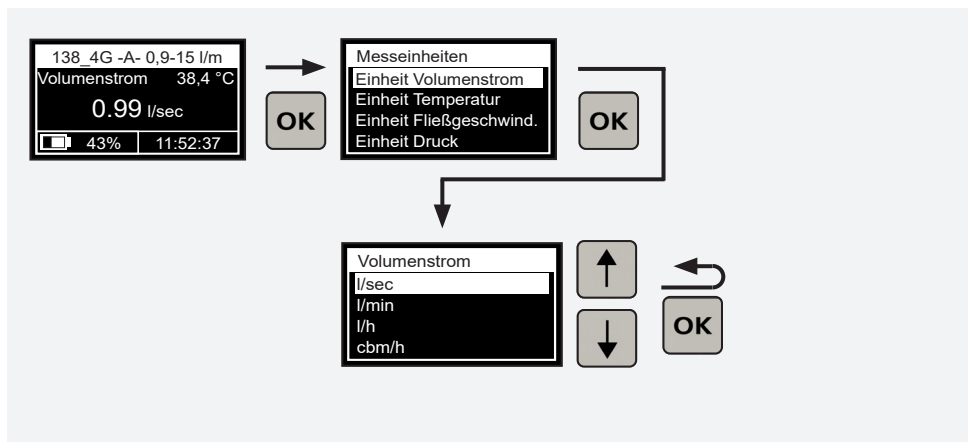


Info!

Wenn Sie die Initialisierung durchführen, setzen Sie das Messmodul auf Werkseinstellung zurück. Alle zuvor getroffenen Einstellungen gehen dabei verloren!

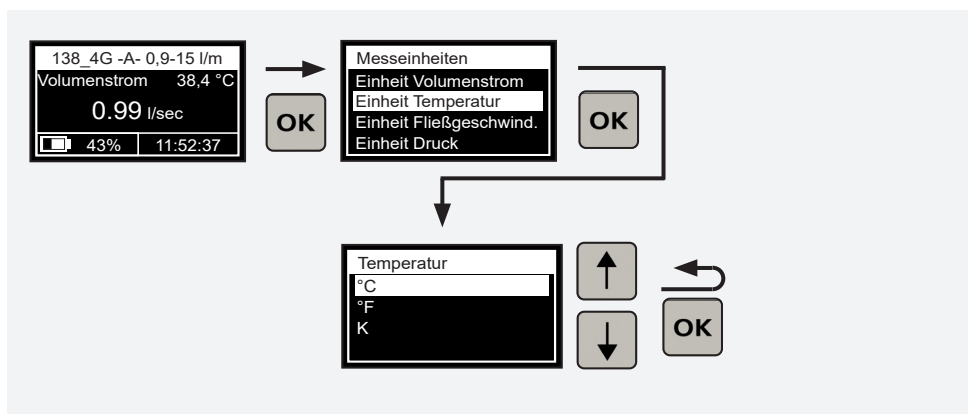
3.7.1

Einheit für den Volumenstrom



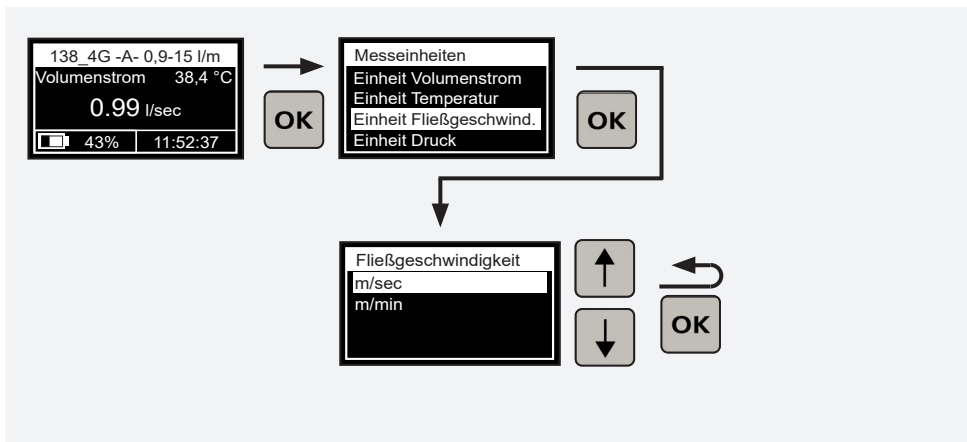
3.7.2

Einheit für die Temperatur



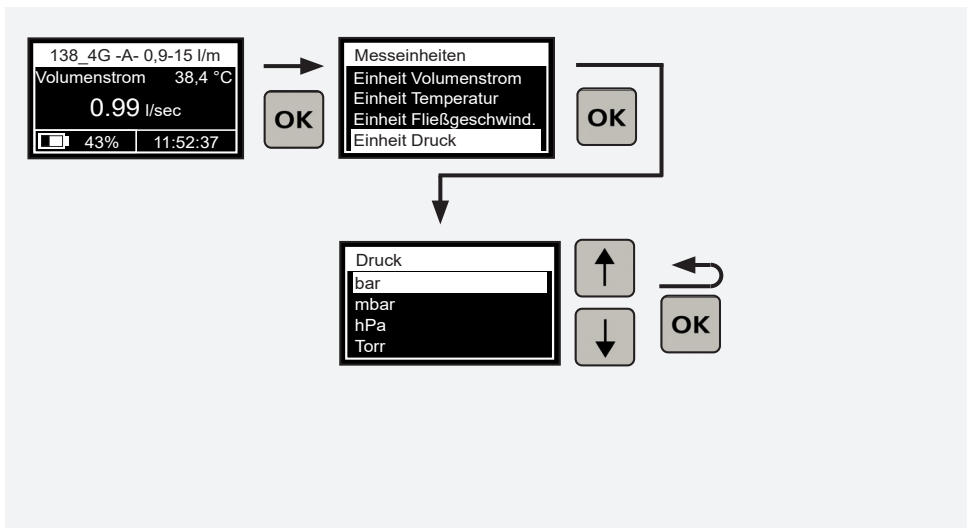
3.7.3

Einheit für die Fließgeschwindigkeit



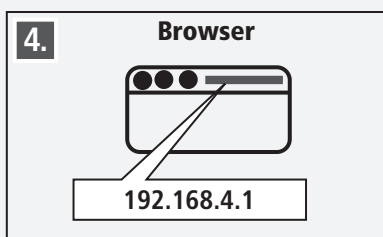
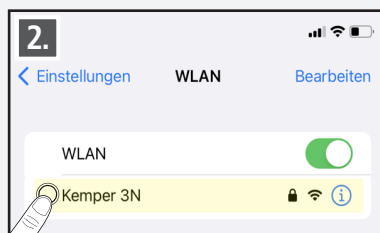
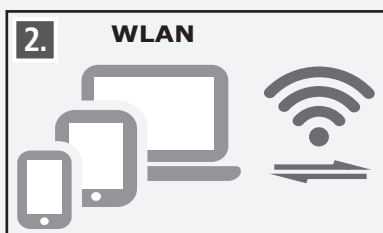
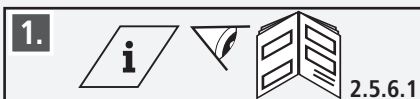
3.7.4

Einheit für den Druck



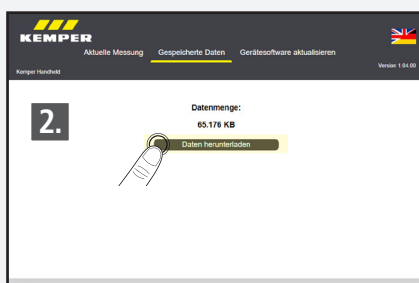
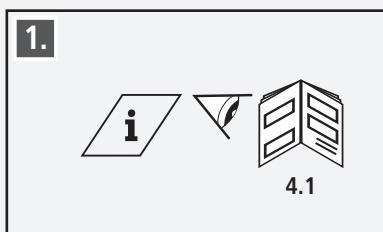
4.1

Verbindung mit dem Webserver herstellen



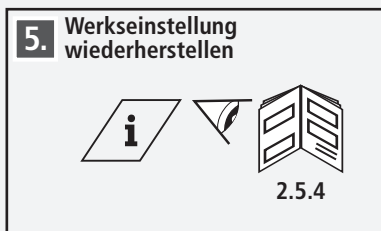
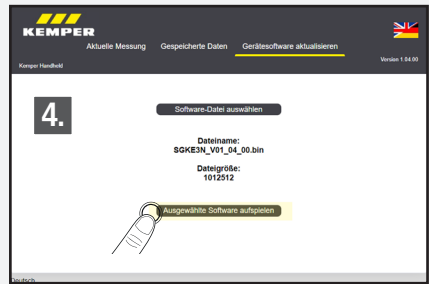
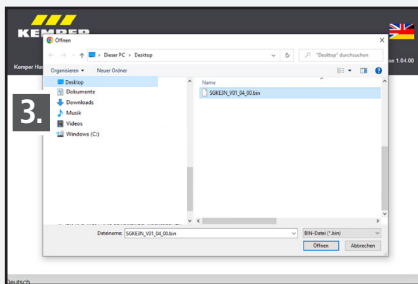
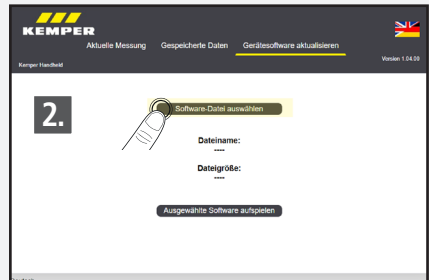
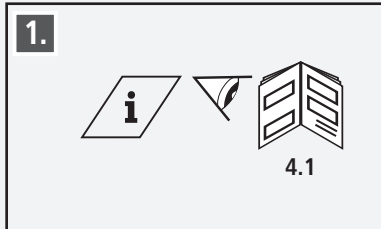
4.2

Messdaten des Handmessgerätes auf ein Endgerät übertragen



4.3

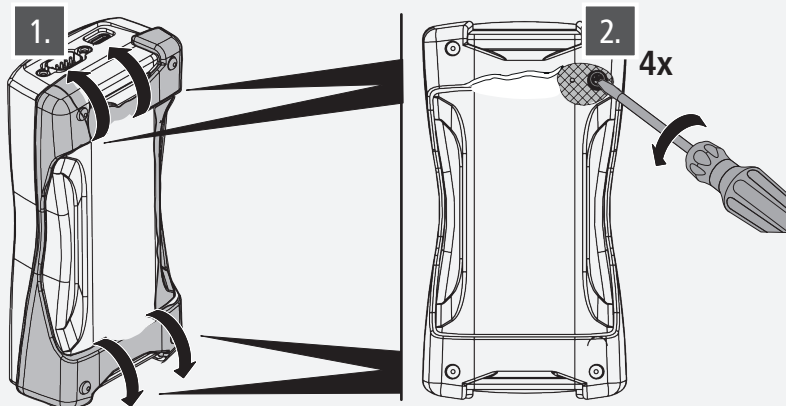
Softwareupdate des Handmessgerätes laden und aufspielen



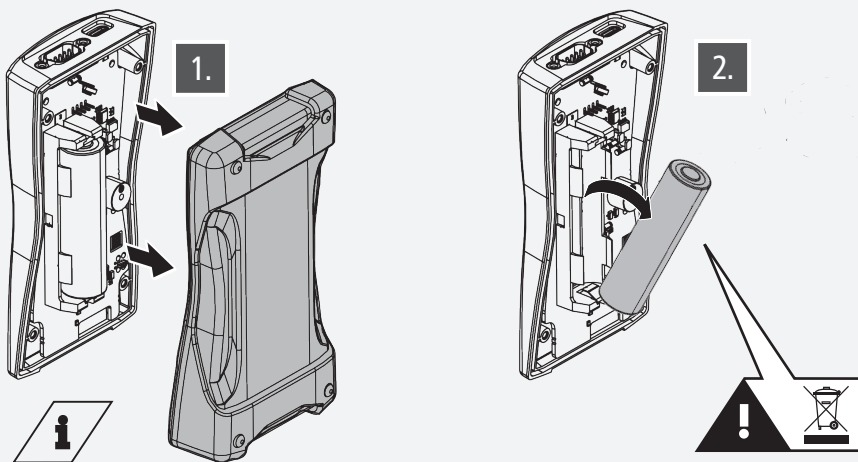
Info!

Die aktuelle Software-Version finden Sie unter:
<https://www.kemper-group.com/de-de/gebaeude-technik/service/downloads-und-epaper-portal/>

1



2

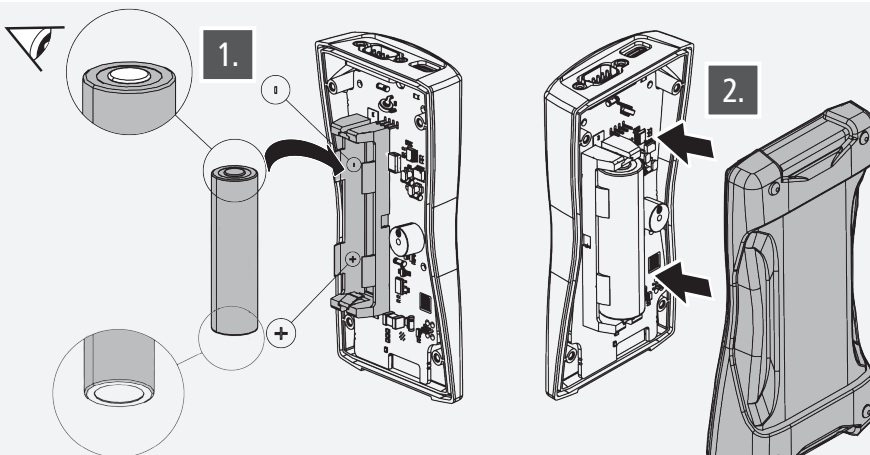
**Info!**

Die Schrauben verbleiben in gummierter Ummantlung - das Herausfallen wird somit vermieden.

5

Austausch des Akkus

3



Info!

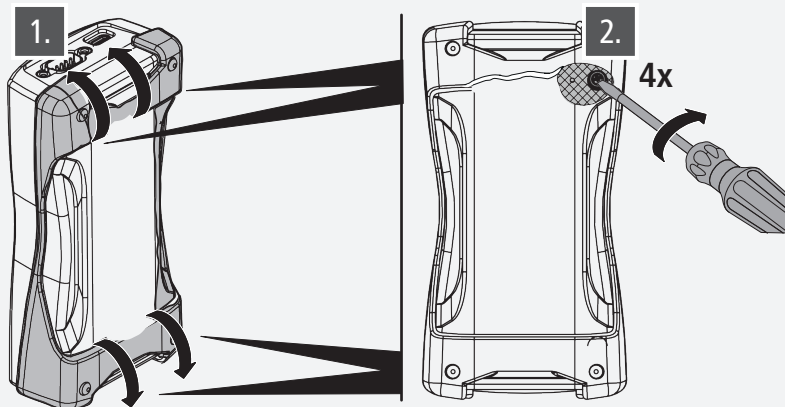
Li-Ion-Akku 18650
Bestellnr. 3692300100



Hinweis!

Bitte beachten Sie, dass der Akku richtig herum eingesetzt wird, ansonsten kann es zu Schäden am Gerät führen!

4



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Manufacturer's address

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57462 Olpe
Tel.: +49 2761 891-0
Web: www.kemper-group.com

After-sales service

Service hotline
Tel.: +49 2761 891 800
Email: anwendungstechnik@kemper-group.com

About this manual

Read this manual carefully before starting use and follow the instructions!

Always pass on this manual to the current plant-operating organisation. The operator must retain the manual for later reference.

Illustrations in this manual serve to aid basic understanding and may differ from the actual system configuration.

Liability

The manufacturer assumes no warranty or liability in case of:

- failure to follow these instructions
- incorrect installation and/or use
- unauthorised modification of the product
- other improper methods of operation.

Safety instructions

Be sure to read and follow the safety instructions in this manual. Failure to follow the safety instructions can result in injury or even death and in damage to property.

The safety instructions are identified by symbols and are introduced by signal words that express the extent of the hazard.

**Safety instruction**

The following safety instructions are used in this manual:

**Warning!**

Indicates hazards that may result in injury, damage to property or contamination of drinking water.

**Note!**

Indicates hazards that may result in damage to the Hygiene Flush Box or malfunctions.

**Info**

Indicates additional information and tips.

**Disposal**

Observe the local regulations on waste disposal and recycling. The product must not be disposed of with normal household waste but must be disposed of properly.



Old batteries must not be disposed of with household waste. You are required by law to bring batteries to a suitable collection point.

**Warning!**

Priority must be given to the national standards and provisions on Health and Safety Regulations.

Storage

Store the CONTROL-PLUS hand-held measuring device as follows:

- packed,
- in a dry, dust-free place,
- not outdoors,
- protected from heat and cold,
- at a storage temperature of 0-50 °C.

1

About the CONTROL-PLUS portable measuring instrument

Intended use

In combination with the various KEMPER sensors, the CONTROL-PLUS hand-held measuring device is used to determine and document operating states in drinking water installations.

Use the system:

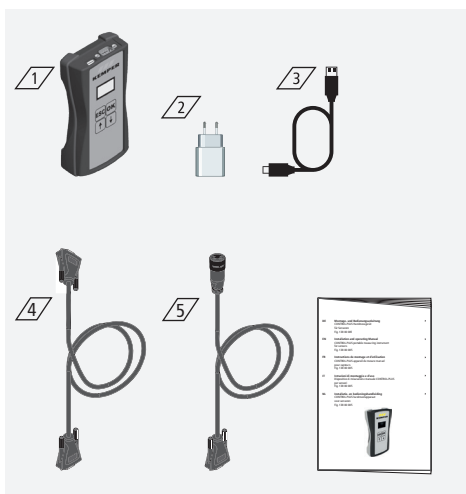
- in perfect condition
- as intended.

KEMPER-Sensors

Figure	Designation
138 4G 638 4G	Flow and temperature sensor
138 00 006	Pressure sensor
138 00 011	Sensor measuring module
138 00 003	Hand-held temperature sensor
138 00 004	CONTROL-PLUS plug-in temperature sensor

1.1

Scope of delivery



Scope of delivery

Inklusive:

- Portable measuring instrument device
- USB power pack 230 V/5 V
- USB-C-charging cable
- Measuring cable with a sensor measuring modul (Figure 130 00 011)
- Measuring cable for connecting to a temperature and flow sensor (Figure 138 4G)
- Installation and Operating Instructions

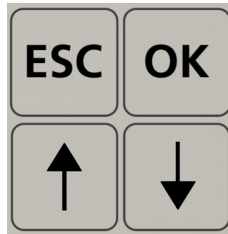
Technical data		
Device power input	5	W
Data logging entries	12.000	max.
Ambient temperature range	0 bis + 50	°C
Protection class	IP 20	
Device dimensions	142x77x38,3	mm
Integrated user interface (Display + 4 keys)	• Settings • Configuration • Overview • Data transfer	
Network interface (W-LAN) for web-based user interface	• Overview • Data transfer • Firmware update • Update of the webserver	
USB-C interface	• Firmware update • Update of the webserver • Data transfer • Power supply	
Language menu	• Deutsch • English • Nederlands	
Operating modes Measuring modes	• Temperature and flow measurement • Temperature measurement • Flow measurement • Data recording	

2

Operating

2.1

Menu navigation



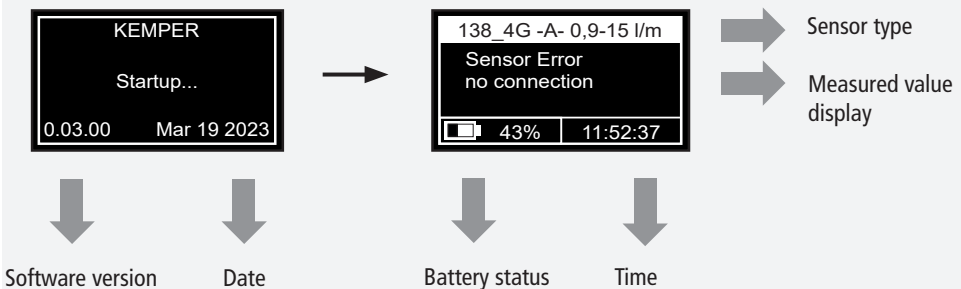
Keys	Description
ESC	Exit the menu / switch between overview and main menu
↑	Roll backwards
OK	Confirmation key
↓	Roll forwards

All menus have a “rolling” structure, i.e., pressing the first menu item. the „↓ key” on the last menu item jumps back to

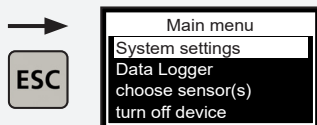
2.2

Switching on and overview display of the device

Press the “OK button” for longer than 1 second to switch on the device.

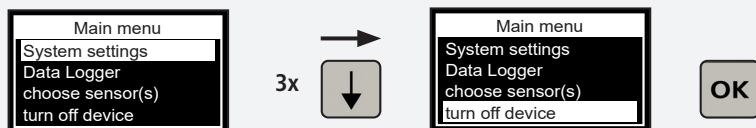


Press the "ESC button" to access the main menu.



2.4

Switching off the device

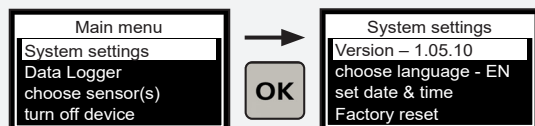


2.5

System settings

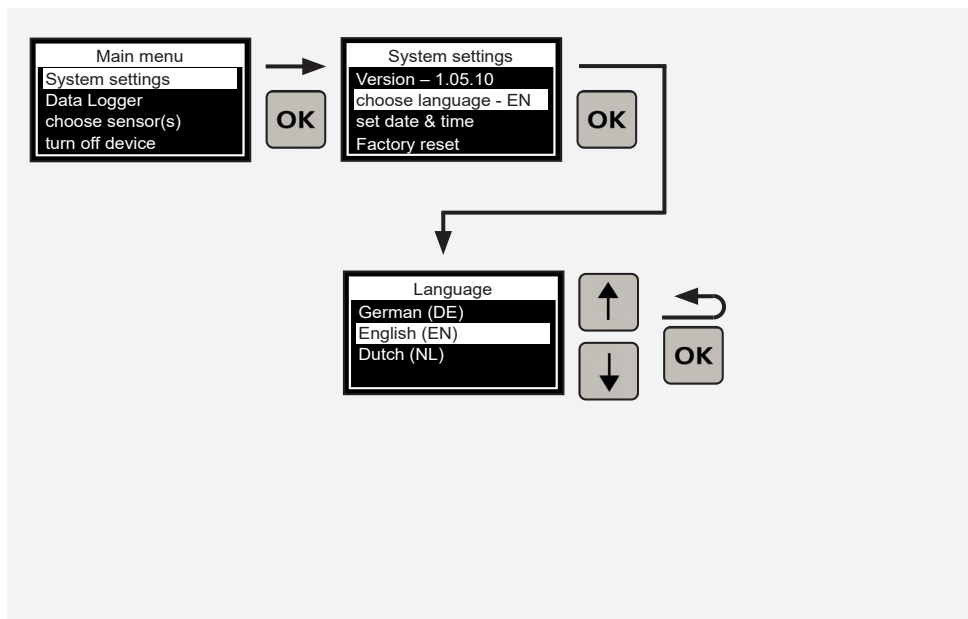
2.5.1

Display of the device software version



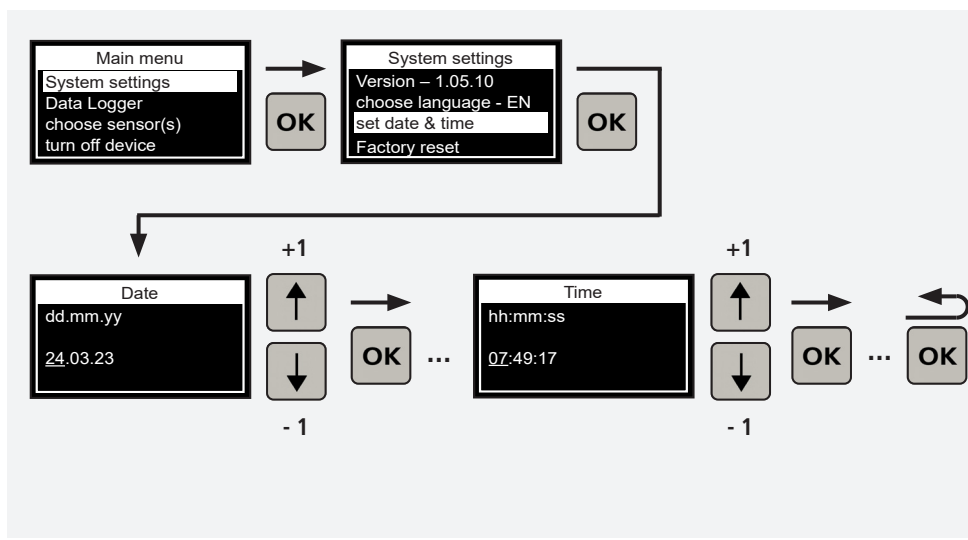
2.5.2

Language selection

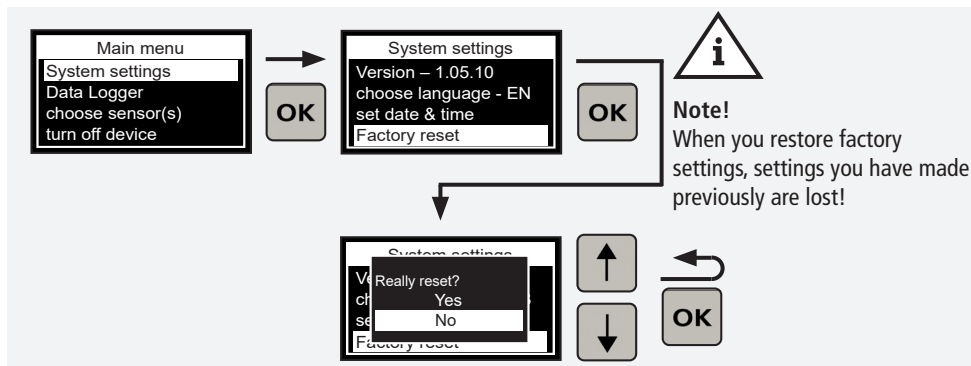


2.5.3

Date and time



Restoring factory settings



2.5.5

Energy-saving settings

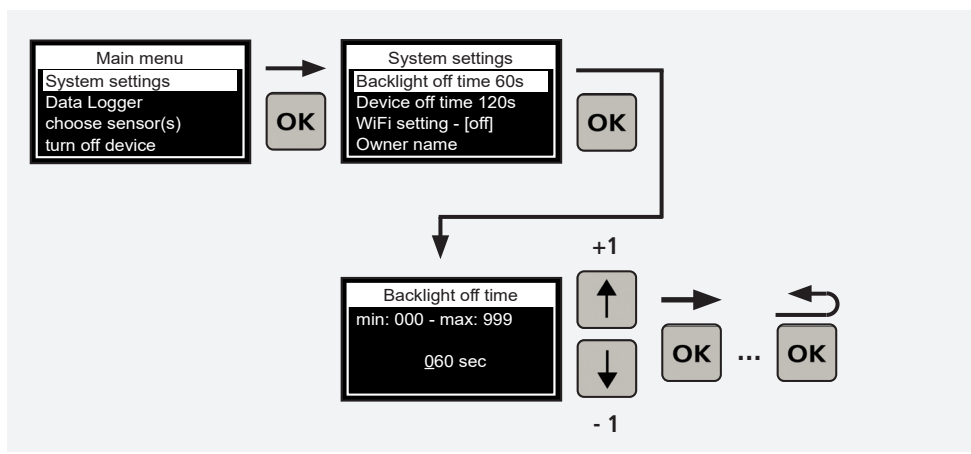
Factory settings:

- If no entry is made for 60 seconds, the display is **automatically deactivated**.
- If no entry is made for 120 seconds, **the device switches off automatically**.

You can change the times in the main menu under "System settings".

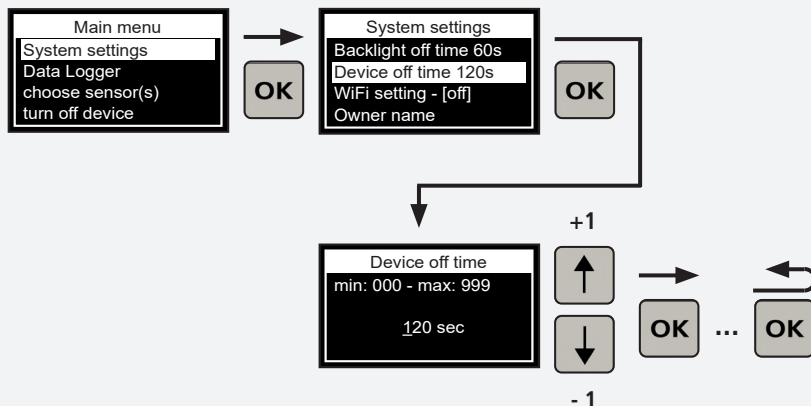
2.5.5.1

Automatic display switch-off



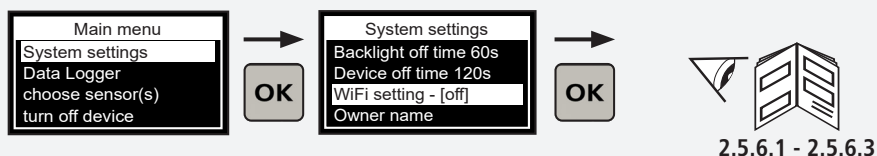
2.5.5.2

Automatic device switch-off



2.5.6

Wifi settings

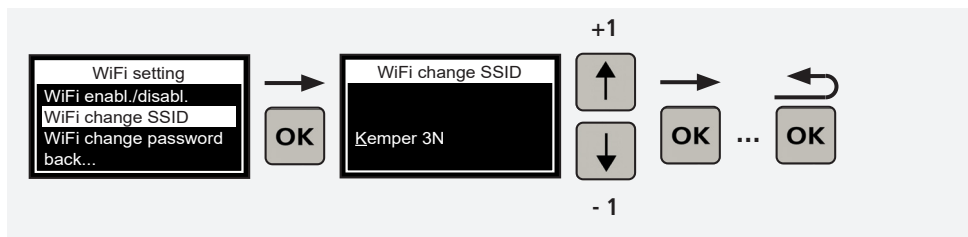


2.5.6.1

Activating | Deactivating WiFi

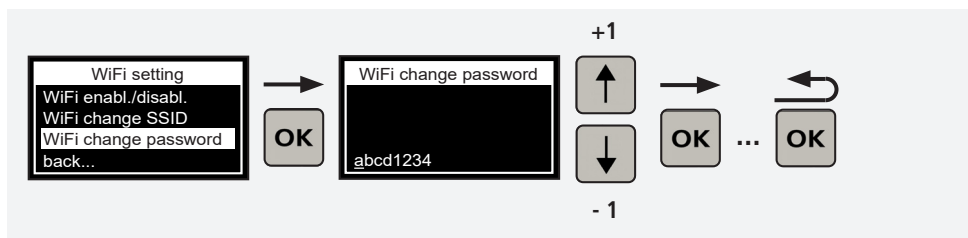


Changing WiFi SSID



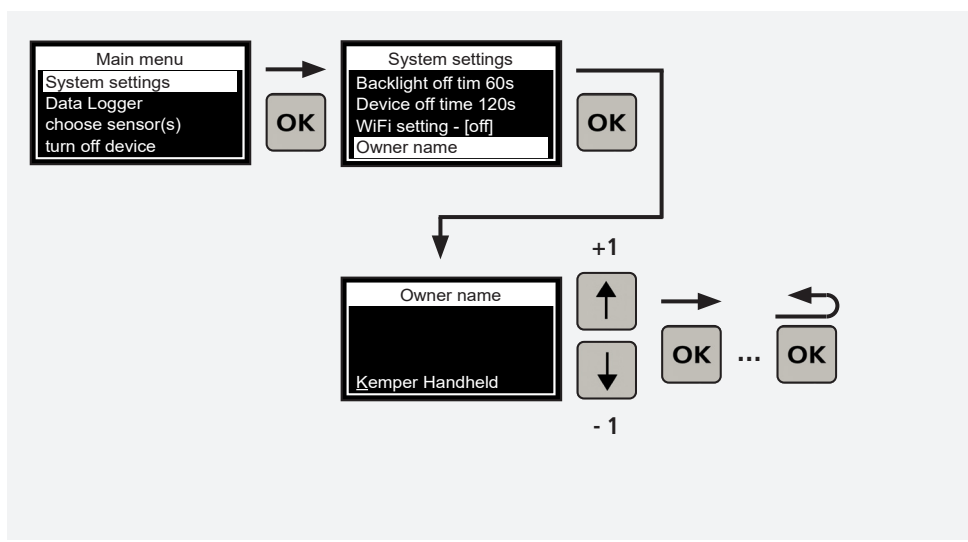
2.5.6.3

Changing WiFi password



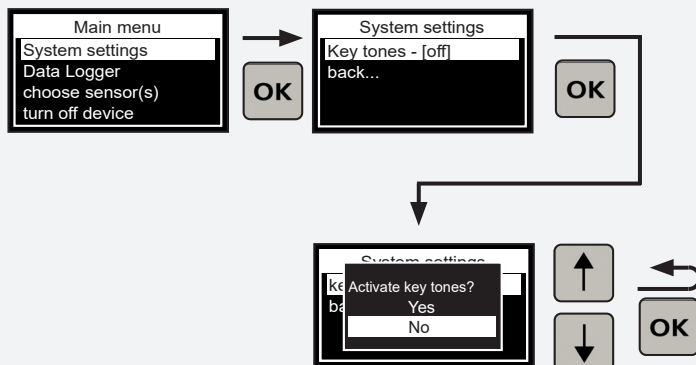
2.5.7

Device owner registration



2.5.8

Activating | deactivating key tones

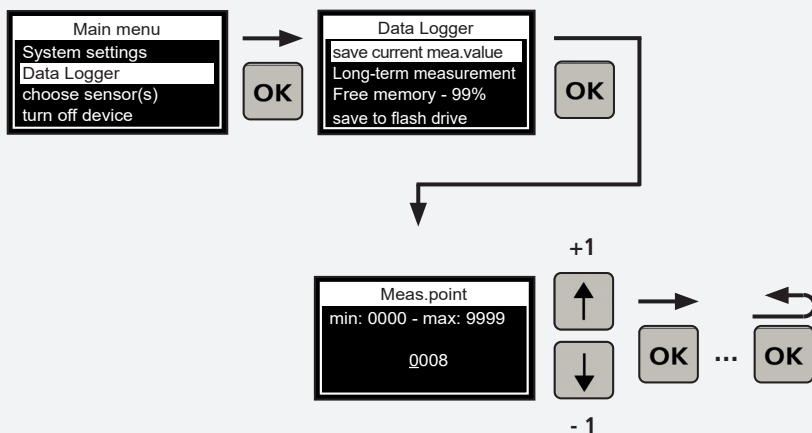


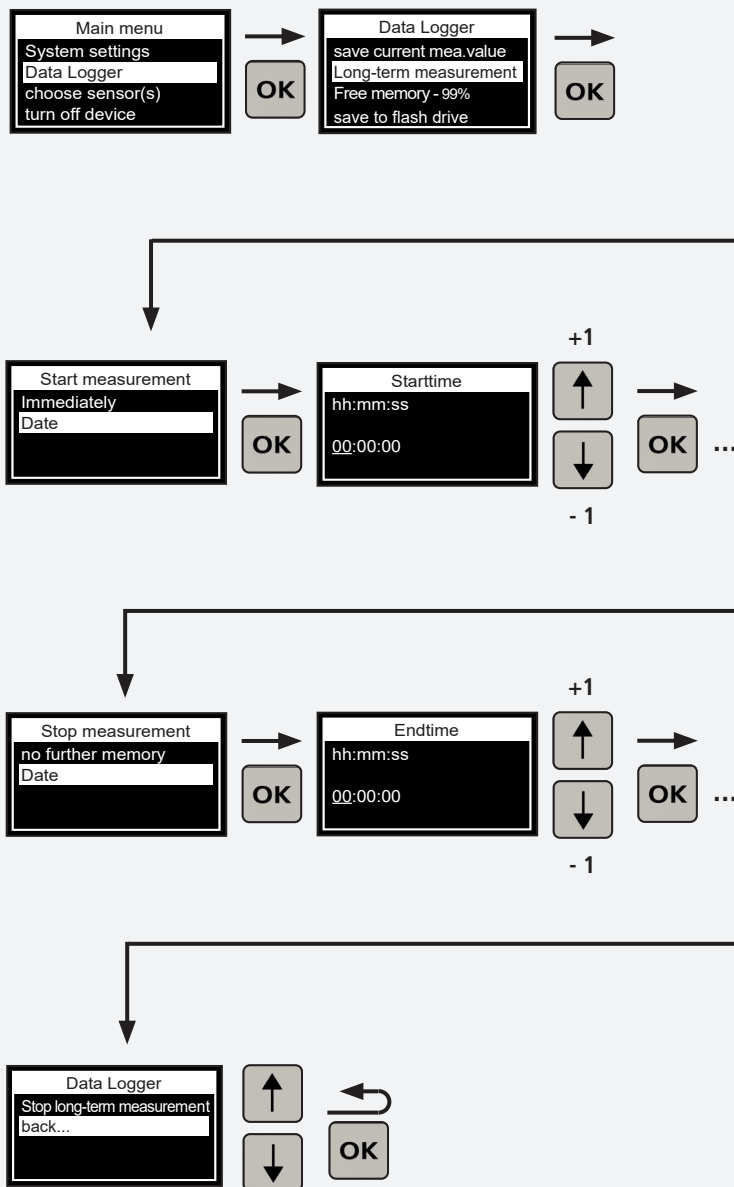
2.6

Setting the data logger

2.6.1

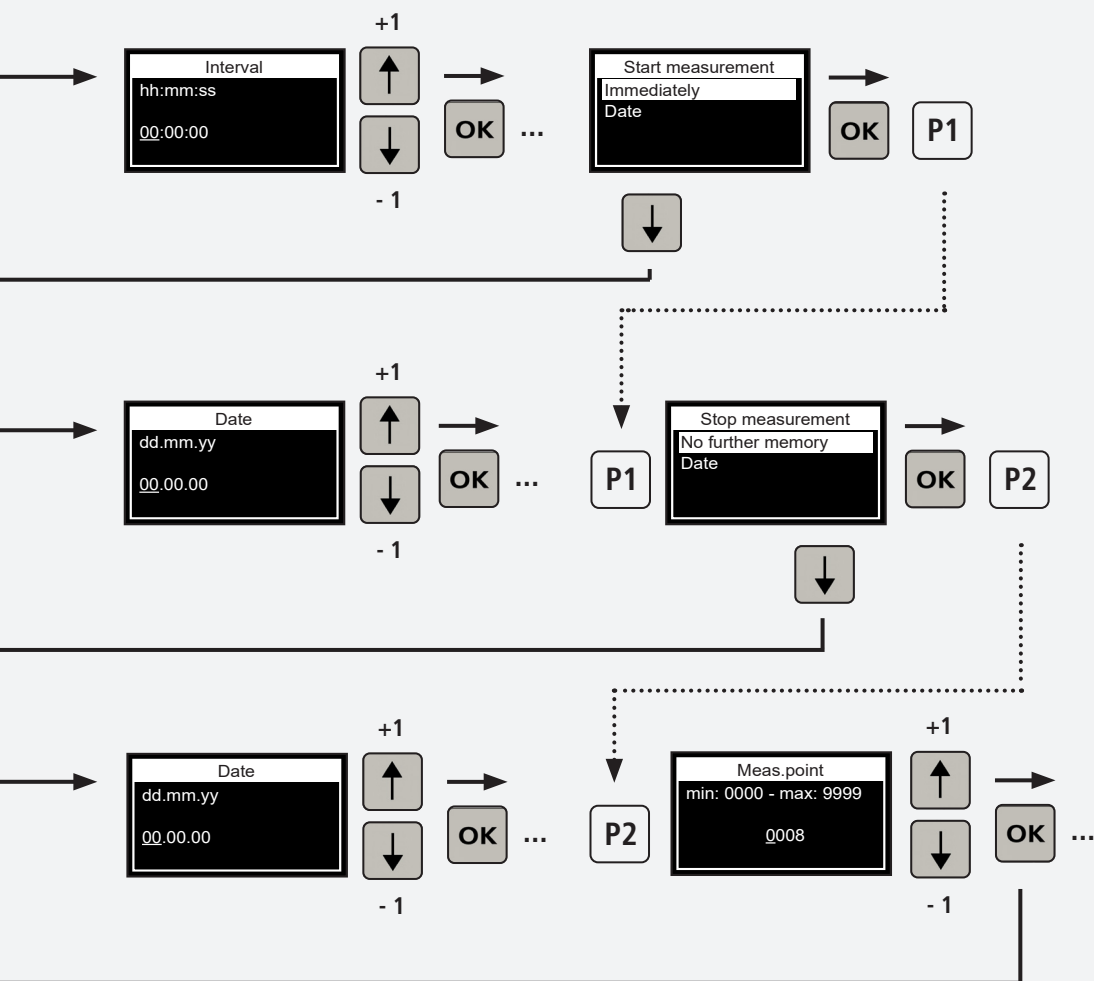
Saving measured values

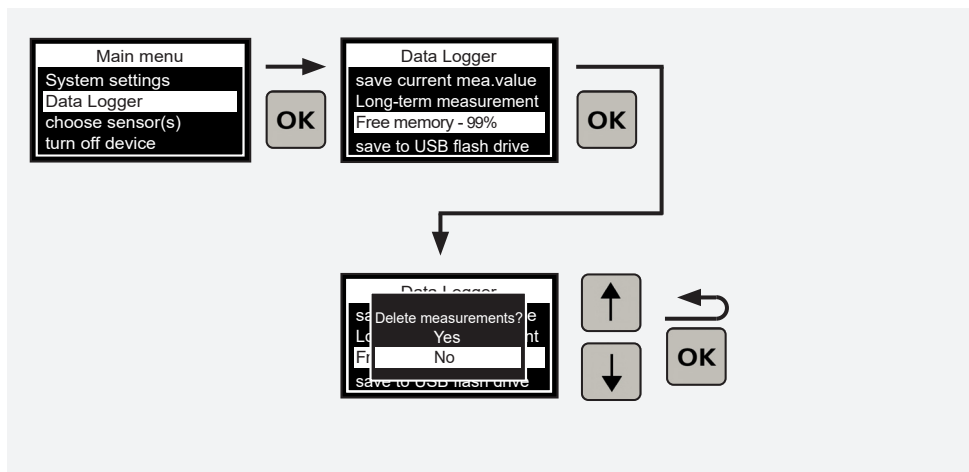




2.6.2

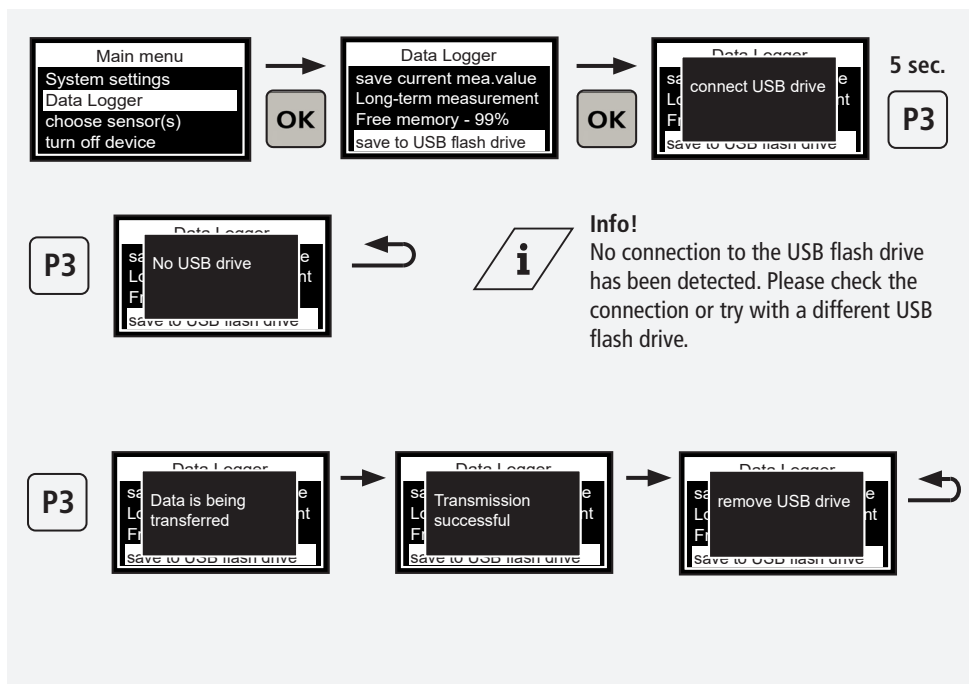
Setting up long-term measurement





2.6.4

Transferring data to USB flash drive

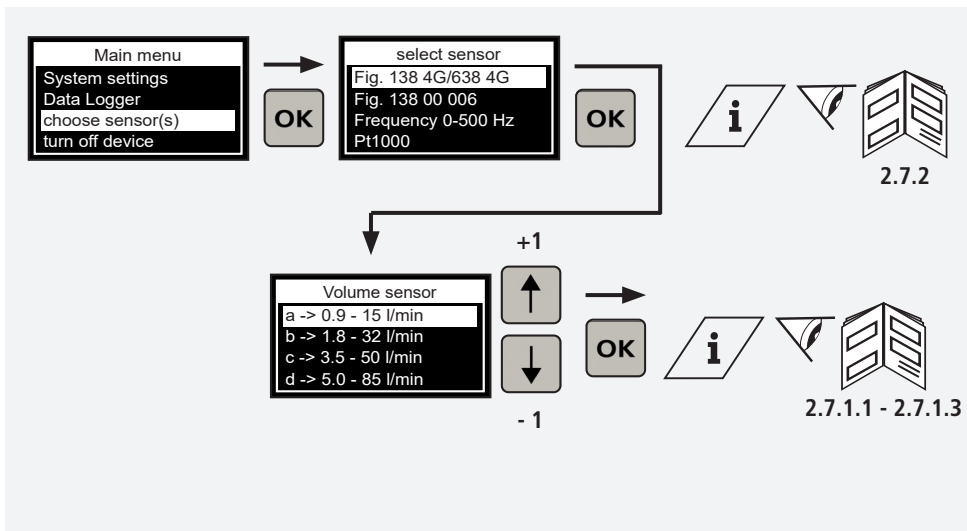


2.7

Sensor selection

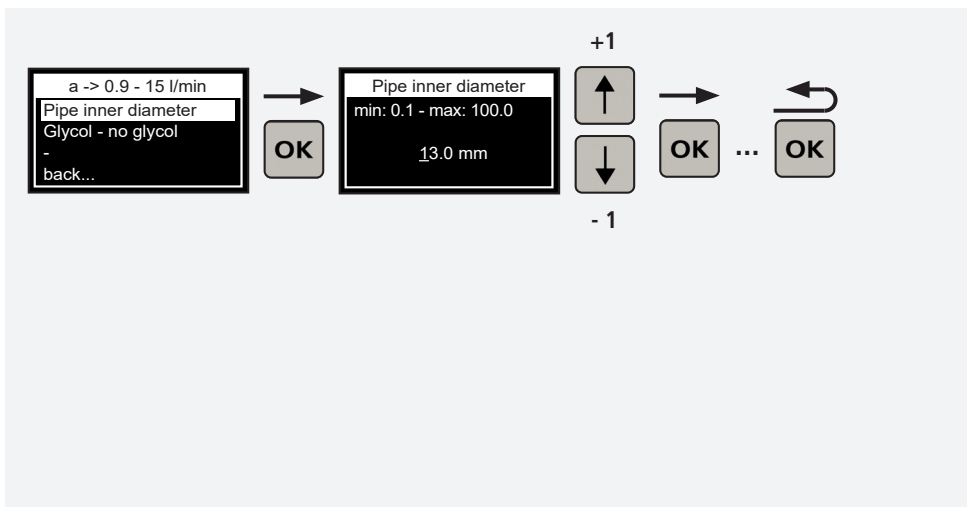
2.7.1

Flow- and temperature sensor figure 138 4G | 638 4G

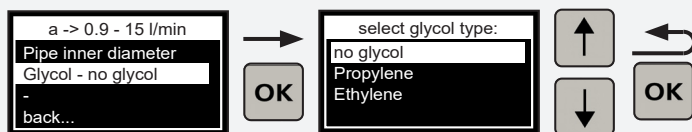


2.7.1.1

Input of inner pipe diameter

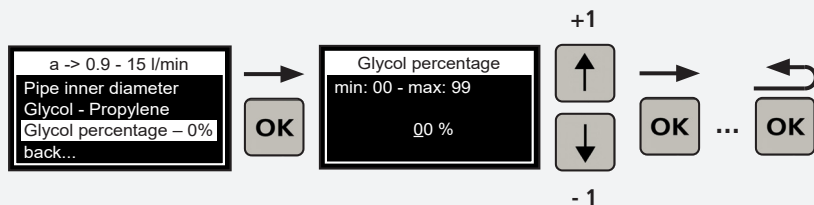


Selecting possible glycol types in the fluid



2.7.1.3

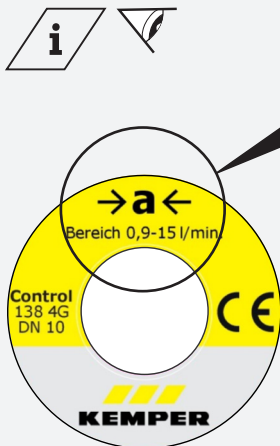
Setting the glycol content



2.7.2

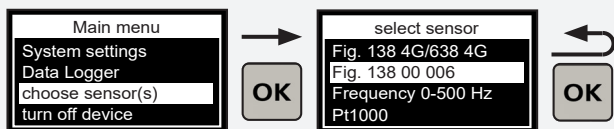
Assigning the sensor measurement range of a flow and temperature sensor figure 138 4G | 638 4G

Marking	Measurement range	Figure
→a←	0,9 - 15 l/min.	138 4G 010
→b←	1,8 - 32 l/min	138 4G 015
→c←	3,5 - 50 l/min	138 4G 020
→d←	5 - 85 l/min	138 4G 025
→e←	9 - 150 l/min	138 4G 032
→f←	11 - 188 l/min	138 4G 040
→g←	18 - 316 l/min	138 4G 050



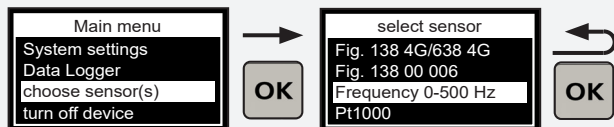
2.7.3

Pressure sensor figure 138 00 006



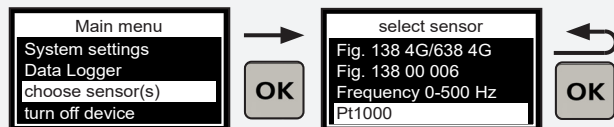
2.7.4

Frequency output of a frequency sensor



2.7.5

Temperature sensor Pt1000|Pt100

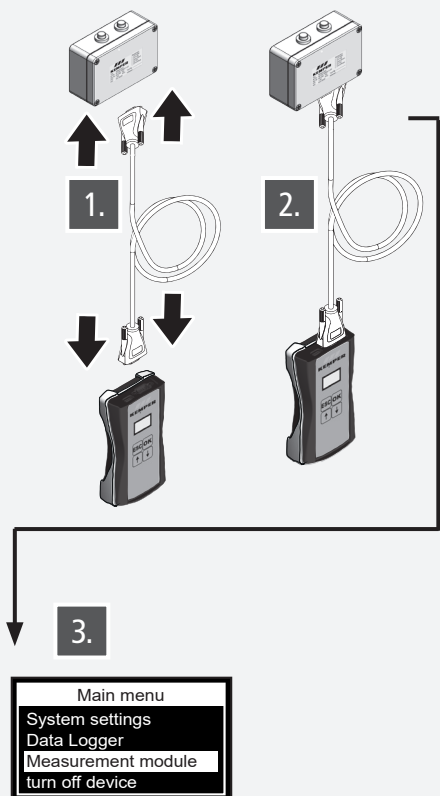


Connecting the portable measuring instrument to a sensor measuring module figure 138 00 011



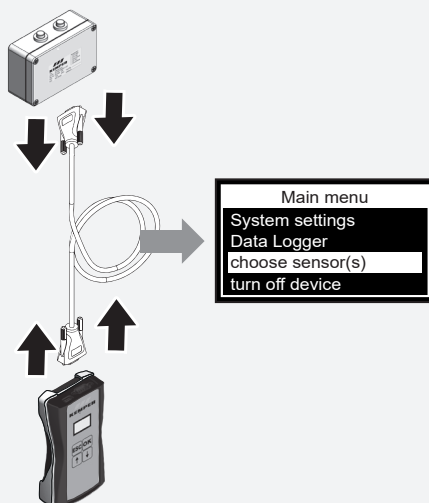
Attention!

Connect the portable measuring instrument with the D-Sub cable (portable measuring instrument scope of delivery) and the measuring module to be able to carry out the configuration in the Measuring module menu.



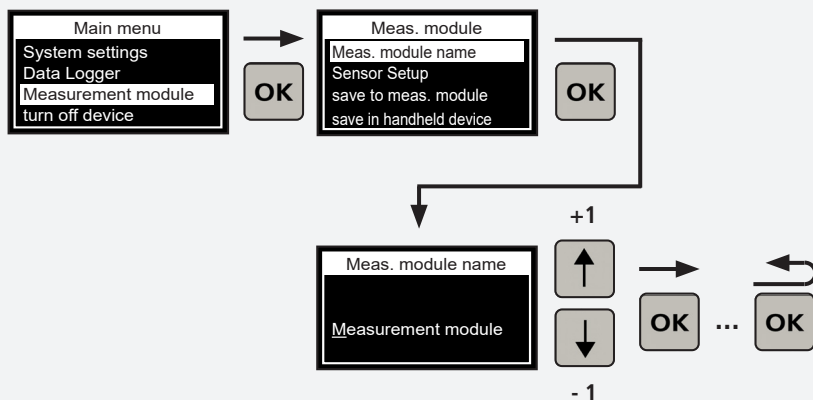
Attention!

If there is no connection, the menu item is **not** displayed in the main menu!



3.1

Changing the designation of the sensor measuring module

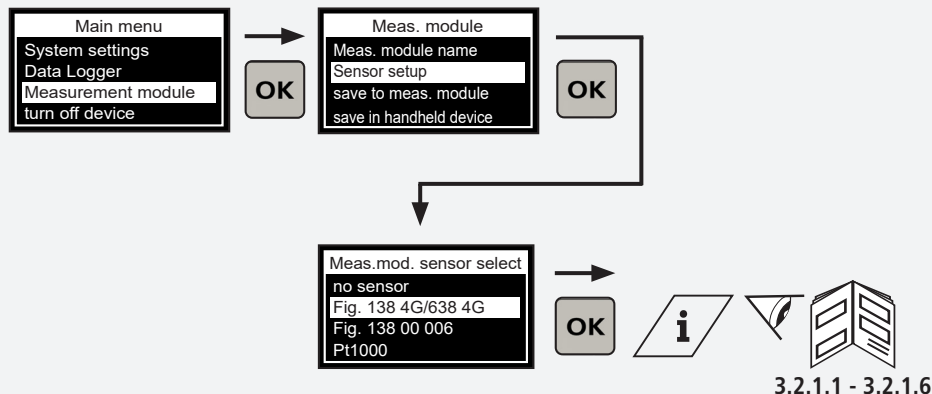


3.2

Selecting and setting a sensor

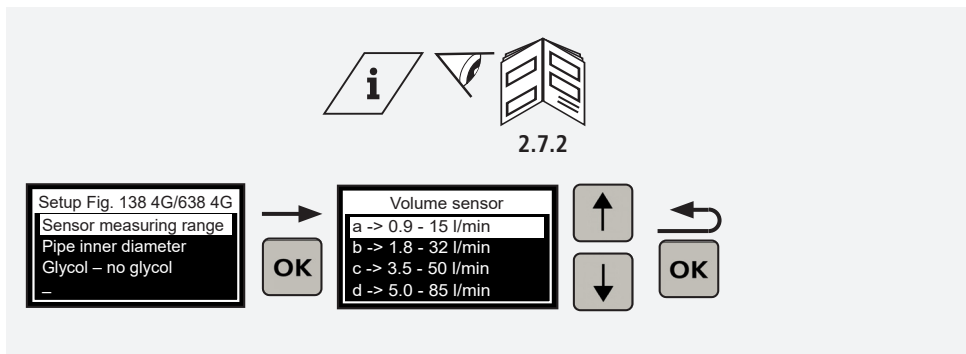
3.2.1

Flow and temperature sensor figure 138 4G | 638 4G



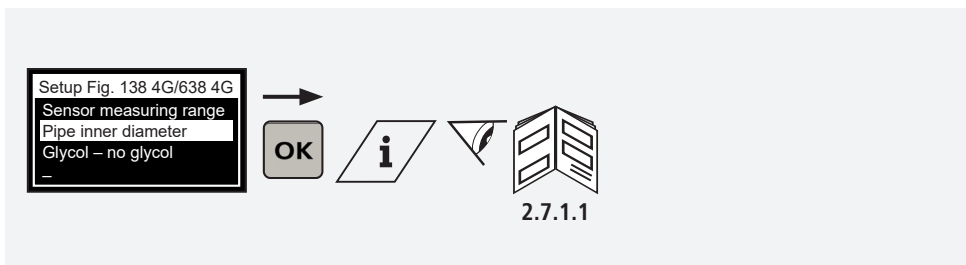
3.2.1.1 - 3.2.1.6

Selecting the sensor measuring range



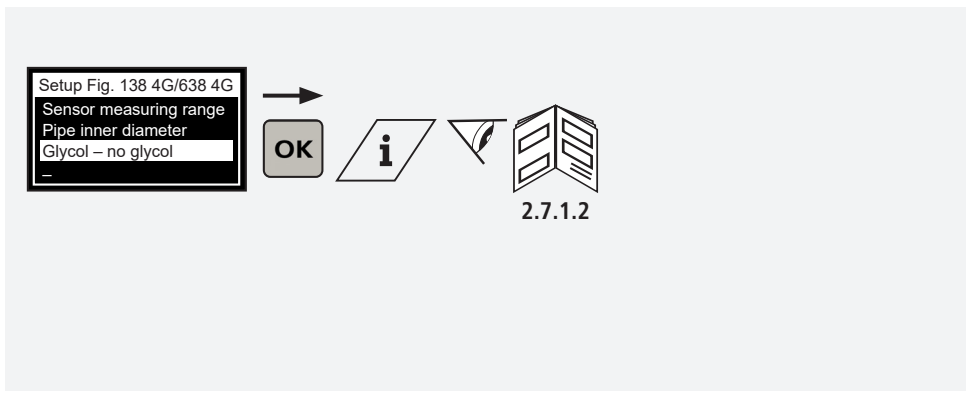
3.2.1.2

Information on the pipe diameter



3.2.1.3

Information on the glycol type



3.2.1.4

Information on the glycol content

Setup Fig. 138 4G/638 4G
Sensor measuring range
Pipe inner diameter
Glycol - Propylene
Glycol percentage - 0%



2.7.1.3

3.2.1.5

Cable compensation

All temperature sensors are evaluated by the portable measuring instrument as a 2-wire measurement. The measurements are falsified by the cable resistance.

It is recommended to balance out the resistance deviations, caused by cable extensions from the temperature sensor to the measuring module with the Cable compensation menu item.

Setup Fig. 138 4G/638 4G
Cable compensation
save to meas. module
back...



3.2.1.5.1 - 3.2.1.5.3

3.2.1.5.1

Cable compensation via length and cross-section

Cable compensation by...
Length x cross-section
Resistive offset
Temperature offset



Wire length
min: 00.00 - max: 99.99
00.00 m



OK ...

Wire diameter
min: 00.00 - max: 99.99
00.00 mm²

+1

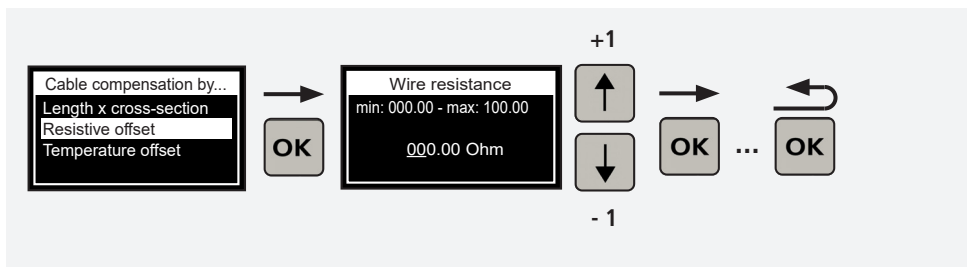


-1

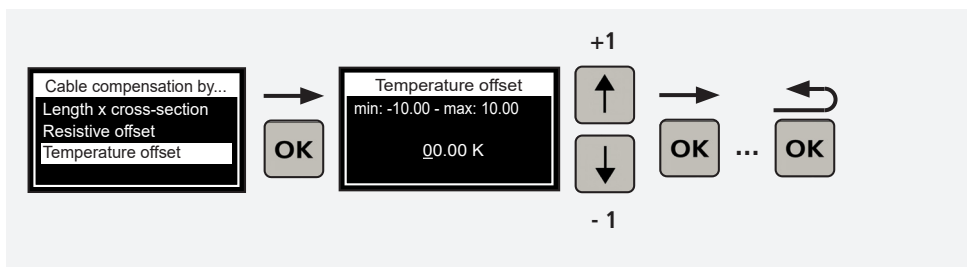
OK ...



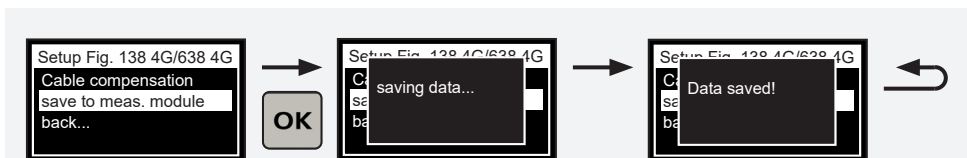
Cable compensation via resistance offset



Cable compensation via temperature offset



Saving settings on the measuring module



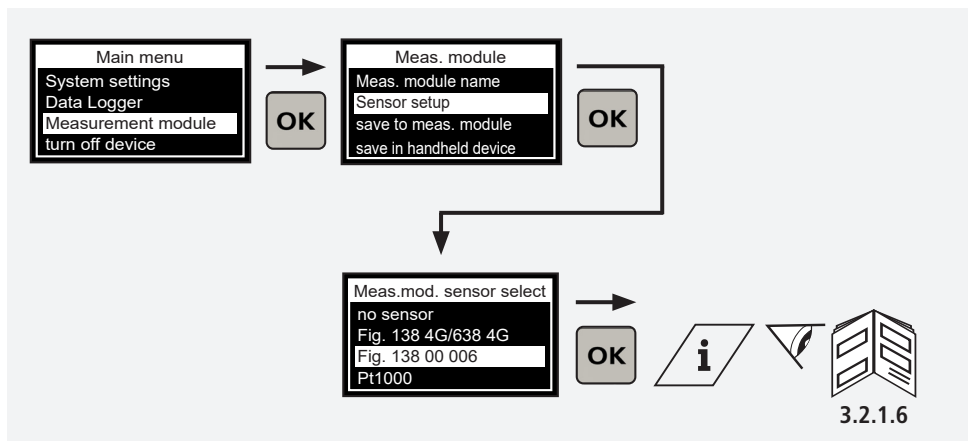
Attention!

After entering the sensor settings, carry out the function "Save in measuring module! This is the only way that the configuration set on the portable measuring instrument is permanently saved on the measuring module.

If writing is not carried out and the measuring cable from the measuring module or portable measuring instrument is removed, you have to enter the sensor settings for further measurements again!

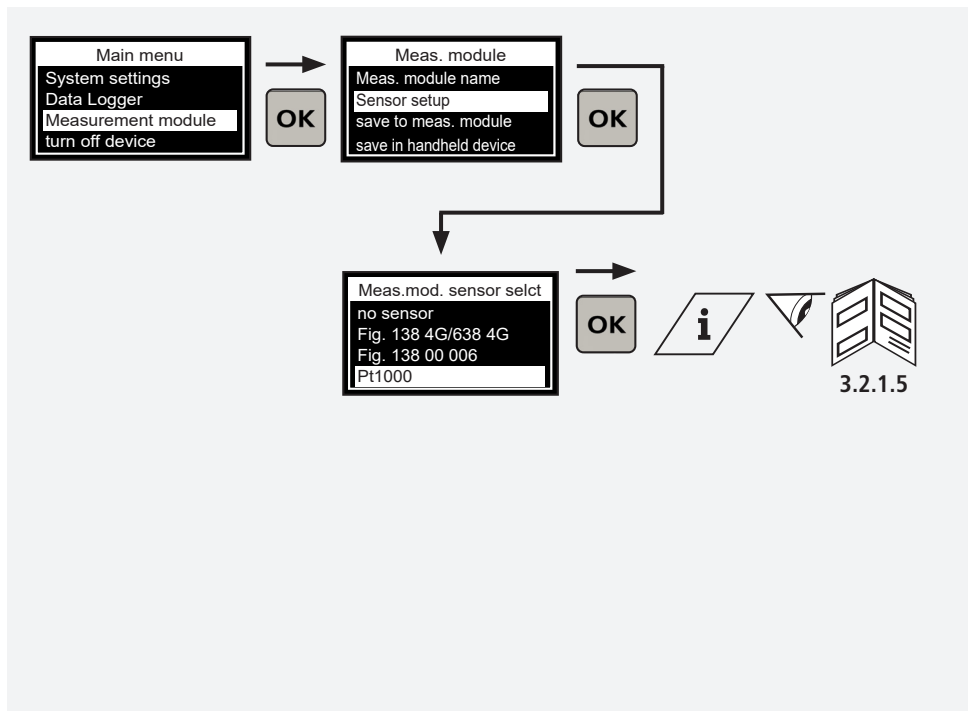
3.2.2

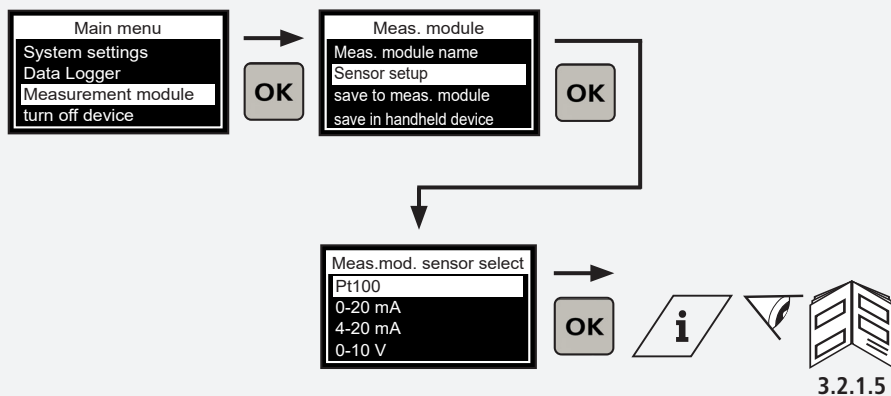
Pressure sensor figure 138 00 006



3.2.3

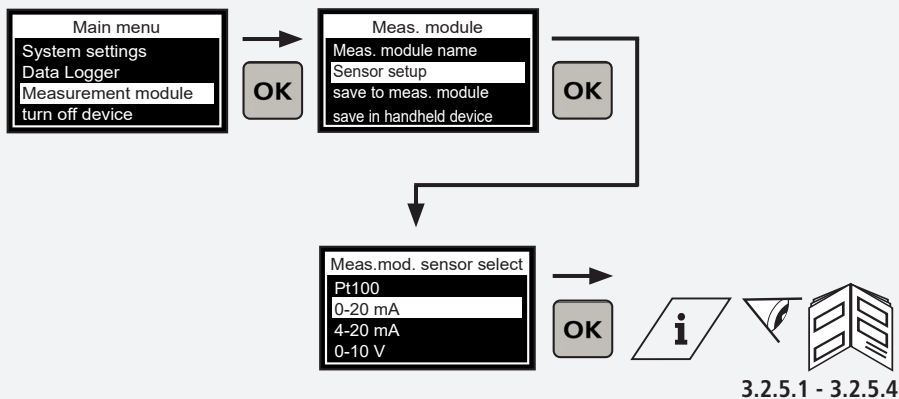
Temperature sensor Pt1000

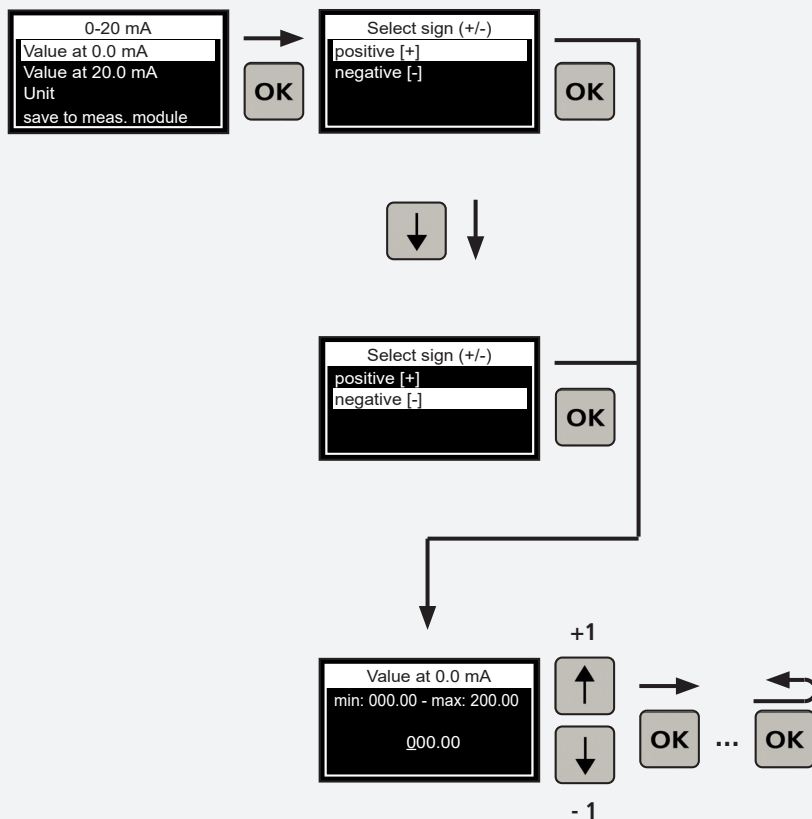


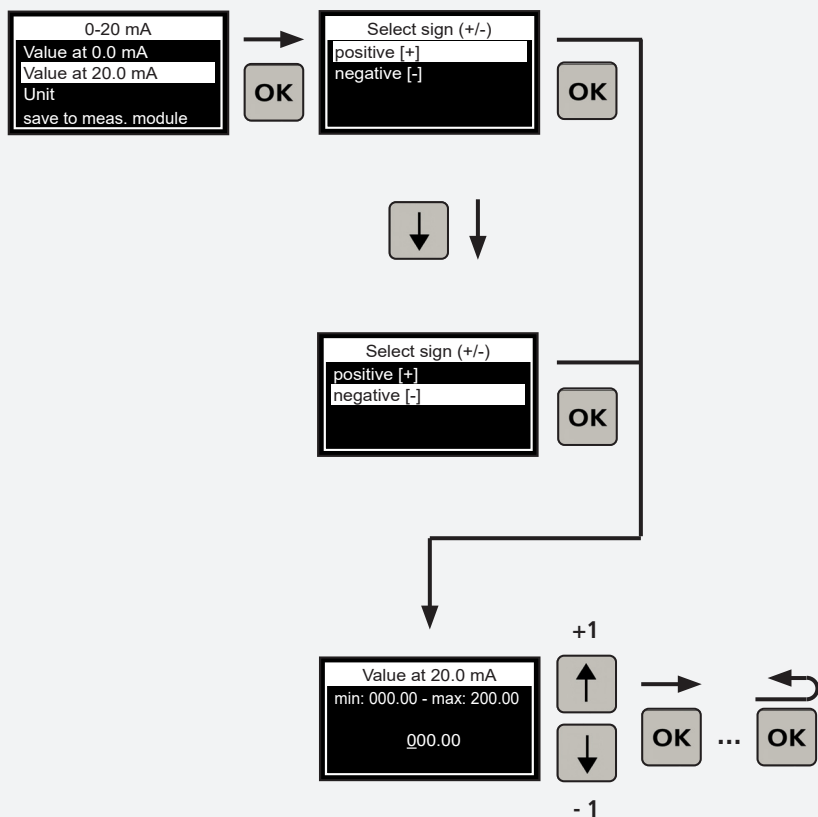


3.2.5

0-20 mA-Sensors

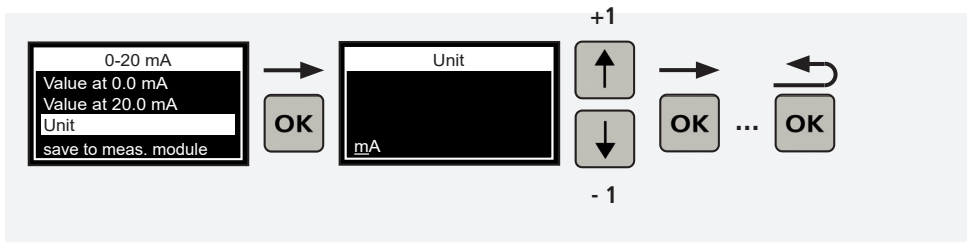






3.2.5.3

Specifying the unit



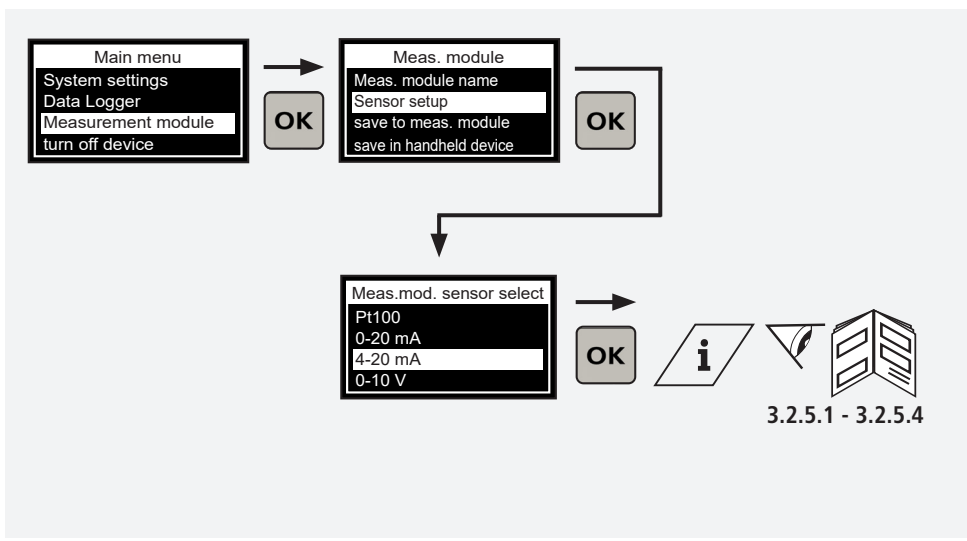
3.2.5.4

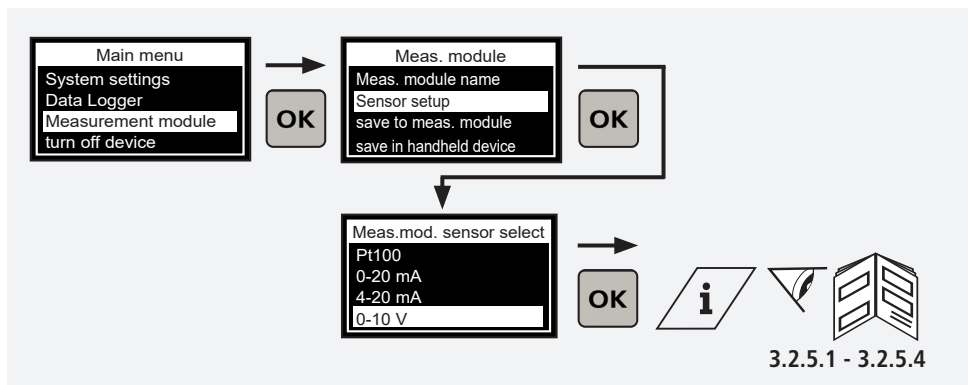
Saving the settings



3.2.6

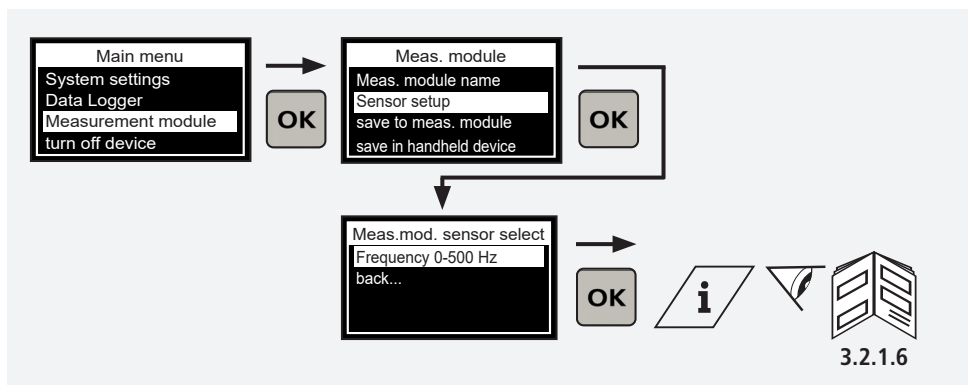
4-20 mA Sensors





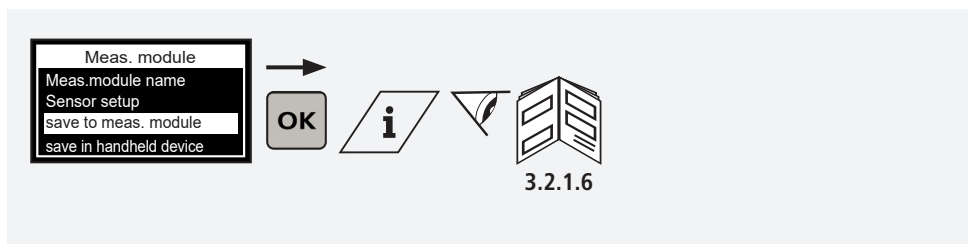
3.2.8

Frequency sensors 0-500 Hz



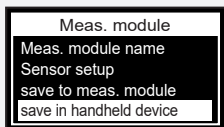
3.3

Saving setting in the measuring module



3.4

Buffering setting in the portable measuring instrument

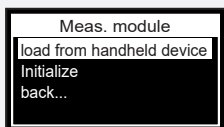


Info

The configuration for the connected measuring module is saved on the buffer of the portable measuring instrument. This can then be used for the configuration of other measuring modules.

3.5

Loading from the buffer of the portable measuring instrument



Attention!

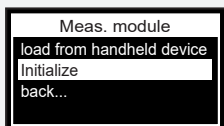
Use a configuration from the portable measuring instrument buffer on the connected measuring module. **To accept the configuration on the measuring module even after separation of the portable measuring instrument, it is essential to save it in the measuring module!**



3.3

3.6

Initialising measuring module



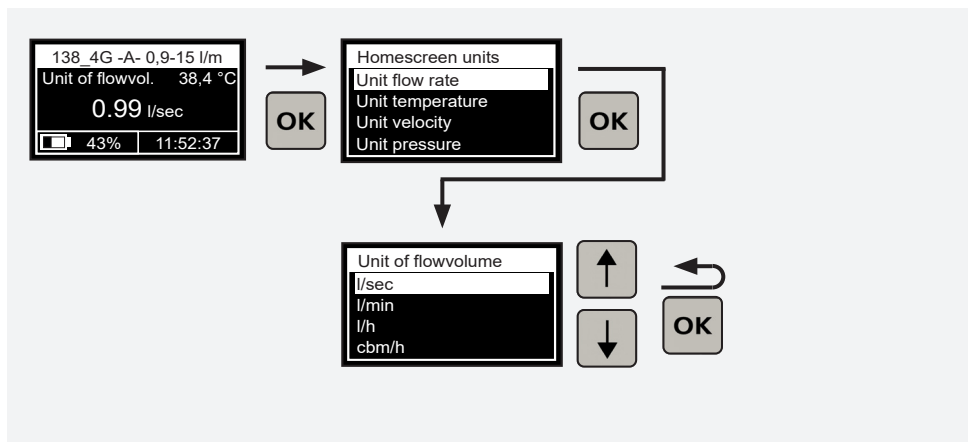
Info

When you are initialising, reset the measuring module to factory settings. All of the settings made before are lost in the process!

Selecting the units displayed during a measurement

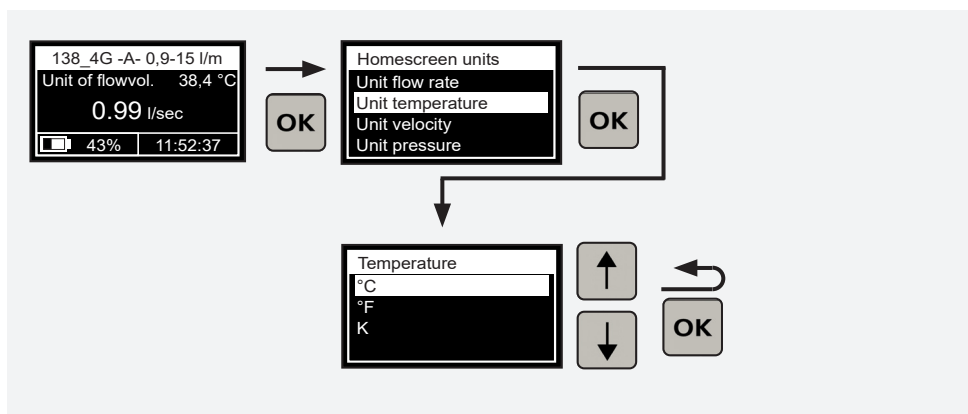
3.7.1

Unit for the volume flow



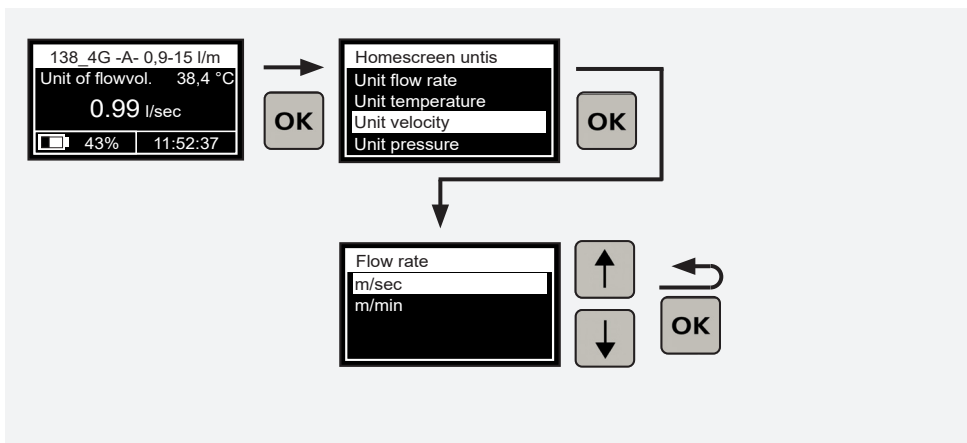
3.7.2

Unit for the temperature



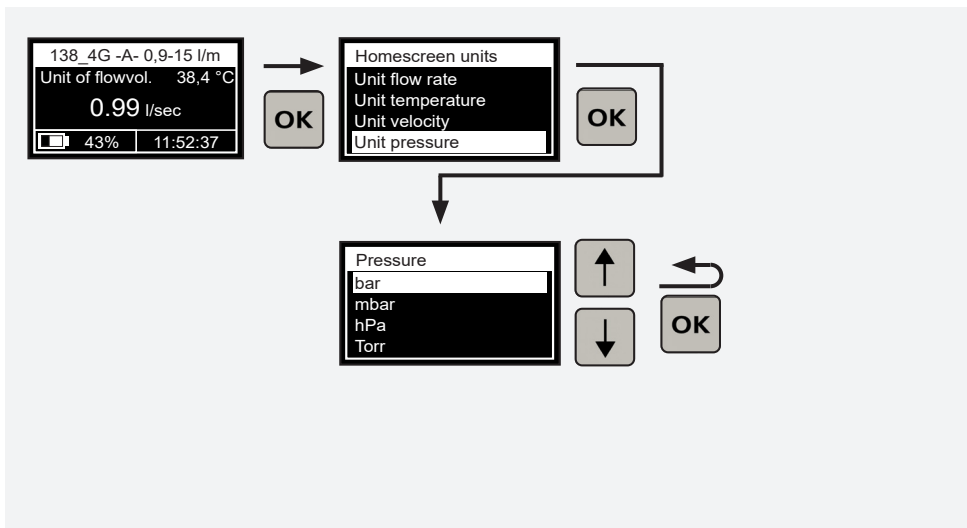
3.7.3

Unit for the flow velocity



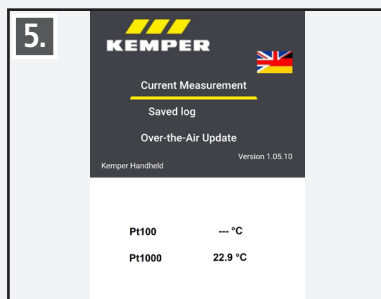
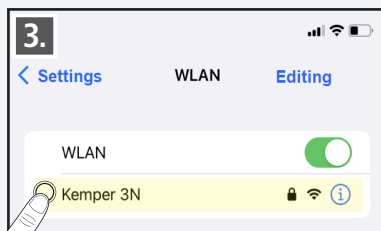
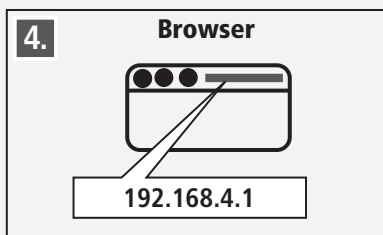
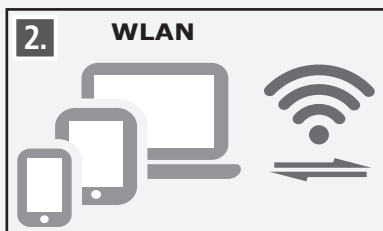
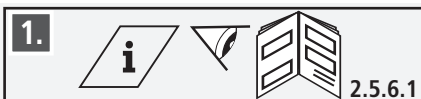
3.7.4

Unit for the pressure



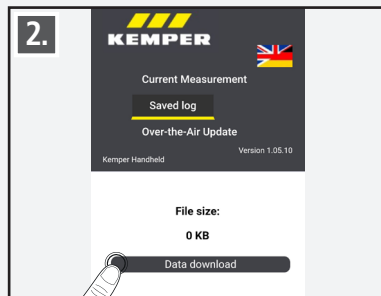
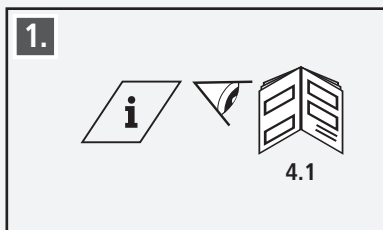
4.1

Connecting to the web server



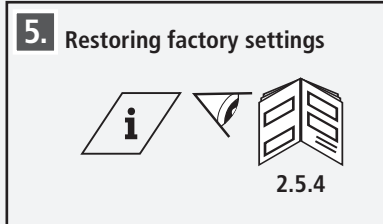
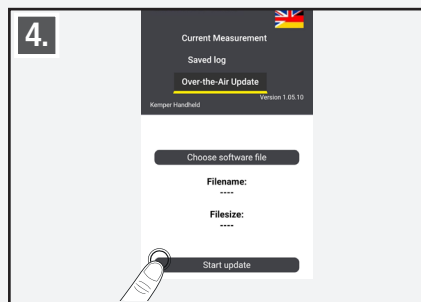
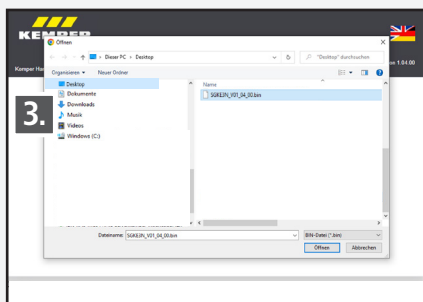
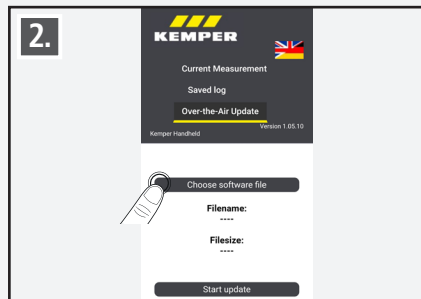
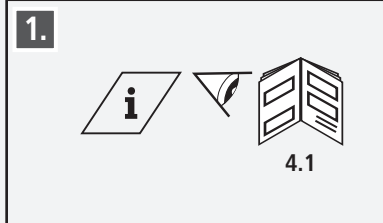
4.2

Transferring the portable measuring instrument measuring data to a terminal device



4.3

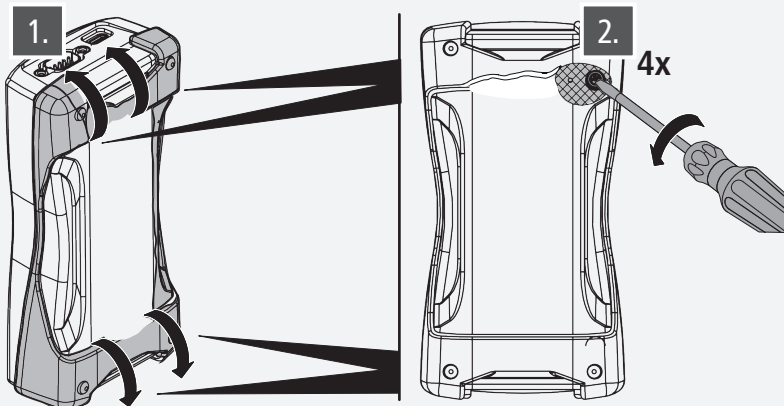
Loading and installing a software update to the portable measuring instrument



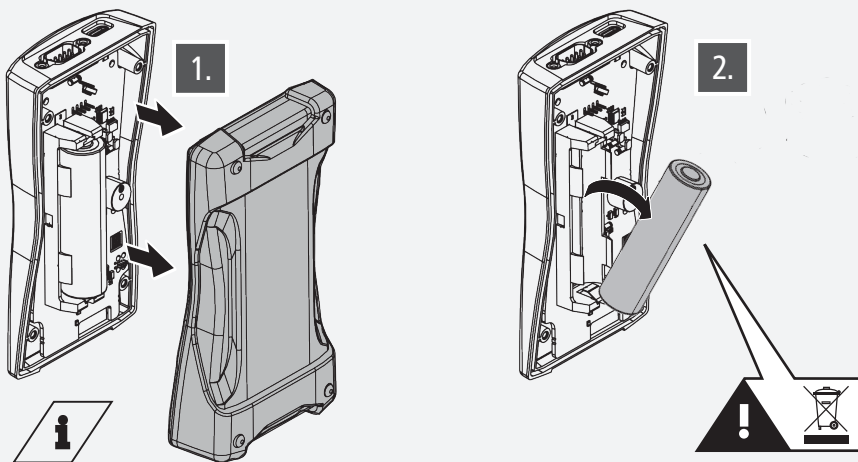
Info

You can find the current software version at:
<https://www.kemper-group.com/de-de/gebaeude-technik/service/downloads-und-epaper-portal/>

1



2

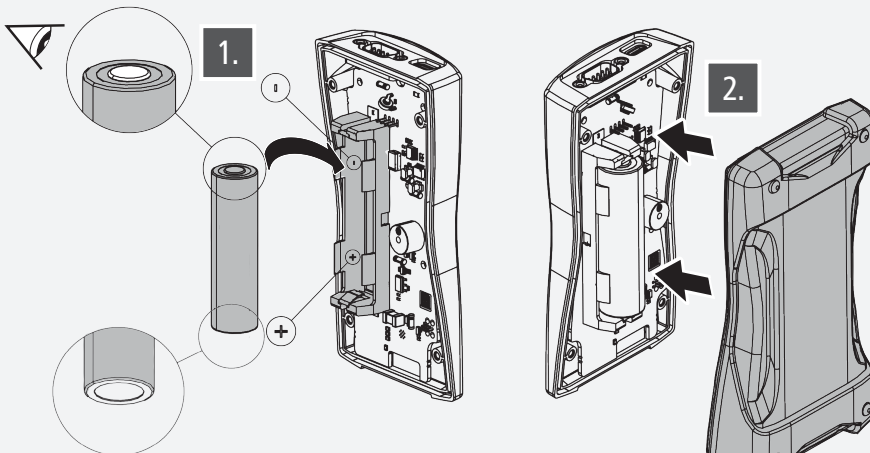
**Info**

The screws remain in the rubberised sheathing - this prevents them falling out.

5

Battery change

3



Info

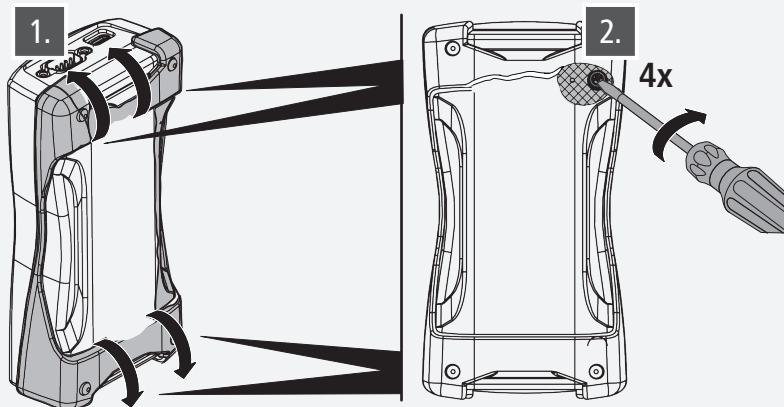
Li-Ion battery 18650
Part no. 3692300100



Attention!

Please make sure that the battery is inserted the right way round, otherwise the device may be damaged!

4



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Ligne d'assistance téléphonique du service après-vente

Tél.: +49 2761 891 800

E-mail: anwendungstechnik@kemper-group.com

A propos de cette notice

Lisez soigneusement la notice avant le montage ou l'utilisation et respectez les instructions! Conservez la notice comme référence à l'avenir!

Les illustrations de cette notice ont pour but de donner au lecteur une compréhension de base et peuvent diverger du modèle existant.

Responsabilité

Le fabricant n'assume aucune responsabilité ni aucune garantie:

- en cas de non-respect de cette notice,
- en cas d'installation et/ou d'utilisation incorrecte(s),
- en cas de modification autonome du produit et
- en cas de toute autre utilisation inappropriée.

Consignes de sécurité

Tenez compte et respectez impérativement les consignes de sécurité indiquées dans cette notice. Le non-respect des consignes de sécurité peut entraîner la mort, des blessures ou des dommages matériels.

Les consignes de sécurité sont caractérisées par des symboles et sont signalées par des termes qui expriment la gravité du risque.

Les consignes de sécurité suivantes sont utilisées dans cette notice:

Avertissement!

Indique les dangers pouvant entraîner des blessures, des dégâts matériels ou une contamination de l'eau potable.

Remarque!

Indique les dangers pouvant entraîner des détériorations sur l'installation ou des dysfonctionnements.

Info

Informations supplémentaires et conseils.

Elimination des déchets

Tenez compte des prescriptions locales relatives au recyclage et à l'élimination des déchets. Il est interdit de jeter le produit dans les ordures ménagères. Il faut, par contre, le mettre au rebut de manière appropriée.

Il est interdit de jeter les piles usagées dans les ordures ménagères. Vous êtes tenu par la loi de remettre les piles usagées à un centre de collecte approprié.

Avertissement!

Respecter avant tout les normes et les réglementations nationales d'installations sanitaires ainsi que celles de prévention des accidents.

Stockage

Stockez l'appareil de mesure manuel CONTROL-PLUS comme suit:

- emballé,
- à un emplacement sec, exempt de poussière,
- pas à l'extérieur,
- protégé de la chaleur et du froid,
- à une température de stockage comprise entre 0 et 50 °C.

1

A propos de CONTROL-PLUS appareil de mesure manuel pour capteurs

Utilisation conforme

En combinaison avec les différents capteurs KEMPER, l'appareil de mesure manuel CONTROL-PLUS sert à déterminer et à documenter les états de fonctionnement dans les installations d'eau potable.

N'utilisez l'appareil:

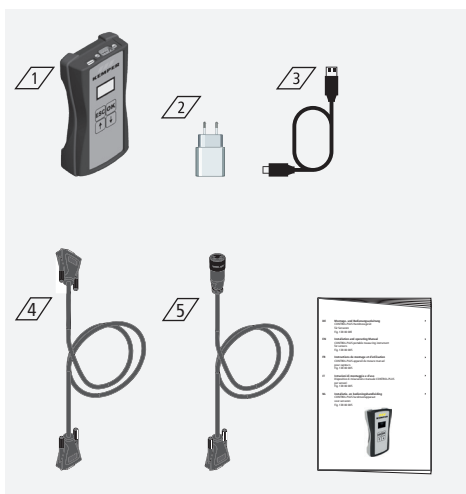
- que s'il est dans un état irréprochable et
- que de manière conforme.

KEMPER capteurs

Figure	Désignation
138 4G 638 4G	Vanne de mesure de débit et de température
138 00 006	Capteur de pression
138 00 011	Capteur module de mesure
138 00 003	Sonde de température manuelle
138 00 004	CONTROL-PLUS Sonde de température à emboîtement

1.1

Contenu de livraison



Contenu de livraison

Inclus:

- Appareil de mesure manuel
- Bloc d'alimentation USB 230 V/5 V
- Câble de recharge USB-C
- Câble de mesure pour la connexion à un capteur module de mesure (Figure 138 00 011)
- Câble de mesure pour la connexion à une vanne de mesure de débit et de la température (Figure 138 4G)
- Instructions de montage et d'utilisation

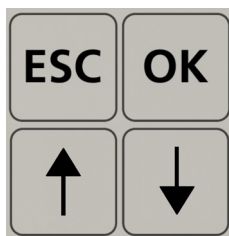
Caractéristiques techniques		
Puissance absorbée de l'appareil	5	W
Entrées d'enregistrement des données	12.000	max.
Plage de la température ambiante	0 bis + 50	°C
Degré de protection	IP 20	
Dimensions de l'appareil	142x77x38,3	mm
Interface utilisateur intégrée (écran + 4 touches)	• Réglages • Paramétrage • Vue d'ensemble • Transfer de données	
Interface réseau (WiFi) pour interface utilisation en ligne	• Vue d'ensemble • Transfert de données • Mise à jour du micrologiciel • Mise à jour du serveur web	
Interface USB-C	• Mise à jour du micrologiciel • Mise à jour du serveur web • Transfert de données • Alimentation électrique	
Menu des langues	• Deutsch • English • Nederlands	
Modes de fonctionnement Types de mesure	• Mesure de la température et du débit • Mesure de la température • Mesure de la pression • Enregistrement des données	

2

Utilisation

2.1

Navigation dans les menus



Touches	Description
ESC	Quitter le menu / Commutation entre Vue d'ensemble et Menu principal
↑	Déplacement vers l'arrière
OK	Touche de confirmation
↓	Déplacement vers l'avant

Tous les menus sont configurés «en continu» ce qui signifie que la pression de la touche „↓” à

la dernière entrée du menu fait passer à la première entrée du menu.

2.2

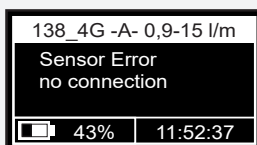
Mise sous tension et affichage de la vue d'ensemble de l'appareil

Appuyez sur la touche „OK” pendant plus d'une seconde pour mettre l'appareil sous tension.



Version du logiciel

Date



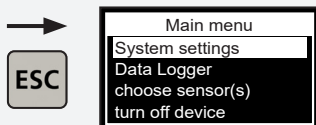
Niveau de charge de l'accu

Heure

Type du capteur

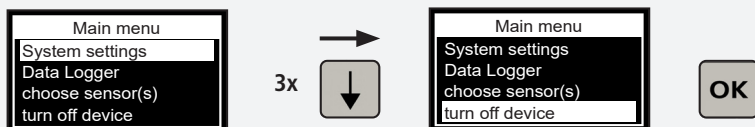
Affichage des valeurs mesurées

Il suffit d'appuyer sur la touche „ESC” pour aller au menu principal.



2.4

Mise hors tension de l'appareil

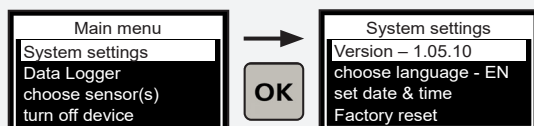


2.5

Réglages du système

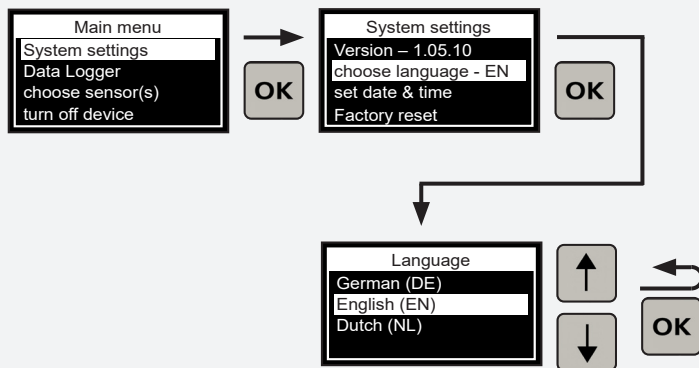
2.5.1

Affichage de la version du logiciel de l'appareil



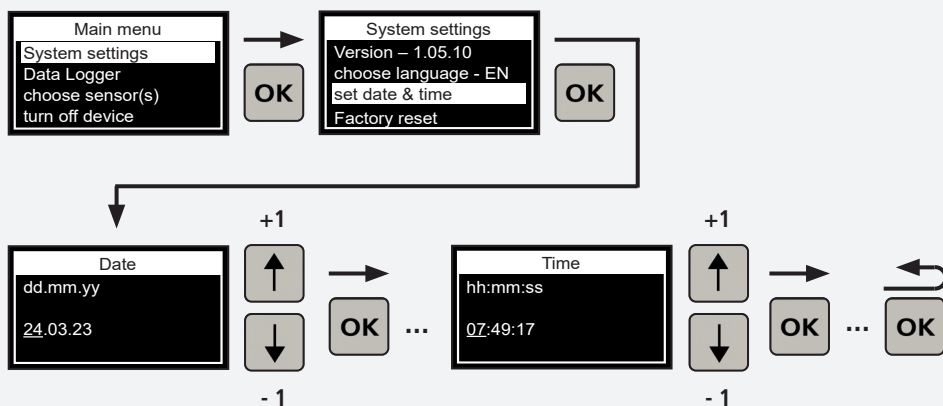
2.5.2

Sélection de la langue

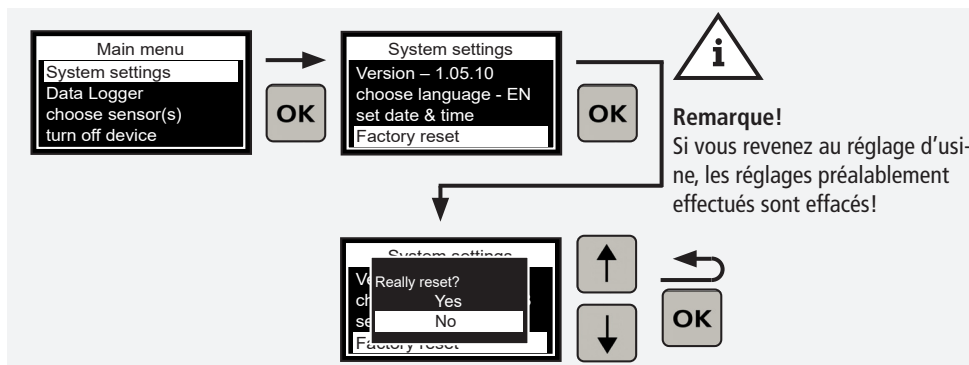


2.5.3

Date et heure



Rétablir le réglage d'usine



2.5.5

Réglages d'économies d'énergie

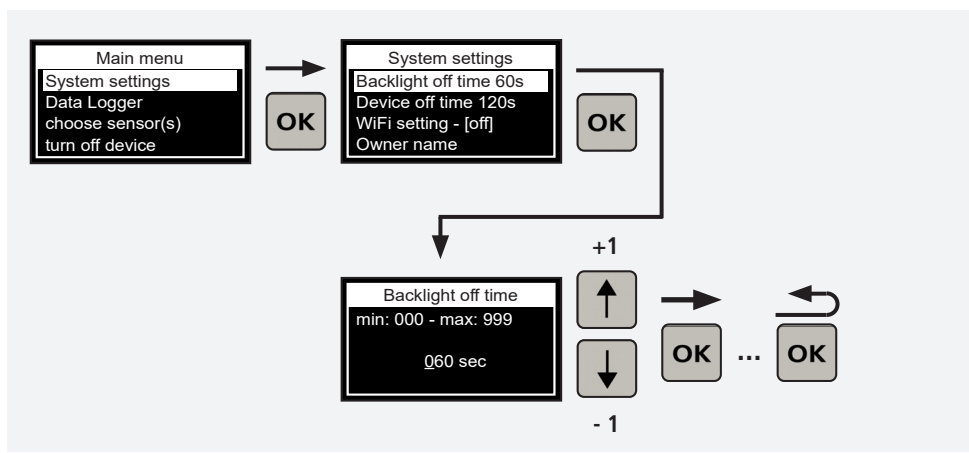
Réglage d'usine:

- Si aucune entrée n'a lieu pendant 60 secondes, l'écran est **automatiquement désactivé**.
- Si aucune entrée n'a lieu pendant 120 secondes, l'appareil se met hors tension.

Vous pouvez modifier les données temporelles dans le menu principal à l'option de menu „Réglages du système”.

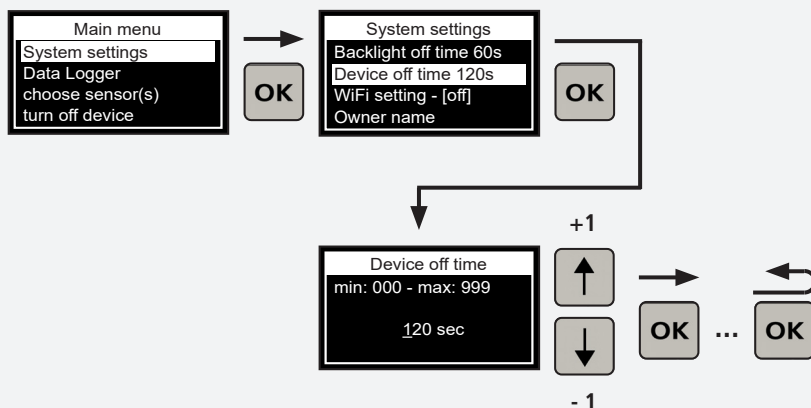
2.5.5.1

Désactivation automatique de l'écran



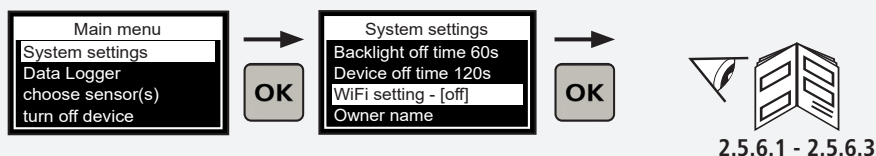
2.5.5.2

Mise hors tension automatique de l'appareil



2.5.6

Réglages WiFi

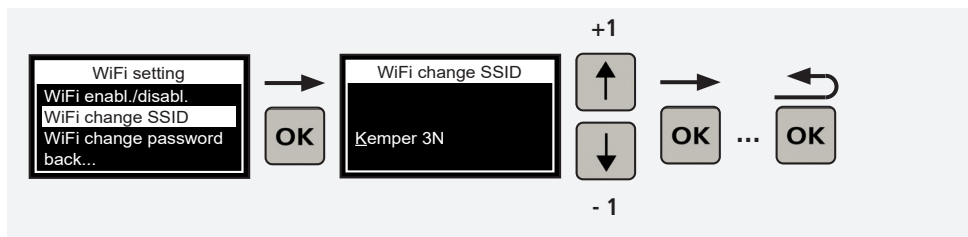


2.5.6.1

Activer | Désactiver le WiFi

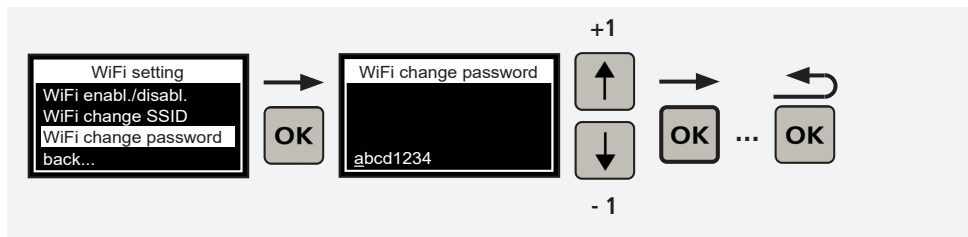


Modifier le SSID du WiFi



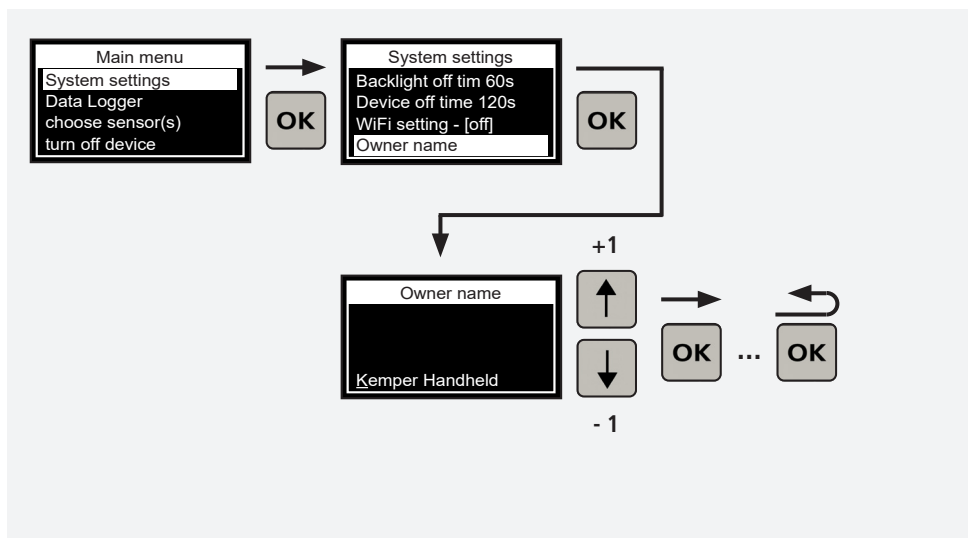
2.5.6.3

Modifier le mot de passe WiFi



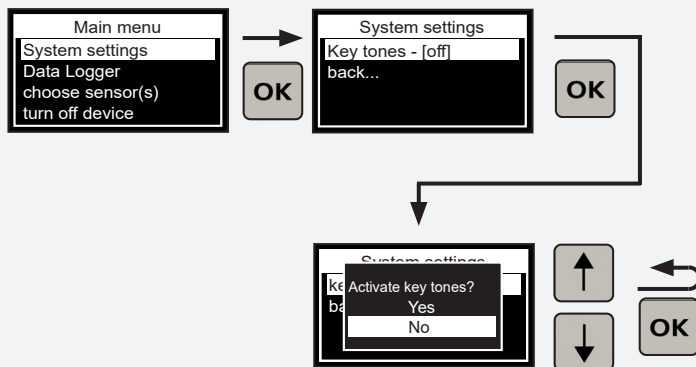
2.5.7

Inscrire le propriétaire de l'appareil



2.5.8

Activer | Désactiver les sons des touches

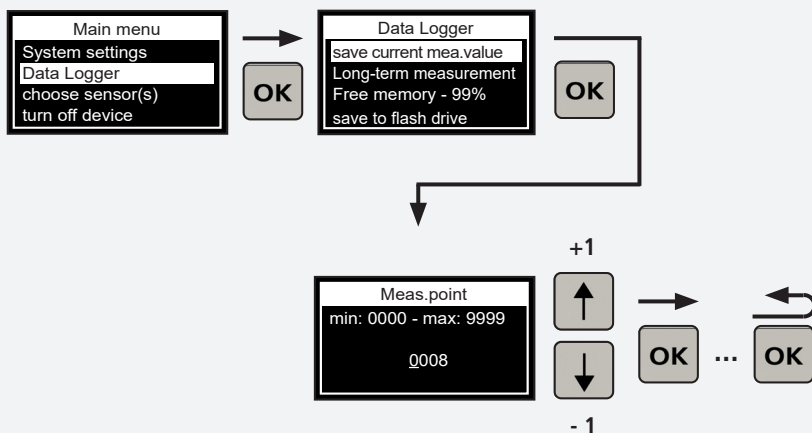


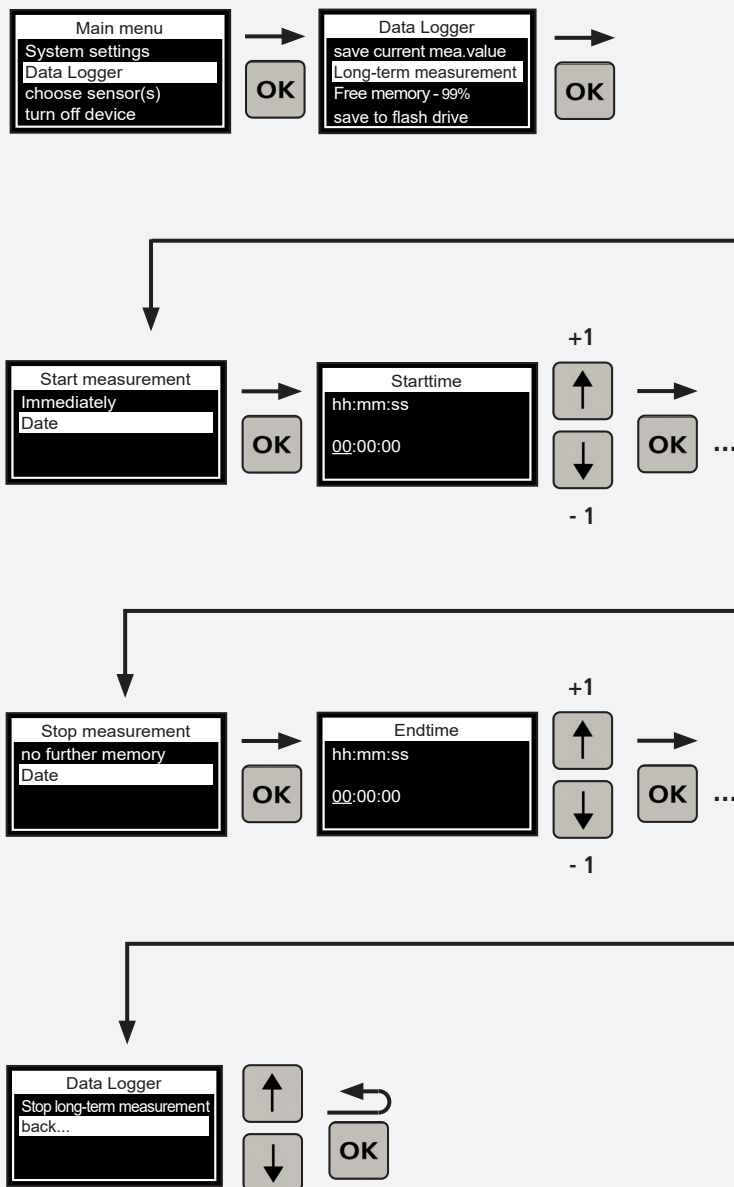
2.6

Réglage de l'enregistreur de données

2.6.1

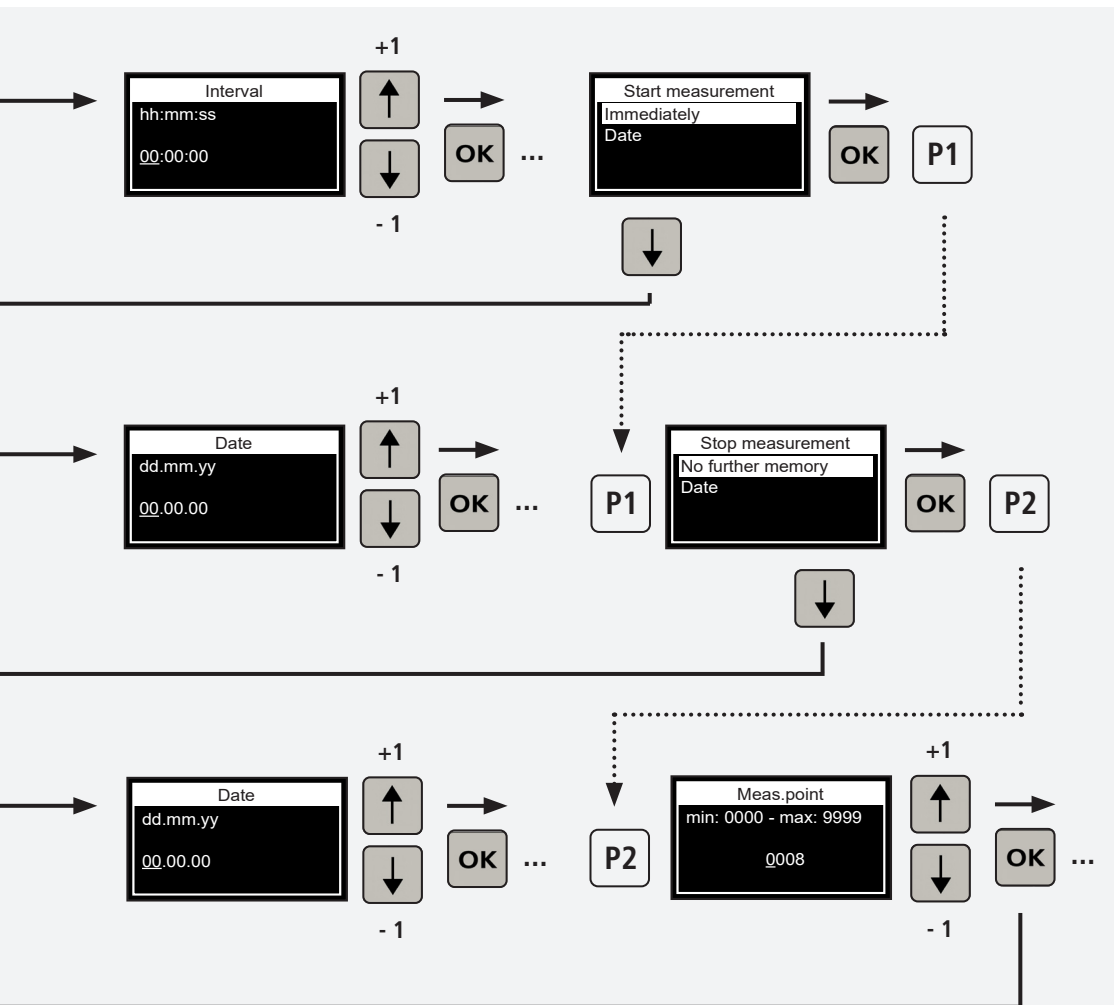
Mémoriser les valeurs de mesure

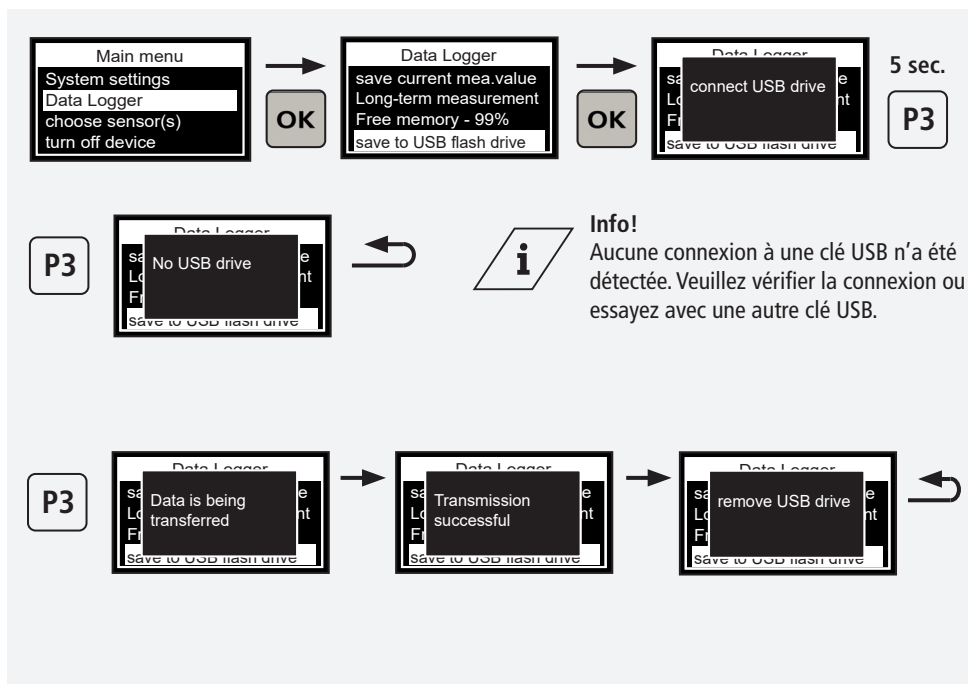
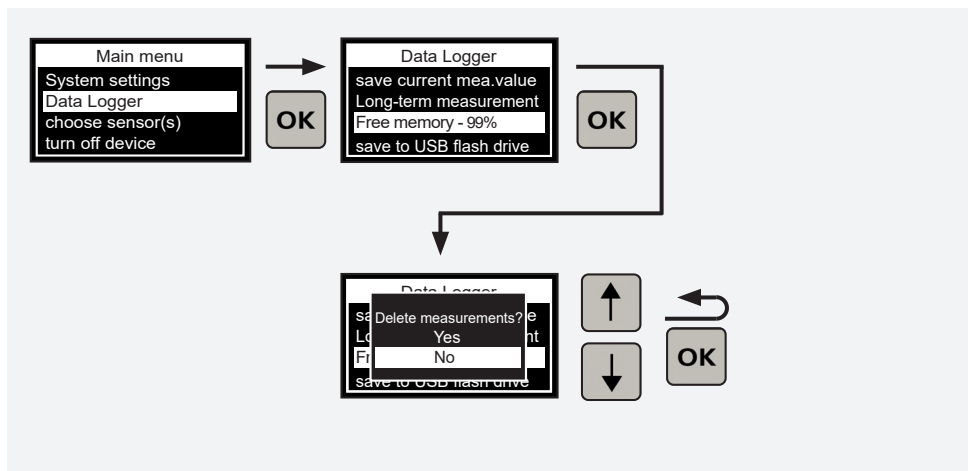




2.6.2

Configurer une mesure à long terme



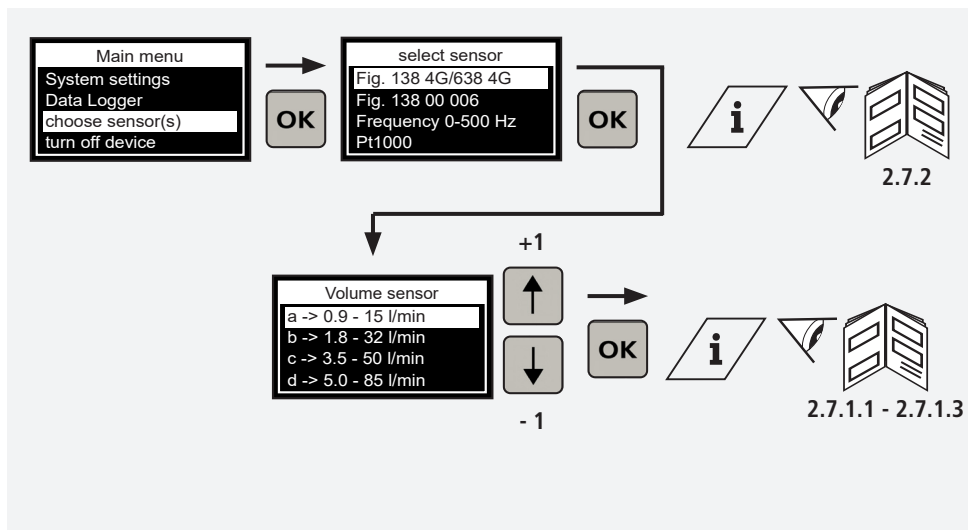


2.7

Sélection du capteur

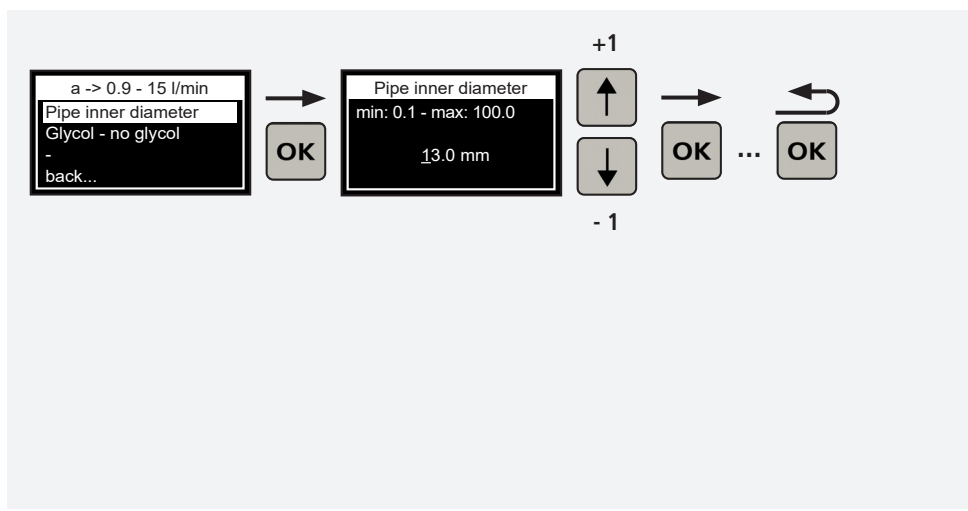
2.7.1

Vanne de mesure de débit et de température figure 138 4G | 638 4G



2.7.1.1

Réglage du diamètre intérieur du tube

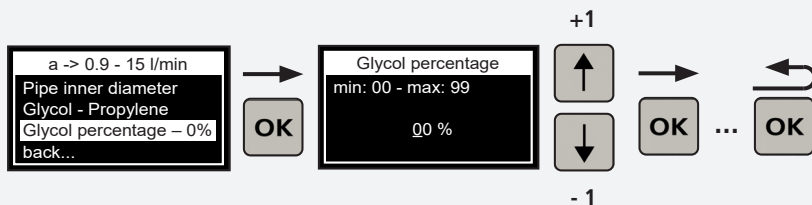


Sélection des types de glycol possibles dans le fluide



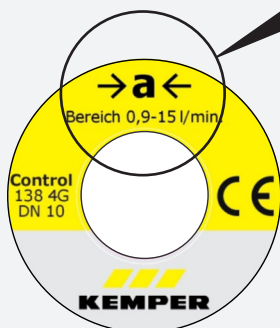
2.7.1.3

Réglage de la teneur en glycol



2.7.2

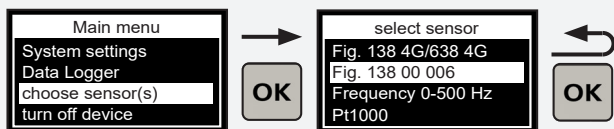
Affectation de la plage de mesure du capteur d'une vanne de mesure de débit et de température Figures 138 4G | 638 4G



Marquage	Plage de mesure	Figure
→a←	0,9 - 15 l/min.	138 4G 010
→b←	1,8 - 32 l/min	138 4G 015
→c←	3,5 - 50 l/min	138 4G 020
→d←	5 - 85 l/min	138 4G 025
→e←	9 - 150 l/min	138 4G 032
→f←	11 - 188 l/min	138 4G 040
→g←	18 - 316 l/min	138 4G 050

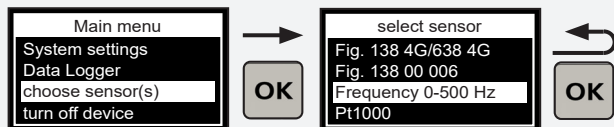
2.7.3

Capteur de pression figure 138 00 006



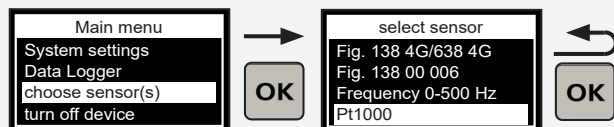
2.7.4

Sortie de la fréquence d'un capteur de fréquence quelconque



2.7.5

Sonde de température Pt1000|Pt100

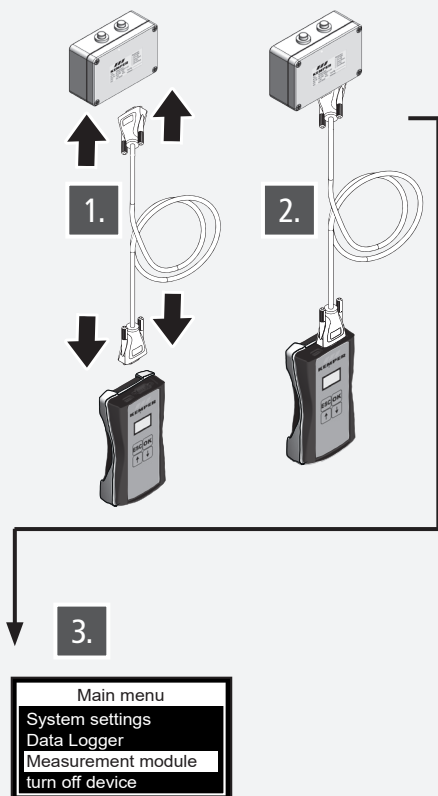


Raccordement de l'appareil de mesure manuel à un capteur module de mesure Figure 138 00 011



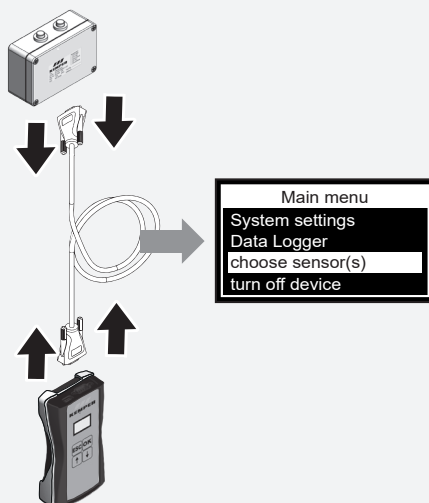
Remarque!

Raccordez l'appareil de mesure manuel en utilisant le câble D-Sub (également fourni avec l'appareil de mesure manuel) et le module de mesure pour pouvoir procéder à la configuration dans le menu Module de mesure.



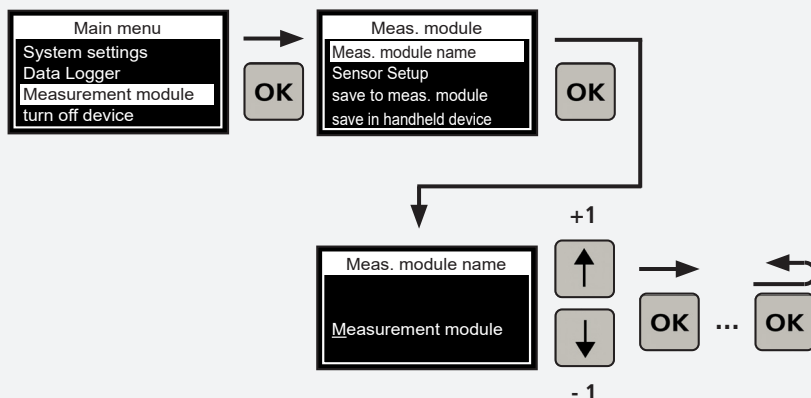
Remarque!

En cas d'absence de connexion, l'option de menu ne s'affiche **pas** dans le menu principal!



3.1

Modification de la désignation du capteur module de mesure

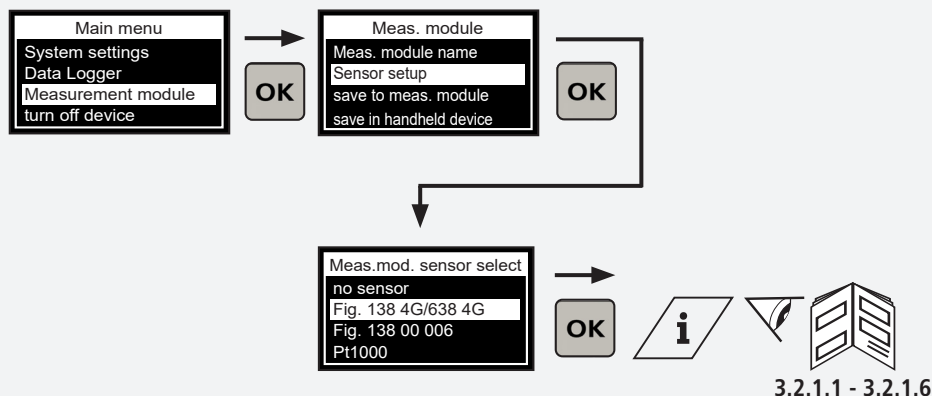


3.2

Sélection et réglage d'un capteur

3.2.1

Vanne de mesure de débit et de température figure 138 4G | 638 4G



Sélection de la plage de mesure du capteur



Setup Fig. 138 4G/638 4G
 Sensor measuring range
 Pipe inner diameter
 Glycol – no glycol
 –

OK

Volume sensor
 a -> 0.9 - 15 l/min
 b -> 1.8 - 32 l/min
 c -> 3.5 - 50 l/min
 d -> 5.0 - 85 l/min



OK

3.2.1.2

Information sur le diamètre intérieur du tube

Setup Fig. 138 4G/638 4G
 Sensor measuring range
 Pipe inner diameter
 Glycol – no glycol
 –

OK



3.2.1.3

Information sur le type de glycol

Setup Fig. 138 4G/638 4G
 Sensor measuring range
 Pipe inner diameter
 Glycol – no glycol
 –

OK



3.2.1.4

Information sur la teneur en glycol

Setup Fig. 138 4G/638 4G
Sensor measuring range
Pipe inner diameter
Glycol - Propylene
Glycol percentage - 0%



2.7.1.3

3.2.1.5

Compensation du câble

Toutes les mesures de la température sont analysées par l'appareil de mesure manuel sous forme d'une mesure à 2 conducteurs. Les mesures sont faussées par la résistance du câble. Il est recommandé de compenser les écarts de

résistance, qui résultent des rallonges des câbles entre le capteur de température et le module de mesure au moyen de l'option de menu „Compensation du câble”.

Setup Fig. 138 4G/638 4G
Cable compensation
save to meas. module
back...



3.2.1.5.1 - 3.2.1.5.3

3.2.1.5.1

Compensation du câble via la longueur et la section

Cable compensation by...
Length x cross-section
Resistive offset
Temperature offset



Wire length
min: 00.00 - max: 99.99
00.00 m



...



Wire diameter
min: 00.00 - max: 99.99
00.00 mm²

+1



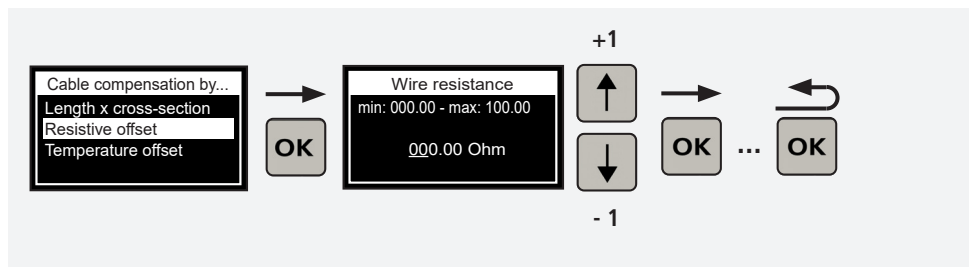
- 1



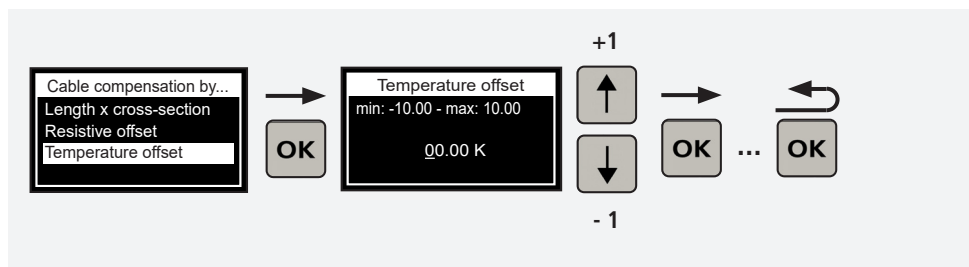
...



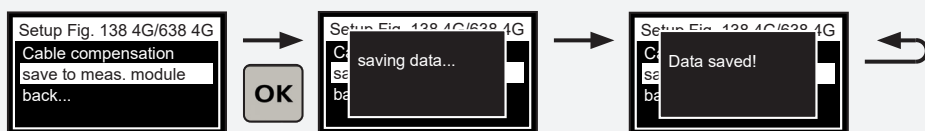
Compensation du câble via le décalage de la résistance



Compensation du câble via le décalage de la température



Mémorisation des réglages sur le module de mesure

**Remarque!**

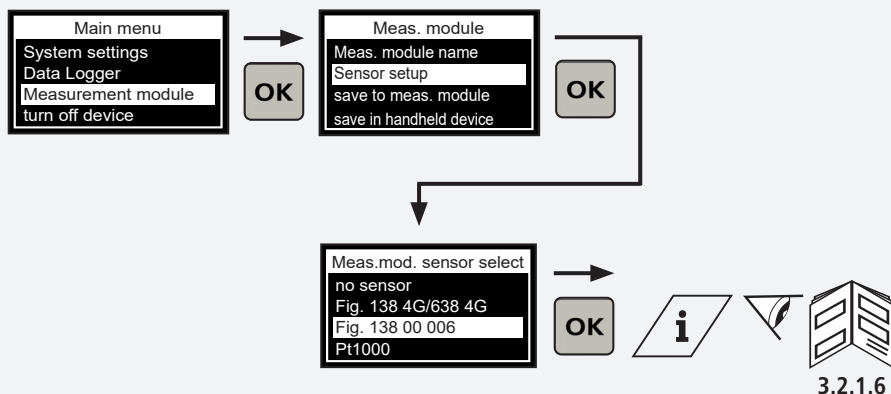
Après avoir saisi les réglages du capteur, exécutez la fonction «Mémorisation dans le module de mesure»! Ce n'est qu'ainsi que la configuration réglée sur l'appareil de mesure manuel est mémorisée en permanence sur le

module de mesure.

Si l'enregistrement n'est pas effectué et si le câble de mesure est débranché du module de mesure ou de l'appareil de mesure manuel, vous devez à nouveau saisir les réglages du capteur pour d'autres mesures!

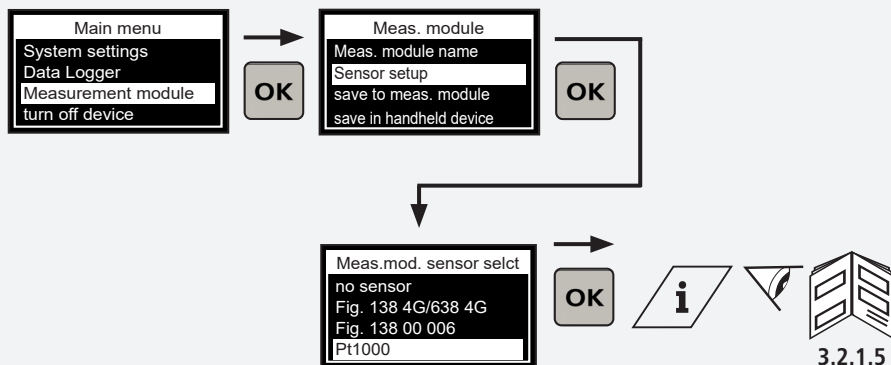
3.2.2

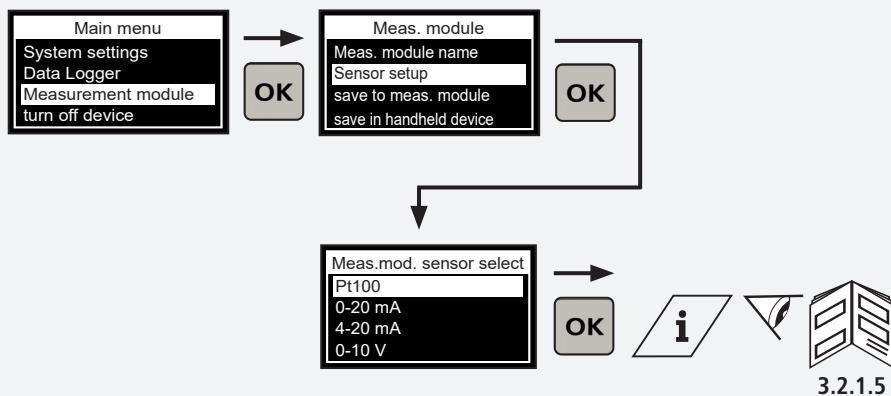
Capteur de pression figure 138 00 006



3.2.3

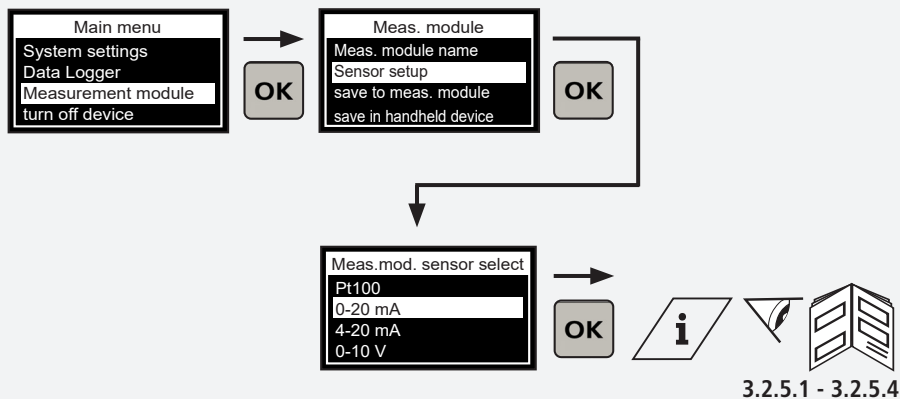
Sonde de température Pt1000

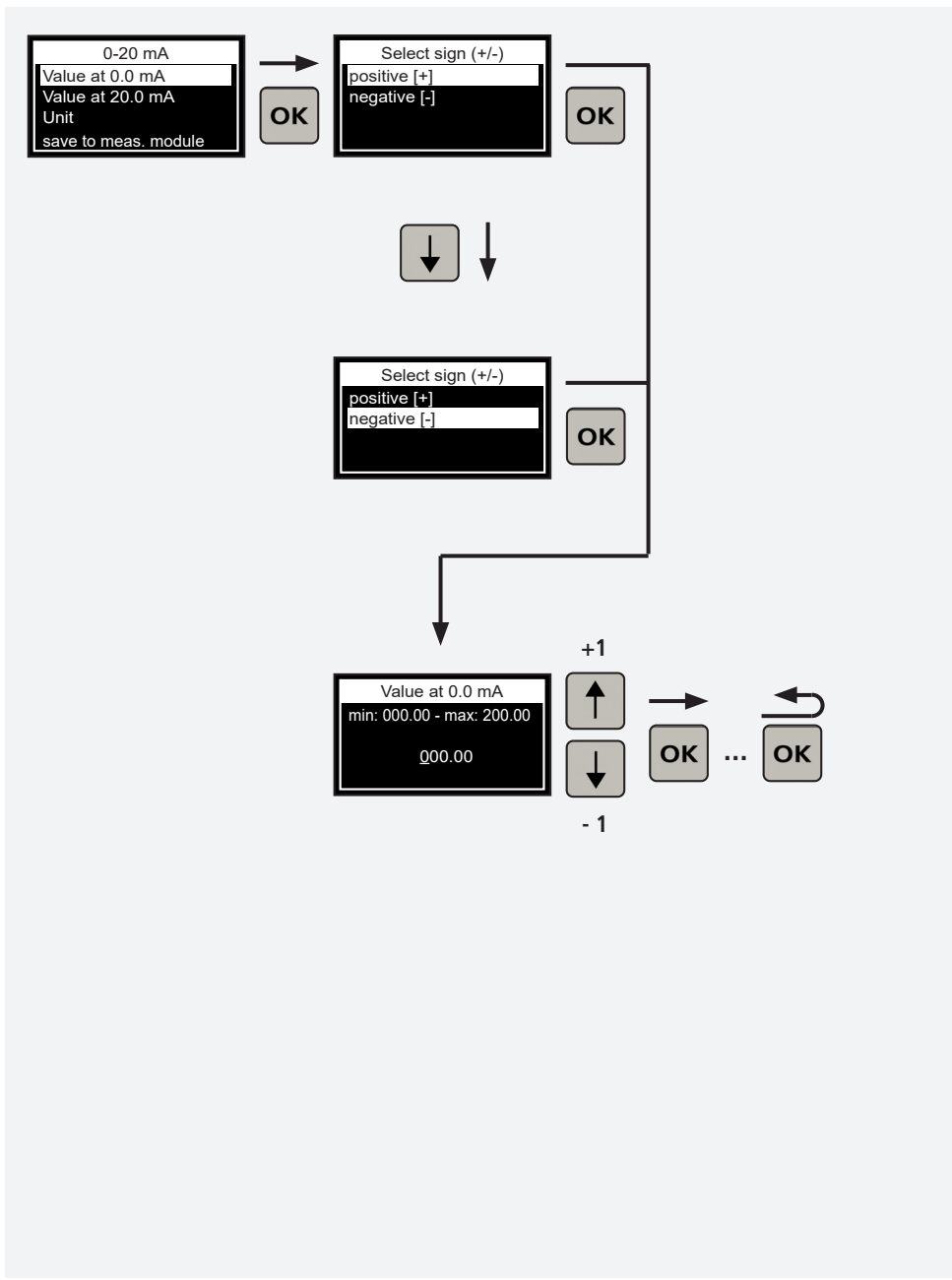


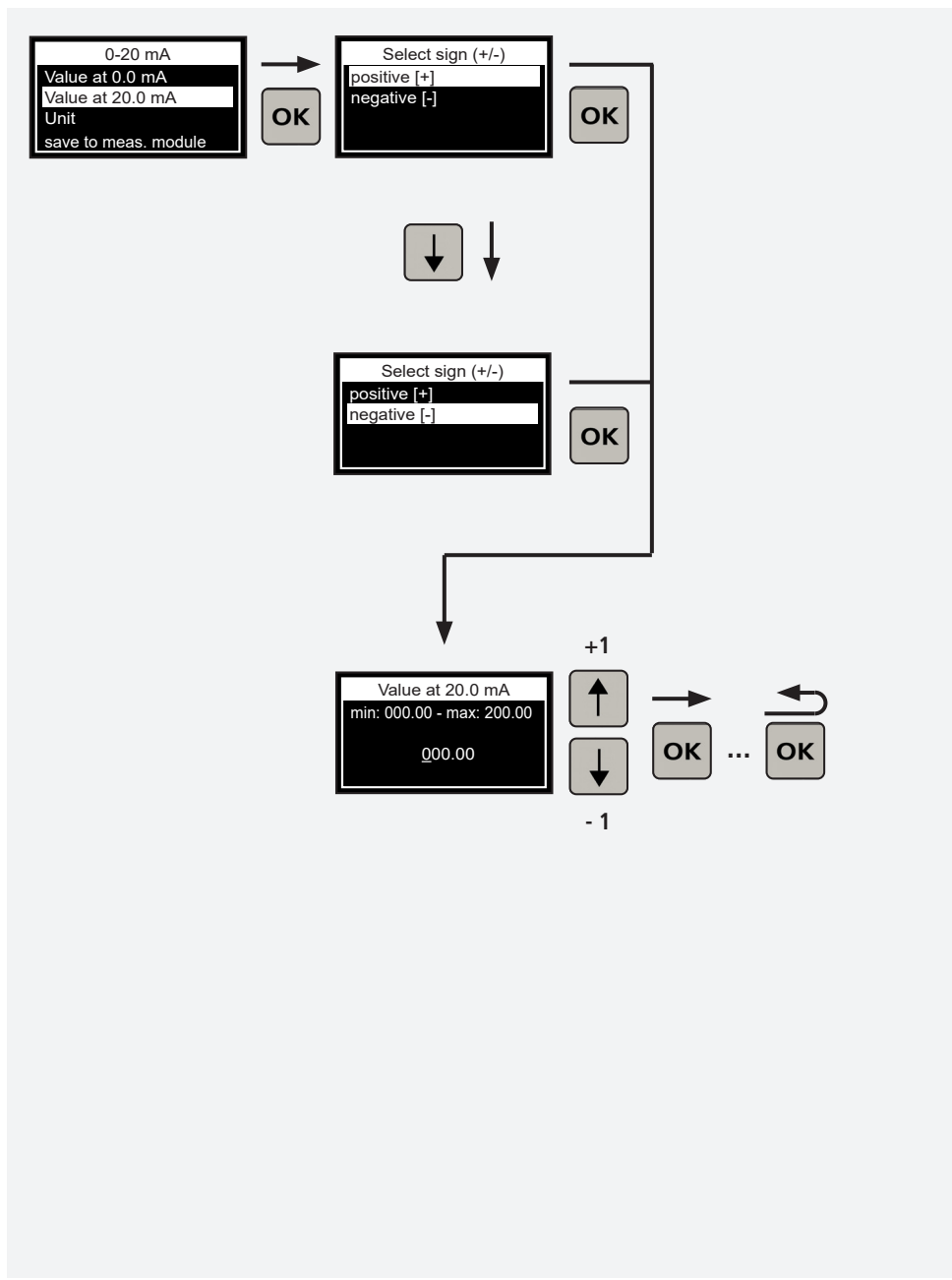


3.2.5

Capteurs 0-20 mA

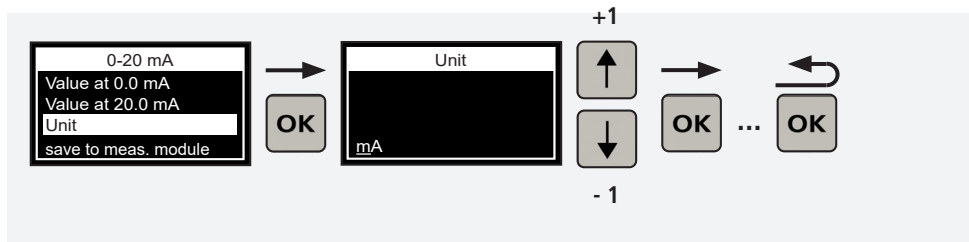






3.2.5.3

Détermination de l'unité



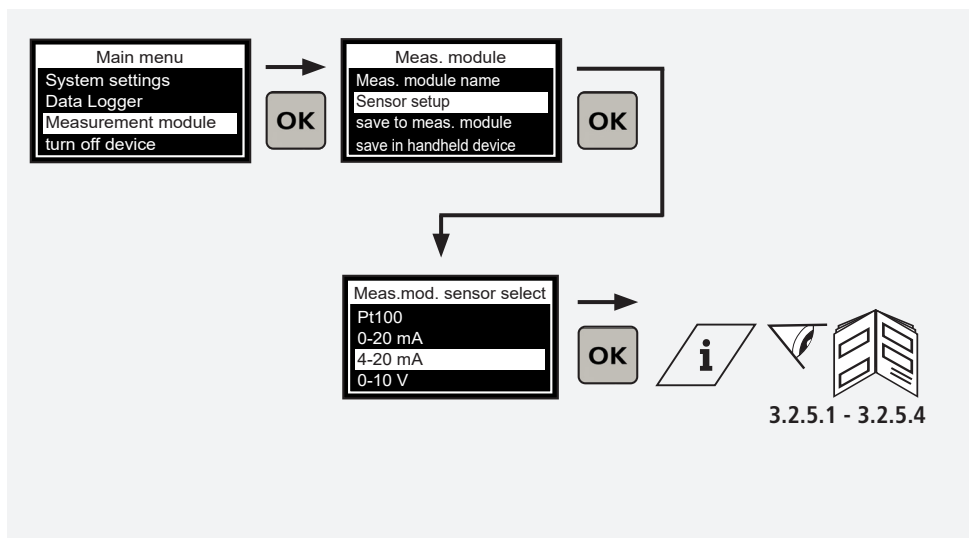
3.2.5.4

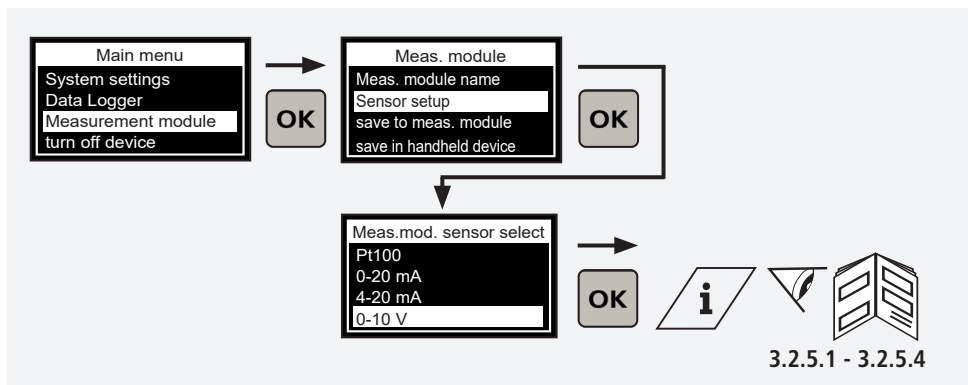
Mémorisation des réglages



3.2.6

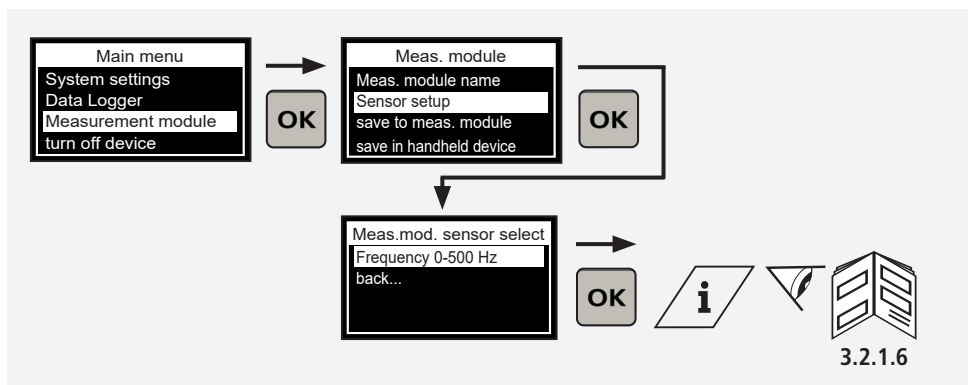
Capteurs 4-20 mA





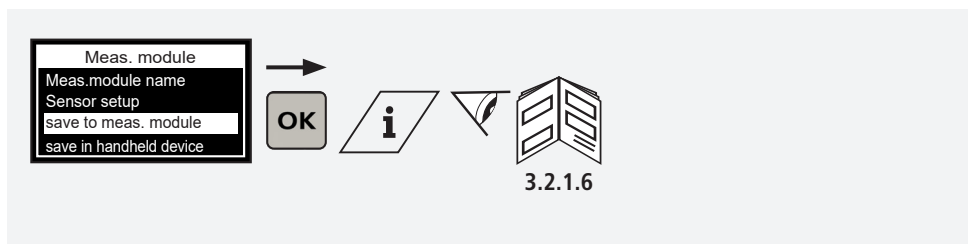
3.2.8

Capteurs de fréquence 0-500 Hz



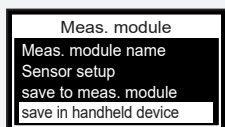
3.3

Mémorisation du réglage dans le module de mesure



3.4

Mémorisation temporaire du réglage dans l'appareil de mesure manuel

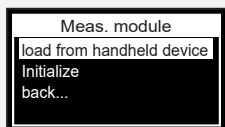


Info!

La configuration du module de mesure raccordé est sauvegardée dans la mémoire tampon de l'appareil de mesure manuel. Elle peut maintenant être utilisée pour la configuration d'autres modules de mesure.

3.5

Chargement du réglage issu de la mémoire tampon de l'appareil de mesure manuel



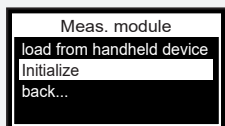
Remarque!

Utilisez une configuration issue de la mémoire tampon de l'appareil de mesure manuel pour le module de mesure raccordé. **Afin de reprendre la configuration sur le module de mesure également après avoir déconnecté l'appareil de mesure manuel, mémorisez-la absolument dans le module de mesure!**



3.6

Initialiser le module de mesure



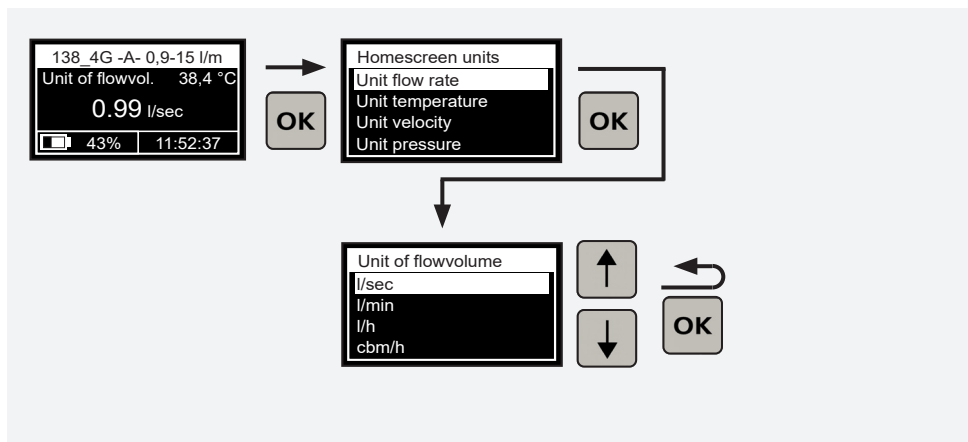
Info!

Lorsque vous effectuez l'initialisation, vous remettez le module de mesure au réglage d'usine. Tous les réglages préalablement effectués sont alors effacés!

Sélection des unités affichées pendant la mesure

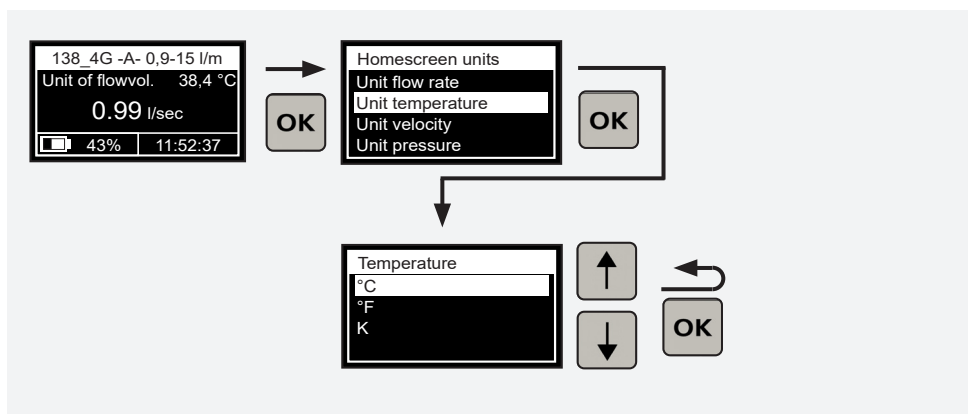
3.7.1

Unité pour le débit volumique



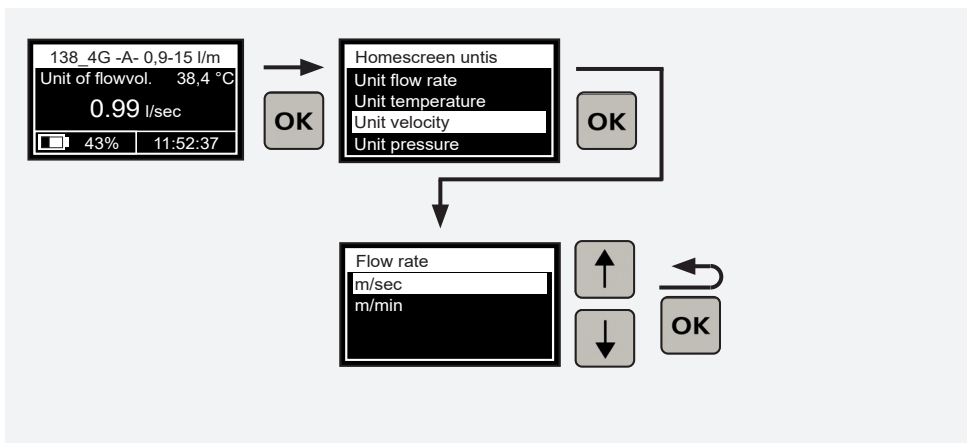
3.7.2

Unité pour la température



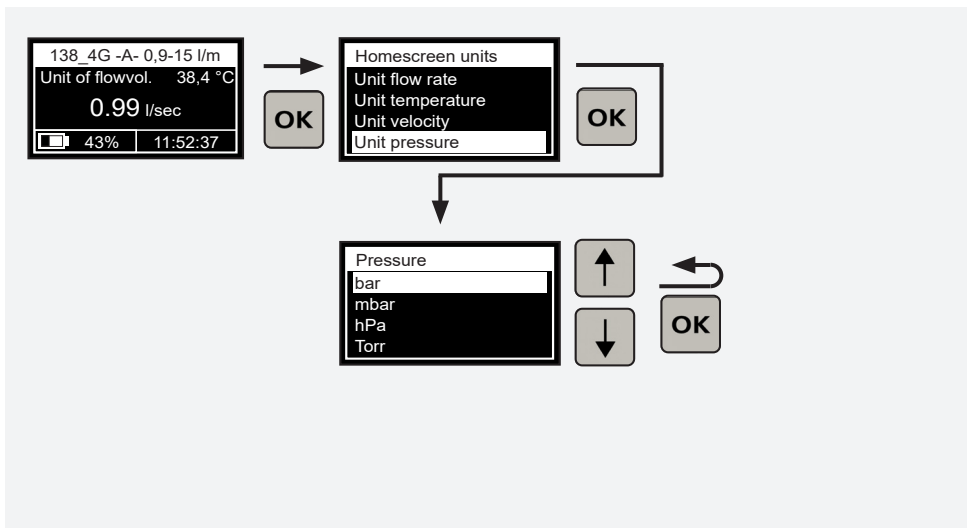
3.7.3

Unité pour la vitesse d'écoulement



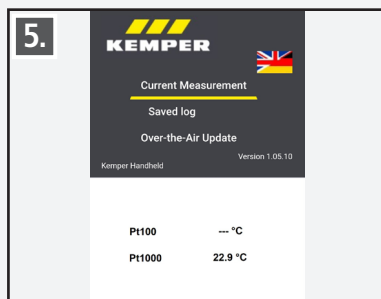
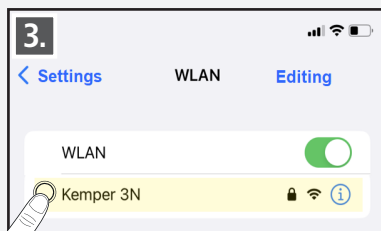
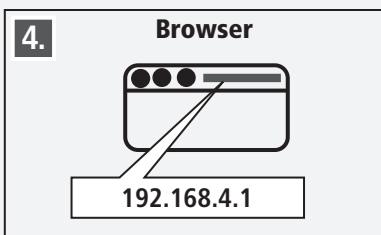
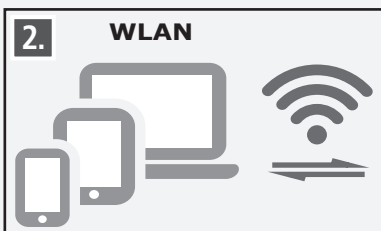
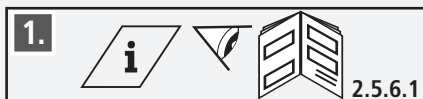
3.7.4

Unité pour la pression



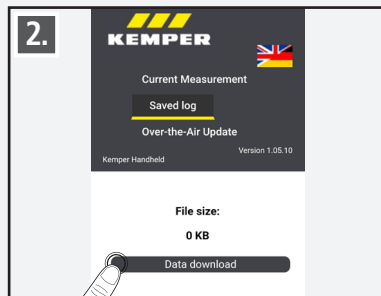
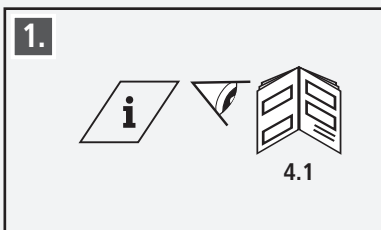
4.1

Etablir la connexion avec le serveur web



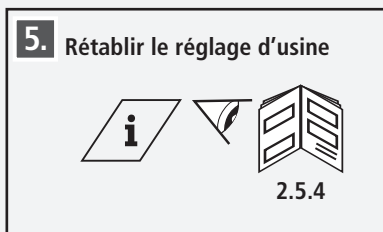
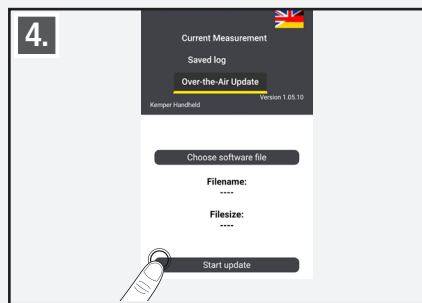
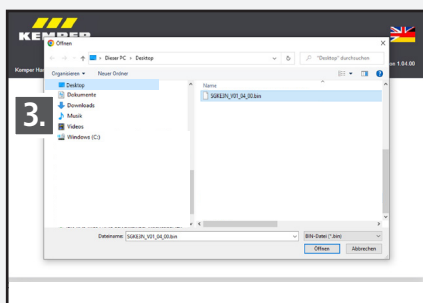
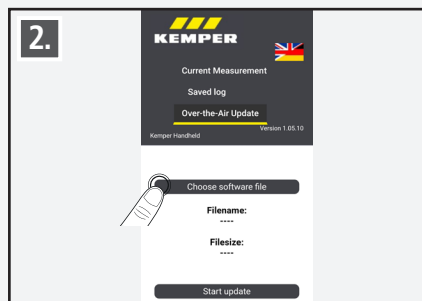
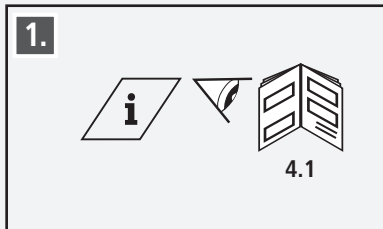
4.2

Transmettre les données de mesure de l'appareil de mesure manuel à un terminal



4.3

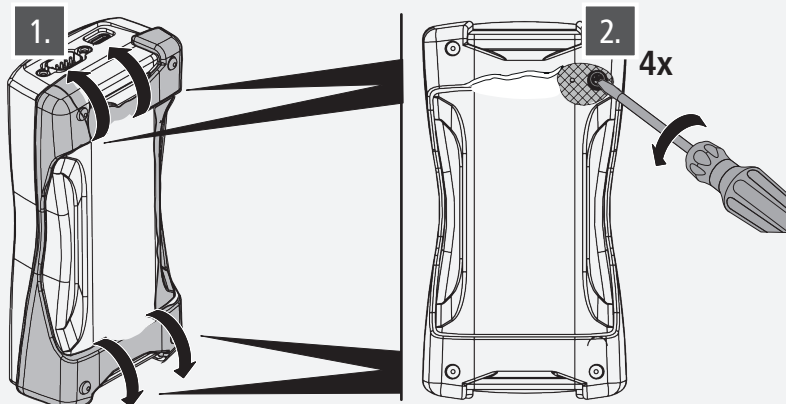
Chargement et installation de la mise à jour du logiciel de l'appareil de mesure manuel



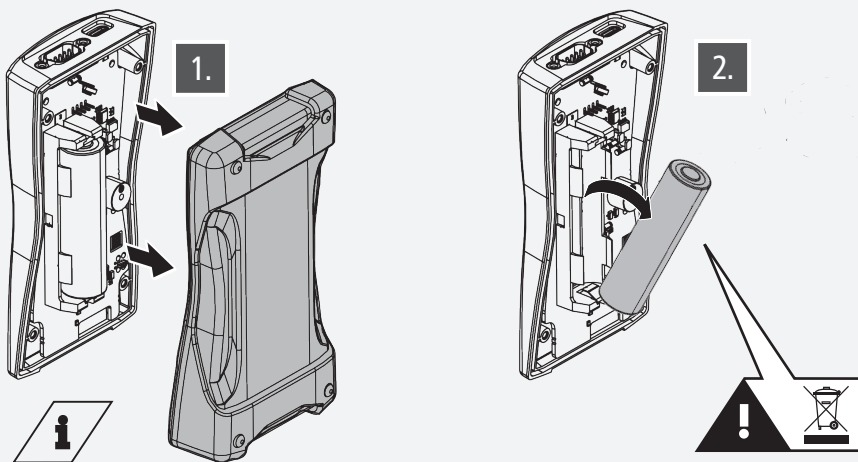
Info!

Vous trouverez la version actuelle du logiciel à l'adresse:
<https://www.kemper-group.com/de-de/gebaeude-technik/service/downloads-und-epaper-portal/>

1



2

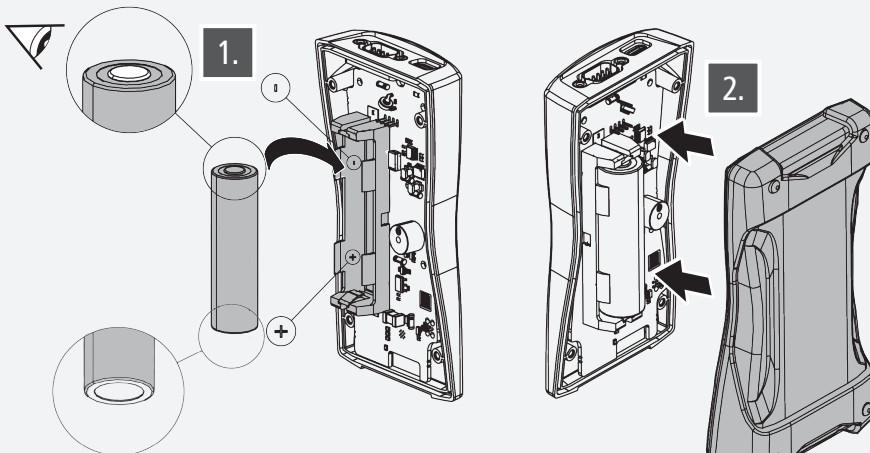
**Info!**

Les vis restent dans le revêtement caoutchouté - ce qui empêche toute chute.

5

Remplacement de l'accu

3



Info!

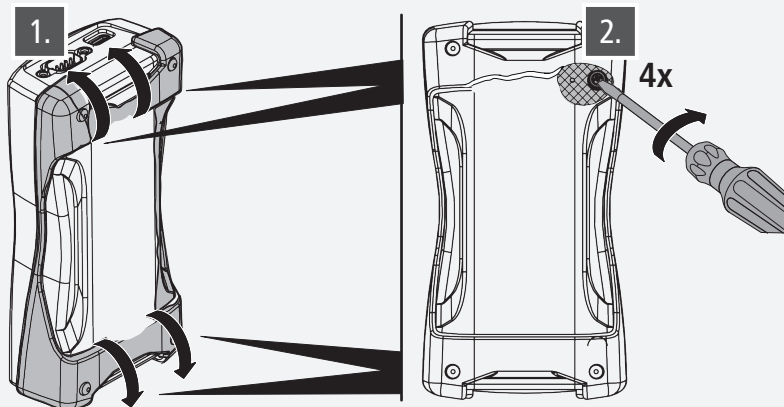
Accu Li-ion 18650
Réf. 3692300100



Remarque!

Veuillez tenir compte que l'accu doit être utilisé dans le bon sens. Sinon, cela pourrait endommager l'appareil!

4



Informazioni su queste istruzioni	112
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Informazioni su queste istruzioni

Leggere con attenzione le presenti istruzioni prima di procedere al montaggio e all'utilizzo. Attenersi alle indicazioni fornite! Conservare le istruzioni per poterle consultare in seguito!

Le immagini riportate in queste istruzioni hanno lo scopo di agevolare la comprensione di base e possono differire dall'effettiva versione dell'impianto.

Responsabilità

Il produttore non fornisce alcuna garanzia né si assume alcuna responsabilità in caso di:

- mancata osservanza delle presenti istruzioni
- installazione e/o utilizzo errato
- modifica arbitraria del prodotto
- altro impiego non conforme.

Avvertenze di sicurezza

Attenersi scrupolosamente alle avvertenze di sicurezza riportate nelle presenti istruzioni. La non osservanza delle avvertenze di sicurezza può causare la morte, lesioni o danni materiali. Le avvertenze di sicurezza sono contraddistinte da simboli. Le avvertenze di sicurezza sono segnalate da parole specifiche che indicano l'entità del pericolo.

Nelle presenti istruzioni vengono utilizzate le seguenti avvertenze di sicurezza:

**Avvertenze di
sicurezza****Attenzione!**

Indica i pericoli che possono essere causa di lesioni, danni materiali o inquinamento dell'acqua potabile.

**Nota!**

Indica i pericoli che possono causare danni all'impianto o malfunzionamenti.

**Informazioni**

Indica ulteriori informazioni e suggerimenti.

**Elimination des déchets**

Attenersi alle disposizioni locali in materia di riciclo o smaltimento dei rifiuti. Il prodotto non può essere gettato via con i normali rifiuti domestici, bensì deve essere smaltito in modo appropriato.



Le batterie esaurite non devono essere smaltite con i rifiuti domestici. È obbligatorio per legge portare le batterie in un punto di raccolta adeguato.

**Attenzione!**

Attenersi in via prioritaria alle norme e alle disposizioni nazionali in materia di prevenzione degli infortuni.

Conservazione

Provvedere alla conservazione del dispositivo di misurazione manuale CONTROL-PLUS nel modo seguente:

- imballato,
- in un luogo asciutto, al riparo dalla polvere,
- non all'aperto,
- protetto dal freddo e dal caldo,
- a una temperatura di conservazione di 0-50 °C

Informazioni sul dispositivo di misurazione manuale CONTROL-PLUS

Use conforme

Il dispositivo di misurazione manuale CONTROL-PLUS viene utilizzato in combinazione con i vari sensori KEMPER per determinare e documentare gli stati di funzionamento degli impianti di acqua potabile.

Utilizzare l'apparecchio:

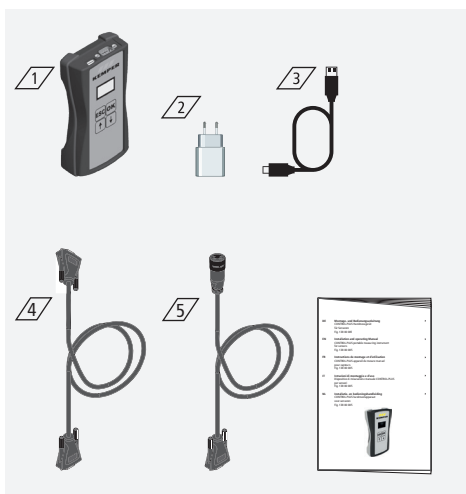
- soltanto se in condizioni perfette
- e conformemente a quanto indicato.

KEMPER Sensori

Figura	Designazione
138 4G 638 4G	Raccordo con sensore termico e di portata
138 00 006	Sensore di pressione
138 00 011	Modulo di misurazione con sensore
138 00 003	Sonda di temperatura manuale
138 00 004	Sonda di temperatura plug-in CONTROL-PLUS

1.1

Fornitura in dotazione



Fornitura in dotazione

Sono inclusi:

- Dispositivo di misurazione manuale
- Alimentatore USB 230 V/5 V
- Cavo di ricarica USB-C
- Cavo di misurazione per il collegamento a un modulo di misurazione con sensore (Figura 130 00 011)
- Cavo di misurazione per il collegamento a un raccordo con sensore termico e di portata (Figura 138 4G)
- Istruzioni di montaggio e d'uso

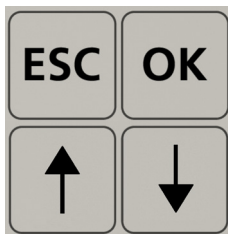
Dati tecnici		
Consumo di energia elettrica del dispositivo	5	W
Voci di registrazione dei dati	12.000	max.
Temperatura aria ambiente	0 bis + 50	°C
Grado di protezione	IP 20	
Dimensioni del dispositivo	142x77x38,3	mm
Interfaccia utente integrata (Display + 4 tasti)	• Impostazioni • Parametrizzazione • Panoramica • Trasferimento dati	
Interfaccia di rete (WLAN) per l'interfaccia utente basata sul web	• Panoramica • Trasferimento dati • Aggiornamento del firmware • Aggiornamento del server web	
Interfaccia USB-C	• Aggiornamento del firmware • Aggiornamento del server web • Trasferimento dati • Alimentazione di tensione	
Menu lingue	• Deutsch • English • Nederlands	
Modalità di funzionamento Modalità di misurazione	• Misurazione della temperatura e della portata • Misurazione della temperatura • Misurazione della pressione • Registrazione dei dati	

2

Utilizzo

2.1

Navigazione nel menu



Tasti	Descrizione
ESC	Uscita dal menu/spostamento tra panoramica e menu principale
↑	Rotazione indietro
OK	Tasto di conferma
↓	Rotazione in avanti

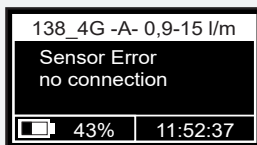
Tutti i menu hanno una struttura „a rotazione“, ovvero premendo il tasto „↓-Taste“ sull’ultima

voce di menu si passa alla prima voce di menu.

2.2

Accensione e schermata panoramica del dispositivo

Premere il tasto „OK“ per più di 1 secondo per accendere il dispositivo.



Tipo di sensore

Indicazione del valore di misurazione



Versione software



Data

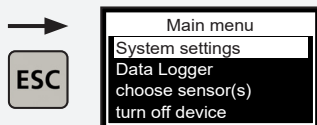


Stato batteria



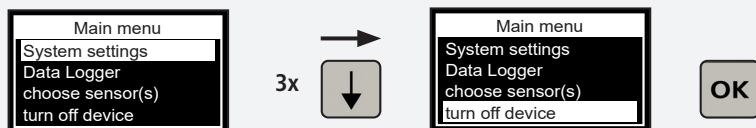
Orario

Premendo il tasto "ESC" si torna al menu principale.



2.4

Spegnimento del dispositivo

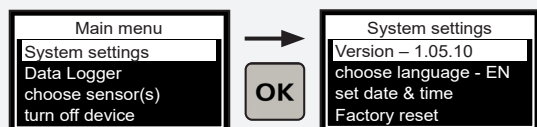


2.5

Impostazioni di sistema

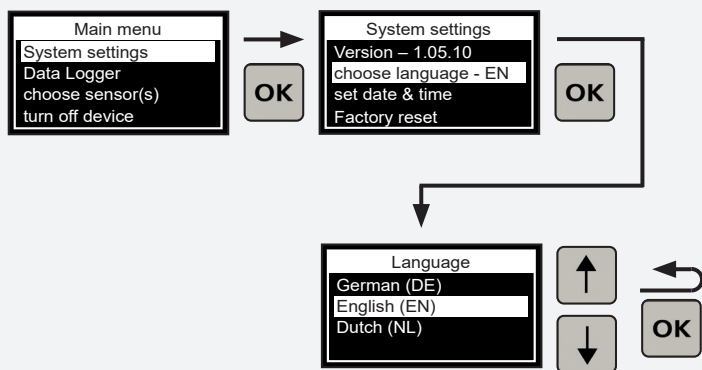
2.5.1

Visualizzazione della versione del software del dispositivo



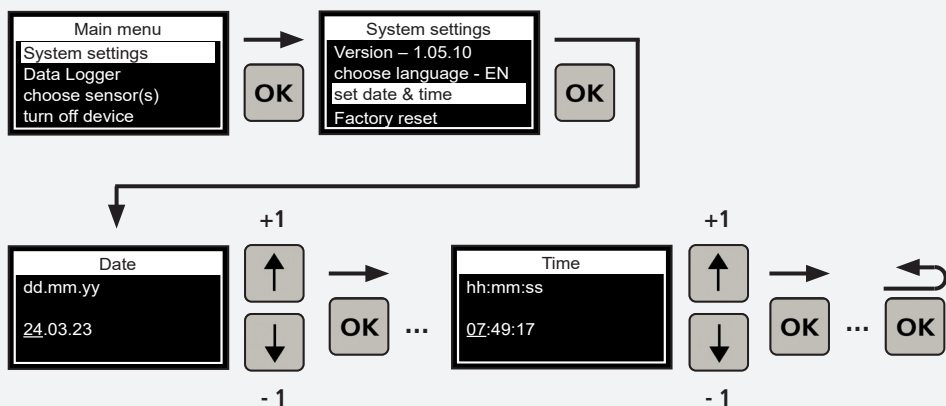
2.5.2

Selezione della lingua

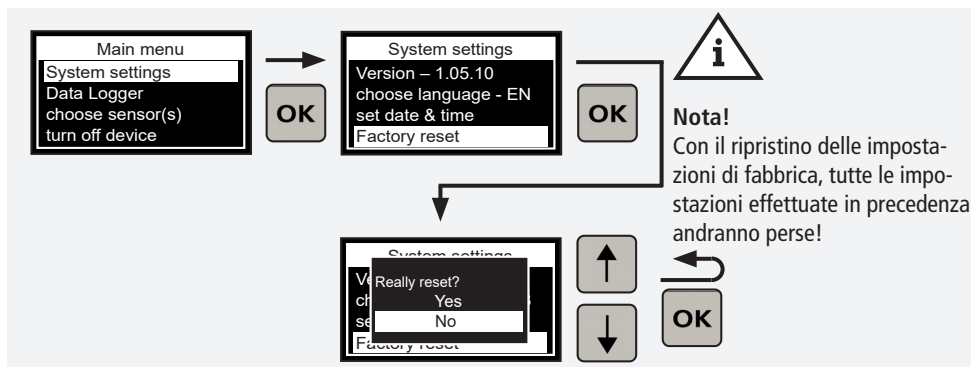


2.5.3

Data e ora



Ripristino delle impostazioni di fabbrica



2.5.5

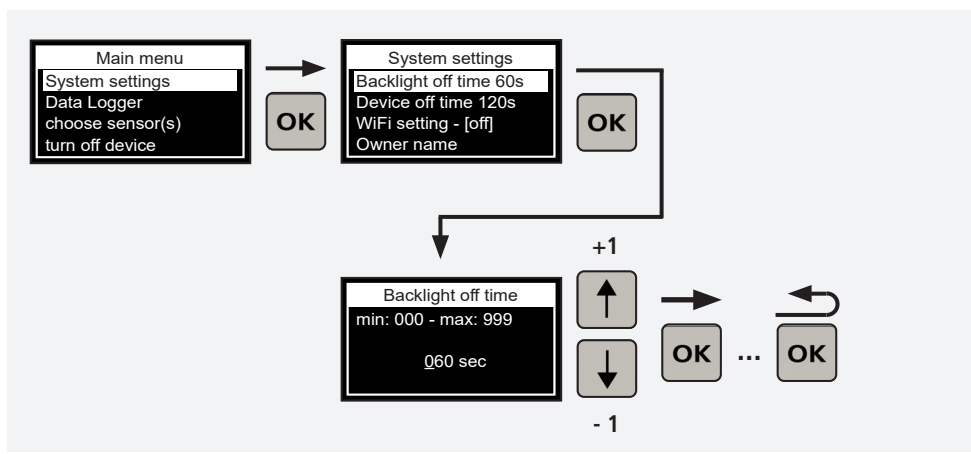
Impostazioni per il risparmio energetico

Impostazioni di fabbrica:

- Dopo 60 secondi di inattività il display **viene disattivato automaticamente**.
 - Dopo 120 secondi di inattività il **dispositivo si spegne**.
- È possibile modificare gli orari nel menu principale alla voce "Impostazioni di sistema".

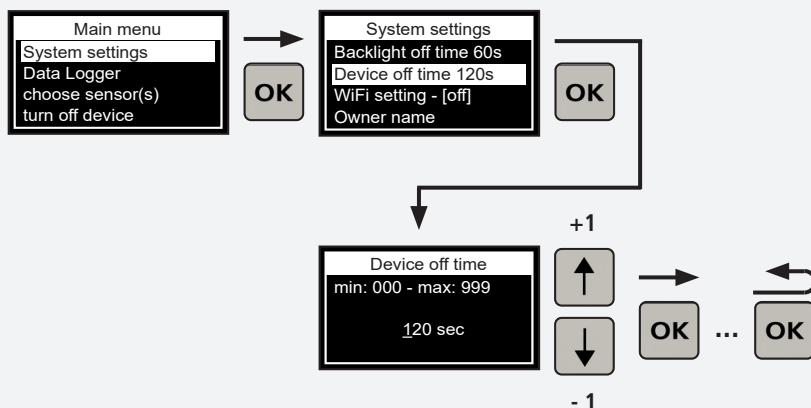
2.5.5.1

Illuminazione automatica del display



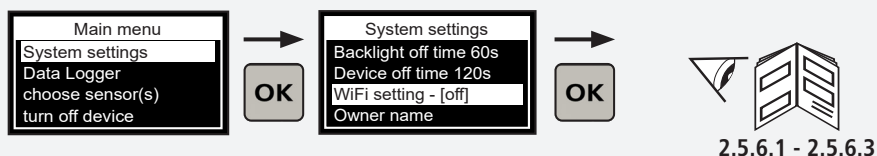
2.5.5.2

Spegnimento automatico del display



2.5.6

Impostazioni Wi-Fi

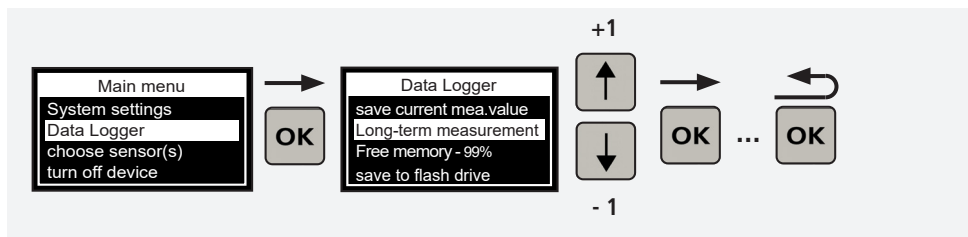


2.5.6.1

Attivazione | disattivazione del Wi-Fi

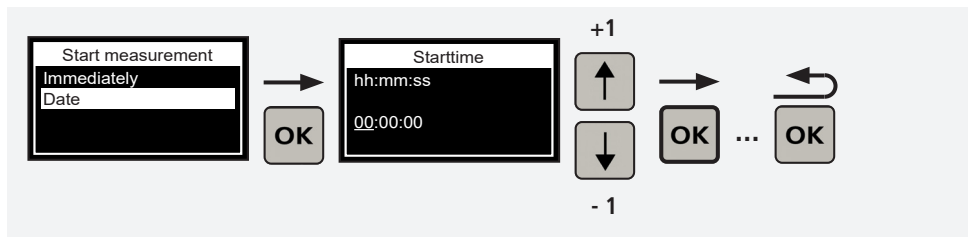


Modifica dell'SSID Wi-Fi



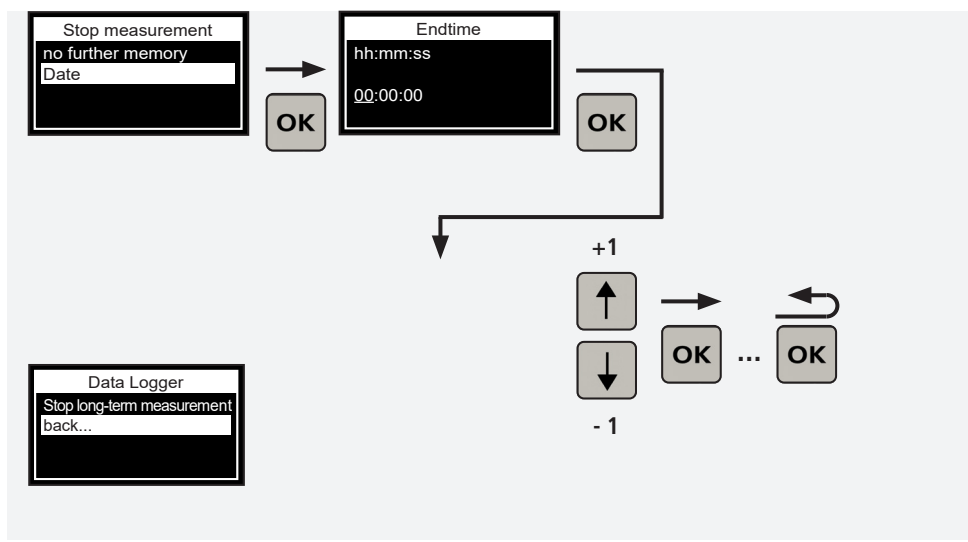
2.5.6.3

Modifica della password Wi-Fi



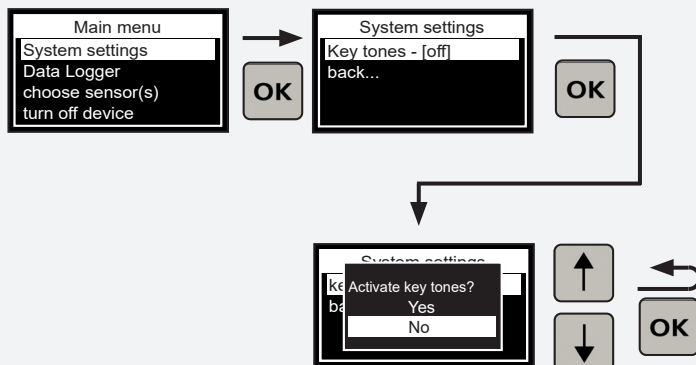
2.5.7

Registrazione del proprietario del dispositivo



2.5.8

Attivazione | disattivazione del tono dei tasti

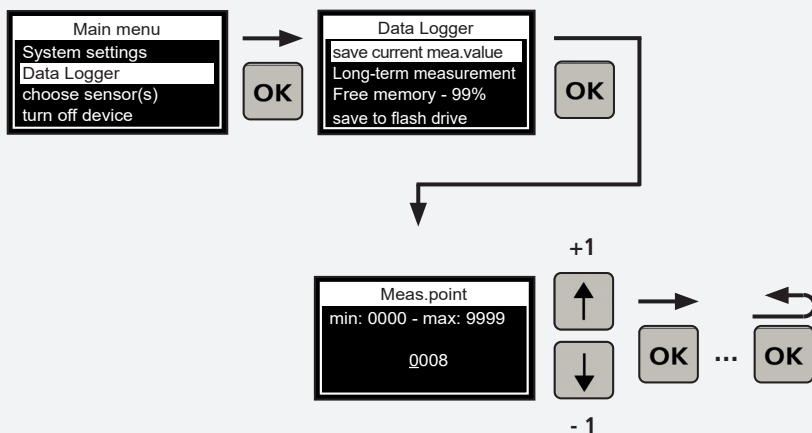


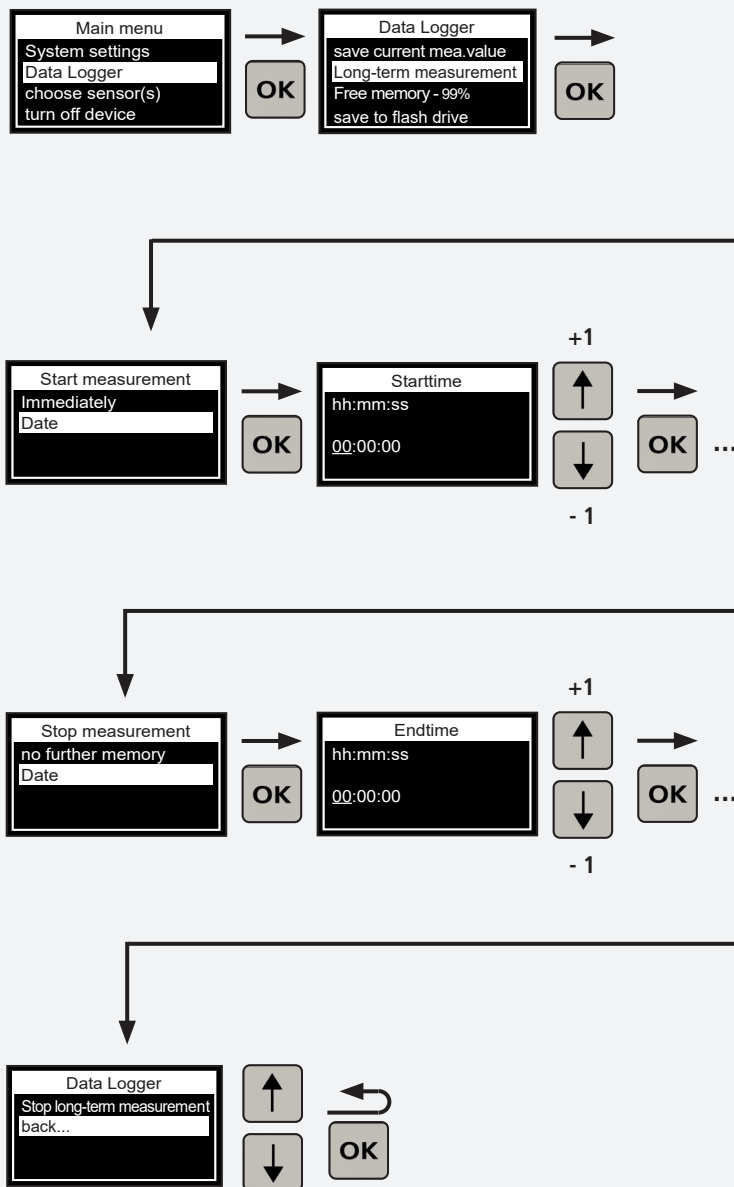
2.6

Impostazione del registratore di dati

2.6.1

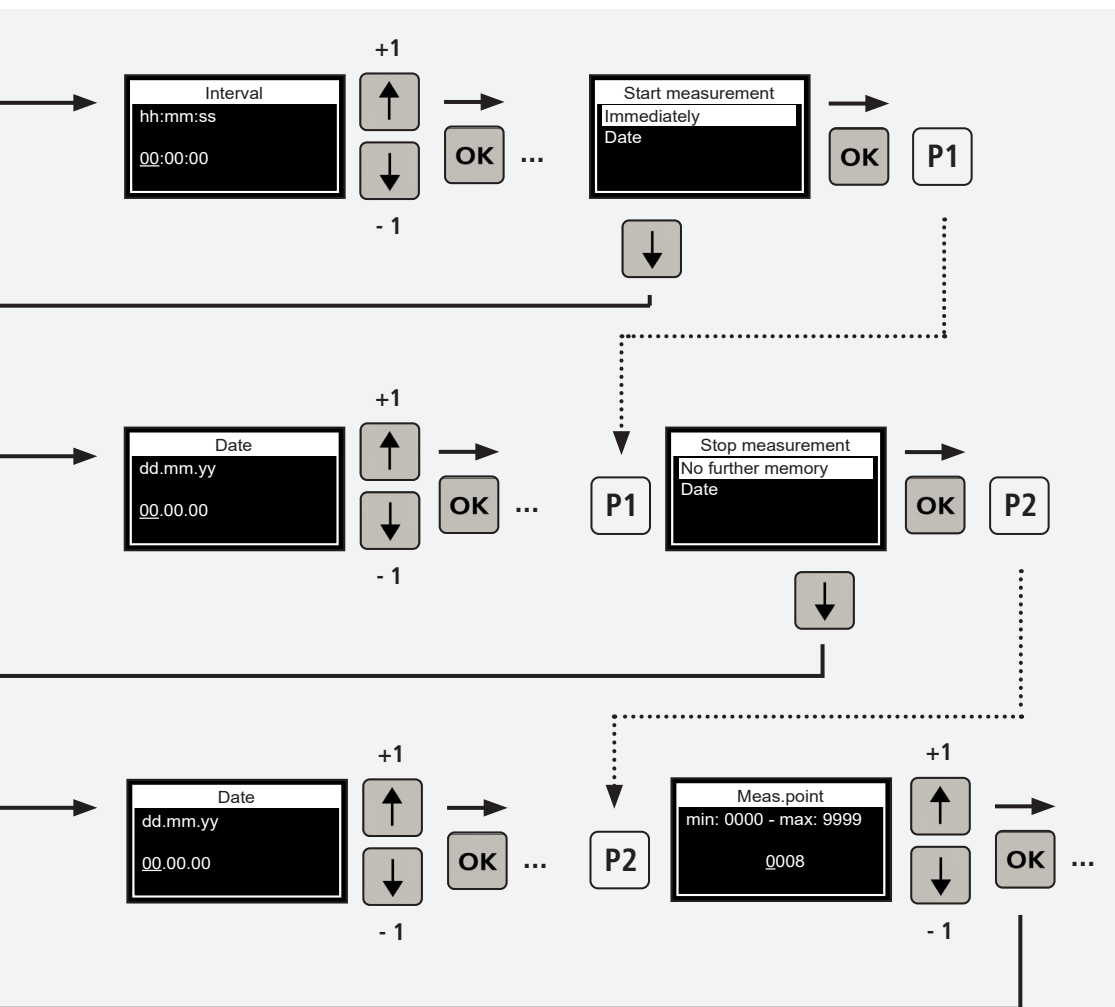
Salvataggio dei valori di misurazione



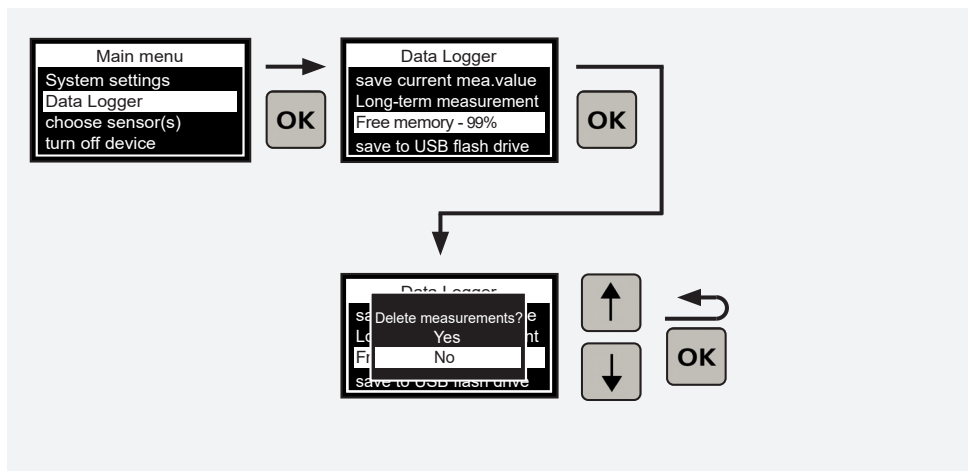


2.6.2

Impostazione della misurazione a lungo termine

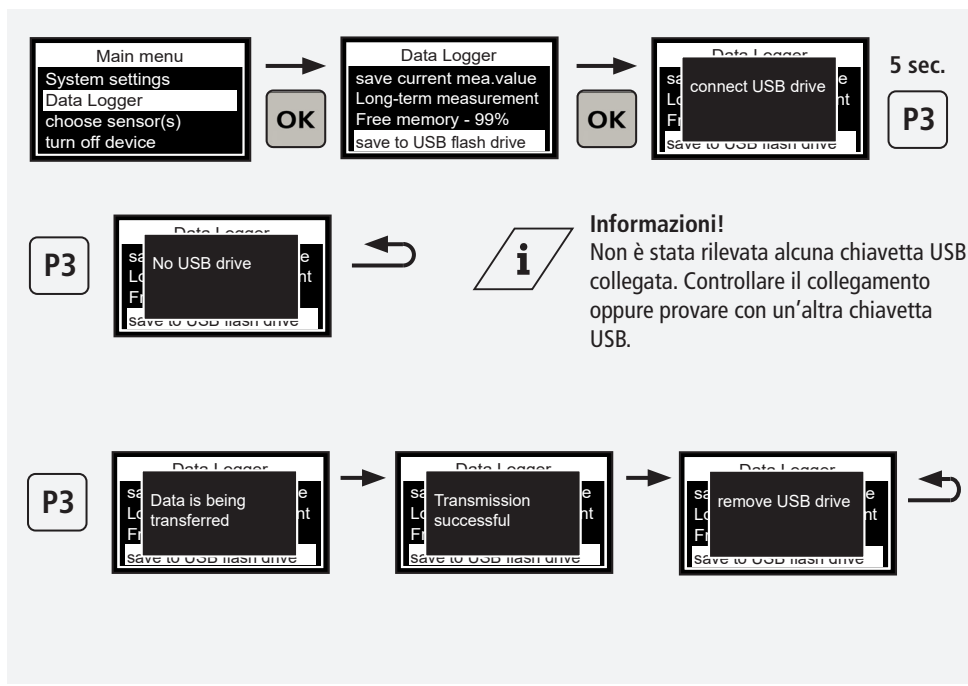


Cancellazione dello spazio di archiviazione



2.6.4

Trasferimento dello spazio di archiviazione sulla chiavetta USB

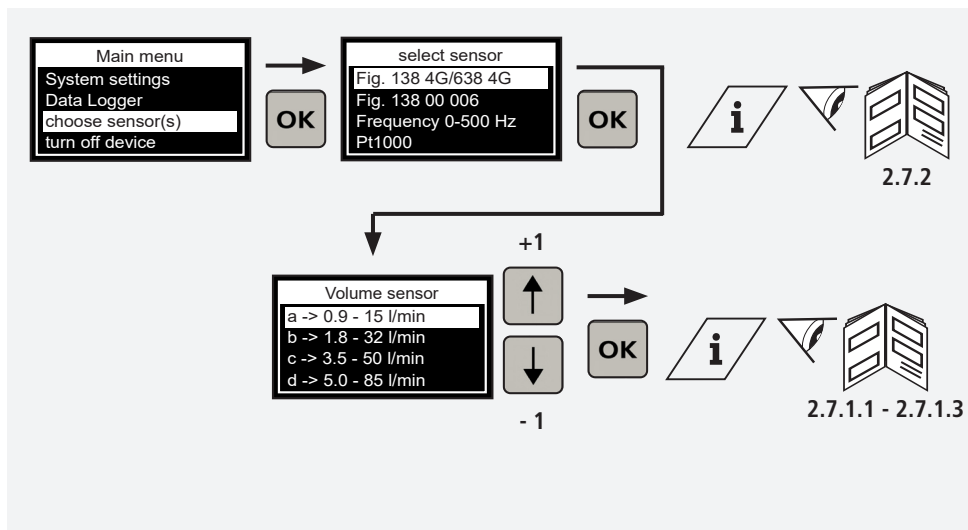


2.7

Selezione sensore

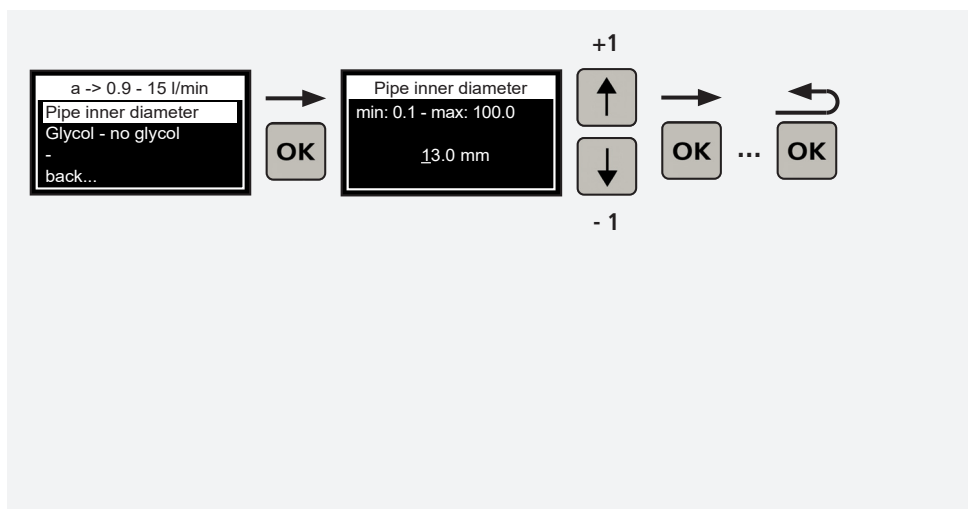
2.7.1

Raccordo con sensore termico e di portata, figura 138 4G | 638 4G

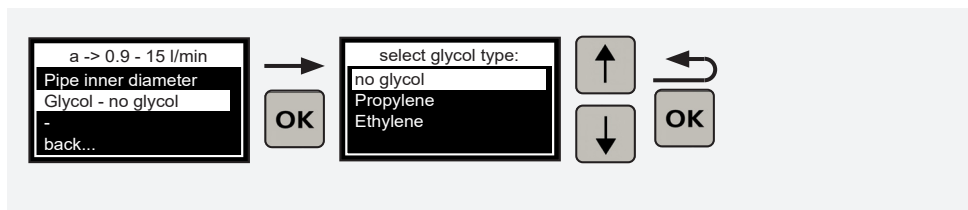


2.7.1.1

Impostazione del diametro interno del tubo

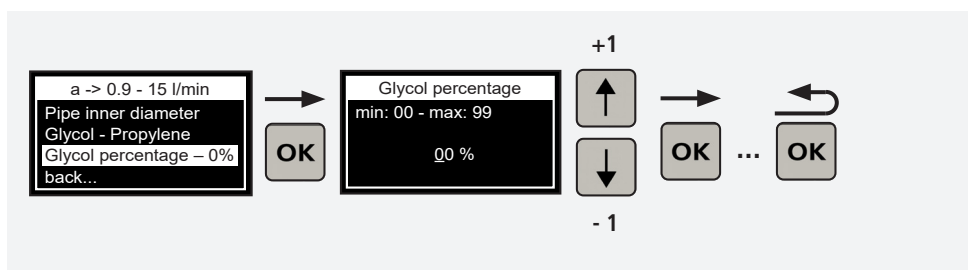


Selezione dei possibili tipi di glicole nel fluido



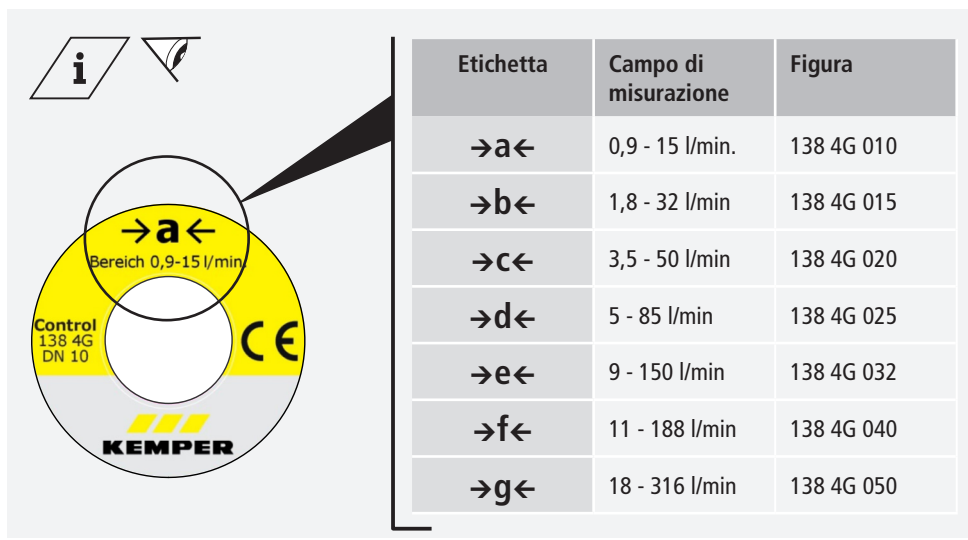
2.7.1.3

Impostazione della percentuale di glicole



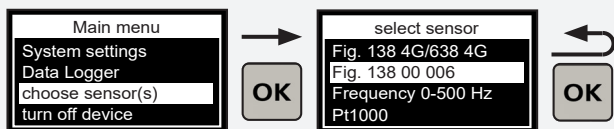
2.7.2

Assegnazione del campo di misurazione del sensore di un raccordo con sensore di portata e termico, articolo 138 4G | 638 4G



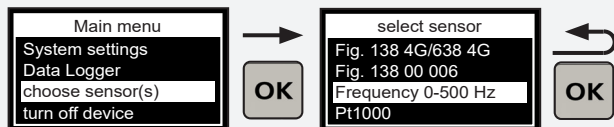
2.7.3

Sensore di pressione figura 138 00 006



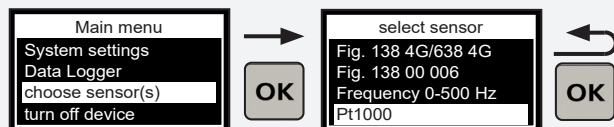
2.7.4

Frequenza di uscita di un qualsiasi sensore di frequenza



2.7.5

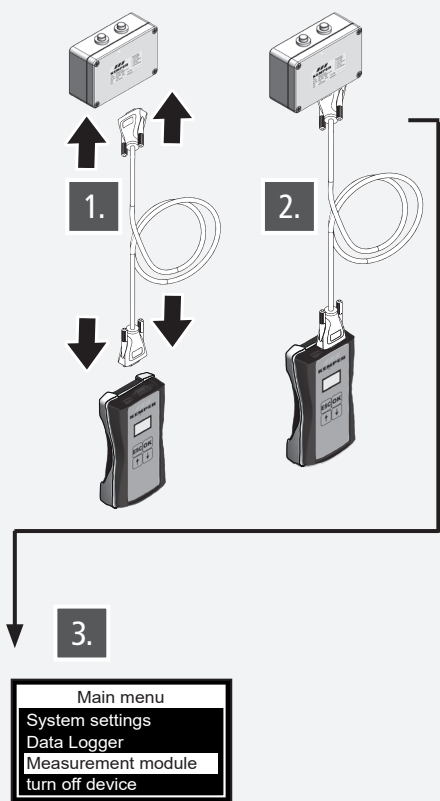
Sonda di temperatura Pt1000|Pt100



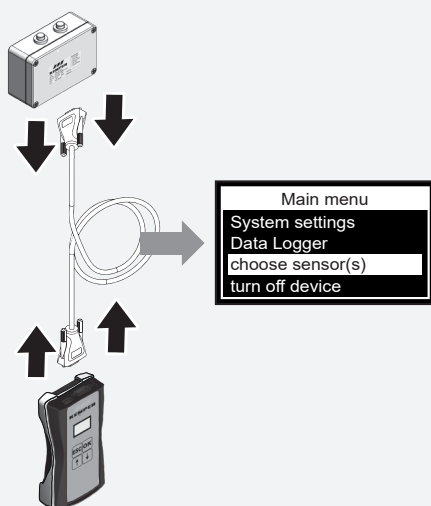
Collegamento del dispositivo di misurazione manuale a un modulo di misurazione con sensore, figura 138 00 011

**Nota!**

Collegare il dispositivo di misurazione manuale al modulo di misurazione tramite il cavo D-Sub (fornito con il dispositivo di misurazione) per poter effettuare la configurazione nel menu del modulo di misurazione.

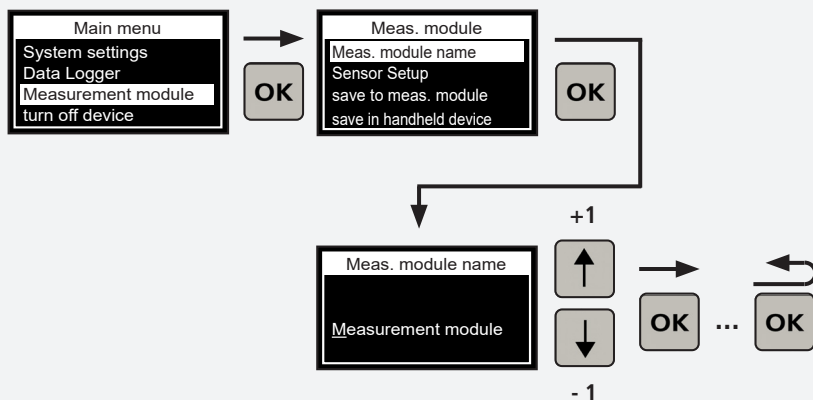
**Nota!**

Se non sussiste alcun collegamento, la voce di menu **non** verrà visualizzata nel menu principale!



3.1

Modifica del nome del modulo di misurazione con sensore

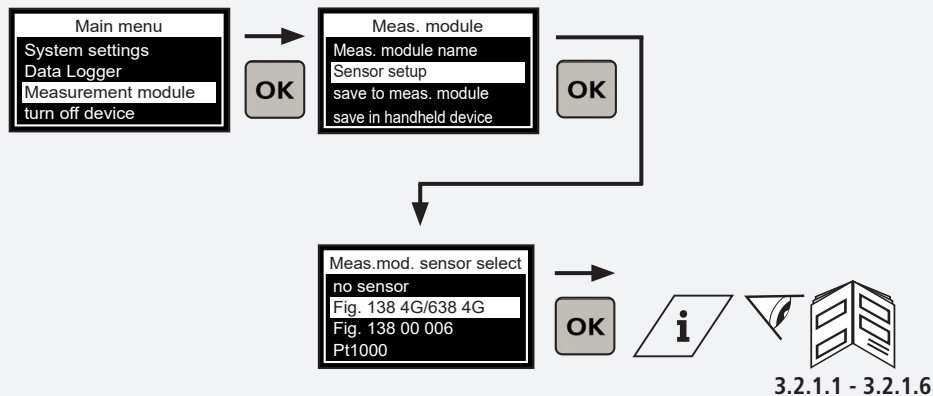


3.2

Selezione e impostazioni di un sensore

3.2.1

Raccordo con sensore termico e di portata, figura 138 4G | 638 4G



3.2.1.1 - 3.2.1.6

Selezione del campo di misurazione del sensore



2.7.2

Setup Fig. 138 4G/638 4G
 Sensor measuring range
 Pipe inner diameter
 Glycol – no glycol
 –

OK

Volume sensor
 a -> 0.9 - 15 l/min
 b -> 1.8 - 32 l/min
 c -> 3.5 - 50 l/min
 d -> 5.0 - 85 l/min



OK

3.2.1.2

Specifiche del diametro interno del tubo

Setup Fig. 138 4G/638 4G
 Sensor measuring range
 Pipe inner diameter
 Glycol – no glycol
 –

OK



2.7.1.1

3.2.1.3

Specifiche del tipo di glicole

Setup Fig. 138 4G/638 4G
 Sensor measuring range
 Pipe inner diameter
 Glycol – no glycol
 –

OK



2.7.1.2

3.2.1.4

Specifiche della percentuale di glicole

Setup Fig. 138 4G/638 4G
Sensor measuring range
Pipe inner diameter
Glycol - Propylene
Glycol percentage - 0%



2.7.1.3

3.2.1.5

Compensazione dei cavi

Tutte le misurazioni della temperatura vengono analizzate dal dispositivo di misurazione manuale come misurazioni a 2 fili. Le misurazioni vengono distorte tramite la resistenza del cavo.

Si consiglia di compensare le deviazioni di resistenza dovute alle prolunghe dei cavi dal sensore di temperatura al modulo di misurazione tramite la voce di menu compensazione dei cavi.

Setup Fig. 138 4G/638 4G
Cable compensation
save to meas. module
back...



3.2.1.5.1 - 3.2.1.5.3

3.2.1.5.1

Compensazione dei cavi per lunghezza e sezione

Cable compensation by...
Length x cross-section
Resistive offset
Temperature offset



Wire length
min: 00.00 - max: 99.99
00.00 m



OK ...

Wire diameter
min: 00.00 - max: 99.99
00.00 mm²

+1

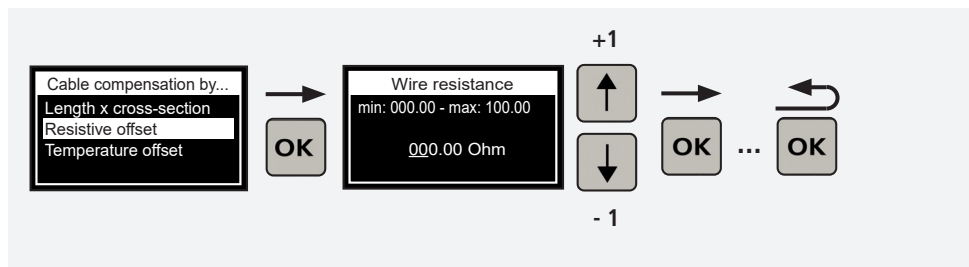


- 1

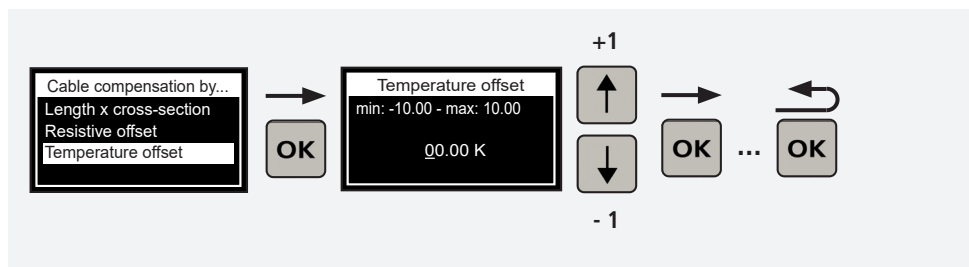
OK ...



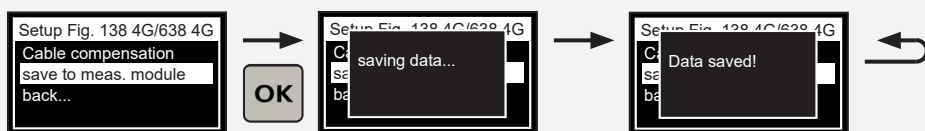
Compensazione dei cavi tramite offset della resistenza



Compensazione dei cavi tramite offset della temperatura



Salvataggio delle impostazioni sul modulo di misurazione

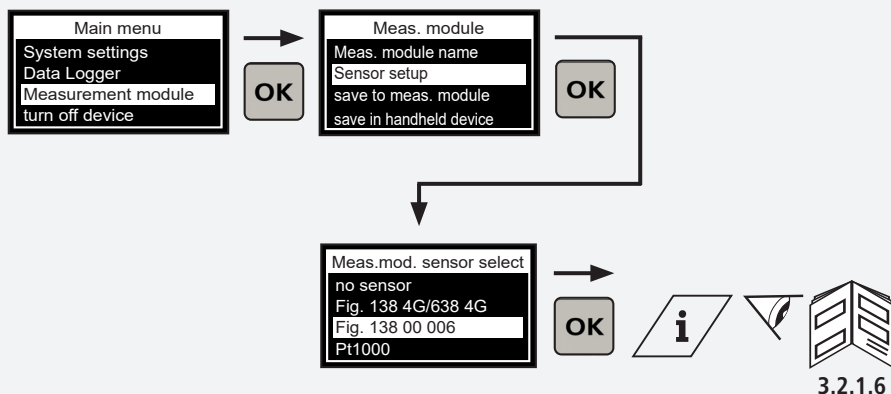
**Nota!**

Dopo aver inserito le impostazioni del sensore, eseguire la funzione „Salva nel modulo di misurazione"! Solamente in questo modo è possibile salvare in modo permanente la configurazione impostata sul dispositivo di misurazione manuale nel modulo di misurazione.

Qualora non si scriva sul modulo di misurazione e il cavo di misurazione venga tolto dal modulo di misurazione o dal dispositivo di misurazione manuale, per successive misurazioni le impostazioni di sensore devono essere digitate nuovamente!

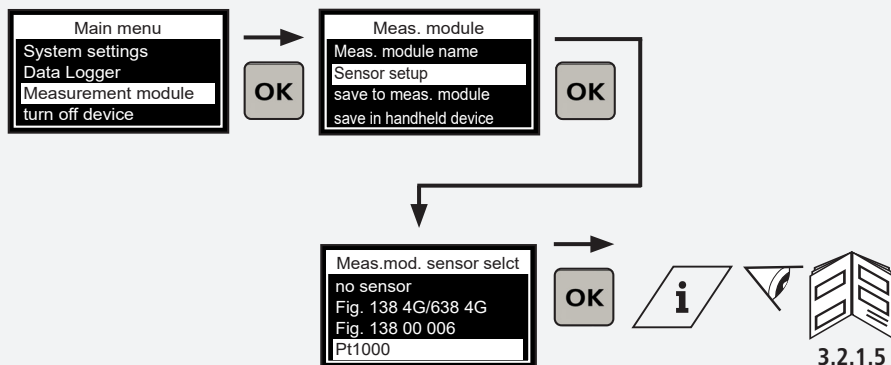
3.2.2

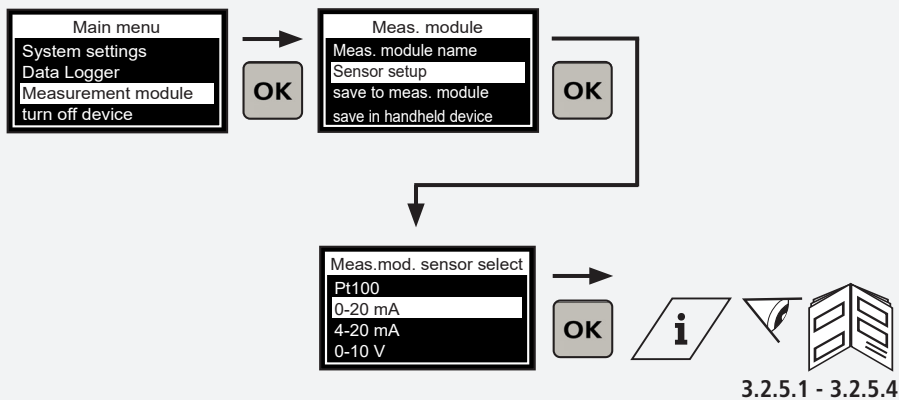
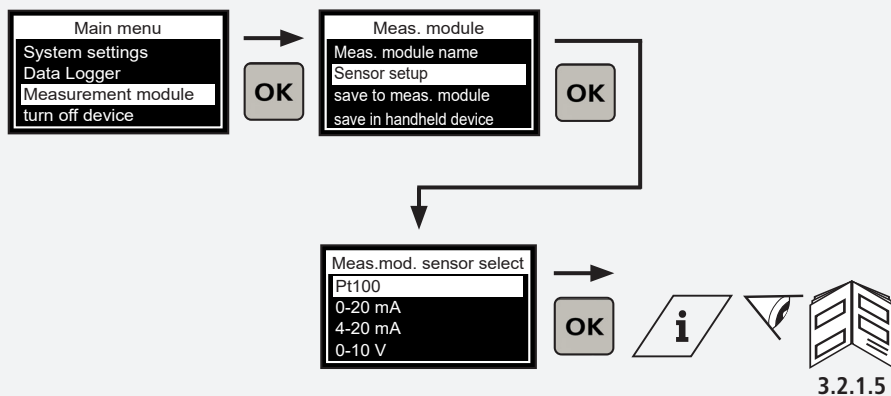
Sensore di pressione figura 138 00 006

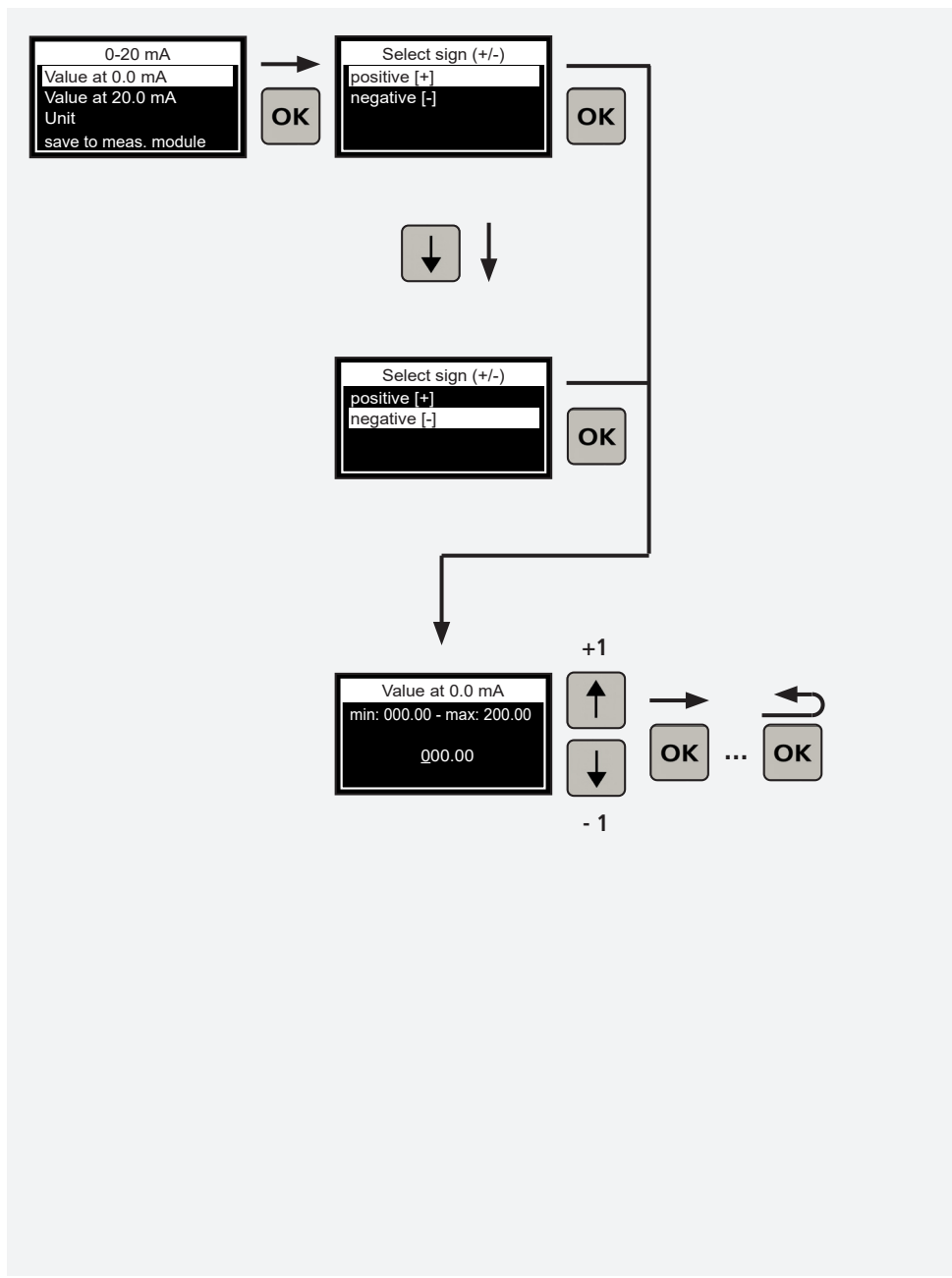


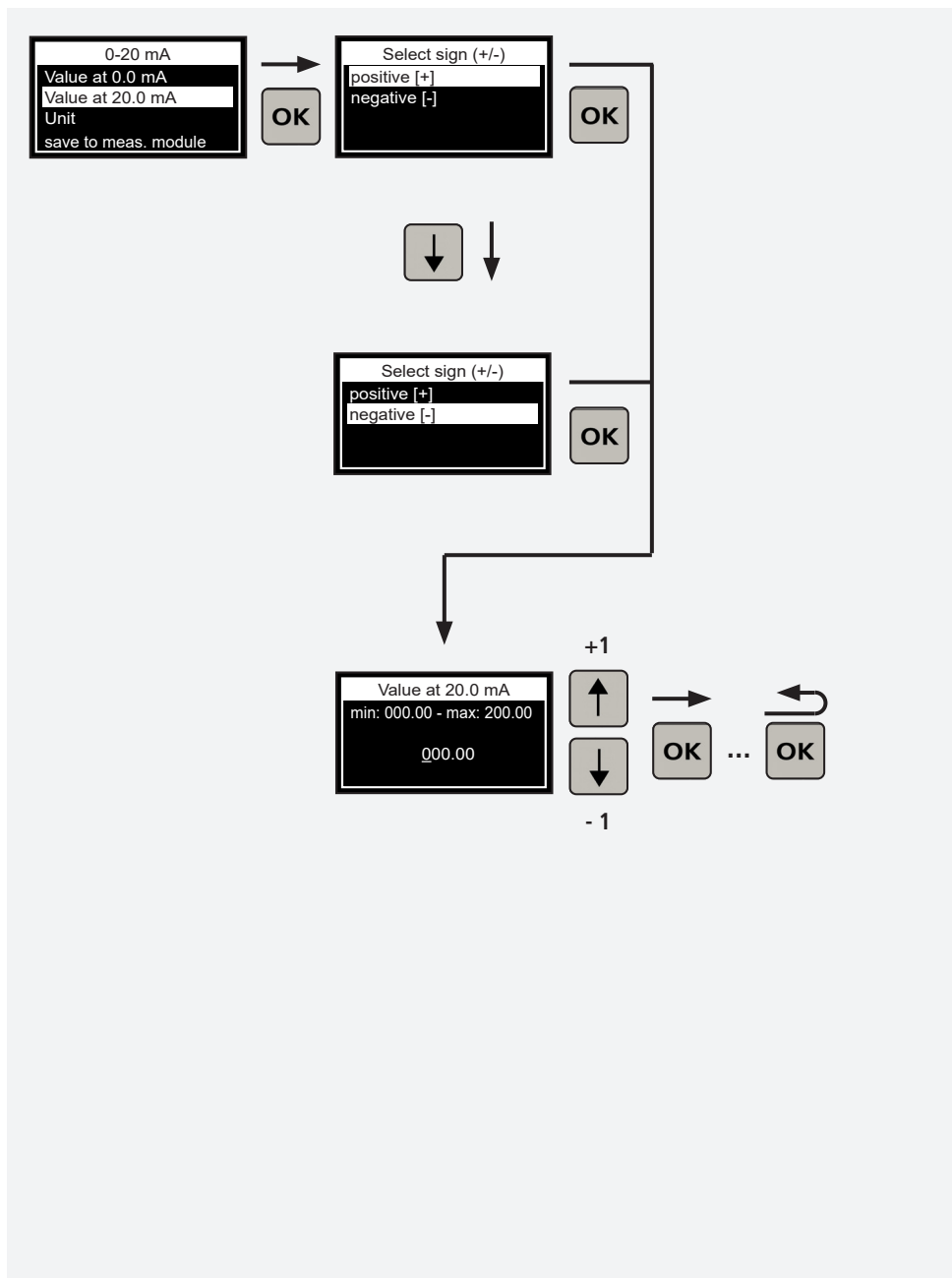
3.2.3

Sonda di temperatura Pt1000



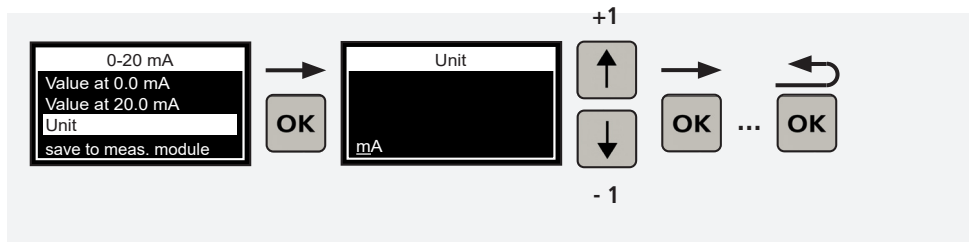






3.2.5.3

Impostazione dell'unità di misura



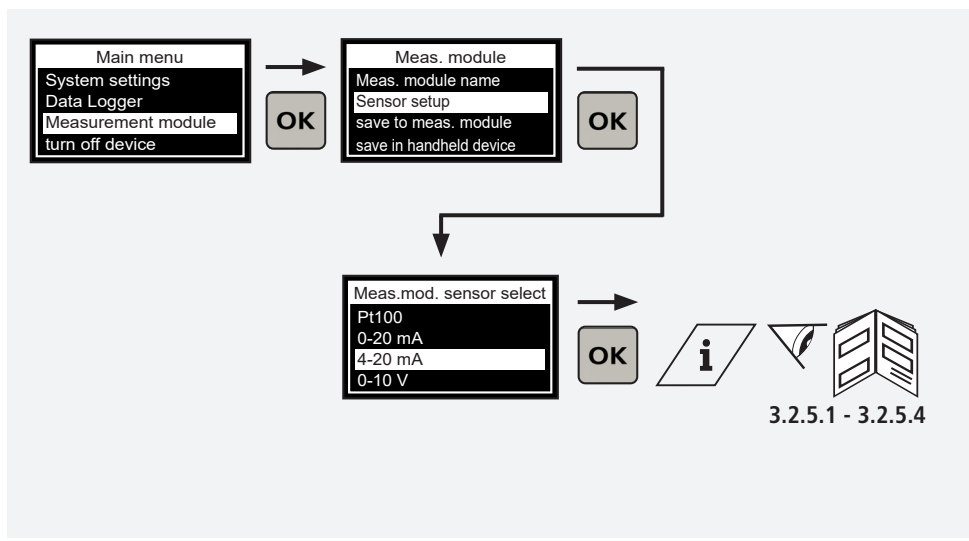
3.2.5.4

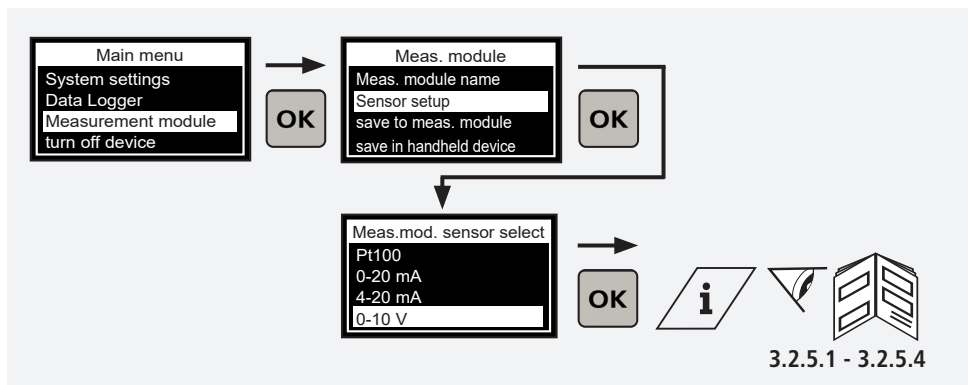
Salvataggio delle impostazioni



3.2.6

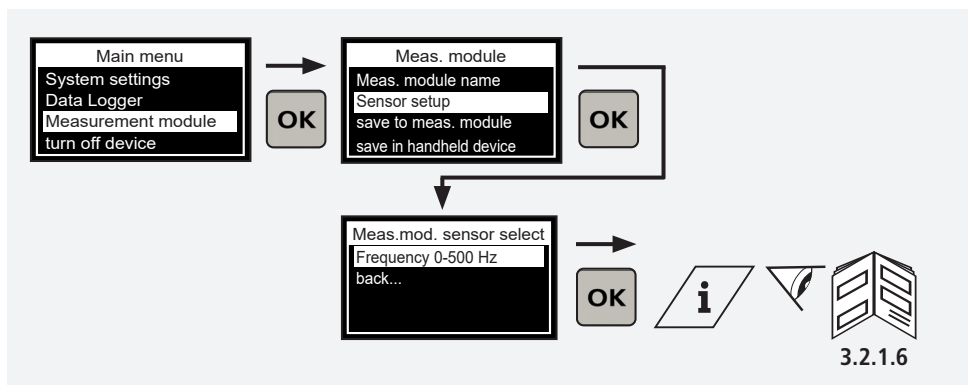
Sensori 4-20 mA





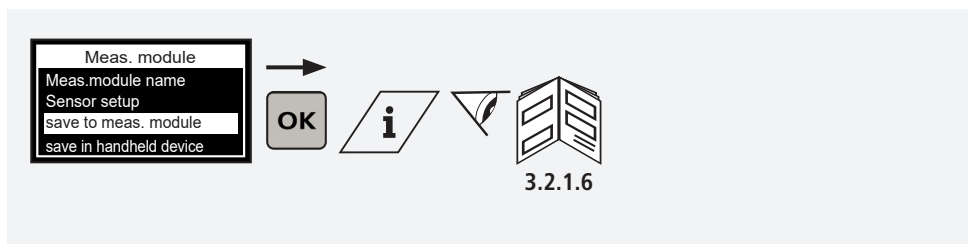
3.2.8

Sensori di frequenza 0-500 Hz



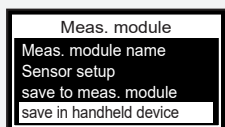
3.3

Salvataggio dell'impostazione nel modulo di misurazione



3.4

Salvataggio temporaneo dell'impostazione nel dispositivo di misurazione manuale

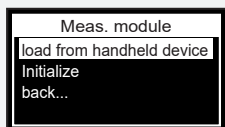


Informazioni!

La configurazione del modulo di misurazione collegato viene salvata nella memoria temporanea del dispositivo di misurazione manuale. Pertanto è possibile configurare altri moduli di misurazione.

3.5

Caricamento dell'impostazione dalla memoria temporanea del



Nota!

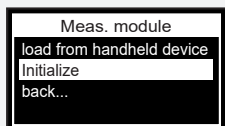
Eseguire una configurazione dalla memoria temporanea del dispositivo di misurazione manuale nel modulo di misurazione collegato. **Per mantenere la configurazione sul modulo di misurazione anche dopo aver scollegato il dispositivo di misurazione manuale, assicurarsi di salvarla nel modulo di misurazione!**



3.3

3.6

Installazione del modulo di misurazione



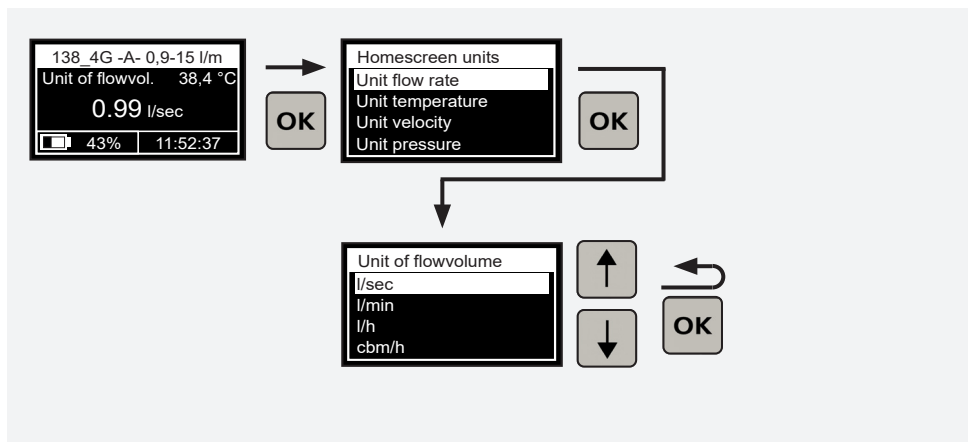
Informazioni!

Effettuando l'inizializzazione, il modulo di misurazione viene riportato alle impostazioni di fabbrica. Tutte le impostazioni effettuate in precedenza andranno perse!

Selezione delle unità di misura visualizzate durante la misurazione

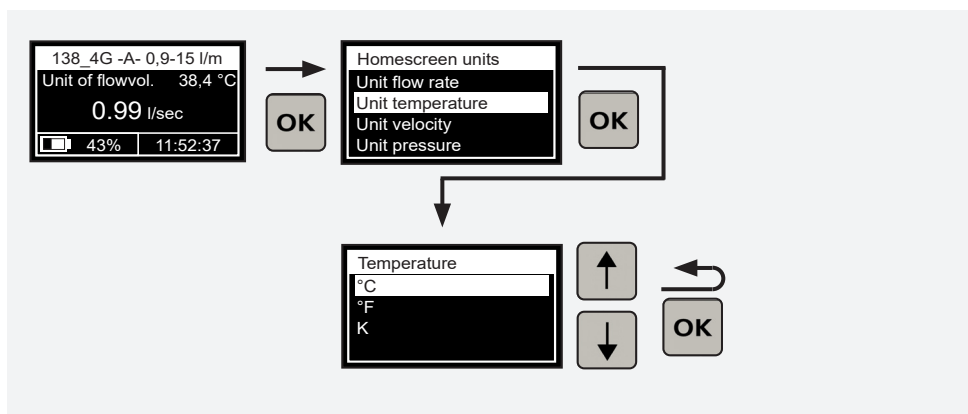
3.7.1

Unità di misura della portata volumetrica



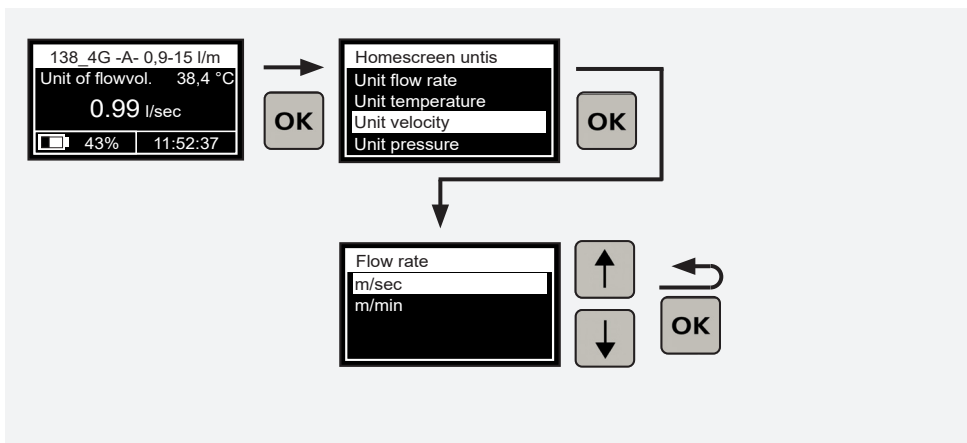
3.7.2

Unità di misura della temperatura



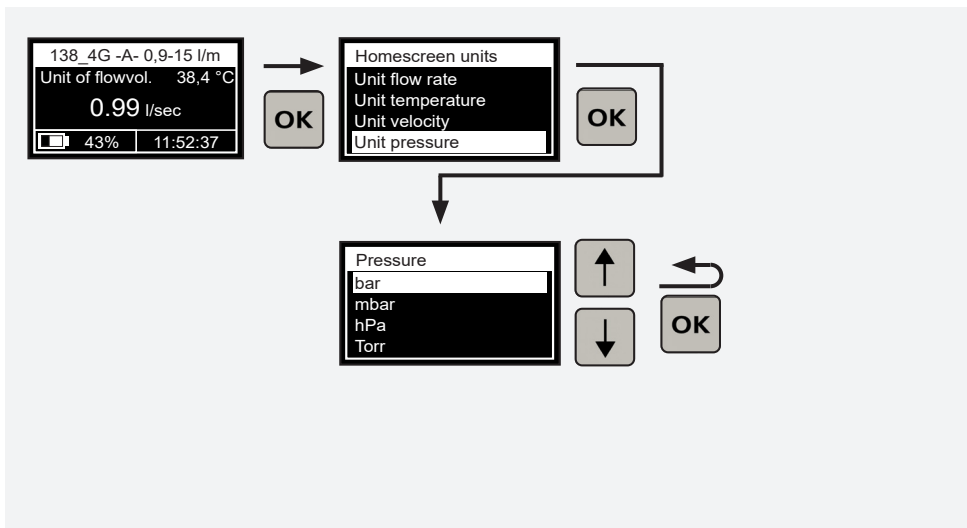
3.7.3

Unità di misura della velocità di flusso



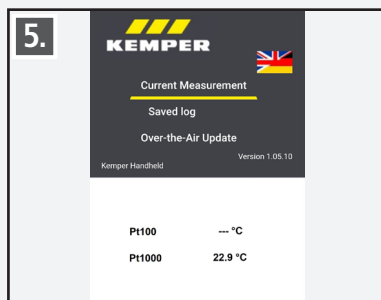
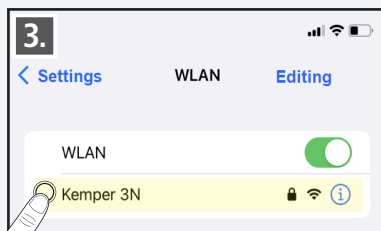
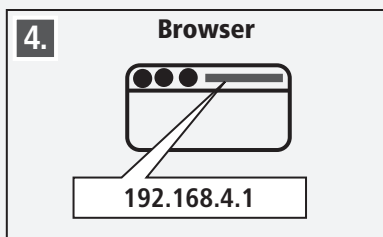
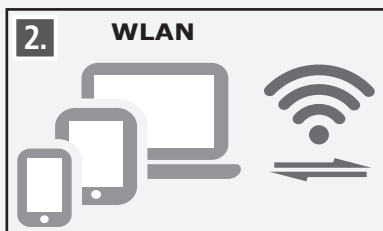
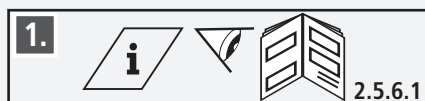
3.7.4

Unità di misura della pressione



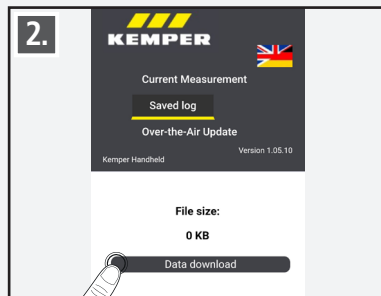
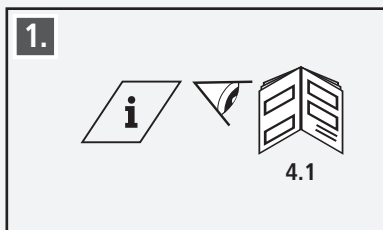
4.1

Utilizzo del server web



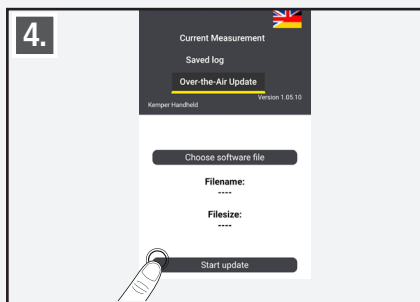
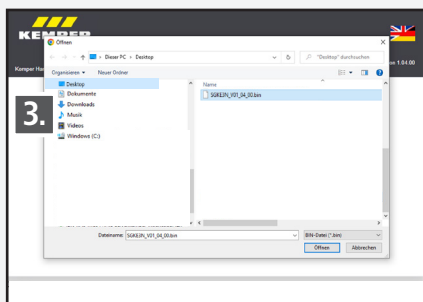
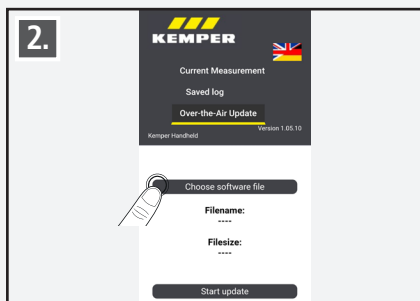
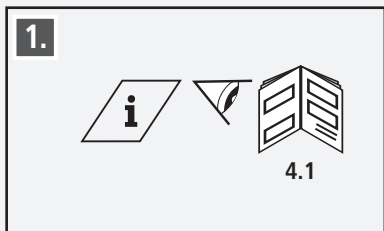
4.2

Trasferimento dei dati di misura dal dispositivo di misurazione portatile

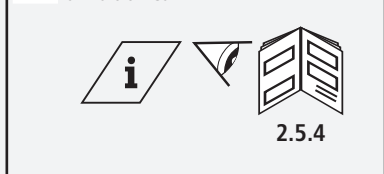


4.3

Caricamento e installazione dell'aggiornamento del software



5. Ripristino delle impostazioni di fabbrica

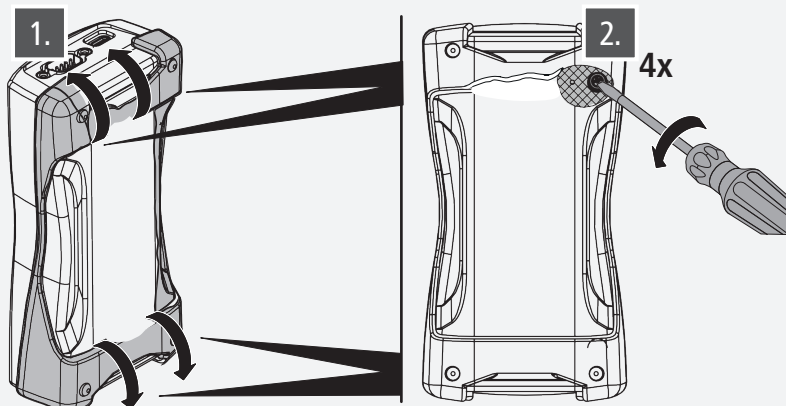


Informazioni!

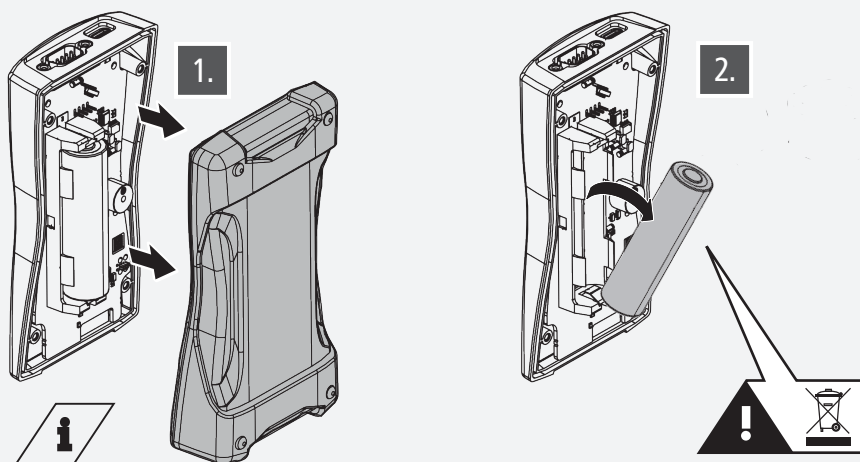
La versione aggiornata del programma è disponibile all'indirizzo:

<https://www.kemper-group.com/de-de/gebaeude-technik/service/downloads-und-epaper-portal/>

1



2

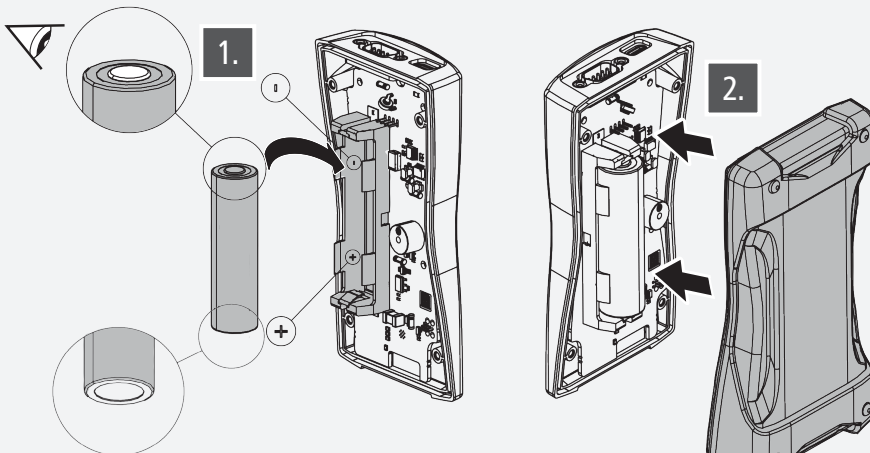
**Informazioni!**

Le viti rimangono nella guaina rivestita in gomma, impedendone la fuoriuscita.

5

Sostituzione della batteria

3



Informazioni!

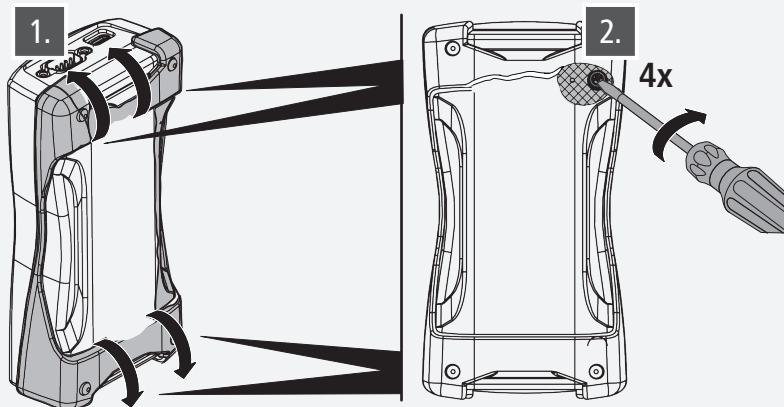
Batteria agli ioni di litio 18650
N. d'ordine 3692300100



Nota!

Assicurarsi di inserire la batteria nel verso giusto, altrimenti il dispositivo potrebbe danneggiarsi!

4



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Over deze handleiding

Lees deze handleiding zorgvuldig door voordat u begint met de installatie en het gebruik en volg de instructies op! Bewaar deze handleiding goed, zodat u haar later weer kunt raadplegen! Afbeeldingen in deze handleiding dienen voor het begrip van de werking en kunnen afwijken van de daadwerkelijke uitvoering.

Aansprakelijkheid

De fabrikant verleent geen garantie en stelt zich niet aansprakelijk bij:

- het negeren van deze handleiding
- incorrecte inbouw en/of incorrect gebruik
- eigenmachtige wijziging van het product
- andere foutieve bediening.

Veiligheidsinstructies

Neem de veiligheidsinstructies in de handleiding in acht en volg ze op. Het niet in acht nemen van de veiligheid-sinstructies kan leiden tot de dood, letsel of materiële schade.

Veiligheidsinstructies zijn herkenbaar aan symbolen. De veiligheidsinstructies worden door signaalwoorden ingeleid die de mate van het risico uitdrukken.

In deze handleiding worden de volgende veiligheidsinstructies gebruikt:

Waarschuwing!

Markeert gevaren die tot letsel, materiële schade of verontreiniging van het drinkwater kunnen leiden.

Aanwijzing!

Markeert gevaren die tot schade aan de hygiënespoeler of tot functiestoringen kunnen leiden.

Info!

Markeert extra informatie en tips.

Verwijdering

Neem de plaatselijke voorschriften voor het recyclen en verwijderen van afval in acht. Het product mag niet met het gewone huisvuil, maar moet vakkundig worden afgevoerd..

Legge batterijen mogen niet bij het huisvuil. U bent wettelijk verplicht om batterijen naar een geschikt inzamel-punt te brengen.

Waarschuwing!

De nationale normen en voorschriften met betrekking tot installatiewerkzaamheden en veiligheidsvoorschriften dienen altijd in acht te worden genomen.

Opslag

Bewaar het CONTROL-PLUS handmeetapparaat als volgt:

- verpakt;
- op een droge, stofvrije plaats;
- niet buiten;
- beschermd tegen warmte en koude;
- bij een opslagtemperatuur van 0-50 °C.

1

Via het CONTROL-PLUS handmeetapparaat

Doelmatig gebruik

Het CONTROL-PLUS handmeetapparaat dient in combinatie met de verschillende KEMPER-sensoren voor het bepalen en documenteren van bedrijfstoestanden in drinkwaterinstallaties.

Gebruik het apparaat:

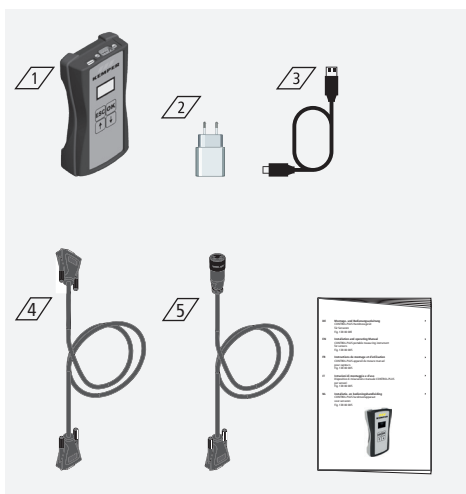
- alleen als hij in goede staat is
- alleen doelmatig.

KEMPER Sensoren

Figuur	Beschrijving
138 4G 638 4G	Flow- en temperatuursensor
138 00 006	Druksensor
138 00 011	Sensormeeetmodule
138 00 003	Handmatige temperatuursensor
138 00 004	CONTROL-PLUS insteektemperatuursensor ^r

1.1

Leveringsomvang



Omvang van de levering

Inclusief:

- Handmeetapparaat ¹
- USB-voeding 230 V/5 V ²
- USB-C-laadkabel ³
- Meetkabel voor de verbinding met een sensormeeetmodule (Figuur 130 00 011) ⁴
- meetkabel voor de verbinding met temperatuur- en flowsensor (Figuur 138 4G) ⁵
- Installatie- en bedieningshandleiding

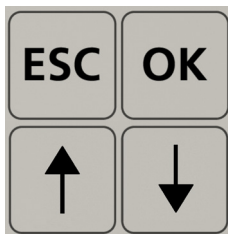
Technische gegevens		
Stroomverbruik van het apparaat	5	W
Datalogging-items	12.000	max.
Omgevingstemperatuurbereik	0 bis + 50	°C
Beschermklasse	IP 20	
Afmetingen van het apparaat	142x77x38,3	mm
Geïntegreerde bedieningsinterface (display + 4 toetsen)	• Instellingen • Parametrering • Overzicht • Datatransfer	
Netwerkiterface (WLAN) voor webondersteunde gebruikersinterface	• Overzicht • Datatransfer • Firmwareupdate • Update van de webserver	
USB-C-interface	• Firmware-update • Update van de webserver • Datatransfer • Voedingsspanning	
Taal menu	• Deutsch • English • Nederlands	
Bedrijfsmodi Meetmodi	• Temperatuur- en flowmeting • Temperatuurmeting • Drukmeting • Gegevensregistratie	

2

Bediening

2.1

Menu-interface



Toetsen	Beschrijving
ESC	Verlaten / wisselen van het menu tussen overzicht en hoofdmenu
↑	Achteruit schuiven
OK	Bevestigingstoets
↓	Vooruit schuiven

Alle menu's zijn „roterend“ opgebouwd, dat wil zeggen dat de bediening van de „↓-toets“ op het

laatste menupunt leidt tot het overspringen naar het eerste menupunt.

2.2

Inschakelen en overzichtswaegave van het apparaat

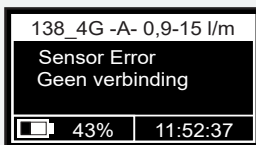
Druk langer dan 1 seconde op de „OK-toets“ om het apparaat in te schakelen.



Software versie



Datum



Accustatus



Tijd

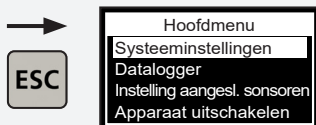


Sensortype



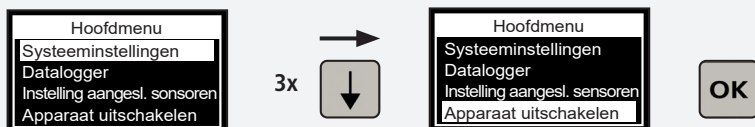
Weergave
meetwaarde

Druk op de toets „ESC” om terug te keren naar het hoofdmenu.



2.4

Uitschakelen van het apparaat



2.5

Systeeminstellingen

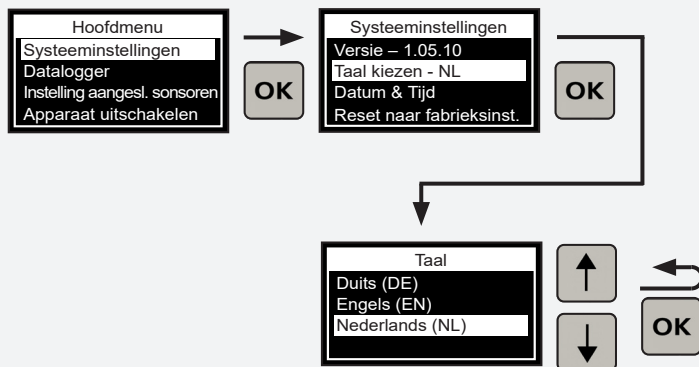
2.5.1

Versieweergave van de apparaatsoftware



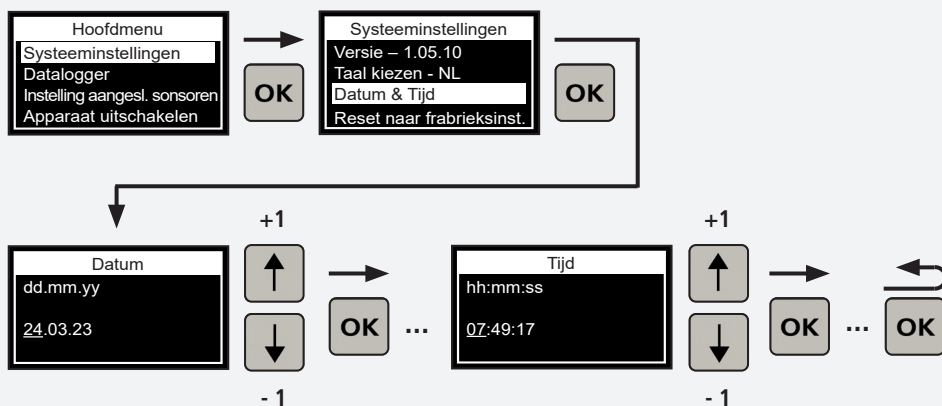
2.5.2

Taalselectie

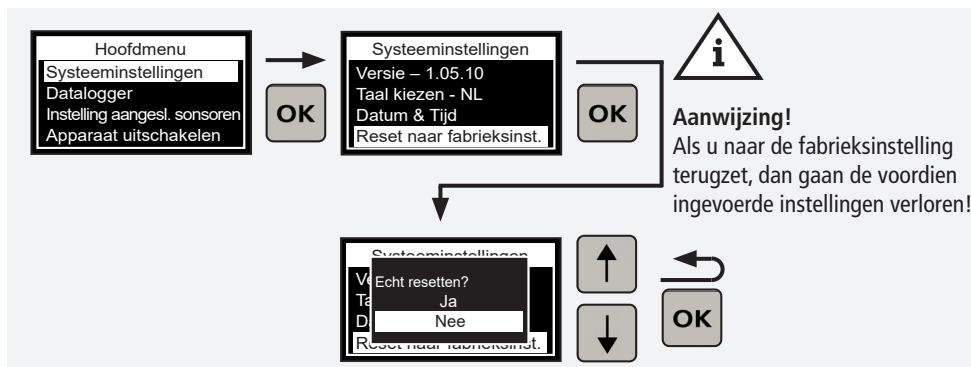


2.5.3

Datum en tijd



Fabrieksinstelling herstellen



2.5.5

Energiespaarinstellingen

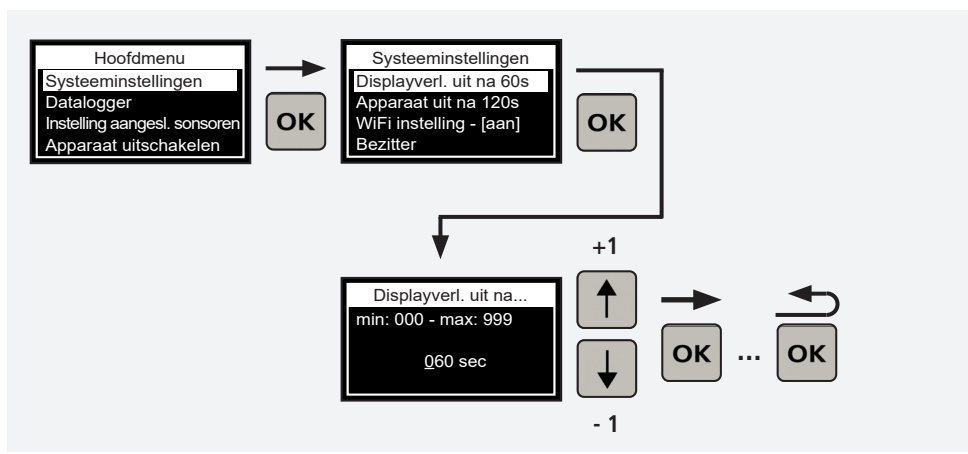
Fabrieksinstelling:

- Wordt er 60 seconden lang niets ingevoerd, dan wordt het display **automatisch gedeactiveerd**.
- Wordt er 120 seconden lang niets ingevoerd, dan **schakelt het apparaat uit**.

De tijden kunt u in het hoofdmenu onder "Systeeminstellingen" wijzigen.

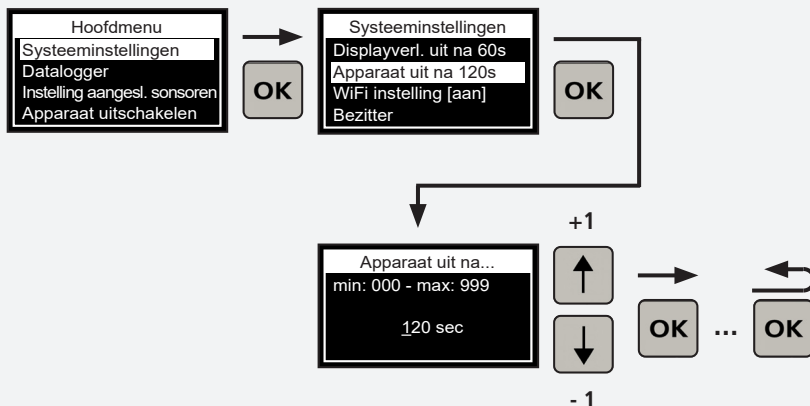
2.5.5.1

Automatische uitschakeling display



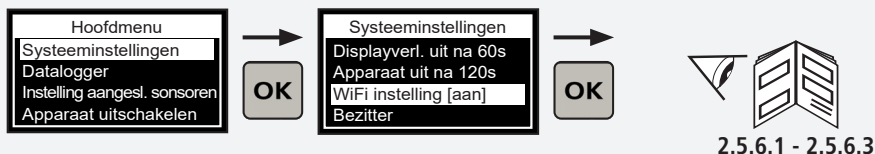
2.5.5.2

Automatische uitschakeling apparaat



2.5.6

Wifi-instellingen



2.5.6.1

Wifi activeren | deactiveren



Wifi-SSID wijzigen



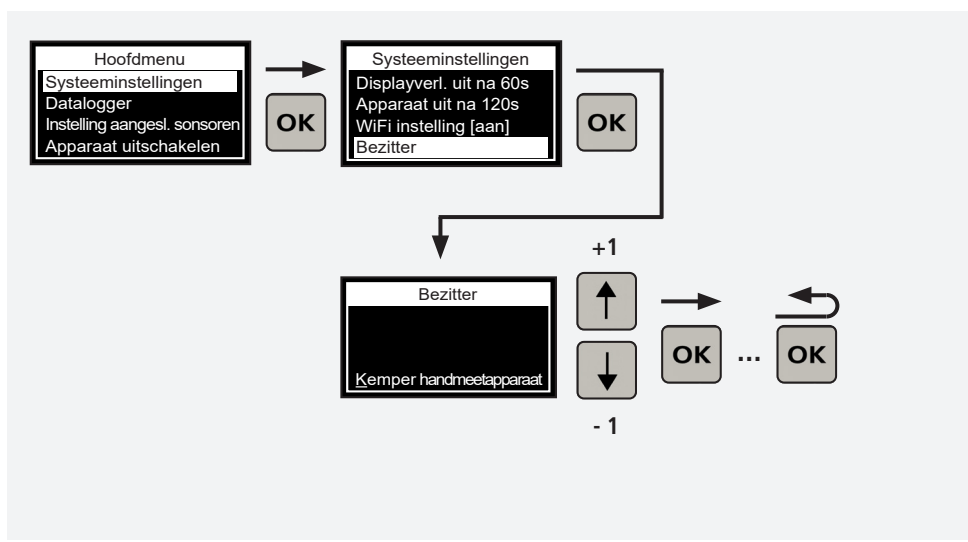
2.5.6.3

Wifi-wachtwoord wijzigen



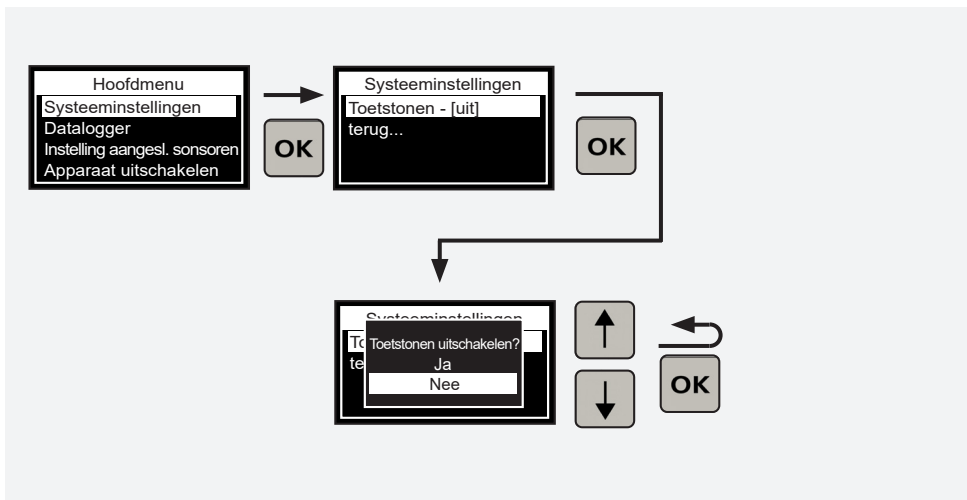
2.5.7

Eigenaar van het apparaat invoeren



2.5.8

Toetstonen activeren | deactiveren

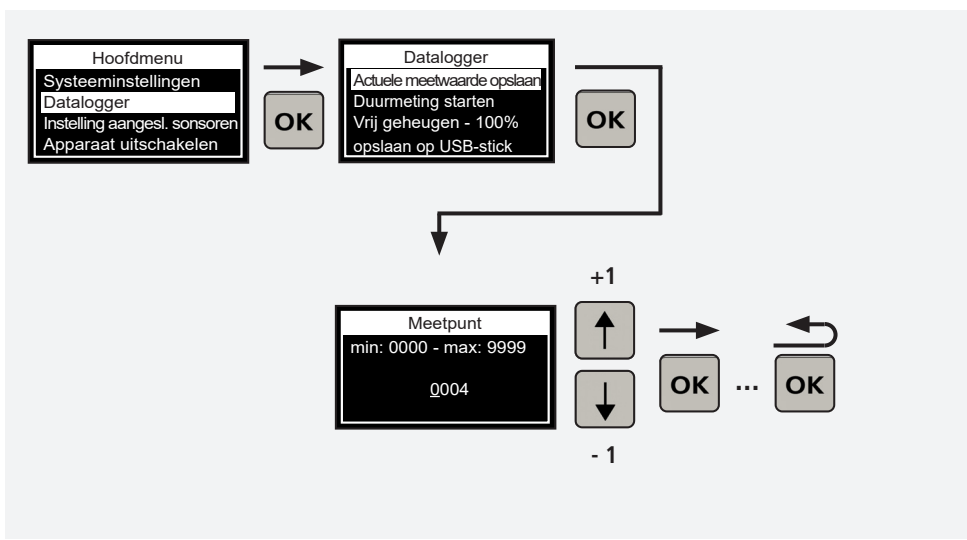


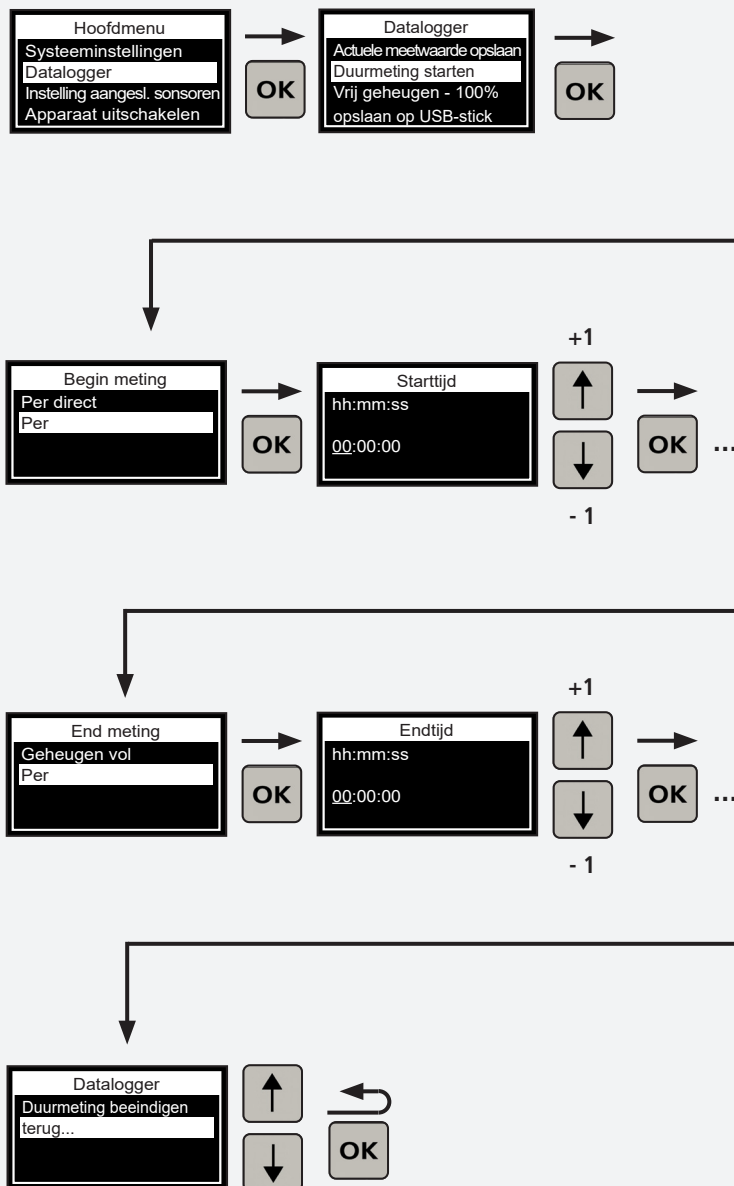
2.6

Instelling van de datalogger

2.6.1

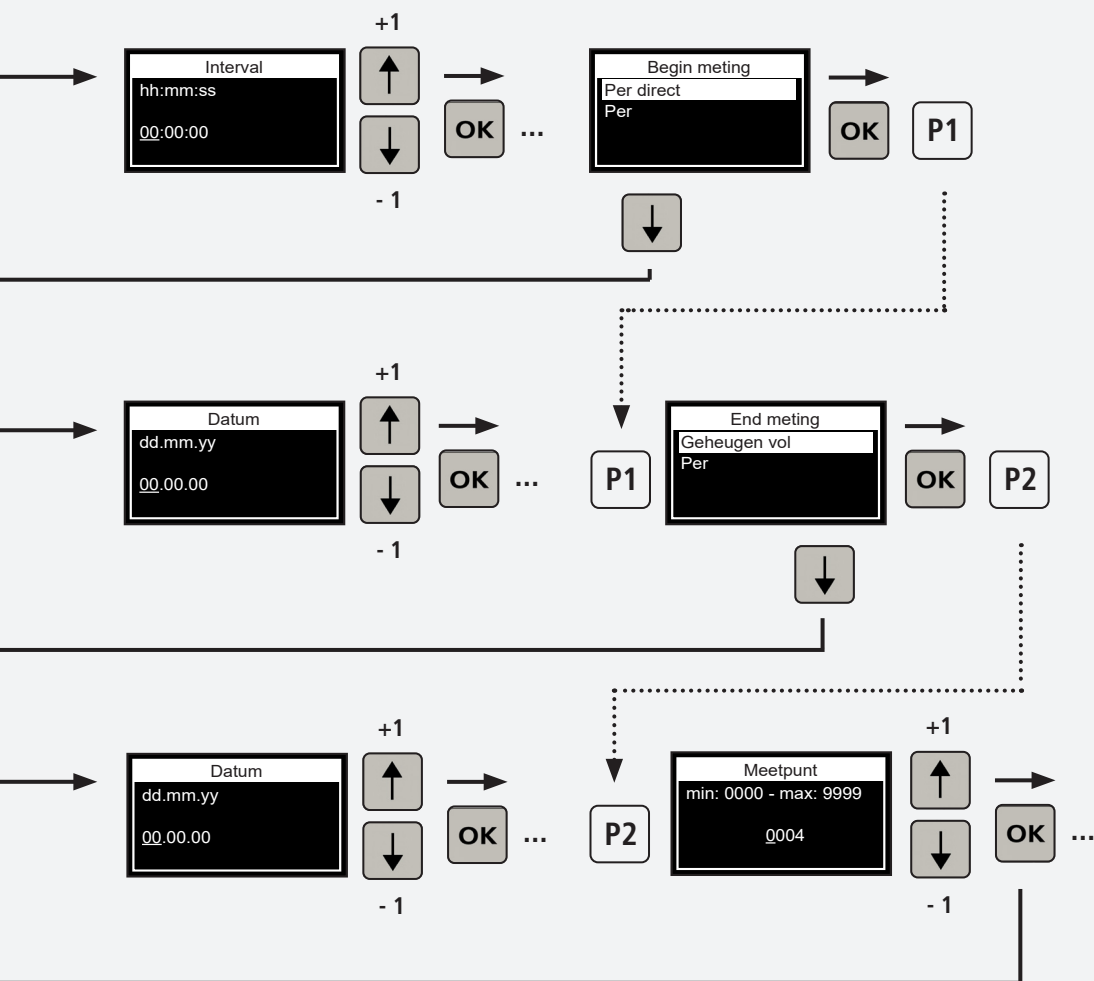
Meetwaarden opslaan

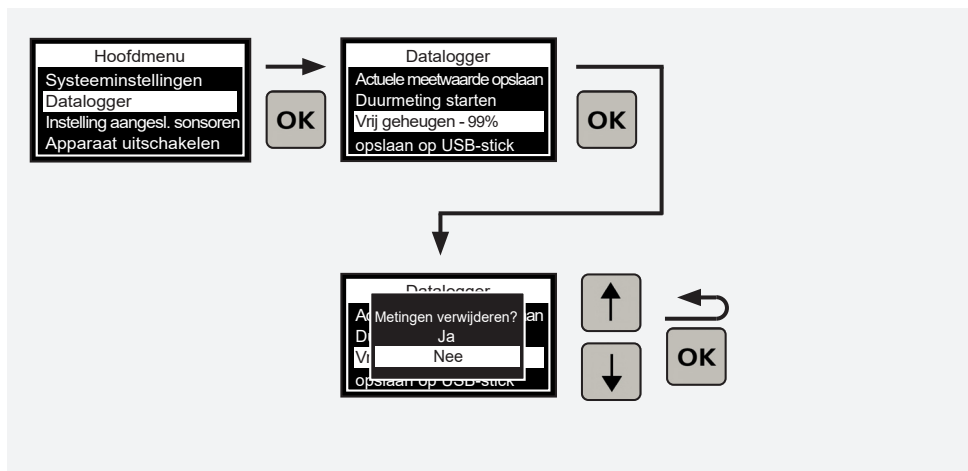




2.6.2

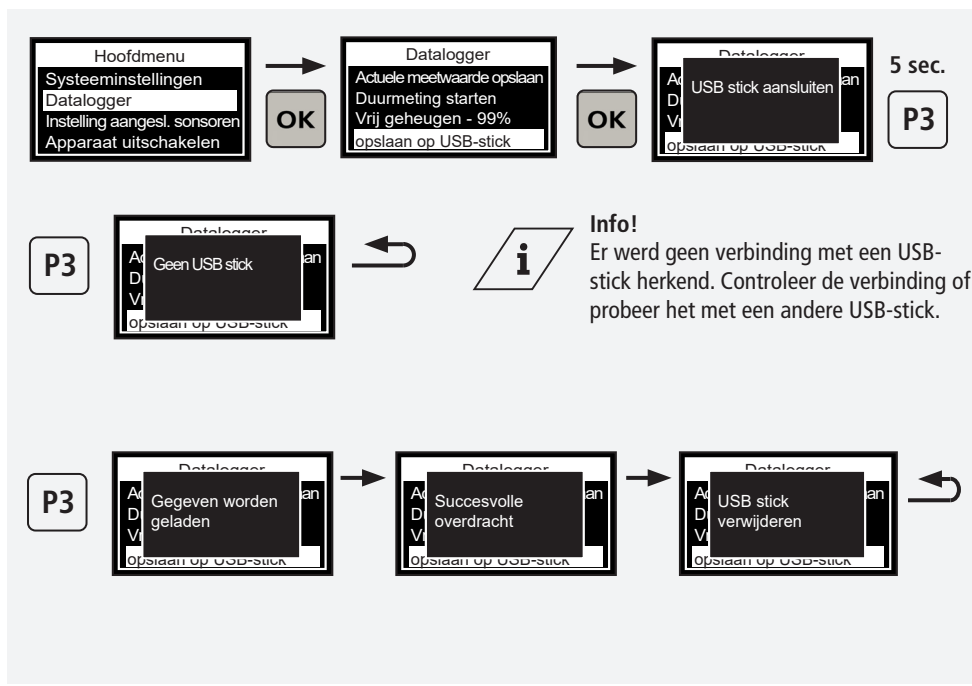
Langetermijnmeting instellen





2.6.4

Geheugenstand op USB-stick overbrengen

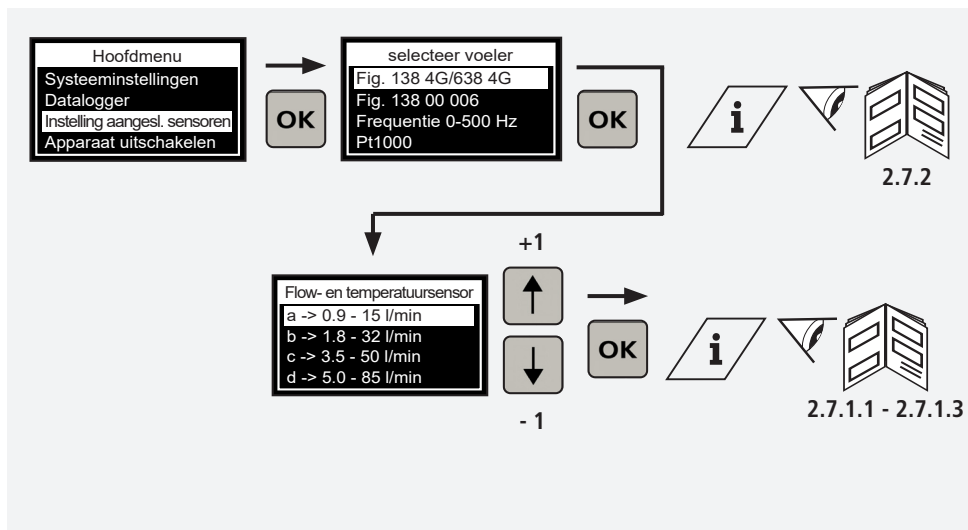


2.7

Sensor selecteren

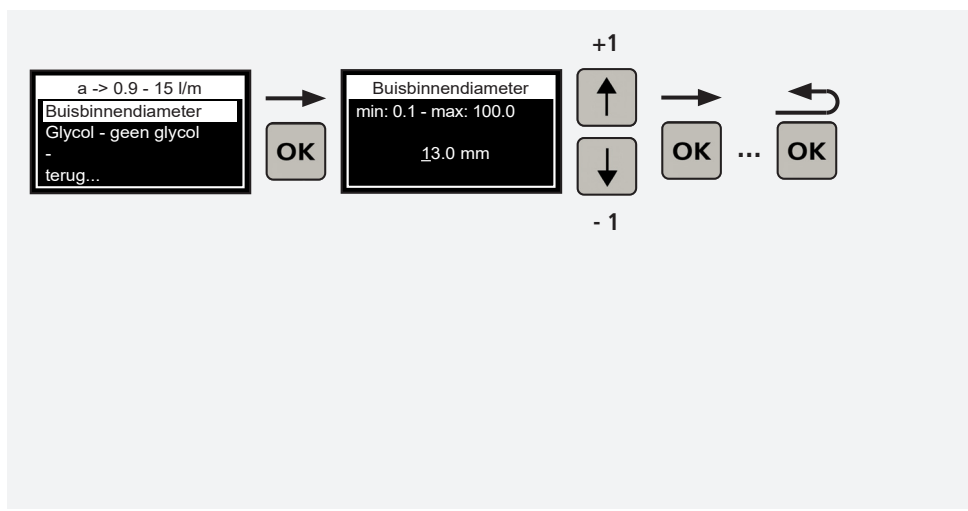
2.7.1

Flow- en temperatuursensor figuur 138 4G | 638 4G



2.7.1.1

Instelling van de buisbinnendiameter

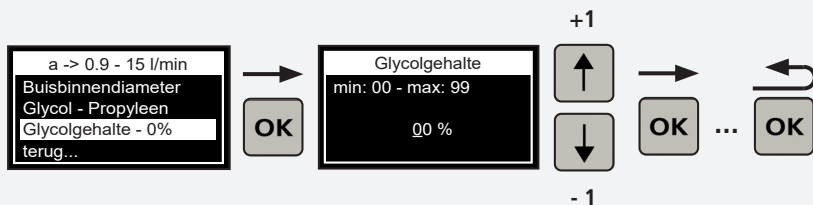


Selectie van mogelijke glycoltypes in de vloeistof



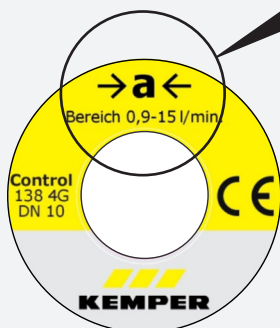
2.7.1.3

Instelling van het glycolaandeel



2.7.2

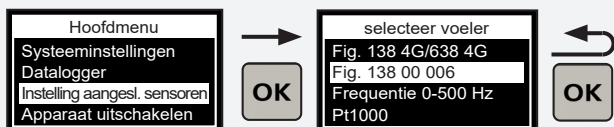
Toewijzing van het sensormeetbereik aan een doorstroom- en temperatuursensor figuur 138 4G | 638 4G



Markering	Meetbereik	Figuur
→a←	0,9 - 15 l/min.	138 4G 010
→b←	1,8 - 32 l/min	138 4G 015
→c←	3,5 - 50 l/min	138 4G 020
→d←	5 - 85 l/min	138 4G 025
→e←	9 - 150 l/min	138 4G 032
→f←	11 - 188 l/min	138 4G 040
→g←	18 - 316 l/min	138 4G 050

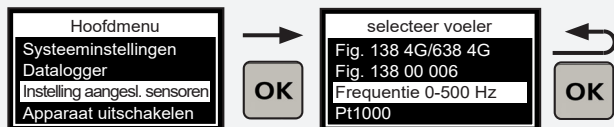
2.7.3

Druksensor figuur 138 00 006



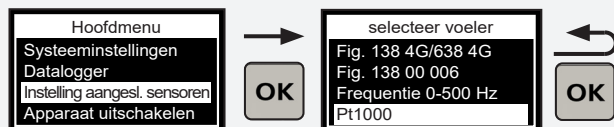
2.7.4

Frequentie-uitgang van een willekeurige frequentiesensor



2.7.5

Temperatuursensor Pt1000|Pt100

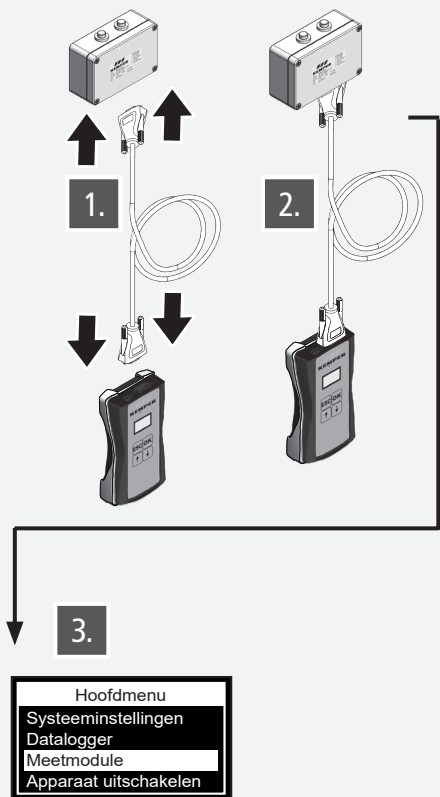


Aansluiting van het handmeetapparaat op een sensormeetmodule figuur 138 00 011



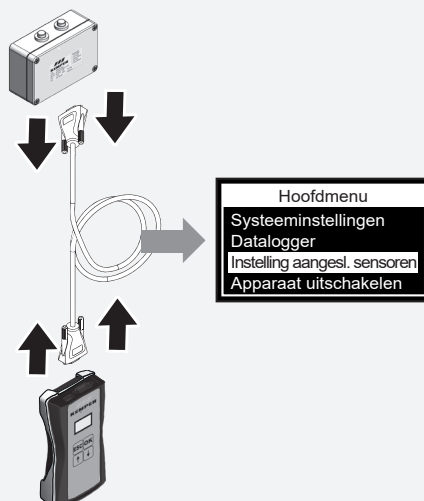
Aanwijzing!

Verbind het handmeetapparaat met de D-Sub-kabel (leveringsomvang handmeetapparaat) en de meetmodule om de configuratie in het menu meetmodule te kunnen uitvoeren.



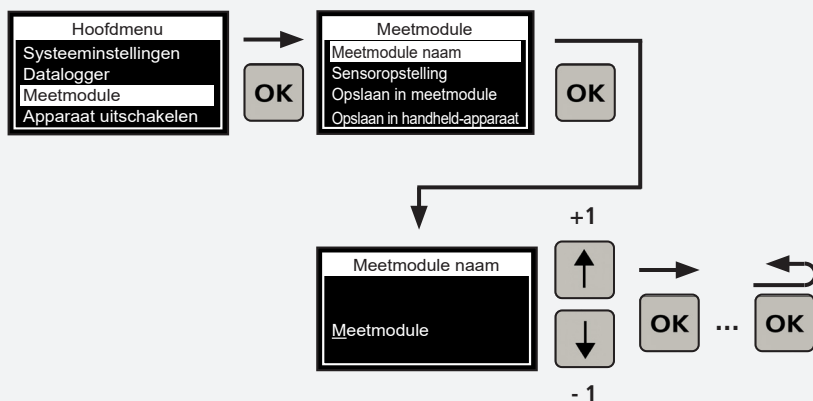
Aanwijzing!

Als er geen verbinding is, wordt het menupunt in het hoofdmenu **niet** weergegeven!



3.1

Wijziging van de aanduiding van de sensor-meetmodule

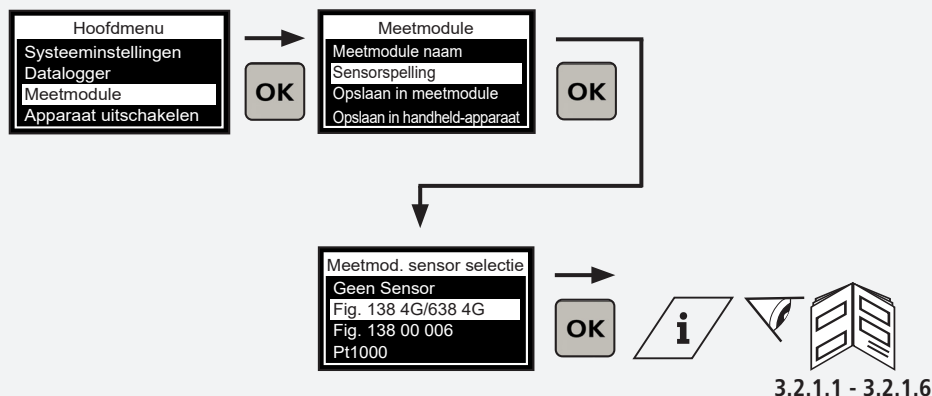


3.2

Selectie en instellingen van een sensor

3.2.1

Flow- en temperatuursensor figuur 138 4G | 638 4G



3.2.1.1 - 3.2.1.6

Selectie van het sensormeetbereik



2.7.2

Setup Fig. 138 4G/638 4G
 Sensor meetbereik
 Buisbinnendiameter
 Glycol – Propyleen
 –

OK

Flow- en temperatuursensor
 a -> 0.9 - 15 l/min
 b -> 1.8 - 32 l/min
 c -> 3.5 - 50 l/min
 d -> 5.0 - 85 l/min



OK

3.2.1.2

Informatie over de buisbinnendiameter

Setup Fig. 138 4G/638 4G
 Sensor meetbereik
 Buisbinnendiameter
 Glycol – Propyleen
 Glycolgehalte - 0%

OK



2.7.1.1

3.2.1.3

Informatie over het glycoltype

Setup Fig. 138 4G/638 4G
 Sensormeetbereik
 Buisbinnendiameter
 Glycol – Propyleen
 Glycolgehalte - 0%

OK



2.7.1.2

3.2.1.4

Informatie over het glycolaandeel

Setup Fig. 138 4G/638 4G
Sensor meetbereik
Buisbinnendiameter
Glycol - Propyleen
Glycolgehalte - 0%



2.7.1.3

3.2.1.5

Kabelcompensatie

Alle temperatuurmetingen worden door het handmeetapparaat als 2-draadsmeting geanalyseerd. De metingen worden door de kabelweerstand vervalst. Er wordt geadviseerd

om de weerstandsafwijkingen, die door de kabelverlengingen van de temperatuursensor naar de meetmodule ontstaan, te compenseren via het menu-item kabelcompensatie.

Setup Fig. 138 4G/638 4G
Kabel compensatie
Opslaan in meetmodule terug...



3.2.1.5.1 - 3.2.1.5.3

3.2.1.5.1

Kabelcompensatie via lengte en doorsnede

Kabel compensatie
Lengte x doorsnede
Weerstandsoffset
Temperatuuroffset



Kabellengte
min: 00.00 - max: 99.99
00.00 m



OK ...

Kabeldiameter
min: 00.00 - max: 99.99
00.00 mm²



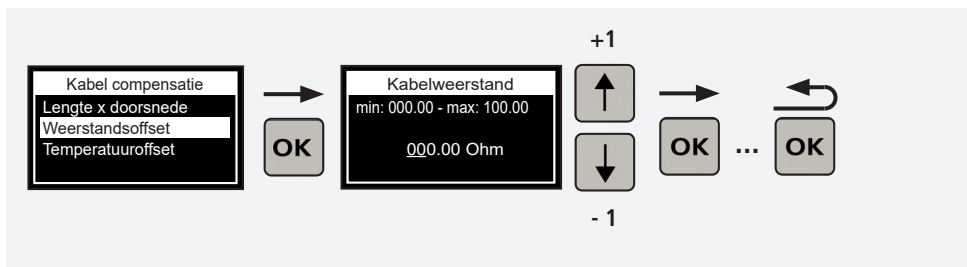
+1

-1

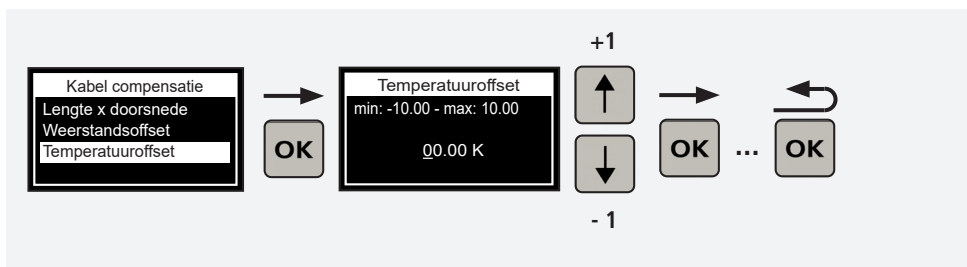
OK ...



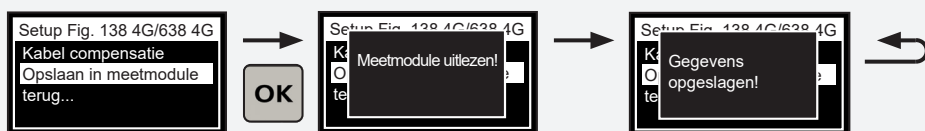
Kabelcompensatie via weerstandsoffset



Kabelcompensatie via temperatuuroffset



Instellingen op de meetmodule opslaan

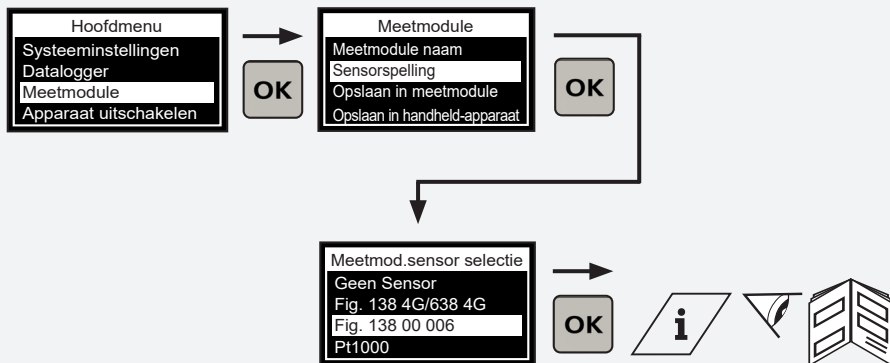
**Aanwijzing!**

Na het invoeren van de sensorinstellingen voert u de functie "In de meetmodule opslaan" uit! Alleen zo wordt de aan het handmeetapparaat ingestelde configuratie

permanent op de meetmodule opgeslagen. Indien dit schrijven niet wordt uitgevoerd en de meetkabel van de meetmodule of het handmeetapparaat wordt getrokken, moet u de sensorinstellingen voor volgende metingen opnieuw invoeren!

3.2.2

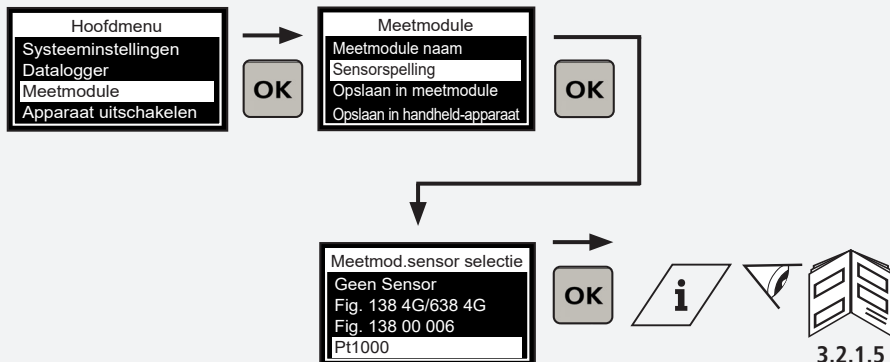
Druksensor figuur 138 00 006



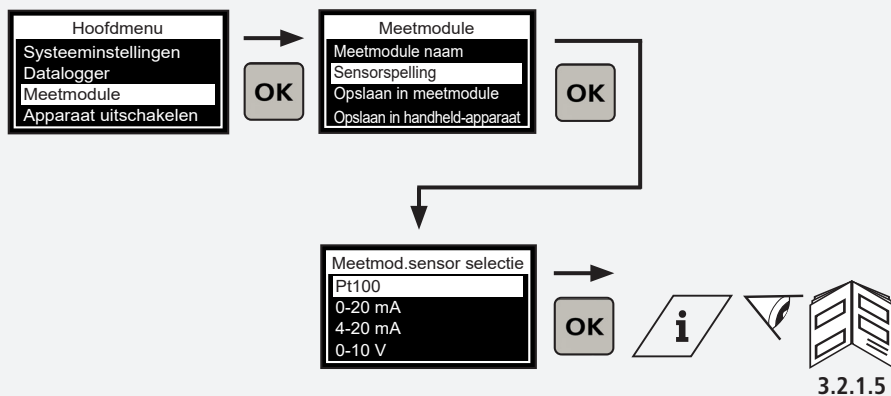
3.2.1.6

3.2.3

Temperatuursensor Pt1000

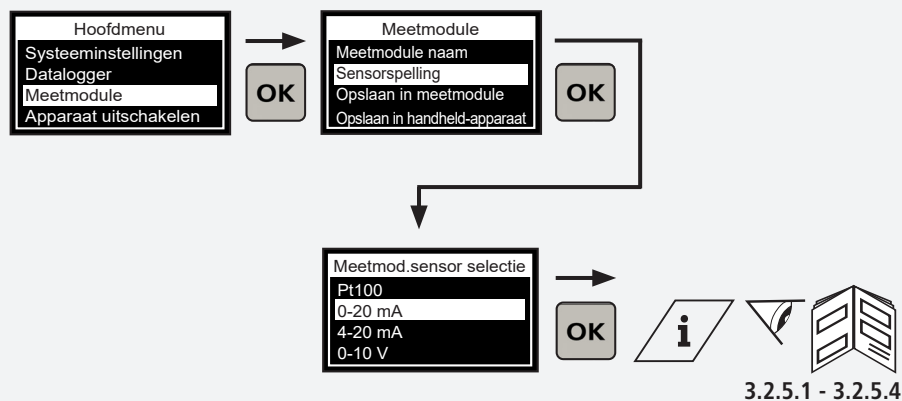


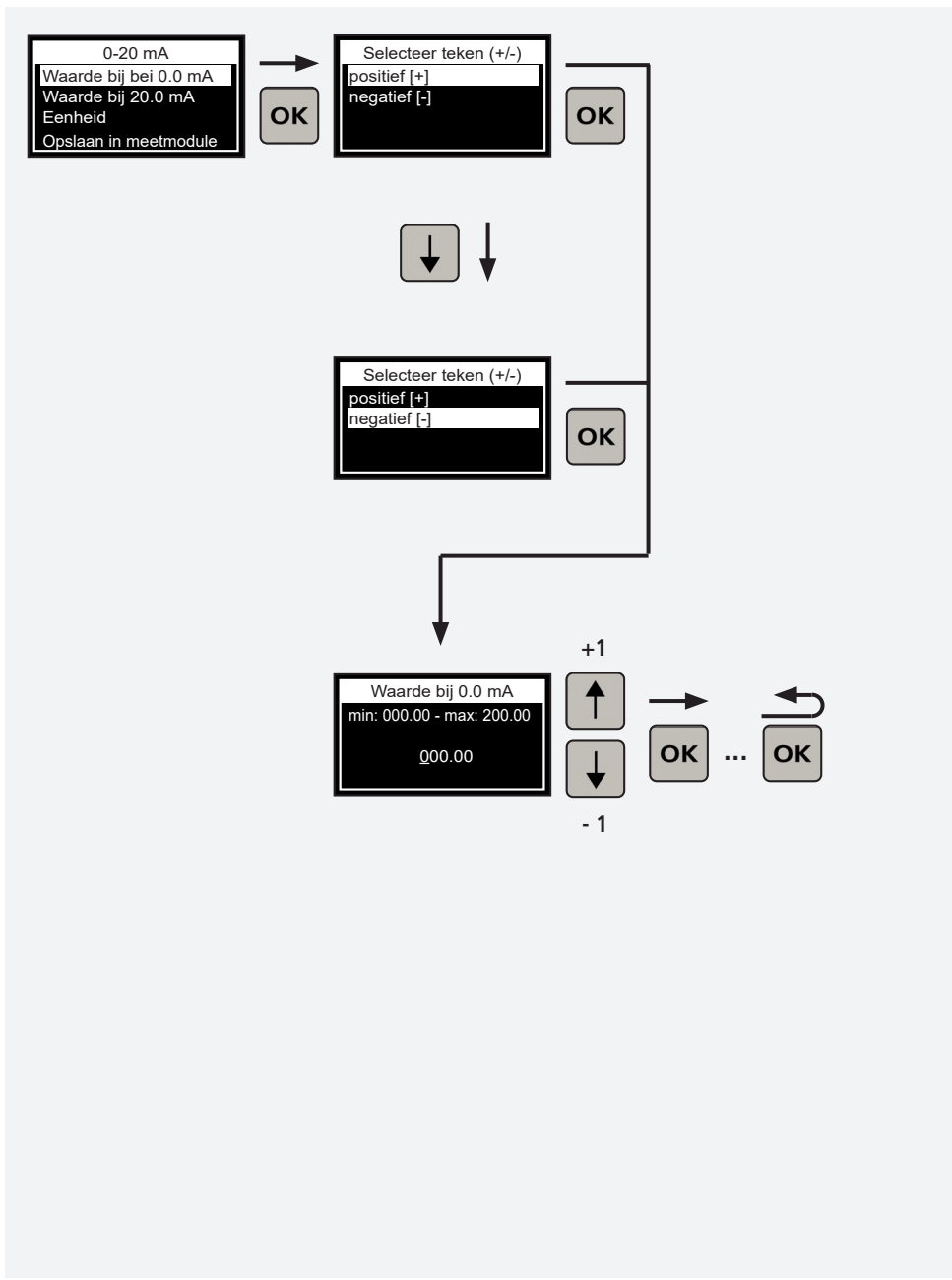
3.2.1.5

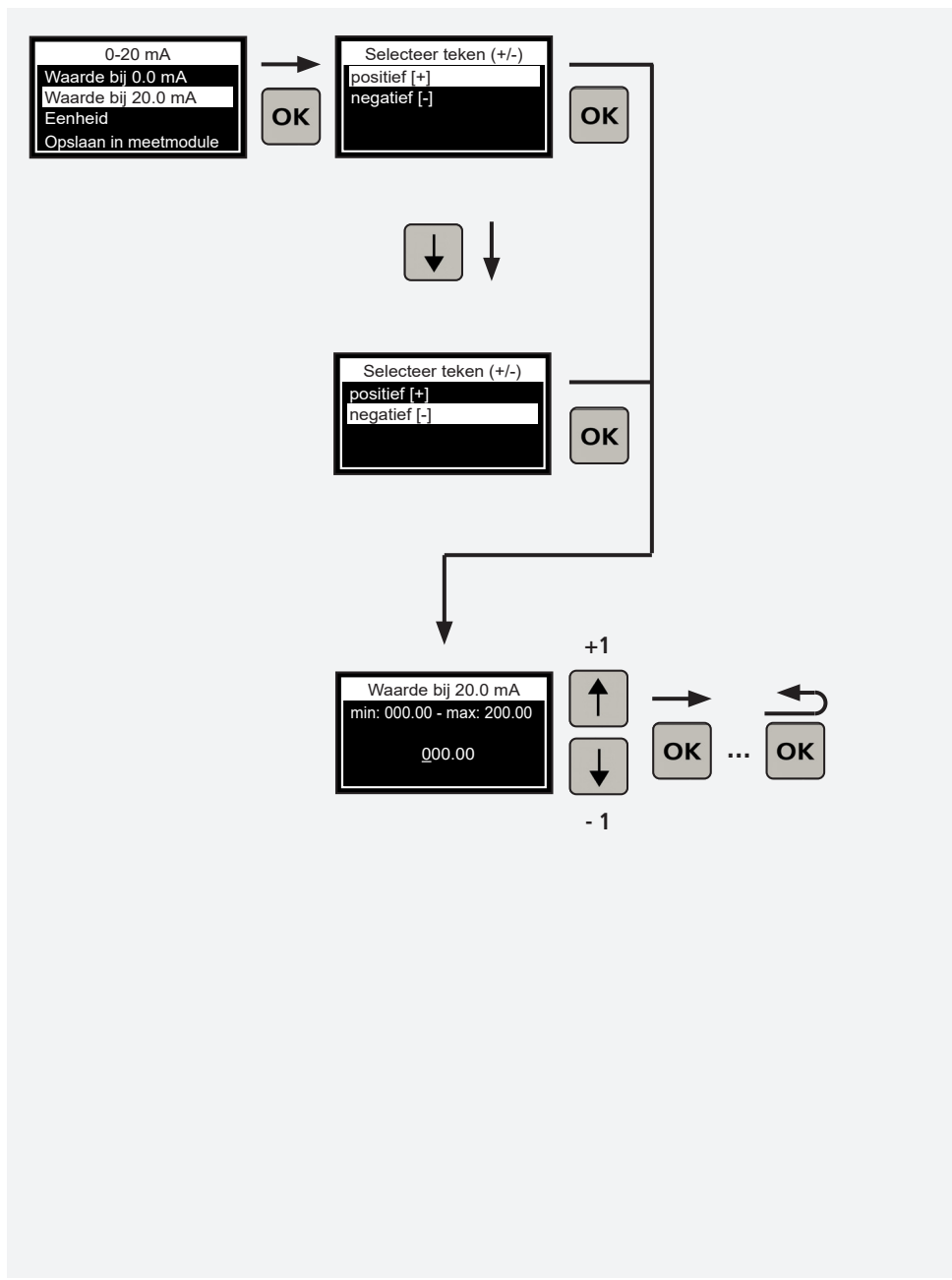


3.2.5

0-20 mA-sensoren

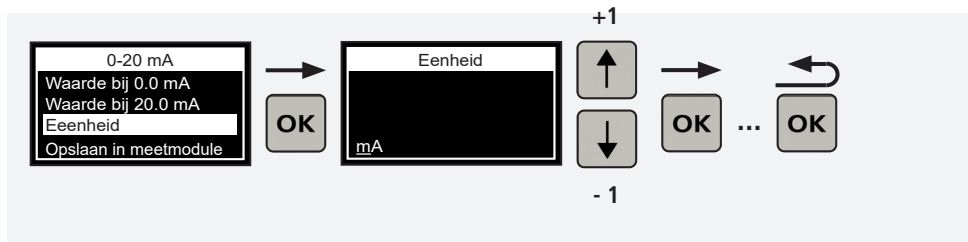






3.2.5.3

Vastleggen van de eenheid



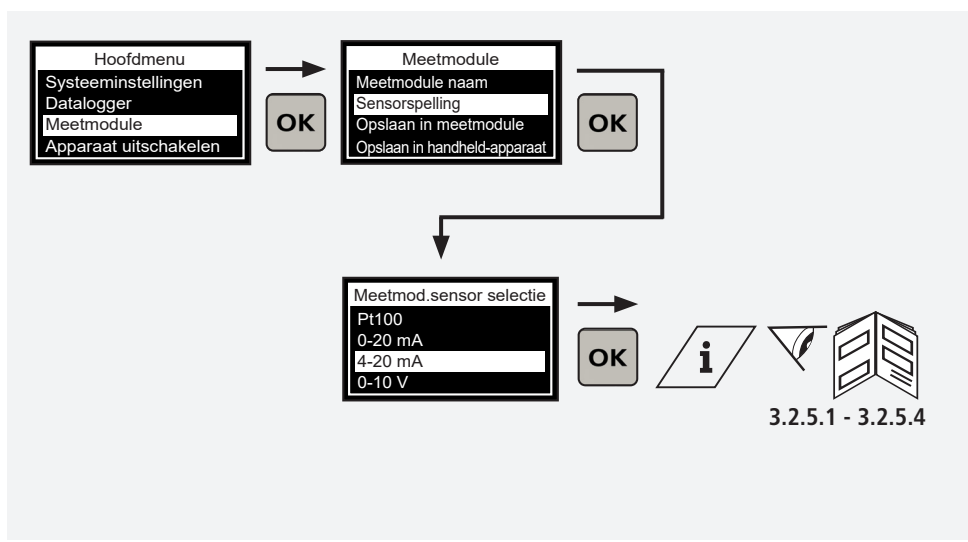
3.2.5.4

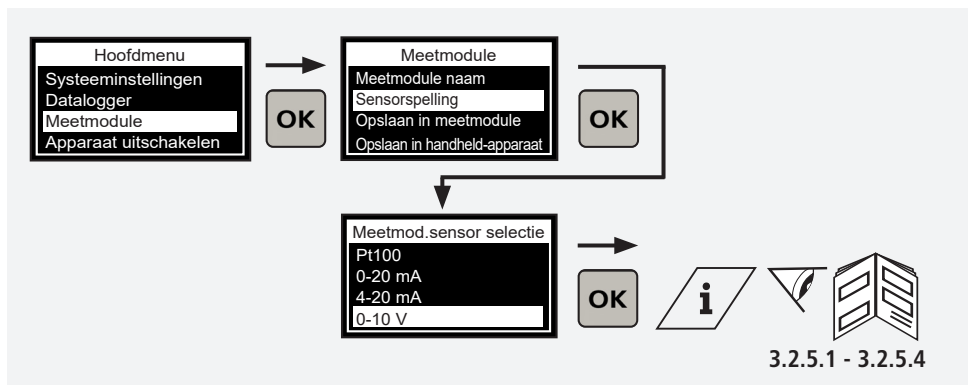
Opslaan van de instellingen



3.2.6

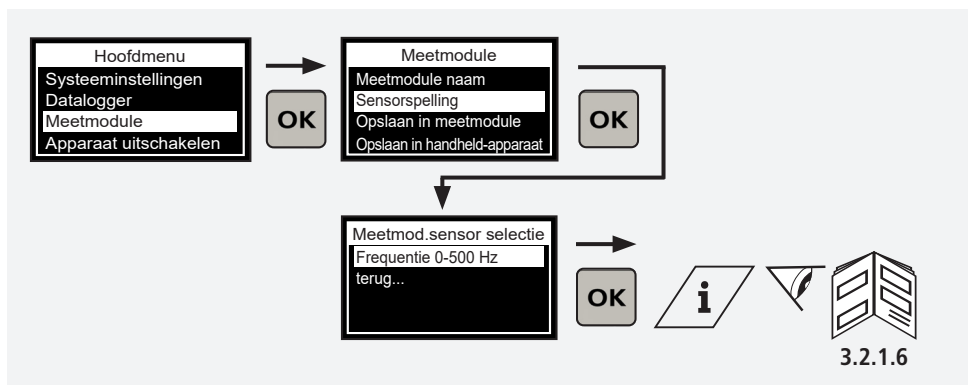
4-20 mA-sensoren





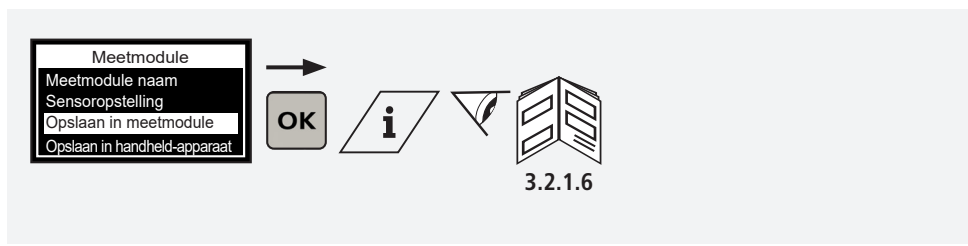
3.2.8

Frequentiesensoren 0-500 Hz



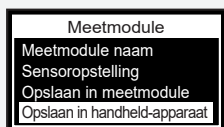
3.3

Instelling in de meetmodule opslaan



3.4

Instelling in het handmeetapparaat tijdelijk opslaan

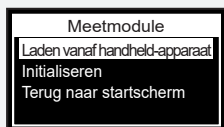


Info!

De configuratie voor de verbonden meetmodule wordt op het tussengeheugen van het handmeetapparaat opgeslagen. Deze kan nu voor de configuratie van andere meetmodules worden gebruikt.

3.5

Instelling uit het tussengeheugen van het handmeetapparaat laden



Aanwijzing!

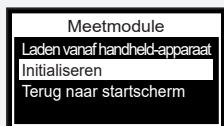
Pas een configuratie uit het tussengeheugen van het handmeetapparaat op de verbonden meetmodule toe. **Om de configuratie op de meetmodule ook na het loskoppelen van het handmeetapparaat over te nemen, dient u deze absoluut in de meetmodule op te slaan!**



3.3

3.6

Meetmodule initialiseren



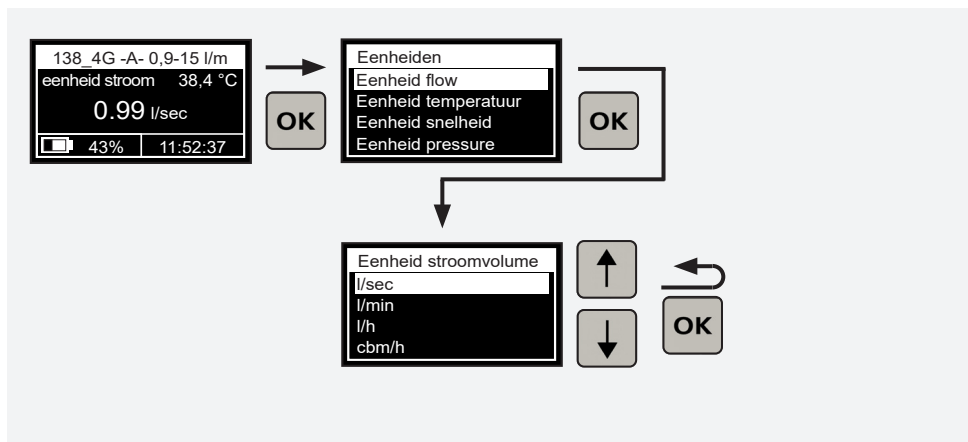
Info!

Als u de initialisatie uitvoert, reset dan de meetmodule naar de fabrieksinstelling. Alle voordien ingevoerde instellingen gaan hierbij verloren.

Selectie van de tijdens de meting weergegeven eenheden

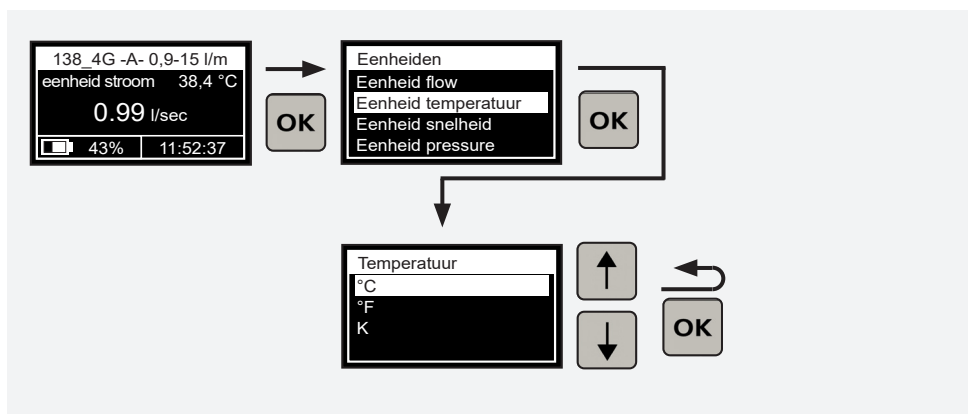
3.7.1

Eenheid voor de flow



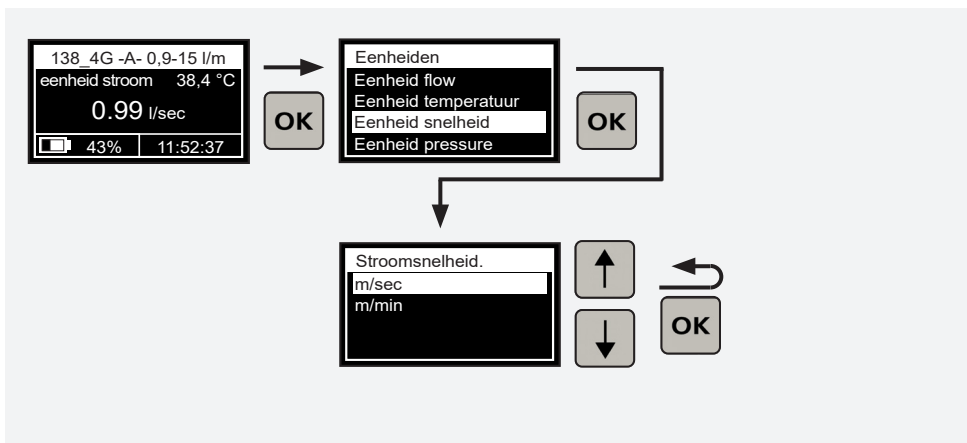
3.7.2

Eenheid voor de temperatuur



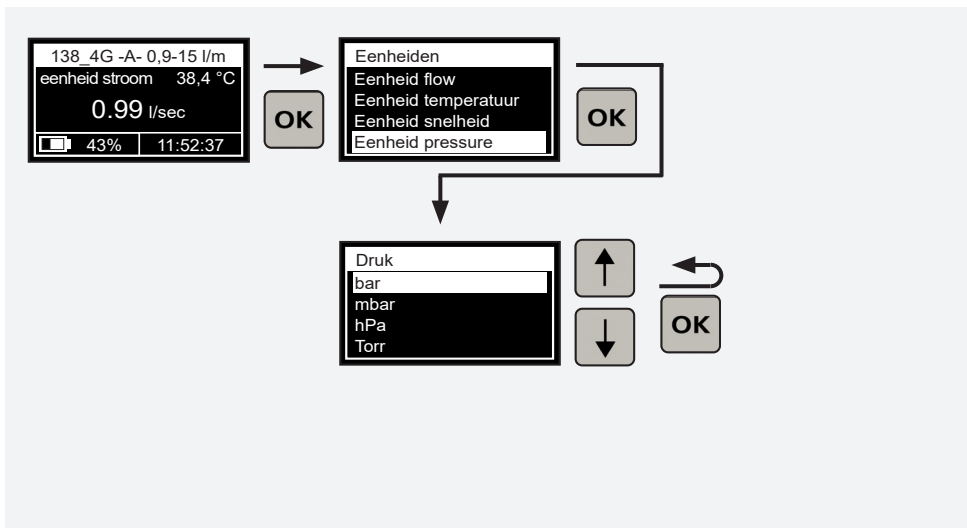
3.7.3

Eenheid voor de stroomsnelheid



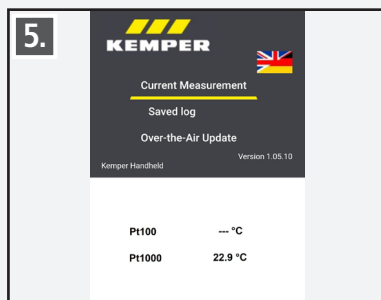
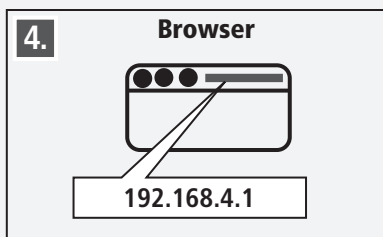
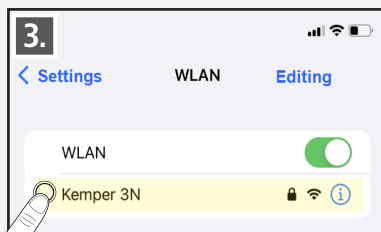
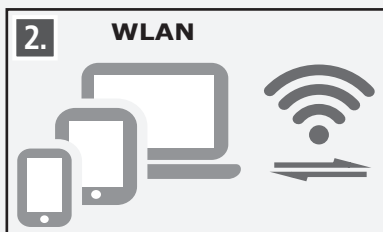
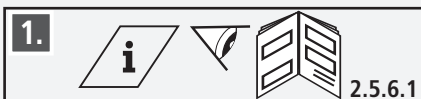
3.7.4

Eenheid voor de druk



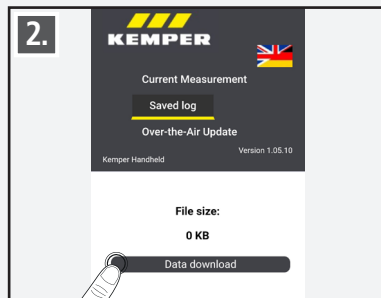
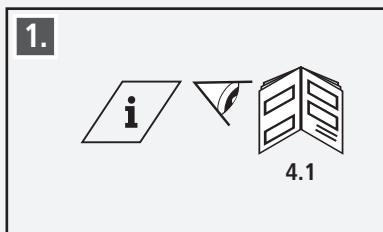
4.1

Verbinding met de webserver tot stand brengen



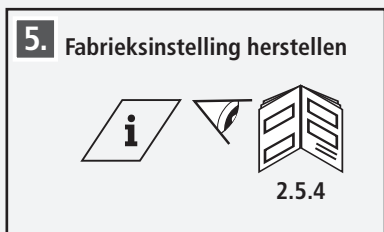
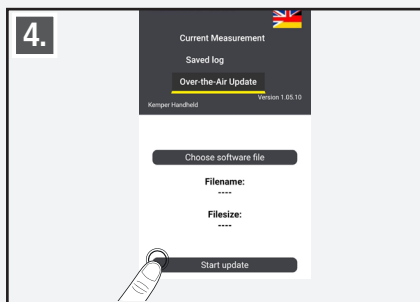
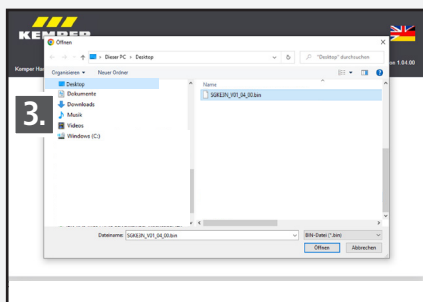
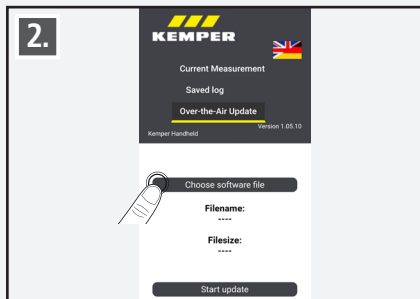
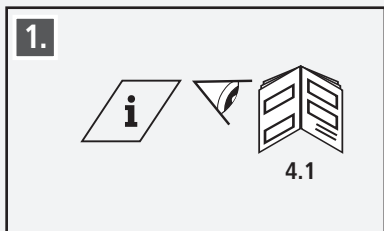
4.2

Meetgegevens van het handmeetapparaat op een eindapparaat overbrengen



4.3

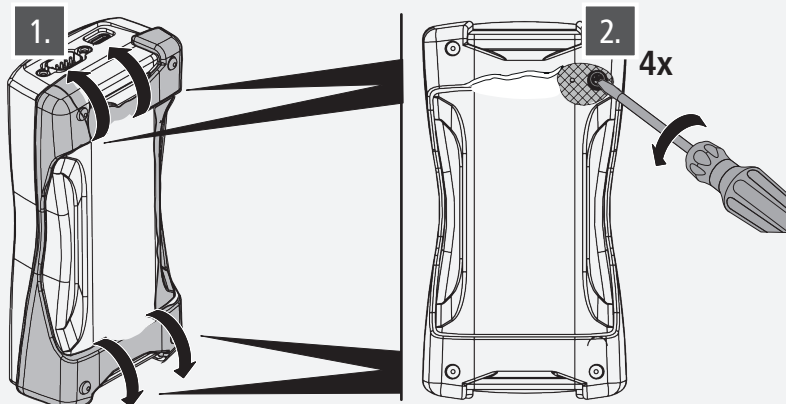
Software-update van het handmeetapparaat laden en installeren



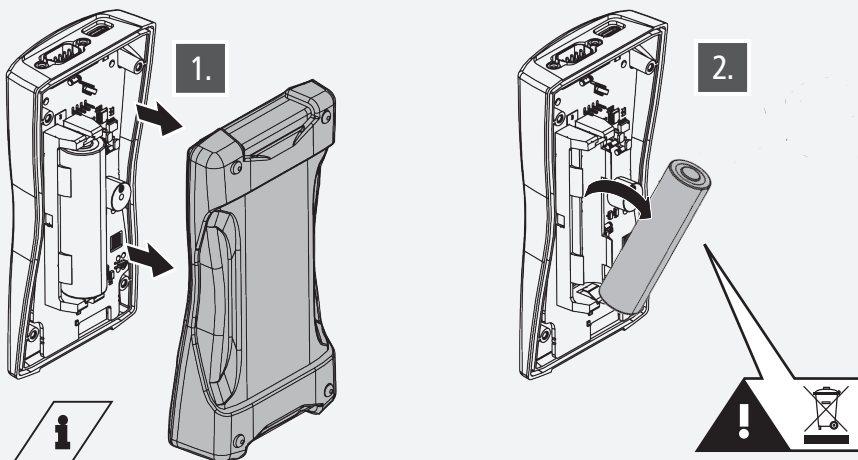
Info

U vindt de actuele softwareversie op:
<https://www.kemper-group.com/de-de/gebaeude-technik/service/downloads-und-e-paper-portal/>

1



2

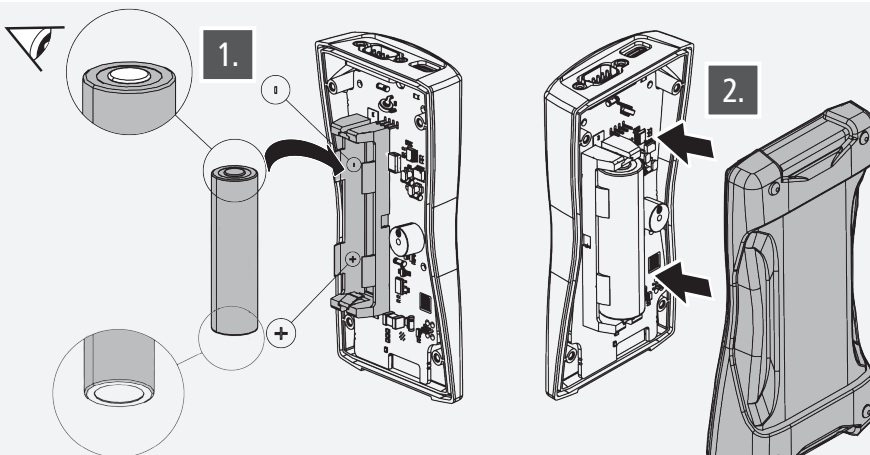
**Info!**

De schroeven blijven in de rubberen omanteling - het uitvallen wordt hiermee vermeden.

5

Vervangen van de accu

3



Info!

Li-ionaccu 18650
Bestelnr. 3692300100



Aanwijzing!

Zorg ervoor dat de accu correct wordt geplaatst,
anders kan er schade aan het apparaat ontstaan!

4

