Type ME31

Display-Modul

Display-Bedienung
Using the display
Utilisation de l'affichage

View 1 of 1

CONFIGURATION

Flow   l/min
10.0

Temperature   °C
21.2
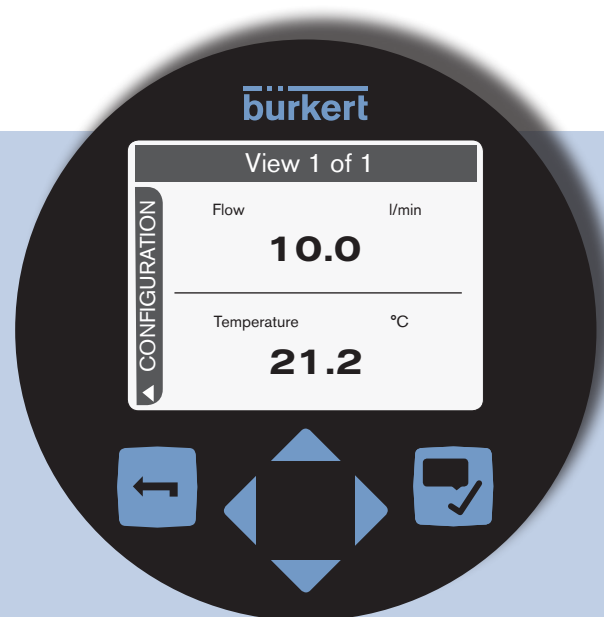
Operating Instructions - Software

Bedienungsanleitung - Software
Manuel d'utilisation - Logiciel

Operation of the display type ME31

CONTENT

4

1 OPERATING INSTRUCTIONS

The operating instructions describe basic operation of the displays for Bürkert devices. Keep these instructions in a location which is easily accessible to every user and make these instructions available to every new owner.

⚠ **WARNING!**

Safety information.

Safety instructions and information for using the communication-capable devices or products may be found in the corresponding operating instructions.

Failure to observe these instructions may result in hazardous situations.

▸ The operating instructions must be read and understood.

1.1 Symbols

⚠ **DANGER!**

Warns of an immediate danger.

▸ Failure to observe the warning will result in fatal or serious injuries.

⚠ **WARNING!**

Warns of a potentially dangerous situation.

▸ Failure to observe the warning may result in serious injuries or death.

⚠ **CAUTION!**

Warns of a possible danger.

▸ Failure to observe this warning may result in a moderate or minor injury.

NOTE!

Warns of damage to property.

▸ Failure to observe the warning may result in damage to the device or other equipment.

indicates important additional information, tips and recommendations.

refers to information in these operating instructions or in other documentation.

▸ designates instructions for risk prevention.

→ designates a procedure which you must carry out.

☑ indicates a result.

1.2 Definitions of terms

The term "device" or "product" used in these instructions refers to communication-capable devices or products.

2 AUTHORIZED USE

Non-authorized use of the display module may be dangerous to people, nearby equipment, and the environment.

Operation of the display is designed for the communication of Bürkert devices.

▸ Use according to the authorized data, operating conditions, and conditions of use specified in the contract documents and operating instructions of the corresponding devices / products.

▸ Use the display module only in conjunction with third-party devices and components recommended and authorized by Bürkert.

▸ Correct installation and careful use and maintenance are essential for reliable and faultless operation.

▸ Use the display module for its intended purpose only.

3 GENERAL INFORMATION

3.1 Contact address

Germany

Bürkert Fluid Control Systems
Sales Center
Christian-Bürkert-Str. 13-17
D-74653 Ingelfingen
Germany
Tel. + 49 (0) 7940 - 10 91 111
Fax + 49 (0) 7940 - 10 91 448
Email: info@de.buerkert.com

International

You can find the contact addresses on the Internet at:

www.burkert.com

3.2 Information on the Internet

The operating instructions and data sheets for device types can be found on the Internet at:

www.burkert.com

4 PRODUCT DESCRIPTION

4.1 Description

The display module makes the setting and monitoring of application-specific parameters a simple operation.

Features:

▪ Clear, straightforward user interface for displaying and changing device or product parameters.

5 USER INTERFACE

The user interface consists of a display and touch-sensitive buttons.
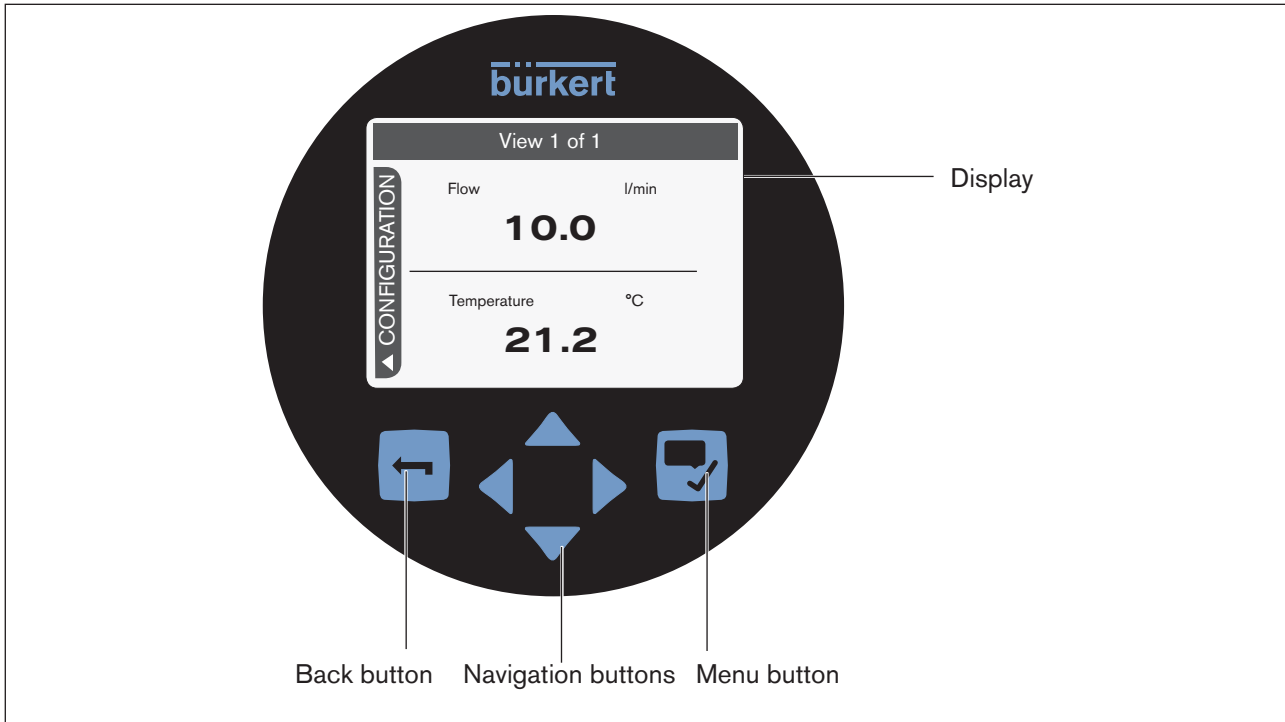
Figure 1: *Overview*

Button		Description
	Back button	Press briefly: Back
		If the user makes changes but hasn't saved these, then a prompt is displayed asking if the changes should be saved.
		Press and hold: Return to view 1
	Navigation buttons	▪ Make selections and settings in Menus.
		◄ ► ▪ Switch views Only available in views, the configuration view and detailed views.
		▪ Save selection (e.g. for option fields).
		▪ Select Configuration area or Menu.

	Menu button	Press briefly: Confirm selection
		          Save selection
		          Next (in the input assistant)

		Press and hold: Open context menu

Table 1: *Description of user interface*

5.1 Display areas
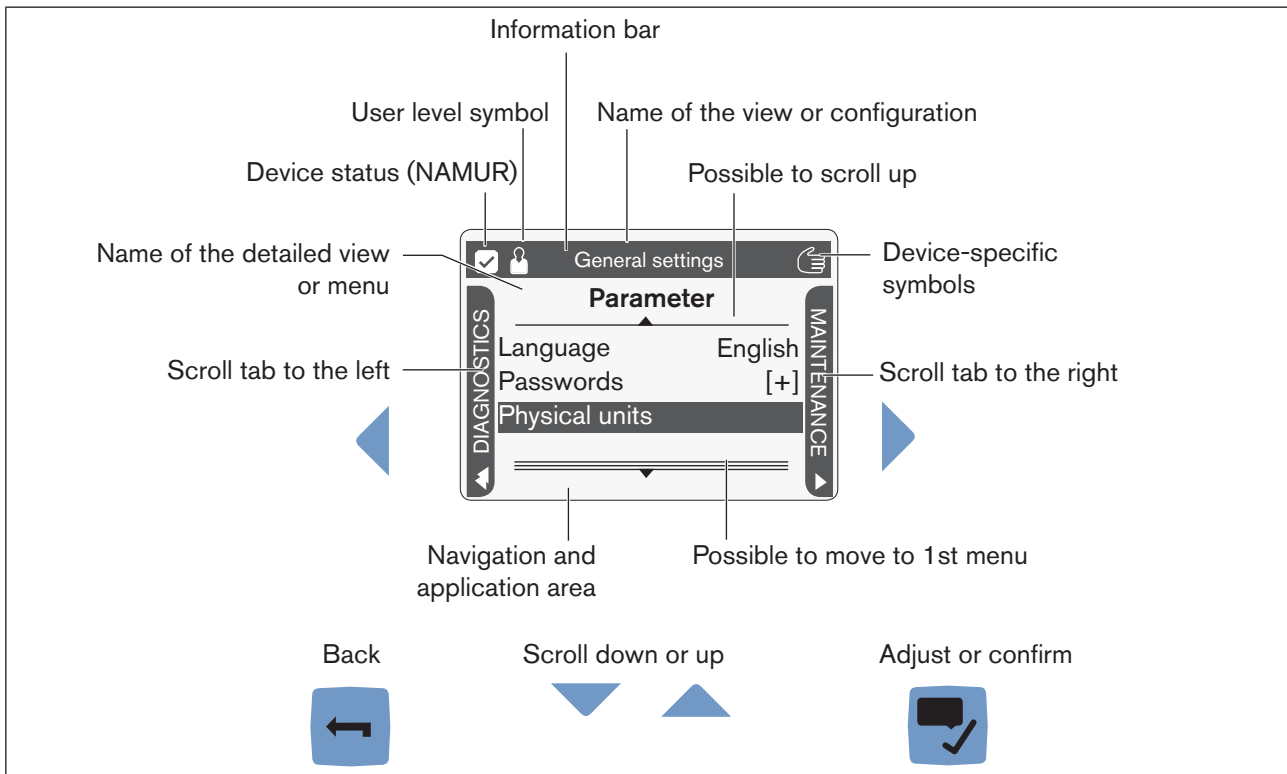
Figure 2:   Display overview (example)

Range	Description
Information bar	Name of the view or configuration area
	Show device status (NAMUR)
	Show user level
	Show device-specific symbols
Designation	Name of the detailed view or menu
Move right or left by a tab	Switch between views
Navigation and application area	Show process values or graphs (trends) in views.
	Select the configuration area or menus according to the view.
	Show values or settings in views.
	Select, enter values or launch input assistants or functions in the menus.

Table 2:   Description of the display areas

A detailed description can be found in the corresponding chapter of these instructions.

5.2 Operating structure

5.2.1 Overview
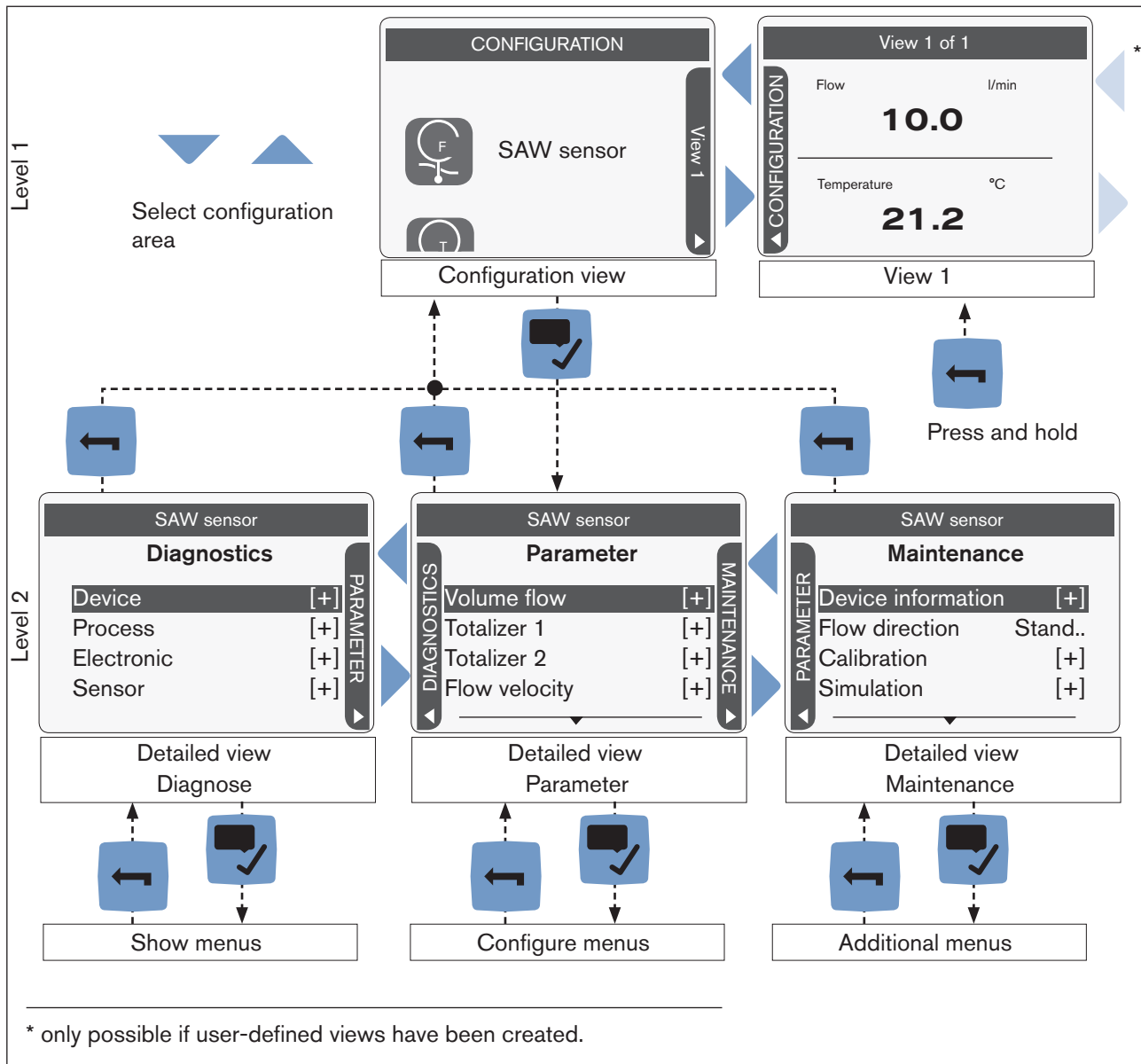
Figure 3:   Operating structure (example)

The operating structure consists of 2 levels with increasing level of detail.

In level 1, the user can switch between the individual views and the configuration view using the navigation buttons ◀ ▶. View 1 is predefined and the user can add additional views.

A maximum of 3 views are available for each configuration area. They show content for the selected configuration area, sorted according to parameter, maintenance and diagnostics (level 2).

The settings and functions menus are shown in the detailed views.

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5.2.2 Description of views

	Load screen
būrkert Loading...	

Level 1

CONFIGURATION ◄ View 1 of 1 Flow **10.0** l/min	**View 1** View which appears: ▪ after system start ▪ after pressing and holding the ← button. View for values or graphs (trend).
View 2 ◄ View 3 of 3 Value 1　　Value 2 Value　　　Value Einheit　　　Einheit Value 3　　Value 4 Value　　　Value Einheit　　　Einheit View 2 ◄ View 3 of 3 Pa　　　CO2 Pressure 100　　　　　▼98 80 60 40 20　　▲23 　　　　　　　t	**View x of x: User-defined view for values or for graphs (trend)** User-customizable view. Possible elements: ▪ Process values ▪ Graphs (trends) ▪ Device-dependent widgets The user can create up to 4 user-defined views for values or graphs.
CONFIGURATION F SAW sensor　　View 1 ► T	**Configuration view** The available configuration areas are displayed and can be selected in the configuration view. **Navigating in the configuration view:** → Select the configuration area with the ▲▼ buttons. → Switch to the detailed view 'Parameters' with the ☑ button.

Level 2	
SAW sensor **Diagnostics** Device [+] Process [+] Electronic [+] Sensor [+] PARAMETER ▶	**Detailed view 'Diagnostics'** View to display values.
SAW sensor **Parameter** DIAGNOSTICS ◀ MAINTENANCE Volume flow [+] Totalizer 1 [+] Totalizer 2 [+] Flow velocity [+] ◀ ▶	**Detailed view 'Parameters'** View to display and adjust values.
SAW sensor **Maintenance** PARAMETER Device information [+] Flow direction Stand.. Calibration [+] Simulation [+] ◀	**Detailed view 'Maintenance'** View to display and adjust supplementary values and input assistants.

Table 3:   Description of views

The content of the detailed views depends on the configuration area selected in the configuration view.

⊕ The diagnostics and maintenance views aren't shown if they don't have any content.

Navigating in the detailed views:

→ Switch between detailed views with the ◀ ▶ buttons.

→ Select Menu with the ▲▼ buttons.

→ Open Menu with the ✓ button.

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Menus to enter or select	
Device information **Name** Q W E R T Y U I O P A S D F G H J K L - Z X C V B N M , . _ abc DEL SPACE .?123 OK	**Menu to enter values or text with the keypad**
Parameter **Time** max: 256 0 1 0 **s** min: 0 Previous: 0	**Menu to enter values with numbers** The current setting and the limits within which the value can be adjusted are shown.
Parameter **Brightness** % 70 0 100	**Menu to enter values with sliders**
Screen saver **Delay** ○ 15 minutes ○ 30 minutes ◉ 60 minutes	**Menu to enter values with option list** Only one option can be selected from the list.
Display **Menu item** ☒ Display menu ☐ Arrange ☐ Sort ☒ Limit	**Menu to enter values with check boxes** Multiple options can be selected from the list.
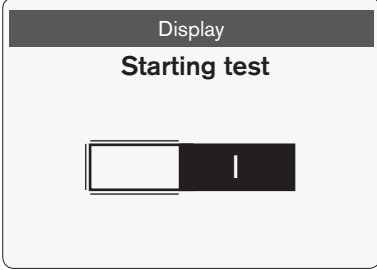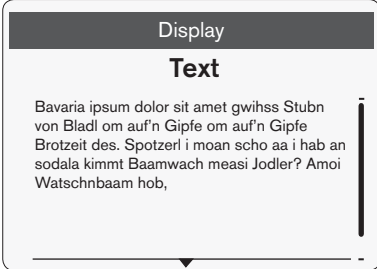
Display **Starting test** ▭▮ |	**Menu to enter values with toggle switches**
Parameter ⬅ **Language**　　1 / 11　☑ 　○　English ◆▶ ◉　German 　○　French	**Menu to enter values with an input assistant** The user can adjust values or launch functions with an input assistant.
Display **Text** Bavaria ipsum dolor sit amet gwihss Stubn von Bladl om auf'n Gipfe om auf'n Gipfe Brotzeit des. Spotzerl i moan scho aa i hab an sodala kimmt Baamwach measi Jodler? Amoi Watschnbaam hob,	**Menu to display text**

Table 4:　　Menus to enter or select

Navigating in the menus to enter or select:
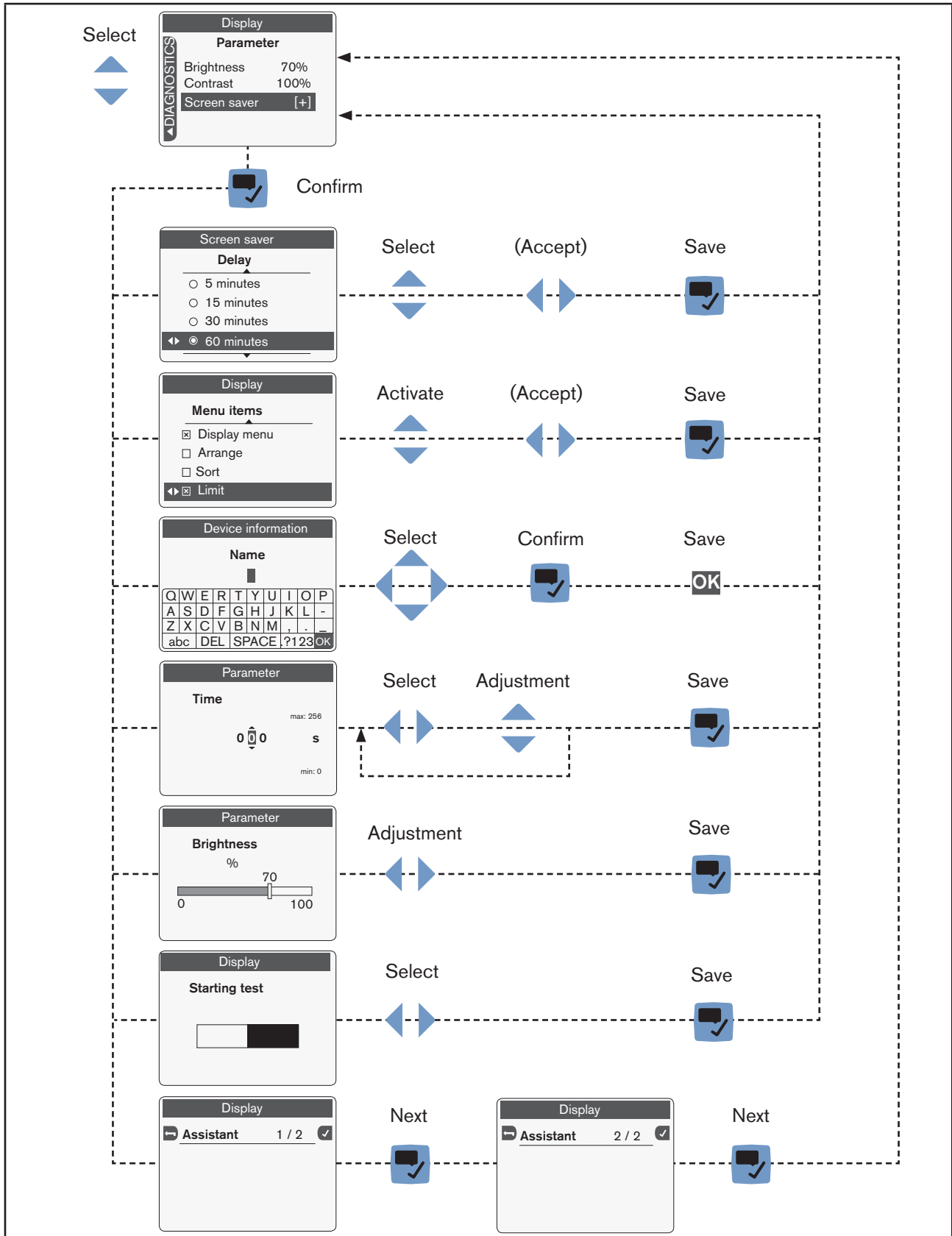
Figure 4:   *Navigating in the views to enter or select (examples)*

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english

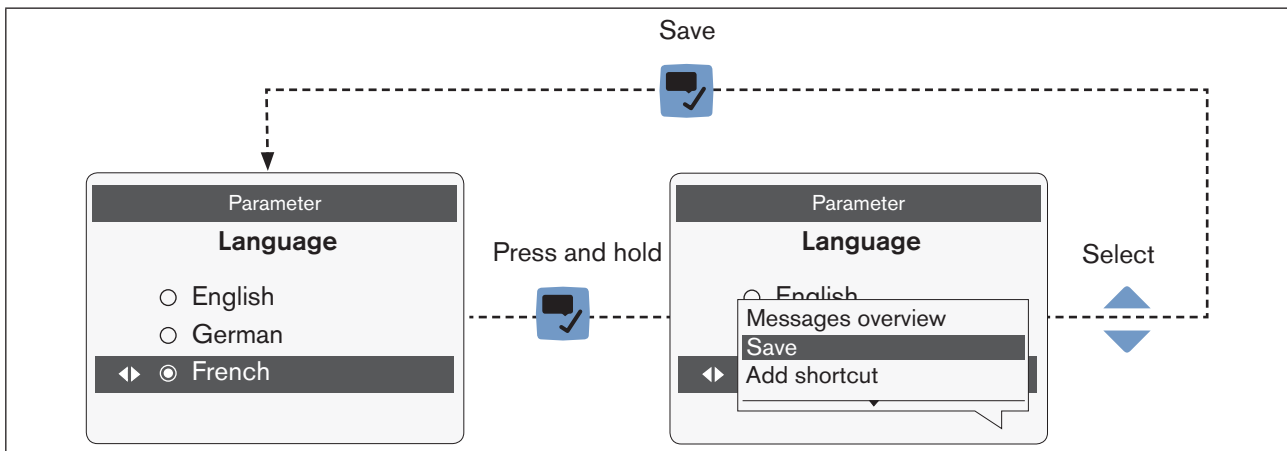The user can also save settings using the context menu:

Figure 5:   Save with context menu

Save with context menu:

Press and hold 🔲: Open the context menu ----➤ 🔼 Save ----➤ 🔲.

✅ The setting is saved.

If the user makes changes but leaves the menu without saving them, then a prompt is displayed asking if the changes should be saved.
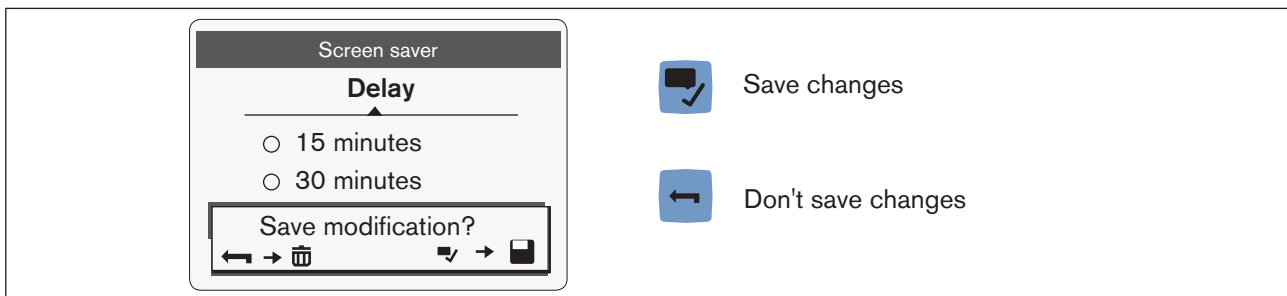

Figure 6:   Request

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6 CONTENT OF AND USING THE VIEWS

6.1 Views (level 1)

The user can select and modify different layouts for the views: Values or graphs (trends).

▪ View 1 is the startup screen when the device is turned on.

▪ The user can create up to 4 user-defined views.

▪ You can switch to view 1 by pressing and holding the ⬅ button for approx. 1 second.

Available displays in the views.

▪ View for values   to display process values

▪ View for graphs   to display process values as graphs (trends)

▪ View with device-specific values

> ℹ️ Configure view, see "7.4 Changing views (level 1)" on page 33
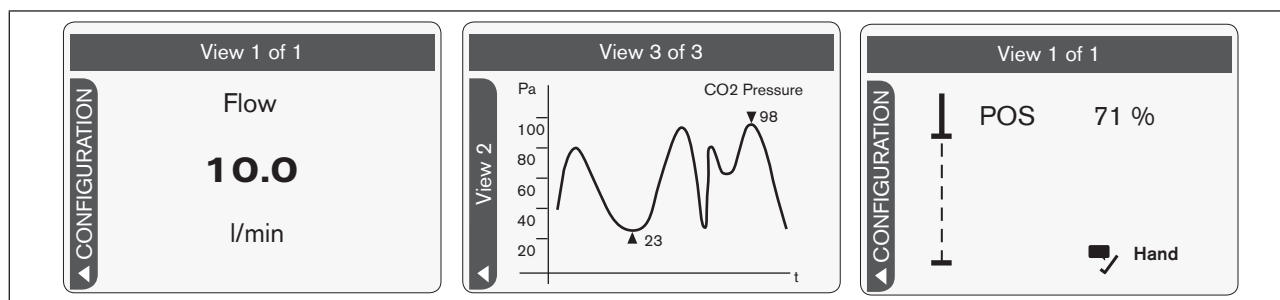
Figure 7:   View (example)

Possible actions:

▪ Switch to view 1, the configuration view or user-defined views.

▪ Select or change the layout (1 to 4 values or 1 to 2 graphs).

▪ Add or remove view.

▪ Change the view title.

▪ Change the user level.

6.2 Configuration view (level 1)

The configuration view shows the available configuration areas.

Figure 8:   Configuration view (example)

Possible actions:

▪ Select configuration area.

▪ Switch to the detailed view 'Parameters' of the selected configuration area.

▪ Switch to view 1.

▪ Change the user level.

▪ Show the message overview.

The available configurations depend on the connected device or product.

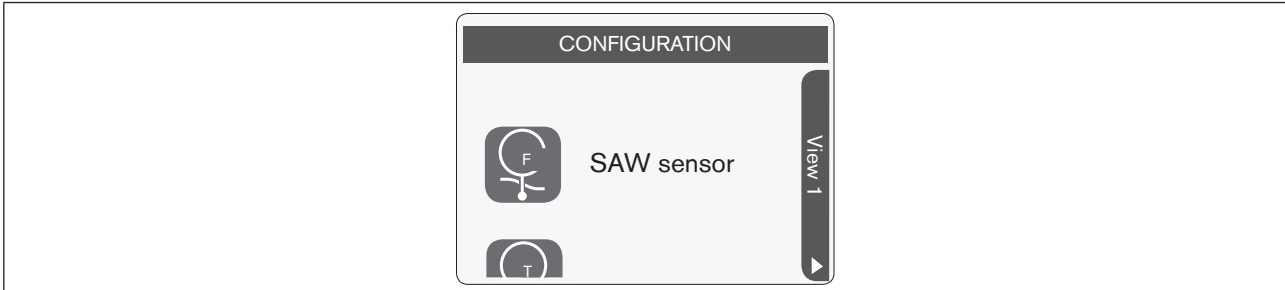The following configurations are available for all devices or products:

Symbol	Description
Display	Settings for the display ▪ Brightness ▪ Contrast ▪ Screen saver
General settings	Settings for (dependent on the user level): ▪ Set language ▪ Date and time ▪ Status display via LED illuminated ring ▪ büS settings ▪ Alarm limits for voltage and temperature ▪ Quick start ▪ Display of device information, software information and diagnostic values ▪ Activate password protection and change passwords ▪ Activate diagnostic functions ▪ Configure units ▪ Reset or restart the device

Table 5:   Configurations

6.3 Detailed views (level 2)

The detailed views display information and settings of the selected **Configuration area** (configuration view).

The detailed views contain **Menus** for operation and display.
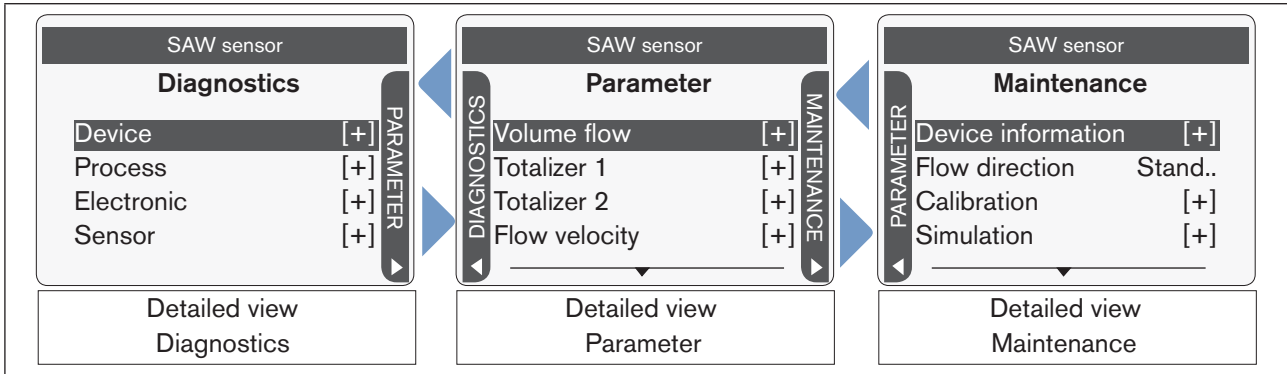
Figure 9: *Detailed views (example)*

> ⚠ The diagnostics and maintenance views aren't shown if they don't have any content.

Possible actions:

▪ Select menu.

▪ Switch between the detailed views.

▪ Switch back to the configuration view.

▪ Switch to view 1.

▪ Change the user level.

Description of the possible menus:

Symbol	Description
Range [+]	Sub-menu exists.
Name Device 1	Setting menu or display menu exists.
Name Device 1 🔒	Setting menu or display menu is read-only for the current user level.

Table 6: *Menu (example)*

> ℹ A detailed description of the menus and the required settings can be found in the respective operating instructions for the devices or products.

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6.3.1 Diagnostics

The detailed view 'Diagnostics' displays information, settings or values for the selected configuration area, e.g. bus information, device information or status information.

The user can't change any settings here.

SAW sensor **Diagnostics** Device [+] Process [+] Electronic [+] Sensor [+] PARAMETER	**Possible elements or actions:** ▪ Display of information. ▪ Switch to the detailed view 'Parameters'. ▪ Switch back to the configuration view. ▪ Switch to view 1.

Figure 10:   Detailed view 'Diagnostics (example)'

6.3.2 Parameter

The detailed view 'Parameters' displays settings for the selected configuration area.

The user can change settings here in the Menus.

SAW sensor **Parameter** DIAGNOSTICS Volume flow [+] MAINTENANCE Totalizer 1 [+] Totalizer 2 [+] Flow velocity [+]	**Possible elements or actions:** ▪ Display of value settings. ▪ Adjust values (via setting menu or selection menu). ▪ Switch to the 'Parameters' or 'Maintenance' detailed views. ▪ Switch back to the configuration view. ▪ Switch to view 1.

Figure 11:   Detailed view 'Parameters (example)'

6.3.3 Maintenance

The detailed view 'Maintenance' displays additional settings for the selected configuration area.

The user can modify the settings or execute the functions with menus and input assistants.

SAW sensor **Maintenance** PARAMETER Device information [+] Flow direction Stand.. Calibration [+] Simulation [+]	**Possible actions:** ▪ Adjust values (with the setting menu or selection menu). ▪ Execute functions. ▪ Switch to the detailed view 'Parameters'. ▪ Switch back to the configuration view. ▪ Switch to view 1.

Figure 12:   Detailed view 'Maintenance (example)'

7 CONFIGURING AND OPERATING

The user can configure settings for the device or product in the detailed views of the selected configuration area.

The user can use the context menu to configure the settings and views in level 1.

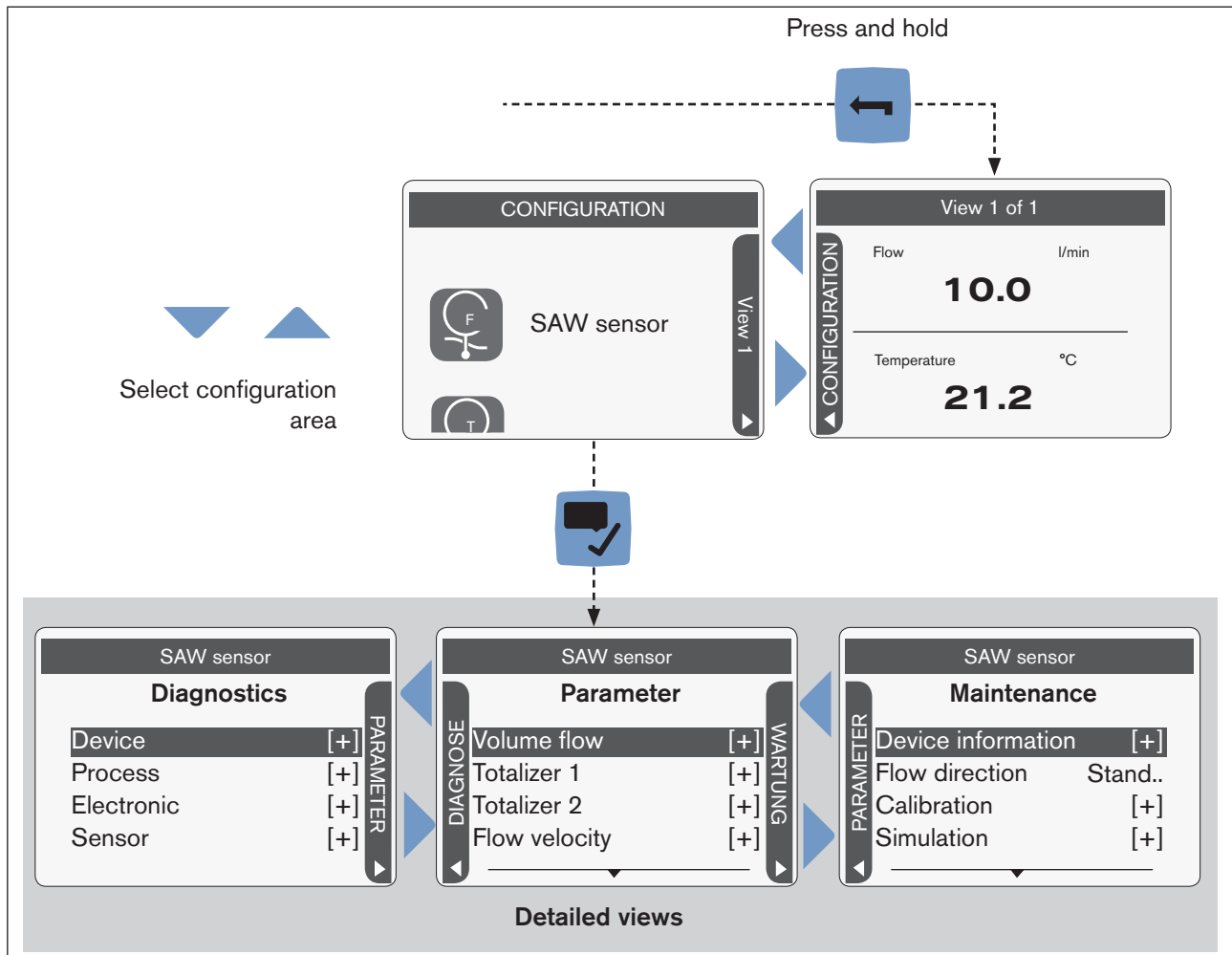## 7.1 Switch to the detailed views

Figure 13: Detailed views (example)

Switch to the detailed view 'Parameters':

Press and hold ⬅: switch to view 1 ----▶ ◀ switch to the configuration view ----▶ select the configuration

area ----▶ ✅ confirm selection.

☑Now the display shows the detailed view 'Parameters' for the selected configuration area.
The user can change settings here.

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7.2 Display settings

The user can configure the display in the following menus:

- ▪ Brightness   Brightness of the backlighting

- ▪ Contrast   Contrast of the display

- ▪ Screen saver   Delay until the screen saver is activated and brightness of the backlighting when the screen saver is on

7.2.1 Switching to the detailed view 'Parameters' for display settings

Switching to the detailed view 'Parameters' for display settings:

Press and hold 🔙: switch to view 1 ----➤◀ switch to configuration view

----➤ 🔼🔳 **Display** ----➤ ✅ Confirm selection.

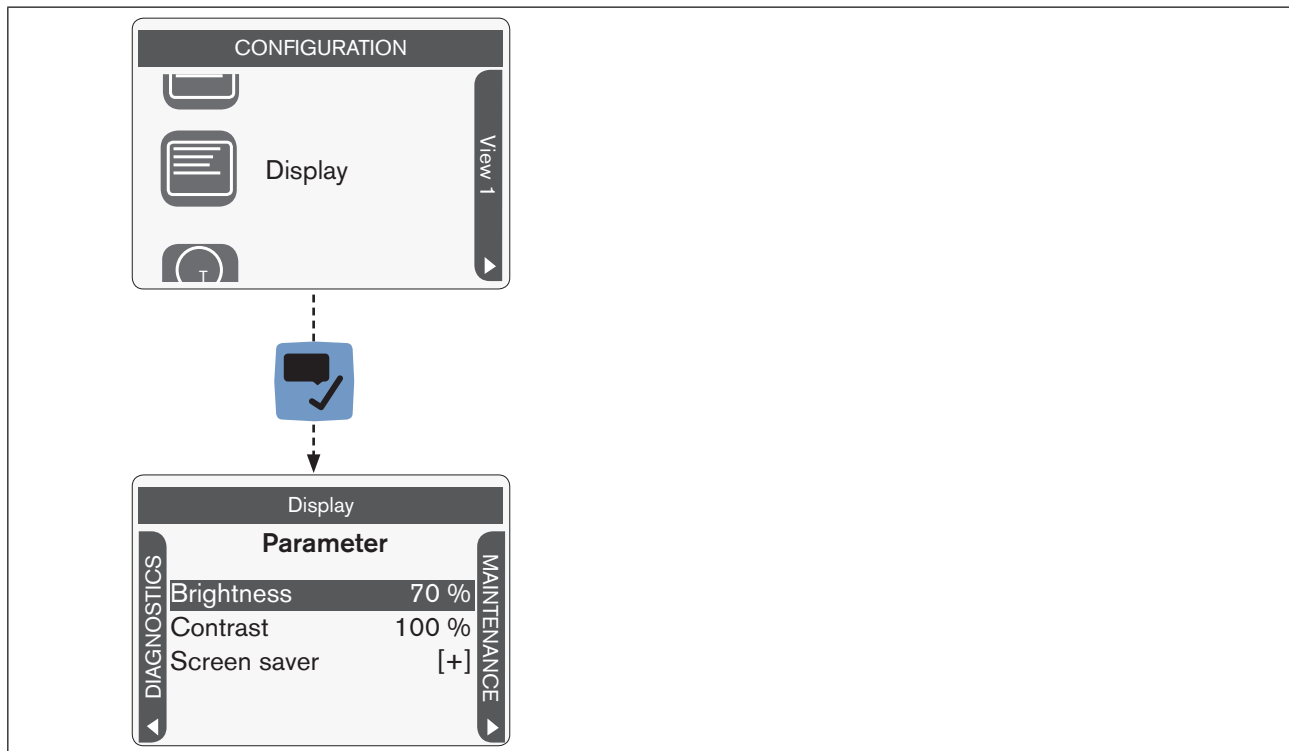☑ Now the display shows the detailed view 'Parameters' for the display settings.

Figure 14:   Display settings (example)

7.2.2 Adjusting the brightness of the backlighting

Adjusting the brightness of the backlighting:

→ Switching to the detailed view 'Parameters' for display settings (see "7.2.1").

 Brightness - - - - ▶ - - - - ▶ Adjust the brightness - - - - ▶ Save.

☑ The brightness of the backlighting is adjusted.

⚠ Reduction of the backlighting brightness if the device temperature exceeds +60 °C:

If the internal device temperature is greater than approx. +60 °C, then the backlighting brightness is reduced to 50 % and turned off 5 minutes after the last user input. The backlighting is turned off above an internal temperature of approx. +80 °C (0 %). User input turns the backlighting on for 30 seconds with a brightness of 50 %.

7.2.3 Contrast setting

→ Switching to the detailed view 'Parameters' for display settings (see "7.2.1").

Adjust the display contrast:

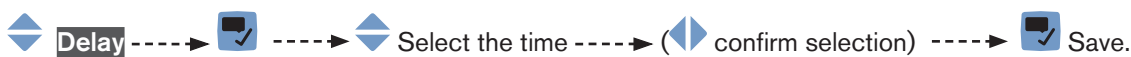 Contrast - - - - ▶ - - - - ▶ Adjust the contrast - - - - ▶ Save.

☑ The display contrast is adjusted.

7.2.4 Screen saver settings

→ Switching to the detailed view 'Parameters' for display settings (see "7.2.1").

 Screen saver - - - - ▶

Adjust the delay after which the screen saver is turned on:

 Delay - - - - ▶ - - - - ▶ Select the time - - - - ▶ (confirm selection) - - - - ▶ Save.

☑ The delay is adjusted.

Adjusting the brightness of the backlighting while the screen saver is active:

 Brightness - - - - ▶ - - - - ▶ Adjust the brightness - - - - ▶ Save.

☑ The brightness of the backlighting while the screen saver is active is adjusted.

7.2.5 Deactivating the screen saver

Operation of the display is protected by a screen saver.

Deactivating the screen saver:

→ Press any button and follow the instructions on the display.
  (Press the ▶ button, then press the ▲ button)

7.3 General settings

The user can configure values in the following menus (depending on the user level):

Menu	Description	User level
▪ Change language	Select the display language	Standard
▪ büS	Name and description for büS communication	Advanced user
	Name, description and values for büS communication	Installer
▪ Physical units	Units	Advanced user
▪ Date and time	Current date and current time	Installer
▪ Status LED	Status display via LED illuminated ring	Installer
▪ Alarm limits	Voltage and temperature limit	Installer
▪ Quick start	Input wizard for the user for initial settings.	Installer
	For example, in the configuration display: language, times, and units.	
▪ Passwords	Activating or deactivating password protection	Installer
	Change passwords	
▪ Diagnostics	Activating or deactivating diagnostic functions	Installateur
▪ Reset device	Reset device or product to factory default settings	Installer
▪ Device information	Display of device information, software information and diagnostic values	Reading rights only

7.3.1 Switching to the detailed view 'Parameters' for general settings

Switching to the detailed view 'Parameters' for general settings:

Press and hold ⬅: switch to view 1 ----▶ ◀ switch to configuration view

----▶ 🔼🔽 ⚙ **General settings** ----▶ ✅ Confirm selection.

☑Now the display shows the detailed view 'Parameters' for the general settings.
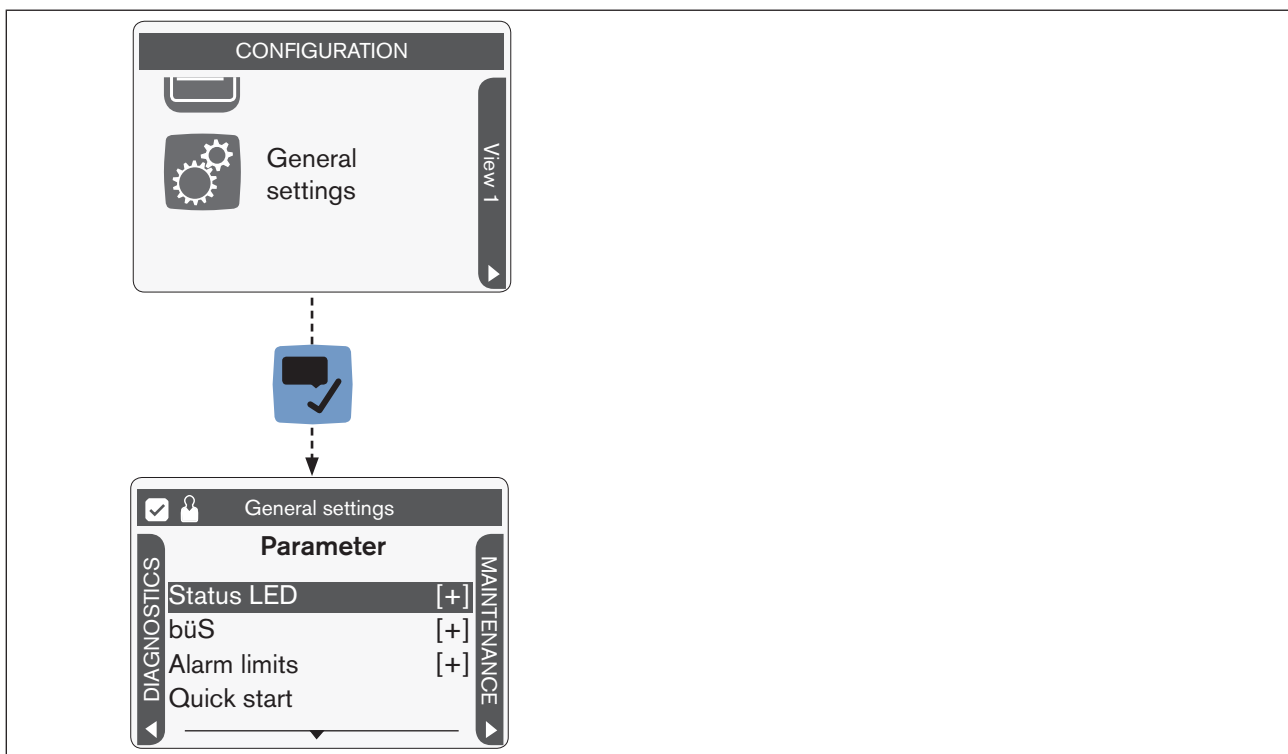

Figure 15: General settings (example)

7.3.2 Set language

→ Switch to the detailed view 'Parameters' for **General settings** (see "7.3.1").

Setting the language:

🔼🔽 **Language** ----▶ ✅ ----▶ 🔼🔽 Select language ----▶ (◀▶ confirm selection) ----▶ ✅ Save.

☑ The language is adjusted.

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7.3.3   büS data settings

The user can configure values for the büS connection in the büS menu.

→ Switch to the detailed view 'Parameters' for **General settings** (see "7.3.1").

büS ----▶ ----▶

The user can configure the following values in the büS menu (user level: Advanced user):

▪ Displayed name

▪ Location

▪ Description

Adjust using the on-screen keypad.

The user can configure the following values in the büS menu (user level: Installer):

Advanced   [+]:

▪ Unique device name   Identifier of the device or product in the bus system
                              Default setting: serial number and identification number
                              Adjust using the on-screen keypad
                              Note: user should not change

▪ Baud rate   Transfer speed
                              50 kbit/s, 250 kbit/s, 500 kbit/s, 1 Mbit/s
                              Default setting: 500 kbit/s
                              Select from option list

▪ büS address   Min: 0, max: 127
                              Adjust with numbers

▪ Bus mode   büS, CANopen
                              Default setting: büS
                              Select from option list

Depending on the specific device:

▪ Termination resistor   Off or On
                              Default setting: Off
                              Select using toggle switch

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### 7.3.4 Configure units

Required user level: Advanced user

The user can configure the units in the `Physical units` menu.

Note:

▪ The units which are configured here don't apply for the views in level 1.

▪ Some units cannot be changed, depending on the specific device.

→ Switch to the detailed view 'Parameters' for `General settings` (see "7.3.1").

Configuring the units:

🔼🔽 `Physical units` ----▶ ✓ ----▶ 🔼🔽 Select physical unit ----▶ ✓ ----▶ 🔼🔽 Select unit ----▶

(◀▶ confirm selection) ----▶ ✓ Save.
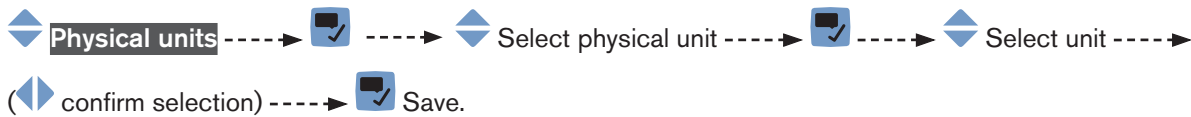
The user can perform these steps for the available units.

☑ The units are adjusted.

7.3.5 Setting the date and time

Required user level: Installer

→ Switch to the detailed view 'Parameters' for `General settings` (see "7.3.1").

Setting the date and time:

🔼🔽 `Date and time` ----▶ ✓.

Launch the input assistant: The previous settings are displayed.

✓ ----▶ 🔼🔽 Set time zone ----▶ 🔼🔽 Switch summer time on or off 🔼🔽◀▶ Adjust the year ----▶ ✓

----▶ 🔼🔽◀▶ Adjust the month ----▶ ✓ ----▶

🔼🔽◀▶ Adjust the day ----▶ ✓ ----▶ 🔼🔽◀▶ Adjust the hour ----▶ ✓ ----▶ 🔼🔽◀▶ Adjust the

minute ----▶ ✓ ----▶ ✓
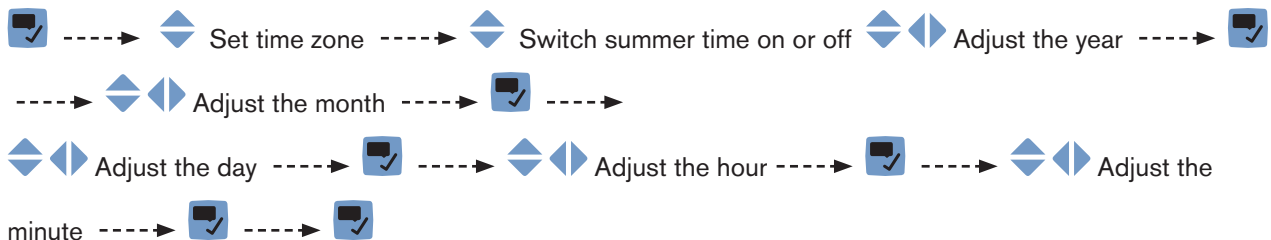
☑ The date and time are adjusted.

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7.3.6 Turning the status display via the LED illuminated ring on or off

Required user level: Installer

The user can select or deactivate the status display mode of the LED illuminated ring in the `Status LED` menu:

Status display mode	Description
NAMUR mode	Device status is displayed: ▪ Color based on NAMUR ▪ Light interval: Status display, dependent on the respective device or product
Fixed color	LED illuminated ring lights up in the selected color (white, red, orange, yellow, green, turquoise, blue or pink)
LED off	LED illuminated ring is not lit

Table 7:   Status display via LED illuminated ring

→ Switch to the detailed view 'Parameters' for **General settings** (see "7.3.1").

Configuring the status display:

 `Status LED` ----▶ ☑ ----▶ `Mode     xxx` ----▶ ☑ ----▶ Select mode*) ----▶ (confirm selection) ----▶ ☑ Save.
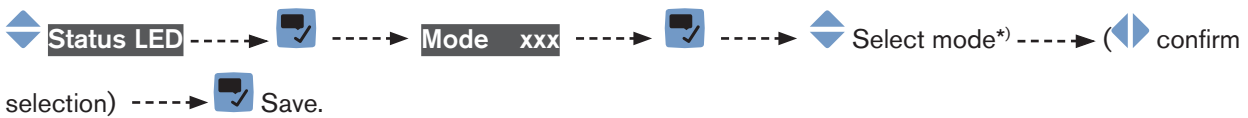
☑ The status display is adjusted.

*) On `Fixed color` status display, select the color as well.

> ℹ Further status display modes may be available on specific devices or products and are described in the corresponding operating instructions.

7.3.7 Adjusting the alarm limits for the supply voltage and device temperature

Required user level: Installer

The user can configure the limits for supply voltage or device temperature warnings as well as the hysteresis in the Alarm limits menu.

→ Switch to the detailed view 'Parameters' for General settings (see "7.3.1").

Adjusting alarm limits, supply voltage example:
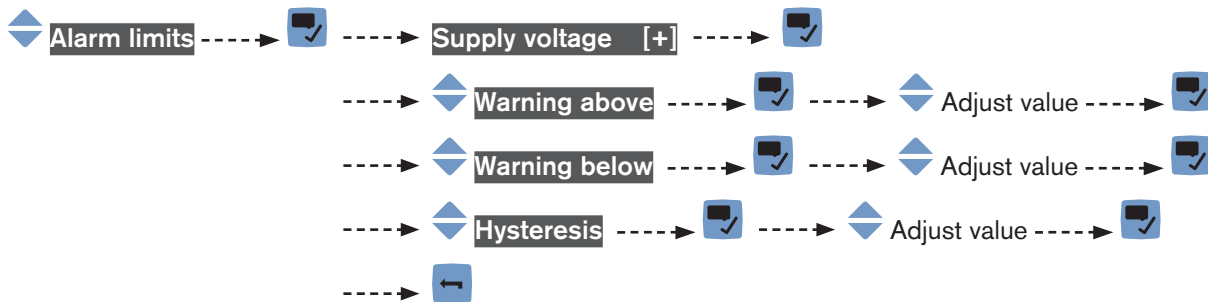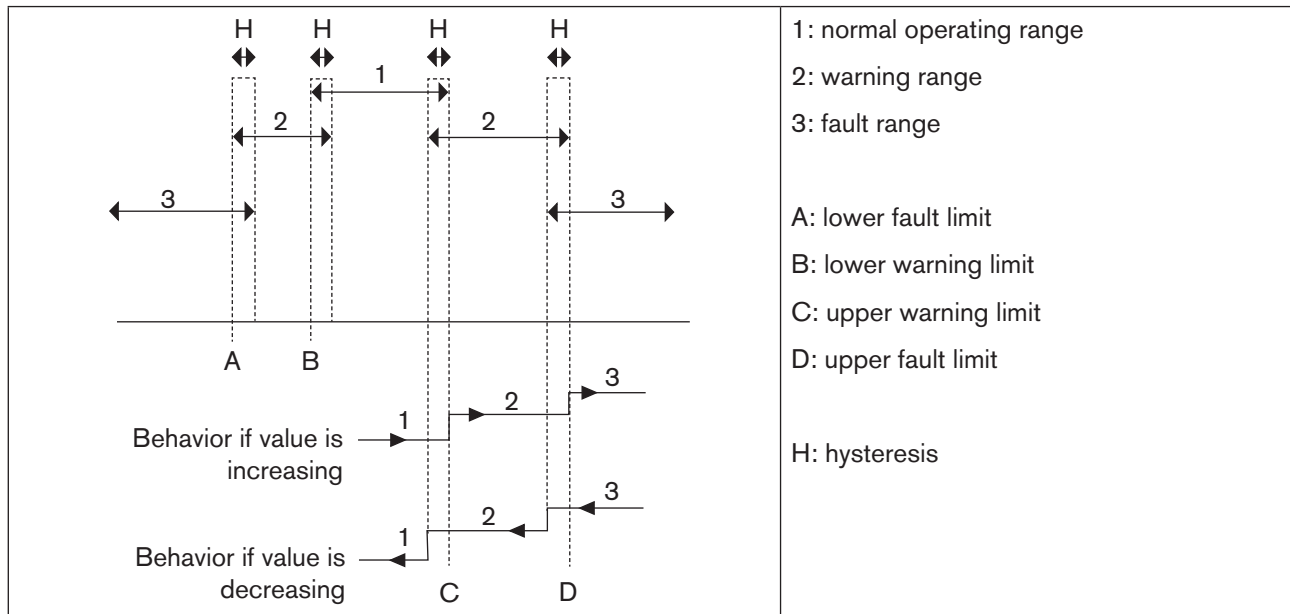

The alarm limits for the supply voltage are adjusted.

	1: normal operating range
	2: warning range
	3: fault range
	A: lower fault limit
	B: lower warning limit
	C: upper warning limit
	D: upper fault limit
	H: hysteresis

Figure 16: Alarm limits

The default settings are device specific and described in the corresponding operating instructions.

7.3.8 Quick start

Required user level: Installer

The user can configure the input assistant for initial start-up once more in the Quick start menu.

7.3.9 Activating or deactivating password protection, changing passwords (PIN)

Required user level: Installer

If password protection is deactivated, then this is the Installer user level.

→ Switch to the detailed view 'Parameters' for General settings (see "7.3.1").

Activating or deactivating password protection:

Passwords - - - - ▶ 🔲 - - - - ▶ Password protection - - - - ▶ 🔲 - - - - ▶ ◀▶ On or Off - - - - ▶ 🔲 Save.

☑ Password protection is activated or deactivated.

If password protection is activated, then the user can change the passwords (PINs).

→ Switch to the detailed view 'Parameters' for General settings (see "7.3.1").

Changing passwords:

Passwords - - - - ▶ 🔲 - - - - ▶ Change passwords - - - - ▶ 🔲 - - - - ▶ Advanced user or Installer

- - - - ▶ Configure PIN - - - - ▶ 🔲 - - - - ▶ 🔲 - - - - ▶ Configure PIN

- - - - ▶ 🔲 Save - - - - ▶ 🔲 .
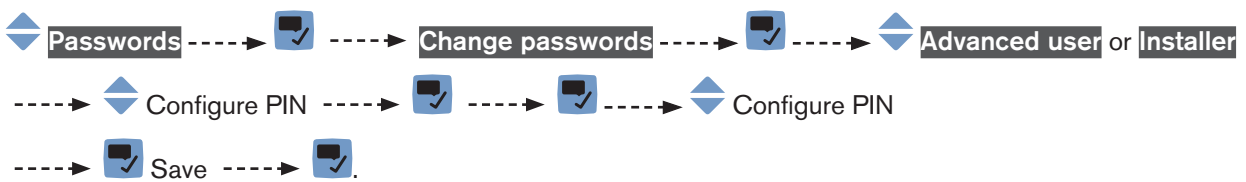
☑ The password (PIN) is changed.

7.3.10 Reset device or product to factory default settings or restart

Required user level: Installer

→ Switch to the detailed view 'Parameters' for General settings (see "7.3.1").

Reset device or product to factory default settings:

▶ Switch to the 'Maintenance' view ----▶ Reset device ----▶ ☑

----▶ ⬍ Factory reset ----▶ ☑

☑ The device or product is reset to factory default settings and restarted.

→ Switch to the detailed view 'Parameters' for General settings (see "7.3.1").

Restart the device or product:

▶ Switch to the 'Maintenance' view ----▶ Restart device ----▶ ☑

----▶ ⬍ Restart ----▶ ☑

☑ The device or product is restarted.

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7.4 Changing views (level 1)

The user can use the context menu to switch between the views.

The user can make the following changes in the views:

▪ Add or delete views
Note: If there is only one view, then the user cannot delete this view.

▪ Change the view title

▪ Select display: Show values or graphs (trends)

▪ Select values or graphs

7.4.1 Open context menu
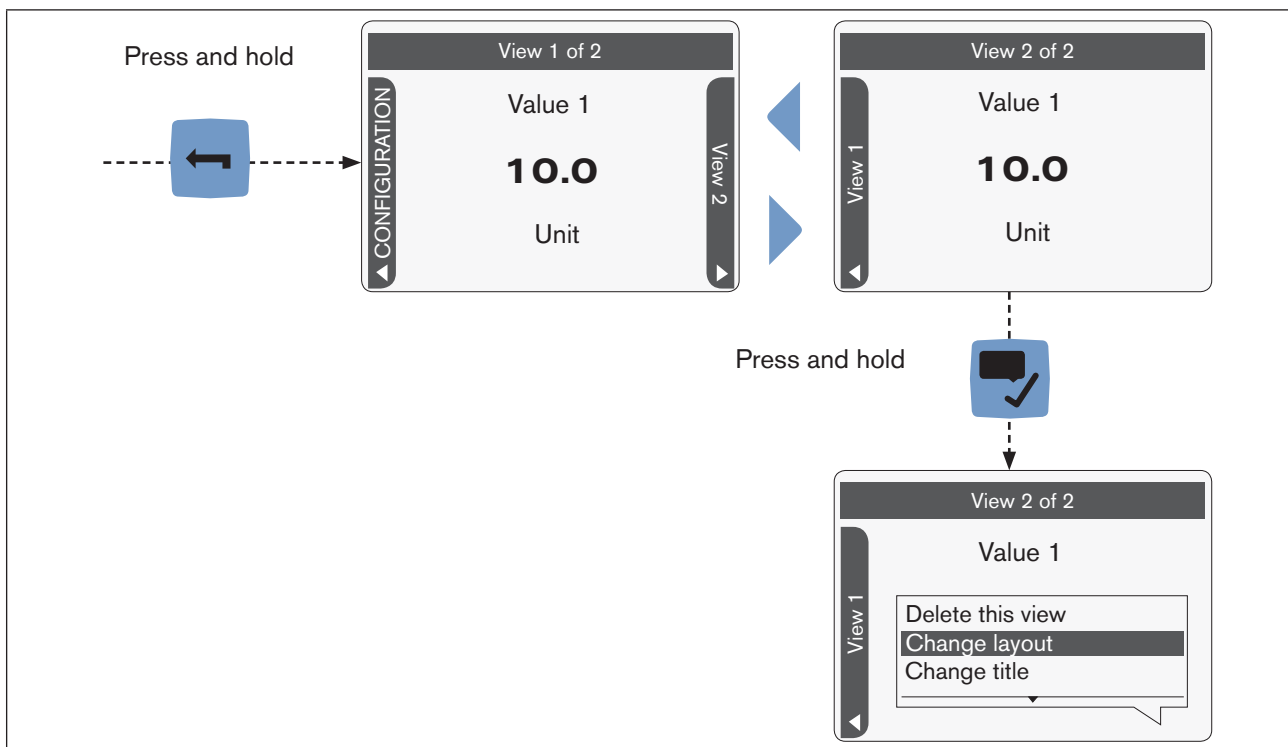
Figure 17:   Open context menu

Open context menu:

Press and hold [⬅]: switch to view 1 ‑ ‑ ‑ ▶ [◀▶] switch to the view to be modified ‑ ‑ ‑ ▶ press and hold [☑]:

Open context menu.

☑ The context menu is open.

The user can select the menus here.

7.4.2   Add or delete view

The user can create up to 4 user-defined views for values or graphs (trends).

→ Switch to the view after which the new view should be inserted.

Add view:

Press and hold [icon]: Open the context menu ----▶ [icon] Add new view ----▶ [icon]

☑ The new view for values is added.

The new view is a view for values and shows the 1st value in the list of allowed values.

Information: If 4 views are already created, this menu item is not available.

→ Switch to the view to be deleted.

Delete view:

Press and hold [icon]: Open the context menu ----▶ [icon] Delete this view ----▶ [icon]

☑ The view is deleted.

Note: If there is only one view, then the user cannot delete this view.

7.4.3   Changing titles

The user can change the name of the view in the information bar under the Change title menu.

→ Switch to the view to be changed.

Changing the view title:

Press and hold [icon]: Open the context menu ----▶ [icon] Change title ----▶ enter title ----▶ OK .

☑ The title of the view is changed.

7.4.4   Changing layouts

The user can select how many values (1, 2 or 4) or graphs (1 or 2) are displayed under the Change layout menu.

→ Switch to the view to be changed.

Change the view layout:

Press and hold 📝: Open the context menu ----▶ 🔷 Change layout ----▶ 🔷 Select layout ----▶

(◀▶ confirm selection) ----▶ 📝 Save.

✅ The layout of the view is changed.

The user can use the context menu to select which values or graphs (trends) are displayed (see"7.4.5" and "7.4.6").

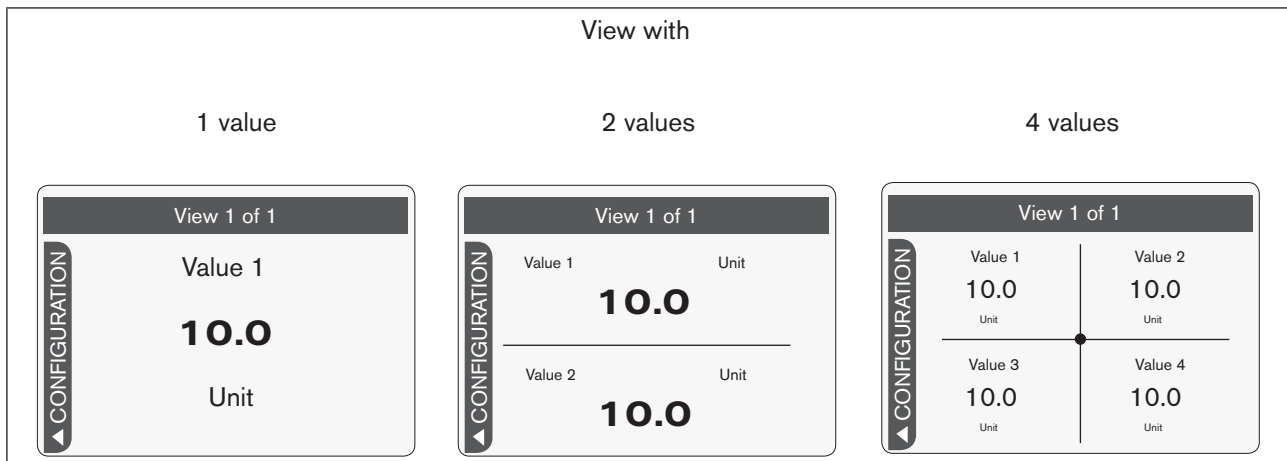**View with values:**

The position of the values on the display depends on the number:

Figure 18:   Position of the values (example)

7.4.5 Select values

In view 1 or a newly added view, the 1st value of the list in the `Change value` menu is inserted automatically in the context menu.

→ Switch to the view to be changed.

Selecting the value:

Press and hold 🔲: Open the context menu ----▶ ⬍ `Change value` ----▶ ☑ ----▶ ⬍ select the value

to change*) ----▶ ⬍ select value ----▶(◀▶ confirm selection) ----▶ 🔲 Save.

☑ The value is selected.

The user can perform these steps for every value.

*) Selection only shown if there is more than one value.

7.4.6 Select values for graphs (trend)

In a newly added view for graphs, the 1st value of the list in the `Change value` menu is inserted automatically in the context menu.

→ Switch to the view to be changed.

Selecting the values for graphs:

Press and hold 🔲: Open the context menu ----▶ ⬍ `Change value` ----▶ 🔲 ----▶ ⬍ select graph to

be changed*) ----▶ ⬍ select value ----▶ (◀▶ confirm selection) ----▶ 🔲 Save.

☑ The graph is selected.

The user can perform these steps for every value.

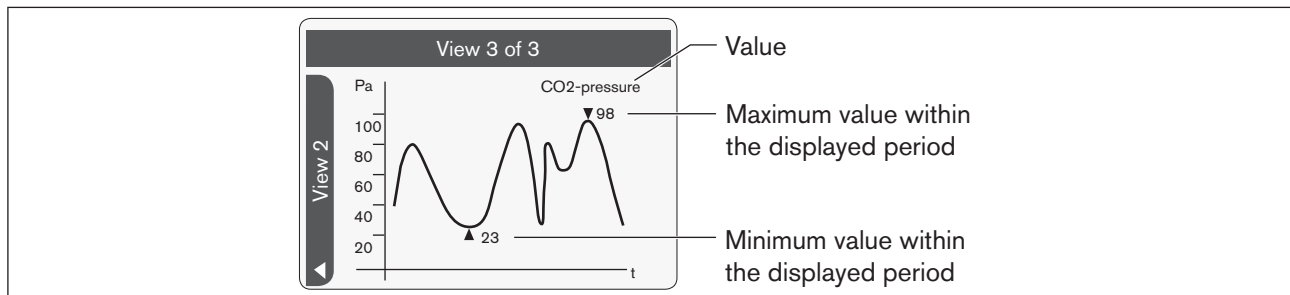*) Selection only shown if there is more than one value.

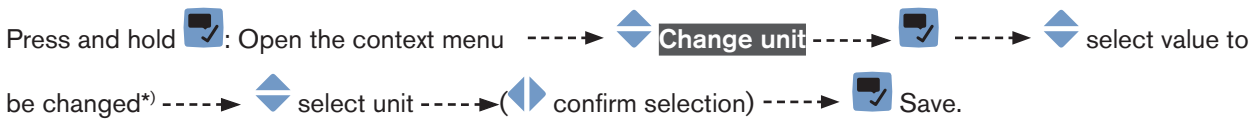Figure 19:   View for graphs (example)

7.4.7 Changing units

The user can select one of the available units for the selected values or graphs (trends) in the `Change unit` menu.

Views for values: Depending on the selected unit, the user can change the number of decimal places for the values.

$\rightarrow$ Switch to the view to be changed.

Changing the unit:

Press and hold [icon]: Open the context menu ----▶ [icon] `Change unit` ----▶ [icon] ----▶ [icon] select value to be changed*) ----▶ [icon] select unit ----▶([icon] confirm selection) ----▶ [icon] Save.
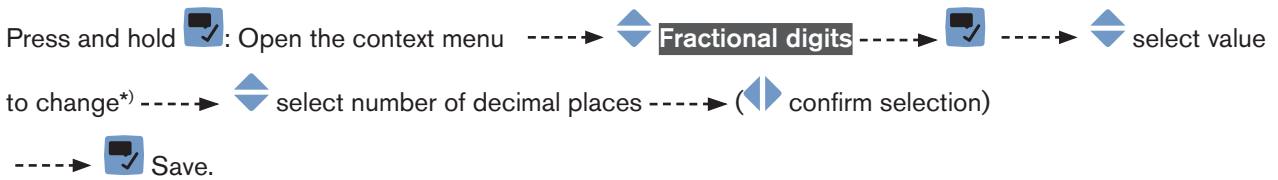
[icon] The unit is changed.

The user can perform these steps for every value.

*) Query only available for multiple values.

$\rightarrow$ Switch to the view to be changed.

Changing the number of decimal places:

Press and hold [icon]: Open the context menu ----▶ [icon] `Fractional digits` ----▶ [icon] ----▶ [icon] select value to change*) ----▶ [icon] select number of decimal places ----▶ ([icon] confirm selection) ----▶ [icon] Save.

[icon] The number of decimal places is changed.

The user can perform these steps for every value.

*) Query only available for multiple values.

7.5 Entering values with an input assistant

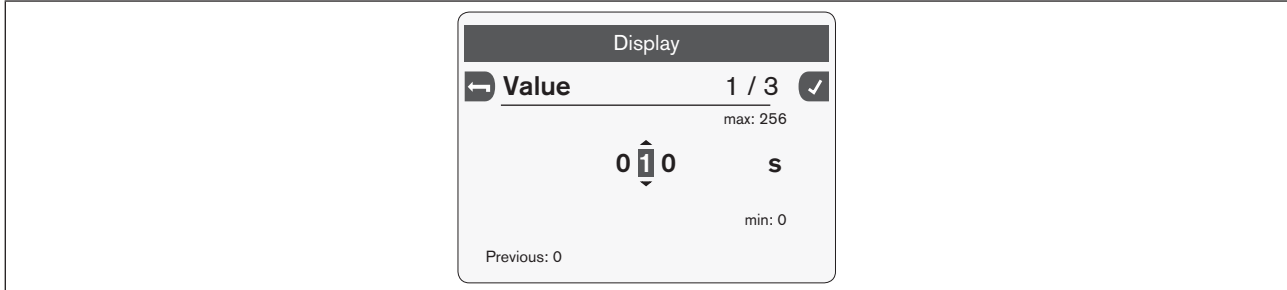An input assistant guides the user through the required settings in a menu.

Figure 20: Input assistant (example)

Symbol	Description
✓	Press the ✓ button for the next step
⬅	Press the ⬅ button for the previous step

Table 8: Menu (example)

7.6 Context menu

The user can open a context menu in every view. The content depends on the active view.

Open context menu:

Press and hold 🔲: Open context menu

☑ The context menu is open.

Context menu content based on the view:

View	Content
Views 1 to 4	▪ Message overview*) ▪ Menus to change the layout ▪ Switch user level
Configuration view	▪ Message overview*) ▪ Switch users
Parameter Maintenance Diagnostics	▪ Message overview*) ▪ Where am I?**) ▪ Create or delete shortcut (see "7.6.1") ▪ Switch user level
in the menu	▪ Message overview*) ▪ Save ▪ Where am I?**) ▪ Create or delete shortcut (see "7.6.1") ▪ Switch user level

Table 9:   Context menu

*) Only available if a message is present.

**) Context menu: Where am I?
Shows the structure which this menu is in: Configuration area, view (and menu)

7.6.1 Context menu: Create or delete shortcut

The user can create up to 3 shortcuts to views (Parameters, Maintenance, Diagnostics) or menus. Then these shortcuts appear in every context menu and allow the user to jump directly to the selected views or menus.
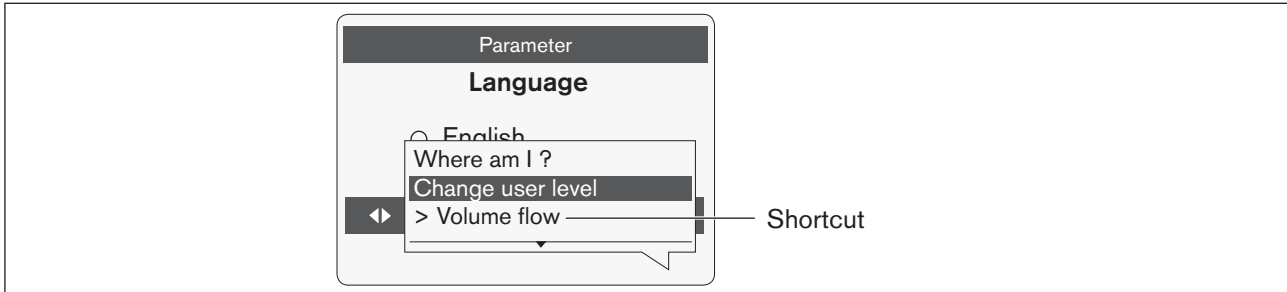

Figure 21:   Shortcut

→ Switch to the view or menu for which a shortcut should be created.

Create shortcut:

Press and hold [icon]: Open the context menu ----► Add shortcut ----► [icon] ----► [icon] Save.

[icon] The shortcut is created.

→ Switch to the view or menu in which the shortcut should be deleted.

Delete shortcut:

Press and hold [icon]: Open the context menu ----► Delete shortcut ----► [icon] ----► [icon] Save.

[icon] The shortcut is deleted.

7.7 User levels (user rights)

The 4 user levels define the rights which a user has with regard to reading, adjusting or changing data.

The menus are not available or marked with a 🔒 symbol according to the active user level.

The active user level is shown as a symbol in the information bar.

The user can change the user level in all views using the context menu.

> ⚠ Password protection can be deactivated: Then the Installer user level is active. Activating or deactivating password protection: see "7.7.2 Activating or deactivating password protection"
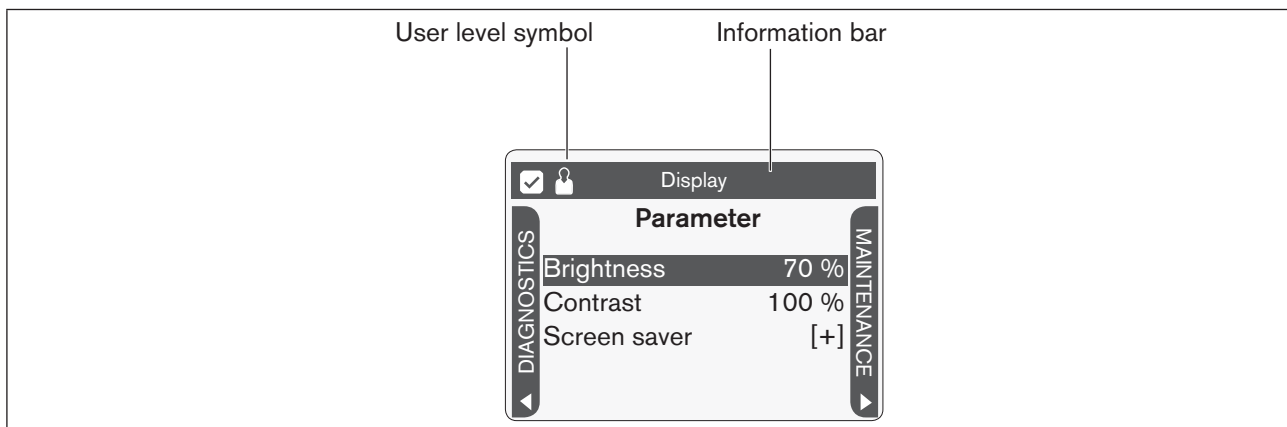

Figure 22:   User level symbol

Description of the possible user levels:

Symbol	User level	Description
	Standard user	No PIN required ▪ Can read defined values ▪ Limited rights to change values.
	Advanced user	PIN required ▪ Can read defined values ▪ Limited rights to change values.
	Installer	PIN required ▪ Can read all values ▪ Expanded rights to change values.
	Bürkert	PIN required ▪ Only for Bürkert employees

Table 10:   User levels

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7.7.1   Changing the user level

The user can change the user level in all views using the context menu Change user level.

Changing the user level:

Press and hold 🖮 : Open the context menu ----▶ 🔼 Change user level ----▶ 🖮 ----▶ 🔼 select user

profile ----▶ enter password (PIN) ----▶ 🖮

✅The user level is changed.

The active user level is shown as a symbol in the information bar.

⚠️ The selected user level remains active until the user is deactivated in the context menu Logout or the screen saver turns on.

7.7.2   Activating or deactivating password protection

Required user level: Installer

Activating or deactivating password protection:

Press and hold ⬅ : switch to view 1 ----▶ ◀ switch to the configuration view

----▶ 🔼 ⚙ General settings ----▶ 🖮 Confirm selection.

✅The display shows the detailed view 'Parameters' for the general settings.

----▶ 🔼 Passwords ----▶ 🖮 ----▶ 🔼 Password protection ----▶ ◀▶ Off or On ----▶ 🖮

✅Password protection is activated or deactivated.

8 ERROR AND STATUS MESSAGES

8.1 Device status messages

8.1.1 Status messages in the information bar on the display

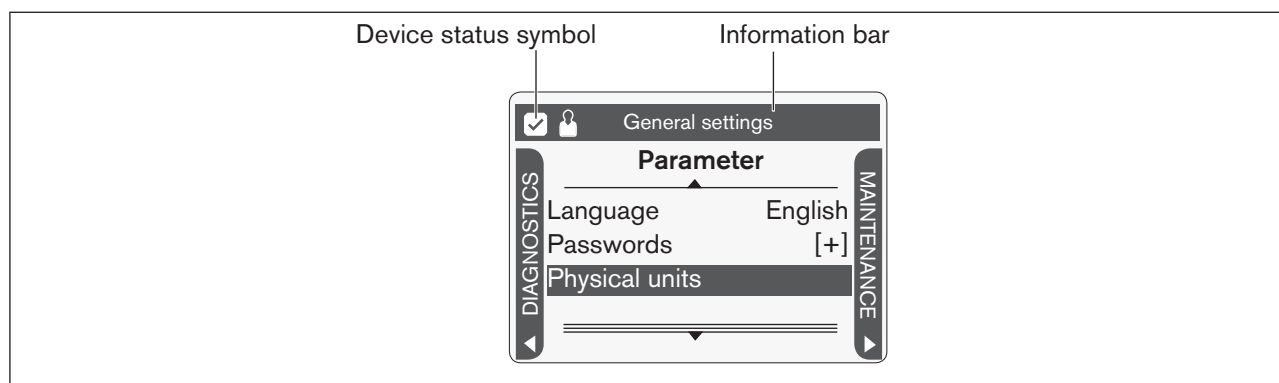The device status is shown as a symbol in the symbol bar on the basis of the NAMUR standard.

Figure 23:   Device status symbol

Symbol	Status	Description
⊗	Failure, error or fault	Due to a malfunction in the device or on its periphery, controlled operation is not possible. → Check the messages in the message overview.
⚡	Function check	The device is being worked on; controlled operation is therefore temporarily not possible.
?	Out of specification	The ambient conditions or process conditions for the device are outside the specified area. Device internal diagnostics point to problems in the device or with the process properties.
🛢	Maintenance required	The device is in controlled operation, however function is briefly restricted. → Maintain device.
	Diagnostics active	Device is operating faultlessly. Status changes are shown in color. Messages are transmitted via any connected field bus.

Table 11:   Device status symbol

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8.1.2   LED illuminated ring status messages

In NAMUR mode, the device status can be shown on the LED illuminated ring in accordance with the NAMUR standard.

Color	Status	Description
Red	Failure, error or fault	Due to a malfunction in the device or on its periphery, controlled operation is not possible.
Orange	Function check	The device is being worked on; controlled operation is therefore temporarily not possible.
Yellow	Out of specification	The ambient conditions or process conditions for the device are outside the specified area. Device internal diagnostics point to problems in the device or with the process properties.
Blue	Maintenance required	The device is in controlled operation, however function is briefly restricted. → Maintain device.
Green	Diagnostics active	Device is operating faultlessly. Status changes are shown in color. Messages are transmitted via any connected field bus.
White	Diagnostics inactive	Device is switched on. Status changes are not shown. Messages are not transmitted via any connected field bus.

Table 12:   LED illuminated ring color

> Further status display modes may be available on specific devices or products and are described in the corresponding operating instructions.

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8.2 Show messages

The messages can be displayed as follows:

Showing messages:

Press and hold 🔲: Open the context menu ----▶ **Messages overview** ----▶ 🔲

✅The display shows the messages.

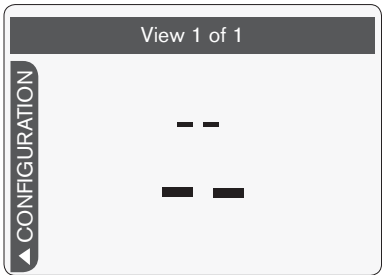## 8.3 Other

Error message	Description	Corrective action
View 1 of 1 CONFIGURATION	Value has (not) yet been sent or is incorrect.	

Table 13:   Other error messages

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