

# **CANEO**

## **Original operating instructions**

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*series43 Hygienic  
series43 Hygienic Display*

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## Foreword

These operating instructions are intended for technicians/installers and operators and should be kept for future reference. Read these operating instructions carefully and make sure that you have fully understood the contents before installing or working with the SENSORswitches.

### TIP

Metric and imperial measurements are used in drawings.  
Imperial measurements are marked with [ ].

## Safety

### General safety

All work on electrical systems or operating equipment may only be carried out by a specially qualified electrician according to the applicable electrotechnical regulations.

The safety of the system in which the SENSORswitch is integrated is the responsibility of the operator.

### Notes and symbols used

Warning notes in relation to personal injury / material damage are formulated according to the "SAFE" principle. This means they contain information on the type and source of the hazard, potential consequences as well as how to avoid and avert danger. The following hazard classifications apply in the safety notes:



**DANGER**

Danger designates a hazardous situation, which, if ignored, will lead to death or serious injury. The symbol next to the warning indicates the type and source of the danger.



## WARNING

Warning designates a hazardous situation, which, if ignored, may lead to death or serious injury. The symbol next to the warning indicates the type and source of the danger.



## CAUTION

Caution designates a hazardous situation, which, if ignored, may lead to injury. The symbol next to the warning indicates the type and source of the danger.

## NOTICE

Notice designates a situation, which may cause material damages and impair the product's function if attention is not paid.

## TIP

Tip provides additional useful information about the handling of the product.

Symbol	Meaning
▶	Avoiding and adverting danger in the warning note
▶	Instructions for action All instructions to be followed within a procedure are always listed in chronological order.
▪	List

## Personnel qualifications

A qualified electrician is a person with suitable technical training, expertise and experience as well as knowledge of relevant

standards, who can evaluate the work assigned to them correspondingly and recognize potential risks.



## WARNING



### **Improper work on electrical systems!**

Electric shock can result in death or life-threatening injuries.

- ▶ Before working on electrical systems, disconnect them from their voltage supply and secure them against being switched on again.
- ▶ Work on electrical installations should be carried out only by qualified personnel in compliance with local and national electrical regulations and specifications.

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## Intended use

Series43 is suitable for a variety of applications. Different operating states can be displayed with the LED outer ring. The optional four-digit seven-segment display can show numbers from 1 - 9999 and, to a limited extent, combinations of letters. Series43 is intended for use in accordance with the items listed here, the values from the "Technical specifications" chapter and the values from the product description.

- Only connect the product to a limited energy source as per IEC 61010 or to an NEC class 2 power supply unit.
- Source current < 4 A at maximum operating voltage.

## Reasonably foreseeable misuse

Any use other than as specified in the section [Intended use](#) or extending beyond this is deemed to be improper.

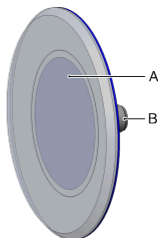
The SENSORswitch is not suitable for:

- use in potentially explosive atmospheres.
- use as a safety component as per directive 2006/42/EC

## General description

The supplied SENSORswitch can have options that differ from those shown in this manual. This does not affect the function. The SENSORswitch is equipped with different color LEDs to indicate operating conditions. The LEDs are actuated differently depending on the pin configuration.

A	Sensor element with symbol or four-digit seven-segment display
B	Connection on the back



## Assembly

### Prepare for assembly

- ▶ Disconnect the system from its voltage supply and secure it against being switched on again.
- ▶ Set the desired position of the SENSORswitch and provide a center hole for the suitable SENSORswitch. see "[Drilling pattern series43](#)"

The product description will indicate the respective SENSORswitch.

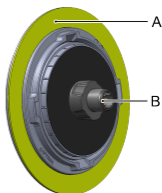
### Attaching the SENSORswitch

**Requirements:** The surface is level and sustainable.

For optimal gluing results, the surface must be cleaned thoroughly at the position where the button will be located.



- ▶ Clean the surface with cleaning cloth A.
- ▶ Dry the surface with a lint-free cloth.
- ▶ Clean the surface with cleaning cloth B.
- ▶ Dry the surface with a lint-free cloth.
- ▶ Depending on the installation position, you now need to connect the SENSORswitch electrically to connection (B). Lay the connecting cable in a way to prevent a mechanical load on the bond area when installed.
- ▶ Remove protective film (A) from the SENSORswitch.
- ▶ Align SENSORswitch with the hole, mount and press firmly.



Example M12 plug

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## Maintenance

### Maintenance operations

Carry out the following maintenance operations at the specified intervals.

Maintenance operation	as needed	annually
Clean the switch surface	X	

## Disassembly

### NOTICE

**If the temperature of the hot air fan is set too high, this may damage the sensor element and the surrounding subsurface!**

- ▶ Do not set the temperature too high.
- ▶ Do not direct the hot air fan at the sensor element.
- ▶ Do not heat the sensor element beyond 80 °C (176 °F).

- ▶ Disconnect the system from its voltage supply and secure it against being switched on again.
- ▶ Evenly heat the SENSORswitch and the subsurface using a hot air fan.
- ▶ Remove the SENSORswitch from the subsurface using a glass scraper.
- ▶ Remove all remaining glue residues from the subsurface.

## Disposal

Different types of electrical and electronic components must be recycled according to their type. All applicable statutory, state and local laws and regulations must be complied with.

## Technical specifications

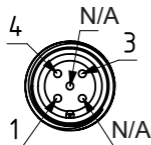
### Technical specifications

<b>series4x</b>	
Operating voltage	— — — DC 12 - 24 V (8.4 to 31.2 V)
Load current	max. 200 mA
Reverse polarity protection	Protection of all cables/lines
Short circuit protection	Protected against short circuit and overload
Voltage drop	Max. 2.5 V at 200 mA load current
Power consumption at 24 V	Max. 90 mA
Operating temperature	-25°C (-13°F) to 50°C (122°F)
Degree of protection IP	Front IP69K Maximum unevenness in mounting surface < 0.2 mm
Communication interface	IO-Link specification V1.1
Measuring principle	Capacitive
Type of actuation	Touch
Actuation force	No actuation force required
max. altitude	3000 m above standard zero
Relative air humidity	Max. 95%, non-condensing

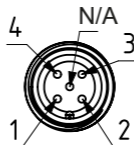


## Connection options

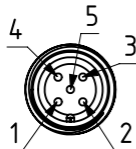
Plug M12, 3-pin



Plug M12, 4-pin

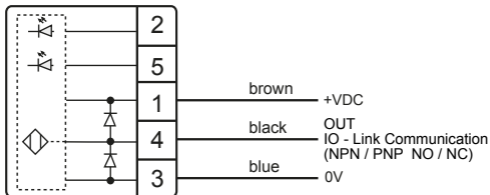


Plug M12, 5-pin



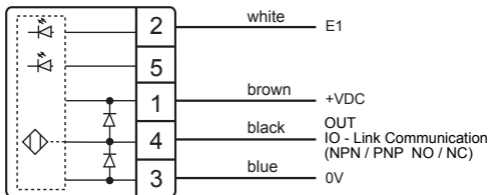
## Connection plan

3-pin



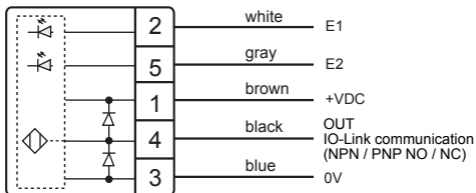
The product description will indicate the configuration.

## 4-pin



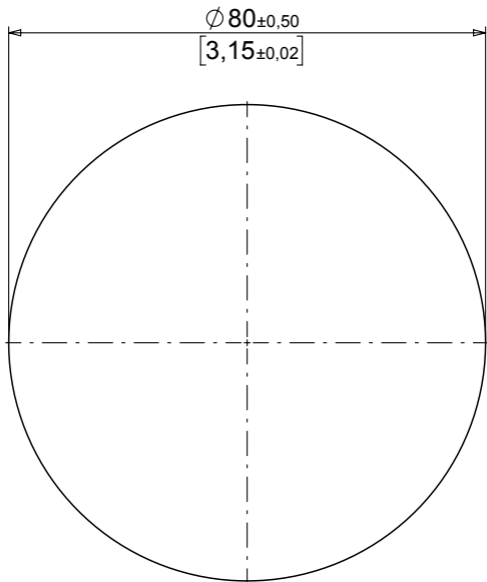
The product description will indicate the configuration.

## 5-pin



The product description will indicate the configuration.

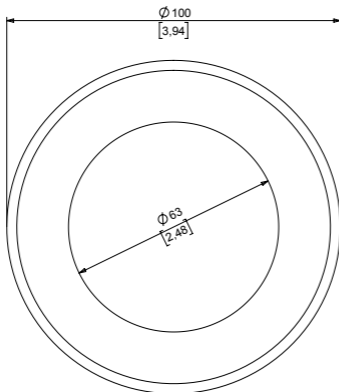
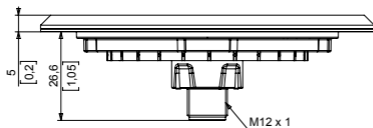
## Drilling pattern



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Metric and imperial measurements are used in drawings. Imperial measurements are marked with [ ].

## Dimensional drawing



Metric and imperial measurements are used in drawings. Imperial measurements are marked with [ ].

## Manual updates

CAPTRON reserves the right to make changes to the contents of this manual as needed. The most current version can be found on our website [www.captron.com](http://www.captron.com) .

## Imprint

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CANEO series43 1.0

## **Product description / Product description**

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