

# CAPTRON Capacitive Switches

## Overview

SENSORswitches are capacitive pushbuttons that are activated without pressure, using a hand or other parts of the body. The buttons have a determinate sensing distance, which may be altered by varying the approach speed and/or damping factor. A quickly approaching finger will achieve a higher sensing distance than a slowly approaching finger. A hand, with its larger damping surface, will achieve a greater sensing distance than a finger at the same speed. The sensitivity of the buttons is specified by the electronic circuit and cannot be changed. All sensors are checked for consistent sensitivity values, which have been determined by long-standing experience.



## Switch Type

### Static

- The output signal is continuously on as long as the sensor area is activated.

### Dynamic

- The output signal length is limited to x milliseconds when the sensor area is activated.

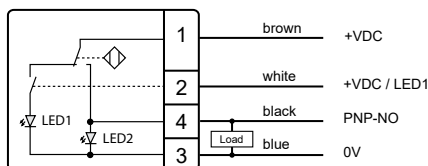
### Toggle

- The output signal turns on when the sensor area is activated and stays on until the sensor area is activated again.

## LED Control

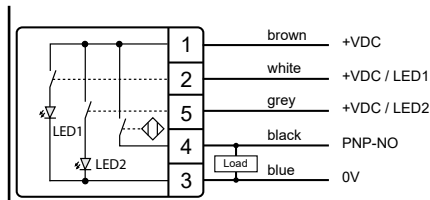
### Semi-Automatic

Semi-Automatic (4-Pin) LED1 can be controlled separately. Ideal for when the system designer would like to display a flashing signal to prompt the user to activate and or touch the switch.



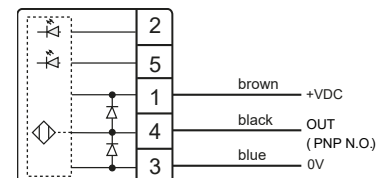
### Manual

Manual (5-Pin) LED1 and LED2 can be controlled separately. Ideal for use when the user would like to show optical feedback acting like a signal indicator (e.g. CDL series or CML series indicator lights).



### Automatic

Automatic (3-Pin) LED1 turns off and the LED2 lights up when the operating surface is touched. Ideal choice for all Human-Machine Interface (HMI) applications that require an intuitive and clearly visible status display.





# CANEO Series10 Hygienic Capacitive Switches

## Overview

### MEETS THE HIGHEST OF HYGIENE STANDARDS AS THE FIRST EHEDG-CERTIFIED SWITCH

The CANEO Series10 Hygienic is the first EHEDG-certified switch (European Hygienic Engineering and Design Group). It also meets FDA requirements, making it perfect for all industries with high requirements for hygienic cleaning, such as the food & beverages and medicine & pharmaceuticals sectors.



CS10HMSDT-C20-030B

CS10HMSDT-B14-0475

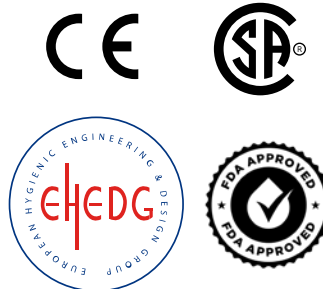
| *22mm Series10 Hygienic Capacitive Switches |         |                            |                          |                |                          |                       |                     |                          |                     |
|---------------------------------------------|---------|----------------------------|--------------------------|----------------|--------------------------|-----------------------|---------------------|--------------------------|---------------------|
| Part Number                                 | Price   | LED Color<br>(Idle/Active) | Switch<br>Type           | LED Control    | Legend                   | Symbol<br>Illuminated | Connection<br>(M12) | Output Pulse             | Drawing<br>Link     |
| <a href="#">CS10HMSDT-C10-02F1</a>          | \$79.00 | green/red                  | Dynamic                  | Semi-automatic | START                    | No                    | 4-pole              | Approx. 300ms            | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-C10-02F2</a>          | \$79.00 |                            | Static                   |                | Continuous when actuated |                       |                     | <a href="#">PDF</a>      |                     |
| <a href="#">CS10HMSDT-C11-054C</a>          | \$79.00 | red/green                  | Dynamic                  |                | STOP                     |                       |                     | Approx. 300ms            | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-C11-054D</a>          | \$79.00 |                            | Static                   |                | Continuous when actuated |                       |                     | <a href="#">PDF</a>      |                     |
| <a href="#">CS10HMSDT-C12-02F9</a>          | \$79.00 | green/red                  | Dynamic                  |                | ON/OFF                   |                       |                     | Approx. 300ms            | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-C12-02FA</a>          | \$79.00 |                            | Static                   |                |                          |                       |                     | Continuous when actuated | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-C12-02FB</a>          | \$79.00 |                            | Toggle                   |                |                          |                       |                     | Toggle                   | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-C16-0469</a>          | \$79.00 | red/green                  | Static                   |                | Power Symbol             |                       |                     | Continuous when actuated | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-C16-054E</a>          | \$79.00 |                            |                          |                |                          |                       |                     |                          | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-C17-0306</a>          | \$79.00 | green/red                  | Dynamic                  |                | START                    |                       |                     | Approx. 300ms            | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-C17-0307</a>          | \$79.00 |                            | Static                   |                |                          |                       |                     | Continuous when actuated | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-C17-030A</a>          | \$79.00 |                            | Dynamic                  | Manual         | 5-pole                   |                       | Approx. 300ms       | <a href="#">PDF</a>      |                     |
| <a href="#">CS10HMSDT-C20-030B</a>          | \$79.00 |                            | Static                   | Semi-automatic | -                        |                       | 4-pole              | Continuous when actuated | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-C20-020C</a>          | \$79.00 |                            |                          | Manual         |                          |                       | 5-pole              | <a href="#">PDF</a>      |                     |
| <a href="#">CS10HMSDT-B10-0314</a>          | \$79.00 |                            | Dynamic                  | Semi-automatic | START                    | Yes                   | 4-pole              | Approx. 300ms            | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-B10-0315</a>          | \$79.00 | Static                     | Continuous when actuated |                | <a href="#">PDF</a>      |                       |                     |                          |                     |
| <a href="#">CS10HMSDT-B11-0316</a>          | \$79.00 | red/green                  | Dynamic                  |                | STOP                     |                       |                     | Approx. 300ms            | <a href="#">PDF</a> |
| <a href="#">CS10HMSDT-B11-0473</a>          | \$79.00 |                            | Static                   |                | Continuous when actuated |                       |                     | <a href="#">PDF</a>      |                     |
| <a href="#">CS10HMSDT-B14-0475</a>          | \$79.00 | green/red                  |                          |                | Power Symbol             |                       |                     | Continuous when actuated | <a href="#">PDF</a> |

| 22mm Series10 Hygienic Capacitive Switches                                                                       |         |                         |             |                |              |                    |                        |                          |                     |
|------------------------------------------------------------------------------------------------------------------|---------|-------------------------|-------------|----------------|--------------|--------------------|------------------------|--------------------------|---------------------|
| Part Number                                                                                                      | Price   | LED Color (Idle/Active) | Switch Type | LED Control    | Legend       | Symbol Illuminated | Connection             | Output Pulse             | Drawing Link        |
| <a href="#">CS10HMODU-C16-0A60</a>                                                                               | \$79.00 | green/red               | Static      | Semi-automatic | Power Symbol | Yes                | 7.87in (200mm) pigtail | Continuous when actuated | <a href="#">PDF</a> |
| <a href="#">CS10HMODU-C19-0A3F</a>                                                                               | \$79.00 | teal/red                |             | Automatic      | RESET        | No                 |                        |                          | <a href="#">PDF</a> |
| <a href="#">CS10HMODU-C20-0A61</a>                                                                               | \$79.00 | green/red               |             | Semi-automatic | -            |                    |                        |                          | <a href="#">PDF</a> |
| Note: An additional pigtail connection makes these part numbers distinguishable from other parts in this series. |         |                         |             |                |              |                    |                        |                          |                     |



# CANEO Series10 Hygienic Capacitive Switches

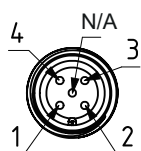
| 22mm Series10 Hygienic Capacitive Switches Specifications |                                                                      |
|-----------------------------------------------------------|----------------------------------------------------------------------|
| <b>Supply Voltage</b>                                     | 24VDC [8.4 to 32V]                                                   |
| <b>Output</b>                                             | PNP-N.O.                                                             |
| <b>Load Current</b>                                       | Max 200mA                                                            |
| <b>Current Consumption</b>                                | Max 40mA @24V                                                        |
| <b>Operating Temperature</b>                              | -30 to 65°C [-22 to 149°F]                                           |
| <b>Storage Temperature</b>                                | -30 to 65°C [-22 to 149°F]                                           |
| <b>IP Rating</b>                                          | IP69K                                                                |
| <b>Material</b>                                           | Housing: Stainless Steel (V4A)<br>Switch surface: Polycarbonate (PC) |
| <b>Weight (lbs)</b>                                       | 0.1                                                                  |
| <b>Agency Approvals</b>                                   | CE, CSA                                                              |



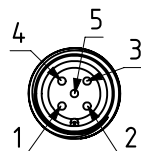
| IO-Link Specifications |      |
|------------------------|------|
| <b>IO-Link</b>         | v1.1 |
| <b>Port Speed</b>      | COM2 |
| <b>SIO Supported</b>   | Yes  |
| <b>ISDU Supported</b>  | Yes  |
| <b>Data Storage</b>    | Yes  |
| <b>Block Parameter</b> | No   |

## Wiring Diagrams

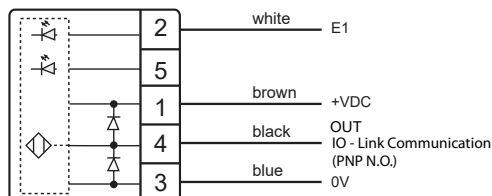
Plug M12, 4-pin



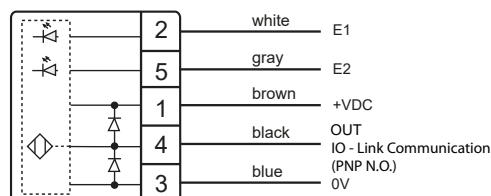
Plug M12, 5-pin



4-pin



5-pin



### 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.

#### Intended use

The SENSORswitch is intended for use in accordance with the items listed here, the values from the "Technical specifications" chapter and the product description.