

# 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

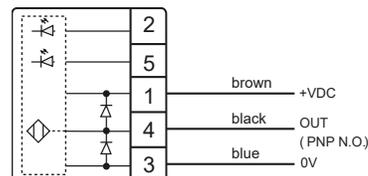
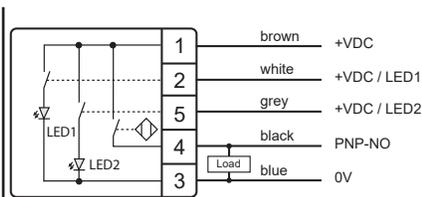
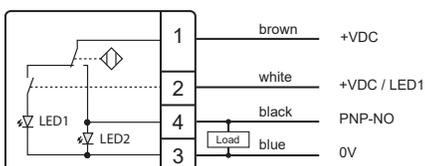
Semi-Automatic (4-Pin) LED1 can be controlled separately. Ideal for when the system designer would like to display a flashing signal to prompt the user to activate and or touch the switch.

### 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.



**CAPTRON**

# CANEO Series10 Standard Capacitive Switches

**IO-Link**[CS10KMLDT-C12-00AE](#)[CS10KMLDT-C20-00BB](#)[CS10KMLDT-B14-054A](#)

<b>*22mm Series10 Standard Capacitive Switches</b>									
<b>Part Number</b>	<b>Price</b>	<b>LED Color (Idle/Active)</b>	<b>Switch Type</b>	<b>LED Control</b>	<b>Legend</b>	<b>Symbol Illuminated</b>	<b>Connection (M12)</b>	<b>Output Pulse</b>	<b>Drawing Link</b>
<a href="#">CS10KMLDT-C10-00A6</a>	\$59.00	green/red	Dynamic	Semi-automatic	START	No	4-pole	Approx. 300ms	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C10-00A7</a>	\$59.00	green/red	Static	Semi-automatic	START		4-pole	Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C11-0543</a>	\$59.00	red/green	Dynamic	Semi-automatic	STOP		4-pole	Approx. 300ms	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C11-0547</a>	\$59.00	red/green	Static	Semi-automatic	STOP		4-pole	Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C12-00AE</a>	\$59.00	green/red	Dynamic	Semi-automatic	ON/OFF		4-pole	Approx. 300ms	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C12-00AF</a>	\$59.00	green/red	Static	Semi-automatic	ON/OFF		4-pole	Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C12-00B0</a>	\$59.00	green/red	Toggle	Semi-automatic	ON/OFF		4-pole	Toggle	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C16-0548</a>	\$59.00	red/green	Static	Semi-automatic	Power Symbol		4-pole	Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C16-0549</a>	\$59.00	green/red	Static	Semi-automatic	Power Symbol		4-pole	Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C17-00B7</a>	\$59.00	green/red	Dynamic	Semi-automatic	START		4-pole	Approx. 300ms	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C17-00B8</a>	\$59.00	green/red	Static	Semi-automatic	START		4-pole	Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C20-00BB</a>	\$59.00	green/red	Dynamic	Semi-automatic	-		4-pole	Approx. 300ms	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C20-00BC</a>	\$59.00	green/red	Dynamic	Manual	-		5-pole	Approx. 300ms	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C20-00BD</a>	\$59.00	green/red	Static	Semi-automatic	-		4-pole	Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-C20-00BE</a>	\$59.00	green/red	Static	Manual	-		5-pole	Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-B10-00C7</a>	\$59.00	green/red	Dynamic	Semi-automatic	START		Yes	4-pole	Approx. 300ms
<a href="#">CS10KMLDT-B10-00C8</a>	\$59.00	green/red	Static	Semi-automatic	START	4-pole		Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-B11-00C9</a>	\$59.00	red/green	Dynamic	Semi-automatic	STOP	4-pole		Approx. 300ms	<a href="#">PDF</a>
<a href="#">CS10KMLDT-B11-00CA</a>	\$59.00	red/green	Static	Semi-automatic	STOP	4-pole		Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-B14-054A</a>	\$59.00	green/red	Static	Semi-automatic	Power Symbol	4-pole		Continuous when actuated	<a href="#">PDF</a>
<a href="#">CS10KMLDT-B14-054B</a>	\$59.00	red/green	Static	Semi-automatic	Power Symbol	4-pole		Continuous when actuated	<a href="#">PDF</a>

\*Purchase cable separately.



# CANEO Series10 Standard Capacitive Switches

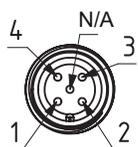
22mm Series10 Standard Capacitive Switches Specifications	
Supply Voltage	24VDC [8.4 to 32V]
Output	PNP-N.O.
Load Current	Max 200mA
Current Consumption	Max 40mA @24V
Operating Temperature	-30 to 65°C [-22 to 149°F]
Storage Temperature	-30 to 65°C [-22 to 149°F]
IP Rating	IP69K
Material	Housing: Polycarbonate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



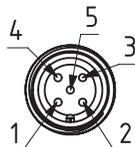
IO-Link Specifications	
IO-Link	v1.1
Port Speed	COM2
SIO Supported	Yes
ISDU Supported	Yes
Data Storage	Yes
Block Parameter	No

## Wiring Diagrams

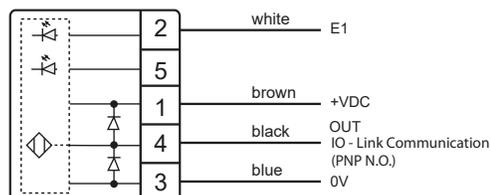
Plug M12, 4-pin



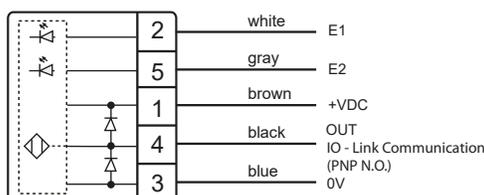
Plug M12, 5-pin



4-pin



5-pin



## 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.



### 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.
- ▶ Wear appropriate personal protective equipment (PPE).