# **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**

#### Statio

- 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.

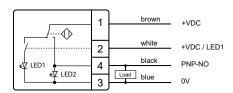
### Toggle

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

# **LED Control**

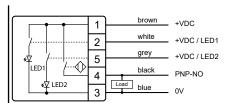
### Semi-Automatic

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.



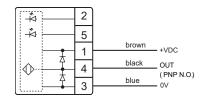
### Manual

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 Series 10 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.







**IO**-Link

# CS10HMSDT-C20-030B

## CS10HMSDT-B14-0475

*22mm Series10 Hygienic Capacitive Switches									
Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Connection (M12)	Output Pulse	Drawing Link
CS10HMSDT-C10-02F1	\$5gs3:	green/red	Dynamic	Semi-automatic  Manual	START	No	4-pole	Approx. 300ms	PDF
CS10HMSDT-C10-02F2	\$5gs4:		Static					Continuous when actuated	<u>PDF</u>
CS10HMSDT-C11-054C	\$5gs5:	red/green	Dynamic		STOP			Approx. 300ms	PDF
CS10HMSDT-C11-054D	\$5gs6:		Static					Continuous when actuated	<u>PDF</u>
CS10HMSDT-C12-02F9	\$5gs7:	green/red red/green	Dynamic		ON/OFF			Approx. 300ms	PDF
CS10HMSDT-C12-02FA	\$5gs8:		Static					Continuous when actuated	<u>PDF</u>
CS10HMSDT-C12-02FB	\$5gs9:		Toggle					Toggle	PDF
CS10HMSDT-C16-0469	\$5gsa:		Static		Power Symbol			Continuous when actuated	PDF
CS10HMSDT-C16-054E	\$5gsb:		Static						PDF
CS10HMSDT-C17-0306	\$5gsc:		Dynamic		START			Approx. 300ms	PDF
CS10HMSDT-C17-0307	\$5gsd:		Static					Continuous when actuated	<u>PDF</u>
CS10HMSDT-C17-030A	\$5gse:		Dynamic				5-pole	Approx. 300ms	PDF
CS10HMSDT-C20-030B	\$;5gsf:	green/red	Static	Semi-automatic	_		4-pole	Continuous when actuated	PDF
CS10HMSDT-C20-020C	\$5gsg:			Manual	-		5-pole		PDF
CS10HMSDT-B10-0314	\$5gsh:		Dynamic	Semi-automatic	START	Yes	Yes 4-pole	Approx. 300ms	PDF
CS10HMSDT-B10-0315	\$-5gsi:		Static					Continuous when actuated	<u>PDF</u>
CS10HMSDT-B11-0316	\$-5gsj:	red/green	Dynamic		STOP			Approx. 300ms	PDF
CS10HMSDT-B11-0473	\$5gsk:		Static					Continuous when actuated	PDF
CS10HMSDT-B14-0475	\$-5gsl:		Static		Power Symbol				PDF

22mm Series10 Hygienic Capacitive Switches									
Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Connection	Output Pulse	Drawing Link
CS10HMODU-C16-0A60	\$;;6ht,:	green/red	Static	Semi-automatic	Power Symbol	Yes	7.87in (200mm) pigtail	Continuous when actuated	PDF
CS10HMODU-C19-0A3F	\$;6ht?:	teal/red		Automatic	RESET	No			PDF
CS10HMODU-C20-0A61	\$;;6ht!:	green/red		Semi-automatic	-				PDF
Note: An additional nigrail connection makes these part numbers distinguishable from other parts in this series									

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# **CAPTRON** CANEO Series 10 Hygienic Capacitive Switches

22mm Series10 Hygienic 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: Stainless Steel (V4A) 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			

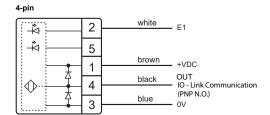
# **Wiring Diagrams**

Plug M12, 4-pin

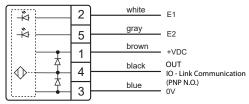


Plug M12, 5-pin





#### 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.