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.
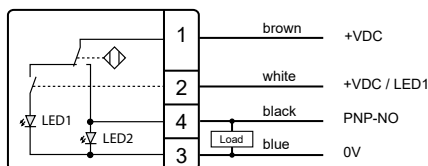
Manual
Manual (5-Pin) LED1 and LED2 can be controlled separately. Ideal for use when the user would like to show optical feedback acting like a signal indicator (e.g. CDL series or CML series indicator lights).
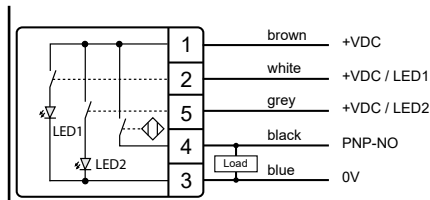
Automatic
Automatic (3-Pin) LED1 turns off and the LED2 lights up when the operating surface is touched. Ideal choice for all Human-Machine Interface (HMI) applications that require an intuitive and clearly visible status display.

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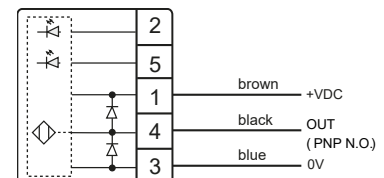
CANEO Series10 Stainless Steel Capacitive Switches

IO-Link

CS10SMTDT-C12-044C   CS10SMTDT-C20-0453   CS10SMTDT-B14-045E

*22mm Series10 Stainless Steel Capacitive Switches									
Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Connection (M12)/	Output Pulse	Drawing Link
CS10SMTDT-C10-0448	$5gso:	green/red	Dynamic	Semi-automatic	START	No	4-pole	Approx. 300ms	PDF
CS10SMTDT-C10-0449	$5gsp:		Static					Continuous when actuated	PDF
CS10SMTDT-C11-054F	$5gsq:	red/green	Dynamic		STOP			Approx. 300ms	PDF
CS10SMTDT-C11-0550	$5gss:		Static					Continuous when actuated	PDF
CS10SMTDT-C12-044C	$;5gst:	green/red	Dynamic		ON/OFF			Approx. 300ms	PDF
CS10SMTDT-C12-044D	$5gsu:		Static					Continuous when actuated	PDF
CS10SMTDT-C12-044E	$5gsv:		Toggle					Toggle	PDF
CS10SMTDT-C16-044F	$5gsx:	red/green	Static		Power Symbol			Continuous when actuated	PDF
CS10SMTDT-C16-0551	$5gsy:								PDF
CS10SMTDT-C17-0451	$5gsz:	green/red	Dynamic		START			Approx. 300ms	PDF
CS10SMTDT-C17-0452	$;5gs]:		Static					Continuous when actuated	PDF
CS10SMTDT-C20-0453	$;5gs[:		Dynamic	Manual	-		5-pole	Approx. 300ms	PDF
CS10SMTDT-C20-0454	$5gs_:								PDF
CS10SMTDT-C20-0455	$5gs#:		Static	Semi-automatic			4-pole	Continuous when actuated	PDF
CS10SMTDT-C20-0456	$;5gs!:			Manual			5-pole		PDF
CS10SMTDT-B10-0457	$5gs?:	green/red	Dynamic	Semi-automatic	START	Yes	4-pole	Approx. 300ms	PDF
CS10SMTDT-B10-0458	$;5gs,:		Static					Continuous when actuated	PDF
CS10SMTDT-B11-045B	$;5gt0:	red/green	Dynamic		STOP			Approx. 300ms	PDF
CS10SMTDT-B11-045C	$;5gt1:		Static					Continuous when actuated	PDF
CS10SMTDT-B14-045E	$;5gt2:	green/red		Power Symbol					PDF
CS10SMTDT-B14-0460	$;5gt3:	red/green							PDF

*Purchase cable separately.

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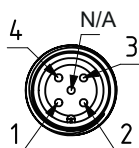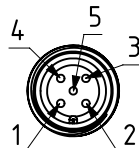| 22mm Series10 Stainless Steel Capacitive Switches Specifications	
Supply Voltage	24VDC [8.4 to 32V]
Output	PNP-N.O.
Load Current	Max 200mA
Current Consumption	Max 40mA @24V
Operating Temperature	-30 to 65°C [-22 to 149°F]
Storage Temperature	-30 to 65°C [-22 to 149°F]
IP Rating	IP69K
Material	Housing: 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

4-pin

5-pin