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

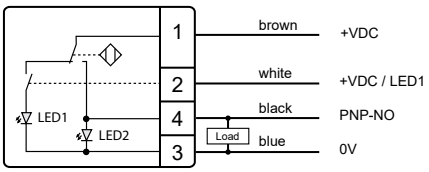
Static
- The output signal is continuously on as long as the sensor area is activated.

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

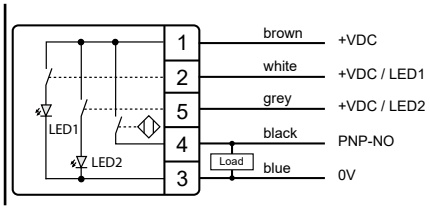
Toggle
- The output signal turns on when the sensor area is activated and stays on until the sensor area is activated again.

LED Control

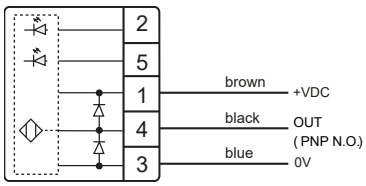
Semi-Automatic
Semi-Automatic (4-Pin) LED1 can be controlled separately. Ideal for when the system designer would like to display a flashing signal to prompt the user to activate and or touch the switch.



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

*22mm Series10 Standard Capacitive Switches

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

*Purchase cable separately.

22mm Series10 Standard Capacitive Switches

Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Connection	Output Pulse	Drawing Link
CS10KMMDU-B13-092D	$59.00	blue/off	dynamic	automatic	RESET	Yes	7.87in (200mm) pigtail	Approx. 300ms	PDF
CS10KMMDU-B14-0A5F	$59.00	green/red	static	semi-automatic	Power Symbol	No		Continuous when actuated	PDF
CS10KMMDU-C20-0793	$59.00		dynamic		-	Yes		Approx. 300ms	PDF

Note: An additional pigtail connection makes these part numbers distinguishable from other parts in this series.

CAPTRON

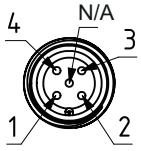
CANEO Series10 Standard Capacitive Switches

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

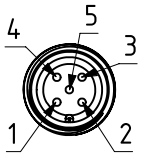
IO-Link Specifications	
IO-Link	v1.1
Port Speed	COM2
SIO Supported	Yes
ISDU Supported	Yes
Data Storage	Yes
Block Parameter	No

Wiring Diagrams

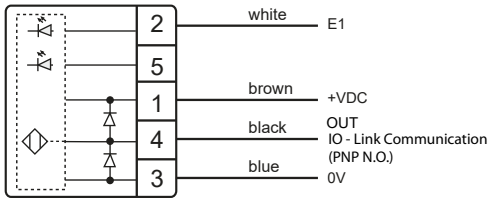
Plug M12, 4-pin



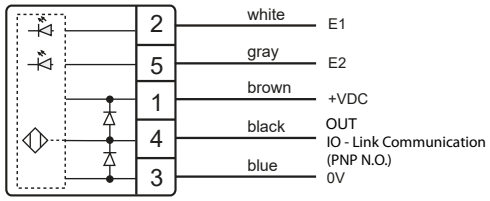
Plug M12, 5-pin



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.

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.
- Wear appropriate personal protective equipment (PPE).