

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.

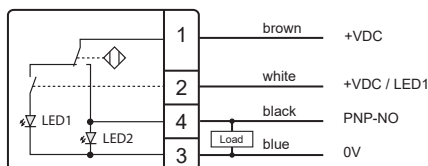
Toggle

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

LED Control

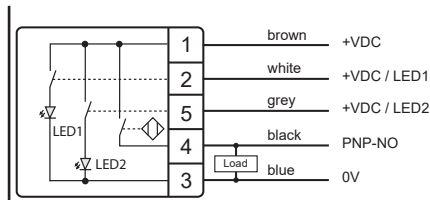
Semi-Automatic

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.



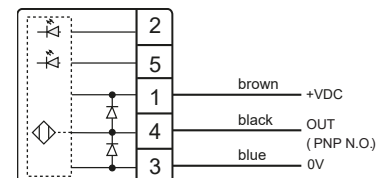
Manual

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 Series41 and Series40 Standard Display Capacitive Switches

**CD41KCRBK-P20-0254**

*Series41 and Series40 Standard Display Capacitive Switches

Part Number	Price	LED Color (Idle/Active)	Switch Type	LED Control	Legend	Symbol Illuminated	Output Pulse	Connection	Agency Approvals	Weight (lbs)	Drawing Link
CD40KMSBN-P20-050F	\$06hu0:	teal/red	Static	Automatic	-	No	Continuous when actuated	3-pole	CE, CSA	0.25	PDF
CD41AARBK-P20-0256	\$06hu3:	green/red	Dynamic				Approx 300ms				4-pole
CD41KCRBK-P20-0254	\$;05gtn:			5-pole				PDF			
CD41KCRBK-P20-0597	\$;05gto:						PDF				
CD41KCRBK-P20-0598	\$;05gtp:			PDF							

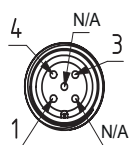
*Purchase cable separately.

Series41 and Series40 Standard Display Capacitive Switches Specifications

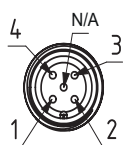
Supply Voltage	Output	Output Pulse	Load Current	Current Consumption	Operating Temperature	Storage Temperature	IP Rating	Material
24VDC [19.2 to 28.8 V]	PNP - N.O.	Approx. 300ms	Max 200mA	Max 90mA @24V	-25 to 50°C [-13 to 122°F]	-25 to 50°C [-13 to 122°F]	IP69K	Housing: Polycarbonate [PC] Switch surface: Polycarbonate [PC]

Wiring Diagrams

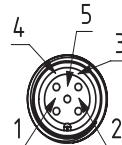
Plug M12, 3-pin



Plug M12, 4-pin



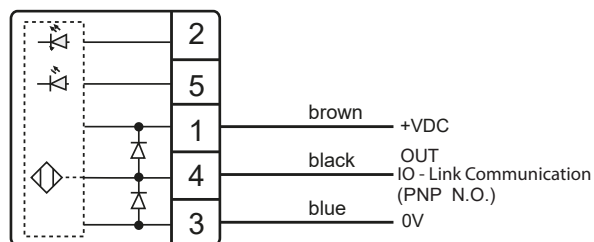
Plug M12, 5-pin



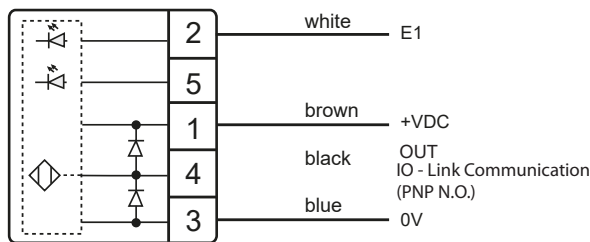
IO-Link Specifications

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

3-pin



4-pin



5-pin

