

CAPTRON

Capacitive Switches

SENSORswitches are capacitive pushbuttons which 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. 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

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

Dynamic

Dynamic:
the output signal length is limited to x ms when the sensor area is activated.

or Toggle?

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

LED Control

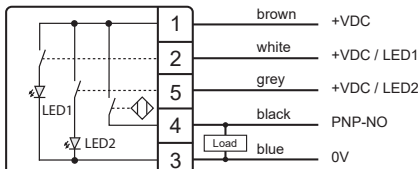
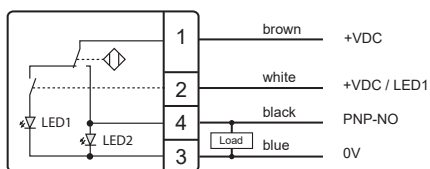
Semi-Automatic

Semi-Automatic (4 Pin) LED1 can be controlled separately. Ideal for when the user would like to display a flashing signal to indicate user to activate.

Vs.

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).



CAPTRON 22mm IP69K Capacitive Switches

22mm IP69K Capacitive Switches, PNP, N.O.													
Part Number		Switch Type	Barrel Size	Diameter	Material	LED Control	Legend	Connection (M8)	Drawing Link				
CHT1-158B-30		Static	22.0 mm	40.0 mm	Plastic And Stainless Steel	Manual	-	5-pole	PDF				
CHT1-158B-30-CPM20				28.5 mm			-		PDF				
CHT1-158P-30				40.0 mm		Semi-automatic	-	4-pole	PDF				
CHT1-158P-30-CPM20				-			PDF						
CHT1-159B-29				Toggle	28.5 mm	Plastic And Aluminum	Manual	START	5-pole	PDF			
CHT1-159B-30								-		PDF			
CHT1-159P-29							Semi-automatic	START	4-pole	PDF			
CHT1-159P-30								-		PDF			
CHT12-159B-30							Dynamic	60.0 mm	Plastic And Delrin	Manual	-	5-pole	PDF
CHT12-159B-64											START/STOP		PDF
CHT12-159P-30										Semi-automatic	-	4-pole	PDF
CHT12-159P-64											START/STOP		PDF
CHT3-456B-29-TGSR		Dynamic	60.0 mm	Plastic And Delrin	Manual	START	5-pole	PDF					
CHT3-456B-29-TGSR		Static				START		PDF					
CHT3-456B-30-TGSR		Dynamic				-		PDF					
CHT3-456B-30-TGSR		Static				-		PDF					
CHT3-456B-H-TGSR		Dynamic				Hand Symbol		PDF					
CHT3-456B-H-TGSR		Static				Hand Symbol		PDF					
CHT3-456P-29-TGSR		Dynamic			Semi-automatic	START	4-pole	PDF					
CHT3-456P-29-TGSR		Static				START		PDF					
CHT3-456P-30-TGSR		Dynamic				-		PDF					
CHT3-456P-30-TGSR		Static				-		PDF					
CHT3-456P-H-TGSR		Dynamic				Hand Symbol		PDF					
CHT3-456P-H-TGSR		Static				Hand Symbol		PDF					



CHT1-158X-XX
(Hygienic)



CHT1-XXXX-XX-CPM20



CHT1-159X-XX



CHT3-456X-X-XXXXX

Please see our website www.AutomationDirect.com for complete engineering drawings. Dimensions are approximate. Not for construction purposes.

CAPTRON 50mm IP69K Capacitive Switches

50 and 60 mm IP69K Capacitive Switches, PNP, N.O. (Require AR3 or AR4 Cover Ring)									
Part Number		Switch Type	Barrel Size	Diameter (w/ Cover Ring)	Material	LED Control	Legend	Connection (M8)	Drawing Link
CHT3-15XB-29-TGSR		Dynamic	50.0 mm	88.0 mm	Plastic And Polycarbonate	Manual	START	5-pole	PDF
CHT3-15XB-29-TGSRS		Static					START		PDF
CHT3-15XB-30-TGSR		Dynamic					-		PDF
CHT3-15XB-30-TGSRS		Static					-		PDF
CHT3-15XB-H-TGSR		Dynamic					Hand Symbol		PDF
CHT3-15XB-H-TGSRS		Static					Hand Symbol		PDF
CHT3-15XP-29-TGSR		Dynamic					4-pole	START	PDF
CHT3-15XP-29-TGSRS		Static						START	PDF
CHT3-15XP-30-TGSR		Dynamic						-	PDF
CHT3-15XP-30-TGSRS		Static						-	PDF
CHT3-15XP-H-TGSR		Dynamic						Hand Symbol	PDF
CHT3-15XP-H-TGSRS		Static						Hand Symbol	PDF
CHT4-25XB-29-TGSR		Dynamic	60.0 mm	100.0 mm		Manual	START	5-pole	PDF
CHT4-25XB-30-TGSR							-		PDF
CHT4-25XB-H-TGSR							Hand Symbol		PDF
CHT4-25XP-29-TGSR							4-pole	START	PDF
CHT4-25XP-30-TGSR								-	PDF
CHT4-25XP-H-TGSR								Hand Symbol	PDF



CHT3-15XX-XX-XXXX



CHT4-25XX-XX-XXXX

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CAPTRON Cover Rings and Indicator Lights

AR3 Cover Ring (Fits All CHT3 Switches)			
Part Number		Color	Image
<u>AR3-1X0</u>		Red	
<u>AR3-1X1</u>		Green	
<u>AR3-1X5</u>		Yellow	
<u>AR3-1X6</u>		Black	

AR4 Cover Ring (Fits All CHT4 Switches)			
Part Number		Color	Image
<u>AR4-BX0</u>		Red	
<u>AR4-BX1</u>		Green	
<u>AR4-BX5</u>		Yellow	
<u>AR4-BX6</u>		Black	

CDL and CML Series IP69K Indicator Lights					
Part Number		Color	Barrel Size	Material	Drawing Link
<u>CDL1-158-30-GR</u>		Red/ green	22.0 mm	Plastic And Stainless Steel	<u>PDF</u>
<u>CDL1-159-30-GR</u>				Plastic And Aluminum	<u>PDF</u>
<u>CML1-158-30</u>		Red/ yellow/ green/ blue/ white/ orange/ violet		Plastic And Stainless Steel	<u>PDF</u>
<u>CML1-159-30</u>				Plastic And Aluminum	<u>PDF</u>



CDL1-158-30-GR
CML1-158-30
(Hygienic)



CDL1-159-30-GR
CML1-159-30



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CAPTRON Cover Rings and Indicator Lights

Specifications								
Part	Supply Voltage	Output	Output Pulse	Load Current	Current Consumption	Operating Temperature	Storage Temperature	IP Rating
CHT1	10–30 VDC	PNP-NO	Continuous when actuated	Max 400mA	Max 20mA @24V	-30–70°C (-22–158°F)	-35–75°C (-31–167°F)	IP69K
CHT12			Toggle					
CHTX-XXXX-XX-TGSR	24VDC (16.8–32V)		Approx. 300ms		Max 30mA @24V	-30–80°C (-22–176°F)	-35–85°C (-31–185°F)	
CHTX-XXXX-XX-TGSRS			Continuous when actuated			0–55°C (32–131°F)		
CDL1		-	-		Max 20mA @24V	-20–50°C (-4–122°F)	-25–55°C (-13–131°F)	
CML1		-	-		Max 30mA @24V			

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