Content:

The capacitive SENSORswitches of the CHT9-1 series are designed for adhesive mounting on glass or other smooth surfaces such as aluminium, metal etc.

Except for the sensor element, no further mounting holes are required.

The CHT9-1 SENSOR buttons are used in public transport, building technology and automation industries. The SENSORswitches have an optical feedback via 16 bright LEDs. In addition, they can be optionally equipped with an acoustic and/or tactile feedback via signal tone/vibration.

For people with limited mobility, the capacitive SENSOR buttons are equipped with Braille on the polycarbonate cover colour ring. As a TSI-PRM compliant version, the SENSORswitch series is also available with a coloured cover ring that has tactile pictograms "<>" in addition to Braille.

Please find below the most important features listed:

- Ø 100 mm total diameter
- Ø 69 - 72 mm mounting hole required
- 3mm height
  PRM compliant: Pictograms and braille available; optical feedback through LEDs

- Adhesive mounting; no screw connection necessary
- Switches on touch; no pressure necessary
- Customization through symbols and colours of the cover ring TSI-
- Optional: Tactile feedback (vibration) / acoustic feedback (signal tone)

CAPTRON can provide individual advice to enable you to choose the perfect product from the CHT9-1 series for the required specifications and applications.

Please contact us:

Tel.   +49 (0)8142 / 44 88 – 160
E-Mail: sales@captron.com

Technical data at 24 V and 20 °C:			
Supply voltage:	DC 24 V (16,8 … 32V)	Reverse polarity protection:	Protection of all lines
	DC 12 V (10,8 … 14V) - Option -	Short-circuit protection:	Short-circuit and overload protection
Load current:	max. 400 mA	Voltage drop:	max. 3 V at 400 mA
Output:	PNP-NO	Current consumption	max. 30 mA at 24V DC
	PNP / NPN changeable by reversing polarity (Option)	Operation temperature:	-30 … +80°C
Output signal:	approx. 300ms („Dynamic") [1]	Degree of protection (IP):	Frontside IP69K
LED 1:	8 green LEDs	Type of operation:	Capacitive
LED 2:	8 red LEDs	Operation force:	No operation force required

Configuration help CHT9-1 (STANDARD)

Type code 1 – with standard coloured cover ring [2]:

		C1	C2	C3	C4	O1		C5			C6		O2
CHT9	-	1					-		/	-		/	

Example: CHT9 - 1   6   1   P   SV   -   H   /   TG   -   SR

Type code 2 – with TSI-PRM compliant coloured cover ring [2]:

		C1	C2	C3	C4	O1		C5			C6			O2
CHT9	-	1					-		/	-		/	T6	/	

C1 – Mounting / version of the coloured cover ring [2]

Code	Description
1	Adhesive mounting / Standard cover ring
1	Adhesive mounting / TSI-PRM compliant c. ring *
-	-
-	-

⚠ * additionally requires the option "O2 -> T6"!

C2 - Type of connection [4]

Code	Description
1	Cable + connector AMP 6,3 (Pin-assignment: 1-2-4-3) *
4	Cable + connector AMP 6,3 (Pin-assignment: 1-4-2-3) *
5	Connector M8
6	Connector JST
7	Single strands 200mm with ferrules

⚠ * only available with the LED function "Semi-Automatic (4-pin)"!

C3 – Colour of the coloured cover ring

Code	Description	
0	Traffic red (RAL 3020)	🟥
1	Traffic green (RAL 6024)	🟩
2	Sky blue (RAL 5015)	🟦
5	Traffic yellow (RAL 1023)	🟨
6	Traffic black (RAL 9017)	⬛
H	Traffic blue (RAL 5017)	🟦
K	Traffic grey A (RAL 7042)	⬜
-	-	

C4 - LED-control [3] / Numbers of pins / Supply voltage

Code	Description
P	Semi-Automatic / 4-pin / PNP-NO / *DC 24V*
B	Manual / 5-pin / PNP-NO / *DC 24 V*
W	Automatic / 3-pin / NP/NPN-NO changeable by reversing polarity * / *DC 24V*
G	Semi-Automatic / 4-pin / PNP-NO / *DC 12V*
-	-

⚠ * currently only available with connection type "7 - single strands"!

O1 – Option 1 / Acoustic and tactile feedback

Code	Description	
S	Acoustic feedback (signal tone) *	🔊
V	Tactile feedback (vibration) *	〰
SV	acoustic + tactile feedback *	🔊〰

⚠ * only available with the LED functions "P - Semi-Automatic" and "B – Manual"!

C5 - Symbol on switch surface

Code	Description
30	White surface
H	Hand (green on white)

For further symbols please see our Symbol list (Link)*

⚠ * all symbols marked as „Standard" are already available from 11 pieces / order up without any surcharge.

C6 – LED colours (LED1 – LED2)

Code	Description	
TG-SR	Green (LED1) / Red (LED2) *- Standard*	🟩🟥
BU-SR	Blue (LED1) / Red (LED2)	🟦🟥
-	-	

O2 - Option 2 / Switching distance

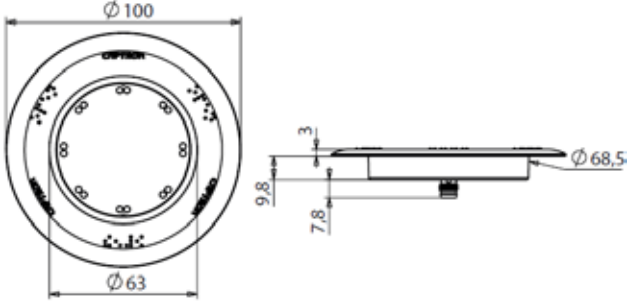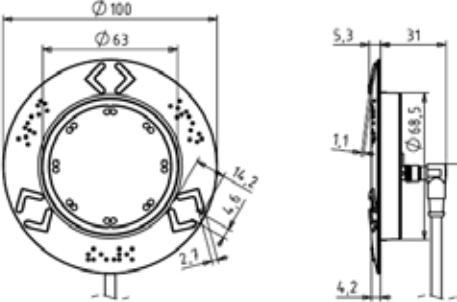| Code	Description
- (w/o)	Standard switching distance
CP12	Increased switching distance
-	-

- - - Please note the additional information and explanations on the following pages. Thank you! - - -

Additional information & explanations on the previously described configuration items:
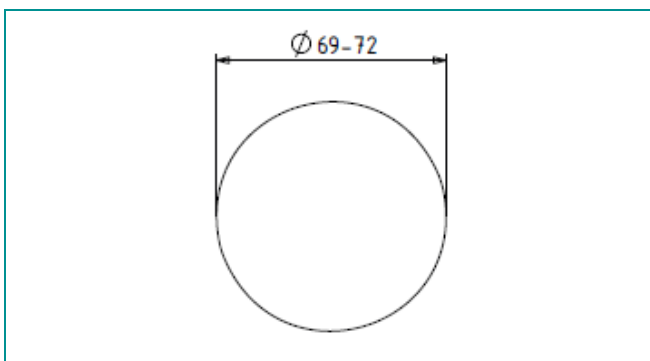
to [1] / Switching function:

| Switching function | *- Dynamic:* | The output signal is time-limited to 300ms, independent of the duration of actuation. |

to [2] / Version of coloured cover ring:

„1" - Standard coloured cover ring - **3x lettering „CAPTRON"** - **3x braille „OPEN"**	 *All dimensions in mm*
„1 … T6" - TSI-PRM compliant cover ring - **3x tactile Picto-grams „<>"** - **3x Braille „OPEN"**	 *All dimensions in mm*

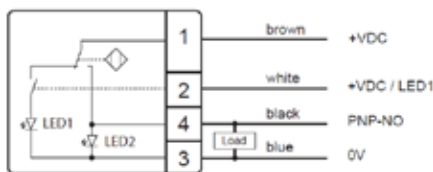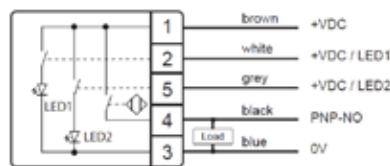**Hole pattern:**

to [3] / LED control

LED control   **- *Semi-Automatic:*** LED1 (e.g. green / operating state) can be controlled separately.
When the SENSORswitch is actuated, LED1 goes out and LED2 (e.g. red / switching state) lights up.

- *Manual:* Both LED1 and LED2 can be controlled separately as required.

- *Automatic:* LED1 (= e.g. green) lights up in operating state.
When the SENSORswitch is touched, LED1 goes out and LED2 (= e.g. red) lights up.
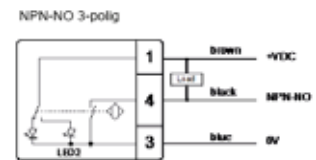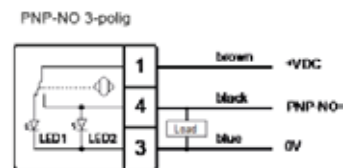***- this function is only available for connection diagram "W -***

Connection diagram:

Connection diagram „P"
PNP-NO // Semi-Automatic

Connection diagram „B"
PNP-NO // Manual

Connection diagram „W"
PNP-NO / NPN-NO changeable by reversing polarity // Automatic

to [4] / Types of connection:

Connector M8 („CHT9-_5_...")	**Connector JST** („CHT9-_6_...")
  4-pin *5-pin*	 *4-pin* *5-pin*
Connector AMP („CHT9-_4_...) („CHT9-_1_...")	**Single strands 200mm** („CHT9-_7_...")
  4-pin *5-pin*	*Single strands 200mm with ferrules* *(Wire end ferrules with plastic collar DIN 46228; wire cross-section strands 0.25 mm²)* *3-pin 4-pin 5-pin*

You need support with the configuration?
Our internal sales team will be happy to advise you on this (Tel.: +49 (0)8142 / 44 88 – 160; sales@captron.com)

You need data sheets and/or 3D data?
Please also contact our internal sales department. Thank you.