

Content: [Short description / Technical data \(Page 1\)](#)
[Configuration help \(Page 2\)](#)
[Additional information / Connection diagram \(Page 3 & 4\)](#)

The capacitive SENSORswitches of the CHT93-1 series are designed for adhesive mounting on glass or other smooth surfaces such as aluminium, metal etc. and switch on contact. Except for the sensor element, no further mounting holes are required.

the field of application extends over traffic engineering and building technology up to information services. The SENSORswitch is equipped with an optical feedback. Several million cycles and an extremely long life completes the SENSORswitch.

In accordance with the requirements of TSI-PRM for persons with reduced mobility, the colour ring can be equipped with Braille and raised pictograms. In addition, the SENSORswitches can be supplied with an acoustic (signal tone) and/or tactile feedback (vibration) in addition to the optical feedback.

Please find below the most important features listed:

- Ideal for mounting on dark tinted glass
- Ø 100mm total diameter
- Adhesive mounting
- 69 – 72mm mounting hole required
- 3mm height
- Customization through symbols and colours of the cover ring
- TSI-PRM compliant – Pictograms and braille available
- Optical feedback through LEDs
- Optional: Acoustic feedback (signal tone) / tactile feedback (vibration)
- Profile angle 90° (Option: 84° / 80° / 60°)

CAPTRON can provide individual advice to enable you to choose the perfect product from the CHT93 series for the required specifications and applications.

Please contact us:

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 E-Mail: sales@captron.com

Technical data at 24 V and 20 °C:			
Supply voltage:	DC 24V (16,8 ... 32V) DC 12V (10,8 ... 14V - Option -)	Voltage drop:	max. 3 V at 400 mA (24V) max. 3V at 200 mA (12 V)
Load current:	max. 400 mA	Current consumption:	max. 30 / 35 mA (24 V) max. 20 mA (12V)
Output:	PNP-NO	Operation temperature:	-30 °C ... +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
Reverse polarity protection:	Protection of all lines		
Short-circuit protection	Short-circuit and overload protection		

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Q U A L I T Y M A D E I N B A V A R I A



Configuration help CHT93-1

Type code 1 – Position ring and cover ring = same colour²:

CHT93	-	C1	C2	C3	C5	-	C6	/	-	C7	/	O1	/	O2
		1	6											

Example: CHT93 - 1 6 5 P - H / TG - SR / T6

Type code 2 – Position ring and cover ring = deviating colours²:

CHT93	-	C1	C2	C3	C4	C5	-	C6	/	-	C7	/	O1	/	O2
		1	6												

C1 – Mounting

Code	Description
1	Adhesive mounting on glass pane

C2 – Type of connection⁵

Code	Description
6	Connector JST (4-pin / standard)

C3 – Colour of the cover ring and the position ring (T1) Colour of the cover ring (Type code 2)

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)	
K	Traffic grey A (RAL 7042)	

C4 – Colour of the position ring (Type Code 2 only)

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)	
K	Traffic grey A (RAL 7042)	

C5 – LED-control³ / Numbers of pins / Supply voltage

Code	Description
P	Semi-Automatic / 4-pin / DC 24V
B	Manual / 5-pin / DC 24V
-	-
-	-

C6 – 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 1 pieces / order up without any surcharge.

C7 – LED colours (LED1 – LED2)

Code	Description	
TG-SR	Green (LED1) / Red (LED2) - <i>Standard</i>	
BU-SR	Blue (LED1) / Red (LED2)	
-	-	

O1 – Version of the coloured position ring⁴

Code	Description
- (w/o)	Standard version
T6	TSI-PRM compliant
-	-

O2 – Profile angle of the cover ring

Code	Description
- (w/o)	90° - <i>Standard</i> -
84°	84° angle version
80°	80° angle version
60°	60° angle version

 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) / Explanation of the type codes 1 / 2:

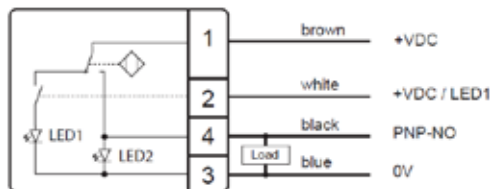
The CHT93-1 series SENSORswitches have a coloured position ring, which is attached to the outside of the glass pane by adhesive mounting, and a coloured cover ring, which is clipped onto the mounting flange on the inside.

These rings can either have the same colour (-> **type code 1**) or different colours (-> **type code 2**; e.g. coloured cover ring = traffic black, coloured position ring = traffic green)

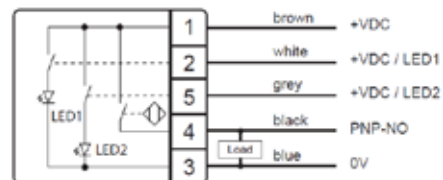
Zu 3) / LED control / Connection diagram:

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. This function is currently only available when the DC 24V version is selected!



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



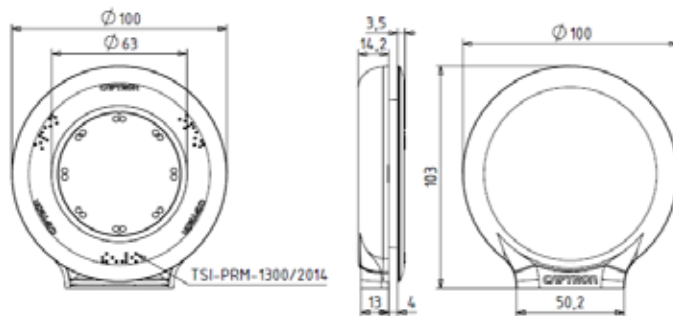
Connection diagram „B“
PNP-NO // Manual

to 4) / version of the coloured position ring and the coloured cover ring:

„1“ – Standard version

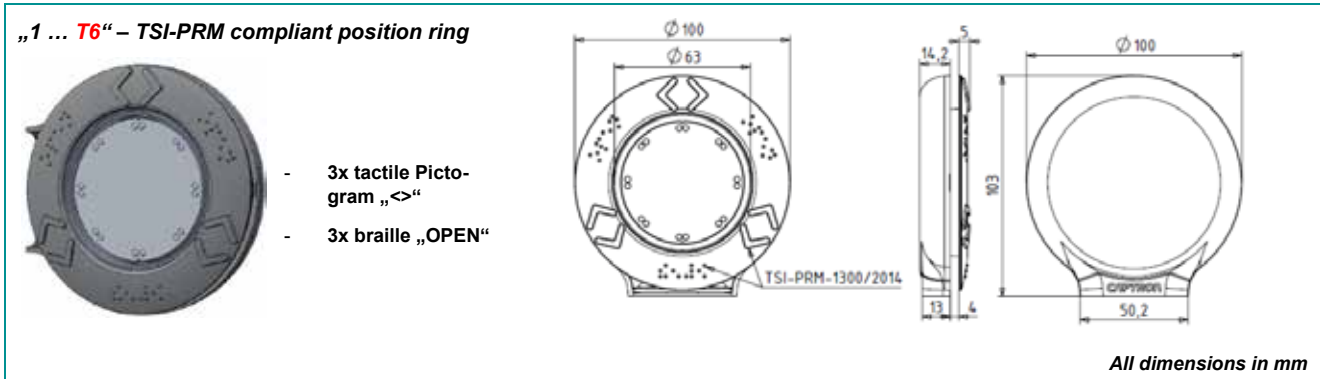


- 3x lettering „CAPTRON“
- 3x braille „OPEN“

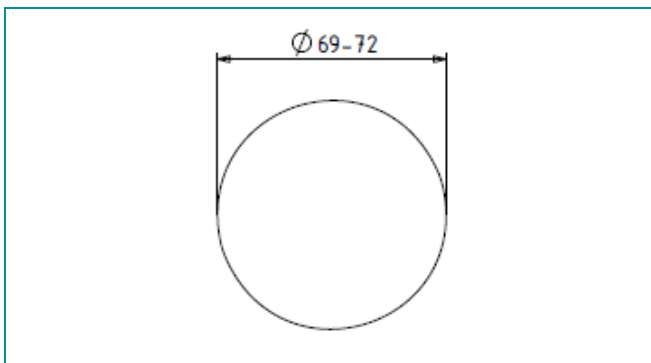


All dimensions in mm

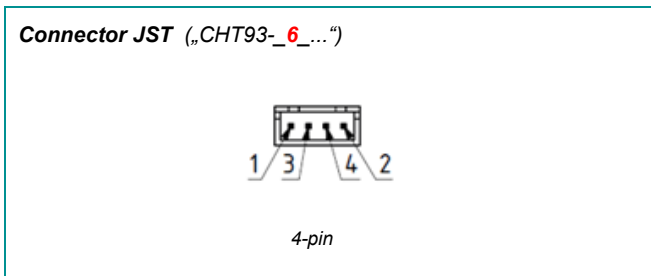
--- PLEASE TURN OVER ---



Hole pattern:



to ⁵⁾ / Types of connection:



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.