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Different shapes, installation depths and plug-in connections mean that the CHT3 series is suitable for a wide range of uses.

The CHT3-1 or CHT3-2 series has a glass fibre-reinforced coloured cover ring and is attached to smooth surfaces (e.g. walls / tables) by screw mounting.

According to the requirements of TSI-PRM for persons with reduced mobility, the certified CHT3 switches are suitable for the traffic and transport industry. The coloured cover ring is available with Braille or raised pictograms. The SENSORswitches can be ordered in addition to the visual feedback by 16 bright LEDs with signal tone and/or tactile feedback (vibration).

Their field of application includes installation in buses and trains as well as for emergency call and information pillars.



Please find below the most important features listed:

- Ø 88 mm total diameter
- Ø 50 - 58 mm mounting hole required
- 7mm height
- TSI-PRM compliant: Pictograms and braille available; optical feedback through LEDs
- A- / V-mounting
- Customization through symbols and colours of the cover ring
- Optional: Tactile feedback (Vibration) / acoustical feedback (signal tone)

CAPTRON can provide individual advice to enable you to choose the perfect product from the CHT3 series for the required specifications and applications.

Please contact us:

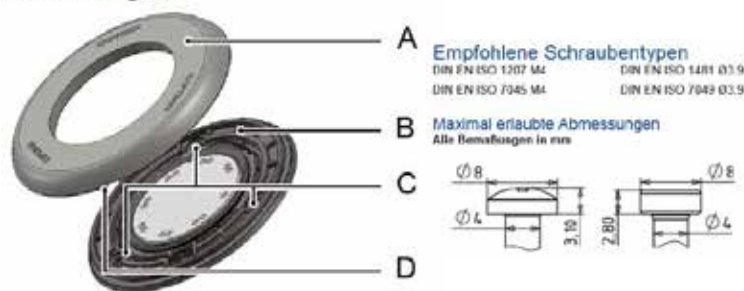
Phone: +49 (0)8142 / 44 88 – 160

E-Mail: [sales@captron.com](mailto:sales@captron.com)

Legend:

- (A) = Coloured cover ring
- (B) = Mounting flange
- (C) = Mounting holes
- (D) = Groove on the back of the coloured cover ring

Übersichtsgrafik



Technical data at 24 V and 20 °C:			
Supply voltage:	DC 24V DC (16,8 ... 32V)	Short-circuit protection:	Short-circuit and overload protection
Load current:	Max. 400 mA	Voltage drop:	max. 3 V at 400 mA
Output:	PNP-NO (NPN-NO optional)	Current consumption:	max. 30 mA at 24V DC
Output signal:	approx. 300ms (Option „Dynamic“) Permanent signal (Option „Static“)	Operation temperature:	-30 ... +80°C (Dynamic) 0 ... +55°C (Static)
LED 1:	8 green LEDs	Degree of protection (IP):	Frontside IP69K
LED 2:	8 red LEDs	Type of operation:	Capacitive
Reverse polarity protection:	Protection of all lines	Operation force:	No operation force required



## Configuration help CHT3-1 / CHT3-2 (STANDARD)

### Type code 1 – with output signal Dynamic <sup>1</sup>:

CHT3	-	C1	C2	C3	C4	O1	-	C5	/	-	C6	/	O2
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Example: CHT3 - 1 5 1 P - H / TG - SR

### Type code 2 – with output signal Static <sup>1</sup>:

CHT3	-	C1	C2	C3	C4	O1	-	C5	/	-	C6	/	ST	/	O2
------	---	----	----	----	----	----	---	----	---	---	----	---	----	---	----

#### C1 – Mounting / version of the coloured cover ring <sup>2</sup>

Code	Description
1	<b>A-mounting</b> / Standard coloured cover ring
A	A-mounting / TSI-PRM compliant cover ring
2	<b>V-mounting</b> / Standard coloured cover ring
V	V-mounting / TSI-PRM compliant cover ring
N	A-mounting / cover ring „INFO“ version *
S	A-mounting / cover ring „SOS“ version *

\* only available in colours Traffic red and Traffic yellow!

#### C2 – Type of connection <sup>4</sup>

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
8	Connector M12

\* 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)	
4	Light grey (RAL 7035)	
5	Traffic yellow (RAL 1023)	
6	Traffic black (RAL 9017)	
H	Traffic blue (RAL 5017)	
8	Stainless steel *	

\* Material = stainless steel; requires additional option „O2“!

#### C4 – LED control <sup>3</sup> / Numbers of pins / Output

Code	Description
P	Semi-Automatic / 4-pin / PNP-NO
B	Manual / 5-pin / PNP-NO
N	Semi-Automatic / 4-pin / NPN-NO *
-	-
-	-
-	-
-	-

\* currently only available with connection type "5 - connector M8"!

#### 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 connection type „7 – single strands“ (LED control „P“ / „B – Manual“) or „5 – connector M8“ (LED control „P – Semi-Automatic“)

#### 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 1 pieces / order up without any surcharge.

#### C6 – LED colours (LED1 – LED2)

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

#### O2 – Version of stainless steel ring (with selection „8“ for C3)

Code	Description
CP161-2	with 3x lettering „CAPTRON“ <sup>2</sup>


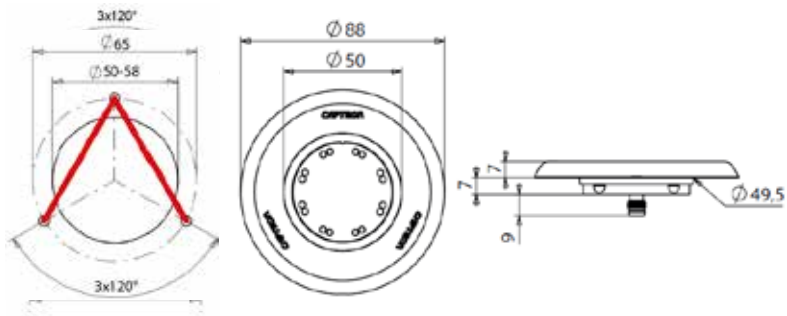

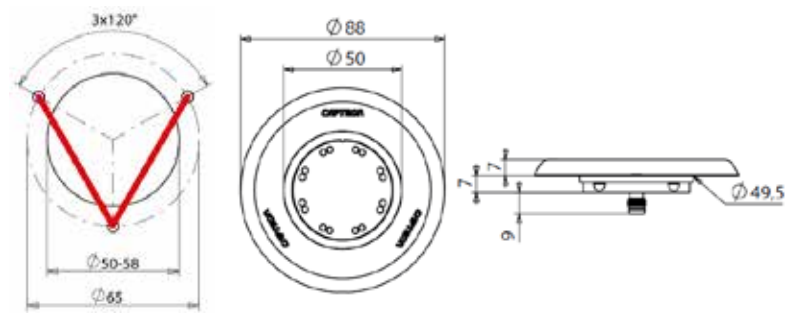

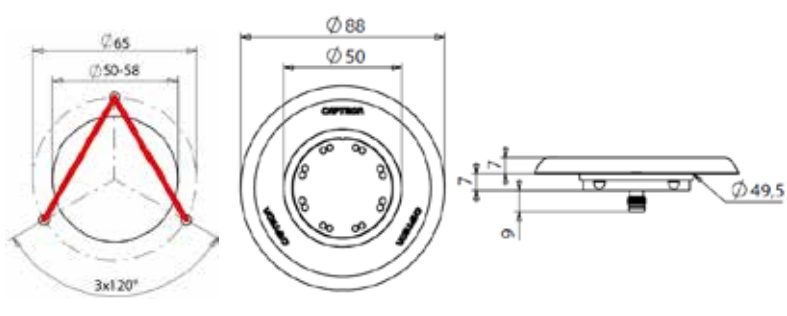
--- Please note the additional information and explanations on the following pages. Thank you! ---

Additional information & explanations on the previously described configuration items:

to <sup>1)</sup>:

- Output signal
- **Dynamic:** The output signal is time-limited to 300ms, independent of the duration of actuation.
  - **Static:** The SENSORswitch switches as long as the switch surface is touched (= permanent signal).

to <sup>2)</sup> / Version of coloured cover ring:

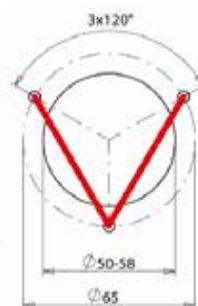
<p><b>„1“ – Standard version, A-mounting</b></p>  <ul style="list-style-type: none"><li>- 3x lettering „CAPTRON“</li></ul>	 <p>Hole pattern (A-mounting)</p> <p>All dimensions in mm</p>
<p><b>„2“ - Standard version; V-mounting</b></p>  <ul style="list-style-type: none"><li>- 3x lettering „CAPTRON“</li></ul>	 <p>Hole pattern (V-mounting)</p> <p>All dimensions in mm</p>
<p><b>„A“ - TSI-PRM compliant, A-mounting</b></p>  <ul style="list-style-type: none"><li>- 3x tactile Pictograms „&lt;“</li><li>- 3x Braille „OPEN“</li></ul>	 <p>Hole pattern (A-mounting)</p> <p>All dimensions in mm</p>

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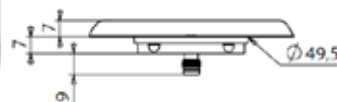
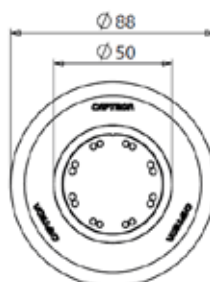
**„V“ – TSI-PRM compliant, V-mounting**



- 3x tactile Pictograms „<>“
- 3x Braille „OPEN“



Hole pattern (V-mounting)



All dimensions in mm

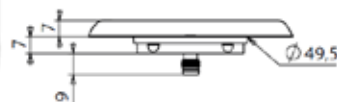
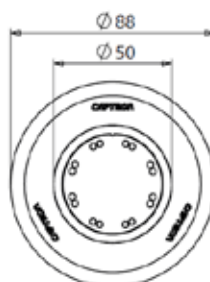
**„N“ - „INFO“-cover ring; A-mounting**



- 3x tactile Pictograms „i“
- 3x Brailleschrift „INFO“



Hole pattern (A-mounting)



All dimensions in mm

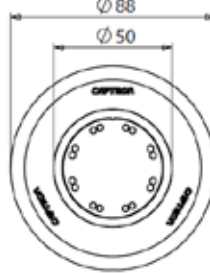
**„S“ - „SOS“-cover ring; A-mounting**



- 3x tactile Pictograms „SOS“
- 3x Brailleschrift „SOS“



Hole pattern (A-mounting)

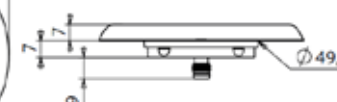
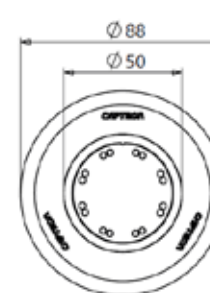
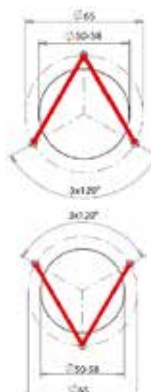


All dimensions in mm

**„CP161-2“ - „stainless steel ring „CAPTRON“ A- or V-mounting**



- 3x lettering „CAPTRON“



All dimensions in mm

## to 3) / LED control & connection diagrams:

### LED-control - Semi-Automatic (P / N):

LED1 (e.g. green / operating status) can be controlled separately.  
When the SENSORswitch is actuated, LED1 goes out and LED2 (e.g. red / switching status) lights up

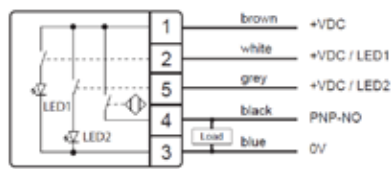
### - Manual (B):

Both LED1 and LED2 can be controlled separately as required.

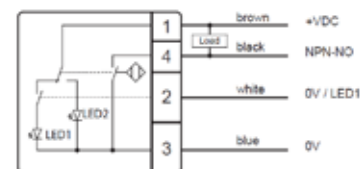
### Connection diagrams:



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



Connection diagram „B“  
PNP-NO // Manual



Connection diagram „N“  
NPN-NO // Semi-Automatic

## to 4) / Types of connection:

<p><b>Connector M8</b> („CHT3-<b>5</b>...“)</p> <p>4-pin      5-pin</p>	<p><b>Connector JST</b> („CHT3-<b>6</b>...“)</p> <p>4-pin      5-pin</p>
<p><b>Connector AMP</b> („CHT3-<b>4</b>...“)</p> <p>4-pin      4-pin</p>	<p><b>Single strands 200mm</b> („CHT3-<b>7</b>...“)</p> <p>Single strands 200mm with ferrules (Wire end ferrules with plastic collar DIN 46228; wire cross-section strands 0.25 mm<sup>2</sup>)</p> <p>4-pin      5-pin</p>
<p><b>Connector M12</b> („CHT3-<b>8</b>...“)</p> <p>4-pin      5-pin</p>	

### 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](mailto:sales@captron.com))

### You need data sheets and/or 3D data?

Please also contact our internal sales department. Thank you.