Content: Short description / Technical data (Page 1)

Configuration help (Page 2)

Additional information / Connection diagram (Page 3 & 4)

SENSORswitches of the CHT4 series have a very large sensing area of  $\emptyset$  63 mm and are designed for screw mounting.

Customers from the field of industrial automation and building technology choose the CHT4 SENSOR switch for flush mounting (CHT4-0) or the SENSOR switch with glass fibre reinforced polycarbonate coloured cover ring (CHT4-2), depending on the application.

In private and public transport, the CHT4 SENSORswitch is used as a door opening SENSORswitch. Equipped with Braille, raised pictograms, 16 bright LEDs, signal tone and vibration, the CHT4 is particularly user-friendly for persons with limited mobility. Other areas of use are emergency call and information pillars at train and bus stations and taxi stands

#### Please find below the most important features listed:

- Ø 63 mm total diameter
- 9,7mm height of the sensor element
- Required accessories: Robust metal housing AH-1X9/CPM07 (110 x 110 mm)
- Customization through symbols
- Optional: Acoustic feedback (signal tone); tactile feedback (vibration)
- Switches on touch high operating comfort, no pressure necessary

CAPTRON can provide individual advice to enable you to choose the perfect product from the CHT4 series for the required specifications and applications.

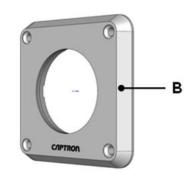
#### Please contact us:

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

## Legend:

(A) = Sensor element CHT4-0 (B) = Metal housing AH4-1X9/CPM07





| Technical data at 24 V and 20 °C: |   |                              |                                       |  |  |
|-----------------------------------|---|------------------------------|---------------------------------------|--|--|
| Complexed                         | DC 24V (16,8 32V)                                   | Reverse polarity protection: | Protection of all lines               |  |  |
| Supply voltage:                   | 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")                           | 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 CHT4-0**



## Type code 1:

| CHT4        | -     | <b>C1</b><br>0 |   | C3<br>X |   | 01 | - | <b>C5</b> | 1 |    | - | C6 | 1 | 02 |
|-------------|-------|----------------|---|---------|---|----|---|-----------|---|----|---|----|---|----|
| Example: Cl | HT4 - | 0              | 5 | X       | Р |    | _ | Н         | / | TG | _ | SR |   |    |

- Please note: The mounting bracket AH4-1X9/CPM07 must be ordered together with the CHT4-0 SENSORswitch -

| C1 -      | Mounting / version of the coloured cover ring <sup>2</sup>        |
|-----------|---|
| Code<br>0 | <u>Description</u> clip-on mounting / without coloured cover ring |
| -         | -   |
| -         | -   |
| -         | -   |
| -         | -   |

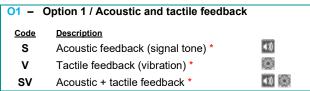
| C2 - 1      | Гуре of connection <sup>4</sup>                      |
|-------------|--|
| <u>Code</u> | <u>Description</u>                                   |
| 1           | Cable + connector AMP 6,3 (Pin-assignment: 1-2-4-3)* |
| 4           | Cable + connector AMP 6,3 (Pin-assignment: 1-4-2-3)* |
| 5           | Connector M8   |
| 6           | Connector JST  |
| 7           | Single strands 200mm with ferrules                   |

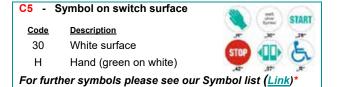
↑ nonly available with the LED function "Semi-Automatic (4-pin)"!

| C3 - Colour of the coloured cover ring |                             |  |
|--|-----------------------------|--|
| <u>Code</u>                            | <u>Description</u>          |  |
| Х                                      | Without coloured cover ring |  |
| -                                      | -                           |  |
| -                                      | -                           |  |
| -                                      | -                           |  |
| -                                      | -                           |  |

| C4 - I      | C4 - LED-control / Numbers of pins / output <sup>3</sup>                          |  |  |  |  |
|-------------|---|--|--|--|--|
| <u>Code</u> | <u>Description</u>  |  |  |  |  |
| Р           | Semi-Automatic / 4-pin / PNP-NO / <b>DC 24V</b>                                   |  |  |  |  |
| В           | Manual / 5-pin / PNP-NO / <i>DC 24V</i>   |  |  |  |  |
| w           | Automatic / 3-pin / PNP/NPN-NO changeable by reversing polarity * / <i>DC 24V</i> |  |  |  |  |
| G           | Semi-Automatic / 4-pin / PNP-NO / <b>DC 12V</b>                                   |  |  |  |  |

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





\* only available with the LED functions "P - Semi-Automatic" and "B – Manual"! ↑ all symbols marked as "Standard" are already available from 1 pieces / order up without any surcharge.

| C6 - LED colours (LED1 - LED2) |                                      |  |  |  |
|--------------------------------|--------------------------------------|--|--|--|
| <u>Code</u>                    | <u>Description</u>                   |  |  |  |
| TG-SR                          | Green (LED1) / Red (LED2) - Standard |  |  |  |
| TG-YW                          | Green (LED1) / Yellow (LED2)         |  |  |  |
| BU-SR                          | Blue (LED1) / Red (LED2)             |  |  |  |

| O2 - Option 2 / Switching distance |                              |  |
|------------------------------------|------------------------------|--|
| <u>Code</u>                        | <u>Description</u>           |  |
| - (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:

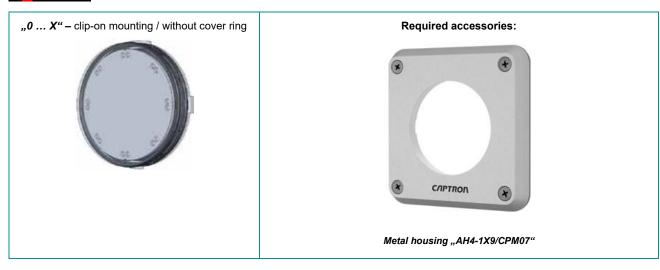
to 1):

**Switching function** 

- Dynamic:

The output signal is time-limited to 300ms, independent of the duration of actuation.

#### to 2) / Mounting:



## to 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.

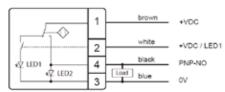
- Automatic:

LED1 (= e.g. green) lights up in operating state.

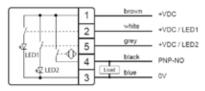
When the SENSORswitch is touched, LED1 goes out and LED2 (= e.g. red) lights up.

- this function is only available for connection diagram "W -

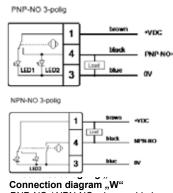
## Connection diagram:



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



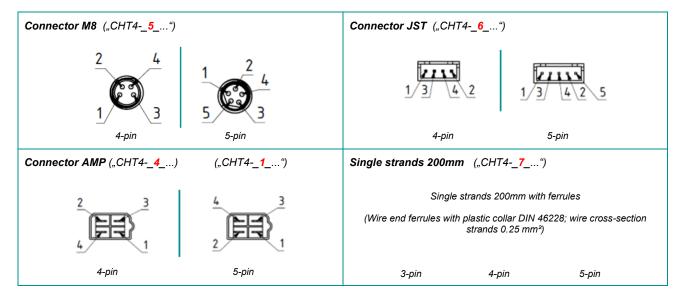
Connection diagram "B" PNP-NO // Manual



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

--- PLEASE TURN OVER ---

# to 4) / 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.