

Touchless Switch



See below:
[Approvals and Compliances](#)

Description

- Touchless momentary push button (MO¹) or as latching switch (LA)
- Protection against unintended switching
- Precise operating
- Potential free output contacts
- Laser lettering possible
- Vandal resistant

Unique Selling Proposition

- Variable supply voltage, RGB with integrated series resistor
- High reliability
- Wiping and cleaning the surface does not trigger a switching operation

Characteristics

- Housing made from stainless steel
- With ring illumination
- Wearless, no moving parts
- Attractive design
- Insensitive to water and rain

Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [CAD-Drawings](#), [Product News](#), [Detailed request for product](#), [Landing Page](#)

Technical Data

Electrical Data

| | |
|--|--|
| Switching Function | Momentary (MO ¹) or latching (LA) |
| Switching Voltage | max. 42 VAC / 60 VDC |
| Switching current | max. 100 mA |
| Electrical Rating | 1 W |
| Switch Resistance OFF | > 10 MΩ |
| Switch Resistance ON | < 16Ω |
| Supply Voltage LED | 5 - 28 VDC |
| Current Consumption all LEDs off | 6.0 mA (typ) / 13.0 mA (max) Peak: 29 mA (switch is closed) 8.0 mA (typ) / 15.0 mA (max) Peak: 34 mA (switch is open) |
| Current Consumption Illumination red, green or blue | 10.0 mA (typ) / 17.0 mA (max) Peak: 34 mA (switch is closed) 11.0 mA (typ) / 19.0 mA (max) Peak: 38 mA (switch is open) |
| Current Consumption Illumination yellow, cyan or magenta | 14.0 mA (typ) / 21.0 mA (max) Peak: 38 mA (switch is closed) 16.0 mA (typ) / 22.0 mA (max) Peak: 43 mA (switch is open) |
| Current Consumption Illumination white | 19.0 mA (typ) / 25.0 mA (max) Peak: 43 mA (switch is closed) |
| Reverse Polarity Protection | yes |
| Output | OptoMOS Relay |
| Lifetime | >20 million actuations |
| connection type ² | TTS Bi-Color 4 Litzen, 26AWG, 0.128 mm ² TTS RGB 6 Litzen, 26AWG, 0.128 mm ² |

Mechanical Data

| | |
|-------------------------------|---------|
| Actuation Type | optical |
| Actuating Force | none |
| Shock Protection | IK06 |
| Mounting Depth | 16.5 mm |
| Tightening Torque Plastic Nut | 2.5 Nm |

Climatical Data

| | |
|--------------------------------|------------------------|
| Operating Temperature | -30 to 85 °C |
| Storage Temperature | -40 to 85 °C |
| IP Protection Class Front Side | IP67 acc. to IEC 60529 |

Material

| | |
|--------------------------------------|-----------------|
| Housing | Stainless Steel |
| Illuminated Ring (Ring Illumination) | PMMA |
| Sensor Window | PC |
| Seal Ring | NBR70 |

¹ on request also available as NC / ² on request also available with cable or connector

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

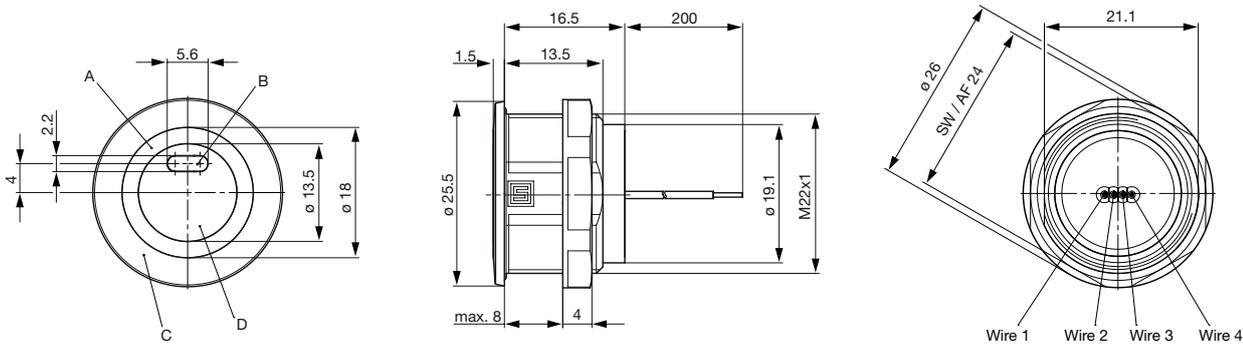
SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Compliances

The product complies with following Guide Lines

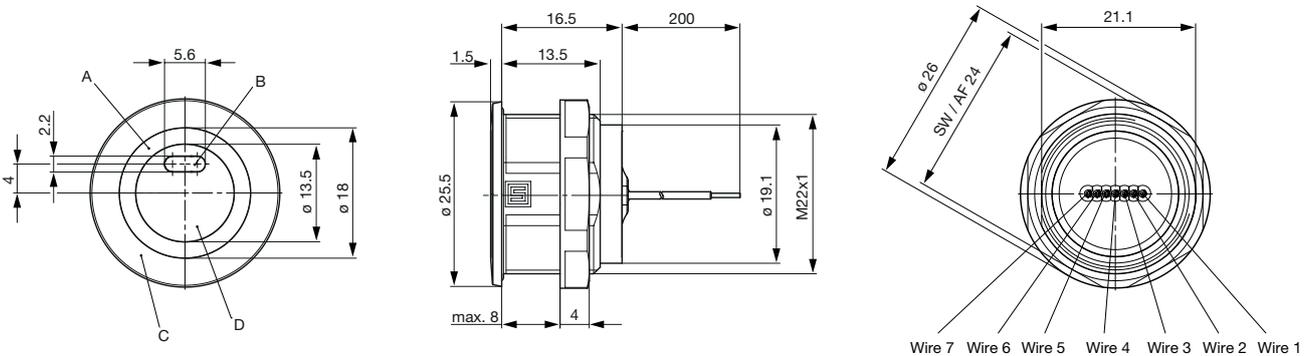
| Identification | Details | Initiator | Description |
|--|--|-------------|---|
|  | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
|  | UKCA declaration of conformity | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008. |
|  | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
|  | REACH | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force. |

Dimension [mm]



- A ring illumination
- B sensor window
- C housing
- D actuator

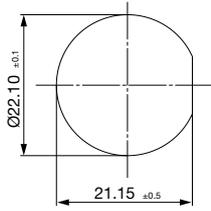
Dimension for RGB Variants



- A ring illumination
- B sensor window
- C housing
- D actuator

Dimension

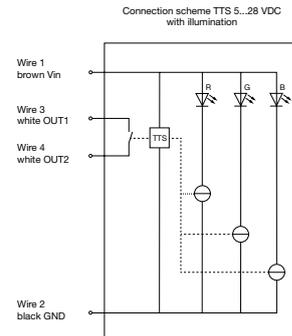
Mounting hole



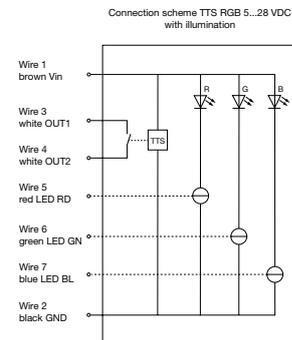
Diagrams

Connection diagram

| TTS Bicolor Connection wire assignment | | |
|--|------------|----------------------|
| Wire-number | Wire color | function |
| Wire 1 | brown | Vin = 5 VDC...28 VDC |
| Wire 2 | black | GND |
| Wire 3 | white | OUT1 |
| Wire 4 | white | OUT2 |



| TTS RGB Connection wire assignment | | |
|------------------------------------|------------|----------------------|
| Wire-number | Wire color | function |
| Wire 1 | brown | Vin = 5 VDC...28 VDC |
| Wire 2 | black | GND |
| Wire 3 | white | OUT1 |
| Wire 4 | white | OUT2 |
| Wire 5 | red | LED red |
| Wire 6 | green | LED green |
| Wire 7 | blue | LED blue |



Lettering Colour of Laser Lettering

| Material | Lettering Colour |
|-----------------|----------------------|
| Stainless Steel | black Filled letters |

Order Index Lettering

| Laser Marking | | | |
|---------------|---------|-------------|---|
| 001 =A | 021 =U | 041 =÷ | 061 =EIN |
| 002 =B | 022 =V | 042 = * | 062 =AUS |
| 003 =C | 023 =W | 043 == | 063 =AUF |
| 004 =D | 024 =X | 044 = # | 064 =AB |
| 005 =E | 025 =Y | 045 = ↔ | 065 =ON |
| 006 =F | 026 =Z | 046 = † | 066 =OFF |
| 007 =G | 027 =0 | 047 = → | 067 =UP |
| 008 =H | 028 =1 | 048 = ← | 068 =DOWN |
| 009 =I | 029 =2 | 049 = ↓ | 069 =HIGH |
| 010 =J | 030 =3 | 050 = ↑ | 070 =LOW |
| 011 =K | 031 =4 | 051 = % | 071 =ON/OFF |
| 012 =L | 032 =5 | 052 = √ | 072 =START |
| 013 =M | 033 =6 | 053 =CTRL | 073 =RESET |
| 014 =N | 034 =7 | 054 =RETURN | 074 =  |
| 015 =O | 035 =8 | 055 =SHIFT | 075 =  |
| 016 =P | 036 =9 | 056 =LOCK | 076 =  |
| 017 =Q | 037 =+ | 057 =STOP | 077 =  |
| 018 =R | 038 =- | 058 =ENTER | |
| 019 =S | 039 =. | 059 =BACK | |
| 020 =T | 040 = x | 060 =LINE | |

Please note that the font size depends on the number of characters

Order number key

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|----|---|----|----|-----|----|---|----|-----|-----|----|---|----|----|---|----|---|----|---|----|----|----|---|----|-----|---|----|
| T | T | S | - | 22 | - | LA | NO | A10 | F0 | - | RI | ORG | VAR | F0 | - | S0 | NC | - | B | - | 06 | - | S0 | NC | NF | - | 0 | 000 | - | C |
| | | | | 1 | | 2 | 3 | 4 | 5 | | 6 | 7 | 8 | 9 | | 10 | 11 | | 12 | | 13 | | 14 | 15 | 16 | | 17 | 18 | | 19 |

Diameter  **1**
 22 mm = 22

Switch type  **2**
 Latching = LA
 Momentary = MO

Switch function  **3**
 Normally open = NO

Rated current  **4**
 100mA = A10

Terminal switch  **5**
 Flexible wires = F0

Illumination / appearance  **6**
 Ring illumination = RI

Illumination / appearance color  **7**
 Red-green = 0RG
 RGB = RGB

Supply voltage illumination  **8**
 5-28V = VAR

Terminal illumination  **9**
 Flexible wires = F0

Housing material  **10**
 Stainless = S0

Housing color  **11**
 Natural = NC

Mounting  **12**
 Thread (M) W/ anti-rotation protection = B

Detection distance *  **13**
 6 cm = 06

Actuator material  **14**
 Stainless steel = S0

Actuator color  **15**
 Natural = NC

Actuator style  **16**
 No Finger guided = NF

Lettering type  **17**
 None = 0

Marking type  **18**
 None = 000

Accessories  **19**
 Hex nut plastic w / O-Ring = C

* Distance can be changed at the production site. MOQ > 100 pcs.

Variants

| Diameter [mm] | Illumination | Illumination Color inactive / active | Function | Accessories | Order Number |
|---------------|-------------------|---|----------------|-----------------|--------------|
| 22 | Ring Illumination | multicolor | latching (LA) | Hex nut plastic | 3-135-364 |
| 22 | Ring Illumination | multicolor | momentary (MO) | Hex nut plastic | 3-135-363 |
| 22 | Ring Illumination | bi-colored green / red | latching (LA) | Hex nut plastic | 3-131-913 |
| 22 | Ring Illumination | bi-colored green / red | momentary (MO) | Hex nut plastic | 3-131-894 |

Latching and momentary NO switch are open after power-up (protection against unintended switching)

Availability for all products can be searched real-time: <https://www.schurter.com/en/info-center/support-tools/stock-check-distributors>

Minimum order quantity for standard variants with or without laser marking is 10 pieces.

| | |
|-----------------------|--------|
| Packaging unit | 10 Pcs |
|-----------------------|--------|