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 contactsLaser 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

Mechanical Data

- 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 (MO1) 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	6.0 mA (typ) / 13.0 mA (max)
off	Peak: 29 mA (switch is closed)
	8.0 mA (typ) / 15.0 mA (max)
	Peak: 34 mA (switch is open)
Current Consumption	10.0 mA (typ) / 17.0 mA (max)
llumination red, green or blue	Peak: 34 mA (switch is closed)
	11.0 mA (typ) / 19.0 mA (max)
	Peak: 38 mA (switch is open)
Current Consumption	14.0 mA (typ) / 21.0 mA (max)
Illumination yellow, cyan or magenta	Peak: 38 mA (switch is closed)
	16.0 mA (typ) / 22.0 mA (max)
	Peak: 43 mA (switch is open)
Current Consumption	19.0 mA (typ) / 25.0 mA (max)
Illumination white	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

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 Illumi-	PMMA
nation)	
Sensor Window	PC
Seal Ring	NBR70

Approvals and Compliances

 $^{^{\}rm 1}$ on request also available as NC / $^{\rm 2}$ on request also available with cable or connector

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

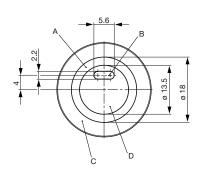
SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical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

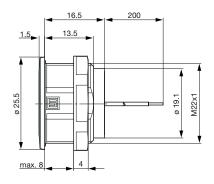
Compliances

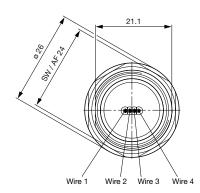
The product complies with following Guide Lines

Identification	Details	Initiator	Description
C€	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.
UK CA	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	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
REACH	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]

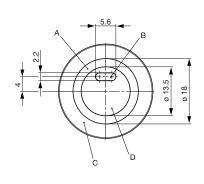


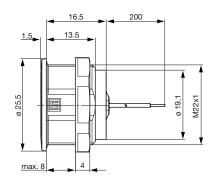


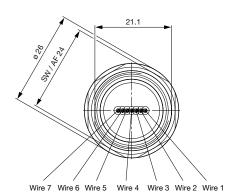


Α ring illumination В sensor window С housing D actuator

Dimension for RGB Variants



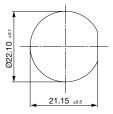




- ring illumination В sensor window housing
- С D actuator

Dimension

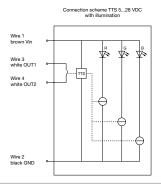
Mounting hole



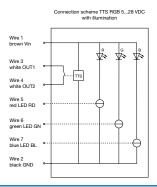
Diagrams

Connection diagram

TTS Bicolor Connection wire assignment					
Wire-number	Wire color	function			
Wire 1	brown	Vin = 5 VDC28 VDC			
Wire 2	black	GND			
Wire 3	white	OUT1			
Wire 4	white	OUT2			



TTS RGB Connection wire assignment					
Wire-number	Wire-number Wire color function				
Wire 1	brown	Vin = 5 VDC28 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 = (1)				
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 d	Please note that the font size depends on the number of characters						

Order number key

TTS - 22 - LA NO) A10	F0 - RI	ORG V	AR F0	- S0	NC	C - B - 06 - S0 NC NE	-	0 000 -	С
1 2 3	4	5 6	7	8 9	10	11	12 13 14 15 16	j	17 18	19
Diameter		Q	4				Housing color		Q	44
		_	1				Housing color		-	11
22 mm	=	22					Natural	=	NC	
Switch type		Q N	2				Mounting		Q,	12
Latching	=	LA					Thread (M) W/ anti-rotation	=	В	
Momentary	=	MO					protection			
Switch function		Q	3				Detection distance *		Q	13
Normally open	=	NO					6 cm	=	06	
Rated current		Q	4				Actuator material		Q	14
100mA	=	A10					Stainless steel	=	S0	
Terminal switch		Q	5				Actuator color		Q	15
Flexible wires	=	F0					Natural	=	NC	
Illumination /		Q	6				Actuator style		Q	16
appearance		DI					No Finger guided	=	NF	
Ring illumination	=	RI					Lettering type		Q	17
Illumination / appearance color		Q,	7				None	=	0	
Red-green	=	0RG					Marking type		Q	18
RGB	=	RGB					None	=	000	
Supply voltage		Q	8				Accessories		Q	19
illumination							Hex nut plastic w /	=	С	
5-28V	=	VAR					O-Ring			
Terminal illumination	า	Q	9							
Flexible wires	=	F0								
Housing material		Q	10							
Stainless	=	S0								

 $^{^{\}star}$ 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	
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information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each

product selected for their own applications.

Mouser Electronics

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Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Schurter:

<u>3-131-894</u> <u>3-131-913</u> <u>3-135-363</u> <u>3-135-364</u>