

Piezo Switch with Extended Protection against Vandalism



PSE M22 HI Braille



PSE M22 HI VS



PSE M22 HI

**Description**

- Momentary switch available in version Standard or with Lettering/Symbols
- Assembly by mounting with nut
- Quick connect terminals or wires

See below:

**Approvals and Compliances**

**Characteristics**

- Housing and actuating area material: high-quality stainless steel, optional aluminium anodized in various colours
- Laser lettering, Braille, standard or customized characters and symbols
- High reliability, long lifetime with more than 20 mill. actuations
- piezo switch with enhanced vandal proof protection to IK 06 impact resistance rating
- For use in harsh environments, both indoors and outdoors (see technical data)

**References**

Alternative: Standard version

**Weblinks**

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

**Technical Data**

**Electrical Data**

Switching Function	N.O.
Switching Voltage	max. 42 / 60 VAC/DC
Switching Current	max. 100 mA
Electrical Rating	1 W
Lifetime	20 million actuations at Rated Switching Capacity
Switch Resistance OFF	> 10 MΩ
Switch Resistance ON	< 20 Ω
Capacity	30 pF
N.O. Closing Impulse Duration	20- 1000 ms depending on actuating force, time and speed
Contact Configuration	free polarity

**Mechanical Data**

Actuating Force	2 - 5 N at ambient temperature
Actuating Travel	0.002 mm
Shock Protection	IK 06
Mounting screw torque	2.5 Nm

**Climatical Data**

Operating Temperature	-20 to +60 °C
Storage Temperature	-20 to +60 °C
IP-Protection	IP67 acc. to IEC 60529, IP69K acc. to DIN 40050-9
Environmental Assessment	+55°C / 93% r.h. acc. to DIN EN 60068-2-30
Salt Spray Test (acc. to DIN 50021-SS)	24 h / 48 h / 96 h Residence Time

**Material**

Housings	Stainless Steel
Actuating Area	Stainless Steel, Aluminium anodized for embossed symbols and Braille lettering




**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.


**Approvals**

Approval Reference Type:

Approval Logo	Certification Body	Description
		Fire Test according to DIN EN 81-71: stress class 1 + 2 (Elevators)
		MIL-STD Certificate Number: 416D Method RS103
		VDE Certificate Number: DIN EN 61000-4-2, DIN EN 61000-4-4



**Application standards**

Application standards where the product can be used

Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.

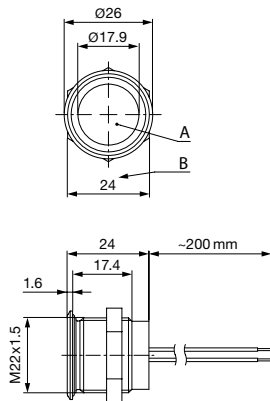
**Compliances**

The product complies with following Guide Lines

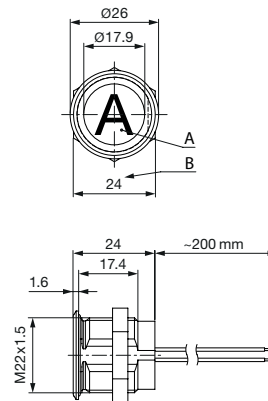
Identification	Details	Initiator	Description
	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU
	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

**Dimension [mm]**

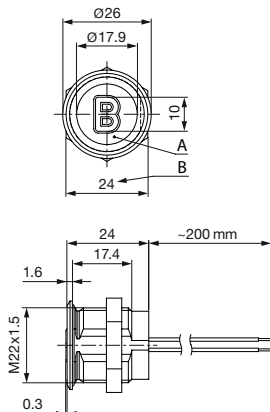
PSE M22 HI Standard with stranded wire (without anti-rotation)



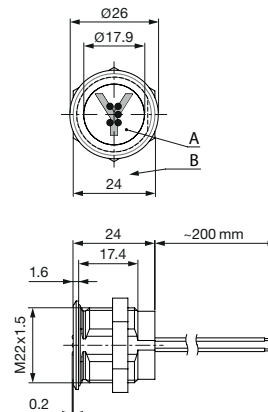
PSE M22 HI Laser marking with stranded wire (with anti-rotation)



PSE M22 HI Embossed marking with stranded wire (with anti-rotation)



PSE M22 HI Braille marking with stranded wire (with anti-rotation)



Either with/without embossed characters or symbols in various colors

With Braille and Laser marking in various colors

**Legend:**

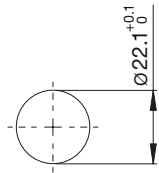
- A = Actuating area
- B = Width across flats
- Wire (Standard: 0.14 mm<sup>2</sup> / 200 mm wire-length)

**Lettering:**

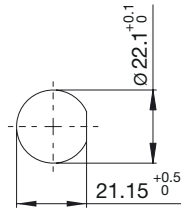
- Either with/without lettering
- Position of the connections with respect to the position of the lettering is not defined

**Dimension**

PSE M22 without anti-rotation



PSE M22 with anti-rotation



**Lettering Colour of Laser Lettering**

Material	Lettering Colour	
Stainless Steel	black	Filled letters
Aluminium	white	Filled letters

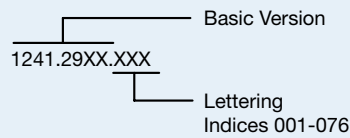
**Ordering Example for Lettering**

**Laser marking**

The last three digits in the order number define the lettering:

001-076	Standard Lettering
101-	Customized Lettering

**Example for ordering with laser marking:**

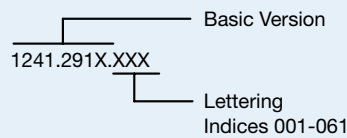


**Braille lettering**





The last three digits in the order number define the lettering:

001-061	Standard Lettering
101-	Customized Lettering

**Example for ordering with Braille lettering**



## Order Index Lettering

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

Order Index Lettering

Braille Marking			
001 = <b>A</b> =		017 = <b>Q</b> =	
002 = <b>B</b> =		018 = <b>R</b> =	
003 = <b>C</b> =		019 = <b>S</b> =	
004 = <b>D</b> =		020 = <b>T</b> =	
005 = <b>E</b> =		021 = <b>U</b> =	
006 = <b>F</b> =		022 = <b>V</b> =	
007 = <b>G</b> =		023 = <b>W</b> =	
008 = <b>H</b> =		024 = <b>X</b> =	
009 = <b>I</b> =		025 = <b>Y</b> =	
010 = <b>J</b> =		026 = <b>Z</b> =	
011 = <b>K</b> =		027 = <b>0</b> =	
012 = <b>L</b> =		028 = <b>1</b> =	
013 = <b>M</b> =		029 = <b>2</b> =	
014 = <b>N</b> =		030 = <b>3</b> =	
015 = <b>O</b> =		031 = <b>4</b> =	
016 = <b>P</b> =		032 = <b>5</b> =	
		033 = <b>6</b> =	
		034 = <b>7</b> =	
		035 = <b>8</b> =	
		036 = <b>9</b> =	
		037 = <b>B</b> =	
		038 = <b>ST</b> =	
		039 = <b>CH</b> =	
		040 = <b>SCH</b> =	
		041 = <b>EI</b> =	
		042 = <b>IE</b> =	
		043 = <b>Ä</b> =	
		044 = <b>Ö</b> =	
		045 = <b>Ü</b> =	
		046 = <b>AU</b> =	
		047 = <b>EU</b> =	
		048 = <b>ÄU</b> =	
		049 = <b>Zahlen- zeichen</b> =	
		050 = <b>.</b> =	
		051 = <b>:</b> =	
		052 = <b>,</b> =	
		053 = <b>;</b> =	
		054 = <b>?</b> =	
		055 = <b>!</b> =	
		056 = <b>-</b> =	
		057 = <b>'</b> =	
		057 = <b>()</b> =	
		059 = <b>„</b> =	
		060 = <b>"</b> =	
		061 = <b>*</b> =	

**All Variants**

Mounting Diameter [mm]	Terminal	Housing Material, Torsion Protection	Actuator area	Lettering	Config. Code	Order Number
22	Flexible wire	Alu green ,yes	Alu green	no	PSE M 22 HI VS	1241.2918
22	Flexible wire	Alu green ,yes	Alu green	laser printed	PSE M 22 HI VS	1241.2924.074
22	Flexible wire	Stainless Steel ,no	Stainless Steel	no	PSE M 22 HI ST	1241.3993

Legend:

Type:

HI = High Impact

VS = anti rotation protection for lettering

Nut with gasket are enclosed in the box.

The listed item numbers represent a selection of the range of piezo switches. Other mounting diameters, materials, colors, connections and symbols are available on request. Special materials for use in salt and chlorinated environment on request.

The MOQ for standard laser lettering on standard variants is 10 pieces.

Availability for all products can be searched real-time:<https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

**Packaging unit**      10 in box with insert



- Actuating elements in ESD safe packaging
- Screw nuts and sealing rings in a bag (enclosed in the box)

**Accessories**

**Description**



Connecting Terminal PSE  
 Connecting Terminal