

Piezo Switch with Extended Protection against Vandalism



PSE M22 HI Embossed



PSE M22 HI Braille



PSE M22 HI VS



**Description**

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

**Approvals**

- 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

**Characteristics**

- Housing and actuating area material: high-quality stainless steel, optional aluminium anodized in various colours
- Laser lettering, embossed symbols, 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

**References**

- Alternative: Standard version [PSE NO 22](#)
- Alternative: switch with prolonged signal: [PSE IV 22](#)

**Weblinks**

[html-datasheet](#), [General Product Information](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [e-Shop](#), [CAD-Drawings](#), [Product News](#), [Detailed request for product](#)

**Technical Data**

**Electrical Data**

Switching Function	N.O.
Switching Voltage	max. 42 / 60 VAC/DC
Switching Current	max. 100 mA
Rated Breaking Capacity	1 W
Lifetime	20 million 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
Actuating Travel	0.002 mm
Shock Protection	IK 06
Tightening Torque	2.5 Nm

**Climatical Data**

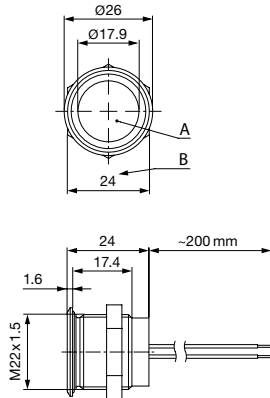
Operating Temperature	-20 to +60 °C
Storage Temperature	-20 to +60 °C
IP-Protection	IP 67 Front Side submerged (1m water column), , front side / rear side DIN EN 60068-2-30 Db (Moist heat - air test with 55°C / 93% humidity)
Salt Spray Test (acc. to DIN 50021-SS)	24 h / 48 h / 96 h Residence Time

**Material**

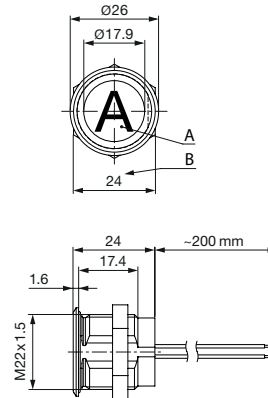
Housing	Stainless Steel
Actuating Area	Stainless Steel, Aluminium anodized for embossed symbols and Braille

**Dimension**

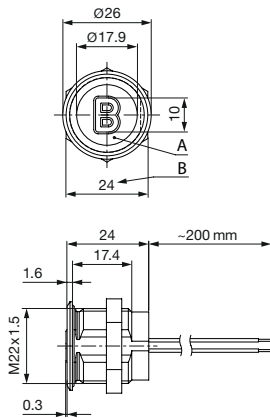
PSE M22 HI Standard with stranded wire (without anti-rotation)



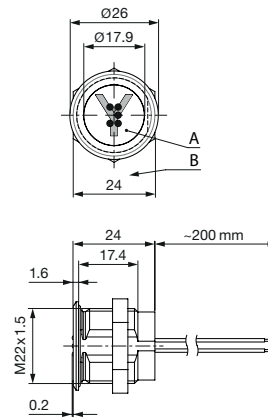
PSE M22 HI Laser marking with stranded wire (with anti-rotation)



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)

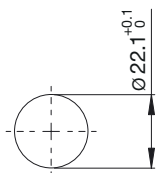
Lettering:

- Either with/without lettering

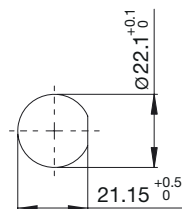
- Position of the connections with respect to the position of the lettering is not defined

**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:

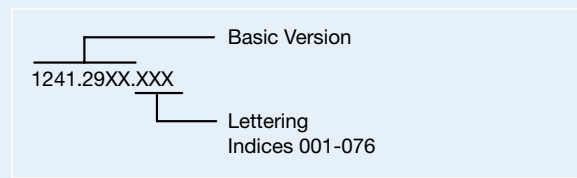
001-076

Standard Lettering

101-

Customized Lettering

#### Example for ordering with laser marking:



#### Embossed lettering

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

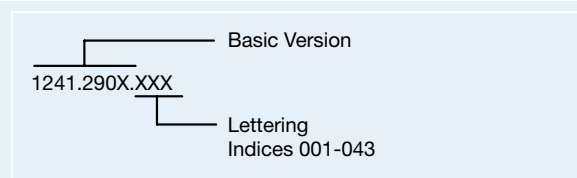
001-043

Standard Lettering

101-

Customized Lettering

#### Example for ordering with embossed lettering:



#### Braille lettering

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

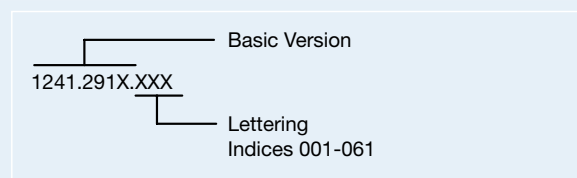
001-061

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>	
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**

Erhabene Symbole /	Embossed Lettering	
000 = Dummy	017 = <b>Q</b>	034 = <b>7</b>
001 = <b>A</b>	018 = <b>R</b>	035 = <b>8</b>
002 = <b>B</b>	019 = <b>S</b>	036 = <b>9</b>
003 = <b>C</b>	020 = <b>T</b>	037 =
004 = <b>D</b>	021 = <b>U</b>	038 = <b>-</b>
005 = <b>E</b>	022 = <b>V</b>	039 = ↑
006 = <b>F</b>	023 = <b>W</b>	040 = ↓
007 = <b>G</b>	024 = <b>X</b>	041 = ←
008 = <b>H</b>	025 = <b>Y</b>	042 = →
009 = <b>I</b>	026 = <b>Z</b>	043 = 
010 = <b>J</b>	027 = <b>0</b>	
011 = <b>K</b>	028 = <b>1</b>	
012 = <b>L</b>	029 = <b>2</b>	
013 = <b>M</b>	030 = <b>3</b>	
014 = <b>N</b>	031 = <b>4</b>	
015 = <b>O</b>	032 = <b>5</b>	
016 = <b>P</b>	033 = <b>6</b>	

Order Index Lettering

Braille Marking

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

**All Variants**

Mounting Diameter [mm]	Terminal	Housing Material, Torsion Protection	Actuator area	Lettering	Config. Code	Order Number
22	Flexible wire	Stainless Steel ,yes	Alu red	embossed	PSE M 22 HI VS	1241.2903.002
22	Flexible wire	Stainless Steel ,yes	Alu green	embossed	PSE M 22 HI VS	1241.2904.028
22	Flexible wire	Stainless Steel ,yes	Alu green	embossed	PSE M 22 HI VS	1241.2904.041
22	Flexible wire	Stainless Steel ,yes	Alu green	embossed	PSE M 22 HI VS	1241.2904.042
22	Flexible wire	Stainless Steel ,yes	Alu natural	embossed	PSE M 22 HI VS	1241.2905.042
22	Flexible wire	Stainless Steel ,yes	Alu blue	emb / las	PSE M 22 HI VS	1241.2913.025
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

Metal 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.

Availability for all products can be searched real-time:<http://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)