

Piezo Switch with Extended Protection against Vandalism



PSE M22 HI

Description

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

See below:

Approvals and Compliances

Characteristics

- Housing and actuator area material: high-quality stainless steel
- Laser lettering, 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

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

Technical Data

Electrical Data

Switching Function	momentary
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	IK06
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

Housing	Stainless Steel
Actuating Area	Stainless Steel




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.

Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Suitable for applications acc.	MIL-STD:	416D Method RS103
	Suitable for applications acc.	VDE Certificate Number:	DIN EN 61000-4-2, DIN EN 61000-4-4
	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

Compliances

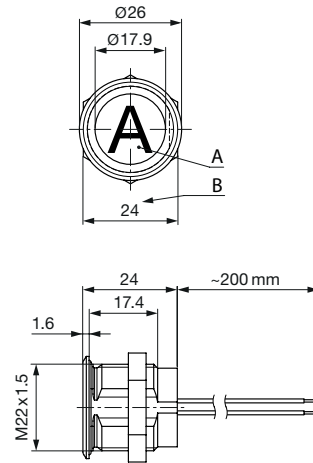
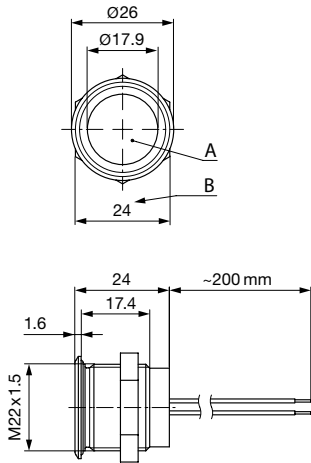
The product complies with following Guide Lines

Identification	Details	Initiator	Description
	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]

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

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

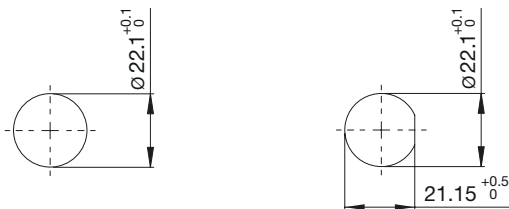


Legend:
 A = Actuating area
 B = Width across flats
 - Wire (Standard: 0.14 mm² / 200 mm wire-length)
 Lettering:
 - Either with/without lettering
 - Position of the connections with respect to the position of the lettering is not defined

Dimension

PSE M22 without anti-rotation

PSE M22 with anti-rotation



Lettering Colour of Laser Lettering

Material	Lettering Colour
Stainless Steel	black Filled letters

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:

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

All Variants

Mounting Diameter [mm]	Terminal	Housing Material, Torsion Protection	Actuator area	Marking	Config. Code	Order Number
22	Flexible wire	Stainless Steel ,no	Stainless Steel	no	PSE M 22 HI Pcs	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 a packing unit.

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

Packaging unit

10 in box with insert or packed in air cushion bags



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

Accessories

Description



[Connecting_Terminal_PSE](#)
Connecting Terminal