Piezo Switch with Extended Protection against Vandalism



PSE M22 HI

See below:

Approvals and Compliances

Description

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

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

Compliances

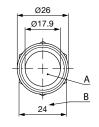
The product complies with following Guide Lines

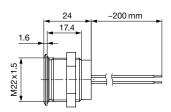
Identification	Details	Initiator	Description
RoHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
REACH	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

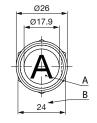
Dimension [mm]

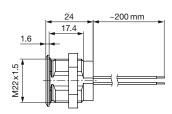
PSE M22 HI Standard with wire leads (without anti-rotation)

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:

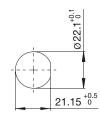
- Either with/without lettering
- Position of the connections with respect to the position of the lettering is not defined

Dimension

PSE M22 without anti-rotation

PSE M22 with anti-rotation



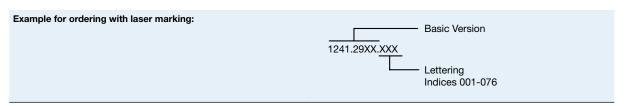


Lettering Colour of Laser Lettering

	•	
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



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 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.

 $Availability for all products can be searched real-time: \\ https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER \\ in the first of the control of t$

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