Piezo Switch N.O.

PSE M19

RoHS COMPLIANT

Description
- Available in version Standard and lettered, from diameter 22 mm with Point Illumination or Ring Illumination
- Assembly by mounting with nut
- Pins, Wire, Crimp Terminal male or Cable with Faston

Approvals
- EMC: EMC directive 2004/108/EWG
- DGUV Test Certificate: FW 11040 Requirements for Food Processing Equipment
- MIL-STD Certificate Number: 202F Method 107G, 202F Method 204D, 202F Method 213B, 416D Method RS103, 810E Method 501.3, 810E Method 502.3, 810E Method 507.3
- VDE Certificate Number: DIN EN 61000-4-2, DIN EN 61000-4-4, DIN EN 61000-4-5

Characteristics
- Housing material types: plastic, aluminum or stainless steel, ring illuminated version additionally made of polyamide
- Variety of design options regarding size, colour, shape, connection or lettering
- High reliability, long lifetime with more than 20 mill. actuations
- For use in harsh environments, both indoors and outdoors

Other versions on request
- switch for longer switching signal duration, type: PSE IV
- switch for explosion proof applications, type: PSE EX
- switch with enhanced vandal proof protection, type: PSE HI
- as keypad, type: Piezo Keypad

References
Alternative: switch with prolonged signal: PSE IV 19
Alternative: switch for EX proved applications: PSE EX 19

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.
Supply Voltage	12 / 24 VDC Ring Illumination, 24 VDC Point Illumination,
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 actuated (Ta = 25°C)
Capacity	5 nF
N.O. Closing Impulse Duration	20- 1000 ms depending on actuating force, time and speed
Contact Configuration	free polarity

Mechanical Data

Actuating Force	≤ 3 N at ambient temperature
Actuating Travel	0.002 mm
Shock Protection	IK 02
Tightening Torque	2.5 Nm

Climatical Data

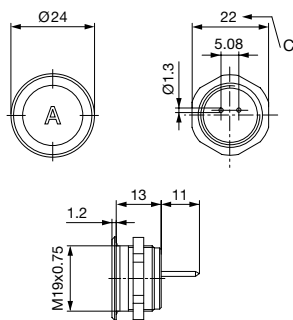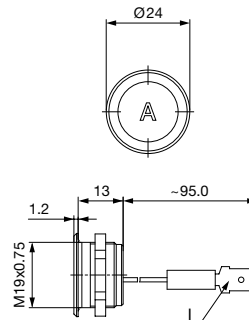|	
Operating Temperature	-40 to +85 °C
Storage Temperature	-40 to +85 °C
IP-Protection	IP 67 Front Side submerged (1m water column), IP 69K Front side High Pressure cleaner test, front side / rear side DIN EN 60068-2-30 Db (Moist heat - air test with 55°C / 93% humidity)
Salt Spray Test (acc. to DIN 50021-SS)	24 h / 48 h / 96 h Residence Time

Material

Housing (depending on type)	Stainless Steel, Aluminium anodized, Polyamide
Actuating Area / Insert (with Ring Illumination)	Stainless Steel, Aluminium anodized
Illuminated Ring (Ring Illumination)	Polyamide

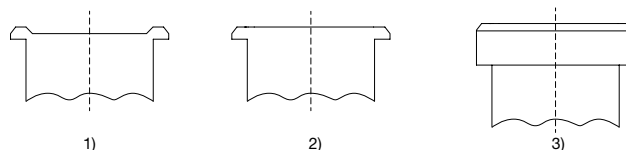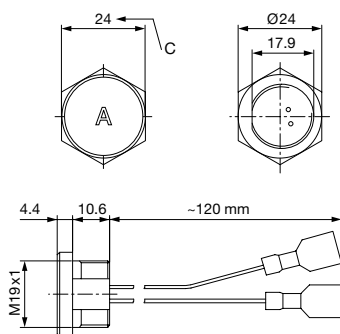## Dimension
PSE M19 with Pins

PSE M19 with Crimp Terminal male

Version available on request

PSE M19 with Cable with Faston, elevated front design

1)
2)
3)

Terminal: Crimp Terminal female Ultrafast red 6.3 x 0.8

Legend:
A = Illumination Area
B = Actuating Area
C = Width Across Flats
I = Crimp Terminal male 6.3 x 0.8
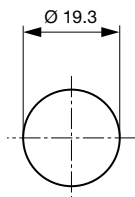PI = Point Illumination
RI = Ring Illumination

Lettering:
- either with/without lettering
- position of the connections with respect to the position of the lettering is not defined

1) with finger guidance (standard)
2) without finger guidance (on request)
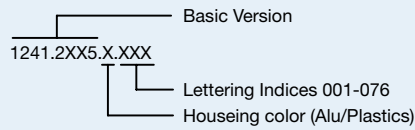3) elevated front design: M19 (standard, others on request)
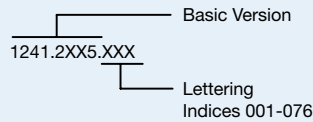
Dimension
PSE M19

Drilling diagram

Lettering

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

001-076	Standard Lettering
101-	Customized Lettering

Lettering - Aluminium / Plastic Material	Basic Version 1241.2XX5.X.XXX Lettering Indices 001-076 Houseing color (Alu/Plastics)
Lettering - Stainless Steel	Basic Version 1241.2XX5.XXX Lettering Indices 001-076

Lettering Colour of Laser Lettering

Material	Lettering Colour		
Stainless Steel	black	Filled letters	
Aluminum natural anodized	light grey	Filled letters	(only after customer approval)
Aluminum coloured anodized	light grey	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 = ⏻
015 = **O**	035 = **8**	055 = **SHIFT**	075 = ☀
016 = **P**	036 = **9**	056 = **LOCK**	076 = 🔔
017 = **Q**	037 = **+**	057 = **STOP**	
018 = **R**	038 = **-**	058 = **ENTER**	
019 = **S**	039 = **.**	059 = **BACK**	
020 = **T**	040 = x	060 = **LINE**	

All Variants

Mounting Diameter	Terminal	Housing Material, Torsion Protection	Colour of Housing	Actuator area	Illumination, LED	Config. Code	Order Number	
19	Cable with Faston	Aluminum ,yes	Alu natural	Elevated Front	non-illuminated	PSE M 19 NO	1241.5003	▌
19	Pins	Aluminum ,no	Alu natural	F	non-illuminated	PSE M 19 NO	1241.3123	▌
19	Pins	Stainless Steel ,no	-	F	non-illuminated	PSE M 19 NO	1241.3388	

Legend:
Type: PSE
NO = normaly open
IV = prolonged signal
RU = PI = Point Illumination
RI = Ring Illumination
LE = Lettered
K = Plastics
Alu = Aluminium
ES = Stainless steel
F = Finger guidance
E = without finger guidance

Plastic nut with gasket are enclosed in the box.

Other mounting diameters, materials, colors, connections, supply voltages possible available on request.
Special materials for use in salt and chlorinated environment on request.

▌ Most Popular.

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 or packed in air cushion bags

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

Accessories

Description

Connecting Terminal PSE
Connecting Terminal

29.10.2014