

## Piezo Switch N.O.



PSE M16

**Description**

- Switch available in version Standard, with Lettering, starting from 22 mm diameter with Point Illumination or Ring Illumination - Assembly by mounting with nut - Pins, Wire, Crimp Terminal male or Cable with Faston

**Approvals**

- EMC directive 2004/108/EWG 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

**Weblinks**

[html-datasheet](#), [General Product Information](#), [Approvals](#), [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 mill. at Rated Braking 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
Starting Torque	2.5 Nm

**Climatical Data**

Operating Temperature	-40 to +85 °C
Storage Temperature	-40 to +85 °C
IP-Protection	IP 67 , IP 69K from front side, front side / rear side DIN EN 60069-2-30 Db (Moist heat - air test with 55°C / 93% humidity)

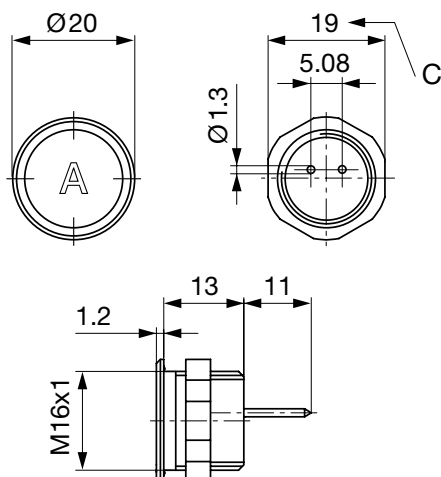
Salt Spray Test (acc. to DIN 50021-SS)	24 h / 48 h / 96 h Residence Time
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**Material**

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

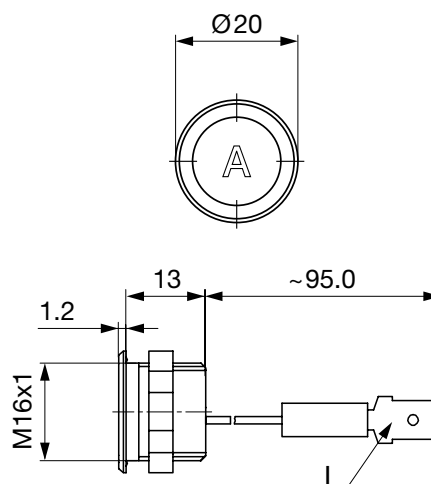
## Dimensions

PSE M16 with Pins

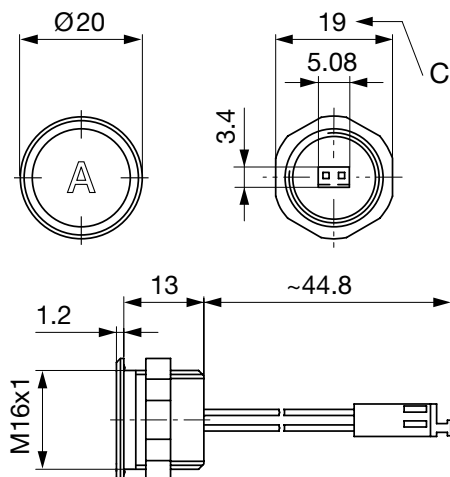


Version available on request

PSE M16 with Crimp Terminal male



PSE M16 with AMP



Version available on request

### 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

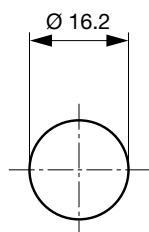
### Lettering:

- either with/without lettering

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

## Dimensions

PSE M16

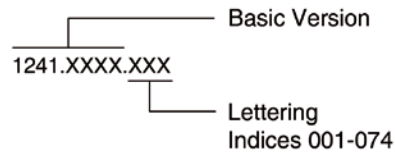


## Lettering

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

001-074	Standard Lettering
101-	Customized Lettering

### Ordering Example for Lettering



## Order Index Lettering

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>	

## Variants

Mounting Diameter	Terminal	Housing Material, Twist Protection	Colour of Housing	Actuator area	Illumination, LED	Type	Order Number
16	Flexible wire	Aluminum ,no	gold	F	non-illuminated	PSE 16 Alu/St	1241.3067.1
16	Flexible wire	Aluminum ,no	red	F	non-illuminated	PSE 16 Alu/St	1241.3067.3
16	Flexible wire	Aluminum ,no	green	F	non-illuminated	PSE 16 Alu/St	1241.3067.5
16	Flexible wire	Aluminum ,no	gold	F	non-illuminated	PSE 16 Alu/St	1241.3336.075
16	Flexible wire	Aluminum ,no	black	F	non-illuminated	PSE 16 Alu/St	1241.3429
16	Flexible wire	Aluminum ,no	titan	F	non-illuminated	PSE 16 Alu/St	1241.3460
16	Quick Connect Terminal	Aluminum ,no	red	F	non-illuminated	PSE 16 Faston	1241.3000
16	Quick Connect Terminal	Aluminum ,no	green	F	non-illuminated	PSE 16 Faston	1241.3001
16	Quick Connect Terminal	Aluminum ,no	black	F	non-illuminated	PSE 16 Faston	1241.3002
16	Quick Connect Terminal	Aluminum ,no	Alu natural	F	non-illuminated	PSE 16 Faston	1241.3003
16	Pins	Aluminum ,no	gold	F	non-illuminated	PSE 16 Alu/St	1241.2411.1
16	Pins	Aluminum ,no	red	F	non-illuminated	PSE 16 Alu/St	1241.2411.3
16	Pins	Aluminum ,no	blue	F	non-illuminated	PSE 16 Alu/St	1241.2411.4
16	Pins	Aluminum ,no	green	F	non-illuminated	PSE 16 Alu/St	1241.2411.5

Mounting Diameter	Terminal	Housing Material, Twist Protection	Colour of Housing	Actuator area	Illumination, LED	Type	Order Number
16	Pins	Aluminum ,no	black	F	non-illuminated	PSE 16 Alu/St	1241.2411.7
16	Pins	Aluminum ,no	Alu natural	F	non-illuminated	PSE 16 Alu/St	1241.2411.8
16	Pins	Stainless Steel ,no	-	F	non-illuminated	PSE 16 Alu/St	1241.2611
16	Faston	Plastics ,no	Alu natural	F	non-illuminated	PSE 16 PI	1241.2356
16	Pins	Plastics ,no	red	F	non-illuminated	PSE 16 PI	1241.2350
16	Pins	Plastics ,no	white	F	non-illuminated	PSE 16 PI	1241.2351
16	Pins	Plastics ,no	Alu natural	F	non-illuminated	PSE 16 PI	1241.2352
16	Pins	Plastics ,no	black	F	non-illuminated	PSE 16 PI	1241.2353

Legend:

Type:

PI = RU = Point Illumination

RI = Ring Illumination

K = Plastics

Alu = Aluminium

ES = Stainless steel

F = Finger guidance

E = without finger guidance

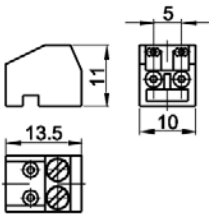
IV = prolonged signal

The nut with gasket are enclosed in the box.

Other mounting diameters, materials, colors, connections, supply voltages as customized products possible.  
Special materials for use in salt and chlorine containing environment on request.

## Accessories

### Description



[Connecting Terminal PSE NO](#)  
Connecting Terminal for Pin Versions of PSE NO

PSE NO

0701.9225