

## Piezo Switch for Explosive Environments



PSE M16 EX



PSE M16 EX red anodized

**Description**

- Piezo switch certified according to ATEX category II 2 G Ex ib IIB T4
- Assembly by mounting with nut
- Pins, Crimp Terminal male, AMP

**Approvals**

- EMC directive 2004/108/EWG EMC directive 2004/108/EWG
- ATEX Approval Test Report: TÜV 08 ATEX 554671X
- ATEX Approval Marking: II 2 G Ex ib IIB T4
- 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

**Characteristics**

- Housing material types: aluminum, brass chrome-plated or stainless steel
- High reliability, long lifetime with more than 20 mill. actuations
- Easy to clean due to a tightly closed surface (IP 69K)
- for use in harsh environments, especially applications and environments where volatile fumes and gases are present

**Weblinks**

[html-datasheet](#), [General Product Information](#), [Approvals](#), [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. 24 / 24 VAC/DC
Switching Current	max. 40 mA
Rated Breaking Capacity	0.96 W
Lifetime	20 mill. at Rated Braking Capacity
Switch Resistance OFF	> 10 k $\Omega$
Switch Resistance ON	< 20 m $\Omega$
Capacity	5 pF
N.O. Closing Impulse Duration	20- 1000 ms
Contact Configuration	free polarity

**Mechanical Data**

Actuating Force	$\leq$ 3 N
Actuating Travel	0.002 mm
Shock Protection	IK 02
Starting Torque	2.5 Nm

**Climatical Data**

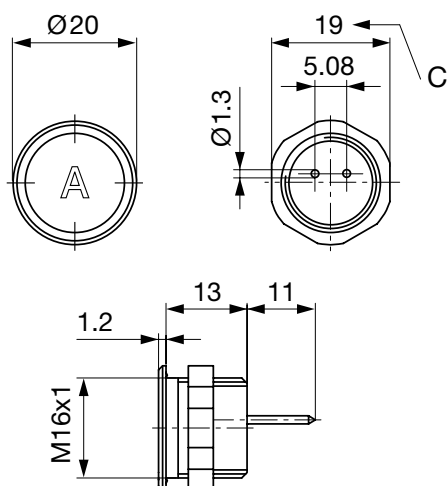
Operating Temperature	-20 to +60 °C
Storage Temperature	-20 to +60 °C
IP-Protection	IP 67 , IP 69K , Front Side / Rear Side DIN EN 60069-2-30 Db (Moist heat - air test with 55°C / 93% humidity)
Salt Spray Test (acc. to DIN 50021-SS)	24 h / 48 h / 96 h Residence Time

**Material**

Housing (depending on type)	Stainless Steel, Aluminium anodized, Polyamide, Chromed Brass
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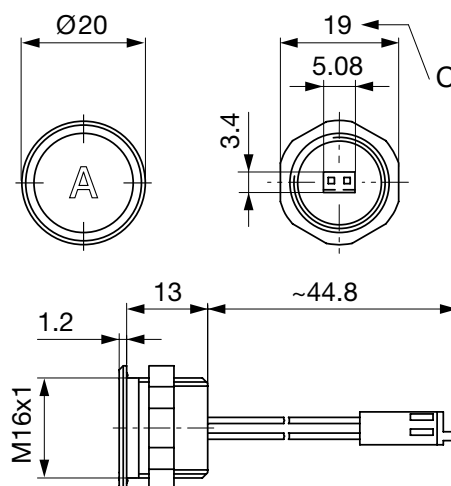
## Dimensions

PSE M16 with Pins



Version available on request

PSE M16 with AMP



Version available on request

Legend:

B = Actuating Area

C = Width Across Flats

I = Crimp Terminal

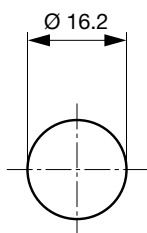
Lettering:

- 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:

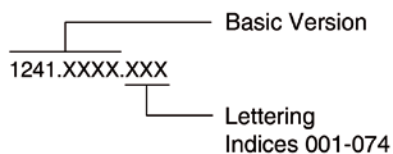
001-074

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>	

## 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	

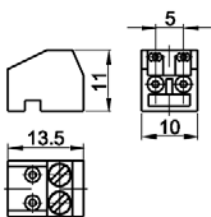
## Variants

Mounting Diameter [mm]	Terminal	Housing Material	Colour of Housing	Type	Order Number
16	Pins	Aluminum	gold	PSE M 16 EX	1241.2415.1
16	Pins	Aluminum	red	PSE M 16 EX	1241.2415.3
16	Pins	Aluminum	green	PSE M 16 EX	1241.2415.5
16	Pins	Aluminum	Alu natural	PSE M 16 EX	1241.2415.8

The listed item numbers represent a selection from the range of piezo switches. Other mounting diameters, materials and colors are available on request.

## Accessories

## Description



Connecting Terminal PSE EX  
Connecting Terminal for Pin Versions of PSE EX

PSE EX

0701.9225