

Piezo Switch Prolonged Signal



PSE M16 IV



**Description**

- Available in version Standard and lettered, from diameter 22 mm with Point Illumination or Ring Illumination
- Multicolor: flexible input voltage from 5 - 28 VDC at constant brightness
- with color combination RGB and RGY
- 7 possible colors with RGB configuration
- 3 possible colors with RGY configuration
- Assembly by mounting with nut
- Pins, Wire, Crimp Terminal male or Cable with Faston

**Unique Selling Proposition**

- Variety of design options regarding size, colour, shape, connection or lettering
- High reliability, long lifetime with more than 20 mill. actuations
- Easy to clean due to a tightly closed surface (IP 69K)
- With multicolor ring illumination

**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
- piezo switch for a longer switching signal duration
- For use in harsh environments, both indoors and outdoors

**Other versions on request**

- switch with short switching pulse, type: PSE NO
- 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 normal operation: [PSE NO 16](#); [PSE NO 19](#); [PSE NO 22](#); [PSE NO 24](#); [PSE NO 27](#); [PSE NO 30](#)

Alternative: Other diameter [PSE IV 22](#); [PSE IV 30](#)

**Weblinks**

[html-datasheet](#), [General Product Information](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [CAD-Drawings](#), [Product News](#), [Detailed request for product](#)

**Technical Data**

**Electrical Data**

Switching Function	N.O.
Supply Voltage	Ring Illumination VDC 12 / 24, 24 VDC Point Illumination,
Supply Voltage Multicolor	5 - 28 VDC
Switching Voltage	max. 32 / 48 VAC/DC
Switching Current	max. 1 A
Rated Breaking Capacity	10 W
Lifetime	20 million at Rated Switching Capacity
Switch Resistance OFF	> 10 MΩ
Switch Resistance ON	< 1 Ω
Capacity	30 pF
N.O. Closing Impulse Duration	15 sec depending on actuating force, time and speed. Longer impulse time up to 50 sec available on request.
Contact Configuration	free polarity

**Mechanical Data**

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

**Climatical Data**

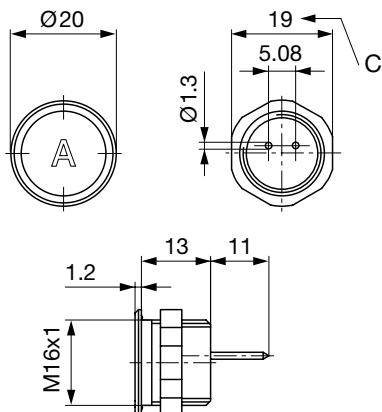
Operating Temperature	-20 to +60 °C
Storage Temperature	-20 to +60 °C
IP-Protection	IP 67 acc. to IEC 60529, IP 69K acc. to DIN 40050-9
Environmental Assessment	55°C / 93% r.h. acc. to DIN EN 60068-2-30
Salt Spray Test (acc. to DIN 50021-SS)	24 h / 48 h / 96 h Residence Time

**Material**

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

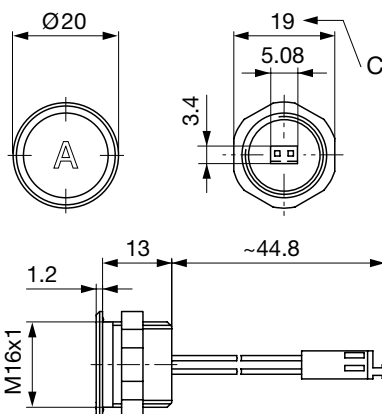
## Dimension

PSE M16 with Pins



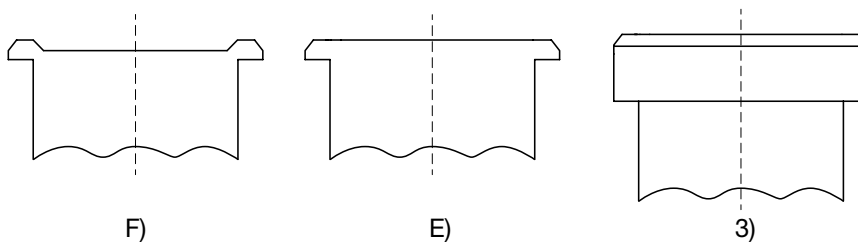
Version available on request

PSE M16 with AMP



Version available on request

Design actuating area

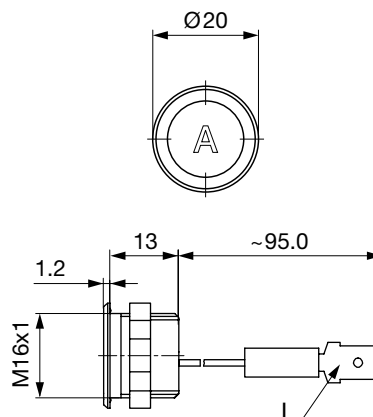


Legend:  
A = Illumination Area  
B = Actuating Area  
C = Width Across Flats  
I = Crimp Terminal male 6.3 x 0.8  
PI = Point Illumination  
RI = Ring Illumination

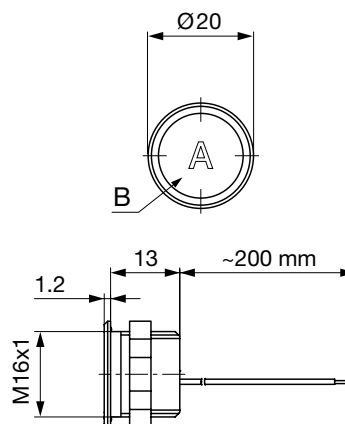
Lettering:  
- either with/without lettering  
- position of the connections with respect to the position of the lettering is not defined

F) with finger guidance  
E) without finger guidance  
3) elevated front design: M19 (standard, others on request)

PSE M16 with Crimp Terminal male

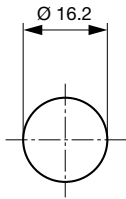


PSE M16 with Wires



## Dimension

PSE M16



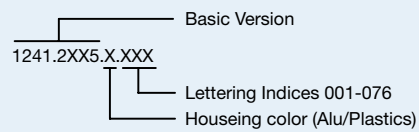
Drilling diagram

## Lettering

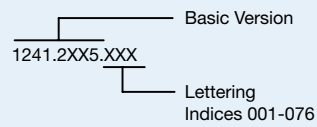
The last three digits in the order number define the lettering:

001-076	Standard Lettering
101-	Customized Lettering

### Lettering - Aluminium / Plastic Material



### Lettering - Stainless Steel



## 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 = <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>	077 = 
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>	

## All Variants

Mounting Diameter	Terminal	Housing Material, Torsion Protection	Colour of Housing	Actuator area	Illumination, LED	Config. Code	Order Number
16	Flexible wire	Aluminum ,no	gold	F	non-illuminated	PSE M 16 IV	<a href="#">1241.3046.1</a>
16	Flexible wire	Aluminum ,no	red	F	non-illuminated	PSE M 16 IV	<a href="#">1241.3046.3</a>
16	Flexible wire	Aluminum ,no	blue	F	non-illuminated	PSE M 16 IV	<a href="#">1241.3046.4</a>
16	Flexible wire	Aluminum ,no	green	F	non-illuminated	PSE M 16 IV	<a href="#">1241.3046.5</a>
16	Flexible wire	Aluminum ,no	black	F	non-illuminated	PSE M 16 IV	<a href="#">1241.3046.7</a>
16	Flexible wire	Aluminum ,no	Alu natural	F	non-illuminated	PSE M 16 IV	<a href="#">1241.3046.8</a>
16	Quick Connect Terminal	Aluminum ,no	gold	F	non-illuminated	PSE M 16 IV	<a href="#">1241.2434.1</a>
16	Quick Connect Terminal	Aluminum ,no	red	F	non-illuminated	PSE M 16 IV	<a href="#">1241.2434.3</a>
16	Quick Connect Terminal	Aluminum ,no	blue	F	non-illuminated	PSE M 16 IV	<a href="#">1241.2434.4</a>
16	Quick Connect Terminal	Aluminum ,no	green	F	non-illuminated	PSE M 16 IV	<a href="#">1241.2434.5</a>
16	Quick Connect Terminal	Aluminum ,no	black	F	non-illuminated	PSE M 16 IV	<a href="#">1241.2434.7</a>
16	Quick Connect Terminal	Aluminum ,no	Alu natural	F	non-illuminated	PSE M 16 IV	<a href="#">1241.2434.8</a>

### Legend:

Type: PSE  
 NO = normally 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

Nut with gasket are enclosed in the box.

Other mounting diameters, materials, colors, connections, supply voltages possible available on request.  
 Special materials e.g. Marine grade stainless steel for use in salt and chlorinated environment on request.

 Most Popular.

Mounting Diameter	Terminal	Housing Material, Torsion Protection	Colour of Housing	Actuator area	Illumination, LED	Config. Code	Order Number
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Availability for all products can be searched real-time: <http://www.schurter.com/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 (enclosed in the box)

**Accessories**

Description



Connecting Terminal PSE  
 Connecting Terminal