

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

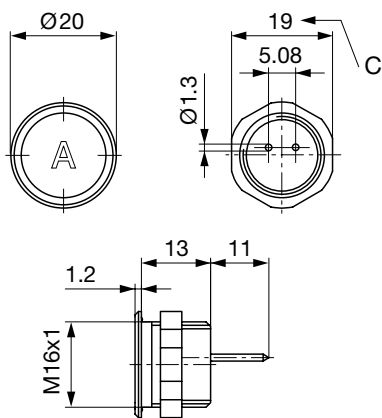
Material

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

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [General Product Information](#)

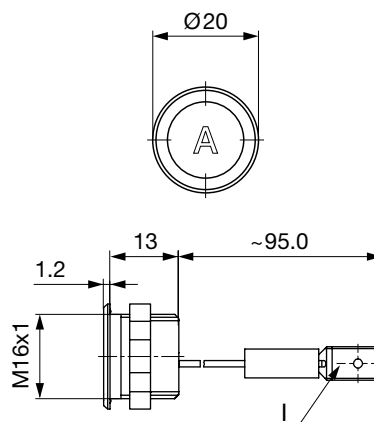
Dimension

PSE M16 with Pins

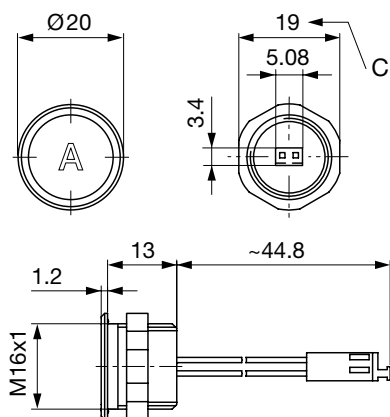


Version available on request

PSE M16 with Faston

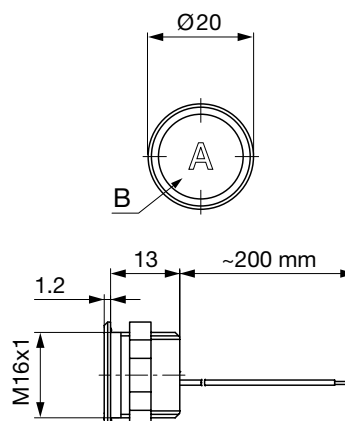


PSE M16 with AMP

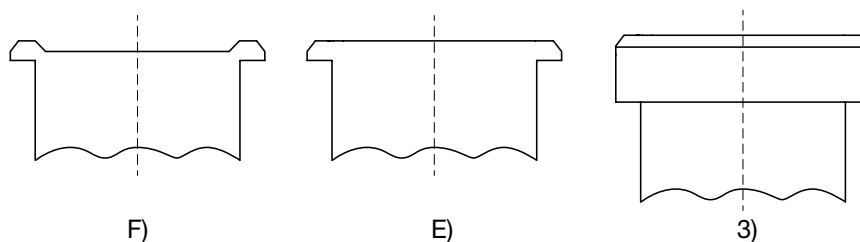


Version available on request

PSE M16 with Wires



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

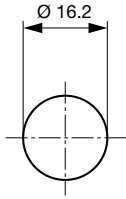
F) with finger guidance

E) without finger guidance

3) elevated front design: M19 (standard, others on request)

Dimension

PSE M16



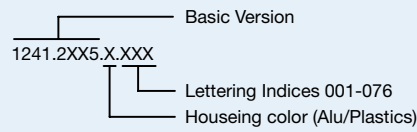
Drilling diagram

Lettering

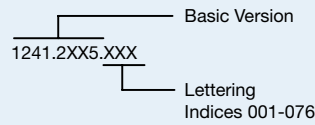
The last three digits in the order number define the lettering:

| | |
|---------|----------------------|
| 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 = 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 | 077 =  |
| 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 |
|-------------------|------------------------|--------------------------------------|-------------------|---------------|-------------------|--------------|--------------|
| 16 | Flexible wire | Aluminum ,no | gold | F | non-illuminated | PSE M 16 IV | 1241.3046.1 |
| 16 | Flexible wire | Aluminum ,no | red | F | non-illuminated | PSE M 16 IV | 1241.3046.3 |
| 16 | Flexible wire | Aluminum ,no | blue | F | non-illuminated | PSE M 16 IV | 1241.3046.4 |
| 16 | Flexible wire | Aluminum ,no | green | F | non-illuminated | PSE M 16 IV | 1241.3046.5 |
| 16 | Flexible wire | Aluminum ,no | black | F | non-illuminated | PSE M 16 IV | 1241.3046.7 |
| 16 | Flexible wire | Aluminum ,no | Alu natural | F | non-illuminated | PSE M 16 IV | 1241.3046.8 |
| 16 | Quick Connect Terminal | Aluminum ,no | gold | F | non-illuminated | PSE M 16 IV | 1241.2434.1 |
| 16 | Quick Connect Terminal | Aluminum ,no | red | F | non-illuminated | PSE M 16 IV | 1241.2434.3 |
| 16 | Quick Connect Terminal | Aluminum ,no | blue | F | non-illuminated | PSE M 16 IV | 1241.2434.4 |
| 16 | Quick Connect Terminal | Aluminum ,no | green | F | non-illuminated | PSE M 16 IV | 1241.2434.5 |
| 16 | Quick Connect Terminal | Aluminum ,no | black | F | non-illuminated | PSE M 16 IV | 1241.2434.7 |
| 16 | Quick Connect Terminal | Aluminum ,no | Alu natural | F | non-illuminated | PSE M 16 IV | 1241.2434.8 |

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.

Availability for all products can be searched real-time:<http://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

Legend:

Type: PSE

NO = normally open

IV = prolonged signal

RU = PI = Point Illumination

| Mounting Diameter | Terminal | Housing Material, Torsion Protection | Colour of Housing | Actuator area | Illumination, LED | Config. Code | Order Number |
|-----------------------------|----------|--------------------------------------|-------------------|---------------|-------------------|--------------|--------------|
| RI = Ring Illumination | | | | | | | |
| LE = Lettered | | | | | | | |
| K = Plastics | | | | | | | |
| Alu = Aluminium | | | | | | | |
| ES = Stainless steel | | | | | | | |
| F = Finger guidance | | | | | | | |
| E = without finger guidance | | | | | | | |

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