Piezo Switch Prolonged Signal







Gold Non-illuminated



red Non-illuminated

See below:

Approvals and Compliances

Description

- Available in version Standard and lettered
- Assembly by mounting with nut
- Pins / Wire / Crimp Terminal male / 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)

Characteristics

- Housing material: aluminum or stainless steel
- Piezo switch for a longer switching signal duration
- For use in harsh environments, both indoors and outdoors (see technical data)

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

References

Alternative: Other diameter

Alternative: switch normal operation: PSE with cable; PSE NO 16; PSE NO 19; PSE NO 22; PSE NO 24; PSE NO 27; PSE NO 30

Weblinks

pdf data sheet, html datasheet, General Product Information, CAD-Drawings, Product News, Detailed request for product

Technical Data

| Electrical Data | |
|------------------------------------|---|
| Switching Function | momentary |
| Switching Voltage | max. 32 / 48 VAC/DC |
| Switching Current | max. 1 A |
| Electrical Rating | 10 W |
| Lifetime | 20 million actuations at Rated Switching |
| | Capacity |
| Switch Resistance OFF | $> 10 \text{ M}\Omega$ |
| Switch Resistance ON | < 1 Ω |
| Capacity | 30 pF |
| N.O. Closing Impulse Duration | min. 15 sec depending on actuating force, time and speed. Longer impulse time up to min. 50 sec available on request. |
| Contact Configuration | free polarity |
| RGB Illumination | |
| Current Consumtion (max per color) | - |

| Mechanical Data | |
|--|---|
| Actuating Force | ≤ 3 N at centric actuation |
| Actuating Travel | 0.002 mm |
| Shock Protection | IK02 |
| Mounting screw torque | 2.5 Nm |
| Climatical Data | |
| Operating Temperature | -20 to 60°C |
| Storage Temperature | -20 to 60 °C |
| IP-Protection | IP67 acc. to IEC 60529, IP69K 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, Aluminum anodized |
| Illuminated Ring (Ring Illumi- nation) | Polyamide |
| | |

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Application standards

Application standards where the product can be used

| Organization | Design | Standard | Description |
|--------------|--------------------------------|-------------------------|--|
| (0) | Designed for applications acc. | EMC Directive: | EMC directive 2004/108/EWG |
| | Designed for applications acc. | MIL-STD: | 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 | Designed for applications acc. | VDE Certificate Number: | DIN EN 61000-4-2, DIN EN 61000-4-4, DIN EN 61000-4-5 |
| <u>IEC</u> | Designed for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |

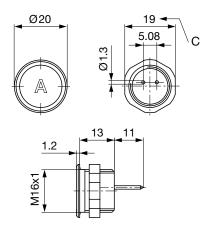
Compliances

The product complies with following Guide Lines

| Identification | Details | Initiator | Description |
|----------------|---------|-------------|---|
| ROHS | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
| REACH | REACH | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force. |

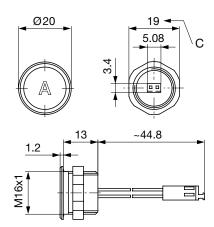
Dimension [mm]

PSE 16 with Pins



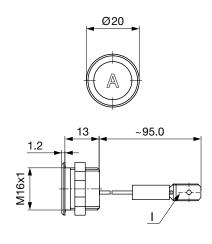
Version available on request

PSE M16 with AMP

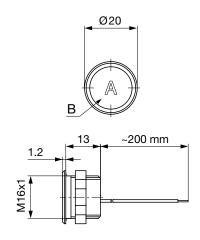


Version available on request

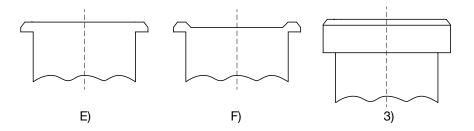
PSE M16 with Faston



PSE M16 with Wires



Design actuating area



Legend:

A = Illumination Area

B = Actuating Area

C = Width Across Flats

 $I = Crimp Terminal male 6.3 \times 0.8$

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

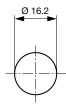
F) with finger guidance

E) without finger guidance

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

Dimension

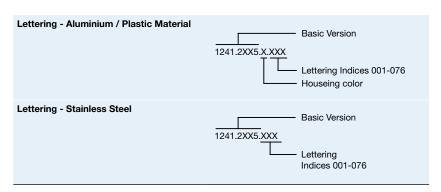
PSE 16



Drilling diagram

Marking





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 = (1) | | |
| 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 | | | |
| Please note that the font size depends on the number of characters | | | | | |

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 | 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 | 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.

The MOQ for standard laser lettering on standard variants is a packing unit.

Most Popular.

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

Legend:

Type: PSE

NO = normaly open

IV = prolonged signal





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

Packaging unit

10 in box with insert or packed in air cushion bags





- Actuating elements in ESD safe packaging Screw nuts and sealing O-ring in a bag (enclosed in the box)

Accessories

Description



Connecting Terminal PSE Connecting Terminal