

Piezo Switch with Extended Protection against Vandalism



PSE M22 HI Embossed



PSE M22 HI Braille



PSE M22 HI VS



Description

- Momentary switch available in version Standard or with Lettering/Symbols Assembly by mounting with nut
- Quick connect terminals or wires

Approvals

- Fire Test according to DIN EN 81-71: stress class 1 + 2 (Elevators)
- MIL-STD Certificate Number: 416D Method RS103
- VDE Certificate Number: DIN EN 61000-4-2, DIN EN 61000-4-4

Characteristics

- Housing and actuating area material: high-quality stainless steel, optional aluminium anodized in various colours
- Laser lettering, embossed symbols, Braille, standard or customized characters and symbols
- High reliability, long lifetime with more than 20 mill. actuations
- piezo switch with enhanced vandal proof protection to IK 06 impact resistance rating
- For use in harsh environments, both indoors and outdoors (see technical data)

References

Alternative: Standard version

Weblinks

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

Technical Data

Electrical Data

| | |
|-------------------------------|--|
| Switching Function | N.O. |
| Switching Voltage | max. 42 / 60 VAC/DC |
| Switching Current | max. 100 mA |
| Rated Breaking Capacity | 1 W |
| Lifetime | 20 million actuations at Rated Switching Capacity |
| Switch Resistance OFF | > 10 MΩ |
| Switch Resistance ON | < 20 Ω |
| Capacity | 30 pF |
| N.O. Closing Impulse Duration | 20- 1000 ms depending on actuating force, time and speed |
| Contact Configuration | free polarity |

Mechanical Data

| | |
|-------------------|----------|
| Actuating Force | 2 - 5 N |
| Actuating Travel | 0.002 mm |
| Shock Protection | IK 06 |
| 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 |

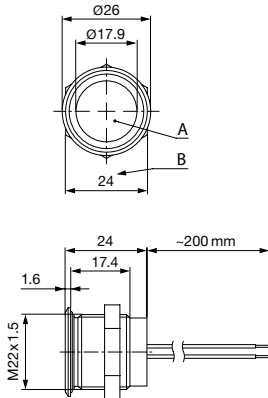
Material

| | |
|----------------|--|
| Housings | Stainless Steel |
| Actuating Area | Stainless Steel, Aluminium anodized for embossed symbols and Braille |

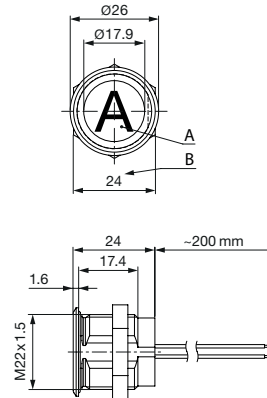
Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [General Product Information](#)

Dimension [mm]

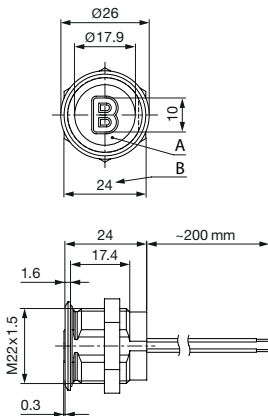
PSE M22 HI Standard with stranded wire (without anti-rotation)



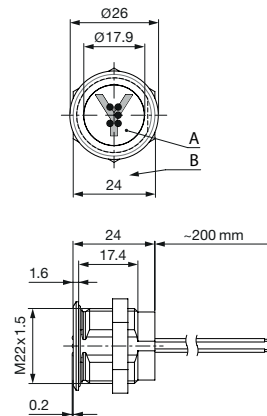
PSE M22 HI Laser marking with stranded wire (with anti-rotation)



PSE M22 HI Embossed marking with stranded wire (with anti-rotation)



PSE M22 HI Braille marking with stranded wire (with anti-rotation)



Either with/without embossed characters or symbols in various colors

With Braille and Laser marking in various colors

Legend:

A = Actuating area

B = Width across flats

- Wire (Standard: 0.14 mm² / 200 mm wire-length)

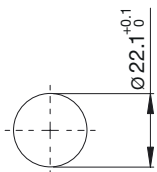
Lettering:

- Either with/without lettering

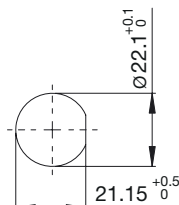
- Position of the connections with respect to the position of the lettering is not defined

Dimension

PSE M22 without anti-rotation



PSE M22 with anti-rotation



Lettering Colour of Laser Lettering

| Material | Lettering Colour | |
|-----------------|------------------|----------------|
| Stainless Steel | black | Filled letters |
| Aluminium | white | Filled letters |

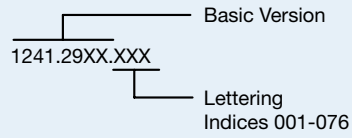
Ordering Example for Lettering

Laser marking

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

| | |
|---------|----------------------|
| 001-076 | Standard Lettering |
| 101- | Customized Lettering |

Example for ordering with laser marking:

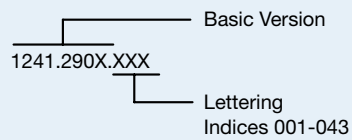


Embossed lettering

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

| | |
|---------|----------------------|
| 001-043 | Standard Lettering |
| 101- | Customized Lettering |

Example for ordering with embossed lettering:

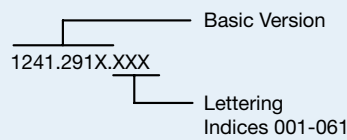


Braille lettering





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

| | |
|---------|----------------------|
| 001-061 | Standard Lettering |
| 101- | Customized Lettering |


Example for ordering with Braille lettering



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 | |

Order Index Lettering

| Erhabene Symbole / | Embossed Lettering | |
|--------------------|--------------------|---|
| 000 = Dummy | 017 = Q | 034 = 7 |
| 001 = A | 018 = R | 035 = 8 |
| 002 = B | 019 = S | 036 = 9 |
| 003 = C | 020 = T | 037 = |
| 004 = D | 021 = U | 038 = - |
| 005 = E | 022 = V | 039 = ↑ |
| 006 = F | 023 = W | 040 = ↓ |
| 007 = G | 024 = X | 041 = ← |
| 008 = H | 025 = Y | 042 = → |
| 009 = I | 026 = Z | 043 =  |
| 010 = J | 027 = 0 | |
| 011 = K | 028 = 1 | |
| 012 = L | 029 = 2 | |
| 013 = M | 030 = 3 | |
| 014 = N | 031 = 4 | |
| 015 = O | 032 = 5 | |
| 016 = P | 033 = 6 | |

Order Index Lettering

Braille Marking

| | | | | | | | |
|------------------|--|------------------|--|--------------------|--|------------------------------------|--|
| 001 = A = | | 017 = Q = | | 033 = 6 = | | 049 = Zahlen- zeichen = | |
| 002 = B = | | 018 = R = | | 034 = 7 = | | 050 = . = | |
| 003 = C = | | 019 = S = | | 035 = 8 = | | 051 = : = | |
| 004 = D = | | 020 = T = | | 036 = 9 = | | 052 = , = | |
| 005 = E = | | 021 = U = | | 037 = B = | | 053 = ; = | |
| 006 = F = | | 022 = V = | | 038 = ST = | | 054 = ? = | |
| 007 = G = | | 023 = W = | | 039 = CH = | | 055 = ! = | |
| 008 = H = | | 024 = X = | | 040 = SCH = | | 056 = - = | |
| 009 = I = | | 025 = Y = | | 041 = EI = | | 057 = ' = | |
| 010 = J = | | 026 = Z = | | 042 = IE = | | 057 = 0 = | |
| 011 = K = | | 027 = 0 = | | 043 = Ä = | | 059 = „ = | |
| 012 = L = | | 028 = 1 = | | 044 = Ö = | | 060 = " = | |
| 013 = M = | | 029 = 2 = | | 045 = Ü = | | 061 = * = | |
| 014 = N = | | 030 = 3 = | | 046 = AU = | | | |
| 015 = O = | | 031 = 4 = | | 047 = EU = | | | |
| 016 = P = | | 032 = 5 = | | 048 = ÄU = | | | |

All Variants

| Mounting Diameter [mm] | Terminal | Housing Material, Torsion Protection | Actuator area | Lettering | Config. Code | Order Number |
|------------------------|---------------|--------------------------------------|-----------------|---------------|----------------|---------------|
| 22 | Flexible wire | Stainless Steel ,yes | Alu red | embossed | PSE M 22 HI VS | 1241.2903.002 |
| 22 | Flexible wire | Stainless Steel ,yes | Alu green | embossed | PSE M 22 HI VS | 1241.2904.028 |
| 22 | Flexible wire | Stainless Steel ,yes | Alu green | embossed | PSE M 22 HI VS | 1241.2904.041 |
| 22 | Flexible wire | Stainless Steel ,yes | Alu green | embossed | PSE M 22 HI VS | 1241.2904.042 |
| 22 | Flexible wire | Stainless Steel ,yes | Alu natural | embossed | PSE M 22 HI VS | 1241.2905.042 |
| 22 | Flexible wire | Stainless Steel ,yes | Alu blue | bra / las | PSE M 22 HI VS | 1241.2913.025 |
| 22 | Flexible wire | Alu green ,yes | Alu green | laser printed | PSE M 22 HI VS | 1241.2924.074 |
| 22 | Flexible wire | Stainless Steel ,no | Stainless Steel | no | PSE M 22 HI ST | 1241.3993 |

Legend:

Type:

HI = High Impact

VS = anti rotation protection for lettering

Nut with gasket are enclosed in the box.

The listed item numbers represent a selection of the range of piezo switches.

Other mounting diameters, materials, colors, connections and symbols are available on request.

Special materials for use in salt and chlorinated environment on request.

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

Packaging unit 10 in box with insert



- 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