Piezo Switch N.O.


PSE M24 RI red

## RoHS

## Description

- Switch available in version Standard, with Lettering, starting from 22 mm diameter with Point Illumination or Ring Illumination - Assembly by mounting with nut - Pins, Wire, Crimp Terminal male or Cable with Faston


## Approvals

- EMC directive 2004/108/EWG 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


## Technical Data

| Electrical Data |  |
| :--- | :--- |
| Switching Function | N.O. |
| Supply Voltage | $12 / 24$ VDC Ring Illumination, 24 |
|  | VDC Point Illumination, |
| Switching Voltage | max. $42 / 60$ VAC/DC |
| Switching Current | max. 100 mA |
| Rated Breaking Capacity | 1 W |
| Lifetime | 20 mill. at Rated Braking Capacity |
| Switch Resistance OFF | $>10 \mathrm{M} \Omega$ |
| Switch Resistance ON | $<20 \Omega$ actuated $\left(\mathrm{Ta}=25^{\circ} \mathrm{C}\right)$ |
| Capacity | 5 nF |
| N.O. Closing Impulse Duration | $20-1000 \mathrm{~ms}$ depending on actuating |
|  | force, time and speed |
| Contact Configuration | free polarity |

## Characteristics

- Housing material types: plastic, aluminum or stainless steel, ring illuminated version additionally made of polyamide
- Variety of design options regarding size, colour, shape, connection or lettering
- High reliability, long lifetime with more than 20 mill. actuations
- For use in harsh environments, both indoors and outdoors


## Other versions on request

- switch for longer switching signal duration, type: PSE IV
- switch for explosion proof applications, type: PSE EX
- switch with enhanced vandal proof protection, type: PSE HI
- as keypad, type: Piezo Keypad


## Weblinks

html-datasheet, General Product Information, Approvals, RoHS, CHINARoHS, e-Shop, CAD-Drawings, Product News, Detailed request for product

| Mechanical Data |  |
| :---: | :---: |
| Actuating Force | $\leq 3 \mathrm{~N}$ at ambient temperature |
| Actuating Travel | 0.002 mm |
| Shock Protection | 1 K 02 |
| Starting Torque | 2.5 Nm |
| Climatical Data |  |
| Operating Temperature | -40 to $+85^{\circ} \mathrm{C}$ |
| Storage Temperature | -40 to $+85^{\circ} \mathrm{C}$ |
| IP-Protection | IP 67 , IP 69K from front side, front side / rear side DIN EN 60069-2-30 Db (Moist heat - air test with $55^{\circ} \mathrm{C} / 93 \%$ humidity) |
| Salt Spray Test (acc. to DIN 50021-SS) | $24 \mathrm{~h} / 48 \mathrm{~h} / 96 \mathrm{~h}$ 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 |

## Dimensions

PSE M24 RI


## Legend:

A = Illumination Area
$\mathrm{B}=$ Actuating Area
$C=$ Width Across Flats
I = Crimp Terminal male $6.3 \times 0.8$
$\mathrm{Pl}=$ Point Illumination
$\mathrm{RI}=$ Ring Illumination
Lettering:

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


## Dimensions

## PSE M24



## Diagrams

PSE M24 RI / PSE M27 RI / PSE M30 RI, 12/24 V


D)

PSE M24 RI / PSE M27 RI / PSE M30 RI, 5 V

A) Cable 1 (color of the LEDs), Supply voltage first LED group
B) Cable 3 (color of the LEDs), Supply voltage second LED group
C) Cable 2 (black), Common mass of both LED groups
D) Cable 4 and 5 (white), Input and output PSE switch
A) Cable 1 (color of the LEDs), Supply voltage first LED group
B) Cable 2 (black), Common mass of both LED groups
C) Cable 3 (color of the LEDs), Supply voltage second LED group
D) Cable 4 and 5 (white), Input and output PSE switch
$\mathrm{PI}=$ point illumination
$\mathrm{RI}=$ ring illumination

## 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

| $001=$ A | $021=\mathbf{U}$ | $041=\div$ | $061=$ EIN |
| :---: | :---: | :---: | :---: |
| $002=B$ | $022=\mathbf{V}$ | $042=$ | $062=$ AUS |
| $003=\mathbf{C}$ | $023=\mathbf{W}$ | $043=$ = | 063 = AUF |
| $004=$ D | $024=\mathbf{X}$ | 044 = \# | $064=\mathbf{A B}$ |
| $005=\mathbf{E}$ | $025=\mathbf{Y}$ | $045=$ | $065=\mathbf{O N}$ |
| $006=\mathbf{F}$ | $026=\mathbf{Z}$ | $046=$ | $066=$ OFF |
| $007=\mathbf{G}$ | $027=0$ | $047=\rightarrow$ | 067 = UP |
| $008=\mathbf{H}$ | $028=1$ | $048=\leftarrow$ | $068=$ DOWN |
| $009=1$ | $029=2$ | $049=$ | $069=$ HIGH |
| $010=\mathbf{J}$ | $030=3$ | $050=$ | $070=$ LOW |
| $011=\mathbf{K}$ | $031=4$ | 051 = \% | 071 = ON/OFF |
| $012=\mathbf{L}$ | $032=5$ | $052=\sqrt{ }$ | $072=$ START |
| $013=\mathbf{M}$ | $033=6$ | $053=$ CTRL | $073=$ RESET |
| $014=\mathbf{N}$ | $034=7$ | 054 = RETURN | $074=$ |
| $015=\mathbf{O}$ | $035=8$ | $055=$ SHIFT | 075 $=$ 淕 |
| $016=\mathbf{P}$ | $036=9$ | $056=$ LOCK | $076=$ S |
| $017=\mathbf{Q}$ | $037=$ + | 057 = STOP |  |
| $018=\mathbf{R}$ | $038=-$ | $058=$ ENTER |  |
| $019=\mathbf{S}$ | $039=$. | 059 = BACK |  |
| $020=\mathbf{T}$ | $040=x$ | $060=$ LINE |  |



Other mounting diameters, materials, colors, connections, supply voltages as customized products possible.
Special materials for use in salt and chlorine containing environment on request.

## Accessories

## Description



Connecting Terminal PSE NO
Connecting Terminal for Pin Versions of PSE NO
$\begin{array}{ll}\text { PSE NO } & 0701.9225\end{array}$


