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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation, and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


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Piezo Switch N.O.


PSE M30 RI


PSE M30 RI Multicolor

## RoHS

## 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
- 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


## Technical Data

| Electrical Data |  |
| :--- | :--- |
| Switching Function | N.O. |
| Supply Voltage | $12 / 24$ VDC Ring Illumination, 24 |
|  | VDC Point Illumination, |
| Supply Voltage Multicolor | $5-28 \mathrm{VDC}$ |
| Switching Voltage | max. 42 / 60 VAC/DC |
| Switching Current | max. 100 mA |
| Rated Breaking Capacity | 1 W |
| Lifetime | 20 million at Rated Switching Capacity |
| Switch Resistance OFF | $>10 \mathrm{M} \Omega$ |
| Switch Resistance ON | $<20 \Omega$ actuated (Ta = 25 ${ }^{\circ} \mathrm{C}$ ) |
| Capacity | 5 nF |
| N.O. Closing Impulse Duration | $20-1000 \mathrm{~ms}$ depending on actuating |
| force, time and speed |  |
| Contact Configuration | free polarity |


| Mechanical Data |  |
| :--- | :--- |
| Actuating Force | $\leq 3 \mathrm{~N}$ at ambient temperature |
| Actuating Travel | 0.002 mm |
| Shock Protection | IK 02 |
| Tightening 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 acc. to IEC 60529, IP 69K acc. to |
|  | $\mathrm{DIN} 40050-9$ |
| Environmental Assessment | $55^{\circ} \mathrm{C} / 93 \%$ r.h. acc. to DIN EN 60068- |
|  | $2-30$ |
| Salt Spray Test (acc. to DIN | $24 \mathrm{~h} / 48 \mathrm{~h} / 96$ h Residence Time |
| $50021-$ SS) |  |
| Material |  |
| Housing (depending on type) | Stainless Steel, Aluminium anodized, |
| Polyamide |  |
| Actuating Area / Insert (with | Stainless Steel, Aluminium anodized |
| Ring Illumination) |  |
| Illuminated Ring (Ring Illumi- | Polyamide |
| nation) |  |

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

## Dimension

PSE M30 RI


Design actuating area

F)

E)

3)

Legend:
A = Illumination Area
$B=$ Actuating Area
C $=$ Width Across Flats
I = Crimp Terminal male $6.3 \times 0.8$
$\mathrm{PI}=$ 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
F) with finger guidance
E) without finger guidance

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

## Dimension

PSE M30


Drilling diagram

## Diagrams

Lighting options Multicolor

| Lighting type | Active <br> terminal <br> A) | Active <br> terminal <br> B) | Active <br> terminal <br> C) | Resulting <br> Color |
| :--- | :---: | :---: | :--- | :--- |
| Multicolor Singlecolor | A |  |  | Red |
| Multicolor Singlecolor |  | B |  | Green |
| Multicolor Singlecolor |  |  | C | Blue |
| Multicolor RGB Additive 2 | A | B |  | Yellow |
| Multicolor RGB Additive 2 | A |  | C | Magenta |
| Multicolor RGB Additive 2 |  | B | C | Cyan |
| Multicolor RGB Additive 3 | A | B | C | White $\quad \bigcirc$ |

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

D)
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

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

$\mathrm{PI}=$ point illumination
$\mathrm{RI}=$ ring illumination

D)
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

PSE M22 / M24 / M27 / M30 RI Multicolor

A) Cable 1 (color of the LED), Supply voltage
B) Cable 2 (color of the LED), Supply voltage
C) Cable 3 (color of the LED), Supply voltage
D) Cable 4 (black), Common mass
E) Cable $5 / 6$ (white), Input and output PSE switch
F) Cable $5 / 6$ (white), Input and output PSE switch

## Lettering



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 | $021=\mathbf{U}$ | $041=\div$ | $061=$ EIN |
| $002=\boldsymbol{B}$ | $022=\mathbf{V}$ | $042=$ * | 062 = AUS |
| $003=\mathbf{C}$ | $023=\mathbf{W}$ | $043=$ | 063 = AUF |
| $004=$ D | $024=\mathbf{X}$ | 044 = \# | $064=\mathbf{A B}$ |
| $005=\mathbf{E}$ | $025=\mathbf{Y}$ | $045=\leftrightarrow$ | $065=\mathbf{O N}$ |
| $006=$ F | $026=\mathbf{Z}$ | $046=\downarrow$ | $066=$ OFF |
| $007=\mathbf{G}$ | $027=0$ | $047=\rightarrow$ | $067=\mathbf{U P}$ |
| $008=\mathbf{H}$ | $028=1$ | $048=\leftarrow$ | 068 = DOWN |
| $009=1$ | $029=2$ | $049=\downarrow$ | $069=$ HIGH |
| $010=\mathbf{J}$ | $030=3$ | $050=\uparrow$ | 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 | $074=$ U |
| $015=\mathbf{O}$ | $035=8$ | $055=$ SHIFT | $075=$ |
| $016=\mathbf{P}$ | $036=9$ | $056=$ LOCK | $076=\Delta$ |
| $017=\mathbf{Q}$ | $037=+$ | 057 = STOP | 077 = (1) |
| $018=\mathbf{R}$ | $038=-$ | $058=$ ENTER |  |
| $019=\mathbf{S}$ | $039=$. | 059 = BACK |  |
| $020=\mathbf{T}$ | $040=x$ | $060=$ LINE |  |

## All Variants

| Mounting Diameter | Terminal | Housing Material, Torsion Protection | Colour of Housing | Actuator area | Illumination, LED | Config. Code | Order Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 | Flexible wire | Aluminum, no | Alu natural | F | Ring Illumination, blue, 24 VDC | PSE M 30 NO RI | 1241.3189 |
| 30 | Flexible wire | Aluminum, no | Alu natural | F | Ring Illumination, red / green, 24 VDC | PSEM 30 NO RI | 1241.3012 |
| 30 | Flexible wire | Aluminum, no | Alu natural | F | Ring Illumination, red / green / blue, $5-28 \text { VDC }$ | PSE M 30 NO RI | 1241.3667 |
| 30 | Flexible wire | Aluminum ,no | Alu natural | F | Ring Illumination, red / green / yellow, $5-28 \text { VDC }$ | PSE M 30 NO RI | 1241.3668 |


| Mounting Diameter | Terminal | Housing Material, Torsion Protection | Colour of Housing | Actuator area | Illumination, LED | Config. Code | Order Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 | Flexible wire | Stainless Steel , no | - | E | Ring Illumination, blue, 24 VDC | PSEM 30 NO RI | 1241.3237 |
| 30 | Flexible wire | Stainless Steel , no | - | F | Ring Illumination, blue, 24 VDC | PSE M 30 NO RI | 1241.3548 |
| 30 | Flexible wire | Stainless Steel , no | - | F | Ring Illumination, red / green, 24 VDC | PSE M 30 NO RI | 1241.3057 |
| 30 | Flexible wire | Stainless Steel , no | - | E | Ring Illumination, red / green / blue, 5-28VDC | PSE M 30 NO RI | 1241.3670 |

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
$\mathrm{NO}=$ normaly open
$\mathrm{IV}=$ prolonged signal
$R U=P I=$ Point Illumination
$\mathrm{RI}=$ Ring Illumination
$L E=$ Lettered
$\mathrm{K}=$ Plastics

Alu $=$ Aluminium
$E S=$ Stainless steel

F = Finger guidance
$E=$ without finger guidance

## Packaging unit



- Actuating elements in ESD safe packaging
- Screw nuts and sealing rings in a bag (enclosd in the box)


## Accessories

## Description



