Chipsmall

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!

Contact us

Piezo Switch N.O.

PSE M22 RI

PSE M22 PI

PSE M22 RI Multicolor

RoHS COMPLIANT

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

Characteristics
- Housing material types: plastic, aluminum or stainless steel, ring illuminated version additionally made of polyamide
- 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

References
Alternative: switch with prolonged signal: PSE AE 16; PSE AE 30; PSE IV 19
Alternative: switch vandal improved: PSE HI 22
Alternative: switch for EX proved applications: PSE EX 16; PSE EX 19; PSE EX 22
Alternative: Other diameter   PSE NO 16; PSE NO 19; PSE NO 24; PSE NO 27; PSE NO 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	12 / 24 VDC Ring Illumination, 24 VDC Point Illumination,
Supply Voltage Multicolor	5 - 28 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 MΩ
Switch Resistance ON	< 20 Ω actuated (Ta = 25°C)
Capacity	5 nF
N.O. Closing Impulse Duration	20- 1000 ms depending on actuating force, time and speed
Contact Configuration	free polarity

Mechanical Data

Actuating Force	≤ 3 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 °C
Storage Temperature	-40 to +85 °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
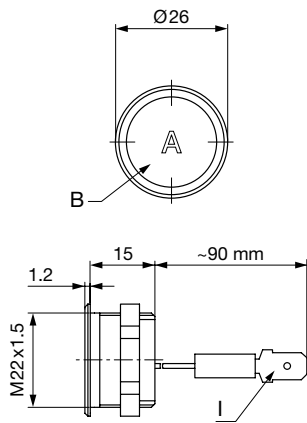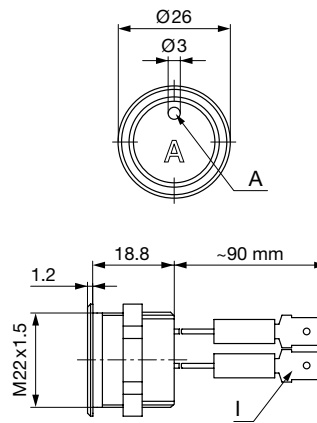
Dimension

PSE M22 with Pins
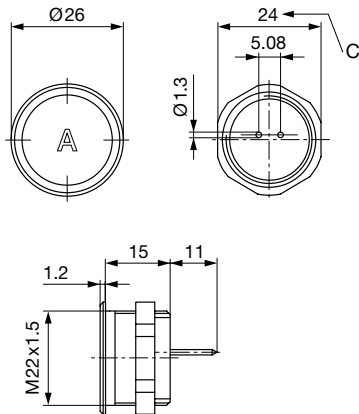
PSE M22 with Wire
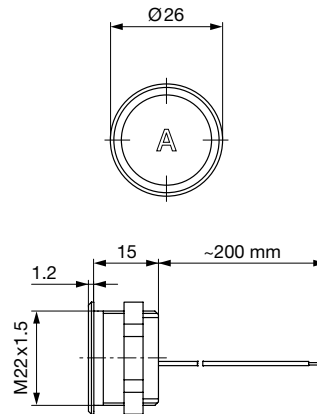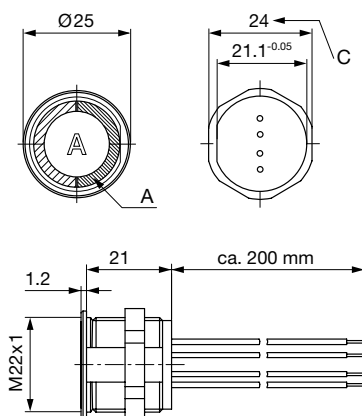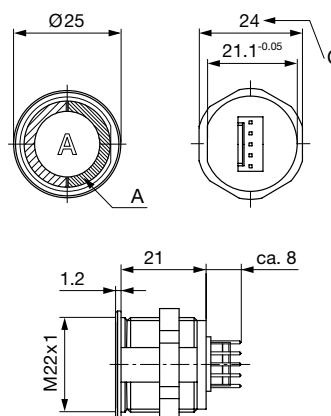
PSE M22 with Crimp Terminal male

PSE M22 PI with Crimp Terminal male

Version available on request

PSE M22 RI with Wires

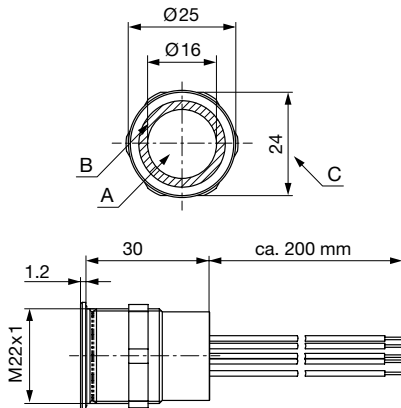PSE M22 RI with Plug Connector

PSE M22 RI Multicolor with wires

Ø25
Ø16
24
B
A
C

30
ca. 200 mm
1.2
M22x1

Design actuating area

F)

E)

3)
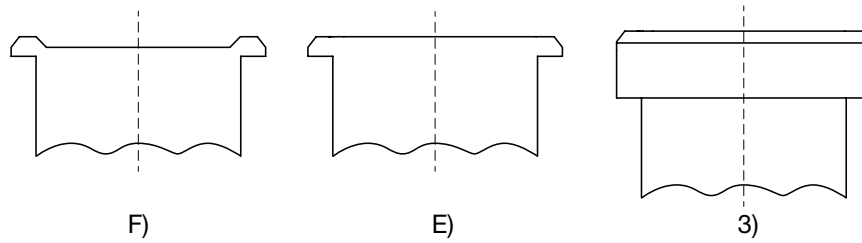
Legend:
A = Illumination Area
B = Actuating Area
C = Width Across Flats
I = Crimp Terminal male 6.3 x 0.8
PI = Point Illumination
RI = Ring Illumination

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 M22

PSE M22 RI

Ø 22.3

$21.15^{+0.05}$
$22.1^{+0.1}$

Drilling diagram

Drilling diagram

Diagrams

Lighting options Multicolor

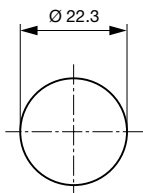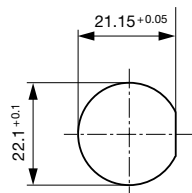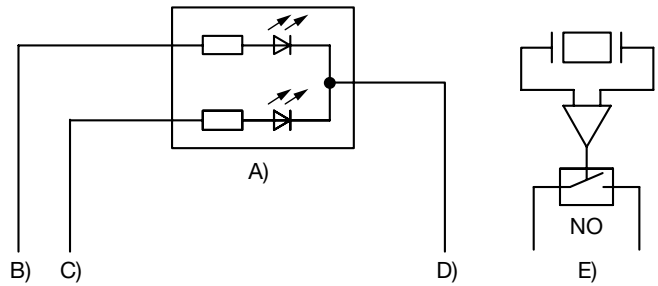| Lighting type	Active terminal A) 🔴	Active terminal B) 🟢	Active terminal C) 🔵	Resulting Color	
Multicolor Singlecolor	A			Red	🔴
Multicolor Singlecolor		B		Green	🟢
Multicolor Singlecolor			C	Blue	🔵
Multicolor RGB Additive 2	A	B		Yellow	🟡
Multicolor RGB Additive 2	A		C	Magenta	🟣
Multicolor RGB Additive 2		B	C	Cyan	🔵
Multicolor RGB Additive 3	A	B	C	White	⚪

PSE PI

A) Double-LED (2 colors, 3 pins) or simple LED (2 pins)
B) Cable 1 (color 1 of the LED), Supply voltage
C) Cable 2 (color 2 of the LED), Supply voltage
D) Cable 3 (black), Mass
E) Cable 4 and 5 (white), input and output PSE switch

PSE M22 RI with Wires, 12/24 V
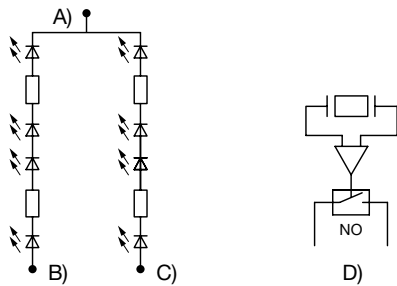
A) Cable 5 (black), Common mass of both LED groups
B) Cable 1 (color of the LEDs), Supply voltage first LED group
C) Cable 2 (color of the LEDs), Supply voltage second LED group
D) Cable 3 and 4 (white), Input and output PSE switch

PSE M22 RI with Quick Connect Terminal, 12/24 V
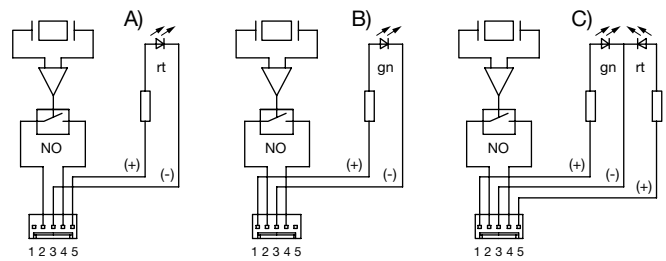
A) Illuminated red
B) Illuminated green
C) Illuminated red/green

PI = point illumination
RI = ring illumination

PSE M22 / M24 / M27 / M30 RI Multicolor
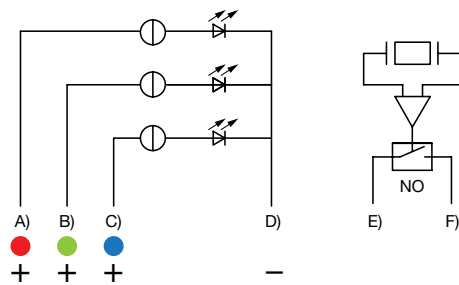
A) Cable 1 (color of the LED), Supply voltage
B) Cable 2 (color of the LED), Supply voltage
C) Cable 3 (color of the LED), Supply voltage
D) Cable 4 (black), Common mass
E) Cable 5/6 (white), Input and output PSE switch
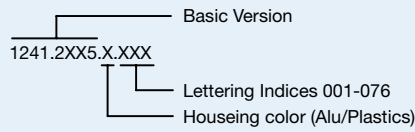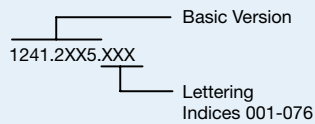F) Cable 5/6 (white), Input and output PSE switch

Lettering

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

001-076	Standard Lettering
101-	Customized Lettering

Lettering - Aluminium / Plastic Material

1241.2XX5.X.XXX
- Basic Version
- Lettering Indices 001-076
- Houseing color (Alu/Plastics)

Lettering - Stainless Steel

1241.2XX5.XXX
- Basic Version
- Lettering Indices 001-076

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
22	Flexible wire	Stainless Steel ,no	-	F	non-illuminated	PSE M 22 NO	1241.3004
22	Flexible wire	Stainless Steel ,yes	-	E	Point Illumination, green, 24 VDC	PSE M 22 NO PI	1241.3594.M
22	Flexible wire	Aluminum ,yes	Alu natural	F	Ring Illumination, blue, 12 VDC	PSE M 22 NO RI	1241.3390
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, green, 12 VDC	PSE M 22 NO RI	1241.3251
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, red / green, 12 VDC	PSE M 22 NO RI	1241.3252

Mounting Diameter	Terminal	Housing Material, Torsion Protection	Colour of Housing	Actuator area	Illumination, LED	Config. Code	Order Number
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, red, 12 VDC	PSE M 22 NO RI	1241.3250
22	Flexible wire	Aluminum ,yes	Alu natural	F	Ring Illumination, blue, 24 VDC	PSE M 22 NO RI	1241.3413
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, green, 24 VDC	PSE M 22 NO RI	1241.3257
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, red / green, 24 VDC	PSE M 22 NO RI	1241.3258
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, red, 24 VDC	PSE M 22 NO RI	1241.3256
22	Flexible wire	Aluminum ,no	Alu natural	F	Multicolor Ring Illumination, red / green / blue, 5 - 28 VDC	PSE M 22 NO RI	1241.3663
22	Flexible wire	Aluminum ,no	Alu natural	F	Multicolor Ring Illumination, red / green / yellow, 5 - 28 VDC	PSE M 22 NO RI	1241.3664
22	Flexible wire	Stainless Steel ,no	-	E	Multicolor Ring Illumination, red / green / blue, 5 - 28 VDC	PSE M 22 NO RI	1241.3669
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, green, 12 VDC	PSE M 22 NO RI	1241.3254
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, red, 12 VDC	PSE M 22 NO RI	1241.3253
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, green, 24 VDC	PSE M 22 NO RI	1241.3260
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, red / green, 24 VDC	PSE M 22 NO RI	1241.3261
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, red, 24 VDC	PSE M 22 NO RI	1241.3259
22	Quick Connect Terminal	Aluminum ,no	Alu natural	F	Point Illumination, blue, 24 VDC	PSE M 22 NO PI	1241.3244.M
22	Quick Connect Terminal	Aluminum ,no	Alu natural	F	Point Illumination, green, 24 VDC	PSE M 22 NO PI	1241.3089.M
22	Quick Connect Terminal	Aluminum ,no	green	F	Point Illumination, green, 24 VDC	PSE M 22 NO PI	1241.3167.M
22	Quick Connect Terminal	Aluminum ,no	Alu natural	F	Point Illumination, red, 24 VDC	PSE M 22 NO PI	1241.3020.M
22	Quick Connect Terminal	Aluminum ,no	red	F	Point Illumination, red, 24 VDC	PSE M 22 NO PI	1241.3166.M
22	Quick Connect Terminal	Aluminum ,no	Alu natural	F	Point Illumination, yellow, 24 VDC	PSE M 22 NO PI	1241.3047.M
22	Quick Connect Terminal	Aluminum ,no	gold	F	Point Illumination, yellow, 24 VDC	PSE M 22 NO PI	1241.3222.M
22	Molex connection	Aluminum ,yes	Alu natural	E	Ring Illumination, red / green, 12 VDC	PSE M 22 NO RI	1241.3255
22	Pins	Aluminum ,no	red	F	non-illuminated	PSE M 22 NO	1241.3005
22	Pins	Aluminum ,no	green	F	non-illuminated	PSE M 22 NO	1241.3006
22	Pins	Aluminum ,no	black	F	non-illuminated	PSE M 22 NO	1241.3007
22	Pins	Aluminum ,no	Alu natural	F	non-illuminated	PSE M 22 NO	1241.3008
22	Pins	Stainless Steel ,no	-	F	non-illuminated	PSE M 22 NO	1241.3075

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 = normaly open

IV = prolonged signal

RU = PI = Point Illumination

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 (enclosd in the box)

Accessories

Description

Connecting Terminal PSE
Connecting Terminal

14.03.2017