Piezo Switch N.O.



PSE M22 PI



PSE M22 PI blue

Description

- Available in version Standard, lettered, with Point Illumination or Ring Illumination - Assembly by mounting with nut - Pins, Wire, Crimp Terminal male or Cable with Faston

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
- 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, CE declaration of conformity, RoHS, CHINA-RoHS, e-Shop, CAD-Drawings, Product News, Detailed request for product

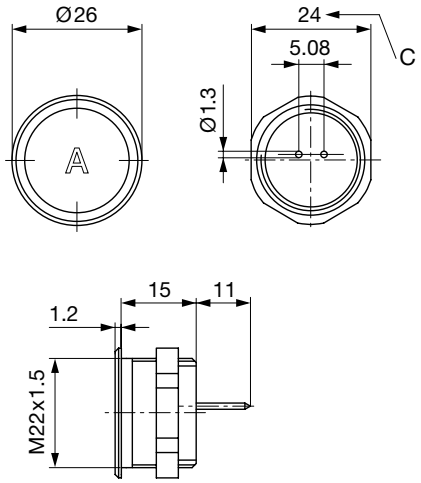
Technical Data

Electrical Data	
Switching Function	N.O.
Supply Voltage	12 / 24 VDC Ring Illumination, 24 VDC Point Illumination,
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 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

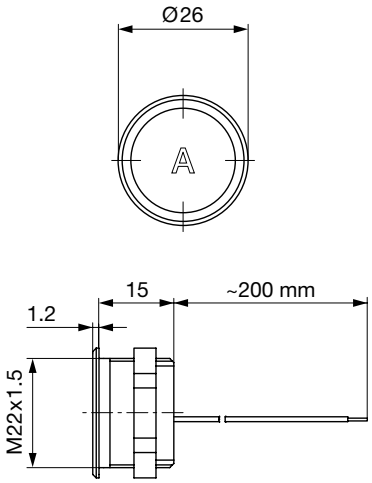
Mechanical Data	
Actuating Force	≤ 3 N at ambient temperature
Actuating Travel	0.002 mm
Shock Protection	IK 02
Starting Torque	2.5 Nm
Climatical Data	
Operating Temperature	-40 to +85 °C
Storage Temperature	-40 to +85 °C
IP-Protection	IP 67 , IP 69K from front side, front side / rear side DIN EN 60069-2-30 Db (Moist heat - air test with 55°C / 93% humidity)
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

Dimensions

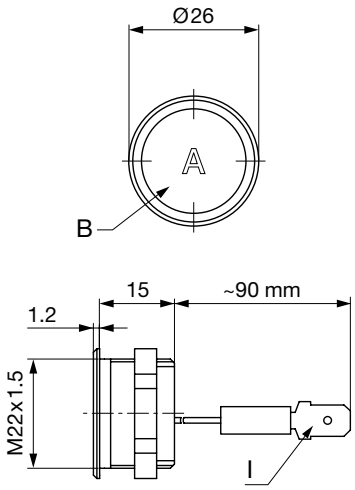
PSE M22 with Pins



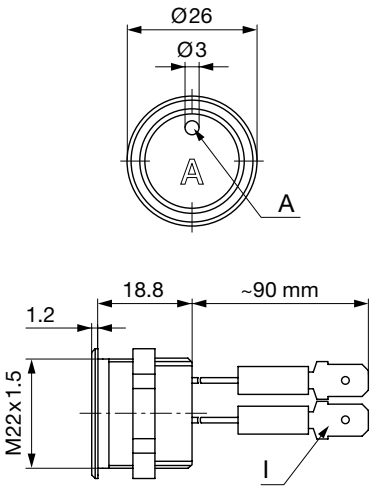
PSE M22 with Wire



PSE M22 with Crimp Terminal male

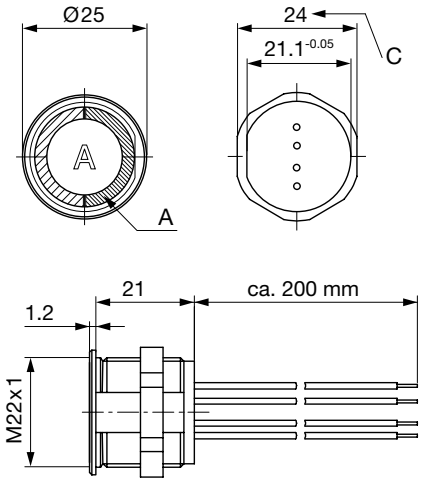


PSE M22 PI with Crimp Terminal male

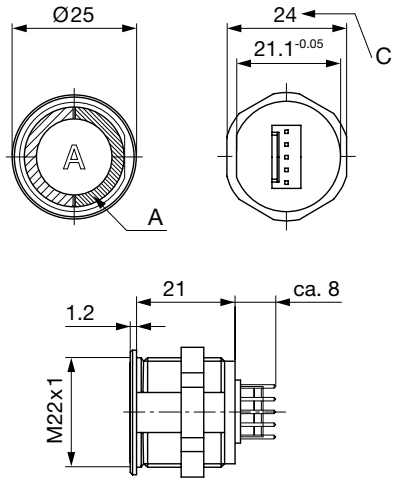


Version available on request

PSE M22 RI with Wires



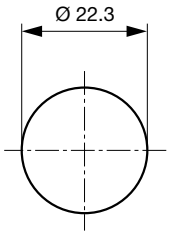
PSE M22 RI with Plug Connector



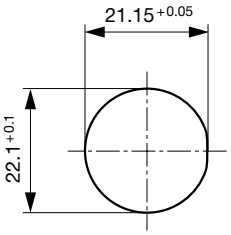
Legend:
A = Illumination Area
B = Actuating Area
C = Width Across Flats
I = Crimp Terminal male 6.3 x 0.8
PI = Point Illumination
RI = Ring Illumination
Lettering:
- either with/without lettering
- position of the connections with respect to the position of the lettering is not defined

Dimensions

PSE M22

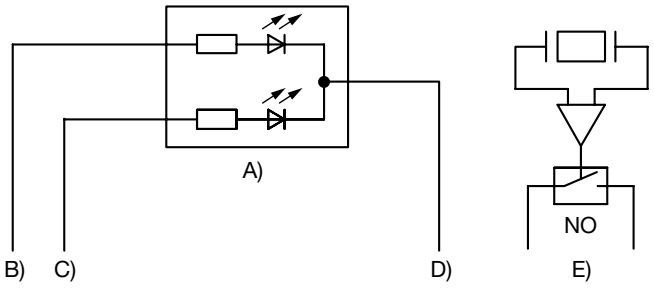


PSE M22 RI



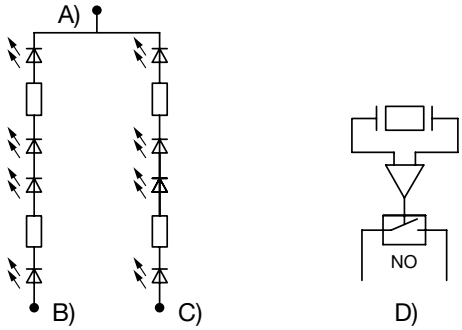
Diagrams

PSE PI



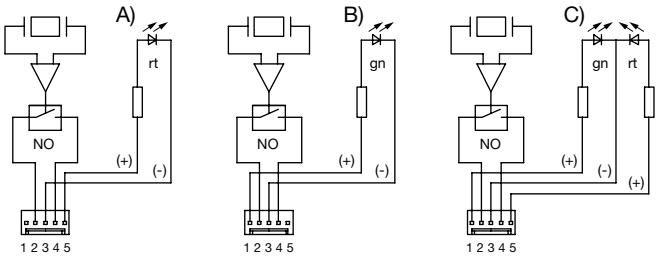
A) Double-LED (2 colors, 3 pins) or simple LED (2 pins)
B) Cable 1 (color 1 of the LED), Supply voltage
C) Cable 2 (color 2 of the LED), Supply voltage
D) Cable 3 (black), Mass
E) Cable 4 and 5 (white), input and output PSE switch

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



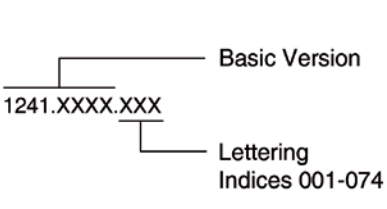
A) Illuminated red
B) Illuminated green
C) Illuminated red/green

PI = point illumination
RI = ring illumination

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 = **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**	
018 = **R**	038 = **-**	058 = **ENTER**	
019 = **S**	039 = **.**	059 = **BACK**	
020 = **T**	040 = x	060 = **LINE**	

Variants

Mounting Diameter	Terminal	Housing Material, Twist Protection	Colour of Housing	Actuator area	Illumination, LED	Config. Code	Order Number
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, green, 12 VDC	PSE 22 RI	1241.3251
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, red / green, 12 VDC	PSE 22 RI	1241.3252
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, red, 12 VDC	PSE 22 RI	1241.3250
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, green, 24	PSE 22 RI	1241.3257
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, red / green, 24 VDC	PSE 22 RI	1241.3258
22	Flexible wire	Aluminum ,yes	Alu natural	E	Ring Illumination, red, 24 VDC	PSE 22 RI	1241.3256
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, green, 12 VDC	PSE 22 RI	1241.3254
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, red / green, 12 VDC	PSE 22 RI	1241.3255
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, red, 12 VDC	PSE 22 RI	1241.3253
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, green, 24 VDC	PSE 22 RI	1241.3260
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, red / green, 24 VDC	PSE 22 RI	1241.3261
22	Plug Connector	Aluminum ,yes	Alu natural	E	Ring Illumination, red, 24 VDC	PSE 22 RI	1241.3259
22	Quick Connect Terminal	Aluminum ,yes	Alu natural	F	Point Illumination, blue, 24 VDC	PSE 22 PI	1241.3244.M
22	Quick Connect Terminal	Aluminum ,no	Alu natural	F	Point Illumination, green, 24 VDC	PSE 22 PI	1241.3089.M
22	Quick Connect Terminal	Aluminum ,no	green	F	Point Illumination, green, 24 VDC	PSE 22 PI	1241.3167.M
22	Quick Connect Terminal	Aluminum ,no	Alu natural	F	Point Illumination, red, 24 VDC	PSE 22 PI	1241.3020.M
22	Quick Connect Terminal	Aluminum ,no	red	F	Point Illumination, red, 24 VDC	PSE 22 PI	1241.3166.M
22	Quick Connect Terminal	Aluminum ,no	Alu natural	F	Point Illumination, yellow, 24 VDC	PSE 22 PI	1241.3047.M
22	Quick Connect Terminal	Aluminum ,yes	gold	F	Point Illumination, yellow, 24 VDC	PSE 22 PI	1241.3222.M
22	Pins	Aluminum ,no	red	F	non-illuminated	PSE 22	1241.3005
22	Pins	Aluminum ,no	green	F	non-illuminated	PSE 22	1241.3006
22	Pins	Aluminum ,no	black	F	non-illuminated	PSE 22	1241.3007
22	Pins	Aluminum ,no	Alu natural	F	non-illuminated	PSE 22	1241.3008
22	Pins	Aluminum ,no	Alu natural	E	non-illuminated	PSE 22	1241.3593
22	Flexible wire	Stainless Steel ,no	-	E	Point Illumination, green, 24 VDC	PSE 22 PI	1241.3594.M

Mounting Diameter	Terminal	Housing Material, Twist Protection	Colour of Housing	Actuator area	Illumination, LED	Config. Code	Order Number

Legend:
Type:
PI = RU = Point Illumination
RI = Ring Illumination
K = Plastics
Alu = Aluminium
ES = Stainless steel
F = Finger guidance
E = without finger guidance
IV = prolonged signal
AE = Indicator

The nut with gasket are enclosed in the box.

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

Packaging unit 10 blistered in boxes (10 pcs.)

Accessories

	Description
Photo coming soon	Connecting Terminal PSE Connecting Terminal

31.05.2013

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments.