Panel Actuators and Indicators
Type PL 22
Buzzer and Flashing Buzzer


PL 22S BZK


PL 22S FBZR

- Ø 22mm (Ø0.87") dimension
- Buzzer
- Interrupted sound
- Flashing type
- AC and DC voltage
- cULus and CE
- IEC/EN 60947-5-1, IEC/EN 60073, IEC/EN 60529, UL 508

Product description

Pilot lights and Buzzer are panel mounted device assemblies consisting of the housing, an internal lamp or buzzer, terminals, and a cover. Applications include industrial control panels of all types, equipment indicator panels, status alarm indicator.
The buzzer volume is 95dB @ 10cm (3.94"), the current is 20mA.

Ordering key

PL 22S BZ R 24*

Series
Dimension
Type
Colour
Voltage

** Not all configurations available – see page 6 for complete list*

Approvals

Technical data

Rated imp. withstand voltage U_{imp}	2500VAC 50Hz 1min.
Rated insulation Voltage U_i	500VAC
Allowable voltage fluctuation	±20%
Continuous operating life	≥100.000h
Ultrahigh brightness	≥100cd/m² (≥9.29ftc)
Applying frequency	50-60Hz
Current consumption (AC/DC)	15-20mA
Sound volume	95dB @ 10cm (3.94")
Operating temperature	-25 to +70°C (-13 to +158°F)
Storage	-30 to +80°C (-22 to +176°F)
Degree of protection	IP 40

Dimension and style

22S = Ø22mm (Ø0.87") standard size

Types

BZ = Buzzer
FBZ= Flashing buzzer

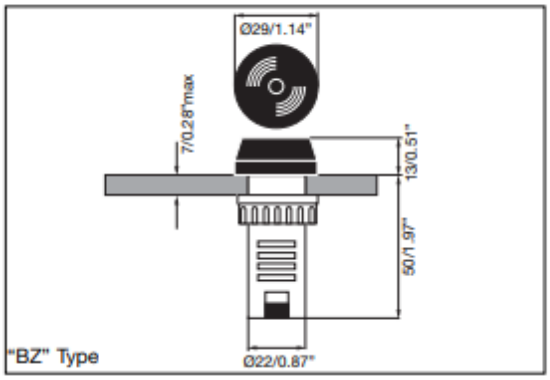
Colours

R = Red only for FBZ type
K = Black only for BZ type

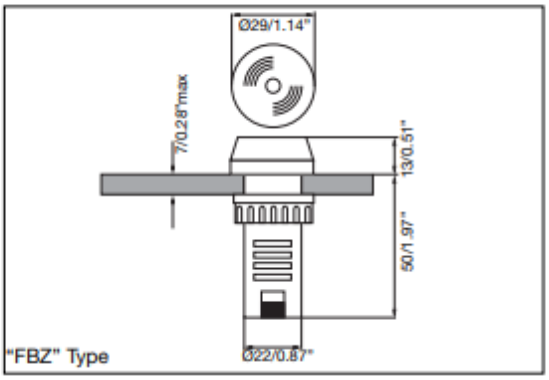
Voltages

12 = 12VAC/DC
24 = 24VAC/DC
110 = 110VAC/DC
220A = 220VAC

Dimensions mm/inches

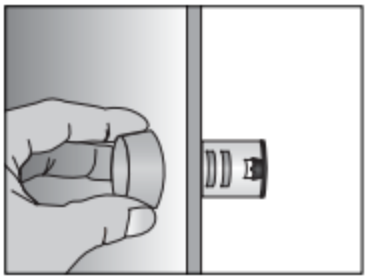


"BZ" Type

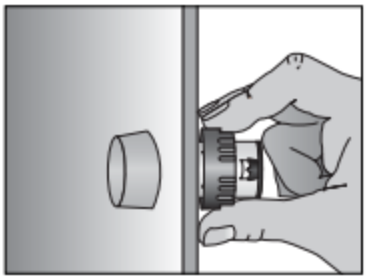


"FBZ" Type

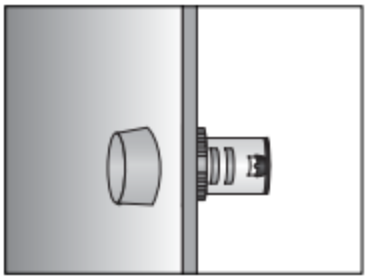
Mounting



Just insert the pilot light into the hole of the pannel.

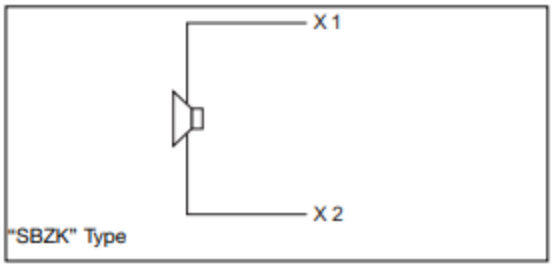


The pilot light will be secured at the back by the plastic nut

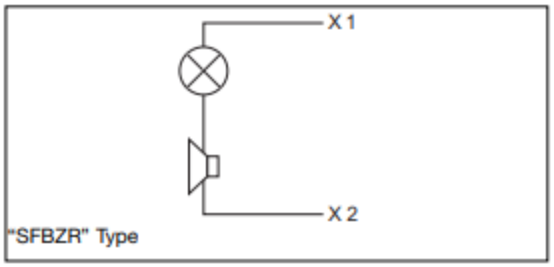


The pilot light has been installed.

Wiring Diagram



"SBZK" Type



"SFBZR" Type

Wiring Notes

1) Use 60°C or 75°C copper (CU) conductor and wire size range 18AWG, stranded or solid.
2) Terminal tightening torque 0.6Nm (5.3in.lb)
3) Recommended external fuse - listed or R/C fuses, Supplemental (JDYX, JDYX2) rated 3A mmaximum.

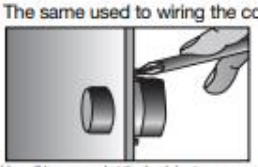
Assembling and Mounting

It come easy to get a complete product. Just to choose the operator, the holder, the lamp element if illuminated function is required and the contact block (up to 3).

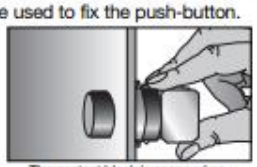
Operator | Holder | Lamp element | Contact block | Bezel Push Button with LED and 1NO+1NC

To install it, the only tool needed is a screwdriver. The same used to wiring the contact block can be used to fix the push-button.

The operator will be inserted into the panel.



The holder will be secured at the back by two screws or nut.



The contact block is snapped on.

Accessories for Panel Actuators

Sealing cover IP67

Always on the head of operators, waterproof and dust, IP67. | Silicon rubber | **PA SEAL COV**

Protection cover

Always on the head of button, prevent strike and mistaking operation. Lockable. | PC | **PA PB COV**

Mounting ring Ø22mm (0.87")

Installed on plastic panel to strengthen mounting. | FE | **PA MR 22**

Reducing ring for Pilot Light Ø22mm (0.87")

To mount the Ø22mm (0.87") pilot light into the hole for Ø25mm (0.98")or Ø30mm (1.18") of the panel. | ABS | Ø30mm/Ø1.18" | **PA RR 3**

Fastering connector for Pilot Light Ø22mm (0.87")

Improve the quality of installation and reduce the time of installations. | PC | **PA PL CONN**

Label frame

Hang it on the push button or pilot light, for symbol or text explanation. | PC | 10mm/0.39" 18mm/0.71" | **PA LBF 11** **PA LBF 18**

Warning plate

For emergency stop push buttons. Thickness 1.5mm/0.059" | ABS | Ø60mm/Ø2.36" Ø90mm/Ø3.54" | **PA WP 6** **PA WP 9**

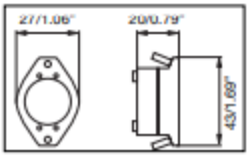
Panel hole cap Ø22mm (0.87")

For blocking up prepared or useless holes on the panels. | ABS | **PA PHC 22**

Holders

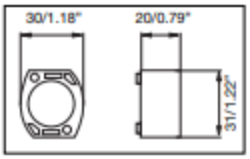
Holder type "M"

Code	**PB MB M**
Material	**Zn + PBT**



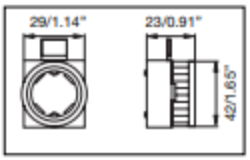
Holder type "P"

Code	**PB MB P**
Material	**PBT**



Holder type "N"

Code	**PB MB N**
Material	**PC**



Lamp Element

Ordering key

PALAMP R 220A*

Type
Colour
Voltage

** Not all configurations available – see page 6 for complete list*

Approvals

c UL us LISTED · CE · RoHS

Colours

R = Red
W = Clear/White
B = Blue
Y = Yellow
G = Green

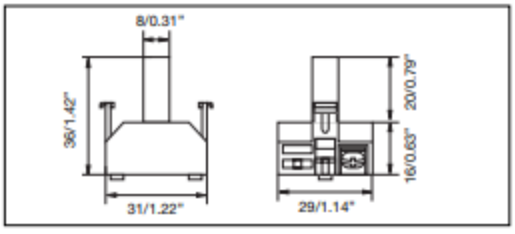
Voltage

12 = 12VAC/DC
24 = 24VAC/DC
110 = 110VAC/DC
220A = 220VAC

Technical data

Rated imp. withstand voltage U_{RIMP}	2500VAC 50Hz 1min.
Rated insulation Voltage U_i	500VAC
Allowable voltage fluctuation	±20%
Continuous operating life	≥100.000h
Ultrahigh brightness	≥100cd/m² (≥9.29ftc)
Applying frequency	50-60Hz
Current consumption (AC/DC)	≤18mA
Operating temperature	-25 to +70°C (-13 to +158°F)
Storage temperature	-30 to +80°C (-22 to +176°F)

Dimensions mm/inches



Wiring Notes

1) Use 60°C or 75°C copper (CU) conductor and wire size range 18AWG, stranded or solid.
2) Terminal tightening torque 0.6Nm (5.3in.lb)
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Panel Actuators and Indicators
Type PA2
Contact Block

CARLO GAVAZZI

- High switching power
- Double switch
- Industrial applications
- 10A switching capacity
- Up to 500VAC
- Modular mounting (up to 3 elements)
- Screw terminals
- High reliability
- cULus and CE
- According to EN ISO 13850 (only NC slow action)
- IEC/EN 60947-5-1, IEC/EN 60947-5-5, UL 508

Product description

Switching element equipped with two independent elements. Available in different switching configurations. Pole and throw configurations can be single pole single throw (SPST) or double pole single throw (DPST). Elements can be snapped to each other on the bottom, up to 3.

Approvals

c UL us LISTED

CE

RoHS

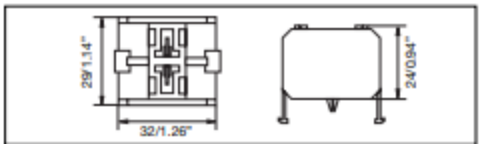
Technical data

Contact resistance	≤50mΩ
Travel	5.8 ± 0.2mm (2.28" ± 0.08")
Rated insulation Voltage U_i	660VAC/DC (acc. to IEC 60947-5-1) 600VAC/DC (acc. to UL508)
Rated imp. withstand voltage U_{imp}	2500VAC 50Hz 1min.
Minimum switching power	
Min Current	100mA
Min Voltage	24V
Switch housing	PC
Contact parts	Cu
Contact material	
Standard	Hard silver
Optional	Gold/silver
Optional for aggressive atmospheres	Silver/palladium
Operating temperature	-25 to +70°C (-13 to +158°F)
Storage temperature	-30 to +80°C (-22 to +176°F)

Terminals

Screw terminals	
Max. section sigle-core wire	2 x 2.5mm² (0.004sq.inch)
Max. section stranded wire	2 x 1.5mm² (0.002sq.inch)
Copper conductor wire	14 AWG @ 60°C or 75°C CU conductor
Terminal tightening torque	1.2Nm (10.6in.lb.)

Dimensions mm/inches



Ordering key

PA 2 110 / 1*

- Type
- Number of contacts
- Contact code
- Options (1 = Snap action
  2 = Slow action with forced opening (13-14) NC contact)

** Not all configurations available – see page 6 for complete list*

Contact code

Contact configuration	Contact code
2 NO contacts (DPST)	200
2 NC contacts (DPST)	020
1 NC contact (SPST)	010
1 NO contact (SPST)	100
1 NC + 1 NO contacts (DPST)	110

Contact characteristics

Contact Rating AC1	10A @ 250VAC	
Contact Rating (acc. to IEC 60947-5-1)	**AC15**	**DC13**
@ 24V	10A	6A
@ 110V	8A	1A
@ 220V	6A	0.5A
@ 380V	4A	-
@ 500V	2.5A	-

AC Contact Rating (acc. to UL 508)	A600	B600
B600 (all snap codes)	@ 120V	6A	3A
A600 (all slow codes)	@ 240V	3A	1.5A
	@ 480V	1.5A	0.75A
	@ 600V	1.2A	0.6A

DC Contact Rating (acc. to UL 508)	Q600	Q300
Q600 (all snap codes)	@ 125V	0.55A	0.55A
Q600 (100, 200 slow codes)	@ 250V	0.27A	0.27A
Q300 (010, 020, 110 slow codes)	@ 480V	0.10A	-
	@ 600V	0.10A	-

Contact rating code designation	Thermal continuous test current, Amperes	Maximum current, amperes (acc. to UL508)								Maximum volt-amperes	
		120V		240V		480V		600V			
		Make	Break	Make	Break	Make	Break	Make	Break	Make	Break
A600	10	60	6.00	30	3.00	15	1.5	12	1.2	7200	720
B600	5	30	3.00	15	1.50	7.50	0.75	6	0.6	3600	360

Contact rating code designation	Thermal continuous test current, Amperes	Maximum current, amperes (acc. to UL508)			Maximum make or break volt-amperes @ 300V or less
		125V	250V	301 to 600V	
Q600	2.5	0.55	0.27	0.10	69
Q300	2.5	0.55	0.27	-	69

Wiring diagram