

Panel Actuators and Indicators

Type PL 22

Buzzer and Flashing Buzzer



- \varnothing 22mm (\varnothing 0.87") 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.

Approvals

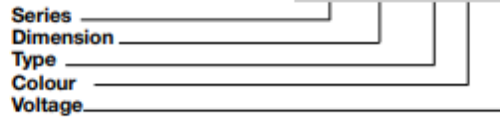


Technical data

Rated imp. withstand voltage U_{imp}	2500VAC 50Hz 1min.
Rated insulation Voltage U_i	500VAC
Allowable voltage fluctuation	$\pm 20\%$
Continuous operating life	≥ 100.000 h
Ultrahigh brightness	≥ 100 cd/m ² (≥ 9.29 ftc)
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

Ordering key

PL 22S BZ R 24*



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

Dimension and style

22S = \varnothing 22mm (\varnothing 0.87") standard size

Types

BZ = Buzzer FBZ= Flashing buzzer

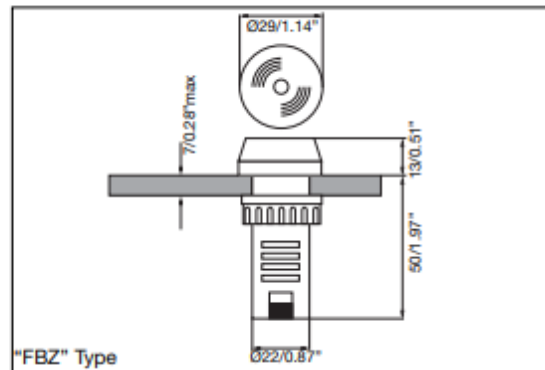
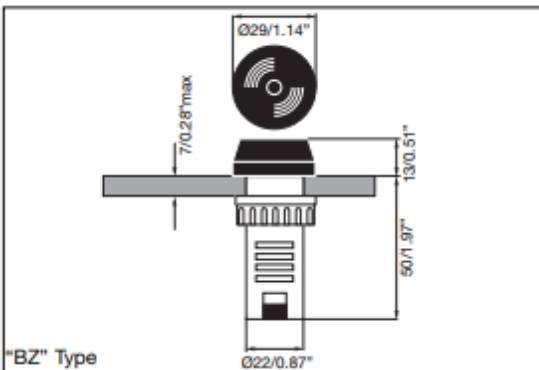
Colours

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

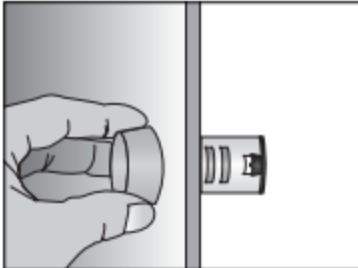
Voltages

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

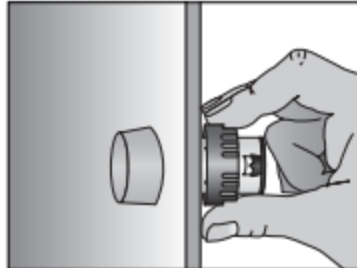
Dimensions mm/inches



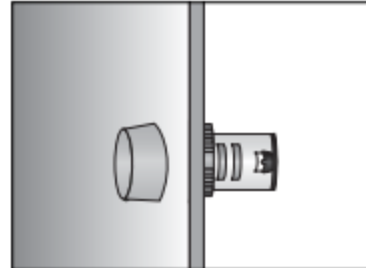
Mounting



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

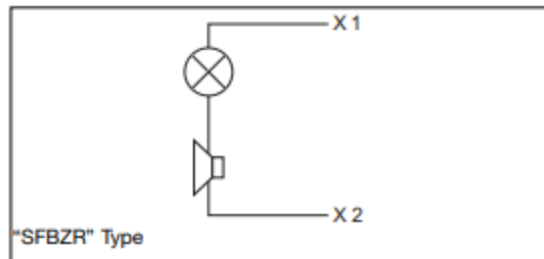
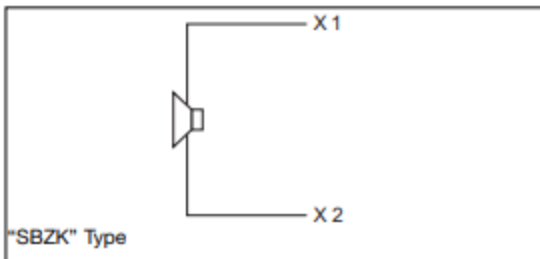


The pilot light will be secured at the back by the plastic nut



The pilot light has been installed.

Wiring Diagram

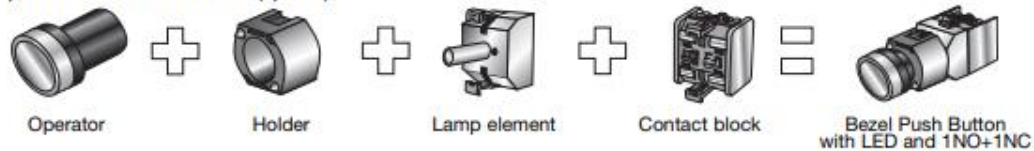


Wiring Notes

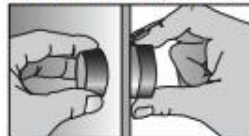
- 1) Use 60°C or 75°C copper (CU) conductor and wire size range 18AWG, stranded or solid.
- 2) Terminal tightening torque 0.6Nm (5.3in.lb)
- 3) Recommended external fuse - listed or R/C fuses, Supplemental (JDYX, JDYX2) rated 3A mmaximum.

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).



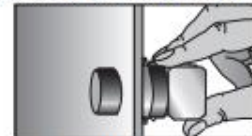
To install it, the only tool needed is a screwdriver. The same used to wiring the contact block can be used to fix the push-button.



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



Fastening 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"

PA LBF 11

18mm/0.71"

PA LBF 18



Warning plate

For emergency stop push buttons. Thickness 1.5mm/0.059"

ABS

Ø60mm/Ø2.36"

PA WP 6

Ø90mm/Ø3.54"

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 Material	PB MB M Zn + PBT	
	Holder type "P" Code Material	PB MB P PBT	
	Holder type "N" Code Material	PB MB N PC	

Lamp Element



Ordering key

PALAMP R 220A*

Type _____
Colour _____
Voltage _____

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

Approvals



Colours

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

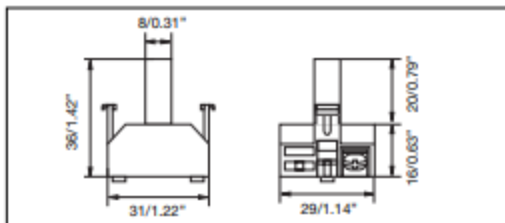
Voltage

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

Technical data

Rated imp. withstand voltage U_{imp}	2500VAC 50Hz 1min.
Rated insulation Voltage U_i	500VAC
Allowable voltage fluctuation	$\pm 20\%$
Continuous operating life	$\geq 100.000h$
Ultrahigh brightness	$\geq 100cd/m^2$ ($\approx 9.29ftc$)
Applying frequency	50-60Hz
Current consumption (AC/DC)	$\leq 18mA$
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

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

Panel Actuators and Indicators

Type PA2

Contact Block



- 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

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

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



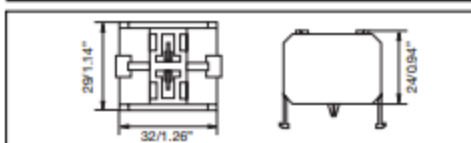
Technical data

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 single-core wire	2 x 2.5mm ² (0.004sq.inch)
Max. section stranded wire	2 x 1.5mm ² (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 Ⓞ NC contact)

Contact code

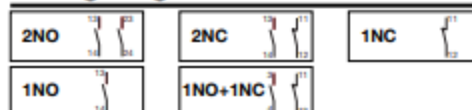
Contact configuration	Contact code
2 NO contacts (DPST)	200
2 NC contacts (DPST)	020
1 NC contact (SPST)	010
1 NO contact (SPST)	100
1 NC + 1 NO contacts (DPST)	110

Contact characteristics

Contact Rating AC1	10A @ 250VAC		
Contact Rating	AC15	DC13	
(acc. to IEC 60947-5-1)	@ 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	Terminal pitch (mm/inches)	Maximum current, amperes (acc. to UL508)								Maximum volt-amperes	
		120V		240V		480V		600V		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	Terminal pitch (mm/inches)	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	69					
Q300	2.5	0.55	0.27	-	-	69					

Wiring diagram



AVAILABLE PORTFOLIO CONFIGURATIONS

Flush Round Push Buttons		Pilot Lights		I/O Push Buttons	
PB22BF0B	PB22BIF0Y	PL22CHLB110	PL22SFLG24	PB22SIO0RG	PB22SIOL0RG
PB22BF0G	PB22SF0B	PL22CHLB24	PL22SFLR110	Key Selector Switches	
PB22BF0K	PB22SF0G	PL22CHLG110	PL22SFLR24		
PB22BF0R	PB22SF0K	PL22CHLG24	PL22SFLW110	PB22SKRS21KL PB22SKRS21KR	
PB22BF0W	PB22SF0R	PL22CHLR110	PL22SFLW24	Push Button Boxes	
PB22BF0Y	PB22SF0Y	PL22CHLR24	PL22SFLY110		
PB22BIF0B	PB22SIF0G	PL22CHLW110	PL22SFLY24	PBBOX1HBG	PBBOX3HBY
PB22BIF0G	PB22SIF0R	PL22CHLW24	PL22SHLG110	PBBOX1HBY	PBBOX4HBG
PB22BIF0R	PB22SIF1G	PL22CHLY110	PL22SHLG220A	PBBOX2HBG	PBBOX4HBY
PB22BIF0W		PL22CHLY24	PL22SHLG24	PBBOX2HBY	PBBOX5HBG
		PL22CLLB220A	PL22SHLR110	PBBOX3HBG	
		PL22CLLB24	PL22SHLR12	Lamp Element	
		PL22CLLG110	PL22SHLR220A		
Extended Push Buttons		PL22CLLG220A	PL22SHLR24	PALAMPB110	PALAMPR24
PB22BE0G	PB22BIE0Y	PL22CLLG24	PL22SHLW110	PALAMPB24	PALAMPW110
PB22BE0K	PB22SIE0G	PL22CLLR110	PL22SHLW24	PALAMPG110	PALAMPW12
PB22BE0R	PB22SIE0R	PL22CLLR220A	PL22SHLY110	PALAMPG220A	PALAMPW24
PB22BIE0R		PL22CLLR24	PL22SHLY24	PALAMPG24	PALAMPY110
Red Emergency Stop Push Buttons		PL22CLLW110	PL22SLLG110	PALAMPR110	PALAMPY24
		PL22CLLW220A	PL22SLLG220A	PALAMPR220A	
Mushroom Push Buttons		PL22CLLW24	PL22SLLG24	Contact Block	
		PL22CLLY110	PL22SLLR110		
PB22BEM41R	PB22SEM41R	PL22CLLY12	PL22SLLR220A	PA2010/1	PA2100/2
PB22BEM61R	PB22SEM61R	PL22CLLY220A	PL22SLLR24	PA2010/2	PA2110/1
PB22BKEM41R		PL22CLLY24	PL22SLLW24	PA2020/1	PA2110/2
Short-Handle Selector Switches		PL22CRLB24	PL22SLLY24	PA2020/2	PA2200/1
		PL22SFLB24	PL22SRLR110	PA2100/1	PA2200/2
		PL22SFLG110		Accessories	
Buzzer and Flashing Buzzer		Long-Handle Selector Switches		PASEALCOV	PAWP6
PL22SBZK110	PL22SFBZR110	PB22BSRS21K	PB22SISRS21W	PAPBCOV	PAWP9
PL22SBZK12	PL22SFBZR12	PB22BSRS22K	PB22SISRS31G	PAMR22	PAPHC22
PL22SBZK220A	PL22SFBZR220A	PB22BSRS31K	PB22SSRS21K	PALBF11	PARR3
PL22SBZK24	PL22SFBZR24	PB22BSRS33K	PB22SSRS31K	PALBF18	PAPLCONN
Two Color Pilot Lights		PB22SISRS21R	PB22SSRS32K	Holders	
PL22STCRG110	PL22STCRG24	PB22BLRS21K	PB22SLRS31K		
PL22STCRG220A		PB22BLRS31K	PB22SLRS32K	PBMBM	PBMBP
		PB22SLRS21K		PBMBN	