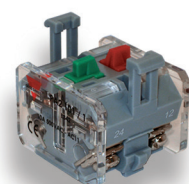


# Push Buttons Selector Switches & Pilot Lights



**Switch**











# Push Buttons Selector Switches & Pilot Lights

Overview	2
Introduction	3
Quick Selection	6
Ordering Key	8
Flush Round Push Buttons	10
Extended Push Buttons	11
Emergency Stop Push Buttons	12
Mushroom Push Buttons	13
Short-handle Selector Switches	14
Long-handle Selector Switches	15
Key Selector Switches	16
I/O Push Buttons	17
Contact Blocks	18
Lamp Elements	19
Pilot Lights	20
Two Colours Pilot Lights	21
Buzzers	22
Accessories	23

# Push Buttons

CARLO GAVAZZI









Series	Type PB Flush Round Push Buttons	Type PB Extended Push Buttons	Type PB Red Emergency Stop Push Buttons	Type PB Mushroom Push Buttons
				
Drilling Diameter Ømm/inches	Ø22/0.87"	Ø22/0.87"	Ø22/0.87"	Ø22/0.87"
Dimensions H x Ømm/inches	37xØ29" 39xØ35"	42xØ29" 44xØ35"	49-51xØ40-Ø60 1.93"-2"xØ1.57"- Ø2.36"	49-51xØ40-Ø60 1.93"-2"xØ1.57"- Ø2.36"
<b>General Specification</b>				
Spring Returned	Yes	Yes	No	Yes
Maintained	Yes	Yes	Yes (turn to release)	Yes
Available colours	R, W, K, B, Y, G*	R, W, K, B, Y, G*	R*	R, Y, G, W, K*
Lamp add-on possibility	Yes	Yes	No	Yes
Approvals/Marks	CE, cULus	CE, cULus	CE, cULus	CE, cULus
<b>Detailed information</b>				
On page	10	11	12	13

Series	Type PB Short-handle Rotary Switches	Type PB Long-handle Rotary Switches	Type PB Key Switches	Type PB I/O Push Button
				
Drilling Diameter Ømm/inches	Ø22/0.87"	Ø22/0.87"	Ø22/0.87"	Ø22/0.87"
Dimensions H x Ømm/inches	51xØ29" 53xØ35"	51xØ29" 53xØ35"	72 x Ø29" 64 x Ø35"	41x 29 x 54 x Ø29 1.61"x1.14"x2.13"xØ1.14"
<b>General Specification</b>				
Spring Returned	Yes	Yes	No	Yes
Two position	Yes	Yes	Yes	No
Three position	Yes	Yes	Yes	No
Available colours	R, Y, G, B, W, K*	R, K, Y, G*	Neutral (metal)	RG*
Lamp add-on possibility	Yes	No	No	Yes
Approvals/Marks	CE, cULus	CE, cULus	CE, cULus	CE, cULus
<b>Detailed information</b>				
On page	14	15	16	17

\* R=Red, W=Clear/White, K=Black (not for illuminated versions), B=Blue, Y= Yellow, G=Green

# Pilot Lights



Series	Type PL High lens	Type PL Round Lens	Type PL Low Lens	Type PL Teeth Lens
				
Drilling Diameter Ømm/inches	Ø22/0.87"	Ø22/0.87"	Ø22/0.87"	Ø22/0.87"
Dimensions H x Ømm/inches	Ø29 x 52**/67 Ø1.14" x 2.05***/2.64"	Ø29 x 41**/54 Ø1.14" x 1.61***/2.13"	Ø29 x 52**/67 Ø1.14" x 2.05***/2.64"	Ø29 x 52**/67 Ø1.14" x 2.05***/2.64"
Colours	R, W, B, Y, G*	R, W, B, Y, G*	R, W, B, Y, G*	R, W, B, Y, G*
Light source	LED	LED	LED	LED
Brightness	≥100cd/m <sup>2</sup> (≥9.29ftc)	≥100cd/m <sup>2</sup> (≥9.29ftc)	≥100cd/m <sup>2</sup> (≥9.29ftc)	≥100cd/m <sup>2</sup> (≥9.29ftc)
Approvals	CE, cULus	CE, cULus	CE, cULus	CE, cULus
<b>Voltage</b>	6VAC/DC 12VAC/DC 24VAC/DC 48VAC/DC 110VAC/DC 220VDC - 220VAC 380VAC	6VAC/DC 12VAC/DC 24VAC/DC 48VAC/DC 110VAC/DC 220VDC - 220VAC 380VAC	6VAC/DC 12VAC/DC 24VAC/DC 48VAC/DC 110VAC/DC 220VDC - 220VAC 380VAC	6VAC/DC 12VAC/DC 24VAC/DC 48VAC/DC 110VAC/DC 220VDC - 220VAC 380VAC
<b>Detailed information</b> On page	20	20	20	20
Series	Type PL Flash Light	Type PL Two Colours	Type PL Flashing Buzzer	Type PL Buzzer
				
Drilling Diameter Ømm/inches	Ø22/0.87"	Ø22/0.87"	Ø22/0.87"	Ø22/0.87"
Dimensions H x Ømm/inches	Ø29 x 52**/67 Ø1.14" x 2.05***/2.64"	Ø29 x 52**/67 Ø1.14" x 2.05***/2.64"	Ø29 x 52**/67 Ø1.14" x 2.05***/2.64"	Ø29 x 52**/67 Ø1.14" x 2.05***/2.64"
Colours	R, W, B, Y, G*	RG*	R*	K*
Light source	LED	LED	LED	-
Brightness / Sound volume	≥100cd/m <sup>2</sup> (≥9.29ftc)	≥100cd/m <sup>2</sup> (≥9.29ftc)	≥100cd/m <sup>2</sup> (≥9.29ftc)	80dB @ 10cm (3.94")
Approvals	CE, cULus	CE, cULus	CE, cULus	CE, cULus
<b>Voltage</b>	6VAC/DC 12VAC/DC 24VAC/DC 48VAC/DC 110VAC/DC 220VDC - 220VAC 380VAC	6VAC/DC 12VAC/DC 24VAC/DC 48VAC/DC 110VAC/DC 220VDC - 220VAC 380VAC	6VAC/DC 12VAC/DC 24VAC/DC 48VAC/DC 110VAC/DC 220VDC - 220VAC 380VAC	6VAC/DC 12VAC/DC 24VAC/DC 48VAC/DC 110VAC/DC 220VDC - 220VAC 380VAC
<b>Detailed information</b> On page	20	21	22	22

\* R=Red, W=Clear/White, K=Black (not for illuminated versions), B=Blue, Y= Yellow, G=Green \*\* Compact Version

Specifications are subject to change without notice. Pictures are just an example. 122011

## The Push Buttons and The Selector Switches

Carlo Gavazzi has developed a new range of push buttons, selector switches and pilot lights in order to complete own offer on automation market and give more solutions to own customers.

Push button switches are mechanical switches that are pushed down to open or to close the electric contacts.

They are mostly used to start/stop electric circuits/devices like lamps, motors, etc...

Selector switches are mechanical switches that can be turned right, center or left to open or to close the electric contacts.

They are mostly used to start/stop devices or to switch between two/three electric circuits. The switch function can be maintained or

spring return. In a maintained the actuator stays in thrown position (on-off). In a spring return the switch must be held in position; it reverts to normal position when actuating force is removed.

Different models of operators are available like push-button (also illuminated type), mushroom push-button, red emergency stop push-button, key push-button, selector switch with two or three positions ...

... to meet most of the markets and the customers needs.

They are available with a various selection of colours (6) and a wide range of supply voltages (from 6V to 380V).

The screws (+, - Pozidrive 2) of terminals are

dispatched open to facilitate the work of wiring that can also be done separately, before the contact block is snapped on the holder. Besides, Carlo Gavazzi has developed the contact block with unloseable screws system, so it is impossible to lose screw while unscrewing. The illuminated functions are made by high-brightness pure colour LED. It is a guarantee of more efficiency and reliability.

Infact, the LED technology reach over than 100.000 hours of service life and the power consumption is lower than filament bulb type. The degree of protections is IP65. It allows to install them also in tough environments e.g. wet or dusty conditions.

## Buttons style and mounting type

This new range has been developed, thinking to the needs of the installations, with three different styles

of shape of push-buttons and three different types of mounting. By combining the styles and the types of

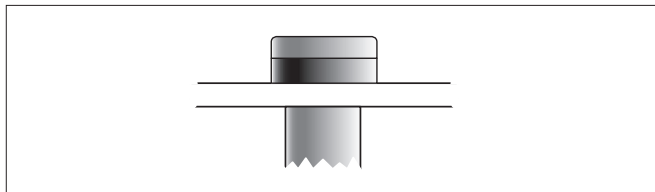
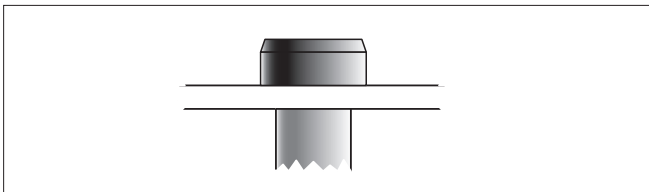
mounting, it is possible to obtain up to 9 different versions for the same product.

### S type operator

It is standard style Ø22 (for panel hole 22mm (0.87")): black plastic head

### B type operator

It is bezel style Ø22 (for panel hole 22mm (0.87")): black plastic head with metal plated circular bezel



Three different types of mounting are available:

### M type holder

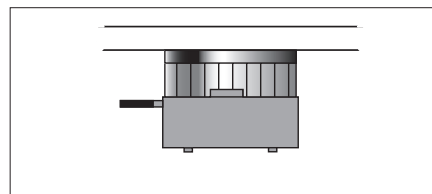
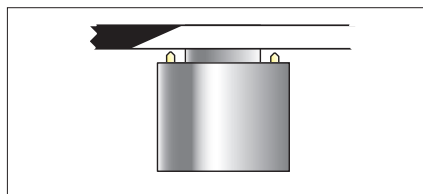
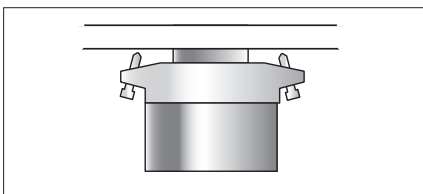
It is metal mounting base: installation and fixing are made by diagonal screws; so it is on the safe side.

### P type holder

It is plastic mounting base: the middle base's material is high strength PBT plastic. The straight screws are used for installation.

### N type holder

It is nut mounting base: using nut for clamping, so it makes installation easily and reduce work intensity by big percentages.



## The contact block

The contact block is the switching element equipped with 2 independent electric contacts. 10 different version of contact blocks are available to meet the needs of the installations and of the customers.

Pole and throw configurations can be single pole single throw (SPST) or double pole single throw (DPST). SPST is a

switch that makes or breaks the connection of a single conductor in a single branch circuit. DPST is a switch that makes or breaks the connection of two circuit conductors in a single branch circuit. A normally open (NO) switch has contacts that are open or disconnected in their unactuated (normal) position. A normally closed (NC) switch has

contacts that are closed or connected in their unactuated (normal) position.

They are snap or slow action types with positive opening of NC contact type. The contact rating of 10A @ 250V AC1 allows to reach high operating performance.

The type of the contact is clearly identified by the colour (red for normally closed and green for normally open).

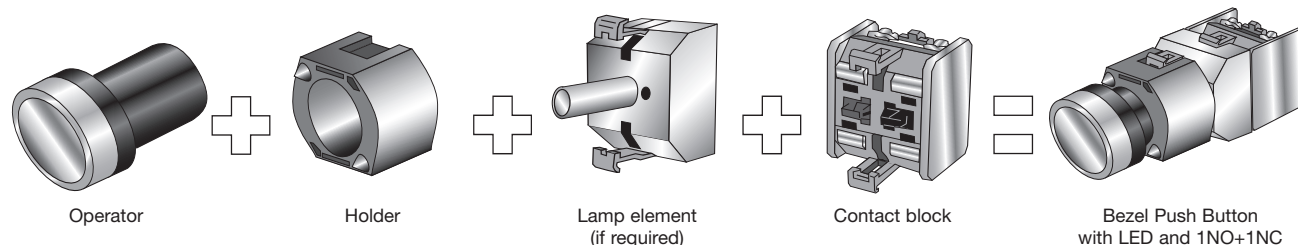


Snap Action	Slow Action	Contact Type
PA2010/1	PA2010/2	1NC
PA2100/1	PA2100/2	1NO
PA2020/1	PA2020/2	2NC
PA2200/1	PA2200/2	2NO
PA2110/1	PA2110/2	1NO+1NC

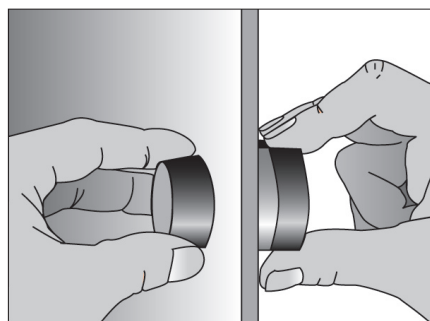


## Simple to choose and to install

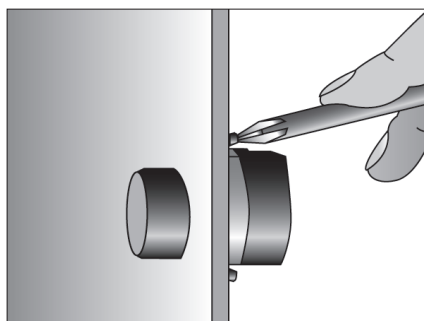
It comes easy to get the right product. Just to choose the operator, the holder, the lamp element (if illuminated function is required) and the contact block (up to 3).



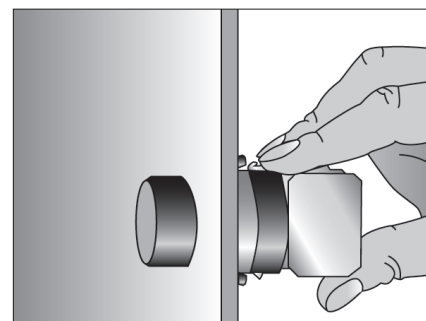
The only tool needed is a screwdriver. The same used to wiring the contact block can be used to fix the push-button.



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.

## The Pilot Lights

The main function of a pilot light is to signalize when an event occurs or to indicate a state. For example, the red light is normally used to indicate that there is voltage on the electrical installation or equipment.

Only one code is enough to choose the product. The LED is delivered already installed, so you should only select the rating voltage and the colour.

The source of light is LED. It gives an optimum perception due to the ideal colour rendering. Beside, it is reliable and cost-saving due to its long lifetime.

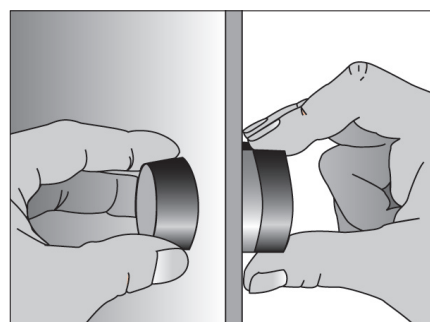
All with dimension of  $\varnothing 22$  (for panel hole 22mm (0.87")), they offer different solutions, from the shape of the lens (high, low, rounded, teeth profile) to the type of functions (light, flashing, two-color, buzzer). Different rating voltage are available, either

in AC or in DC, in order to meet all the requirement of the market. A wide selection of colours (red, green, yellow, white and blue) allows to choose the right colour for the right function.

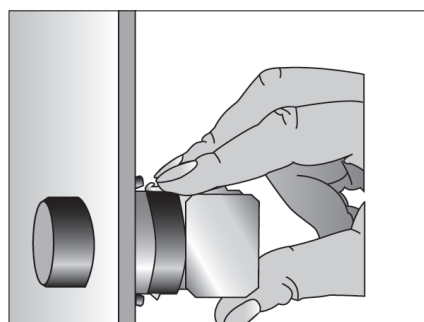
The pilot light can be easily and safely assembled by one person with just a few movements of the hand.

The installations is simply made by plastic nut.

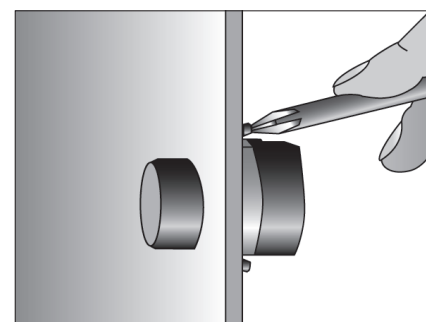
## Simple to install



Just to insert the pilot light into the hole of the panel.



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



The pilot light has been installed.

## Specifications

**International Specifications**  
The International Electrotechnical Commission, IEC, which is part of the International Standards Organization, ISO, publishes IEC publications which act as a basis for the world market.

**European Specifications**  
The European Committee for Electrotechnical Standardisation (CENELEC), grouping 18 European countries, publishes EN standards for low voltage industrial apparatus. These European standards differ very little from IEC international standards and use a similar numbering system. The same is true of national standards. Contradicting national standards are

withdrawn.  
**Harmonised European Specifications**  
The European Committees for Standardisation (CEN and CENELEC), grouping 18 European countries, publish EN standards relating to safety of machinery.

**Specifications in Canada and the USA**  
These are equivalent, but differ markedly from IEC, UTE, VDE and BS specifications. UL Underwriters Laboratories (USA) CSA Canadian Standards Association (Canada)  
Remark concerning the label issued by the UL (USA). Two levels of acceptance between devices must be distinguished. "Recognized" Authorised to be included in

equipment, if the equipment in question has been entirely mounted and wired by qualified personnel. They are not valid for use as "General purpose products" as their possibilities are limited. They bear the mark:



"Listed" Authorised to be included in equipment and for separate sale are "General purpose products" components in the USA. They bear the mark :



## European Directives

The guarantee of free movement of goods within the European Community assumes elimination of any regulatory differences between the member states. European Directives set up common rules that are included in the legislation of each state while contradictory regulations are cancelled.

There are three main directives :

- **Low Voltage Directive 73/23/EEC**, amended by **Directive 93/68/EEC**

concerning electrical equipment from 50 to 1000 V a.c. and from 75 to 1500 V d.c. This specifies that compliance with the requirements that is sets out **is acquired** once the equipment conforms to the standards harmonised at European level.

- **Machine Directives – 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC** – defining main safety and health requirements concerning design and manufacture of the machines and other

equipment including safety components in European Union countries.

- **Electromagnetic Compatibility Directive 89/336/EEC**, amended by **Directive 92/31/EEC** and **Directive 93/68/EEC** concerning all electrical devices likely to create electromagnetic disturbances.

## Approvals



## Technical Data

Rated capacity acc. to IEC 60947-5-1

AC-15	DC-13
220V/6A	24V/6A
380V/4A	48V/3A
500V/2.5A	110V/1A
660V/2A	220V/0.5A

Rated capacity acc. to UL 508

B600	Q600
A600	Q600
A600	Q300

Snap action type

≤50mΩ (hard sliver contact)

NO slow action type

NC slow action type

**Contact resistance**

**Rated Impulse withstand Voltage  $U_{imp}$**

2500VAC 50Hz 1min.

**Mechanical life**

Normal button ≥3x10<sup>6</sup> cycles  
Selector ≥30x10<sup>4</sup> cycles  
Key button ≥5x10<sup>4</sup> cycles  
Emergency button ≥5x10<sup>4</sup> cycles

**Electrical life**

≥30x10<sup>4</sup> cycles

**Rated thermal current  $I_{th}$**

10A

**Rated insulation voltage  $U_i$**

660VAC/DC (acc. to IEC 60947-5-1)  
600VAC/DC (acc. to UL508)

**Operating temperature**

-25 ~ +70°C (-13 ~ +158°F)

**Storage temperature**

-30 ~ +80°C (-22 ~ +176°F)

## Standard

IEC/EN 60073  
IEC/EN 60529  
IEC/EN 60947-1  
IEC/EN 60947-5-1, 60947-5-5  
UL 508  
EN 418

## Parts Material

Peripheral of actuator	AL
Holder	Zn or PBT. PC
Actuator	Pa
Contact	AgNi
Switch housing	PC
Contact parts	Cu

## Ordering Key

**PB 22S IF 1 R** □<sup>2</sup>

### Series

**PB** = Push Button (or Selector switch)  
**PL** = Pilot Light

### Dimension and Style

**22S** = Ø 22mm (0.87") Standard design  
**22B** = Ø 22mm (0.87") Bezel design (only for Push Buttons)  
**22C** = Ø 22mm (0.87") Compact design (only for Pilot light)

### Push Buttons and Selector Switches types

**F** = Flush round  
**E** = Extended round  
**IF** = Illuminated<sup>1</sup> Flush round  
**IE** = Illuminated<sup>1</sup> Extended round  
**M4** = Mushroom Ø40mm (Ø1.57")  
**M6** = Mushroom Ø60mm (Ø2.36")  
**IM4** = Illuminated<sup>1</sup> Mushroom Ø40mm (Ø1.57")  
**IM6** = Illuminated<sup>1</sup> Mushroom Ø60mm (Ø2.36")  
**EM4** = Red Emergency Stop Ø40mm (Ø1.57")  
**EM6** = Red Emergency Stop Ø60mm (Ø2.36")  
**KM4** = Key-Reset Emergency Stop Red Ø40mm (Ø1.57")  
**SRS** = Short-handle Selector Switch  
**ISRS** = Illuminated<sup>1</sup> Short-handle Selector Switch (only action 21 or 31)  
**LRS** = Long-handle Selector Switch  
**KRS** = Key Selector Switch (only action 21 or 31)  
**IO** = IO Push Button (ON-OFF type)  
**IOL** = IO Push Button (ON-OFF type) illuminated<sup>1</sup>

### Pilot Light types

**HL** = High Lens  
**RL** = Round Lens  
**LL** = Low Lens  
**TC** = Two Colours  
**TL** = Teeth Lens  
**BZ** = Buzzer  
**FBZ** = Flashing Buzzer  
**FL** = Flash Light

### Actions

**Nil** = Only for Pilot Light  
**0** = Spring return (not for red emergency stop)  
**1** = Maintained  
**21** = Two positions L R  
**22** = Two positions L C  
**23** = Two positions C ↗ R  
**31** = Three positions L ↘ C R  
**32** = Three positions L C R  
**33** = Three positions L ↗ C ↘ R  
**34** = Three positions L ↗ C ↖ R

### Colours (only Red for emergency stop types)

**R** = Red  
**G** = Green  
**Y** = Yellow  
**W** = Clear/White  
**B** = Blue  
**K** = Black (not for illuminated versions)

### Voltages (only for Pilot Light)

**06** = 6VAC / DC  
**12** = 12VAC / DC  
**24** = 24VAC / DC  
**48** = 48VAC / DC  
**110** = 110VAC / DC  
**220D** = 220VDC  
**220A** = 220VAC  
**380A** = 380VAC

### Key extraction position (only for Key Selector Switch)

**KL** = on the left position  
**KC** = on the center position  
**KR** = on the right position

<sup>1</sup> = Light function is obtained by the lamp element pg.19

↗ = Spring return

□<sup>2</sup> = position available only for Pilot Light or Key extraction position



## Quick selection

### ▲ Actions

**0** = Spring Return    **32\*** = Three pos. L↗C↘R  
**1** = Maintained        **33\*** = Three pos. L↗C R  
**21** = Two pos. L R     **34\*** = Three pos. L C↘R  
**22\*** = Two pos. L↗C  
**23\*** = Two pos. C↘R    \* : not for illuminated  
**31** = Three pos. L C R   ↗ : spring return

### ● Colours

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

### ▼ Voltages

**06** = 6VAC/DC        **110** = 110VAC/DC  
**12** = 12VAC/DC      **220D** = 220VDC  
**24** = 24VAC/DC     **220A** = 220VAC  
**48** = 48VAC/DC     **380A** = 380VAC

#### Flush round push buttons



PB 22S F    ▲ ●  
 PB 22S IF   ▲ ●



PB 22B F    ▲ ●  
 PB 22B IF   ▲ ●

#### Extended push buttons



PB 22S E    ▲ ●  
 PB 22S IE   ▲ ●



PB 22B E    ▲ ●  
 PB 22B IE   ▲ ●

#### Mushroom push buttons



PB 22S M4 ▲ ●    PB 22S IM4 ▲ ●  
 PB 22S M6 ▲ ●    PB 22S IM6 ▲ ●



PB 22B M4 ▲ ●    PB 22B IM4 ▲ ●  
 PB 22B M6 ▲ ●    PB 22B IM6 ▲ ●

#### Emergency mushroom push buttons



PB 22S EM4 1R    PB 22S KM4 1R  
 PB 22S EM6 1R    PB 22S KM6 1R



PB 22B EM4 1R    PB 22B KM4 1R  
 PB 22B EM6 1R    PB 22B KM6 1R

#### Short-handle selector switches



PB 22S SRS    ▲ ●  
 PB 22S ISRS   ▲ ●



PB 22B SRS    ▲ ●  
 PB 22B ISRS   ▲ ●

#### Long-handle Selector Switches



PB 22S LRS    ▲ ●



PB 22B LRS    ▲ ●

## Quick selection

### ▲ Actions

0 = Spring Return    32\* = Three pos. L↔C↔R  
 1 = Maintained    33\* = Three pos. L↔C↔R  
 21 = Two pos. L↔R    34\* = Three pos. L↔C↔R  
 22\* = Two pos. L↔C  
 23\* = Two pos. C↔R    \* : not for illuminated  
 31 = Three pos. L↔C↔R    ↗ : spring return

### ● Colours

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

### ▼ Voltages

06 = 6VAC/DC    110 = 110VAC/DC  
 12 = 12VAC/DC    220D = 220VDC  
 24 = 24VAC/DC    220A = 220VAC  
 48 = 48VAC/DC    380A = 380VAC

#### Key selector switches



PB 22S KRS    KL  
 PB 22S KRS ▲    KC  
 PB 22S KRS ▲    KR

#### I/O push buttons



PB 22S IO    0RG  
 PB 22S IOL    0RG

#### Metal holder



PB MB M

#### Plastic holder



PB MB P

#### Nut holder



PB MB N

#### Lamp element



PA LAMP ◻ ▼

#### Contact blocks



PA2010/1    PA2010/2  
 PA2100/1    PA2100/2  
 PA2020/1    PA2020/2  
 PA2200/1    PA2200/2  
 PA2110/1    PA2110/2

#### Example of a complete product



PB22BIF 0G + PBMBP +  
 PALAMP G24 + PA2110/1

#### High lens pilot light



PL 22C HL ◻ ▼    PL 22S HL ◻ ▼

#### Round lens pilot light



PL 22C RL ◻ ▼    PL 22S RL ◻ ▼

#### Low lens pilot light



PL 22C LL ◻ ▼    PL 22S LL ◻ ▼

#### Teeth lens pilot light



PL 22C TL ◻ ▼    PL 22S TL ◻ ▼

#### Flash lens pilot light



PL 22S FL ◻ ▼

#### Two colours pilot light



PL 22S TC RG ▼

#### Flashing buzzer



PL 22S FBZ R ▼

#### Buzzer



PL 22S BZ K ▼

## OUR SALES NETWORK IN EUROPE

**AUSTRIA** - Carlo Gavazzi GmbH  
Ketzergasse 374, A-1230 Wien  
Tel: +43 1 888 4112  
Fax: +43 1 889 10 53  
office@carlogavazzi.at

**BELGIUM** - Carlo Gavazzi NV/SA  
Schaarbeeklei 213/3, B-1800 Vilvoorde  
Tel: +32 2 257 4120  
Fax: +32 2 257 41 25  
sales@carlogavazzi.be

**DENMARK** - Carlo Gavazzi Handel A/S  
Over Hadstenvej 40, DK-8370 Hadsten  
Tel: +45 89 60 6100  
Fax: +45 86 98 15 30  
handel@gavazzi.dk

**FINLAND** - Carlo Gavazzi OY AB  
Petaksentie 2-4, FI-00661 Helsinki  
Tel: +358 9 756 2000  
Fax: +358 9 756 20010  
myynti@carlogavazzi.fi

**FRANCE** - Carlo Gavazzi Sarl  
Zac de Paris Nord II, 69, rue de la Belle  
Etoile, F-95956 Roissy CDG Cedex  
Tel: +33 1 49 38 98 60  
Fax: +33 1 48 63 27 43  
french.team@carlogavazzi.fr

**GERMANY** - Carlo Gavazzi GmbH  
Pfnorstr. 10-14  
D-64293 Darmstadt  
Tel: +49 6151 81000  
Fax: +49 6151 81 00 40  
info@gavazzi.de

**GREAT BRITAIN** - Carlo Gavazzi UK Ltd  
7 Springlakes Industrial Estate,  
Deadbrook Lane, Hants GU12 4UH,  
GB-Aldershot  
Tel: +44 1 252 339600  
Fax: +44 1 252 326 799  
sales@carlogavazzi.co.uk

**ITALY** - Carlo Gavazzi SpA  
Via Milano 13, I-20020 Lainate  
Tel: +39 02 931 761  
Fax: +39 02 931 763 01  
info@gavazziacbu.it

**NETHERLANDS** - Carlo Gavazzi BV  
Wijkermeerweg 23,  
NL-1948 NT Beverwijk  
Tel: +31 251 22 9345  
Fax: +31 251 22 60 55  
info@carlogavazzi.nl

**NORWAY** - Carlo Gavazzi AS  
Melkeveien 13, N-3919 Porsgrunn  
Tel: +47 35 93 0800  
Fax: +47 35 93 08 01  
gavazzi@carlogavazzi.no

**PORTUGAL** - Carlo Gavazzi Lda  
Rua dos Jerónimos 38-B,  
P-1400-212 Lisboa  
Tel: +351 21 361 7060  
Fax: +351 21 362 13 73  
carlogavazzi@carlogavazzi.pt

**SPAIN** - Carlo Gavazzi SA  
Avda. Iparraguirre, 80-82,  
E-48940 Leioa (Bizkaia)  
Tel: +34 94 480 4037  
Fax: +34 94 480 10 61  
gavazzi@gavazzi.es

**SWEDEN** - Carlo Gavazzi AB  
V:a Kyrkogatan 1,  
S-652 24 Karlstad  
Tel: +46 54 85 1125  
Fax: +46 54 85 11 77  
info@carlogavazzi.se

**SWITZERLAND** - Carlo Gavazzi AG  
Verkauf Schweiz/Vente Suisse  
Sumpfstrasse 32,  
CH-632 Steinhausen  
Tel: +41 41 747 4535  
Fax: +41 41 740 45 40  
info@carlogavazzi.ch

## OUR SALES NETWORK IN NORTH AMERICA

**USA** - Carlo Gavazzi Inc.  
750 Hastings Lane,  
USA-Buffalo Grove, IL 60089,  
Tel: +1 847 465 6100  
Fax: +1 847 465 7373  
sales@carlogavazzi.com

**CANADA** - Carlo Gavazzi Inc.  
2660 Meadowvale Boulevard,  
CDN-Mississauga Ontario L5N 6M6,  
Tel: +1 905 542 0979  
Fax: +1 905 542 22 48  
gavazzi@carlogavazzi.com

**MEXICO** - Carlo Gavazzi Mexico S.A. de C.V.  
Calle La Montaña no. 28, Fracc. Los Pastores  
Naucaalpan de Juárez, EDOMEX CP 53340  
Tel & Fax: +52.55.5373.7042  
mexicosales@carlogavazzi.com

## OUR SALES NETWORK IN ASIA AND PACIFIC

**SINGAPORE** - Carlo Gavazzi Automation  
Singapore Pte. Ltd.  
61 Tai Seng Avenue #05-06  
UE Print Media Hub  
Singapore 534167  
Tel: +65 67 466 990  
Fax: +65 67 461 980

**MALAYSIA** - Carlo Gavazzi Automation  
(M) SDN. BHD.  
D12-06-G, Block D12,  
Pusat Perdagangan Dana 1,  
Jalan PJU 1A/46, 47301 Petaling Jaya,  
Selangor, Malaysia.  
Tel: +60 3 7842 7299  
Fax: +60 3 7842 7399

**CHINA** - Carlo Gavazzi Automation  
(China) Co. Ltd.  
Rm. 2308 - 2310, 23/F.,  
News Building, Block 1,  
1002 Shennan Zhong Road,  
Shenzhen, China  
Tel: +86 755 83699500  
Fax: +86 755 83699300

**HONG KONG** - Carlo Gavazzi  
Automation Hong Kong Ltd.  
Unit 3 12/F Crown Industrial Bldg.,  
106 How Ming St., Kowloon,  
Hong Kong  
Tel: +852 23041228  
Fax: +852 23443689

## OUR PRODUCTION SITES

Carlo Gavazzi Industri A/S  
Hadsten - **DENMARK**

Carlo Gavazzi Ltd  
Zejtun - **MALTA**

Carlo Gavazzi Controls SpA  
Belluno - **ITALY**

Uab Carlo Gavazzi Industri Kaunas  
Kaunas - **LITHUANIA**

Carlo Gavazzi Automation  
(Kunshan) Co., Ltd.  
Kunshan - **CHINA**

## HEADQUARTERS

Carlo Gavazzi Automation SpA  
Via Milano, 13 - I-20020  
Lainate (MI) - **ITALY**  
Tel: +39 02 931 761  
info@gavazzi-automation.com

**Sense Switch Control Fieldbus EcoEnergy**  
equipment

**CARLO GAVAZZI**  
Automation Components

Further information on  
[www.gavazziautomation.com](http://www.gavazziautomation.com) - [www.carlogavazzi.com](http://www.carlogavazzi.com)

**CARLO GAVAZZI**