# Plastic Enclosures for 22mm Pilot Devices

## Switch Enclosures

| Switch Enclosures | | | |
|---|---|---|---|
| ***Specification Standard*** | ***Enclosure Material*** | ***Gasket Material*** | ***Degree of Protection*** |
| CEI EN 60947-5-1 | Thermoplastic ABS, conforms to UL94/HB | Caoutchouc (rubber) foam | IP65 according to CEI EN 60529 |

Also check out our metal pushbutton enclosures in the Enclosures section.

**SA107-40SL** **SA105-40SL** **SA100SL**

Enclosures have molded knock-outs for 1/2" conduit fittings.

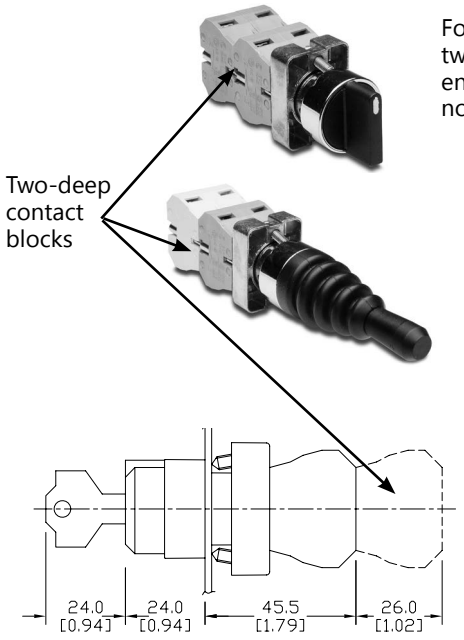
## Important notes about enclosure depth and over-tightening

Switches with two-deep contact blocks require enclosures that are 74mm deep: 51mm-deep enclosures are too shallow and the switch contact block will not fit.

For switches with one-deep contact blocks, either 51mm-deep or 74mm-deep enclosures can be used.

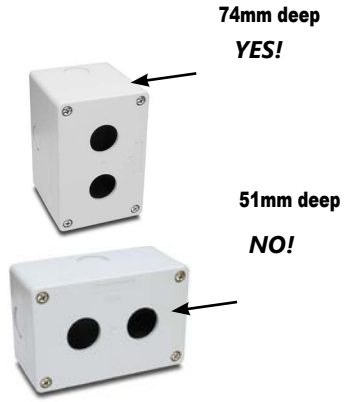
Also, do not over-tighten when securing switch in the enclosure body. Over-tightening will crack the plastic body of the enclosure.

When installing pushbutton, switches, and joysticks with securing screws, ensure that they have good purchase on area away from the perforated key-way slots made for other switch types. Securing screws should be tightened to 4.5 lb·in or less.




Dimensions: mm [inches]

For example: If using a switch having a two-deep contact block with a two-hole enclosure, order a 74mm-deep SA104SL, not a 51mm-deep SA105-40SL.




## No-Hole Model

| No Hole Model | | | | | |
|---|---|---|---|---|---|
| ***Part Number*** | ***Color*** | ***Price*** | ***Drawing Link*** | ***Hole Size/Depth*** | ***Mounting Instructions*** |
| ***SA111-00*** | Gray | $-0ayl: | PDF | No Holes | Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body. |

**Note: This enclosure works with most 22mm pushbuttons but may not work with Cutler-Hammer E22 series pushbuttons. Check your pushbutton dimensions before ordering.**

**74mm deep: SA111-00**

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## Single-Hole Models

51mm deep:
SA100SL
SA101SL

74mm deep:
SA103SL
SA104SL

| Single-Hole Models | | | | | |
|---|---|---|---|---|---|
| ***Part Number*** | ***Color*** | ***Price*** | ***Drawing Link*** | ***Hole Size/Depth*** | ***Mounting Instructions*** |
| ***SA100SL*** | Gray | $aya: | PDF | Hole size fits 22mm devices, 51mm depth accommodates single-deep contact block switches | Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body. |
| ***SA101SL*** | Gray body/yellow top | $ayb: | PDF | | |
| ***SA103SL*** | Gray | $ayc: | PDF | Hole size fits 22mm devices, 74mm depth accommodates two-deep contact block switches | |
| ***SA104SL*** | Gray body/yellow top | $ayd: | PDF | | |

## Two-Hole Models

51mm deep:
SA105-40SL

| Two-Hole Models | | | | | |
|---|---|---|---|---|---|
| ***Part Number*** | ***Color*** | ***Price*** | ***Drawing Link*** | ***Hole Size/Depth*** | ***Mounting Instructions*** |
| ***SA105-40SL*** | Gray | $0aye: | PDF | Hole size fits 22mm devices, 51mm depth accommodates single-deep contact block switches | Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body. |
| ***SA106-40SL*** | Gray | $;0ayf: | PDF | Hole size fits 22mm devices 74mm depth accommodates two-deep contact block switches | |

## Three-Hole Models

51mm deep:
SA107-40SL

| Three-Hole Models | | | | | |
|---|---|---|---|---|---|
| ***Part Number*** | ***Color*** | ***Price*** | ***Drawing Link*** | ***Hole Size/Depth*** | ***Mounting Instructions*** |
| ***SA107-40SL*** | Gray | $0ayg: | PDF | Hole size fits 22mm devices, 51mm depth accommodates single-deep contact block switches | Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body. |
| ***SA108-40SL*** | | $0ayh: | PDF | Hole size fits 22mm devices, 74mm depth accommodates two-deep contact block switches | |

# Plastic Enclosures for 22mm Pilot Devices

## Four-Hole Models

**51mm deep:**
**SA109-40SL**

| Four-Hhole Models | | | | | |
|---|---|---|---|---|---|
| ***Part Number*** | ***Color*** | ***Price*** | ***Drawing Link*** | ***Hole Size/Depth*** | ***Mounting Instructions*** |
| ***SA109-40SL*** | Gray | $-0ayi: | PDF | Hole size fits 22mm devices, 51mm depth accommodates single-deep contact block switches | Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body. |
| ***SA110-40SL*** | | $-0ayj: | PDF | Hole size fits 22mm devices, 74mm depth accommodates two-deep contact block switches | |

## Five-and Six-Hole Models

**74mm deep:**
**SA111**

**74mm deep:**
**SA112**

| Five-and Six-Hole Models | | | | | |
|---|---|---|---|---|---|
| ***Part Number*** | ***Color*** | ***Price*** | ***Drawing Link*** | ***Hole Size/Depth*** | ***Mounting Instructions*** |
| ***SA111*** | Gray | $0ayk: | PDF | Hole size fits 22mm devices, 74mm depth accommodates two-deep contact block switches | Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body. |
| ***SA112*** | | $0ayn: | PDF | Hole size fits 22mm devices, 74mm depth accommodates two-deep contact block switches | |

***Note: These enclosures work with most 22mm pushbuttons, but may not work with Cutler-Hammer E22 series pushbuttons. Check your pushbutton dimensions before ordering.***

# GCX Series 22mm Plastic Pilot Devices Specifications

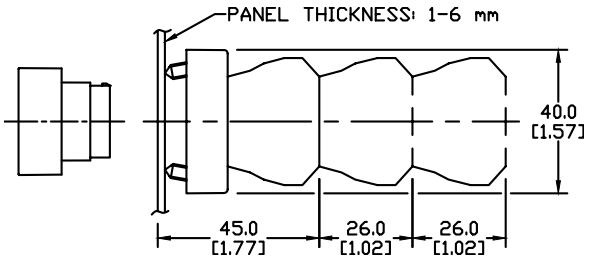
## Assembly information

These pushbuttons and indicator lights are supplied with the appropriate contact blocks, unless otherwise indicated.
Use these drawings as a guide to make sure there is adequate clearance behind the panel.

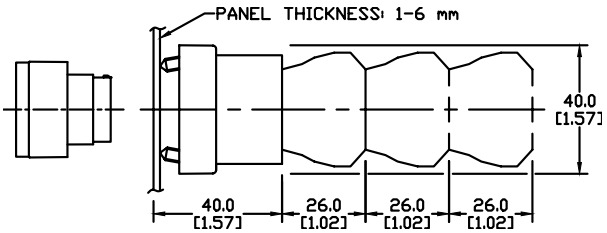
## Dimensions

mm
[inches]

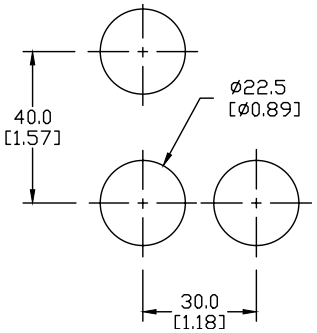
***Pushbuttons and selector switches***



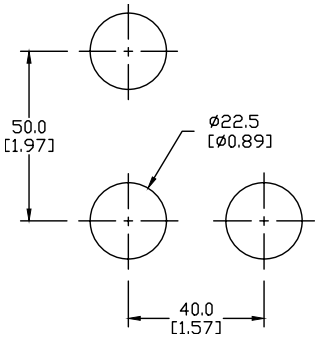

***Illuminated pushbuttons and selector switches/ indicator lights***




## Mounting



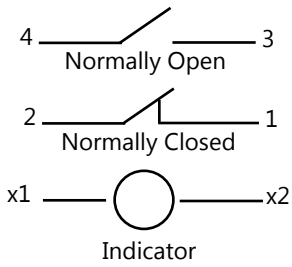

***This layout is suitable if all switches are 230V or less and the same polarity.***




***This layout is suitable if all switches are 400V or less and different polarity.***

***NOTE: Contact blocks can be arranged up to three deep by two wide.***

Typical Wiring




## Specifications

These specifications apply to all the GCX and ECX 22mm plastic pushbuttons and switches.

| Physical Specifications | |
|---|---|
| ***Standards Reference*** | CEI EN 60947-5-1, CSA C22-2 n.14 |
| ***Approvals*** | UL File E189258, IMQ (where specified) |
| ***Enclosure Material*** | Fiberglass reinforced thermoplastic |
| ***Contacts Material*** | Silver |
| ***Protection Degree*** | IP40 for GCX3151-24, GCX3151-120, GCX3153-24 and GCX3153-120. IP65 for all others.(See Appendix of this catalog for explanation of IP ratings according to IEC 144 CEI 70-1.) |
| ***Electric Shock Protection*** | IEC 536, Class II |
| ***Temperature Ratings*** | Storage: -40 -to 80ºC (-40 to 176º F)<br>Operating: -25º to +70ºC (-13º to 158º F) |
| ***Working Positions*** | All working positions are allowed |
| ***Mechanical Life*** | Pushbuttons, selector switches, joy stick switches: 1,000,000 operations<br>Emergency mushrooms and push-push pushbuttons: 300,000 operations |
| ***Positive Opening Operation*** | (according to IEC 947-5-1)<br>All functions incorporating an NC contact are positive opening operation |

| Electrical Specifications | |
|---|---|
| ***Rated Thermal Current (contact block)*** | A300, Q300 (Refer to E22 Series mounting/contact rating section for details) |
| ***Rated Insulation Voltage*** | Ui 660V according to CEI EN 60947-5-1,<br>300V according to CSA C22-2 n.14 and UL 508 |
| ***Dielectric Strength*** | 3kV (1 second) |
| ***Insulation Resistance*** | 2MΩ min. (500VDC) |
| ***Initial Contact Resistance*** | ≤ 25mΩ |
| ***Short-Circuit Protection**** | Cartridge fuses gl 10 A-500V 10, 3x38l1 100 KA |
| ***Terminal Markings*** | According to CENELEC EN 50013 |
| ***Connections*** | Single screw with non-loosening plate clamp,14AWG max.,Tighten to 0.8Nm max |
| ***Contacts Operation*** | Self-cleaning types EN01 (N.C.) EN 10 (N.O.) slow-action, positive opening |
| ***Operation Frequency*** | 3600 operations per hour max. |
| ***Utilization Category*** | AC15 (Control of AC electromagnetic loads)<br>24 volts AC at 10 amps<br>130 volts AC at 6.5 amps<br>DC13 (Control of DC electromagnetic loads)<br>24 volts DC at 1.5 amps<br>110 volts DC at 0.5 amps |

***Note: Recommended, not supplied**