

# Plastic Enclosures for 22mm Pilot Devices

## 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



SA107-40SL SA105-40SL SA100SL

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

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

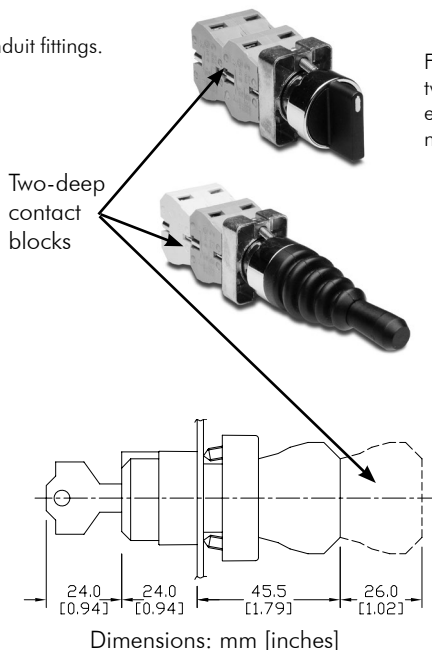
### Important notes about enclosure depth and over-tightening

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.

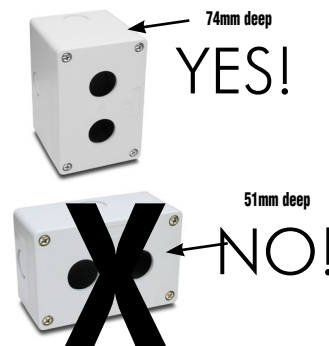
For switches with one-deep contact blocks, either 51mm-deep or 74mm-deep enclosures can be used.

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 keyway slots made for other switch types. Securing screws should be tightened to 4.5 lb-in or less.



For example: If using a switch having a two-deep contact block with a two-hole enclosure, order a 74mm-deep SA106-40SL, not a 51mm-deep SA105-40SL.



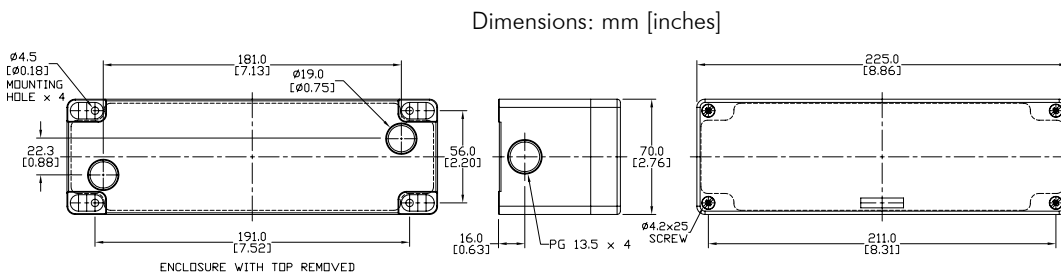
## No-hole model

Part Number	Color	Price	Dimensions (HxWxD)	Hole Size/Depth	Mounting Instructions
SA111-00	Gray	\$12.50	225x70x74	No Holes	Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body.



74mm deep: SA111-00

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



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## Single-hole models

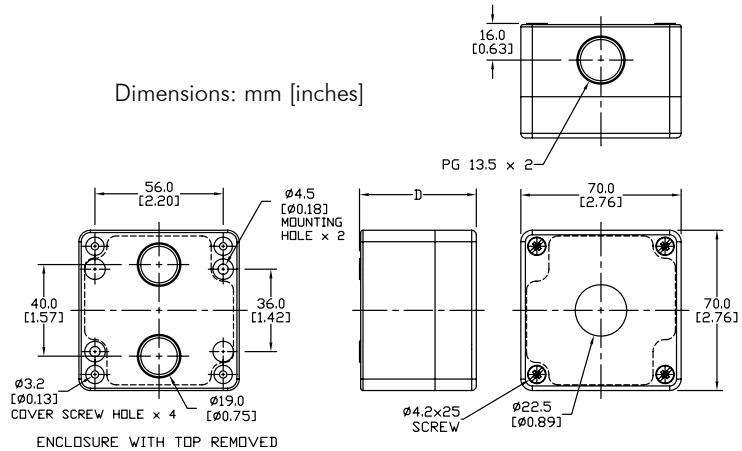


**51mm deep:** SA100SL  
SA101SL

**74mm deep:** SA103SL  
SA104SL

Part Number	Color	Price	Dimensions (HxWxD)	Hole Size/Depth	Mounting Instructions
SA100SL	Gray	\$6.75	70x70x51	Hole size fits 22mm devices, 51mm depth accommodates <b>single-deep contact block</b> switches	Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body.
SA101SL	Gray body/yellow top	\$7.25	70x70x51		
SA103SL	Gray	\$7.75	70x70x74	Hole size fits 22mm devices, 74mm depth accommodates <b>two-deep contact block</b> switches	
SA104SL	Gray body/yellow top	\$8.00	70x70x74		

Dimensions: mm [inches]



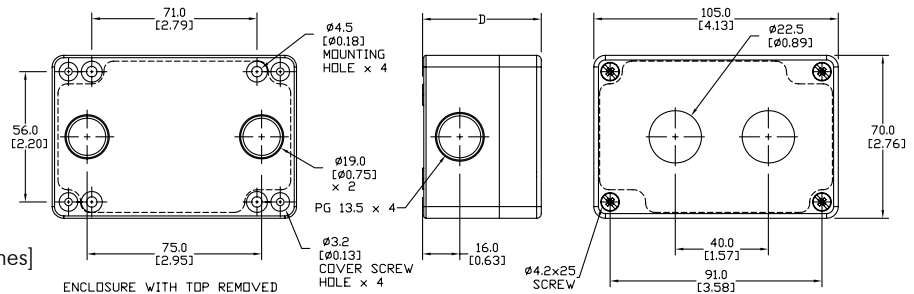
## Two-hole models



**51mm deep:** SA105-40SL

Part Number	Color	Price	Dimensions (HxWxD)	Hole Size/Depth	Mounting Instructions
SA105-40SL	Gray	\$8.50	105x70x51 (40mm between hole centers)	Hole size fits 22mm devices, 51mm depth accommodates <b>single-deep contact block</b> switches	Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body.
SA106-40SL	Gray	\$9.25	105x70x74 (40mm between hole centers)	Hole size fits 22mm devices, 74mm depth accommodates <b>two-deep contact block</b> switches	

Dimensions: mm [inches]



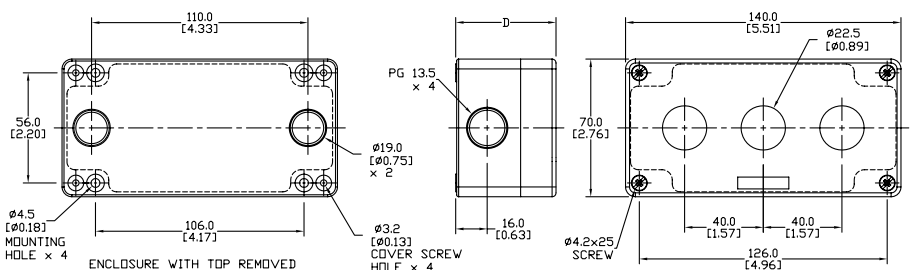
## Three-hole models



**51mm deep:** SA107-40SL

Part Number	Color	Price	Dimensions (HxWxD)	Hole Size/Depth	Mounting Instructions
SA107-40SL	Gray	\$10.50	140x70x51 (40mm between hole centers)	Hole size fits 22mm devices, 51mm depth accommodates <b>single-deep contact block</b> switches	Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body.
SA108-40SL		\$12.00	140x70x74 (40mm between hole centers)	Hole size fits 22mm devices, 74mm depth accommodates <b>two-deep contact block</b> switches	

Dimensions: mm [inches]



# Plastic Enclosures for 22mm Pilot Devices

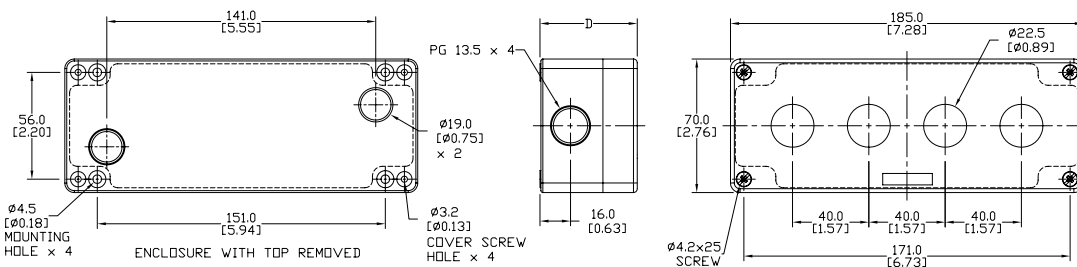
## Four-hole models



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

Part Number	Color	Price	Dimensions (HxWxD)	Hole Size/Depth	Mounting Instructions
SA109-40SL	Gray	\$12.00	185x70x51 (40mm between hole centers)	Hole size fits 22mm devices, 51mm depth accommodates <b>single-deep contact block</b> switches	Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body.
SA110-40SL		\$14.00	185x70x74 (40mm between hole centers)	Hole size fits 22mm devices, 74mm depth accommodates <b>two-deep contact block</b> switches	

Dimensions: mm [inches]



## Five-hole and six-hole models



**74mm deep:**  
SA111

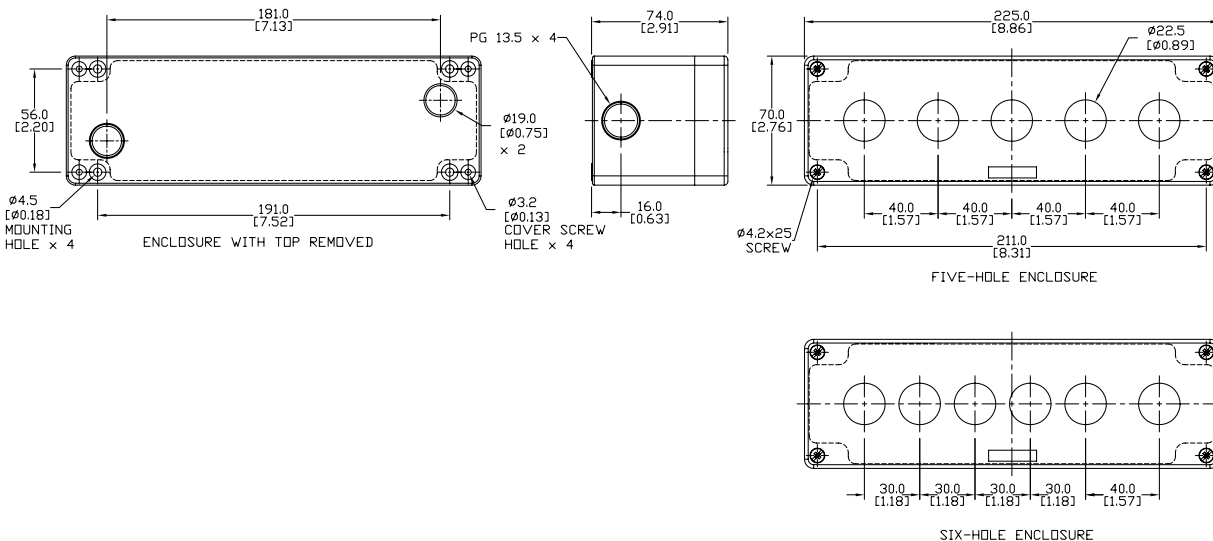


**74mm deep:**  
SA112

Part Number	Color	Price	Dimensions (HxWxD)	Hole Size/Depth	Mounting Instructions
SA111	Gray	\$12.50	225x70x74 (40mm between hole centers)	Hole size fits 22mm devices, 74mm depth accommodates <b>two-deep contact block</b> switches	Tighten 22mm devices only as needed to provide proper sealing. Over-tightening will crack plastic body.
SA112		\$13.00	225x70x74 (30mm between hole centers, except 40mm for 6th hole)	Hole size fits 22mm devices, 74mm depth accommodates <b>two-deep contact block</b> 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.*

Dimensions: mm [inches]

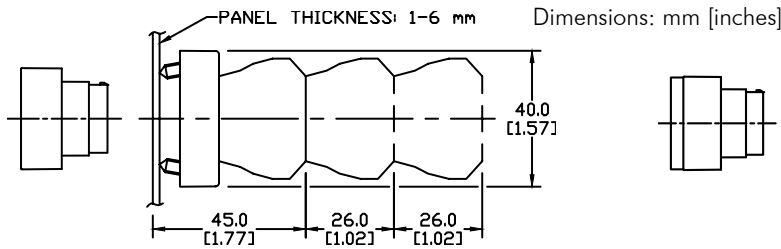


# GCX Series 22mm Plastic Pilot Devices Specifications

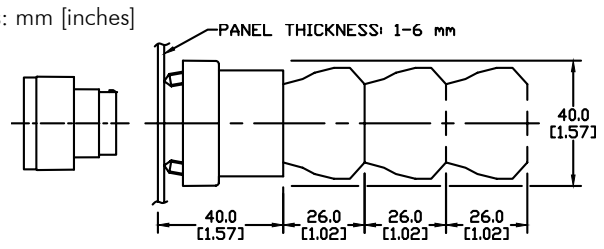
## Assembly information

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.

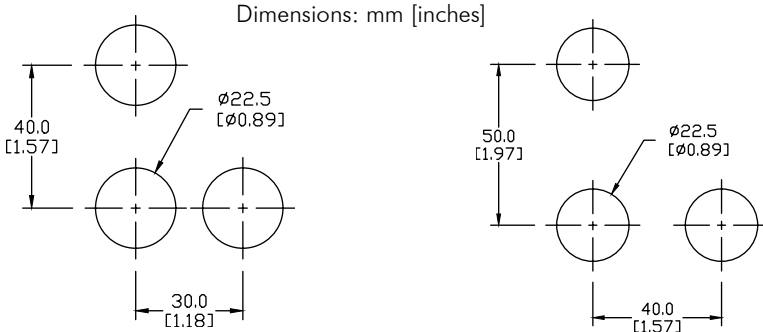
### Pushbuttons and selector switches



### Illuminated pushbuttons and selector switches/indicator lights

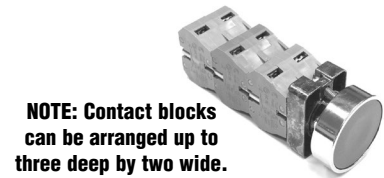


## Mounting



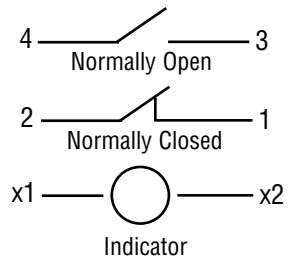
This layout is suitable if all switches are 230V or less and the same polarity.

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		Electrical Specifications	
<b>Standards Reference</b>	CEI EN 60947-5-1, CSA C22-2 n.14	<b>Rated Thermal Current (contact block)</b>	A300, Q300 (Refer to E22 Series mounting/contact rating section for details)
<b>Approvals</b>	UL File E189258, IMQ (where specified)	<b>Rated Insulation Voltage</b>	Ui 660V according to CEI EN 60947-5-1, 300V according to CSA C22-2 n.14 and UL 508
<b>Enclosure Material</b>	Fiberglass reinforced thermoplastic	<b>Dielectric Strength</b>	3kV (1 second)
<b>Contacts Material</b>	Silver	<b>Insulation Resistance</b>	2MΩ min. (500VDC)
<b>Protection Degree</b>	IP 40 for GCX3151-24, GCX3151-120, GCX3153-24 and GCX3153-120. IP 65 for all others. (See Appendix of this catalog for explanation of IP ratings according to IEC 144 CEI 70-1.)	<b>Initial Contact Resistance</b>	≤25mΩ
<b>Electric Shock Protection</b>	IEC 536, Class II	<b>Short-Circuit Protection*</b>	Cartridge fuses gl 10 A-500V 10, 3x381 100 KA
<b>Temperature Ratings</b>	Storage: -40° to 80°C (-40° to 176° F) Operating: -25° to +70°C (-13° to 158° F)	<b>Terminal Markings</b>	According to CENELEC EN 50013
<b>Working Positions</b>	All working positions are allowed	<b>Connections</b>	Single screw with non-loosening plate clamp, 14AWG max., Tighten to 0.8Nm max
<b>Mechanical Life</b>	Pushbuttons, selector switches, joy stick switches: 1,000,000 operations Emergency mushrooms and push-push pushbuttons: 300,000 operations	<b>Contacts Operation</b>	Self-cleaning types EN01 (N.C.) EN 10 (N.O.) slow action, positive opening
<b>Positive Opening Operation</b>	(according to IEC 947-5-1) All functions incorporating an NC contact are positive opening operation	<b>Operation Frequency</b>	3600 operations per hour max.
		<b>Utilization Category</b>	AC15 (Control of AC electromagnetic loads) 24 volts AC at 10 amps 130 volts AC at 6.5 amps DC13 (Control of DC electromagnetic loads) 24 volts DC at 1.5 amps 110 volts DC at 0.5 amps

\*Note: Recommended, not supplied

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.