

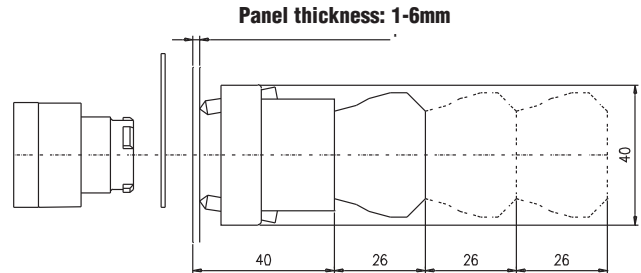
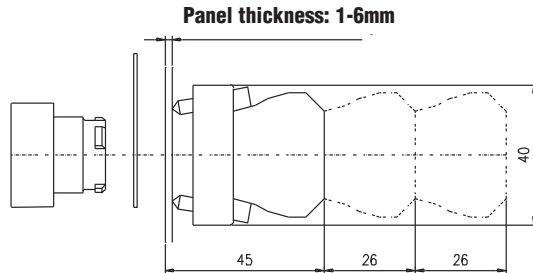
22 mm Metal Pilot Devices Specifications

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.

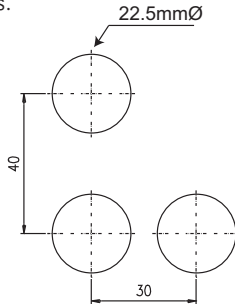
Pushbuttons and selector switches

Lighted pushbuttons and selector switches/pilot lights



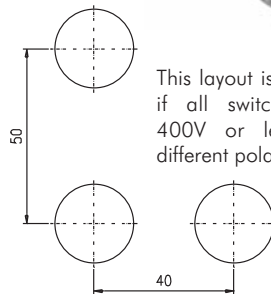
Panel holes

For safe operation, use these mounting hole drawings to ensure that there is adequate space between switches.



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

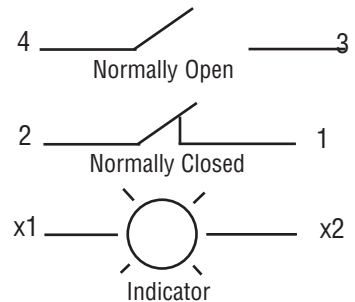
NOTE: Contact blocks can be arranged up to three deep by two wide.



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

All dimensions are in millimeters. 25.4mm = 1 inch. For example, 30 mm in inches = 30/25.4 = 1.181 inches.

Typical Wiring



Specifications

These specifications apply to all the 22 mm metal pushbuttons and switches.

Physical Specifications	
Standards Reference	CEI EN 60947-5-1, CSA C22-2 n.14
Approvals	CSA, IMQ (where specified), UL File E189258
Enclosure Material	Zn + Al + Mg alloy, chromium plated
Contacts Material	Gold plated silver
Protection Degree	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.)
Temperature Ratings	Storage: -40° to 80°C (-40° to 176° F) Operating: -25° to +70°C (-13° to 158° F)
Working Positions	All working positions are allowed
Mechanical Life	Pushbuttons, selector switches, joy stick switches: 1,000,000 operations Mushroom pushbuttons: 300,000 operations

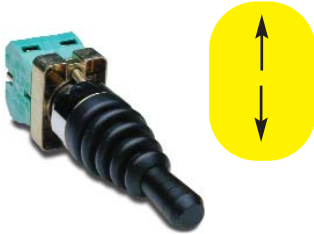
Electrical Specifications	
Rated Thermal Current (contact block)	A300, Q300 (Refer to page e25-51. for more information.)
Rated Insulation Voltage	Ui 660V according to CEI EN 60947-5-1, 300V according to CSA C22-2 n.14
Dielectric Strength	3KV (1 second)
Insulation Resistance	2MΩ min. (500VDC)
Initial Contact Resistance	≤25mΩ
Short-Circuit Protection*	Cartridge fuses gl 10 A-500V 10,3x38I1 100 KA
Terminal Markings	According to CENELEC EN 50013
Connections	Single screw with non-loosening plate clamp, 14AWG 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) 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

22 mm Metal Joystick Selector Switches

Joystick selector switches

Four models available



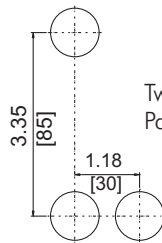
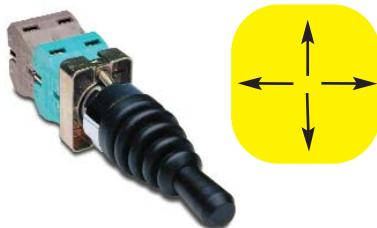
Part Number	Description	Price
ECX1510	22 mm metal joystick-style selector switch, two-position momentary , two N.O. contact blocks <--->	
ECX1512	22 mm metal joystick-style selector switch, two-position maintained , two N.O. contact blocks <--->	
ECX1520	22 mm metal joystick-style selector switch, four-position momentary , four N.O. contact blocks <--->	
ECX1524	22 mm metal joystick-style selector switch, four-position maintained , four N.O. contact blocks <--->	

Note: Four-position switches use two special contact blocks which are not replaceable.

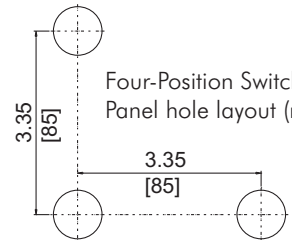
Note: When using switches having two-deep contact blocks (4-position joysticks) with the 22 mm plastic enclosures, use enclosures that are 74 mm deep; 51 mm-deep enclosures are too shallow.

ECX1510 (Two-position momentary) ECX1512 (Two-position maintained)

- Moving the joystick **UP** will close contact on one side.
- Moving the joystick **DOWN** will close contact on other side.

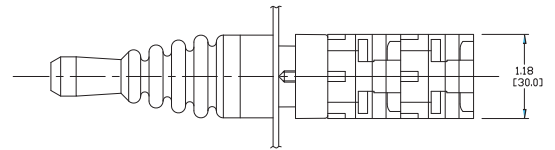


Two-Position Switch
Panel hole layout (mm)



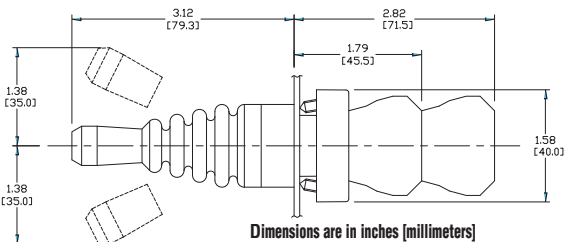
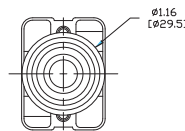
Four-Position Switch
Panel hole layout (mm)

Dimensions



ECX1520 (Four-position momentary) ECX1524 (Four-position maintained)

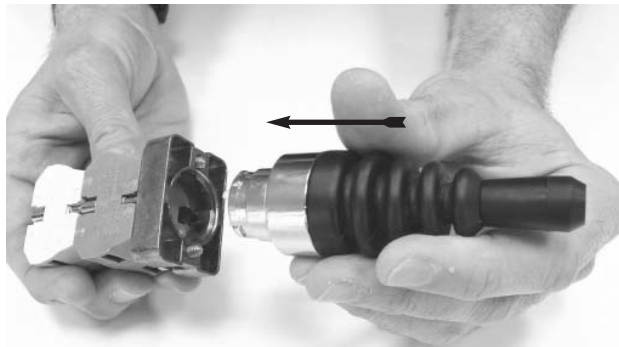
- Moving the joystick **UP** will close Green contact on one side and moving it **DOWN** will close Gray contact located behind it.
- Moving the joystick **RIGHT** will close Green contact on other side and moving it **LEFT** will close Gray contact located behind it.



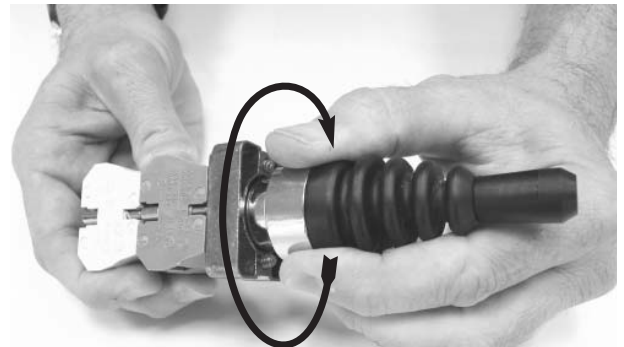
Dimensions are in inches [millimeters]

Important installation note

It is very important that the joystick be assembled correctly to ensure proper operation.



Insert operator into support base (panel is not shown).



Twist clockwise until it clicks into place. Carefully tighten the securing screws. Do not over-tighten. If the operator is not "clicked" into position before the screws are tightened, the switch will not work properly.