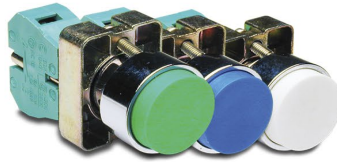


GCX/ECX Series 22mm Metal Pilot Devices Selection Guide



Flush

- Momentary 30 or 40mm operators
- Available in six colors: black, red, yellow, blue, white and green
- One contact block included
- ON/OFF models also available



Extended

- Momentary 30mm operators
- Available in six colors: black, red, yellow, blue, white and green
- One contact block included



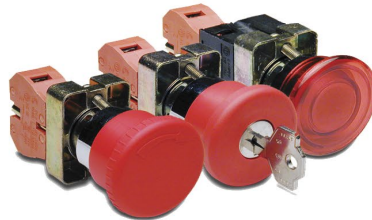
Two way

- Two way on/off control
- With or without illuminated indicators
- One N.O. and one N.C. contact block included



Illuminated

- Available in clear, red, yellow, blue, white and green; 24 and 120-volt models
- Momentary and push-push styles
- Flush or extended operators available
- Incandescent and LED models
- One contact block included



Mushroom

- Available in momentary, twist-to-release, and key release models
- One contact block included
- Also available in incandescent and LED illuminated models



Audible annunciators and potentiometers

- Audible annunciators with or without LED indicator
- 5 and 10 K Ω potentiometers



Selector switches

- Two and three-position in spring return and maintained, non-illuminated and illuminated; incandescent and LED models
- Contact block included



Key switches

- Two and three-position
- Contact blocks included



Joysticks

- Two and four-position, maintained and momentary
- Contact blocks included



Pilot lights

- Available in six colors: red, green, white, clear, yellow and blue
- 24 and 120-volt models with LED
- Frosted diffuser for even lighting
- Incandescent or LED indicators

Accessories



- One to six-hole enclosures

- Bulbs and LEDs

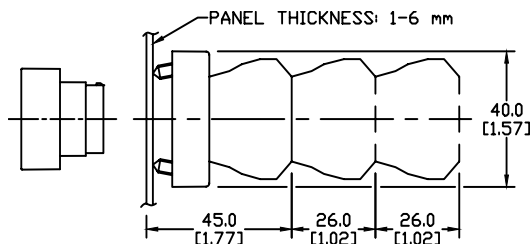
- Protective actuator caps

GCX Series 22mm Metal Pilot Devices Specifications

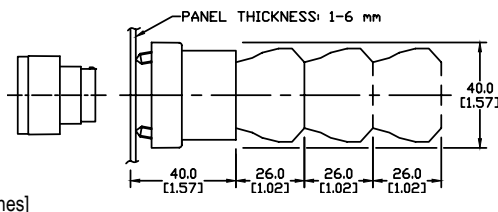
Assembly information

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

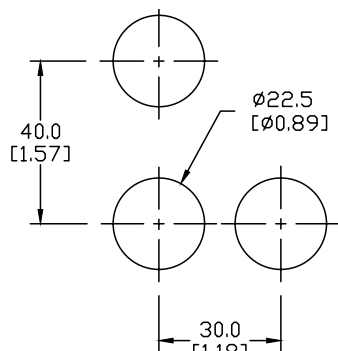


Illuminated pushbuttons and selector switches/pilot lights

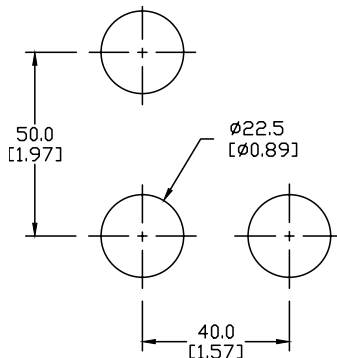


Dimensions: mm [inches]

Mounting



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

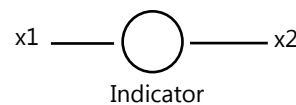
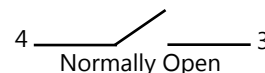


This layout is suitable if all switches are 400V or less and different polarity.

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



Typical Wiring



Specifications

These specifications apply to all GCX and ECX 22mm 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	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.)
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 E22 Series mounting/contact rating section for details)
Rated Insulation Voltage	Ui 660V according to CEI EN 60947-5-1, 300V according to CSA C22-2 n.14
Dielectric Strength	3 kV (1 second)
Insulation Resistance	2 MΩ min. (500 VDC)
Initial Contact Resistance	≤ 25 mΩ
Short-Circuit Protection*	Cartridge fuses gl 10A - 500V 10,3x381 100 kA
Terminal Markings	According to CENELEC EN 50013
Connections	Single screw with non-loosening plate clamp, 14 AWG 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

GCX Series 22mm Plastic Pilot Devices Specifications

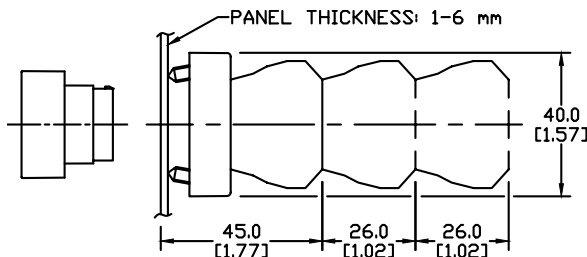
Assembly information

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.

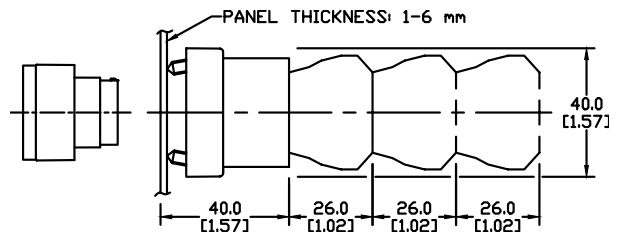
Dimensions

mm
[inches]

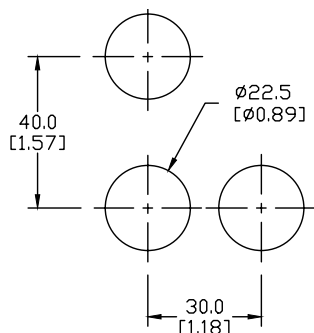
Pushbuttons and selector switches



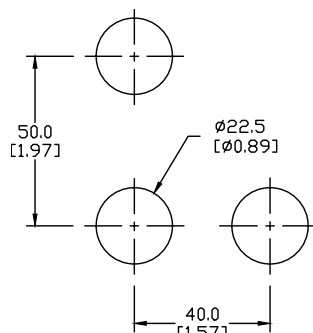
Illuminated pushbuttons and selector switches/ indicator lights



Mounting



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

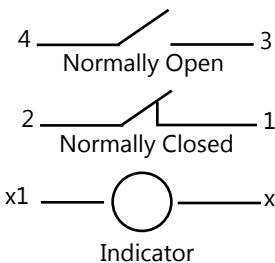


This layout is suitable if all switches are 400V or less and different polarity.

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 +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 Emergency mushrooms and push-push pushbuttons: 300,000 operations
Positive Opening Operation	(according to IEC 947-5-1) 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, 300V according to CSA C22-2 n.14 and UL 508
Dielectric Strength	3 kV (1 second)
Insulation Resistance	2 MΩ min. (500 VDC)
Initial Contact Resistance	≤ 25 mΩ
Short-Circuit Protection*	Cartridge fuses gl 10 A-500V 10, 3x381 100 KA
Terminal Markings	According to CENELEC EN 50013
Connections	Single screw with non-loosening plate clamp, 14 AWG max., Tighten to 0.8 N·m max
Contacts Operation	Self-cleaning types EN01 (N.C.) EN10 (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