

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



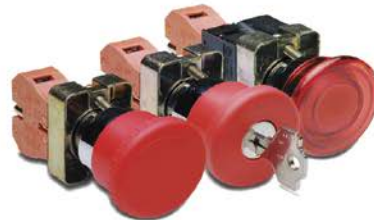
Two way

- 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

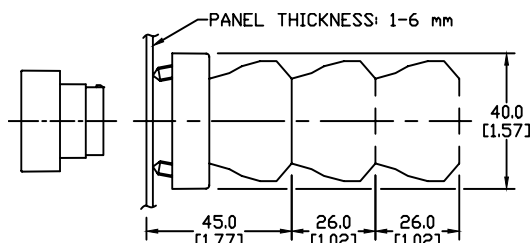
- Protective actuator caps

GCX Series 22mm Metal Pilot Devices Specifications

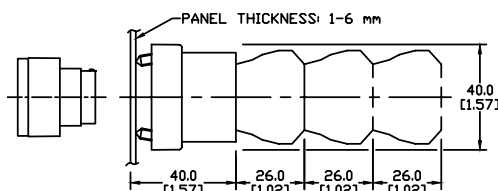
Assembly information

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

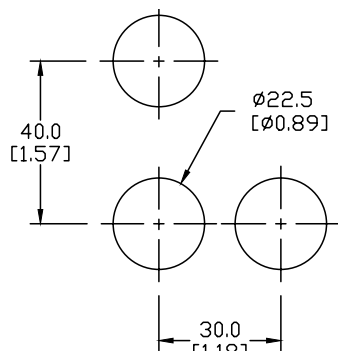


Illuminated pushbuttons and selector switches/pilot lights

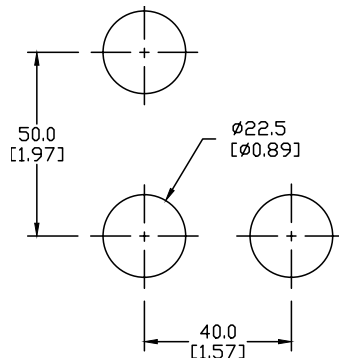


Dimensions: mm [inches]

Mounting



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

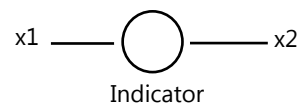
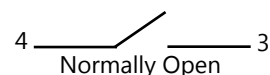


This layout is suitable if all switches are 400V or less and different polarity.

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



Typical Wiring



Specifications

These specifications apply to all GCX and ECX 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 | 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 | 3kV (1 second) |
| Insulation Resistance | 2MΩ min. (500VDC) |
| Initial Contact Resistance | ≤ 25mΩ |
| Short-Circuit Protection* | Cartridge fuses gl 10A - 500V 10,3x3811 100kA |
| 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

GCX Series 22mm Plastic Pilot Devices Specifications

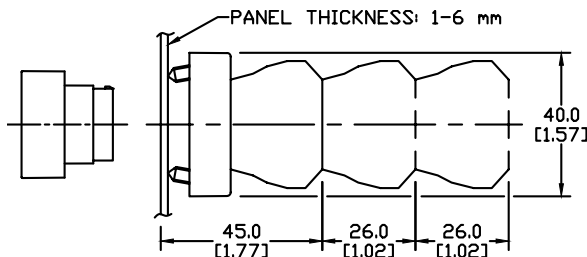
Assembly information

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.

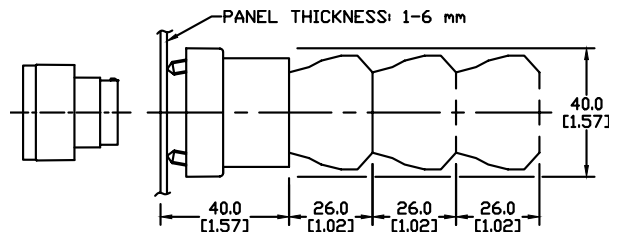
Dimensions

mm
[inches]

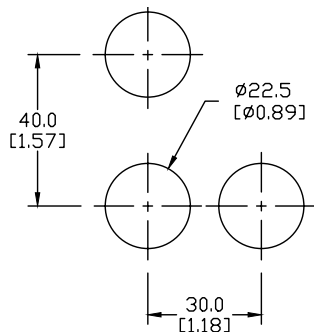
Pushbuttons and selector switches



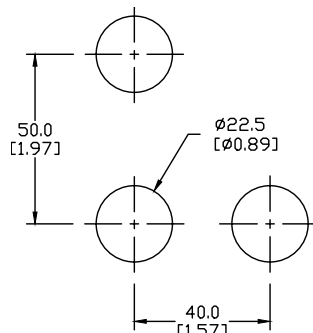
Illuminated pushbuttons and selector switches/ indicator lights



Mounting



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

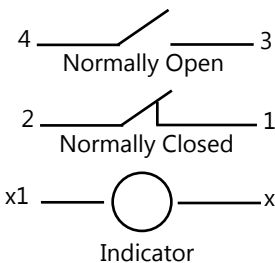


This layout is suitable if all switches are 400V or less and different polarity.

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 | | Electrical Specifications | |
|-----------------------------------|--|--|---|
| Standards Reference | CEI EN 60947-5-1, CSA C22-2 n.14 | Rated Thermal Current (contact block) | A300, Q300 (Refer to E22 Series mounting/contact rating section for details) |
| Approvals | UL File E189258, IMQ (where specified) | Rated Insulation Voltage | Ui 660V according to CEI EN 60947-5-1, 300V according to CSA C22-2 n.14 and UL 508 |
| Enclosure Material | Fiberglass reinforced thermoplastic | Dielectric Strength | 3kV (1 second) |
| Contacts Material | Silver | Insulation Resistance | 2MΩ min. (500VDC) |
| 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.) | Initial Contact Resistance | ≤ 25mΩ |
| Electric Shock Protection | IEC 536, Class II | Short-Circuit Protection* | Cartridge fuses gl 10 A-500V 10, 3x3811 100 KA |
| Temperature Ratings | Storage: -40 to 80°C (-40 to 176° F) Operating: -25° to +70°C (-13° to 158° F) | Terminal Markings | According to CENELEC EN 50013 |
| Working Positions | All working positions are allowed | Connections | Single screw with non-loosening plate clamp, 14AWG max., Tighten to 0.8Nm max |
| Mechanical Life | Pushbuttons, selector switches, joy stick switches: 1,000,000 operations Emergency mushrooms and push-push pushbuttons: 300,000 operations | Contacts Operation | Self-cleaning types EN01 (N.C.) EN 10 (N.O.) slow-action, positive opening |
| Positive Opening Operation | (according to IEC 947-5-1) All functions incorporating an NC contact are positive opening operation | 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