

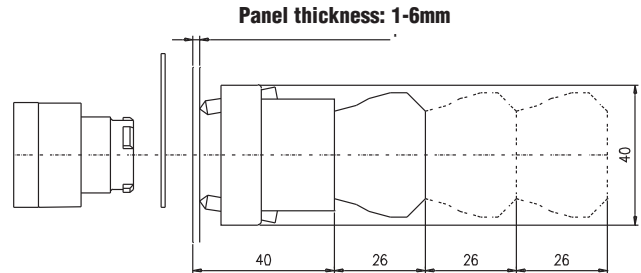
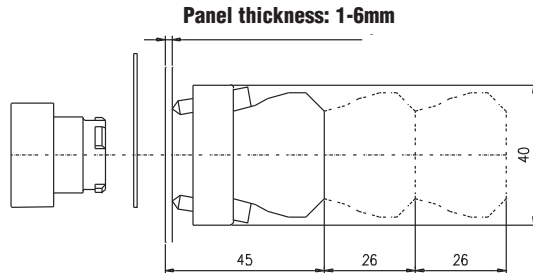
22 mm Metal Pilot Devices Specifications

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.

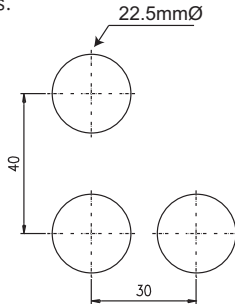
Pushbuttons and selector switches

Lighted pushbuttons and selector switches/pilot lights



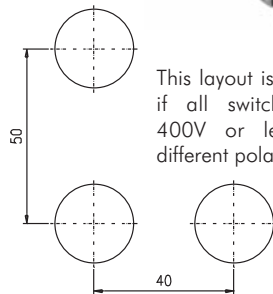
Panel holes

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.

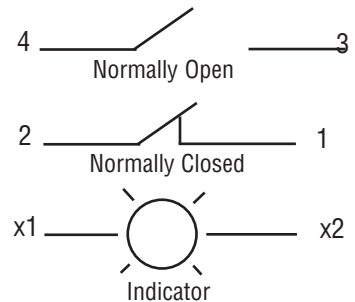
NOTE: Contact blocks can be arranged up to three deep by two wide.



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

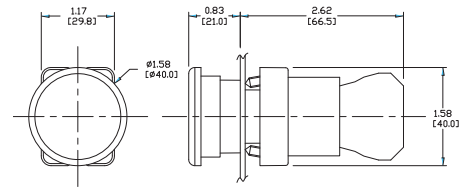
Electrical Specifications	
Rated Thermal Current (contact block)	A300, Q300 (Refer to page e25-51. for more information.)
Rated Insulation Voltage	Ui 660V according to CEI EN 60947-5-1, 300V according to CSA C22-2 n.14
Dielectric Strength	3KV (1 second)
Insulation Resistance	2MΩ min. (500VDC)
Initial 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 Illuminated Pushbuttons

Mushroom-style illuminated pushbuttons

All pushbuttons include operator, mounting adapter, chrome plated alloy bezel, indicating bulb (if applicable), and contact block. They are shipped unassembled. Legend plate is not included and must be ordered separately. All switches in this series use replacement contact block ECX1030 (Red, N.C.) or ECX1040 (Green, N.O.), sold separately in packages of two or five.



GCX1221-24

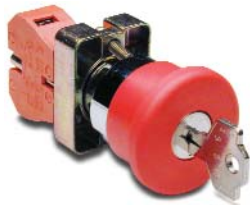
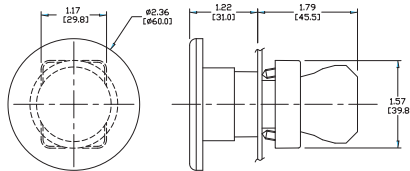
Part Number	Lamp Color	Price	Mushroom-style Illuminated Pushbuttons Description	Replacement Bulbs
Incandescent				
GCX1221-24	Red	<--->	22 mm metal incandescent momentary pushbutton with incandescent illuminated 40 mm mushroom actuator, 24VDC/VAC, one N.C. contact block	ECX1902-5 5/pk 80mA
GCX1221-120	Red	<--->	22 mm metal incandescent momentary pushbutton with incandescent illuminated 40 mm mushroom actuator, 120VDC/VAC, one N.C. contact block	ECX1904-5 5/pk 20mA
GCX1226-24	Red	<--->	22 mm metal incandescent pushbutton with incandescent illuminated 40 mm mushroom twist-to-release actuator, 24VDC/VAC, one N.C. contact block	ECX1902-5 5/pk 80mA
GCX1226-120	Red	<--->	22 mm metal incandescent pushbutton with incandescent illuminated 40 mm mushroom twist-to-release actuator, 120VDC/VAC, one N.C. contact block	ECX1904-5 5/pk 20mA
LED				
GCX1221-24L	Red	<--->	22 mm metal momentary pushbutton with LED illuminated 40 mm mushroom actuator, 24VDC/VAC, one N.C. contact block	ECX1911-2 2/pk 26mA
GCX1221-120L	Red	<--->	22 mm metal momentary pushbutton with LED illuminated 40 mm mushroom actuator, 120VDC/VAC, one N.C. contact block	ECX1921-2 2/pk 5mA
GCX1226-24L	Red	<--->	22 mm metal pushbutton with LED illuminated 40 mm mushroom twist-to-release actuator, 24VDC/VAC, one N.C. contact block	ECX1911-2 2/pk 26mA
GCX1226-120L	Red	<--->	22 mm metal pushbutton with LED illuminated 40 mm mushroom twist-to-release actuator, 120VDC/VAC, one N.C. contact block	ECX1921-2 2/pk 5mA

Non-Illuminated Mushroom pushbuttons

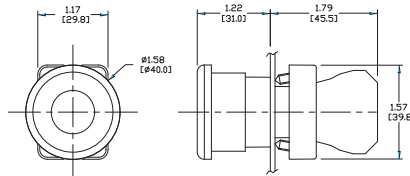
Has large 60 mm dia. actuator and mounts in standard 22 mm hole



GCX1137



GCX1141
(key operated)



Note: Keyed switches come with two keys. All metal 22 mm keyed switches are keyed alike. Replacement keys are available. Order part no. ECX1067-2 (pkg. of 2).

Part Number	Color	Description	Price
GCX1131	Red	Twist-to-release actuator with one N.C. contact block, fits in 22 mm dia. hole. Has large 40 mm dia. mushroom-style actuator.	<--->
GCX1134	Black	Momentary action with one N.O. contact block, fits in 22 mm dia. hole, has large 40 mm dia. mushroom-style actuator.	<--->
GCX1135	Red	Momentary action with one N.C. contact block, fits in 22 mm dia. hole, has large 40 mm dia. mushroom-style actuator. "Emergency" legend plate available (see Accessories).	<--->
GCX1136	Red	Twist-to-release actuator with one N.C. contact block, fits in 22 mm dia. hole. 60 mm mushroom-style actuator.	<--->
GCX1137	Red	Momentary action with one N.C. contact block, fits in 22 mm dia. hole, has large 60 mm dia. mushroom-style. "Emergency" legend plate available (see Accessories).	<--->
GCX1139	Yellow	Momentary action with one N.O. contact block, fits in 22 mm dia. hole, has large 40 mm dia. mushroom-style actuator.	<--->
GCX1141	Red	Key operated release with one N.C. contact block, fits in 22 mm dia. hole, has large 40 mm dia. mushroom-style actuator. "Emergency" legend plate available (see Accessories).	<--->

Note: Find our extensive line of accessories on pages e25-41 to e25-43

Note: All dimensions are in inches (millimeters).