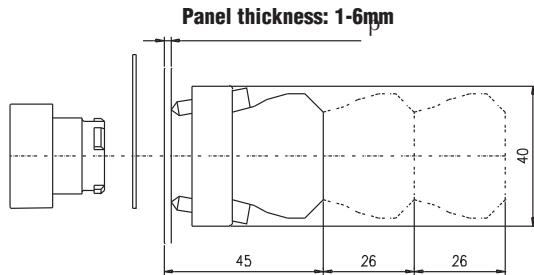


22 mm Metal Pilot Devices Specifications

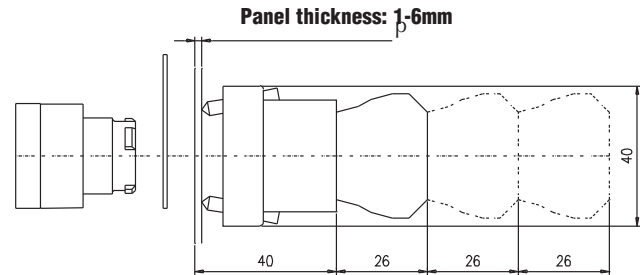
Assembly information

These pushbuttons and indicator lights are supplied with the appropriate contact blocks. Use these drawings as a guide to make sure there is adequate clearance behind the panel.

Pushbuttons and selector switches

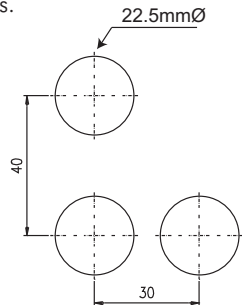


Lighted pushbuttons and selector switches/pilot lights



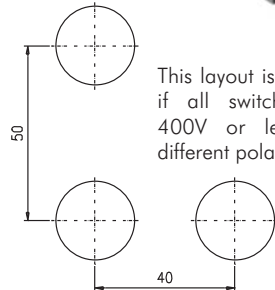
Panel holes

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



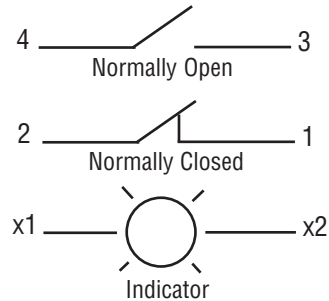
This layout is suitable if all switches are 230V or less and the same polarity.

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.

Typical Wiring



Specifications

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

Physical Specifications	
Standards Reference	IEC EN 60947_5_1, CSA C22-2 n.14
Approvals	CSA # 066746-0-000, IMQ (where specified), UL File E189258 (ECX 1030, 1040, 1041, 1042 contact blocks and ECX 1050 lamp holder with support base)
Enclosure Material	Zn + Al + Mg alloy, chromium plated
Contacts Material	Silver
Protection Degree	IP 65 according to IEC 144 CEI 70-1, unless otherwise stated (see page 31-10 for explanation of IP 65)
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 23-30 for more information.)
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	3KV (1 second)
Insulation Resistance	2MΩ min. (500V DC)
Initial Contact Resistance	≤25mΩ
Short-Circuit Protection (Recommended, not supplied)	Cartridge fuses gI 10 A-500V AC 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 (rated operation current)	AC15 (Control of AC electromagnetic loads) 24 V AC at 10 amps 130 V AC at 6.5 amps 400 V AC at 4 amps DC13 (Control of DC electromagnetic loads) 24 V DC at 2.8 amps 110 V DC at 0.5 amps 250 V DC at 0.27 amps

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

22 mm Metal Selector Switches

Two-position selector switches

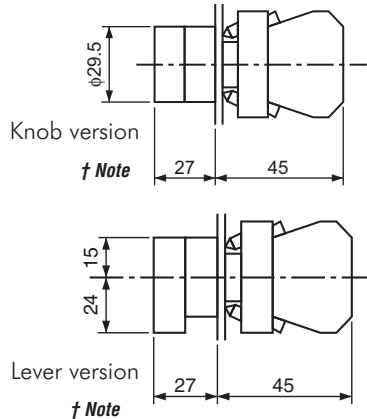


GCX1300 Knob version



GCX1350 Lever version

Part Number	Description - 2-Position Switches	
GCX1300	22 mm metal selector switch, two-position maintained , black knob. One N.O. contact block	
GCX1310	22 mm metal selector switch, two-position spring-return from right , black knob. One N.O. contact block	
GCX1350	22 mm metal selector switch, two-position maintained , black lever. One N.O. contact block	
GCX1360	22 mm metal selector switch, two-position spring-return from right , black lever. One N.O. contact block	



Contact Closure Sequence - 2-Position Switch				
Contact Blocks	Contact Arrangement (viewed from front)		Switch Position (viewed from front)	
	Left	Right	Left (Note 1)	Right (Note 2)
1 x NC	NC		X	
		NC		X
1 x NO	NO			X
		NO		X
2 x NC	NC	NC	XX	
2 x NO	NO	NO		XX

Note 1: Left switch position deactivates all contacts.
Note 2: Right switch position activates all contacts.

Note:

Three-position selector switches



GCX1320-22 Knob version



GCX1370-22 Lever version

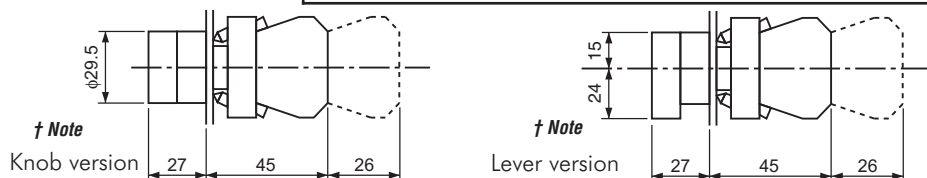
Part Number	Description - 3-Position Switches	
GCX1320-22	22 mm metal selector switch, three-position maintained , black knob, Two N.O. and two N.C. contact blocks	
GCX1330-22	22 mm metal selector switch, three-position spring-return to center , black knob, Two N.O. and two N.C. contact blocks	
GCX1370-22	22 mm metal selector switch, three-position, maintained , black lever, Two N.O. and two N.C. contact blocks	
GCX1380-22	22 mm metal selector switch, three-position spring-return to center , black lever, Two N.O. and two N.C. contact blocks	



Note: When using switches having two-deep contact blocks with the 22 mm plastic enclosures, be sure to use enclosures that are 74 mm deep; 51 mm-deep enclosures are too shallow and the switch body will not fit.

Contact Closure Sequence - 3-Position Switch					
Contact Blocks	Contact Arrangement (viewed from front)		Switch Position (viewed from front)		
	Left	Right	Left (Note 1)	Center (Note 2)	Right (Note 3)
1 x NC	NC			X	X
		NC	X	X	
1 x NO	NO		X		
		NO			X
2 x NC	NC	NC	X	XX	X
2 x NO	NO	NO	X		X

Note 1: Left switch position activates left side contacts (viewed from front).
Note 2: Center switch position deactivates all contacts.
Note 3: Right switch position activates right side contacts (viewed from front).



Note: You will find our extensive line of accessories on pages A22-22 through A22-24, and A22-33.

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