22 mm Metal Pilot Devices
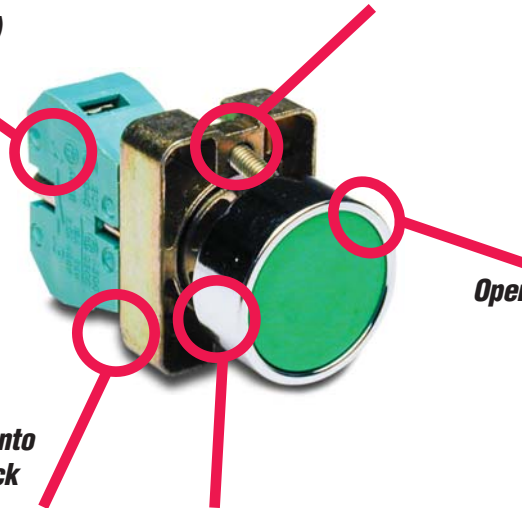## Features

Any combination of contact blocks is allowed, up to a total of six (two blocks wide and three blocks deep)

Secure mounting method eliminates twisting in mounting hole

Operators are protected to IP65

Support base mounts into panels up to 6 mm thick

Chrome-plated alloy bezel is not only corrosion-resistant, but also attractive
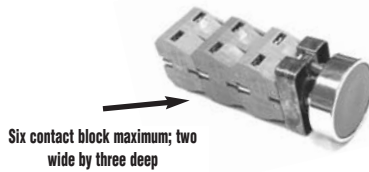
Easy installation

To remove operator, press toward support base and twist counter-clockwise.

To install switch, place support base against rear of panel (*not shown here*), insert the operator and twist clockwise until it clicks into place. Carefully tighten the securing screws. Do not overtighten.

Six contact block maximum; two wide by three deep

**Self-cleaning gold-plated silver contacts provide reliable, low-energy switching**

Contacts rated at 10 amps thermal current A300
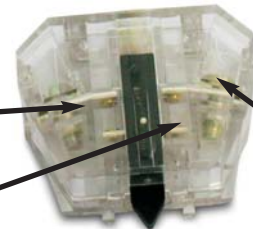
Pressure plate wiring terminals for easy, secure wiring, accepting up to 14 AWG wire

Clear contact block for illustration purposes. Clear contact blocks are not available for sale from AutomationDirect.

All indicators offer side wire entry with back screw terminals for easy wiring
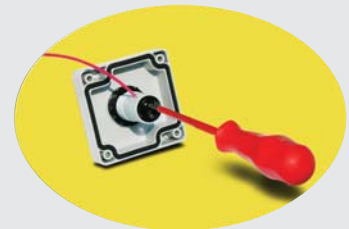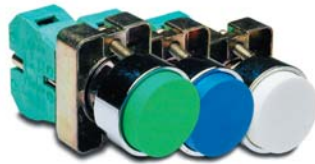
22 mm Metal Pilot Devices Selection Guide

Flush
- 30 or 40 mm operators
- Available in six colors: black, red, yellow, blue, white and green
- One contact block included

Extended
- 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 NO and one NC contact block included

Illuminated
- Available in black, red, yellow, blue, white and green
- 24 and 120-volt models
- One contact block included

Mushroom
- Available in momentary, twist-to-release, and key release models.
- One contact block included

Illuminated mushroom
- Available in red
- 24 and 120-volt models
- Momentary and twist-to-release
- One contact block included

Selector switches
- Two and three-position in spring return and maintained, non-illuminated and illuminated
- Contact blocks included

Key switches
- Two and three-position
- Contact blocks included

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

Indicating lights
- Available in six colors: red, green, white, clear, yellow and blue
- 24 and 120-volt models
- Frosted diffuser for even lighting
- Lamp replacement from the front
- Side wire entry for easier power wiring

Accessories

One, two, three and four-hole enclosures

Bulbs and LEDs

Protective actuator caps

PB & Lights

22 MM METAL PILOT DEVICES SPECIFICATIONS

Assembly information

Centsable 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.
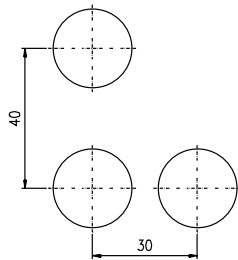
Pushbuttons and selector switches

Panel thickness: 1-6mm

45   26   26
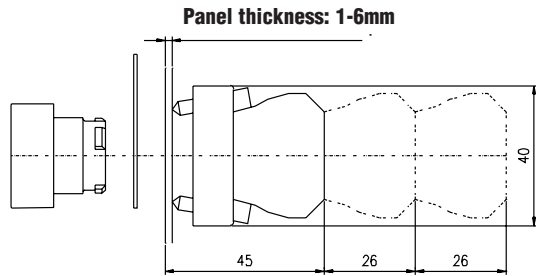
Lighted pushbuttons and selector switches/pilot lights

Panel thickness: 1-6mm
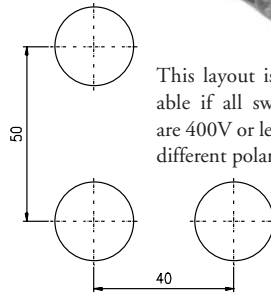

40   26   26   26
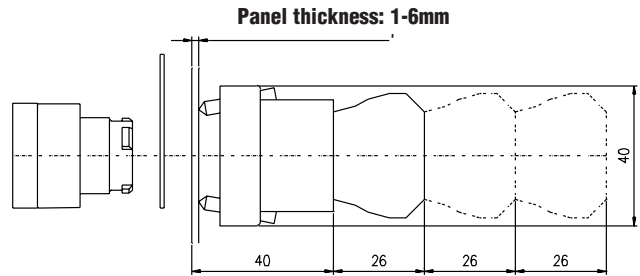
Panel holes

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.

40
30

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

50
40

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

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

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
Enclosure Material	Zn + Al + Mg alloy, chromium plated
Contacts Material	Gold plated silver
Protection Degree	IP 65 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),-5° to 35° C (23° to 95° 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)	10A, A300
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** 24 volts AC at 10 amps 130 volts AC at 6.5 amps **DC13** 24 volts DC at 1.5 amps 110 volts DC at 0.5 amps

Note: Recommended, not supplied

22 MM METAL PUSHBUTTONS

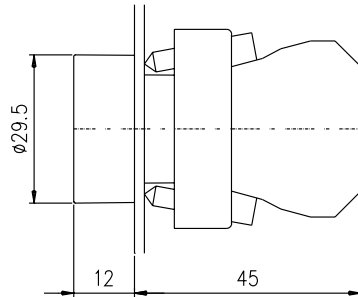## Momentary flush pushbuttons with protective metal ring (30 mm dia. actuator)
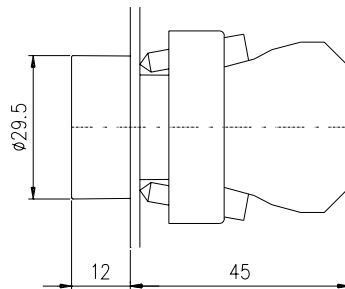
GCX1102

Part Number	Color	Description	Price
GCX1100	Black	One **N.O.** contact block, 30 mm dia. actuator, mounts in 22 mm hole	check
GCX1101	Red	One **N.C.** contact block, 30 mm dia. actuator, mounts in 22 mm hole	check
GCX1102	Green	One **N.O.** contact block, 30 mm dia. actuator, mounts in 22 mm hole	check
GCX1103	Yellow		check
GCX1104	Blue		check
GCX1105	White		check

Protective silicone covers for these pushbutton actuators are available. See Accessories Section.

Flush ON/OFF pushbuttons with protective metal ring (30 mm dia. actuator)

GCX1106

GCX1107

Part Number	Color	Description	Price
GCX1106	Red with "Off" symbol (O) on actuator	One **N.C.** contact block, mounts in 22 mm hole	check
GCX1107	Green with "On" symbol (I) on actuator	One **N.O.** contact block, mounts in 22 mm hole	check

Protective silicone covers for these pushbutton actuators are available. See Accessories Section.

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

Pushbuttons with protective metal ring (40 mm dia. actuator)
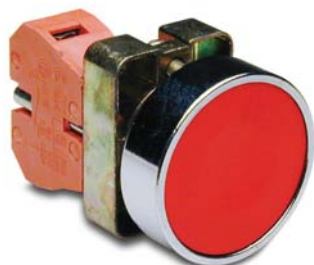
GCX1121
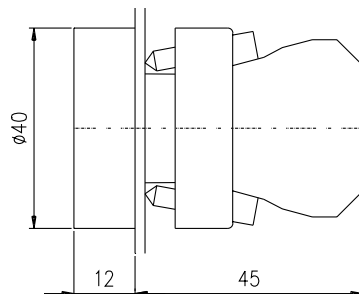
Part Number	Color	Description	Price
GCX1120	Black	One **N.O.** contact block, 40mm dia. actuator, mounts in 22 mm hole	check
GCX1121	Red	One **N.C.** contact block, 40mm dia. actuator, mounts in 22 mm hole	check
GCX1122	Green	One **N.O.** contact block, 40mm dia. actuator, mounts in 22 mm hole	check
GCX1123	Yellow		check
GCX1124	Blue		check
GCX1125	White		check

Protective silicone covers are not available for this pushbutton.

PB & Lights

22 MM METAL PUSHBUTTONS

Momentary extended pushbuttons
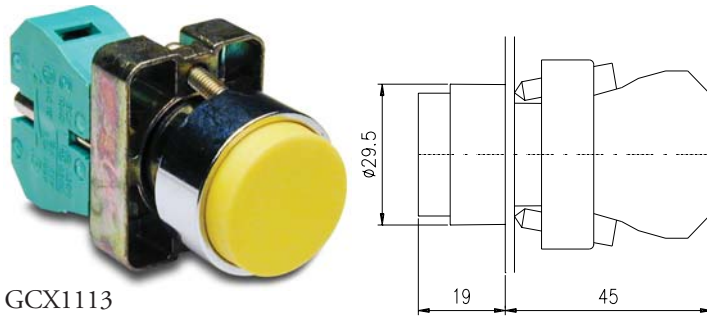
GCX1113

Part Number	Color	Description	Price
GCX1110	Black	One **N.O.** contact block, has extended 30 mm dia. actuator, mounts in 22 mm hole	check
GCX1111	Red	One **N.C.** contact block, has extended 30 mm dia. actuator, mounts in 22 mm hole	check
GCX1112	Green	One **N.O.** contact block, has extended 30 mm dia. actuator, mounts in 22 mm hole	check
GCX1113	Yellow		check
GCX1114	Blue		check
GCX1115	White		check

Clear protective silicone actuator cover is available. Order part no. ECX1706-5. See Accessories Section for more information.

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 22mm keyed switches are keyed alike. Replacement keys are available. Order part no. ECX1067-2 (pkg. of 2).
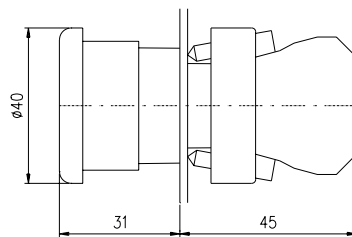
Part Number	Color	Description	Price
GCX1131	Red	**Twist-to-release** actuator with one **N.C.** contact block, typically used in Emergency Stop applications, fits in 22 mm dia. hole, has large 40 mm dia. mushroom-style actuator, "Emergency" legend plate available (see Accessories).	check
GCX1134	Black	**Momentary action** with one **N.O.** contact block, fits in 22 mm dia. hole, has large 40 mm dia. mushroom-style actuator.	check
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).	check
GCX1136	Red	**Twist-to-release** actuator with one **N.C.** contact block, typically used in Emergency Stop applications, fits in 22 mm dia. hole, 60 mm mushroom-style actuator, "Emergency" legend plate available (see Accessories).	check
GCX1137	Red	**Momentary action** with one **N.C.** contact block, fits in 22 mm dia. hole, has large 60 mm dia. mushroom-style actuator, "Emergency" legend plate available (see Accessories).	check
GCX1139	Yellow	**Momentary action** with one **N.O.** contact block, fits in 22 mm dia. hole, has large 40 mm dia. mushroom-style actuator.	check
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, typically used in Emergency Stop applications, "Emergency" legend plate available (see Accessories).	check

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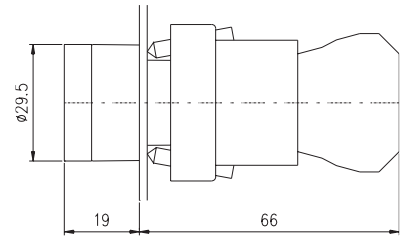
22 mm METAL ILLUMINATED PUSHBUTTONS

Illuminated momentary pushbutton with protective plastic ring

12 models available:

- Protective plastic ring for flush mount pushbutton functionality
- 24V with incandescent lamp in six colors
- 120V with incandescent lamp in six colors
- Replacement incandescent bulbs are available
- 24V and 120V LED lamps can be ordered separately and installed for longer life

GCX1202-24

Ø29.5

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

Part Number	Lamp Color	Description	Replacement Bulb Part. No.	Replacement LED Part. No.	Price
GCX1201-24	Red	22 mm metal illuminated pushbutton, **24VDC/VAC**. **One N.C.** contact block. Flush operator with colored plastic ring. Incandescent replacement bulbs and LEDs available.		ECX1911-2 pkg. of 2, 26mA current draw	check
GCX1202-24	Green			ECX1912-2 pkg. of 2, 26mA current draw	check
GCX1203-24	Yellow		ECX1902-5 pkg. of 5, 80mA current draw	ECX1913-2 pkg. of 2, 26mA current draw	check
GCX1204-24	Blue	22 mm metal illuminated pushbutton, **24VDC/VAC**. **One N.O.** contact block. Flush operator with colored plastic ring. Incandescent replacement bulbs and LEDs available.		ECX1914-2 pkg. of 2, 26mA current draw	check
GCX1205-24	Clear			ECX1915-2 pkg. of 2, 26mA current draw	check
GCX1206-24	White			ECX1915-2 pkg. of 2, 26mA current draw	check
GCX1201-120	Red	22 mm metal illuminated pushbutton, **120VDC/VAC**. **One N.C.** contact block. Flush operator with colored plastic ring. Incandescent replacement bulbs and LEDs available.		ECX1921-2 pkg. of 2, 5mA current draw	check
GCX1202-120	Green			ECX1922-2 pkg. of 2, 5mA current draw	check
GCX1203-120	Yellow		ECX1904-5 pkg. of 5, 20mA current draw	ECX1923-2 pkg. of 2, 5mA current draw	check
GCX1204-120	Blue	22 mm metal illuminated pushbutton, **120VDC/VAC**. **One N.O.** contact block. Flush operator with colored plastic ring. Incandescent replacement bulbs and LEDs available.		ECX1924-2 pkg. of 2, 5mA current draw	check
GCX1205-120	Clear			ECX1925-2 pkg. of 2, 5mA current draw	check
GCX1206-120	White			ECX1925-2 pkg. of 2, 5mA current draw	check

Note: Bulb removal tool available. See the contact block and accessories page.

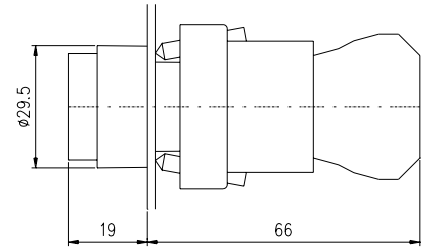PB & Lights

22 MM METAL ILLUMINATED PUSHBUTTONS

Illuminated momentary pushbuttons with extended actuator

12 models available:
- 24V with incandescent lamp in six colors
- 120V with incandescent lamp in six colors
- Replacement incandescent bulbs are available
- 24V and 120V LED lamps can be ordered separately and installed for longer life

GCX1214-24

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

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Part Number	Lamp Color	Description	Replacement Bulb Part. No.	Replacement LED Part. No.	Price
GCX1211-24	Red	22 mm metal extended illuminated pushbutton, **24VDC/VAC**. **One N.C.** contact block, replacement bulbs and LEDs available.		ECX1911-2 pkg. of 2, 26mA current draw	check
GCX1212-24	Green			ECX1912-2 pkg. of 2, 26mA current draw	check
GCX1213-24	Yellow		ECX1902-5 pkg. of 5, 80mA current draw	ECX1913-2 pkg. of 2, 26mA current draw	check
GCX1214-24	Blue	22 mm metal extended illuminated pushbutton, **24VDC/VAC**. **One N.O.** contact block, incandescent replacement bulbs and LEDs available.		ECX1914-2 pkg. of 2, 26mA current draw	check
GCX1215-24	Clear			ECX1915-2 pkg. of 2, 26mA current draw	check
GCX1216-24	White			ECX1915-2 pkg. of 2, 26mA current draw	check
GCX1211-120	Red	22 mm metal extended illuminated pushbutton, **120VDC/VAC**. **One N.C.** contact block, replacement bulbs and LEDs available.		ECX1921-2 pkg. of 2, 5mA current draw	check
GCX1212-120	Green			ECX1922-2 pkg. of 2, 5mA current draw	check
GCX1213-120	Yellow		ECX1904-5 pkg. of 5, 20mA current draw	ECX1923-2 pkg. of 2, 5mA current draw	check
GCX1214-120	Blue	22 mm metal extended illuminated pushbutton, **120VDC/VAC**. **One N.O.** contact block, incandescent replacement bulbs and LEDs available.		ECX1924-2 pkg. of 2, 5mA current draw	check
GCX1215-120	Clear			ECX1925-2 pkg. of 2, 5mA current draw	check
GCX1216-120	White			ECX1925-2 pkg. of 2, 5mA current draw	check

Note: Bulb removal tool available. See replacement lamps on the accessories page.

Clear protective silicone actuator cover is available. Order part no. ECX1706-5. See Accessories Section for more information.
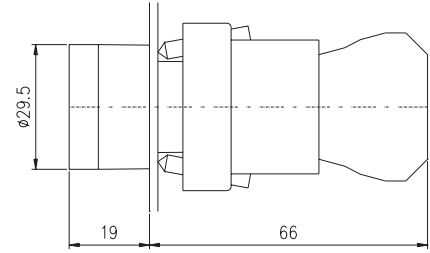
22 MM METAL ILLUMINATED PUSHBUTTONS

Illuminated push-push style push-buttons with protective plastic ring

12 models available:
- Latching Push-ON, Push-OFF actuator
- 24V with incandescent lamp in six colors
- 120V with incandescent lamp in six colors
- Replacement incandescent bulbs are available
- 24V and 120V LED lamps can be ordered separately and installed for longer life

GCX1194-24

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

Part Number	Lamp Color	Description	Replacement Bulb Part. No.	Replacement LED Part. No.	Price
GCX1191-24	Red	22 mm metal illuminated pushbutton, **24VDC/VAC**, has **one N.O.** contact block. Flush Push ON - Push OFF operator with colored plastic ring. Incandescent replacement bulbs and LEDs available. **Note**: These switches are supplied with a special N.O. contact block designed for use with this actuator.	ECX1902-5 pkg. of 5, 80mA current draw	ECX1911-2 pkg. of 2, 26mA current draw	check
GCX1192-24	Green			ECX1912-2 pkg. of 2, 26mA current draw	check
GCX1193-24	Yellow			ECX1913-2 pkg. of 2, 26mA current draw	check
GCX1194-24	Blue			ECX1914-2 pkg. of 2, 26mA current draw	check
GCX1195-24	Clear			ECX1915-2 pkg. of 2, 26mA current draw	check
GCX1196-24	White			ECX1915-2 pkg. of 2, 26mA current draw	check
GCX1191-120	Red	22 mm metal illuminated pushbutton, **120VDC/VAC**, has **one N.O.** contact block. Flush Push ON - Push OFF operator with colored plastic ring. Incandescent replacement bulbs and LEDs available. **Note**: These switches are supplied with a special N.O. contact block designed for use with this actuator.	ECX1904-5 pkg. of 5, 20mA current draw	ECX1921-2 pkg. of 2, 5mA current draw	check
GCX1192-120	Green			ECX1922-2 pkg. of 2, 5mA current draw	check
GCX1193-120	Yellow			ECX1923-2 pkg. of 2, 5mA current draw	check
GCX1194-120	Blue			ECX1924-2 pkg. of 2, 5mA current draw	check
GCX1195-120	Clear			ECX1925-2 pkg. of 2, 5mA current draw	check
GCX1196-120	White			ECX1925-2 pkg. of 2, 5mA current draw	check

Note: Bulb removal tool available. See replacement lamps on the accessories page.

PB & Lights

22 MM METAL PUSHBUTTONS

Mushroom-style illuminated momentary pushbuttons

GCX1221-24

Part Number	Lamp Color	Description	Replacement Bulb Part. No.	Replacement LED Part. No.	Price
GCX1221-24	Red	22 mm metal momentary pushbutton with illuminated 40mm mushroom actuator, **24VDC/VAC**, has 1 **N.C.** contact block, comes with incandescent light, replacement bulbs and LEDs available, "Emergency" legend plate available (see Accessories).	ECX1902-5 pkg. of 5, 80mA current draw	ECX1911-2 pkg. of 2, 26mA current draw	check
GCX1221-120	Red	22 mm metal momentary pushbutton with illuminated 40mm mushroom actuator, **120VDC/VAC**, has 1 **N.C.** contact block, comes with incandescent light, replacement bulbs and LEDs available, "Emergency" legend plate available (see Accessories).	ECX1904-5 pkg. of 5, 20mA current draw	ECX1921-2 pkg. of 2, 5mA current draw	check
GCX1226-24	Red	22 mm metal momentary pushbutton with illuminated 40mm mushroom **twist-to-release** actuator, **24VDC/VAC**, has 1 **N.C.** contact block, comes with incandescent light, replacement bulbs and LEDs available, "Emergency" legend plate available (see Accessories).	ECX1902-5 pkg. of 5, 80mA current draw	ECX1911-2 pkg. of 2, 26mA current draw	check
GCX1226-120	Red	22 mm metal momentary pushbutton with illuminated 40mm mushroom **twist-to-release** actuator, **120VDC/VAC**, has 1 **N.C.** contact block, comes with incandescent light, replacement bulbs and LEDs available, "Emergency" legend plate available (see Accessories).	ECX1904-5 pkg. of 5, 20mA current draw	ECX1921-2 pkg. of 2, 5mA current draw	check

Note: Bulb removal tool available. See replacement lamps on the accessories page.

Two-way momentary pushbuttons

GCX1151-24

GCX1152 (with on/off symbols)

Part Number	Description	Price
GCX1150	Two way for on/off control, has **one N.O.** and **one N.C.** contact block, fits in 22 mm dia. hole, without symbols	check
GCX1152	Two way for on/off control, has **one N.O.** and **one N.C.** contact block, fits in 22 mm dia. hole, has "On" (I) and "Off" (0) symbols	check
GCX1151-24	**24VDC/VAC** two way with indicator, faces without symbols. Has **one N.O.** and **one N.C.** contact block, fits in 22 mm dia. hole.	check
GCX1153-24	**24VDC/VAC** two way with indicator, with ON (1) and OFF (0) symbols. Has **one N.O.** and **one N.C.** contact block	check
GCX1151-120	**120VDC/VAC** two way with indicator, faces without symbols. Has **one N.O.** and **one N.C.** contact block, fits in 22 mm dia. hole.	check
GCX1153-120	**120VDC/AC** two way with indicator, with ON (1) and OFF (0) symbols. Has **one N.O.** and **one N.C.** contact block	check
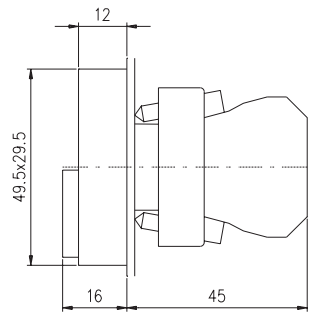
GCX1150, GCX1152 models
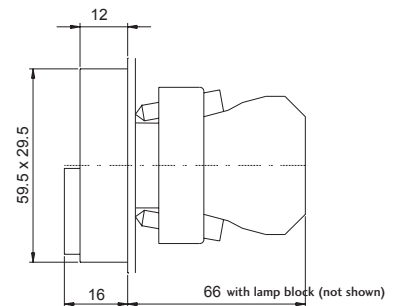
GCX1151-24, GCX1153-24, GCX1151-120, GCX1153-120 models

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
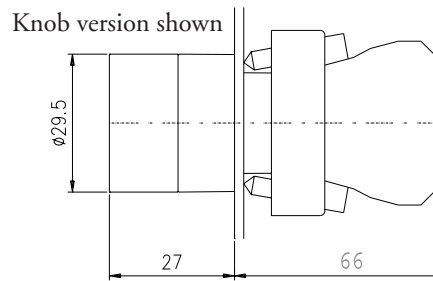
Two-position selector switches

GCX1300 Knob version

GCX1350 Lever version

Part Number	Description	Price
GCX1300	22 mm metal selector switch, two-position **maintained**, black knob. Has **one N.O.** contact block.	check
GCX1310	22 mm metal selector switch, two-position **spring return from right**, black knob. Has **one N.O.** contact block.	check
GCX1350	22 mm metal selector switch, two-position **maintained**, black lever. Has **one N.O.** contact block.	check
GCX1360	22 mm metal selector switch, two-position, **spring return from right,** black lever. Has **one N.O.** contact block.	check

Knob version shown

Ø29.5   27   66

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

Three-position selector switches

GCX1320-22 Knob version

GCX1370-22 Lever version

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

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.

Knob version shown

Ø29.5   27   66*   26
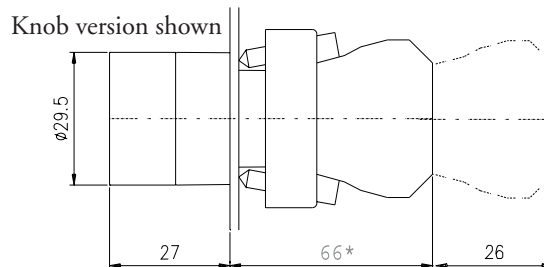
22 MM METAL KEY SWITCHES AND LIGHTS

Key-operated selector switches

GCX1420
(2-position maintained)

Part Number	Description	Price
GCX1420	22 mm metal selector switch, key-operated, **two-position maintained**, key can be removed in all positions, replacement keys available. Has **one N.O.** contact block	check
GCX1430	22 mm metal selector switch, key-operated, **two-position spring return from right**, replacement keys available. Has **one N.O.** contact block	check
GCX1470-22	22 mm metal selector switch, key-operated, **three-position maintained**, key can be removed in all positions, replacement keys available. Has **two N.O.** and **two N.C.** contact blocks	check

Note: Keyed switches come with two keys. All metal 22mm keyed switches are keyed the same. Replacement keys are available. Order part no. ECX1067-2 (pkg. of 2). Keys for metal 22mm keyed switches are not compatible with Cutler-Hammer key switches.

Note: When using switches having two-deep contact blocks (such as, Model GCX1470-22) with the 22 mm plastic enclosures, be sure to use enclosures that are 74mm deep. 51mm-deep enclosures are too shallow and the switch body will not fit.

Ø29.5

| 24 | 24 | 45 | 26 |
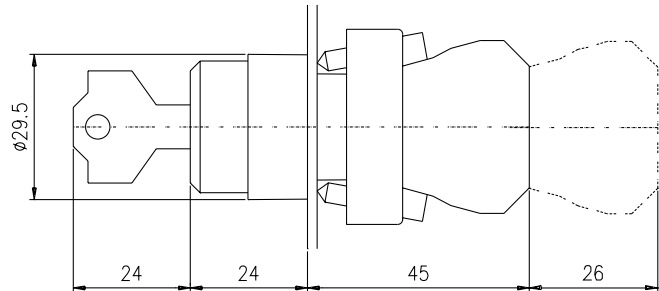
All dimensions are in millimeters. 25.4mm = 1 inch. For example, 30 mm in inches = 30/25.4 = 1.181 inches.
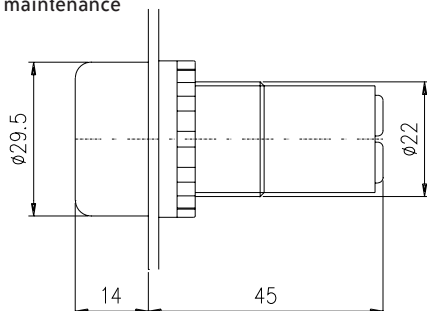
Indicator lights

ECX1051-24   ECX1052-24

12 models available:

• 24V with incandescent lamp in six colors

• 120V with incandescent lamp in six colors

• Replacement incandescent bulbs are available. 24V and 120V LED lamps can be ordered separately and installed for additional brightness

Note: When using LED replacement with these indicators, it may be necessary to remove the frosted diffuser for enhanced illumination.

• Monoblock design for easy mounting

• Side wire entry with back screw terminals for easy wiring and maintenance

Ø29.5   Ø22

| 14 | 45 |

Part Number	Lamp Color	Price	Description	Replacement Bulb Part. No.	Replacement LED Part. No.
ECX1051-24	Red	check	22 mm monoblock incandescent indicator light, **24VDC/VAC**, replacement bulbs and LEDs available	ECX1902-5 pkg. of 5, 80mA current draw	ECX1911-2; pkg. of 2, 26mA current draw
ECX1052-24	Green	check			ECX1912-2; pkg. of 2, 26mA current draw
ECX1053-24	Yellow	check			ECX1913-2; pkg. of 2, 26mA current draw
ECX1054-24	Blue	check			ECX1914-2; pkg. of 2, 26mA current draw
ECX1055-24	Clear	check			ECX1915-2; pkg. of 2; 26mA current draw
ECX1056-24	White	check			ECX1915-2; pkg. of 2, 26mA current draw
ECX1051-120	Red	check	22 mm monoblock incandescent indicator light, **120VDC/VAC**, replacement bulbs and LEDs available	ECX1904-5 pkg. of 5, 20mA current draw	ECX1921-2; pkg. of 2, 5mA current draw
ECX1052-120	Green	check			ECX1922-2; pkg. of 2, 5mA current draw
ECX1053-120	Yellow	check			ECX1923-2; pkg. of 2, 5mA current draw
ECX1054-120	Blue	check			ECX1924-2; pkg. of 2, 5mA current draw
ECX1055-120	Clear	check			ECX1925-2; pkg. of 2, 5mA current draw
ECX1056-120	White	check			ECX1925-2; pkg. of 2, 5mA current draw

Note: Bulb removal tool available. See replacement lamps on the accessories page.

22 MM METAL ILLUMINATED SELECTOR SWITCHES

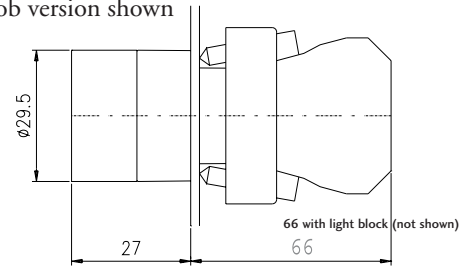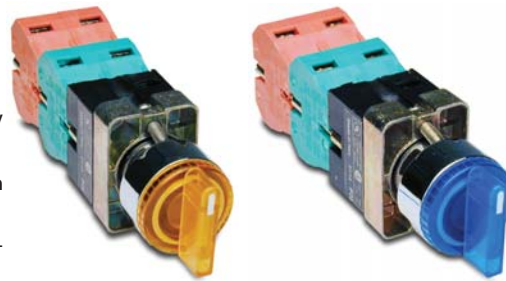## Illuminated two-position selector switch

20 models available:

• 24V with incandescent bulb in five colors

• 120V with incandescent bulb in five colors

• Available in **spring return** and **maintained** styles

• Replacement incandescent bulbs are available

• 24V and 120V LED lamps can be ordered separately and installed for longer life

GCX1245-24

Knob version shown

Ø29.5

27   66

66 with light block (not shown)

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

Part Number	Lamp Color	Spring Return	Replacement Bulb Part. No.	Replacement LED Part. No.	Price
GCX1241-24	Red	22 mm metal illuminated 2-position selector switch. **Spring return from right**. 24VDC/VAC. **One N.O.** contact block. Illuminated colored knob. Incandescent replacement bulbs and LEDs available.	ECX1902-5 pkg. of 5, 80mA current draw	ECX1911-2 pkg. of 2, 26mA current draw	check
GCX1242-24	Green			ECX1912-2 pkg. of 2, 26mA current draw	check
GCX1243-24	Yellow			ECX1913-2 pkg. of 2, 26mA current draw	check
GCX1244-24	Blue			ECX1914-2 pkg. of 2, 26mA current draw	check
GCX1245-24	Clear			ECX1915-2 pkg. of 2, 26mA current draw	check
GCX1241-120	Red	22 mm metal illuminated 2-position selector switch. **Spring return from right**. 120VDC/VAC **One N.O.** contact block. Illuminated colored knob. Incandescent replacement bulbs and LEDs available.	ECX1904-5 pkg. of 5, 20mA current draw	ECX1921-2 pkg. of 2, 5mA current draw	check
GCX1242-120	Green			ECX1922-2 pkg. of 2, 5mA current draw	check
GCX1243-120	Yellow			ECX1923-2 pkg. of 2, 5mA current draw	check
GCX1244-120	Blue			ECX1924-2 pkg. of 2, 5mA current draw	check
GCX1245-120	Clear			ECX1925-2 pkg. of 2, 5mA current draw	check

Part Number	Lamp Color	Maintained	Replacement Bulb Part. No.	Replacement LED Part. No.	Price
GCX1251-24	Red	22 mm metal illuminated 2 position selector switch. **Maintained**. 24VDC/VAC. **One N.O.** contact block. Illuminated colored knob. Incandescent replacement bulbs and LEDs available.	ECX1902-5 pkg. of 5, 80mA current draw	ECX1911-2 pkg. of 2, 26mA current draw	check
GCX1252-24	Green			ECX1912-2 pkg. of 2, 26mA current draw	check
GCX1253-24	Yellow			ECX1913-2 pkg. of 2, 26mA current draw	check
GCX1254-24	Blue			ECX1914-2 pkg. of 2, 26mA current draw	check
GCX1255-24	Clear			ECX1915-2 pkg. of 2, 26mA current draw	check
GCX1251-120	Red	22 mm metal illuminated 2 position selector switch. **Maintained**. 120VDC/VAC. **One N.O.** contact block. Illuminated colored knob. Incandescent replacement bulbs and LEDs available.	ECX1904-5 pkg. of 5, 20mA current draw	ECX1921-2 pkg. of 2, 5mA current draw	check
GCX1252-120	Green			ECX1922-2 pkg. of 2, 5mA current draw	check
GCX1253-120	Yellow			ECX1923-2 pkg. of 2, 5mA current draw	check
GCX1254-120	Blue			ECX1924-2 pkg. of 2, 5mA current draw	check
GCX1255-120	Clear			ECX1925-2 pkg. of 2, 5mA current draw	check

Note: Bulb removal tool available. See replacement lamps on the accessories page.

PB & Lights

22 MM METAL ILLUMINATED SELECTOR SWITCHES

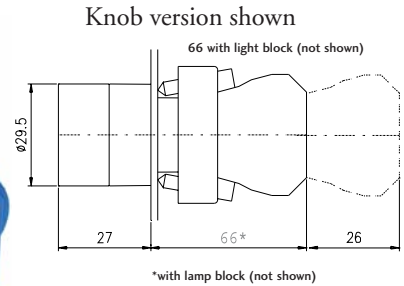## Illuminated three-position selector switches

20 models available:

• 24V with incandescent bulb in five color 120V with incandescent bulb in five colors

• Available in **maintained** and **spring return** styles

• Replacement incandescent bulbs are available

• 24V and 120V LED lamps can be ordered separately and installed for longer life.

GCX1263-24

GCX1264-24

Knob version shown

66 with light block (not shown)

Ø29.5

27 66* 26

*with lamp block (not shown)

Part Number	Lamp Color	Maintained	Replacement Bulb Part. No.	Replacement LED Part. No.	Price
GCX1261-24	Red	22 mm metal illuminated 3 position selector switch. **Maintained. 24VDC/VAC**. **2 N.O. and 2 N.C.** contact blocks. Illuminated colored knob. Incandescent replacement bulbs and LEDs available.	ECX1902-5 pkg. of 5, 80mA current draw	ECX1911-2 pkg. of 2, 26mA current draw	check
GCX1262-24	Green			ECX1912-2 pkg. of 2, 26mA current draw	check
GCX1263-24	Yellow			ECX1913-2 pkg. of 2, 26mA current draw	check
GCX1264-24	Blue			ECX1914-2 pkg. of 2, 26mA current draw	check
GCX1265-24	Clear			ECX1915-2 pkg. of 2, 26mA current draw	check
GCX1261-120	Red	22 mm metal illuminated 3 position selector switch. **Maintained. 120VDC/VAC**. **2 N.O. and 2 N.C.** contact blocks. Illuminated colored knob. Incandescent replacement bulbs and LEDs available.	ECX1904-5 pkg. of 5, 20mA current draw	ECX1921-2 pkg. of 2, 5mA current draw	check
GCX1262-120	Green			ECX1922-2 pkg. of 2, 5mA current draw	check
GCX1263-120	Yellow			ECX1923-2 pkg. of 2, 5mA current draw	check
GCX1264-120	Blue			ECX1924-2 pkg. of 2, 5mA current draw	check
GCX1265-120	Clear			ECX1925-2 pkg. of 2, 5mA current draw	check

Part Number	Lamp Color	Spring Return	Replacement Bulb Part. No.	Replacement LED Part. No.	Price
GCX1281-24	Red	22 mm metal illuminated 3 position selector switch. **Spring return to Center. 24VDC/VAC**. **2 N.O. and 2 N.C.** contact blocks. Illuminated colored knob. Incandescent replacement bulbs and LEDs available.	ECX1902-5 pkg. of 5, 80mA current draw	ECX1911-2 pkg. of 2, 26mA current draw	check
GCX1282-24	Green			ECX1912-2 pkg. of 2, 26mA current draw	check
GCX1283-24	Yellow			ECX1913-2 pkg. of 2, 26mA current draw	check
GCX1284-24	Blue			ECX1914-2 pkg. of 2, 26mA current draw	check
GCX1285-24	Clear			ECX1915-2 pkg. of 2, 26mA current draw	check
GCX1281-120	Red	22 mm metal illuminated 3 position selector switch. **Spring return to Center. 120VDC/VAC**. **2 N.O. and 2 N.C.** contact blocks. Illuminated colored knob. Incandescent replacement bulbs and LEDs available.	ECX1904-5 pkg. of 5, 20mA current draw	ECX1921-2 pkg. of 2, 5mA current draw	check
GCX1282-120	Green			ECX1922-2 pkg. of 2, 5mA current draw	check
GCX1283-120	Yellow			ECX1923-2 pkg. of 2, 5mA current draw	check
GCX1284-120	Blue			ECX1924-2 pkg. of 2, 5mA current draw	check
GCX1285-120	Clear			ECX1925-2 pkg. of 2, 5mA current draw	check

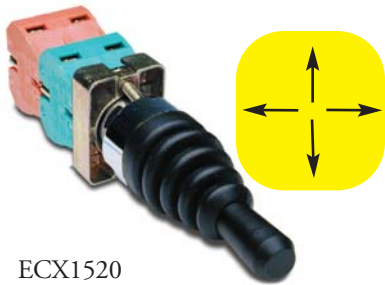*Note:Bulb removal tool available. See the contact block and accessories page.*

22 mm Metal Joystick Selector Switches

"Joystick" selector switches
Four models available
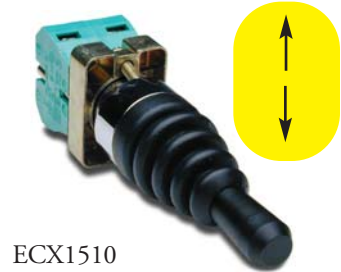
ECX1510
(Two-position momentary)
ECX1512
(Two-position maintained)

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

| Part Number	Description	Price
ECX1510	22 mm metal joystick-style selector switch, **two-position momentary**, has **two N.O.** contact blocks	check
ECX1512	22 mm metal jystick-style selector switch, **two-position maintained**, has **two N.O.** contact blocks	check
ECX1520	22 mm metal joystick-style selector switch, **four-position momentary,** has **four N.O.** contact blocks	check
ECX1524	22 mm metal joystick-style selector switch, **four-position maintained,** has **four N.O.** contact blocks	check

Note: When using switches having two-deep contact blocks (four-position joysticks) 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.
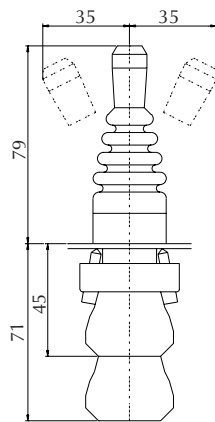
Panel hole layouts for two-position switches
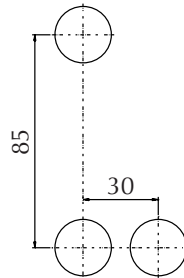
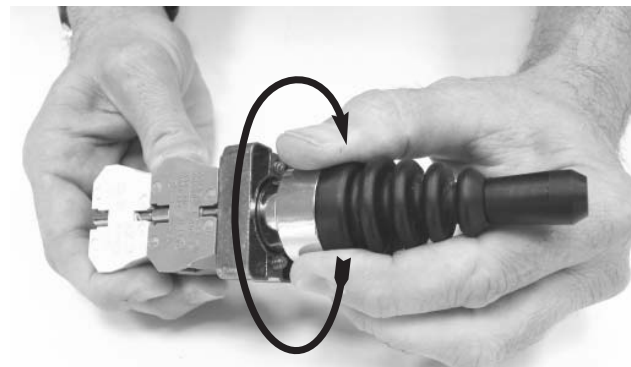Panel hole layouts for four-position switches
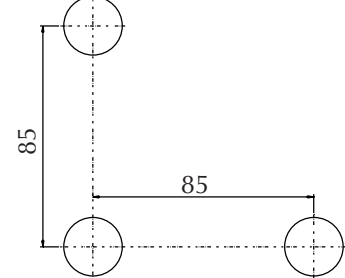
Important installation note
It is very important that the joystick be assembled correctly to ensure proper operation.

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

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

22 MM PLASTIC SWITCH ENCLOSURES

Switch enclosures

Specification Standard	Material	Gasket Material	Degree of Protection
CEI EN 60947-5-1	Thermoplastic ABS, conforms to UL94/HB	Caoutchouc foam	IP65 according to CEI EN 60529

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

SA100SL   SA105-40SL   SA107-40SL

Also check out our metal push-button enclosures in the Hubbell Wiegmann enclosure section of this catalog.

Enclosures have molded knock-outs for 1/2" conduit fittings.

## Important notes about enclosure depth and overtightening

Switches with two-deep contact blocks require enclosures that are 74 mm deep: 51 mm-deep enclosures are too shallow and the switch contact block will not fit.

For switches with one-deep contact blocks, either 51 mm-deep or 74 mm-deep enclosures can be used.

Also, **do not overtighten** when securing switch in the enclosure body. Overtightening will crack the plastic body of the enclosure.

Two-deep contact blocks

Ø29.5

24   24   45   26
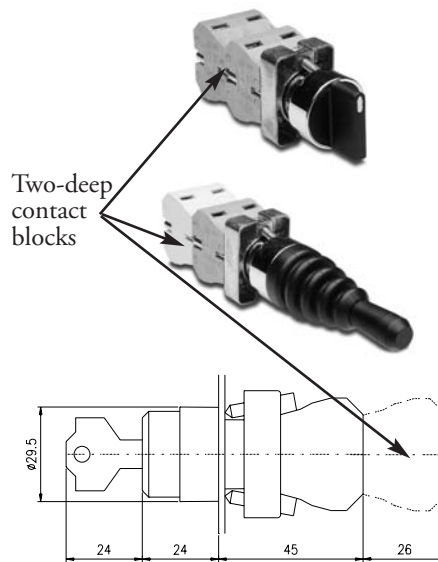
For example: If using a switch having a two-deep contact block with a two-hole enclosure, order a 74mm-deep SA106-40SL, **not** a 51mm-deep SA105-40SL.
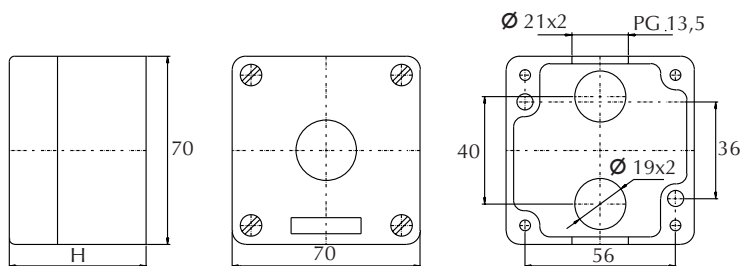
74mm deep

YES!

51mm deep

X NO!
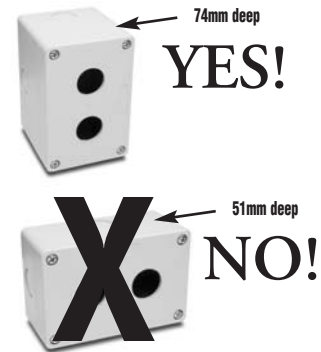
Single-hole models

51 mm deep:
SA100SL
SA101SL

74 mm deep:
SA103SL
SA104SL

Part Number	Dimensions (HxWxD)	Hole Size/Depth	Mounting Instructions	Color	Price
SA100SL	70x70x51	Hole size fits 22 mm devices, 51 mm depth accommodates **single-deep contact block** switches	Tighten 22 mm devices only as needed to provide proper sealing. Overtightening will crack plastic body.	Gray	check
SA101SL	70x70x51			Gray body with yellow top	check
SA103SL	70x70x74	Hole size fits 22 mm devices, 74 mm depth accommodates **two-deep contact block** switches		Gray	check
SA104SL	70x70x74			Gray body with yellow top	check

Ø 21x2   PG 13,5

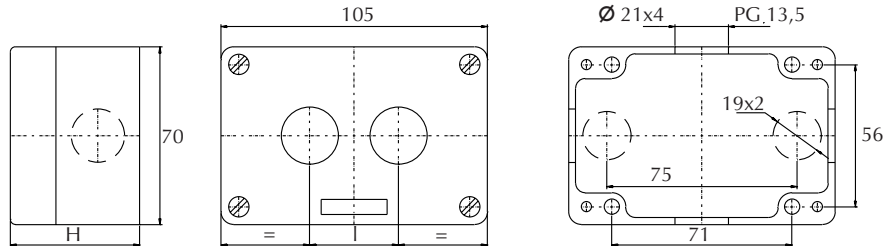70   70   40   Ø 19x2   36   56

H

22 MM PLASTIC SWITCH ENCLOSURES

Two-hole models

51 mm deep:
SA105-40SL

Part Number	Dimensions (HxWxD)	Hole Size/Depth	Mounting Instructions	Color	Price
SA105-40SL	105x70x51 (40 mm between hole centers)	Hole size fits 22 mm devices, 51 mm depth accommodates **single–deep contact block** switches	Tighten 22 mm devices only as needed to provide proper sealing. Overtightening will crack plastic body.	Gray	check
SA106-40SL	105x70x74 (40 mm between hole centers)	Hole size fits 22 mm devices 74 mm depth accommodates **two–deep contact block** switches			check

Three-hole models

51 mm deep:
SA107-40SL

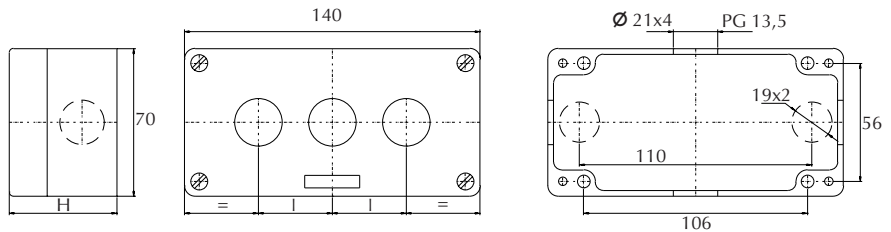| Part Number	Dimensions (HxWxD)	Hole Size/Depth	Mounting Instructions	Color	Price
SA107-40SL	140x70x51 (40mm between hole centers)	Hole size fits 22 mm devices, 51mm depth accommodates **single–deep contact block** switches	Tighten 22 mm devices only as needed to provide proper sealing. Overtightening will crack plastic body.	Gray	check
SA108-40SL	140x70x74 (40mm between hole centers)	Hole size fits 22 mm devices, 74 mm depth accommodates **two–deep contact block** switches			check

Four-hole models

51 mm deep:
SA109-40SL

| Part Number	Dimensions (HxWxD)	Hole Size/Depth	Mounting Instructions	Color	Price
SA109-40SL	185x70x51 (40mm between hole centers)	Hole size fits 22 mm devices, 51 mm depth accommodates **single–deep contact block** switches	Tighten 22 mm devices only as needed to provide proper sealing. Overtightening will crack plastic body.	Gray	check
SA110-40SL	185x70x74 (40mm between hole centers)	Hole size fits 22 mm devices, 74 mm depth accommodates **two–deep contact block** switches			check

PB & Lights
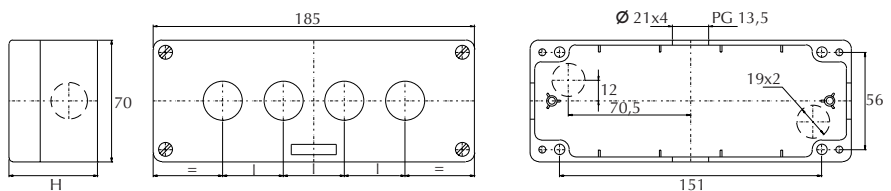
22 MM PILOT DEVICE ACCESSORIES

Replacement incandescent bulbs

Part Number	Rating	Description	Quantity	Price
ECX1900-5	6V, 1.2 watts	6V replacement bulb for 22 mm metal and C-H switches and indicators. Miniature bayonet base T31/4.	pkg. of 5 bulbs	check
ECX1902-5	24V@ 80mA	24V replacement bulb for 22 mm metal and C-H switches and indicators. Miniature bayonet base T31/4.	pkg. of 5 bulbs	check
ECX1904-5	130V@20mA	120V replacement bulb for 22 mm metal and C-H switches and indicators. Miniature bayonet base T31/4.	pkg. of 5 bulbs	check

Note: Bulb removal tool available. Order part number HT8LAMPTOOL.

Replacement LED lamps

Part Number	Color	Rating	Description	Quantity	Price
ECX1911-2	Red	24V@26mA	LED replacement lamp for miniature bayonet base lamps. Works with 22 mm metal and Cutler-Hammer switches and indicators, but illumination will not be as even when used with 22mm indicators. Note: **Will not** replace sealed C-H monoblock LED indicators.	pkg. of 2 LED lamps	check
ECX1912-2	Green				check
ECX1913-2	Yellow				check
ECX1914-2	Blue				check
ECX1915-2	White				check
ECX1921-2	Red	120V@5mA			check
ECX1922-2	Green				check
ECX1923-2	Yellow				check
ECX1924-2	Blue				check
ECX1925-2	White				check

Note: Bulb removal tool available. Order part number HT8LAMPTOOL.

Protective covers for pushbuttons

ECX1702-5

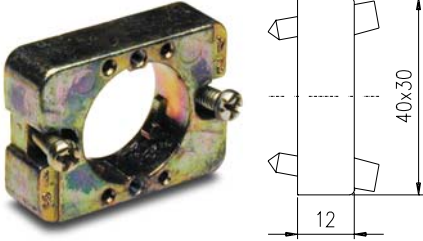| Part Number	Color	Description	Quantity	Price
ECX1700-5	Black	Silicone protective covers for use with 22 mm metal standard-size flush pushbuttons. **Will not** work with C-H pushbuttons, 22 mm metal illuminated or extended pushbuttons, or 22 mm metal pushbuttons with 40 mm actuator face.	pkg. of 5 protective caps	check
ECX1701-5	Red			check
ECX1702-5	Green			check
ECX1703-5	Yellow			check
ECX1704-5	Blue			check
ECX1705-5	Clear			check
ECX1706-5	Clear	Clear silicone protective covers for use with 22 mm metal illuminated and extended pushbuttons only. **Will not** work with C-H pushbuttons, 22 mm metal pushbuttons with 40 mm actuator face, or 22 mm metal lighted mushroom pushbuttons.		check

Hole plug

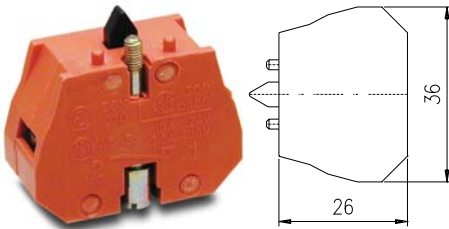| Part Number	Description	Color	Price
ECX1490	Plastic hole plug for 22.5mm openings in panels and enclosures; supplied with O-ring and mounting screw. Two plugs per package.	Black	check

22 mm Pilot Device Accessories

Replacement 22 mm support base

Part Number	Description	Quantity	Price
ECX1029-2	22 mm Support Base Note: This is a replacement part and is not required with any switch assembly. **Will not** work with Cutler-Hammer 22 mm switches sold by AutomationDirect	pkg. of 1	check

Replacement contact blocks

Part Number	Contacts	Description	Quantity	Price
ECX1030-5	Red, normally-closed (N.C.)	Replacement contact block for 22 mm metal push-buttons and selector switches.	pkg. of 5	check
ECX1040-5	Green, normally-open (N.O.)	Note: **Will not** work with Cutler-Hammer 22 mm switches sold by AutomationDirect		check

Note: See electrical specifications on page 20-6.

ECX1030-5

Replacement keys

Part Number	Description	Quantity	Price
ECX1067-2	Replacement keys for all key-actuated 22 mm metal selector switches only. **Will not** work with Cutler-Hammer 22 mm keyed switches sold by AutomationDirect	pkg. of 2	check

Note: All key-actuated 22mm metal selector switches are keyed alike.

"Emergency" legend plate

Part Number	Description	Quantity	Price
ECX1651	Oversize yellow circular "Emergency" legend plate for 22 mm E-stop type mushroom pushbuttons, 60mm outside dia.	pkg. of 1	check

PB & Lights