

# GCX Series 22mm Plastic Illuminated Pushbuttons

## Mushroom-Style Illuminated Pushbuttons

All pushbuttons include operator, support base, 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.



**GCX3221-24**

| Mushroom-Style Illuminated Pushbuttons |            |         |                            |                                                                                                                                   |                                            |                                         |
|----------------------------------------|------------|---------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------|
| Part Number                            | Lamp Color | Price   | Drawing Link               | Description                                                                                                                       | Replacement Incandescent Bulb [5 per pack] | Replacement LED Lamp [2 per pack]       |
| <b>Incandescent</b>                    |            |         |                            |                                                                                                                                   |                                            |                                         |
| <a href="#"><u>GCX3221-24</u></a>      | Red        | \$12.50 | <a href="#"><u>PDF</u></a> | 22mm plastic momentary pushbutton with incandescent illuminated 40mm mushroom actuator, 24VDC/VAC, one N.C. contact block         | <a href="#"><u>ECX1902-5</u></a> , 80mA    | <a href="#"><u>ECX1911-2</u></a> , 26mA |
| <a href="#"><u>GCX3221-120</u></a>     | Red        | \$14.50 | <a href="#"><u>PDF</u></a> | 22mm plastic momentary pushbutton with incandescent illuminated 40mm mushroom actuator, 120VDC/VAC, one N.C. contact block        | <a href="#"><u>ECX1904-5</u></a> , 20mA    | <a href="#"><u>ECX1921-2</u></a> , 5mA  |
| <a href="#"><u>GCX3226-24</u></a>      | Red        | \$14.50 | <a href="#"><u>PDF</u></a> | 22mm plastic pushbutton with incandescent illuminated 40mm mushroom twist-to-release actuator, 24VDC/VAC, one N.C. contact block  | <a href="#"><u>ECX1902-5</u></a> , 80mA    | <a href="#"><u>ECX1911-2</u></a> , 26mA |
| <a href="#"><u>GCX3226-120</u></a>     | Red        | \$16.00 | <a href="#"><u>PDF</u></a> | 22mm plastic pushbutton with incandescent illuminated 40mm mushroom twist-to-release actuator, 120VDC/VAC, one N.C. contact block | <a href="#"><u>ECX1904-5</u></a> , 20mA    | <a href="#"><u>ECX1921-2</u></a> , 5mA  |
| <b>LED</b>                             |            |         |                            |                                                                                                                                   |                                            |                                         |
| <a href="#"><u>GCX3221-24L</u></a>     | Red        | \$17.50 | <a href="#"><u>PDF</u></a> | 22mm plastic momentary pushbutton with LED illuminated 40mm mushroom actuator, 24VDC/VAC, one N.C. contact block                  | <a href="#"><u>ECX1902-5</u></a> , 80mA    | <a href="#"><u>ECX1911-2</u></a> , 26mA |
| <a href="#"><u>GCX3221-120L</u></a>    | Red        | \$19.00 | <a href="#"><u>PDF</u></a> | 22mm plastic momentary pushbutton with LED illuminated 40mm mushroom actuator, 120VDC/VAC, one N.C. contact block                 | <a href="#"><u>ECX1904-5</u></a> , 20mA    | <a href="#"><u>ECX1921-2</u></a> , 5mA  |
| <a href="#"><u>GCX3226-24L</u></a>     | Red        | \$20.00 | <a href="#"><u>PDF</u></a> | 22mm plastic pushbutton with LED illuminated 40mm mushroom twist-to-release actuator, 24VDC/VAC, one N.C. contact block           | <a href="#"><u>ECX1902-5</u></a> , 80mA    | <a href="#"><u>ECX1911-2</u></a> , 26mA |
| <a href="#"><u>GCX3226-120L</u></a>    | Red        | \$21.00 | <a href="#"><u>PDF</u></a> | 22mm plastic pushbutton with LED illuminated 40mm mushroom twist-to-release actuator, 120VDC/VAC, one N.C. contact block          | <a href="#"><u>ECX1904-5</u></a> , 20mA    | <a href="#"><u>ECX1921-2</u></a> , 5mA  |

## Non-Illuminated Mushroom Pushbuttons

Feature large 60mm dia. actuator and mount in standard 22mm hole.

| Non-illuminated Mushroom Pushbuttons |        |         |                            |                                                                                                                                                                            |
|--------------------------------------|--------|---------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number                          | Color  | Price   | Drawing Link               | Description                                                                                                                                                                |
| <a href="#"><u>GCX3131</u></a>       | Red    | \$10.50 | <a href="#"><u>PDF</u></a> | Twist-to-release actuator with one N.C. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator.                                                |
| <a href="#"><u>GCX3134</u></a>       | Black  | \$8.50  | <a href="#"><u>PDF</u></a> | Momentary action with one N.O. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator.                                                         |
| <a href="#"><u>GCX3135</u></a>       | Red    | \$8.50  | <a href="#"><u>PDF</u></a> | Momentary action with one N.C. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator. EMERGENCY legend plate available (see Accessories).     |
| <a href="#"><u>GCX3136</u></a>       | Red    | \$13.00 | <a href="#"><u>PDF</u></a> | Twist-to-release actuator with one N.C. contact block, fits in 22mm dia. hole. 60mm dia. mushroom-style actuator.                                                          |
| <a href="#"><u>GCX3137</u></a>       | Red    | \$10.50 | <a href="#"><u>PDF</u></a> | Momentary action with one N.C. contact block, fits in 22mm dia. hole, has large 60mm dia. mushroom-style. EMERGENCY legend plate available (see Accessories).              |
| <a href="#"><u>GCX3139</u></a>       | Yellow | \$8.50  | <a href="#"><u>PDF</u></a> | Momentary action with one N.O. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator.                                                         |
| <a href="#"><u>GCX3141</u></a>       | Red    | \$15.50 | <a href="#"><u>PDF</u></a> | Key operated release with one N.C. contact block, fits in 22mm dia. hole, has large 40mm dia. mushroom-style actuator. EMERGENCY legend plate available (see Accessories). |



**GCX3137**



**GCX3141**  
(key operated)



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

For accessories, see 22mm Plastic Pilot Device Accessories in this section.

# GCX Series 22mm Plastic 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 IP40 or IP65 (see specifications below)**

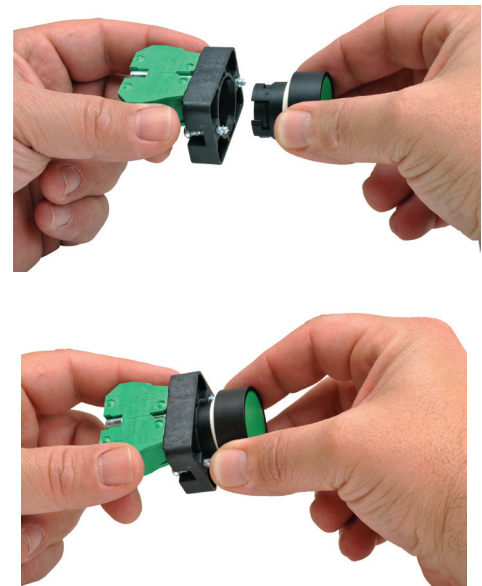
**Support base mounts into panels up to 6 mm thick**

**Fiberglass reinforced thermoplastic bezel**

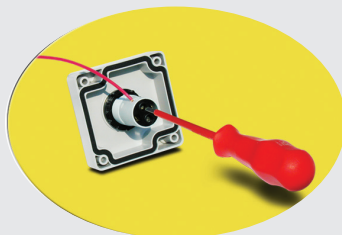
## Easy installation

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

Max torque: 4.5 lb-in

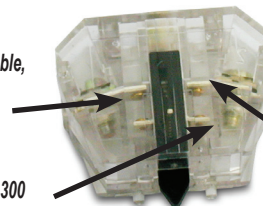


**All indicators offer side wire entry with back screw terminals for easy wiring**



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

**Contacts rated A300 (Refer to E22 Series mounting/contact rating section for details)**



**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 [www.AutomationDirect.com](http://www.AutomationDirect.com)**

# 22mm Plastic Pilot Device Accessories

## Replacement Incandescent Bulbs



**ECX1902-5**

## Replacement LED Lamps



**ECX1915-2**

## Hole Plug



**ECX1490**

## Protective Covers for Pushbuttons



**ECX1703-5**

## Knockout Punches



**109225**

## Replacement Keys



**ECX1067-2**

### Replacement Incandescent Bulbs

| Part Number                      | Quantity | Price   | Rating              | Description                                                                          |
|----------------------------------|----------|---------|---------------------|--------------------------------------------------------------------------------------|
| <a href="#"><u>ECX1900-5</u></a> | 5        | \$9.50  | 6V@ 200mA 1.2 watts | 6V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4   |
| <a href="#"><u>ECX1902-5</u></a> | 5        | \$9.50  | 24V@ 80mA 2 watts   | 24V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4  |
| <a href="#"><u>ECX1904-5</u></a> | 5        | \$20.00 | 130V@20mA 2.6 watts | 120V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4 |

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

### Replacement LED Lamps

| Part Number                      | Color  | Quantity | Price   | Rating                | Description                                                                                                                                                                                                                                                    |
|----------------------------------|--------|----------|---------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>ECX1911-2</u></a> | Red    | 2        | \$17.50 | 24V@26mA<br>0.6 watts | LED replacement lamp for miniature bayonet bases<br>Works with 22mm switches and indicators, but<br>illumination will not be as even when used with the<br>ECX 22mm indicators<br><br>Note: Will not replace sealed Cutler-Hammer<br>monoblock LED indicators. |
| <a href="#"><u>ECX1912-2</u></a> | Green  |          | \$22.00 |                       |                                                                                                                                                                                                                                                                |
| <a href="#"><u>ECX1913-2</u></a> | Yellow |          | \$17.50 |                       |                                                                                                                                                                                                                                                                |
| <a href="#"><u>ECX1914-2</u></a> | Blue   |          | \$23.50 |                       |                                                                                                                                                                                                                                                                |
| <a href="#"><u>ECX1915-2</u></a> | White  |          | \$28.00 |                       |                                                                                                                                                                                                                                                                |
| <a href="#"><u>ECX1921-2</u></a> | Red    |          | \$17.50 | 120V@5mA<br>0.6 watts |                                                                                                                                                                                                                                                                |
| <a href="#"><u>ECX1922-2</u></a> | Green  |          | \$22.00 |                       |                                                                                                                                                                                                                                                                |
| <a href="#"><u>ECX1923-2</u></a> | Yellow |          | \$17.50 |                       |                                                                                                                                                                                                                                                                |
| <a href="#"><u>ECX1924-2</u></a> | Blue   |          | \$23.50 |                       |                                                                                                                                                                                                                                                                |
| <a href="#"><u>ECX1925-2</u></a> | White  |          | \$28.00 |                       |                                                                                                                                                                                                                                                                |

Note: LED modules have very low current draw and should not be used with triac output devices like PLC triac output modules. It is recommended that dry contact outputs be used to switch 120 volt AC LED modules.

### Hole Plug

| Part Number                    | Color | Price  | Description                                                                                                                      |
|--------------------------------|-------|--------|----------------------------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>ECX1490</u></a> | Black | \$2.75 | Plastic hole plug for 22.5 mm openings in panels and enclosures; supplied with O-ring and mounting screw. Two plugs per package. |

### Protective Covers for Pushbuttons

| Part Number                      | Color  | Quantity | Price   | Description                                                                                                                                                                                                                        |
|----------------------------------|--------|----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>ECX1700-5</u></a> | Black  | 5        | \$7.50  | Silicone protective covers for use with 22mm standard-size flush pushbuttons. Will not work with Cutler-Hammer pushbuttons, 22mm plastic illuminated or extended pushbuttons, or 22mm plastic pushbuttons with 40mm actuator face. |
| <a href="#"><u>ECX1701-5</u></a> | Red    |          | \$7.50  |                                                                                                                                                                                                                                    |
| <a href="#"><u>ECX1702-5</u></a> | Green  |          | \$7.50  |                                                                                                                                                                                                                                    |
| <a href="#"><u>ECX1703-5</u></a> | Yellow |          | \$7.50  |                                                                                                                                                                                                                                    |
| <a href="#"><u>ECX1704-5</u></a> | Blue   |          | \$7.50  |                                                                                                                                                                                                                                    |
| <a href="#"><u>ECX1705-5</u></a> | Clear  |          | \$7.50  |                                                                                                                                                                                                                                    |
| <a href="#"><u>ECX1706-5</u></a> | Clear  |          | \$13.00 | Clear silicone protective covers for use with 22mm illuminated and extended pushbuttons only. Will not work with Cutler-Hammer pushbuttons or 22mm mushroom pushbuttons.                                                           |

Ruko's knockout punch hole-cutting tool includes punch, die and draw bolt (without ball bearing). Use for sheet steel, stainless-steel sheets, non-ferrous and light metals, and plastics up to 0.16" (8 ga.) thick. Replacement bolts are offered in three of the most popular sizes. See the Tools section of the catalog for details.

Note: Part number [109225](#) is recommended when punching holes for 22mm pilot devices.

### Replacement Keys

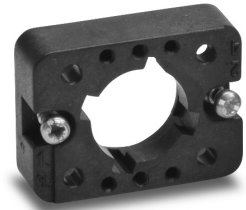
| Part Number                      | Quantity | Price  | Description                                                                                                                                           |
|----------------------------------|----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>ECX1067-2</u></a> | 2        | \$6.50 | Replacement key for GCX series key-actuated selector switches, pack of 2 sets (2 keys each).<br>NOTE: Will not work with Cutler-Hammer 22mm switches. |

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

# 22mm Plastic Pilot Device Accessories

## Replacement 22mm Support Base

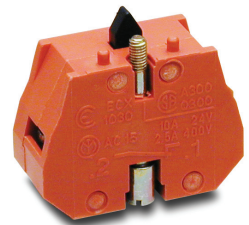
| Replacement 22mm Support Base    |          |        |                            |                                                                                                                                                                                                         |
|----------------------------------|----------|--------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number                      | Quantity | Price  | Drawing Link               | Description                                                                                                                                                                                             |
| <a href="#"><u>ECX3029-2</u></a> | 1        | \$1.75 | <a href="#"><u>PDF</u></a> | 22mm plastic support base<br>Note: This item is supplied as a replacement part and is not required with any switch assembly.<br>Will not work with Cutler-Hammer 22mm switches sold by AutomationDirect |



[ECX3029-2](#)

## Replacement Contact Blocks

| Replacement Contact Blocks       |          |         |                            |                                        |                                                                                                                                                                                                                                         |
|----------------------------------|----------|---------|----------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number                      | Quantity | Price   | Drawing Link               | Contacts                               | Description                                                                                                                                                                                                                             |
| <a href="#"><u>ECX1030-2</u></a> | 2        | \$7.25  | <a href="#"><u>PDF</u></a> | Red, normally-closed (N.C.)            | Replacement contact block for 22mm pushbuttons and selector switches.<br>Tightening Torque, terminal screw: 0.8 N-m max<br>mounting screw: 0.5 N-m max<br>Note: Will not work with Cutler-Hammer 22mm switches sold by AutomationDirect |
| <a href="#"><u>ECX1030-5</u></a> | 5        | \$17.00 | <a href="#"><u>PDF</u></a> |                                        |                                                                                                                                                                                                                                         |
| <a href="#"><u>ECX1040-2</u></a> | 2        | \$7.25  | <a href="#"><u>PDF</u></a> | Green, normally-open (N.O.)            | Note: Will not work with Cutler-Hammer 22mm switches sold by AutomationDirect                                                                                                                                                           |
| <a href="#"><u>ECX1040-5</u></a> | 5        | \$17.00 | <a href="#"><u>PDF</u></a> |                                        |                                                                                                                                                                                                                                         |
| <a href="#"><u>ECX1042-2</u></a> | 2        | \$7.25  | <a href="#"><u>PDF</u></a> | Brown, normally-open (N.O.), push-push | Use on lighted Push-push button only                                                                                                                                                                                                    |



[ECX1030-2](#)

Note: See electrical specifications on GCX Series 22mm Plastic Pilot Devices

## EMERGENCY STOP Legend Plate

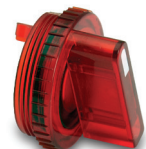
| EMERGENCY STOP Legend Plate    |          |        |                            |                                                                                                                        |
|--------------------------------|----------|--------|----------------------------|------------------------------------------------------------------------------------------------------------------------|
| Part Number                    | Quantity | Price  | Drawing Link               | Description                                                                                                            |
| <a href="#"><u>ECX1651</u></a> | 1        | \$2.75 | <a href="#"><u>PDF</u></a> | Oversize yellow circular EMERGENCY STOP legend plate for 22mm E-stop type mushroom pushbuttons, 60mm outside diameter. |



[ECX1651](#)

## Two-Position Short Lever Operator

| Short Lever Replacement Operator  |            |         |                                                                                    |                                                           |
|-----------------------------------|------------|---------|------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Part Number                       | Lamp Color | Price   | 2-Position                                                                         | Use with                                                  |
| <a href="#"><u>GR1172PR-5</u></a> | Red        | \$16.50 | 22mm 2-position selector switch illuminated short lever replacement operator, 5/pk | Part numbers starting with GCX124, GCX125, GCX324, GCX325 |
| <a href="#"><u>GR1172PV-5</u></a> | Green      | \$16.50 | 22mm 2-position selector switch illuminated short lever replacement operator, 5/pk |                                                           |
| <a href="#"><u>GR1172PG-5</u></a> | Yellow     | \$16.50 | 22mm 2-position selector switch illuminated short lever replacement operator, 5/pk |                                                           |
| <a href="#"><u>GR1172PB-5</u></a> | Blue       | \$16.50 | 22mm 2-position selector switch illuminated short lever replacement operator, 5/pk |                                                           |
| <a href="#"><u>GR1172PN-5</u></a> | Clear      | \$16.50 | 22mm 2-position selector switch illuminated short lever replacement operator, 5/pk |                                                           |

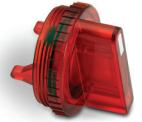


[GR1172PR-5](#)

# 22mm Plastic Pilot Device Accessories

## Three-Position Short Lever Operator

| Short Lever Replacement Operator  |            |         |                                                                                    |                                                           |
|-----------------------------------|------------|---------|------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Part Number                       | Lamp Color | Price   | 3-Position                                                                         | Use with                                                  |
| <a href="#"><u>GR1288PR-5</u></a> | Red        | \$16.50 | 22mm 3-position selector switch illuminated short lever replacement operator, 5/pk | Part numbers starting with GCX126, GCX128, GCX326, GVX328 |
| <a href="#"><u>GR1288PV-5</u></a> | Green      | \$16.50 | 22mm 3-position selector switch illuminated short lever replacement operator, 5/pk |                                                           |
| <a href="#"><u>GR1288PG-5</u></a> | Yellow     | \$16.50 | 22mm 3-position selector switch illuminated short lever replacement operator, 5/pk |                                                           |
| <a href="#"><u>GR1288PB-5</u></a> | Blue       | \$16.50 | 22mm 3-position selector switch illuminated short lever replacement operator, 5/pk |                                                           |
| <a href="#"><u>GR1288PN-5</u></a> | Clear      | \$16.50 | 22mm 3-position selector switch illuminated short lever replacement operator, 5/pk |                                                           |



[GR1288PR-5](#)

## Mushroom Switch Replacement Operator

| Mushroom Switch Replacement Operator |            |        |                                                                                   |                                                                                    |
|--------------------------------------|------------|--------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Part Number                          | Lamp Color | Price  | Description                                                                       | Use with                                                                           |
| <a href="#"><u>PL1171PR-5</u></a>    | Red        | \$7.25 | 22mm, illuminated momentary Mushroom switch replacement operator, red, 5/pk       | Part numbers starting with GCX1221, GCX3221 mushroom-style illuminated pushbuttons |
| <a href="#"><u>PL1298P-5</u></a>     | Red        | \$7.25 | 22mm illuminated twist-to-release mushroom switch replacement operator, red, 5/pk | Part numbers starting with GCX1226, GCX3226 mushroom-style illuminated pushbuttons |



[PL1298P-5](#)

## Flush Pushbutton Replacement Operator

| Flush Pushbutton Replacement Operator |            |        |                                                              |                                                           |
|---------------------------------------|------------|--------|--------------------------------------------------------------|-----------------------------------------------------------|
| Part Number                           | Lamp Color | Price  | Description                                                  | Use with                                                  |
| <a href="#"><u>GR1168PR-5</u></a>     | Red        | \$9.00 | 22mm illuminated flush pushbutton replacement operator, 5/pk | Part numbers starting with GCX119, GCX120, GCX319, GCX320 |
| <a href="#"><u>GR1168PV-5</u></a>     | Green      | \$9.00 | 22mm illuminated flush pushbutton replacement operator, 5/pk |                                                           |
| <a href="#"><u>GR1168PG-5</u></a>     | Yellow     | \$9.00 | 22mm illuminated flush pushbutton replacement operator, 5/pk |                                                           |
| <a href="#"><u>GR1168PB-5</u></a>     | Blue       | \$9.00 | 22mm illuminated flush pushbutton replacement operator, 5/pk |                                                           |
| <a href="#"><u>GR1168PN-5</u></a>     | Clear      | \$9.00 | 22mm illuminated flush pushbutton replacement operator, 5/pk |                                                           |
| <a href="#"><u>GR1168PW-5</u></a>     | White      | \$9.00 | 22mm illuminated flush pushbutton replacement operator, 5/pk |                                                           |



[GR1168PR-5](#)

## Extended Pushbutton Replacement Operator

| Extended Pushbutton Replacement Operator |            |        |                                                                  |                                           |
|------------------------------------------|------------|--------|------------------------------------------------------------------|-------------------------------------------|
| Part Number                              | Lamp Color | Price  | Description                                                      | Use with                                  |
| <a href="#"><u>PL1308PR-5</u></a>        | Red        | \$7.00 | 22mm illuminated extended pushbutton, replacement operator, 5/pk | Part numbers starting with GCX121, GCX321 |
| <a href="#"><u>PL1308PV-5</u></a>        | Green      | \$7.00 | 22mm illuminated extended pushbutton, replacement operator, 5/pk |                                           |
| <a href="#"><u>PL1308PG-5</u></a>        | Yellow     | \$7.00 | 22mm illuminated extended pushbutton, replacement operator, 5/pk |                                           |
| <a href="#"><u>PL1308PB-5</u></a>        | Blue       | \$7.00 | 22mm illuminated extended pushbutton, replacement operator, 5/pk |                                           |
| <a href="#"><u>PL1308PN-5</u></a>        | Clear      | \$7.00 | 22mm illuminated extended pushbutton, replacement operator, 5/pk |                                           |
| <a href="#"><u>PL1308PW-5</u></a>        | White      | \$7.00 | 22mm illuminated extended pushbutton, replacement operator, 5/pk |                                           |



[PL1308PR-5](#)

# 22mm Plastic Pilot Device Accessories

## Legend Plates

Plastic legend plates for use with 22mm pilot devices. White engraved text on colored background. O-ring included.



**ECX1670-B07**



**ECX1670-R03**

| Plastic Legend Plates |                |                             |        |                     |
|-----------------------|----------------|-----------------------------|--------|---------------------|
| Legend                | Color of Field | Part Number                 | Price  | Drawing Link        |
| AUTO OFF HAND         | Black          | <a href="#">ECX1670-B46</a> | \$3.75 | <a href="#">PDF</a> |
| Blank Plate           | Black          | <a href="#">ECX1670-B</a>   | \$3.00 | <a href="#">PDF</a> |
| Blank Plate           | Red            | <a href="#">ECX1670-R</a>   | \$3.00 | <a href="#">PDF</a> |
| CLAMP                 | Black          | <a href="#">ECX1670-B24</a> | \$3.75 | <a href="#">PDF</a> |
| CLOSE                 | Black          | <a href="#">ECX1670-B01</a> | \$3.00 | <a href="#">PDF</a> |
| DOWN                  | Black          | <a href="#">ECX1670-B02</a> | \$3.00 | <a href="#">PDF</a> |
| EMERG. STOP           | Red            | <a href="#">ECX1670-R03</a> | \$3.00 | <a href="#">PDF</a> |
| EXTEND                | Black          | <a href="#">ECX1670-B51</a> | \$3.75 | <a href="#">PDF</a> |
| FEEDER OFF            | Black          | <a href="#">ECX1670-B26</a> | \$3.75 | <a href="#">PDF</a> |
| FEEDER ON             | Black          | <a href="#">ECX1670-B25</a> | \$3.75 | <a href="#">PDF</a> |
| FOR OFF REV           | Black          | <a href="#">ECX1670-B19</a> | \$3.00 | <a href="#">PDF</a> |
| FOR-REV               | Black          | <a href="#">ECX1670-B13</a> | \$3.00 | <a href="#">PDF</a> |
| FORWARD               | Black          | <a href="#">ECX1670-B04</a> | \$3.00 | <a href="#">PDF</a> |
| GRIP                  | Black          | <a href="#">ECX1670-B53</a> | \$3.75 | <a href="#">PDF</a> |
| HAND-AUTO             | Black          | <a href="#">ECX1670-B14</a> | \$3.00 | <a href="#">PDF</a> |
| HAND OFF AUTO         | Black          | <a href="#">ECX1670-B20</a> | \$3.00 | <a href="#">PDF</a> |
| HIGH                  | Black          | <a href="#">ECX1670-B27</a> | \$3.75 | <a href="#">PDF</a> |
| HIGH LOW              | Black          | <a href="#">ECX1670-B43</a> | \$3.75 | <a href="#">PDF</a> |
| IN                    | Black          | <a href="#">ECX1670-B28</a> | \$3.75 | <a href="#">PDF</a> |
| INCH                  | Black          | <a href="#">ECX1670-B29</a> | \$3.75 | <a href="#">PDF</a> |
| JOG                   | Black          | <a href="#">ECX1670-B05</a> | \$3.00 | <a href="#">PDF</a> |
| JOG FOR               | Black          | <a href="#">ECX1670-B30</a> | \$3.75 | <a href="#">PDF</a> |
| JOG REV               | Black          | <a href="#">ECX1670-B31</a> | \$3.75 | <a href="#">PDF</a> |
| JOG-RUN               | Black          | <a href="#">ECX1670-B15</a> | \$3.00 | <a href="#">PDF</a> |
| LOW                   | Black          | <a href="#">ECX1670-B32</a> | \$3.75 | <a href="#">PDF</a> |
| LOWER                 | Black          | <a href="#">ECX1670-B33</a> | \$3.75 | <a href="#">PDF</a> |

Note: Legend plate text is 3mm in height

| Plastic Legend Plates |                |                             |        |                     |
|-----------------------|----------------|-----------------------------|--------|---------------------|
| Legend                | Color of Field | Part Number                 | Price  | Drawing Link        |
| MAN AUTO              | Black          | <a href="#">ECX1670-B44</a> | \$3.75 | <a href="#">PDF</a> |
| MAN OFF AUTO          | Black          | <a href="#">ECX1670-B47</a> | \$3.75 | <a href="#">PDF</a> |
| MOTOR RUN             | Black          | <a href="#">ECX1670-B22</a> | \$3.00 | <a href="#">PDF</a> |
| MOTOR STOP            | Black          | <a href="#">ECX1670-B23</a> | \$3.00 | <a href="#">PDF</a> |
| OFF                   | Black          | <a href="#">ECX1670-B34</a> | \$3.75 | <a href="#">PDF</a> |
| OFF-ON                | Black          | <a href="#">ECX1670-B16</a> | \$3.00 | <a href="#">PDF</a> |
| ON                    | Black          | <a href="#">ECX1670-B06</a> | \$3.00 | <a href="#">PDF</a> |
| OPEN                  | Black          | <a href="#">ECX1670-B07</a> | \$3.00 | <a href="#">PDF</a> |
| OPEN OFF CLOSE        | Black          | <a href="#">ECX1670-B48</a> | \$3.75 | <a href="#">PDF</a> |
| OPEN-CLOSE            | Black          | <a href="#">ECX1670-B17</a> | \$3.00 | <a href="#">PDF</a> |
| OUT                   | Black          | <a href="#">ECX1670-B35</a> | \$3.75 | <a href="#">PDF</a> |
| POWER ON              | Black          | <a href="#">ECX1670-B21</a> | \$3.00 | <a href="#">PDF</a> |
| PULL ON PUSH OFF      | Black          | <a href="#">ECX1670-B50</a> | \$3.75 | <a href="#">PDF</a> |
| RAISE                 | Black          | <a href="#">ECX1670-B36</a> | \$3.75 | <a href="#">PDF</a> |
| READY                 | Black          | <a href="#">ECX1670-B37</a> | \$3.75 | <a href="#">PDF</a> |
| RELEASE               | Black          | <a href="#">ECX1670-B54</a> | \$3.75 | <a href="#">PDF</a> |
| RESET                 | Black          | <a href="#">ECX1670-B38</a> | \$3.75 | <a href="#">PDF</a> |
| RETRACT               | Black          | <a href="#">ECX1670-B52</a> | \$3.75 | <a href="#">PDF</a> |
| REVERSE               | Black          | <a href="#">ECX1670-B08</a> | \$3.00 | <a href="#">PDF</a> |
| RUN                   | Black          | <a href="#">ECX1670-B09</a> | \$3.00 | <a href="#">PDF</a> |
| SAFE RUN              | Black          | <a href="#">ECX1670-B45</a> | \$3.75 | <a href="#">PDF</a> |
| START                 | Black          | <a href="#">ECX1670-B10</a> | \$3.00 | <a href="#">PDF</a> |
| STOP                  | Black          | <a href="#">ECX1670-B11</a> | \$3.00 | <a href="#">PDF</a> |
| STOP                  | Red            | <a href="#">ECX1670-R11</a> | \$3.00 | <a href="#">PDF</a> |
| TEST                  | Black          | <a href="#">ECX1670-B39</a> | \$3.75 | <a href="#">PDF</a> |
| TRANSFER              | Black          | <a href="#">ECX1670-B40</a> | \$3.75 | <a href="#">PDF</a> |
| TRIP                  | Black          | <a href="#">ECX1670-B41</a> | \$3.75 | <a href="#">PDF</a> |
| UNCLAMP               | Black          | <a href="#">ECX1670-B42</a> | \$3.75 | <a href="#">PDF</a> |
| UP                    | Black          | <a href="#">ECX1670-B12</a> | \$3.00 | <a href="#">PDF</a> |
| UP OFF DOWN           | Black          | <a href="#">ECX1670-B49</a> | \$3.75 | <a href="#">PDF</a> |
| UP-DOWN               | Black          | <a href="#">ECX1670-B18</a> | \$3.00 | <a href="#">PDF</a> |

# 22mm Plastic Pilot Device Accessories



**ECX1690-B16**



**ECX1690-R11**

| Jumbo Plastic Legend Plates |                |                                    |        |                            |
|-----------------------------|----------------|------------------------------------|--------|----------------------------|
| Legend                      | Color of Field | Part Number                        | Price  | Drawing Link               |
| Blank Plate                 | Black          | <a href="#"><u>ECX1690-B</u></a>   | \$3.75 | <a href="#"><u>PDF</u></a> |
| Blank Plate                 | Red            | <a href="#"><u>ECX1690-R</u></a>   | \$3.75 | <a href="#"><u>PDF</u></a> |
| EMERG. STOP                 | Red            | <a href="#"><u>ECX1690-R03</u></a> | \$3.75 | <a href="#"><u>PDF</u></a> |
| HAND-OFF-AUTO               | Black          | <a href="#"><u>ECX1690-B20</u></a> | \$3.75 | <a href="#"><u>PDF</u></a> |
| JOG                         | Black          | <a href="#"><u>ECX1690-B05</u></a> | \$3.75 | <a href="#"><u>PDF</u></a> |
| OFF-ON                      | Black          | <a href="#"><u>ECX1690-B16</u></a> | \$3.75 | <a href="#"><u>PDF</u></a> |
| OPEN-CLOSE                  | Black          | <a href="#"><u>ECX1690-B17</u></a> | \$3.75 | <a href="#"><u>PDF</u></a> |
| POWER ON                    | Black          | <a href="#"><u>ECX1690-B21</u></a> | \$3.75 | <a href="#"><u>PDF</u></a> |
| START                       | Black          | <a href="#"><u>ECX1690-B10</u></a> | \$3.75 | <a href="#"><u>PDF</u></a> |
| STOP                        | Red            | <a href="#"><u>ECX1690-R11</u></a> | \$3.75 | <a href="#"><u>PDF</u></a> |

Note: Legend plate text is 3mm in height

# GCX Series 22mm Plastic Pilot Devices Specifications

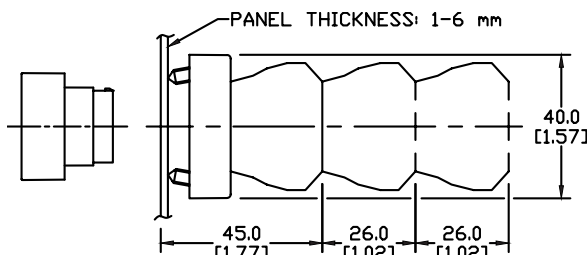
## Assembly information

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.

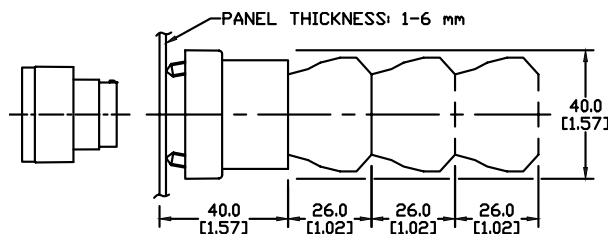
## Dimensions

mm  
[inches]

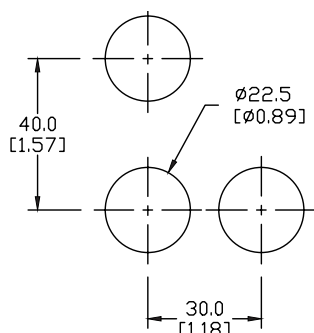
**Pushbuttons and selector switches**



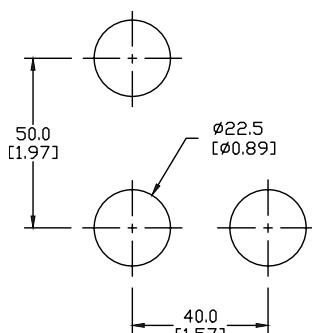
**Illuminated pushbuttons and selector switches/indicator lights**



## Mounting



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

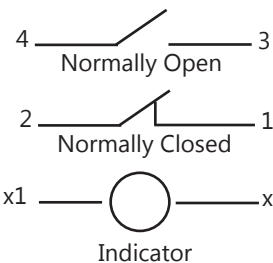


**This layout is suitable if all switches are 400V or less and different polarity.**

**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                    |                                                                                                                                                                                                       |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Standards Reference</b>        | CEI EN 60947-5-1, CSA C22-2 n.14                                                                                                                                               | <b>Rated Thermal Current (contact block)</b> | A300, Q300 (Refer to E22 Series mounting/contact rating section for details)                                                                                                                          |
| <b>Approvals</b>                  | UL File E189258, IMQ (where specified)                                                                                                                                         | <b>Rated Insulation Voltage</b>              | Ui 660V according to CEI EN 60947-5-1, 300V according to CSA C22-2 n.14 and UL 508                                                                                                                    |
| <b>Enclosure Material</b>         | Fiberglass reinforced thermoplastic                                                                                                                                            | <b>Dielectric Strength</b>                   | 3kV (1 second)                                                                                                                                                                                        |
| <b>Contacts Material</b>          | Silver                                                                                                                                                                         | <b>Insulation Resistance</b>                 | 2MΩ min. (500VDC)                                                                                                                                                                                     |
| <b>Protection Degree</b>          | 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.) | <b>Initial Contact Resistance</b>            | ≤ 25mΩ                                                                                                                                                                                                |
| <b>Electric Shock Protection</b>  | IEC 536, Class II                                                                                                                                                              | <b>Short-Circuit Protection*</b>             | Cartridge fuses gl 10 A-500V 10, 3x38/1 100 KA                                                                                                                                                        |
| <b>Temperature Ratings</b>        | Storage: -40 to 80°C (-40 to 176° F)<br>Operating: -25° to +70°C (-13° to 158° F)                                                                                              | <b>Terminal Markings</b>                     | According to CENELEC EN 50013                                                                                                                                                                         |
| <b>Working Positions</b>          | All working positions are allowed                                                                                                                                              | <b>Connections</b>                           | Single screw with non-loosening plate clamp, 14AWG max., Tighten to 0.8Nm max                                                                                                                         |
| <b>Mechanical Life</b>            | Pushbuttons, selector switches, joy stick switches: 1,000,000 operations<br>Emergency mushrooms and push-push pushbuttons: 300,000 operations                                  | <b>Contacts Operation</b>                    | Self-cleaning types EN01 (N.C.) EN 10 (N.O.) slow-action, positive opening                                                                                                                            |
| <b>Positive Opening Operation</b> | (according to IEC 947-5-1)<br>All functions incorporating an NC contact are positive opening operation                                                                         | <b>Operation Frequency</b>                   | 3600 operations per hour max.                                                                                                                                                                         |
|                                   |                                                                                                                                                                                | <b>Utilization Category</b>                  | AC15 (Control of AC electromagnetic loads)<br>24 volts AC at 10 amps<br>130 volts AC at 6.5 amps<br>DC13 (Control of DC electromagnetic loads)<br>24 volts DC at 1.5 amps<br>110 volts DC at 0.5 amps |

\*Note: Recommended, not supplied