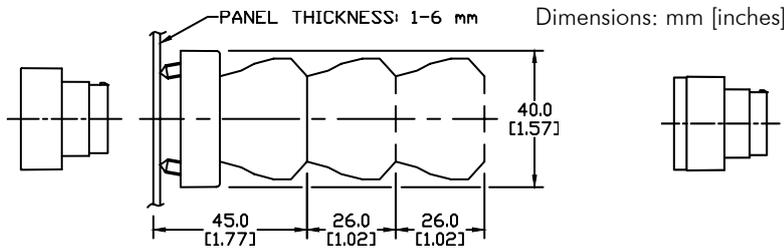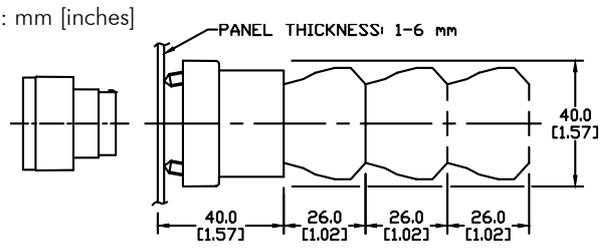# GCX Series 22mm Plastic Pilot Devices Specifications

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.
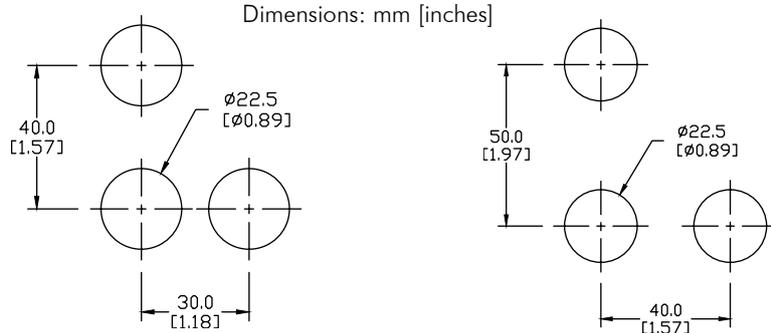
Pushbuttons and selector switches

PANEL THICKNESS: 1-6 mm
Dimensions: mm [inches]
40.0 [1.57]
45.0 [1.77]   26.0 [1.02]   26.0 [1.02]

Illuminated pushbuttons and selector switches/indicator lights

PANEL THICKNESS: 1-6 mm
40.0 [1.57]
40.0 [1.57]   26.0 [1.02]   26.0 [1.02]   26.0 [1.02]

Mounting

Dimensions: mm [inches]

40.0 [1.57]
Ø22.5 [Ø0.89]
30.0 [1.18]

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

50.0 [1.97]
Ø22.5 [Ø0.89]
40.0 [1.57]

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

4 ——⟋—— 3
Normally Open

2 ——⟋—— 1
Normally Closed

x1 ——◯—— x2
Indicator

Specifications

These specifications apply to all the GCX and ECX 22mm plastic pushbuttons and switches.

| Physical Specifications	
Standards Reference	CEI EN 60947-5-1, CSA C22-2 n.14
Approvals	UL File E189258, IMQ (where specified)
Enclosure Material	Fiberglass reinforced thermoplastic
Contacts Material	Silver
Protection Degree	IP 40 for GCX3151-24, GCX3151-120, GCX3153-24 and GCX3153-120. IP 65 for all others.(See Appendix of this catalog for explanation of IP ratings according to IEC 144 CEI 70-1.)
Electric Shock Protection	IEC 536, Class II
Temperature Ratings	Storage: -40° -to 80°C (-40° to 176° F) Operating: -25° to +70°C (-13° to 158° F)
Working Positions	All working positions are allowed
Mechanical Life	Pushbuttons, selector switches, joy stick switches: 1,000,000 operations Emergency mushrooms and push-push pushbuttons: 300,000 operations
Positive Opening Operation	(according to IEC 947-5-1) All functions incorporating an NC contact are positive opening operation

Electrical Specifications	
Rated Thermal Current (contact block)	A300, Q300 (Refer to E22 Series mounting/contact rating section for details)
Rated Insulation Voltage	Ui 660V according to CEI EN 60947-5-1, 300V according to CSA C22-2 n.14 and UL 508
Dielectric Strength	3kV (1 second)
Insulation Resistance	2MΩ min. (500VDC)
Initial Contact Resistance	≤25mΩ
Short-Circuit Protection*	Cartridge fuses gl 10 A-500V 10, 3x38l1 100 KA
Terminal Markings	According to CENELEC EN 50013
Connections	Single screw with non-loosening plate clamp,14AWG max., Tighten to 0.8Nm max
Contacts Operation	Self-cleaning types EN01 (N.C.) EN 10 (N.O.) slow action, positive opening
Operation Frequency	3600 operations per hour max.
Utilization Category	AC15 (Control of AC electromagnetic loads) 24 volts AC at 10 amps 130 volts AC at 6.5 amps DC13 (Control of DC electromagnetic loads) 24 volts DC at 1.5 amps 110 volts DC at 0.5 amps

*Note: Recommended, not supplied

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

GCX Series 22mm Plastic Pushbuttons

Momentary flush pushbuttons with protective plastic ring (30mm dia. actuator)

Dimensions: mm [inches]

29.8 [1.17]   12.0 [0.47]   45.0 [1.77]

Ø29.5 [Ø1.16]

39.8 [1.57]
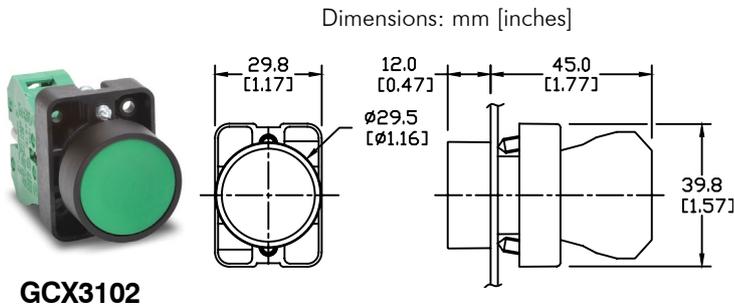
GCX3102

Part Number	Color	Price	Description
GCX3100	Black	$4.75	**One N.O.** contact block, 30mm dia. actuator, mounts in 22mm hole
GCX3101	Red	$4.75	**One N.C.** contact block, 30mm dia. actuator, mounts in 22mm hole
GCX3102	Green	$4.75	**One N.O.** contact block, 30mm dia. actuator, mounts in 22mm hole
GCX3103	Yellow	$4.75	
GCX3104	Blue	$4.75	
GCX3105	White	$4.75	

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

Dimensions: mm [inches]

29.8 [1.17]   12.0 [0.47]   45.0 [1.77]

Ø29.5 [Ø1.16]

39.8 [1.57]
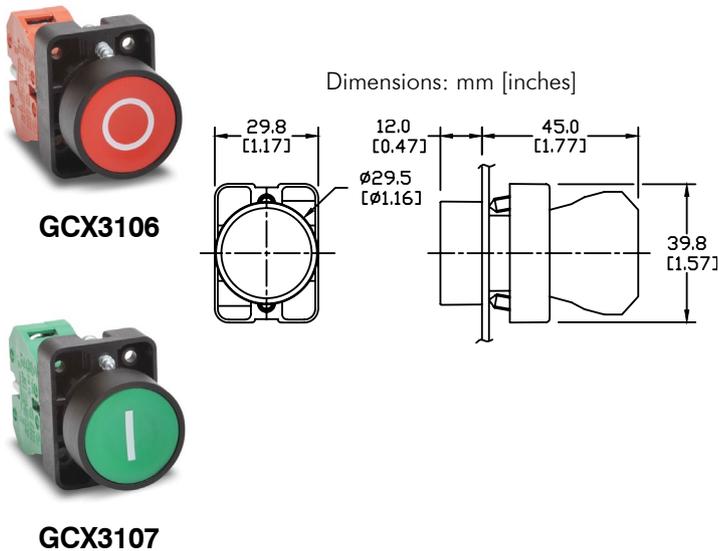
GCX3106

GCX3107

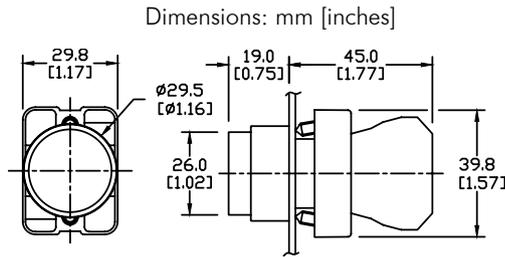| Part Number	Color	Price	Description
GCX3106	Red with OFF symbol (O) on actuator	$5.25	**One N.C.** contact block, 30mm dia. actuator, mounts in 22mm hole
GCX3107	Green with ON symbol (I) on actuator	$5.25	**One N.O.** contact block, 30mm dia. actuator, mounts in 22mm hole

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

GCX Series 22mm Plastic Pushbuttons

Momentary extended pushbuttons

Dimensions: mm [inches]

GCX3113

Part Number	Color	Price	Description
GCX3110	Black	$5.25	**One N.O.** contact block, extended 30mm dia. actuator, mounts in 22mm hole
GCX3111	Red	$5.25	**One N.C.** contact block, extended 30mm dia. actuator, mounts in 22mm hole
GCX3112	Green	$5.25	**One N.O.** contact block, extended 30mm dia. actuator, mounts in 22mm hole
GCX3113	Yellow	$5.25	
GCX3114	Blue	$5.25	
GCX3115	White	$5.25	

Double-headed momentary pushbuttons

| Part Number	Price	Double-headed Momentary Pushbuttons Description
GCX3150	$9.75	Double-headed for on/off control, **One N.O.** and **one N.C.** contact block, fits in 22mm dia. hole, without symbols
GCX3151-24	$15.00	**24VDC/VAC** double-headed with indicator, faces without symbols. **One N.O.** and **one N.C.** contact block, fits in 22mm dia. hole
GCX3151-120	$15.50	**120VDC/VAC** double-headed with indicator, faces without symbols. **One N.O.** and **one N.C.** contact block, fits in 22mm dia. hole
GCX3152	$10.50	Double-headed for on/off control. **One N.O.** and **one N.C.** contact block, fits in 22mm dia. hole. With "ON" (I) and "OFF" (0) symbols
GCX3153-24*	$15.50	**24VDC/VAC** double-headed with indicator, with ON (1) and OFF (0) symbols. **One N.O.** and **one N.C.** contact block
GCX3153-120*	$16.00	**120VDC/AC** double-headed with indicator, with ON (1) and OFF (0) symbols. **One N.O.** and **one N.C.** contact block

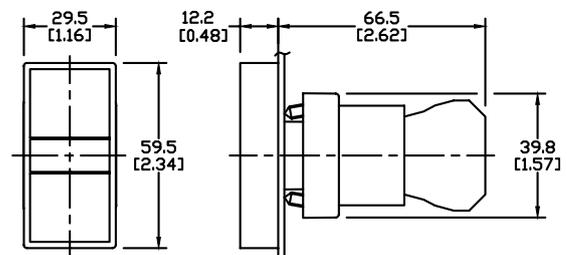** Note: Lamp data in 22mm Plastic Pilot Device Accessories in this section.*

GCX3152 (with on/off symbols)

GCX3151-24

Dimensions: mm [inches]
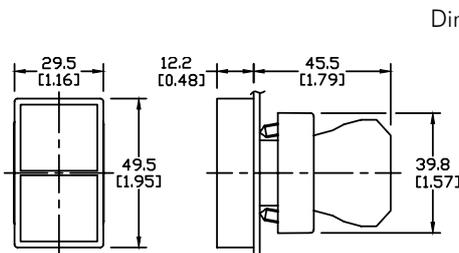
GCX3150, GCX3152 models

GCX3151-24, GCX3153-24, GCX3151-120, GCX3153-120 models

For accessories, see 22mm Plastic Pilot Device Accessories in this section.
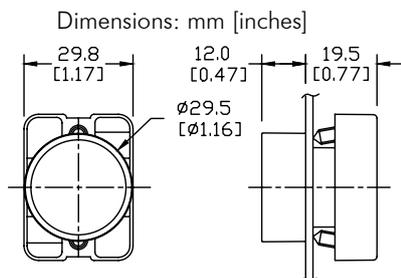
GCX Series 22mm Plastic Pushbuttons without Contact Block

Momentary flush pushbutton operator (without contact block) (30mm dia. actuator)
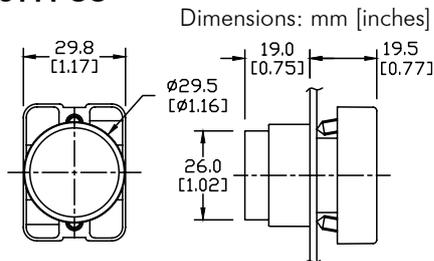

GCX3100-SC   **GCX3101-SC**

Part Number	Color	Price	Description
GCX3100-SC	Black	$2.50	22mm plastic pushbutton operator, flush, includes 30mm diameter operator and support base ONLY. Contact blocks sold separately. Mounts in 22mm hole.
GCX3101-SC	Red	$2.50	22mm plastic pushbutton operator, flush, includes 30mm diameter operator and support base ONLY. Contact blocks sold separately. Mounts in 22mm hole.
GCX3102-SC	Green	$2.50	22mm plastic pushbutton operator, flush, includes 30mm diameter operator and support base ONLY. Contact blocks sold separately. Mounts in 22mm hole.

Dimensions: mm [inches]

NOTE: Contact block sold separately. See accessories.

Momentary extended pushbutton operator (without contact block) (30mm dia. actuator)


GCX3111-SC

Part Number	Color	Price	Description
GCX3110-SC	Black	$2.50	22mm plastic pushbutton operator, extended, includes 30mm diameter operator and support base ONLY. Contact block sold separately. Mounts in 22mm hole.
GCX3111-SC	Red	$2.50	22mm plastic pushbutton operator, extended, includes 30mm diameter operator and support base ONLY. Contact block sold separately. Mounts in 22mm hole.
GCX3112-SC	Green	$2.50	22mm plastic pushbutton operator, extended, includes 30mm diameter operator and support base ONLY. Contact block sold separately. Mounts in 22mm hole.

Dimensions: mm [inches]

NOTE: Contact block sold separately. See accessories.

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

Contact Blocks

Contact blocks are availble for all these products. See accessories.
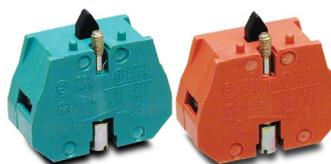
ECX1040-2   **ECX1030-2**

GCX Series 22mm Plastic Pilot Devices
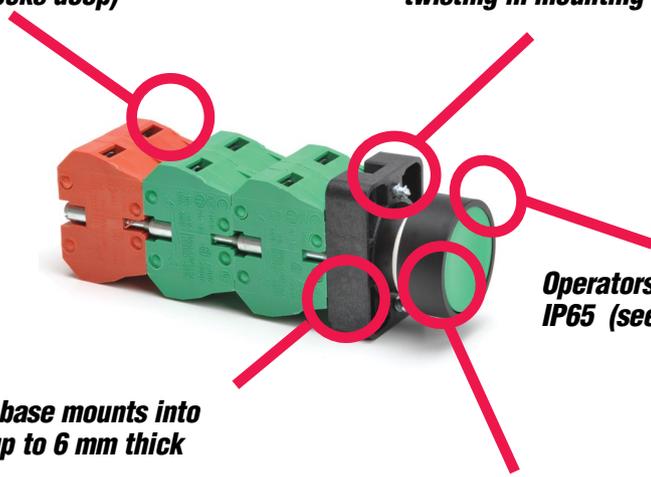
Features

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

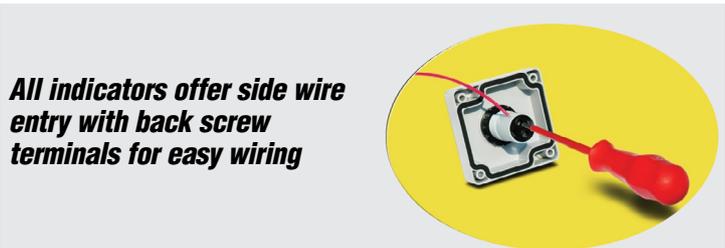**Secure mounting method eliminates twisting in mounting hole**

Operators are protected to IP 40 or IP65 (see specifications below)

Support base mounts into panels up to 6 mm thick

Fiberglass reinforced thermoplastic bezel

Easy installation

1)

2)

3) **CLICK**

4) Turn 1st screw to just touch the panel

5) Tighten 2nd screw

6) Tighten 1st screw

Max torque: 4.5 lb-in

All indicators offer side wire entry with back screw terminals for easy wiring
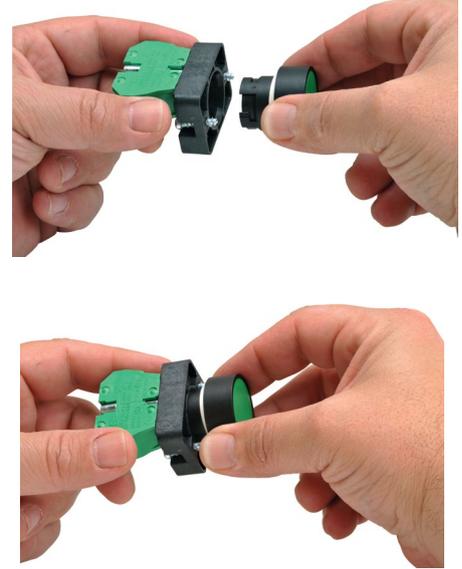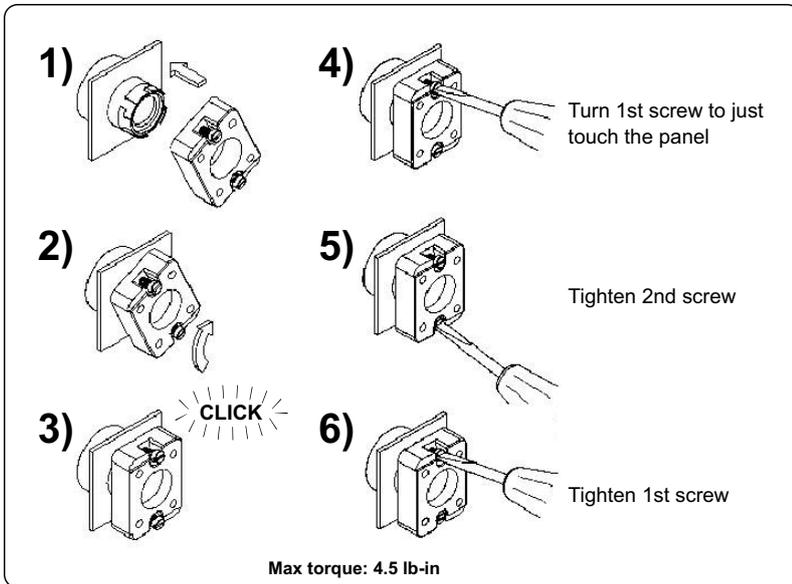
Self-cleaning silver contacts provide reliable, low-energy switching
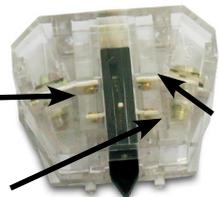
Pressure plate wiring terminals for easy, secure wiring, accepting up to 14 AWG wire

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

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

22mm Plastic Pilot Device Accessories

Replacement incandescent bulbs

ECX1902-5

Replacement Incandescent Bulbs				
Part Number	Quantity	Price	Rating	Description
ECX1900-5	Pkg of 5 bulbs	$8.75	6V@ 200mA, 1.2 watts	6V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4
ECX1902-5	Pkg of 5 bulbs	$8.75	24V@ 80mA 2 watts	24V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4
ECX1904-5	Pkg of 5 bulbs	$18.00	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

ECX1915-2

Replacement LED Lamps					
Part Number	Color	Quantity	Price	Rating	Description
ECX1911-2	Red		$16.00	24V@26mA 0.6 watts	LED replacement lamp for miniature bayonet bases. Works with 22mm switches and indicators, but illumination will not be as even when used with the ECX 22mm indicators. Note: **Will not replace** sealed Cutler-Hammer monoblock LED indicators.
ECX1912-2	Green		$20.00		
ECX1913-2	Yellow	Pkg of 2 LED lamps	$16.00		
ECX1914-2	Blue		$21.50		
ECX1915-2	White		$26.00		
ECX1921-2	Red		$16.00	120V@5mA 0.6 watts	
ECX1922-2	Green		$20.00		
ECX1923-2	Yellow		$16.00		
ECX1924-2	Blue		$21.50		
ECX1925-2	White		$26.00		

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

ECX1490

Hole Plug			
Part Number	Color	Price	Description
ECX1490	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

ECX1703-5

Protective Covers for Pushbuttons				
Part Number	Color	Quantity	Price	Description
ECX1700-5	Black		$6.75	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.
ECX1701-5	Red		$6.75	
ECX1702-5	Green		$6.75	
ECX1703-5	Yellow	Pkg of 5 protective caps	$6.75	
ECX1704-5	Blue		$6.75	
ECX1705-5	Clear		$6.75	
ECX1706-5	Clear		$12.00	Clear silicone protective covers for use with 22mm illuminated and **extended pushbuttons only. Will not work** with Cutler-Hammer pushbuttons or 22mm mushroom pushbuttons.

Knockout Punches

109225

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

ECX1067-2

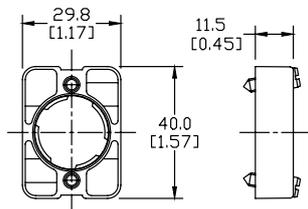| Replacement Keys			
Part Number	Quantity	Price	Description
ECX1067-2	Pkg of 2	$6.00	Replacement key for GCX series key-actuated selector switches, pack of 2 sets (2 keys each). NOTE: Will not work with Cutler-Hammer 22mm switches.

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

22mm Plastic Pilot Device Accessories

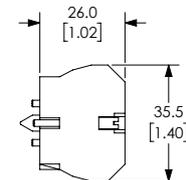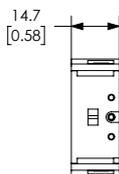## Replacement 22mm support base

ECX3029-2

Replacement 22mm Support Base			
Part Number	Quantity	Price	Description
ECX3029-2	Pkg of 1	$1.75	22mm plastic support base. Note: This item is supplied as a replacement part and is not required with any switch assembly. **Will not work** with Cutler-Hammer 22mm switches sold by AUTOMATIONDIRECT

29.8 [1.17] 11.5 [0.45] 40.0 [1.57] Dimensions: mm [inches]

Replacement contact blocks

ECX1030-2

Replacement Contact Blocks				
Part Number	Quantity	Price	Contacts	Description
ECX1030-2	Pkg of 2	$6.50	Red, normally-closed (N.C.)	Replacement contact block for 22mm pushbuttons and selector switches. Tightening Torque, terminal screw: 0.8 N·m max, mounting screw: 0.5 N·m max. Note: **Will not work** with Cutler-Hammer 22mm switches sold by AUTOMATIONDIRECT
ECX1030-5	Pkg of 5	$15.50		
ECX1040-2	Pkg of 2	$6.50	Green, normally-open (N.O.)	
ECX1040-5	Pkg of 5	$15.50		
ECX1042-2	Pkg of 2	$6.50	Brown, normally-open (N.O.), push-push	Use on lighted Push-push button only

Note: See electrical specificatons on GCX Series 22mm Plastic Pilot Devices Specifications page at beginning of this section.

14.7 [0.58] 26.0 [1.02] 35.5 [1.40] Dimensions: mm [inches]

EMERGENCY STOP legend plate

ECX1651

EMERGENCY STOP Legend Plate			
Part Number	Quantity	Price	Description
ECX1651	pkg. of 1	$2.75	Oversize yellow circular EMERGENCY STOP legend plate for 22mm E-stop type mushroom pushbuttons, 60mm outside diameter.

Two-position short lever operator

GR1172PR-5

Short Lever Replacement Operator				
Part Number	Lamp Color	Price	2-Position	Use with
GR1172PR-5	Red	$15.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk	Part numbers starting with GCX124, GCX125 GCX324, GCX325
GR1172PV-5	Green	$15.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk	
GR1172PG-5	Yellow	$15.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk	
GR1172PB-5	Blue	$15.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk	
GR1172PN-5	Clear	$15.00	22mm 2-position selector switch illuminated short lever replacement operator, 5/pk	

22mm Plastic Pilot Device Accessories

Three-position short lever operator

GR1288PR-5

Short Lever Replacement Operator				
Part Number	Lamp Color	Price	3-Position	Use with
GR1288PR-5	Red	$15.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	Part numbers starting with GCX126, GCX128 GCX326, GVX328
GR1288PV-5	Green	$15.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	
GR1288PG-5	Yellow	$15.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	
GR1288PB-5	Blue	$15.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	
GR1288PN-5	Clear	$15.00	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	

Mushroom switch replacement operator

PL1298P-5

Mushroom Switch Replacement Operator				
Part Number	Lamp Color	Price	Description	Use with
PL1171PR-5	Red	$6.50	22mm, illuminated **momentary** Mushroom switch replacement operator, red, 5/pk	Part numbers starting with GCX1221, GCX3221 mushroom-style illuminated pushbuttons
PL1298P-5	Red	$6.50	22mm illuminated **twist-to-release** mushroom switch replacement operator, red, 5/pk	Part numbers starting with GCX1226, GCX3226 mushroom-style illuminated pushbuttons

Flush pushbutton replacement operator

GR1168PR-5

Flush Pushbutton Replacement Operator				
Part Number	Lamp Color	Price	Description	Use with
GR1168PR-5	Red	$8.25	22mm illuminated flush pushbutton replacement operator, 5/pk	Part numbers starting with GCX119, GCX120 GCX319, GCX320
GR1168PV-5	Green	$8.25	22mm illuminated flush pushbutton replacement operator, 5/pk	
GR1168PG-5	Yellow	$8.25	22mm illuminated flush pushbutton replacement operator, 5/pk	
GR1168PB-5	Blue	$8.25	22mm illuminated flush pushbutton replacement operator, 5/pk	
GR1168PN-5	Clear	$8.25	22mm illuminated flush pushbutton replacement operator, 5/pk	
GR1168PW-5	White	$8.25	22mm illuminated flush pushbutton replacement operator, 5/pk	

Extended pushbutton replacement operator

PL1308PR-5

Extended Pushbutton Replacement Operator				
Part Number	Lamp Color	Price	Description	Use with
PL1308PR-5	Red	$6.25	22mm illuminated extended pushbutton, replacement operator, 5/pk	Part numbers starting with GCX121, GCX321
PL1308PV-5	Green	$6.25	22mm illuminated extended pushbutton, replacement operator, 5/pk	
PL1308PG-5	Yellow	$6.25	22mm illuminated extended pushbutton, replacement operator, 5/pk	
PL1308PB-5	Blue	$6.25	22mm illuminated extended pushbutton, replacement operator, 5/pk	
PL1308PN-5	Clear	$6.25	22mm illuminated extended pushbutton, replacement operator, 5/pk	
PL1308PW-5	White	$6.25	22mm illuminated extended pushbutton, replacement operator, 5/pk	

Note: All dimensions are in inches [millimeters].

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.
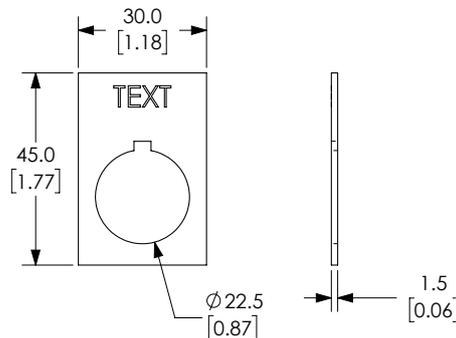
ECX1670-B07

ECX1670-R03

Plastic Legend Plates			
Legend	**Color of Field**	**Part Number**	**Price**
AUTO OFF HAND	Black	ECX1670-B46	$3.50
Blank Plate	Black	ECX1670-B	$3.00
Blank Plate	Red	ECX1670-R	$3.00
CLAMP	Black	ECX1670-B24	$3.50
CLOSE	Black	ECX1670-B01	$3.00
DOWN	Black	ECX1670-B02	$3.00
EMERG. STOP	Red	ECX1670-R03	$3.00
EXTEND	Black	ECX1670-B51	$3.50
FEEDER OFF	Black	ECX1670-B26	$3.50
FEEDER ON	Black	ECX1670-B25	$3.50
FOR OFF REV	Black	ECX1670-B19	$3.00
FOR-REV	Black	ECX1670-B13	$3.00
FORWARD	Black	ECX1670-B04	$3.00
GRIP	Black	ECX1670-B53	$3.50
HAND-AUTO	Black	ECX1670-B14	$3.00
HAND OFF AUTO	Black	ECX1670-B20	$3.00
HIGH	Black	ECX1670-B27	$3.50
HIGH LOW	Black	ECX1670-B43	$3.50
IN	Black	ECX1670-B28	$3.50
INCH	Black	ECX1670-B29	$3.50
JOG	Black	ECX1670-B05	$3.00
JOG FOR	Black	ECX1670-B30	$3.50
JOG REV	Black	ECX1670-B31	$3.50
JOG-RUN	Black	ECX1670-B15	$3.00
LOW	Black	ECX1670-B32	$3.50
LOWER	Black	ECX1670-B33	$3.50

Note: Legend plate text is 3mm in height

Plastic Legend Plates			
Legend	**Color of Field**	**Catalog Number**	**Price**
MAN AUTO	Black	ECX1670-B44	$3.50
MAN OFF AUTO	Black	ECX1670-B47	$3.50
MOTOR RUN	Black	ECX1670-B22	$3.00
MOTOR STOP	Black	ECX1670-B23	$3.00
OFF	Black	ECX1670-B34	$3.50
OFF-ON	Black	ECX1670-B16	$3.00
ON	Black	ECX1670-B06	$3.00
OPEN	Black	ECX1670-B07	$3.00
OPEN OFF CLOSE	Black	ECX1670-B48	$3.50
OPEN-CLOSE	Black	ECX1670-B17	$3.00
OUT	Black	ECX1670-B35	$3.50
POWER ON	Black	ECX1670-B21	$3.00
PULL ON PUSH OFF	Black	ECX1670-B50	$3.50
RAISE	Black	ECX1670-B36	$3.50
READY	Black	ECX1670-B37	$3.50
RELEASE	Black	ECX1670-B54	$3.50
RESET	Black	ECX1670-B38	$3.50
RETRACT	Black	ECX1670-B52	$3.50
REVERSE	Black	ECX1670-B08	$3.00
RUN	Black	ECX1670-B09	$3.00
SAFE RUN	Black	ECX1670-B45	$3.50
START	Black	ECX1670-B10	$3.00
STOP	Black	ECX1670-B11	$3.00
STOP	Red	ECX1670-R11	$3.00
TEST	Black	ECX1670-B39	$3.50
TRANSFER	Black	ECX1670-B40	$3.50
TRIP	Black	ECX1670-B41	$3.50
UNCLAMP	Black	ECX1670-B42	$3.50
UP	Black	ECX1670-B12	$3.00
UP OFF DOWN	Black	ECX1670-B49	$3.50
UP-DOWN	Black	ECX1670-B18	$3.00

Dimensions: mm [inches]

22mm Plastic Pilot Device Accessories

ECX1690-B16

Jumbo Plastic Legend Plates

Legend	Color of Field	Part Number	Price
Blank Plate	Black	ECX1690-B	$3.50
Blank Plate	Red	ECX1690-R	$3.50
EMERG. STOP	Red	ECX1690-R03	$3.50
HAND-OFF-AUTO	Black	ECX1690-B20	$3.50
JOG	Black	ECX1690-B05	$3.50
OFF-ON	Black	ECX1690-B16	$3.50
OPEN-CLOSE	Black	ECX1690-B17	$3.50
POWER ON	Black	ECX1690-B21	$3.50
START	Black	ECX1690-B10	$3.50
STOP	Red	ECX1690-R11	$3.50

Note: Legend plate text is 3mm in height

ECX1690-R11

45.0 [1.77]

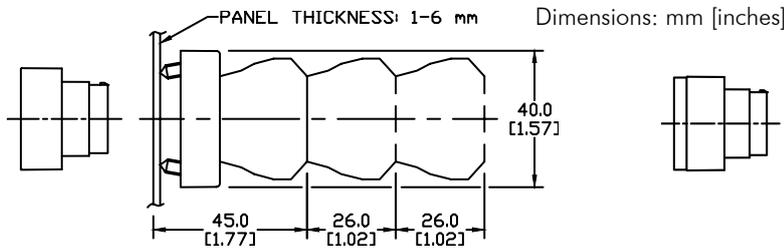45.0 [1.77]

TEXT

⌀ 22.5 [0.87]

1.5 [0.06]
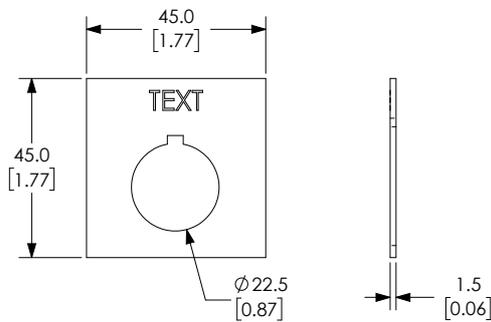
Dimensions: mm [inches]

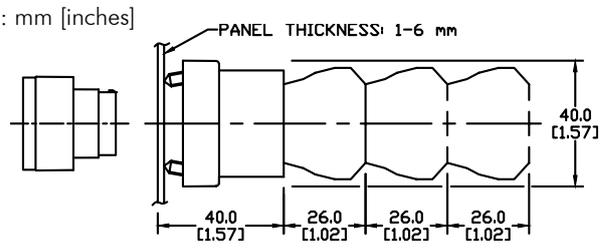# GCX Series 22mm Plastic Pilot Devices Specifications

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.
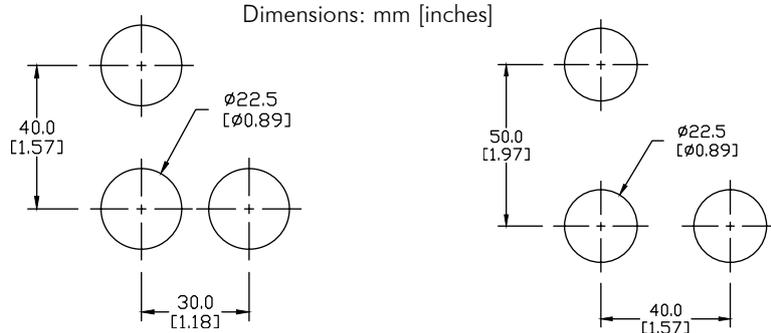
Pushbuttons and selector switches

Dimensions: mm [inches]

PANEL THICKNESS: 1-6 mm

40.0 [1.57]

45.0 [1.77]   26.0 [1.02]   26.0 [1.02]

Illuminated pushbuttons and selector switches/indicator lights

PANEL THICKNESS: 1-6 mm

40.0 [1.57]

40.0 [1.57]   26.0 [1.02]   26.0 [1.02]   26.0 [1.02]

Mounting

Dimensions: mm [inches]

40.0 [1.57]

Ø22.5 [Ø0.89]

30.0 [1.18]

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

50.0 [1.97]

Ø22.5 [Ø0.89]

40.0 [1.57]

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

4 ———⟋ ——— 3
Normally Open

2 ———⟍ ——— 1
Normally Closed

x1 ——— ◯ ——— x2
Indicator

Specifications

These specifications apply to all the GCX and ECX 22mm plastic pushbuttons and switches.

Physical Specifications	
Standards Reference	CEI EN 60947-5-1, CSA C22-2 n.14
Approvals	UL File E189258, IMQ (where specified)
Enclosure Material	Fiberglass reinforced thermoplastic
Contacts Material	Silver
Protection Degree	IP 40 for GCX3151-24, GCX3151-120, GCX3153-24 and GCX3153-120. IP 65 for all others.(See Appendix of this catalog for explanation of IP ratings according to IEC 144 CEI 70-1.)
Electric Shock Protection	IEC 536, Class II
Temperature Ratings	Storage: -40º -to 80ºC (-40º to 176º F) Operating: -25º to +70ºC (-13º to 158º F)
Working Positions	All working positions are allowed
Mechanical Life	Pushbuttons, selector switches, joy stick switches: 1,000,000 operations Emergency mushrooms and push-push pushbuttons: 300,000 operations
Positive Opening Operation	(according to IEC 947-5-1) All functions incorporating an NC contact are positive opening operation

Electrical Specifications	
Rated Thermal Current (contact block)	A300, Q300 (Refer to E22 Series mounting/contact rating section for details)
Rated Insulation Voltage	Ui 660V according to CEI EN 60947-5-1, 300V according to CSA C22-2 n.14 and UL 508
Dielectric Strength	3kV (1 second)
Insulation Resistance	2MΩ min. (500VDC)
Initial Contact Resistance	≤25mΩ
Short-Circuit Protection*	Cartridge fuses gl 10 A-500V 10, 3x38l1 100 KA
Terminal Markings	According to CENELEC EN 50013
Connections	Single screw with non-loosening plate clamp,14AWG max., Tighten to 0.8Nm max
Contacts Operation	Self-cleaning types EN01 (N.C.) EN 10 (N.O.) slow action, positive opening
Operation Frequency	3600 operations per hour max.
Utilization Category	AC15 (Control of AC electromagnetic loads) 24 volts AC at 10 amps 130 volts AC at 6.5 amps DC13 (Control of DC electromagnetic loads) 24 volts DC at 1.5 amps 110 volts DC at 0.5 amps

Note: Recommended, not supplied

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.