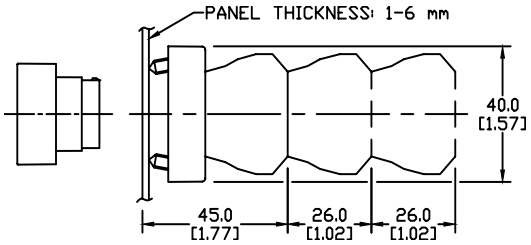
GCX Series 22mm Metal Pilot Devices Specifications

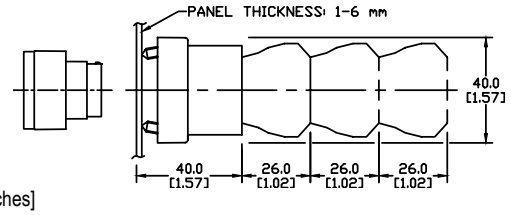
Assembly information

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

Pushbuttons and selector switches

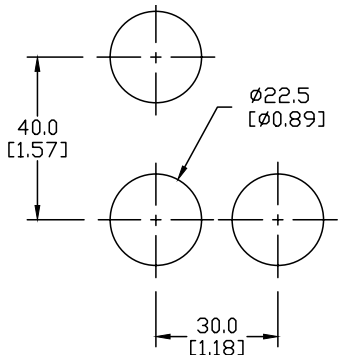


Illuminated pushbuttons and selector switches/pilot lights

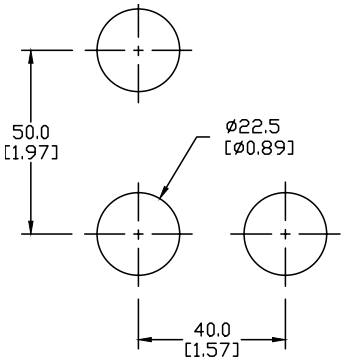


Dimensions: mm [inches]

Mounting



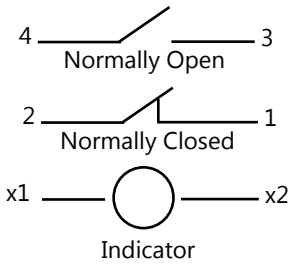
This layout is suitable if all switches are 230V or less and the same polarity.



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 GCX and ECX 22 mm metal pushbuttons and switches.

Physical Specifications	
Standards Reference	CEI EN 60947-5-1, CSA C22-2 n.14
Approvals	CSA, IMQ (where specified), UL File E189258
Enclosure Material	Zn + Al + Mg alloy, chromium plated
Contacts Material	Silver
Protection Degree	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.)
Temperature Ratings	Storage: -40 -to 80°C (-40 to 176° F) Operating: -25 to +70°C (-13 to 158° F)
Working Positions	All working positions are allowed
Mechanical Life	Pushbuttons, selector switches: Joy stick switches: 1,000,000 operations Mushroom pushbuttons: 300,000 operations

Electrical Specifications	
Rated Thermal Current (contact block)	A300, Q300 (Refer to 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
Dielectric Strength	3kV (1 second)
Insulation Resistance	2MΩ min. (500VDC)
Initial Contact Resistance	≤ 25mΩ
Short-Circuit Protection*	Cartridge fuses gl 10A - 500V 10,3x38l1 100kA
Terminal Markings	According to CENELEC EN 50013
Connections	Single screw with non-loosening plate clamp,14AWG max.
Contacts Operation	Self-cleaning types EN01 (N.C.) EN 10 (N.O.) slow-action, positive opening
Operation Frequency	3600 operations per hour max.
Utilization Category	AC15 (Control of AC electromagnetic loads) 24 volts AC at 10 amps 130 volts AC at 6.5 amps DC13 (Control of DC electromagnetic loads) 24 volts DC at 1.5 amps 110 volts DC at 0.5 amps

***Note: Recommended, not supplied**

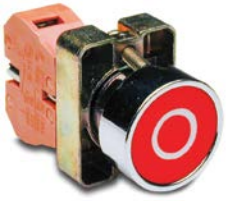
GCX Series 22mm Metal Pushbuttons

Momentary Flush Pushbuttons with protective metal ring (30mm dia. actuator)

GCX1102

Momentary Pushbuttons Flush with Protective Metal Ring				
Part Number	***Color***	***Price***	***Drawing Link***	***Description***
GCX1100	Black	$7.50	PDF	One N.O. contact block, 30mm dia. actuator, mounts in 22mm hole
GCX1101	Red	$7.50	PDF	One N.C. contact block, 30mm dia. actuator, mounts in 22mm hole
GCX1102	Green	$7.50	PDF	One N.O. contact block, 30mm dia. actuator, mounts in 22mm hole
GCX1103	Yellow	$7.50	PDF	
GCX1104	Blue	$7.50	PDF	
GCX1105	White	$7.50	PDF	

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



GCX1106

GCX1107

Momentary Pushbuttons Flush ON/OFF				
Part Number	***Color***	***Price***	***Drawing Link***	***Description***
GCX1106	Red with "Off" symbol (O) on actuator	$8.25	PDF	One N.C. contact block, 30mm dia. actuator, mounts in 22mm hole
GCX1107	Green with "On" symbol (I) on actuator	$8.25	PDF	One N.O. contact block, 30mm dia. actuator, mounts in 22mm hole

Momentary Pushbuttons with protective metal ring (40mm dia. actuator)

GCX1121

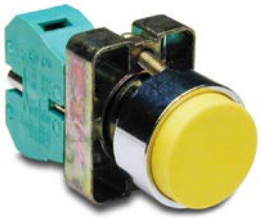
Momentary Pushbuttons with Protective Metal Ring				
Part Number	***Color***	***Price***	***Drawing Link***	***Description***
GCX1120	Black	$8.75	PDF	One N.O. contact block, 40mm dia. actuator, mounts in 22mm hole
GCX1121	Red	$8.75	PDF	One N.C. contact block, 40mm dia. actuator, mounts in 22mm hole
GCX1122	Green	$8.75	PDF	One N.O. contact block, 40mm dia. actuator, mounts in 22mm hole
GCX1123	Yellow	$8.75	PDF	
GCX1124	Blue	$8.75	PDF	
GCX1125	White	$8.75	PDF	

Note: Protective silicone covers are not available for this pushbutton.

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

GCX Series 22mm Metal Pushbuttons

Momentary Extended Pushbuttons



GCX1113

Momentary Extended Pushbuttons				
Part Number	*Color*	*Price*	*Drawing Link*	*Description*
GCX1110	Black	$8.25	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O. contact(s), metal base, metal bezel, Operator: black, extended, 30mm, round, plastic.
GCX1111	Red	$8.25	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.C. contact(s), metal base, metal bezel, Operator: red, extended, 30mm, round, plastic.
GCX1112	Green	$8.25	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O. contact(s), metal base, metal bezel, Operator: green, extended, 30mm, round, plastic.
GCX1113	Yellow	$8.25	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O. contact(s), metal base, metal bezel, Operator: yellow, extended, 30mm, round, plastic.
GCX1114	Blue	$8.25	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O. contact(s), metal base, metal bezel, Operator: blue, extended, 30mm, round, plastic.
GCX1115	White	$8.25	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O. contact(s), metal base, metal bezel, Operator: white, extended, 30mm, round, plastic.

Double-Headed Momentary Pushbuttons

GCX1152 (with on/off symbols)

GCX1151-24

Double-Headed Momentary Pushbuttons			
Part Number	*Price*	*Drawing Link*	*Description*
GCX1150	$14.50	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 50mm, rectangular, plastic.
GCX1151-24	$21.50	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, incandescent illuminated, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 60mm, rectangular, plastic, 24 VAC/VDC, full voltage.
GCX1151-120	$22.50	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, incandescent illuminated, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 60mm, rectangular, plastic, 120 VAC/VDC, full voltage.
GCX1152	$15.50	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 50mm, rectangular, plastic, operator text "(I) and (0)".
GCX1153-24*	$22.50	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, incandescent illuminated, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 50mm, rectangular, plastic, operator text "(I) and (0)", 24 VAC/VDC, full voltage.
GCX1153-120*	$23.50	PDF	AutomationDirect pushbutton, IP65, 22mm, momentary, incandescent illuminated, (1) N.O./(1) N.C. contact(s), metal base, metal bezel, Operator: red/green, double headed, 50mm, rectangular, plastic, operator text "(I) and (0)", 120 VAC/VDC, full voltage.

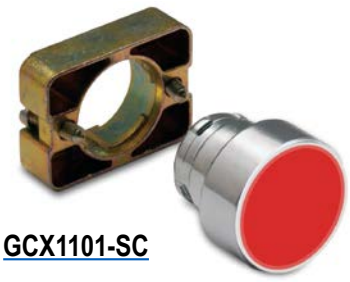
*** Note: Lamp data in 22 mm Metal Pilot Accessories in this section.**

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

GCX Series 22mm Metal Pushbuttons without Contact Block

Momentary Flush Pushbutton Operator (without contact block) (30mm dia. actuator)

Momentary Flush Pushbuttons Operators (without contact block)				
Part Number	***Color***	***Price***	***Drawing Link***	***Description***
GCX1100-SC	Black	$5.00	PDF	22mm metal pushbutton operator, flush, includes 30mm dia. operator and support base ONLY. Contact blocks sold separately, mounts in 22mm hole.
GCX1101-SC	Red	$5.00	PDF	22mm metal pushbutton operator, flush, includes 30mm dia. operator and support base ONLY. Contact blocks sold separately, mounts in 22mm hole.
GCX1102-SC	Green	$5.00	PDF	22mm metal pushbutton operator, flush, includes 30mm dia. operator and support base ONLY. Contact blocks sold separately, mounts in 22mm hole.



GCX1101-SC

Momentary Extended Pushbutton Operator (without contact block) (30mm dia. actuator)

Momentary Extended Pushbutton Operators (without contact block)				
Part Number	***Color***	***Price***	***Drawing Link***	***Description***
GCX1110-SC	Black	$5.00	PDF	22mm metal pushbutton operator, extended, includes 30mm dia. operator and support base ONLY. Contact block sold separately, mounts in 22mm hole
GCX1111-SC	Red	$5.00	PDF	22mm metal pushbutton operator, extended, includes 30mm dia. operator and support base ONLY. Contact block sold separately, mounts in 22mm hole
GCX1112-SC	Green	$5.00	PDF	22mm metal pushbutton operator, extended, includes 30mm dia. operator and support base ONLY. Contact block sold separately, mounts in 22mm hole

GCX1112-SC

Contact blocks are available for these products.

ECX1042-2 ECX1030-2

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

22mm Metal Pilot Device Accessories

Replacement Incandescent Bulbs

Replacement Incandescent Bulbs				
Part Number	**Quantity**	**Price**	**Rating**	**Description**
ECX1900-5	5	$9.50	6V@ 200mA , 1.2 watts	6V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4
ECX1902-5	5	$9.50	24V@ 80mA 2 watts	24V replacement bulb for 22mm switches and indicators. Miniature bayonet base T31/4
ECX1904-5	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.

ECX1902-5

Replacement LED Lamps

Replacement LED Lamps					
Part Number	**Color**	**Quantity**	**Price**	**Rating**	**Description**
ECX1911-2	Red	2	$17.50	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		$22.00		
ECX1913-2	Yellow		$17.50		
ECX1914-2	Blue		$23.50		
ECX1915-2	White		$28.00		
ECX1921-2	Red		$17.50	120V@5mA 0.6 watts	
ECX1922-2	Green		$22.00		
ECX1923-2	Yellow		$17.50		
ECX1924-2	Blue		$23.50		
ECX1925-2	White		$28.00		

ECX1915-2

Hole plug

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.

ECX1490

Pilot Light Replacement Lens

Pilot Light Replacement Lens				
Part Number	**Lamp Color**	**Price**	**Description**	**Use with**
PL1170PR-5	Red	$7.00	22mm metallic series pilot light replacement lens, 5/pk	Part numbers starting with GCX123
PL1170PV-5	Green	$7.00	22mm metallic series pilot light replacement lens, 5/pk	
PL1170PG-5	Yellow	$7.00	22mm metallic series pilot light replacement lens, 5/pk	
PL1170PB-5	Blue	$7.00	22mm metallic series pilot light replacement lens, 5/pk	
PL1170PN-5	Clear	$7.00	22mm metallic series pilot light replacement lens, 5/pk	
PL1170PW-5	White	$7.00	22mm metallic series pilot light replacement lens, 5/pk	

PL1170PR-5

22mm Metal Pilot Device Accessories

Protective Covers for Pushbuttons

Protective Covers for Pushbuttons				
Part Number	***Color***	***Quantity***	***Price***	***Description***
ECX1700-5	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.
ECX1701-5	Red		$7.50	
ECX1702-5	Green		$7.50	
ECX1703-5	Yellow		$7.50	
ECX1704-5	Blue		$7.50	
ECX1705-5	Clear		$7.50	
ECX1706-5	Clear		$13.00	Clear silicone protective covers for use with 2 mm illuminated and extended pushbuttons only. Will not work with Cutler-Hammer pushbuttons or 22mm mushroom pushbuttons.

ECX1703-5

Replacement 22mm Support Base

Replacement 22mm Support Base				
Part Number	***Quantity***	***Price***	***Drawing Link***	***Description***
ECX1029-2	1	$7.00	PDF	22mm metal 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

ECX1029-2

Replacement Contact Blocks

Replacement Contact Blocks					
Part Number	***Quantity***	***Price***	***Drawing Link***	***Contacts***	***Description***
ECX1030-2	2	$7.25	PDF	Red, normally-closed (N.C.)	Replacement contact block for 22mm pushbuttons and selector switches. Tightening Torque, terminal screw: 0.8Nm max mounting screw: 0.5Nm max Note: Will not work with Cutler-Hammer 22mm switches.
ECX1030-5	5	$17.00	PDF		
ECX1040-2	2	$7.25	PDF	Green, normally-open (N.O.)	
ECX1040-5	5	$17.00	PDF		
ECX1042-2	2	$7.25	PDF	Brown, normally-open (N.O.), push-push	Replacement normally open push-push contact blocks for 22mm pushbutton and selector switches, pack of 2. Note: Will not work with Cutler-Hammer 22mm switches.

ECX1030-2

Note: See electrical specifications on ECX Series 22mm Metal Pilot Devices Specifications page at beginning of this section.

Replacement Keys

Replacement Keys			
Part Number	***Quantity***	***Price***	***Description***
ECX1067-2	Pkg of 2 sets (2 keys per set)	$6.50	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.

ECX1067-2

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

22mm Metal Pilot Device Accessories

EMERGENCY STOP Legend Plate

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

ECX1651

Knockout Punches

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.

Note: Part number 109225 is recommended when punching holes for 22mm pilot devices.

109225

Two-Position Short Lever Operator

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

GR1172PR-5

Three-Position Short Lever Operator

3-Position Short Lever Replacement Operator				
Part Number	*Lamp Color*	*Price*	*3-Position*	*Use with*
GR1288PR-5	Red	$16.50	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	Part numbers starting with GCX126, GCX128 GCX326, GCX328
GR1288PV-5	Green	$16.50	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	
GR1288PG-5	Yellow	$16.50	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	
GR1288PB-5	Blue	$16.50	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	
GR1288PN-5	Clear	$16.50	22mm 3-position selector switch illuminated short lever replacement operator, 5/pk	

GR1288PR-5

22mm Metal Pilot Device Accessories

Mushroom Switch Replacement Operator

Mushroom Switch Replacement Operator				
Part Number	***Lamp Color***	***Price***	***Description***	***Use with***
PL1171PR-5	Red	$7.25	22mm, illuminated momentary Mushroom switch replacement operator, red, 5/pk	Part numbers starting with GCX1221, GCX3221 mushroom-style illuminated pushbuttons
PL1298P-5	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***
GR1168PR-5	Red	$9.00	22mm illuminated flush pushbutton replacement operator, 5/pk	Part numbers starting with GCX119, GCX120 GCX319, GCX320
GR1168PV-5	Green	$9.00	22mm illuminated flush pushbutton replacement operator, 5/pk	
GR1168PG-5	Yellow	$9.00	22mm illuminated flush pushbutton replacement operator, 5/pk	
GR1168PB-5	Blue	$9.00	22mm illuminated flush pushbutton replacement operator, 5/pk	
GR1168PN-5	Clear	$9.00	22mm illuminated flush pushbutton replacement operator, 5/pk	
GR1168PW-5	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***
PL1308PR-5	Red	$7.00	22mm illuminated extended pushbutton, replacement operator, 5/pk	Part numbers starting with GCX121, GCX321
PL1308PV-5	Green	$7.00	22mm illuminated extended pushbutton, replacement operator, 5/pk	
PL1308PG-5	Yellow	$7.00	22mm illuminated extended pushbutton, replacement operator, 5/pk	
PL1308PB-5	Blue	$7.00	22mm illuminated extended pushbutton, replacement operator, 5/pk	
PL1308PN-5	Clear	$7.00	22mm illuminated extended pushbutton, replacement operator, 5/pk	
PL1308PW-5	White	$7.00	22mm illuminated extended pushbutton, replacement operator, 5/pk	

PL1308PR-5

22mm Metal Pilot Device Accessories

Legend Plates

Aluminum legend plates for use with 22mm pilot devices. Black or red field with silver background. O-ring included.

ECX1670A-B04

ECX1670A-R03

Aluminum Legend Plates						
Legend	*Color of Field*	*Text Color*	*Background Color*	*Part Number*	*Price*	*Drawing Link*
AUTO OFF HAND	Black	Black	Silver	***ECX1670A-B46***	$3.75	PDF
Blank Plate	Black	-	Silver	***ECX1670A-B***	$3.75	PDF
Blank Plate	Red	-	Silver	***ECX1670A-R***	$3.75	PDF
CLAMP	Black	Black	Silver	***ECX1670A-B24***	$3.75	PDF
CLOSE	Black	Black	Silver	***ECX1670A-B01***	$3.75	PDF
DOWN	Black	Black	Silver	***ECX1670A-B02***	$3.75	PDF
EMERG. STOP	Red	Red	Silver	***ECX1670A-R03***	$3.75	PDF
EXTEND	Black	Black	Silver	***ECX1670A-B51***	$3.75	PDF
FEEDER OFF	Black	Black	Silver	***ECX1670A-B26***	$3.75	PDF
FEEDER ON	Black	Black	Silver	***ECX1670A-B25***	$3.75	PDF
FOR OFF REV	Black	Black	Silver	***ECX1670A-B19***	$3.75	PDF
FOR REV	Black	Black	Silver	***ECX1670A-B13***	$3.75	PDF
FORWARD	Black	Black	Silver	***ECX1670A-B04***	$3.75	PDF
GRIP	Black	Black	Silver	***ECX1670A-B53***	$3.75	PDF
HAND-AUTO	Black	Black	Silver	***ECX1670A-B14***	$3.75	PDF
HAND OFF AUTO	Black	Black	Silver	***ECX1670A-B20***	$3.75	PDF
HIGH	Black	Black	Silver	***ECX1670A-B27***	$3.75	PDF
HIGH LOW	Black	Black	Silver	***ECX1670A-B43***	$3.75	PDF
IN	Black	Black	Silver	***ECX1670A-B28***	$3.75	PDF
INCH	Black	Black	Silver	***ECX1670A-B29***	$3.75	PDF
JOG	Black	Black	Silver	***ECX1670A-B05***	$3.75	PDF
JOG FOR	Black	Black	Silver	***ECX1670A-B30***	$3.75	PDF
JOG REV	Black	Black	Silver	***ECX1670A-B31***	$3.75	PDF
JOG RUN	Black	Black	Silver	***ECX1670A-B15***	$3.75	PDF
LOW	Black	Black	Silver	***ECX1670A-B32***	$3.75	PDF
LOWER	Black	Black	Silver	***ECX1670A-B33***	$3.75	PDF
MAN AUTO	Black	Black	Silver	***ECX1670A-B44***	$3.75	PDF

Note: Legend plate text is 3mm in height
Continued on next page

22mm Metal Pilot Device Accessories

ECX1670A-B48

ECX1670A-R11

Aluminum Legend Plates (continued)						
Legend	*Color of Field*	*Text Color*	*Background Color*	*Part Number*	*Price*	*Drawing Link*
MAN OFF AUTO	Black	Black	Silver	***ECX1670A-B47***	$3.75	PDF
MOTOR RUN	Black	Black	Silver	***ECX1670A-B22***	$3.75	PDF
MOTOR STOP	Black	Black	Silver	***ECX1670A-B23***	$3.75	PDF
OFF	Black	Black	Silver	***ECX1670A-B34***	$3.75	PDF
OFF ON	Black	Black	Silver	***ECX1670A-B16***	$3.75	PDF
ON	Black	Black	Silver	***ECX1670A-B06***	$3.75	PDF
OPEN	Black	Black	Silver	***ECX1670A-B07***	$3.75	PDF
OPEN OFF CLOSE	Black	Black	Silver	***ECX1670A-B48***	$3.75	PDF
OPEN CLOSE	Black	Black	Silver	***ECX1670A-B17***	$3.75	PDF
OUT	Black	Black	Silver	***ECX1670A-B35***	$3.75	PDF
POWER ON	Black	Black	Silver	***ECX1670A-B21***	$3.75	PDF
PULL ON PUSH OFF	Black	Black	Silver	***ECX1670A-B50***	$3.75	PDF
RAISE	Black	Black	Silver	***ECX1670A-B36***	$3.75	PDF
READY	Black	Black	Silver	***ECX1670A-B37***	$3.75	PDF
RELEASE	Black	Black	Silver	***ECX1670A-B54***	$3.75	PDF
RESET	Black	Black	Silver	***ECX1670A-B38***	$3.75	PDF
RETRACT	Black	Black	Silver	***ECX1670A-B52***	$3.75	PDF
REVERSE	Black	Black	Silver	***ECX1670A-B08***	$3.75	PDF
RUN	Black	Black	Silver	***ECX1670A-B09***	$3.75	PDF
SAFE RUN	Black	Black	Silver	***ECX1670A-B45***	$3.75	PDF
START	Black	Black	Silver	***ECX1670A-B10***	$3.75	PDF
STOP	Black	Black	Silver	***ECX1670A-B11***	$3.75	PDF
STOP	Red	Red	Silver	***ECX1670A-R11***	$3.75	PDF
TEST	Black	Black	Silver	***ECX1670A-B39***	$3.75	PDF
TRANSFER	Black	Black	Silver	***ECX1670A-B40***	$3.75	PDF
TRIP	Black	Black	Silver	***ECX1670A-B41***	$3.75	PDF
UNCLAMP	Black	Black	Silver	***ECX1670A-B42***	$3.75	PDF
UP	Black	Black	Silver	***ECX1670A-B12***	$3.75	PDF
UP OFF DOWN	Black	Black	Silver	***ECX1670A-B49***	$3.75	PDF
UP DOWN	Black	Black	Silver	***ECX1670A-B18***	$3.75	PDF

Note: Legend plate text is 3mm in height

22mm Metal Pilot Device Accessories

ECX1680A-B17

ECX1680A-R03

Jumbo Aluminum Legend Plates						
Legend	*Color of Field*	*Text Color*	*Background Color*	*Part Number*	*Price*	*Drawing Link*
Blank Plate	Black	-	Silver	***ECX1680A-B***	$4.25	PDF
Blank Plate	Red	-	Silver	***ECX1680A-R***	$4.25	PDF
EMERG. STOP	Red	Red	Silver	***ECX1680A-R03***	$4.25	PDF
HAND OFF AUTO	Black	Black	Silver	***ECX1680A-B20***	$4.25	PDF
JOG	Black	Black	Silver	***ECX1680A-B05***	$4.25	PDF
OFF ON	Black	Black	Silver	***ECX1680A-B16***	$4.25	PDF
OPEN CLOSE	Black	Black	Silver	***ECX1680A-B17***	$4.25	PDF
POWER ON	Black	Black	Silver	***ECX1680A-B21***	$4.25	PDF
START	Black	Black	Silver	***ECX1680A-B10***	$4.25	PDF
STOP	Red	Red	Silver	***ECX1680A-R11***	$4.25	PDF

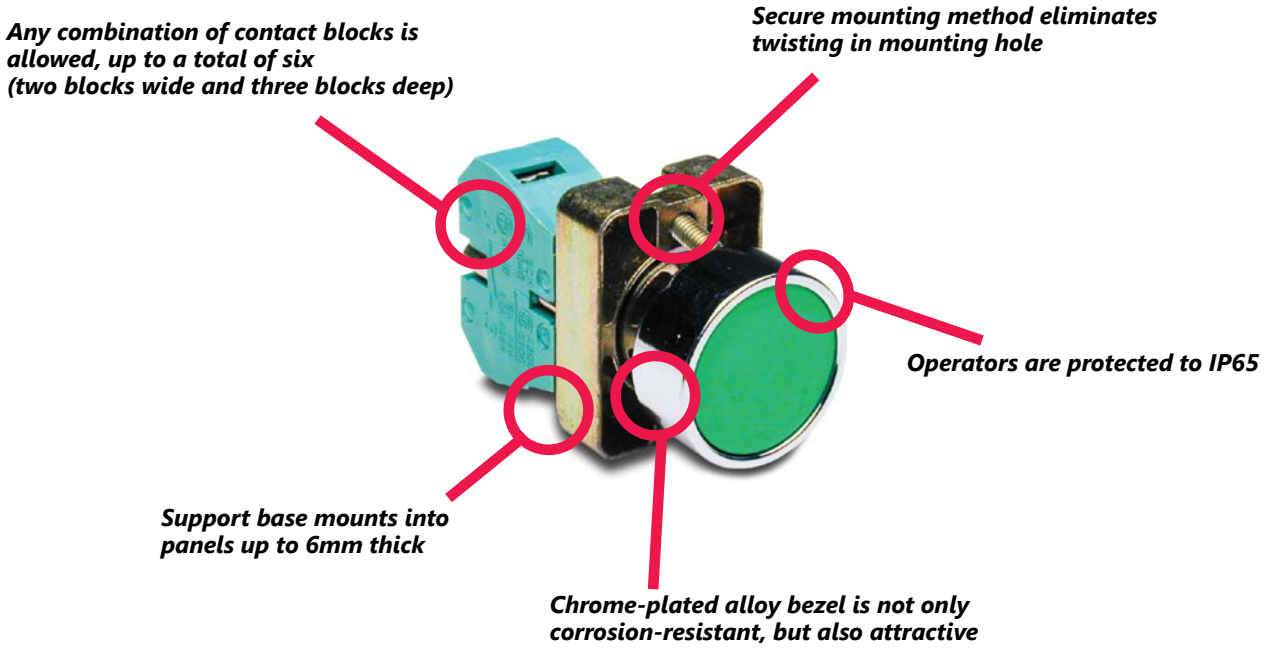
Note: Legend plate text is 3mm in height

E22 Series Cross-reference Tables

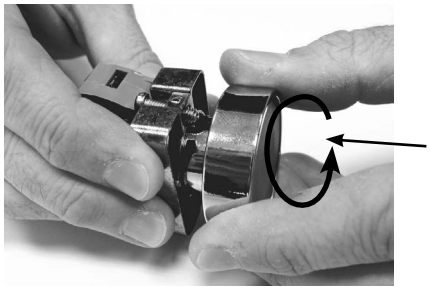
Pushbutton, Indicator Light, and Selector Switch Cross Reference				
Cutler-Hammer	***Allen-Bradley***	***Telemecanique XB2B (chrome bezel) XA2B (black bezel)***	***GE C-2000***	***Siemens***
Non-Illuminated Pushbuttons				
E22PB1A	800EPF2 800E3LX10	ZA2BA2 ZA2BZ101	P9XPNNG10N0	3SB1000-0AB01 3SB02-CBH 3SB1400-0B
E22PB3A	800EPF3 800E3LX10	ZA2BA3 ZA2BZ101	P9XPNVG10N0	3SB1000-0AE01 3SB02-CBH 3SB1400-0B
E22EB2B	800EPE4 800E3LX01	ZA2BL4 ZA2BZ102	P9XPNRS20N0	3SB1000-0LC01 3SB02-CBH 3SB1400-0B
E22ASB204	ENCLSR: 800E-2P 800EP-F3 800E-2LX10 800EP-E4 800E-2LX01 800E-34BE208 800E-34R212	XALB211 Both flush - stop is not extended	P9CPNRSN20NO P9CPNVGN10NO P9EPB02 P9AEPN201 P9AEPN202	3SB02-S21
Illuminated Pushbuttons				
E22TB2X4B	800EPLE4 800E3DL3 800E3X01	ZA2BW14 ZA2BW06224	P9XPLRSDN12NADI	3SB1001-OLC01 3SB02-CBH 3SB1400-0C 3SB1400-2H
E22TB3X4A	800EPLE3 800E3DL3 800E3X10	ZA2B213 AZ2B206124	P9XPLVSDN12NADI	3SB1001-0LE01 3SB02-CBH 3SB1400-0B 3SB1440-2H
E22TB9X4A	800EPLE5 800E3DL3 800E3X10	ZA2BW15 ZA2BW06124	P9XPLASDN12NADI	3SB1001-0LD01 3SB02-CBH 3SB1400-0B 3SB1400-2H
E22TB2X10B	800EPLE4 800E2RL5 800E3X01	ZA2BW14 ZA2BW062120	P9XPLRSB P9PRNVJ P9PDNVD	3SB1001-0LC01 3SB02-CBH 3SB1400-0C
E22TB3X10A	800EPLE3 800E2RL5 800E3X10	ZA2BW13 ZA2BW061120	P9XPLVSD P9PRNVJ P9PDNVD	3SB02-UPR1P 3SB1910-0DE 3SB1400-OB
E22TB9X10A	800DPLE5 800E2RL5 800E3X10	ZA2BW15 ZA2B2061120	P9XPLASD P9PRNVJ P9PDNVD	3SB02-UPR1P 3SB1910-0DD 3SB1400-0B

GCX Series 22mm Metal Pilot Devices

Features

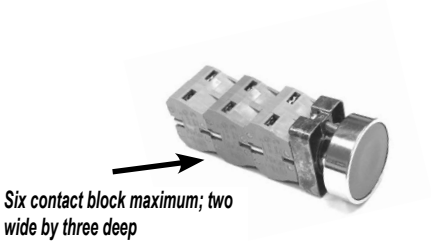


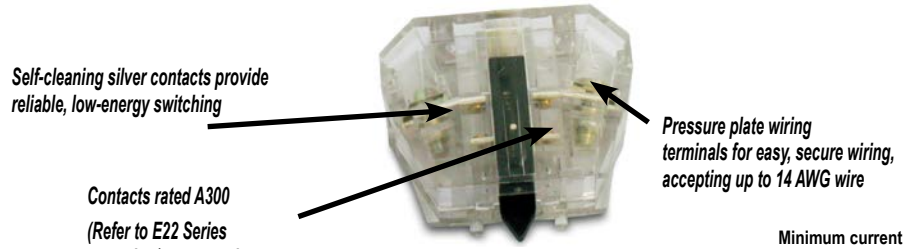
Easy installation



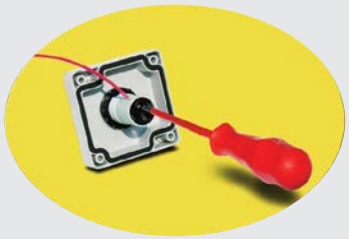
To remove operator, press toward support base and twist counterclockwise.

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 over-tighten.





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



GCX Series 22mm Plastic Pilot Devices Specifications

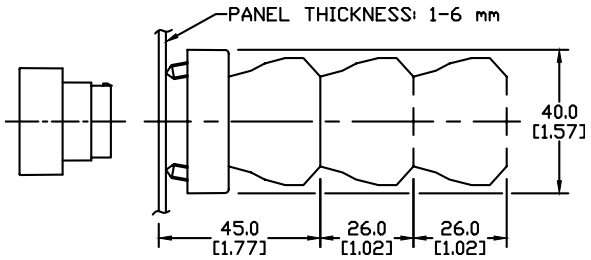
Assembly information

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.

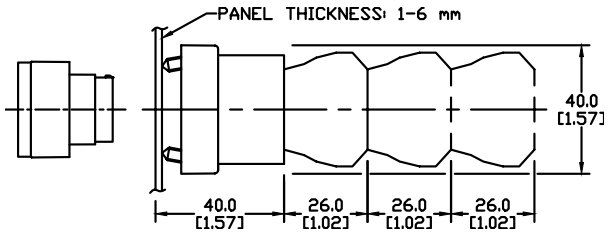
Dimensions

mm
[inches]

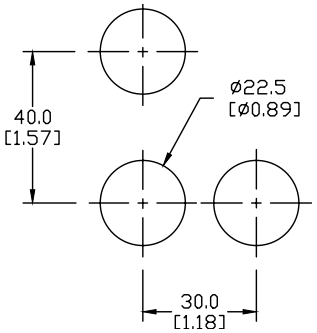
Pushbuttons and selector switches



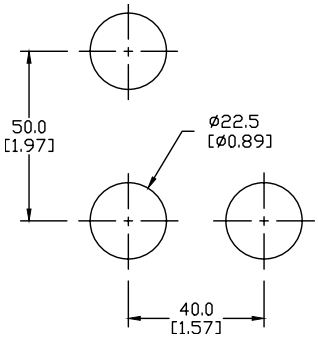
Illuminated pushbuttons and selector switches/ indicator lights



Mounting



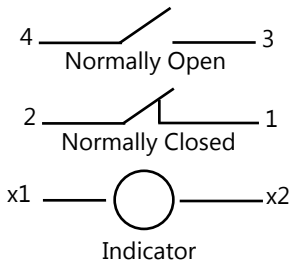
This layout is suitable if all switches are 230V or less and the same polarity.



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	
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	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.)
Electric Shock Protection	IEC 536, Class II
Temperature Ratings	Storage: -40 -to 80ºC (-40 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**