22MM IEC PILOT DEVICES

series 22 iec

c3controls offers the best selection of illuminated and non-illuminated push buttons and selector switches on the market today. We also have a full line of unibody and modular pilot lights, all engineered for superior durability and long life. Check out our multi-voltage LED light module that can be operated at any voltage from 20V to 277V AC or DC. Their modular design and easy-to-create assemblies offer convenience in ordering and assembly. Our line of factory assembled 22mm IEC Compact Control Stations offers the convenience of a single catalog number, shorter control panel bill of material, and easier inventory management.

Section 15

PROVEN

Conformity to Standards:

PILOT DEVICES
UL 508
CSA C22.2 No. 14
IEC 60947-1, 60947-5-1

ASSEMBLED CONTROL STATIONS
UL 508, 50, 50E
CSA C22.2 No. 14, 94.2-07
IEC 60947-5, 60529

ENCLOSURES
UL 50, 50E
CSA C22.2 No. 94.2-07
IEC 60529

Visit www.c3controls.com to download product certifications.

Certifications:

UL File #: E68568 (Guide NKCR, NKCR7)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

UL File #: E68568 (Guide NKCR, NKCR7)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

UL File #: E470986

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

NOTE: The scope (range, description, price, specifications, dimensions, etc.) of the product featured in this section is subject to change without notice. Refer to www.c3controls.com for product updates.

22MM IEC PILOT DEVICES

c3controls offers a comprehensive line of 22mm IEC Pilot Devices. Each product is designed and manufactured to the needs of the machine builder. Check out all the features of our Series 22 IEC below!

THE MOST INNOVATIVE LINE OF AMERICAN-MADE 22MM IEC PILOT DEVICES.

✓ **Proven**	Our 22mm IEC operators are UL Listed and CE marked meeting global standards requirements.
✓ **Easy to Install**	Our "snap-on" contact blocks are color coded for quick circuit identification and feature 35° angled captive terminal screws and self-lifting pressure plates for fast and easy wiring.
✓ **Quick and Simple**	The latching mechanism enables the user to wire the contact blocks and light modules separate from the operator and outside the confined space of the control panel.
✓ **Low Profile**	The 22mm line assumes the lead in the industry with the shortest depth behind the panel.
✓ **Rugged Design**	Manufactured to be the highest quality—inside and out. With its metal appearance and sleek design, you know you are getting the quality you deserve.
✓ **Visible Certifications**	Our product certifications and electrical ratings are clearly marked on the outside of the contact blocks for easy reference during installation.
✓ **Flexible**	Our contact blocks can be stacked 2 deep and up to 3 across for a total of 6 circuits, providing the flexibility to operate multiple control circuits from a single operator.
✓ **Heavy Duty**	Polyester construction provides superior durability, corrosion resistance, moisture rejection and electrical insulation.
✓ **Convenient**	Reduce inventory with our interchangeable modular design, providing endless options for appropriate operator interface.
✓ **Environmentally Secure**	With 4/4X and IP66 ratings, our 22mm line of pilot devices are built to last and withstand dust, corrosion, ice, and rain.
✓ **Lifetime Warranty***	Every product is backed by our lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.
✓ **Guaranteed Same-Day Shipping***	Product availability reduces inventory, and improves cash-flow—saving you money. With c3controls any order for standard catalog items received by 6:00pm ET is guaranteed to ship same-day.
✓ **Advantage Pricing**	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.

*See c3controls Terms & Conditions

> *c3controls' 22mm IEC Multi-Voltage Pilot Lights, along with their outstanding customer and delivery services, give us what we need to maintain a competitive edge.*
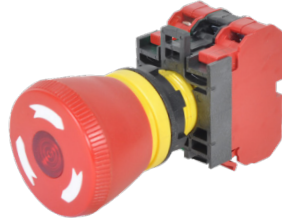
Chris Seiler, General Manager • **Fliteway Technologies**

Momentary Push Button
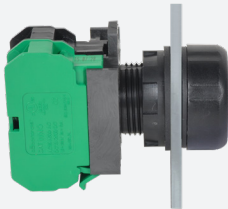
Illuminated E-Stop

Modular Pilot Light

Illuminated Selector Switch

UNIQUE PRODUCT LINE FEATURES

SHORTER DEPTH

Our compact line saves you valuable space in your control panel with our shorter contact blocks and light modules. We deliver the shortest depth 22mm Pilot Devices engineered in the USA, exceeding the demands of our customers and the industry.

EN418 EMERGENCY STOP

c3controls' maintained push-twist-release operators meet the global compliance standards for EN418 - *Safety of Machinery*, and they feature a unique trigger action and are available in both non-illuminated and illuminated versions.

EXCLUSIVE MULTI-VOLTAGE LIGHTS

c3
Exclusive!

Our non-relampable multi-voltage light units— the only U.S. engineered multi-voltage light in the industry!—operate at any voltage from 20V to 277V AC or DC without losing intensity, making them easily interchangeable across multiple applications.

ONE CAM DESIGN

Our single cam design eliminates the need for multiple cam and selector switch configurations, reducing inventory and saving you labor time and costs.

LABOR AND COST SAVINGS

Available in non-illuminated and illuminated versions, our dual-push button operators do the work of two operators in one 22.5mm hole, saving time, labor and space.

COMPACT CONTROL STATIONS

Factory assembly of our 22mm IEC Compact Control Stations provide the convenience of a single catalog number, no assembly required, shorter control panel bill of materials, and easier inventory management.

FIND IT FAST

22mm IEC Pilot Devices

- Certifications
- Specifications
- Dimension Drawings
- Installation Instructions
- Easy to Buy

c3controls.com

SELECT YOUR CONTACT BLOCK

MODULAR CONTACT BLOCK CONFIGURATION

CODE	DESCRIPTION	CONTACT SYMBOL	COLOR	LIST
	SILVER CONTACTS			
WNO	Normally Open Contact Block		Green	$ 8.10
WNC	Normally Closed Contact Block		Red	$ 8.10
WEM	Early Make Contact Block		White	$ 8.10
WDB	Delayed Break Contact Block		Black	$ 8.10
	GOLD PLATED CONTACTS ‡			
WNOG	Normally Open Contact Block ‡		Green	$22.00
WNCG	Normally Closed Contact Block ‡		Red	$22.00
WEMG	Early Make Contact Block ‡		White	$22.00
WDBG	Delayed Break Contact Block ‡		Black	$22.00

STANDARD RATING DESIGNATIONS

A600 (AC) RATING DESIGNATION

A600 (7,200 VA Make and 720 VA Break),
600V AC Maximum
Maximum Continuous Thermal Current, Ith: 10A

Q600 (DC) RATING DESIGNATION

Q600 (69 VA Make and 69 VA Break),
600V DC Maximum
Maximum Continuous Thermal Current, Ith: 2.5A

‡NOTE: Gold plated contacts are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

DISCOUNT SCHEDULE **E**
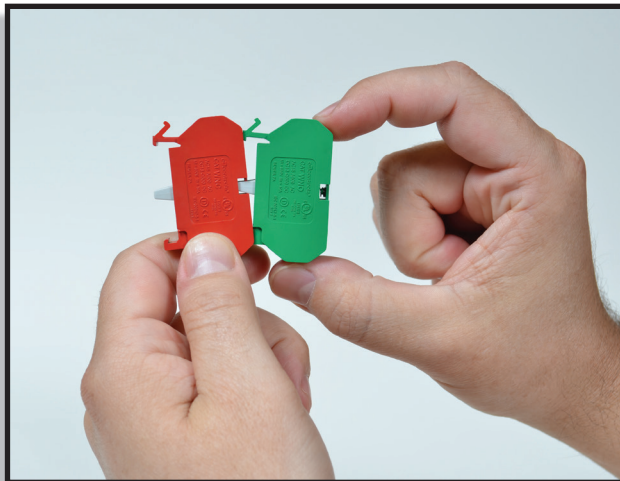
Simple, Fast and Time Saving.

c3controls 22mm IEC modular contact blocks are constructed out of the finest materials ensuring secure assembly at every "snap". Our contact blocks can be stacked 2 deep and up to 3 across for a total of 6 circuits. 35 degree angled captive terminal screws and self-lifting pressure plates make wiring fast and easy. Also, our contact blocks are color coded for quick circuit identification.

AVAILABLE CONTACT BLOCKS FOR ORDINARY LOCATIONS
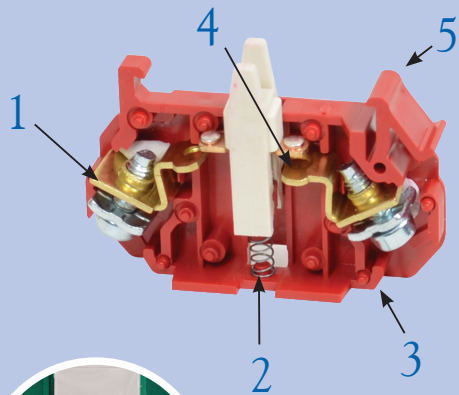
WNO   WNC   WEM   WDB

22mm IEC Contact Blocks

Our contact blocks save you time and money by offering the flexibility to operate multiple control circuits from a single pilot device. This capability includes stacking up to 2 contact blocks deep and up to 3 across providing a total of 6 circuits on most operators in any combination. And, unlike the competition, our standard latching device allows for 3-across contact blocks without the hassle of ordering separate latches. In addition, our "snap-on" contact blocks are color coded for instant circuit identification and take less time to install than it takes to pick up a screwdriver! The heavy-duty construction ensures these contact blocks will remain installed. Our contact blocks are rated A600 (AC), Q600 (DC) and IP20 for finger safe terminations.
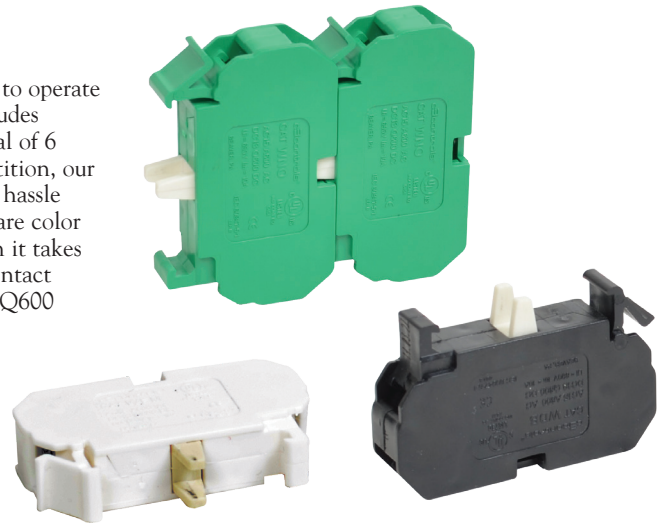
UNIQUE PRODUCT FEATURES

c3controls manufactures the most innovative, user-friendly line of Contact Blocks on the market today!

1. 35 Degree angled captive terminal screws and self-lifting pressure plates facilitate wiring even when blocks are stacked.

2. Stainless steel spring for protection against corrosion.

3. Color-coded body for quick circuit identification (green = NO, red = NC, white = EM, black = DB).

4. Built-in self-wiping cleaning action and high contact point pressure for low-level switching. Silver contact rivets provide long life on normal control circuits.

5. Single mounting position allows for proper installation everytime and constant terminal position from block to block, reducing installation and wiring time.

Gold plated contacts are available on standard blocks for dry circuit applications.

IT'S EASY TO BUILD YOUR OWN PUSH BUTTON

Simply pick the code number from each of the sections below and combine them to build your part number.

Momentary Push Buttons (Non-Illuminated)

W22PB – [____] [____] [____] – [____] / [____] / [____]
        I   II   III   IV   V*   VI*   VII*

Example: To build one of our most popular Push Buttons, the part number would be **W22PB + II + III + IV + V + VI + VII** or **W22PB-FG-10**

*NOTE: Contact block configurations are based on circuit designation. If only two contact blocks are selected, they will be assembled in the left and right positions.
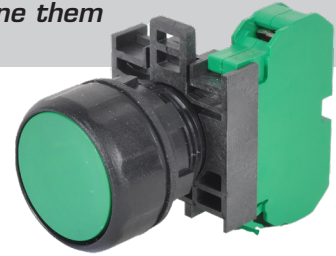
I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22PB	Push Button Operator	$10.00

II. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
M	Chrome Plated (Type 4X)	$ 3.00
A	Aluminum (Type 4)‡	$ 3.00

III. CAP TYPE

CODE	DESCRIPTION	LIST
F	Flush	—
E	Extended	—
M	Mushroom	$ 8.90
G	Guarded‡	$ 16.00
J	Jumbo Mushroom‡	$ 12.00

IV. CAP COLOR

CODE	DESCRIPTION
K	Black
B	Blue
G	Green
E	Grey
R	Red
W	White
Y	Yellow‡

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

V. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$16.20
02	2 Normally Closed Contact Blocks	$16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$16.20

VI. CONTACT BLOCK CONFIGURATION (CENTER)

(USE CHART V FROM ABOVE)

VII. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART V FROM ABOVE)

LEGEND PLATES in almost any size & color are available for same day shipping. See pages 41-43 for complete selection.

SOME OF OUR POPULAR CONFIGURATIONS:

DISCOUNT SCHEDULE **E**

MOMENTARY NON-ILLUMINATED PUSH BUTTON OPERATORS

	CAP COLOR	FLUSH CAP CATALOG NUMBER	LIST	EXTENDED CAP CATALOG NUMBER	LIST
1 NO	Black	W22PB-FK-10	$18.10	W22PB-EK-10	$18.10
	Green	W22PB-FG-10	$18.10	W22PB-EG-10	$18.10
	Red	W22PB-FR-10	$18.10	W22PB-ER-10	$18.10
1 NC	Black	W22PB-FK-01	$18.10	W22PB-EK-01	$18.10
	Green	W22PB-FG-01	$18.10	W22PB-EG-01	$18.10
	Red	W22PB-FR-01	$18.10	W22PB-ER-01	$18.10
1 NO & 1 NC	Black	W22PB-FK-10/01	$26.20	W22PB-EK-10/01	$26.20
	Green	W22PB-FG-10/01	$26.20	W22PB-EG-10/01	$26.20
	Red	W22PB-FR-10/01	$26.20	W22PB-ER-10/01	$26.20

MIX AND MATCH ANY BEZEL, COLOR AND MOMENTARY NON-ILLUMINATED PUSH BUTTON CAP

Flush · Extended · Guarded · Mushroom (40mm) · Jumbo Mushroom (60mm) · Polyester (Type 4X) · Chrome (Type 4X) · Aluminum (Type 4)

22MM IEC MOMENTARY NON-ILLUMINATED PUSH BUTTONS

Our line of 22mm IEC Momentary Non-Illuminated Push Buttons feature contact blocks that are stackable up to 2 deep and 3 across for a total of 6 circuits per operator. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.
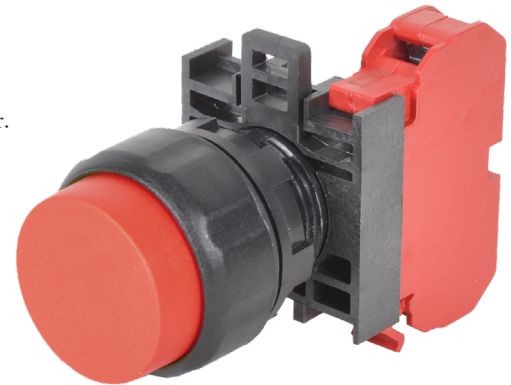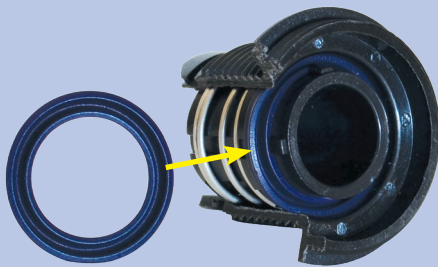
Product features include:

- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.

- Compact size, only 45.6mm (1-57/64") deep from the front of the panel.

- Six color options are available in three different cap types.

- Removable latching device allows for easy installation and wiring for up to three contact blocks across.

- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~ 4mm^2(#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.

- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

UNIQUE PRODUCT FEATURES

Our revolutionary U-cup seal is infused with a Teflon coating to eliminate cracking when exposed to harsh conditions such as heat, dryness and sunlight. The U-Cup seal rides easily along the stroker and keeps water, oils, dust and other corrosive particles in the air away from the contact blocks. The U-Cup seal also acts like a squeegee and forms a permanent watertight seal that meets or exceeds Type 4/4X.

IT'S EASY TO BUILD YOUR OWN PUSH BUTTON

Simply pick the code number from each of the sections below and combine them to build your part number.

Momentary Dual Push Buttons (Non-Illuminated)

W22DPB – ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ – ☐☐☐☐ / ☐☐☐☐
   /   II   III   IV   V   VI*   VII*

Example: To build one of our most popular Push Buttons, the part number would be **W22DPB + II + III + IV + V + VI + VII** or **W22DPB-ERFG-01/10**

*NOTE: Contact block mounted on left side is operated by the bottom push button and contact block mounted on right side is operated by the top push button.
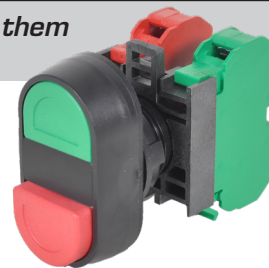
I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22DPB	Dual Push Button	$20.00

II. CAP TYPE (BOTTOM)

CODE	DESCRIPTION
F	Flush
E	Extended

III. CAP COLOR (BOTTOM)

CODE	DESCRIPTION
G	Green
R	Red
K	Black‡
B	Blue‡
E	Grey‡
W	White‡
Y	Yellow‡

IV. CAP TYPE (TOP)

CODE	DESCRIPTION
F	Flush
E	Extended

V. CAP COLOR (TOP)

CODE	DESCRIPTION
G	Green
R	Red
K	Black‡
B	Blue‡
E	Grey‡
W	White‡
Y	Yellow‡

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

VI. CONTACT BLOCK CONFIGURATION (LEFT SIDE) — OPERATED BY THE BOTTOM PUSH BUTTON

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$16.20
02	2 Normally Closed Contact Blocks	$16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$16.20

VII. CONTACT BLOCK CONFIGURATION (RIGHT SIDE) — OPERATED BY THE TOP PUSH BUTTON

(USE CHART VI FROM ABOVE)

DISCOUNT SCHEDULE E

LEGEND PLATES for Dual Push Button operators are available for same day shipping. See pages 41-43 for complete selection.
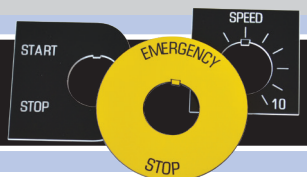
START STOP EMERGENCY STOP SPEED 10

SOME OF OUR POPULAR CONFIGURATIONS:

	MOMENTARY NON-ILLUMINATED DUAL PUSH BUTTONS			
CONTACT SYMBOL	CONTACT BLOCK MOUNTING POSITION	CAP COLOR	EXTENDED RED (BOTTOM) FLUSH GREEN (TOP)	LIST
1 NC & 1 NO	Left Right	Red/Green	W22DPB-ERFG-01/10	$36.20

MIX AND MATCH ANY COLOR AND DUAL PUSH BUTTON CAP

Flush/Flush   Extended/Flush   Flush/ Extended

series
22
iec
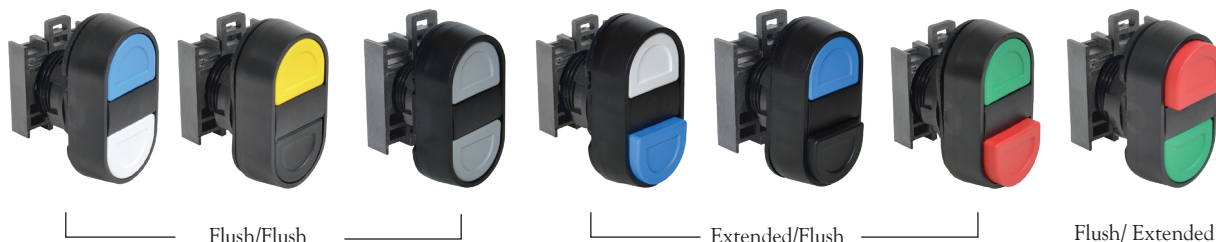
22mm IEC Momentary Non-Illuminated Dual Push Buttons

Our line of 22mm IEC Momentary Non-Illuminated Push Buttons feature contact blocks that are stackable up to 2 deep and 3 across for a total of 6 circuits per operator. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- Two color options are available in both flush and extended caps.
- The Dual Push Button design incorporates all the features and advantages of the Series 22 IEC products.
- Removable latching device allows for easy installation and wiring of contact blocks.
- An illuminated version is also available, see pages 18 & 19.
- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~ 4mm^2(#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

22MM IEC PILOT DEVICES

UNIQUE PRODUCT FEATURES

Labor & Cost Savings

Combine the functionality of two operators in one 22.5mm (7/8") hole—saving time, labor and space!

Environmentally Secure

The seal acts like a squeegee and forms a permanent watertight seal that meets Type 4/4X and IP66 without a rubber boot.

IT'S EASY TO BUILD YOUR OWN PUSH BUTTON

Simply pick the code number from each of the sections below and combine them to build your part number.

Maintained Push Buttons (Non-Illuminated)
2-Position Push-Pull

W22PP – ☐☐☐ ☐☐☐ ☐☐☐ – ☐☐☐ / ☐☐☐ / ☐☐☐
　　　　　 I 　　 *II* 　 *III* 　 *IV* 　 *V** 　 *VI** 　 *VII**

Example: To build one of our most popular Push Buttons, the part number would be W22PP + II + III + IV + V + VI + VII or W22PP-MG-10

*NOTE: Contact block configurations are based on circuit designation. If only two contact blocks are selected, they will be assembled in the left and right positions.

I. OPERATOR TYPE/FUNCTION

CODE	DESCRIPTION	LIST
W22PP	Push-Pull Maintained	$ 27.00

II. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
M	Chrome Plated (Type 4X)	$ 3.00
A	Aluminum (Type 4)‡	$ 3.00

III. CAP TYPE

CODE	DESCRIPTION	LIST
M	Mushroom	—
J	Jumbo Mushroom‡	$ 3.00

IV. CAP COLOR

CODE	DESCRIPTION
G	Green
R	Red
K	Black‡
B	Blue‡
E	Grey‡
W	White‡
Y	Yellow‡

V. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$ 16.20
02	2 Normally Closed Contact Blocks	$ 16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$ 16.20

VI. CONTACT BLOCK CONFIGURATION (CENTER)

(USE CHART V)

VII. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART V)

DISCOUNT SCHEDULE **E**

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

O = OPEN   X = CLOSED

MAINTAINED IN/MAINTAINED OUT					
1 CIRCUIT (01)		**2 CIRCUIT (10/01)**		**2 CIRCUIT (01/01)**	
OUT	IN	OUT	IN	OUT	IN
NC	X	O	NC	X	O	NC	X	O
		NO	O	X	NC	X	O

The 2-Position Push-Pull is maintained in both the push and pull positions. The primary application is "push" to "stop" and "pull" to "start".

MIX AND MATCH ANY BEZEL, COLOR AND PUSH-PULL MAINTAINED NON-ILLUMINATED CAP

Mushroom (40mm)　　Jumbo Mushroom (60mm)　　Polyester (Type 4X)　　Chrome (Type 4X)　　Aluminum (Type 4)
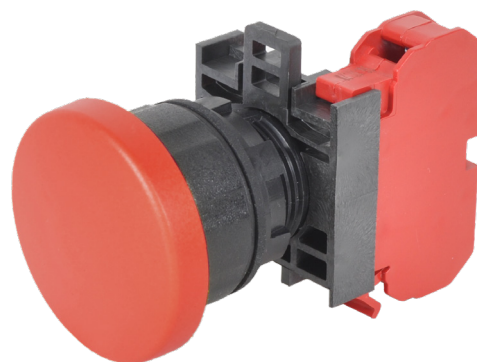
22MM IEC PILOT DEVICES

22MM IEC MAINTAINED NON-ILLUMINATED PUSH BUTTONS

THE MOST RUGGED EMERGENCY STOP IN THE INDUSTRY!

If you are looking for a 22mm heavy-duty emergency stop, look no further. The c3controls 22mm IEC Emergency Stop Push Button is the best in the industry. These operators are manufactured with polyester construction for superior corrosion resistance, moisture rejection and electrical insulation. The solid brass detent mechanism ensures safe circuit interruption every time. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Compact size, only 45.6mm (1-51/64") deep from the front of the panel.
- Direct drive contacts feature a mechanical linkage from the operator to ensure contact separation when actuated, even if the contacts have lightly welded.
- Removable latching device allows for easy installation and wiring for up to three contact blocks across.
- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps to accommodate $0.5 \sim 4mm^2$ (#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.
- Contact blocks are stackable up to 2 deep and 3 across for a total of 6 circuits per operator.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

UNIQUE PRODUCT FEATURES
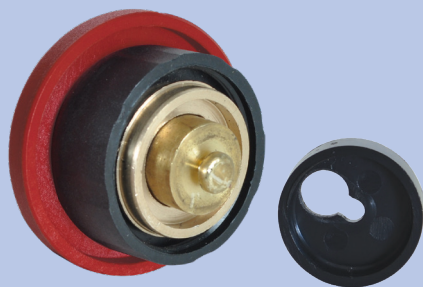
We Put The Metal On The Inside — Where It Counts!

c3controls Emergency Stops contain a solid brass detent mechanism and are the best-engineered, most reliable heavy-duty emergency stop buttons in the world. This rugged design ensures reliable operation in emergency applications, providing safe interruption of circuits, and much longer life when compared to any competitor's product.

SOME OF OUR POPULAR CONFIGURATIONS:

2-POSITION PUSH-PULL MAINTAINED NON-ILLUMINATED OPERATORS			
		MUSHROOM CAP	
	CAP COLOR	CATALOG NUMBER	LIST
1 NO	Green	W22PP-MG-10	$35.10
1 NC	Red	W22PP-MR-01	$35.10

IT'S EASY TO BUILD YOUR OWN PUSH BUTTON

Simply pick the code number from each of the sections below and combine them to build your part number.

Maintained Push Buttons (Non-Illuminated)
3-Position Push-Pull

W22PP 3A ☐ – ☐ ☐ – ☐ / ☐ / ☐
    I   *II*   *III*   *IV*   *V*   *VI*   *VII*   *VIII*

Example: To build one of our most popular Push Buttons, the part number would be **W22PP + 3A + III + IV + V + VI + VII + VIII or W22PP3A-MR-10/01**

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22PP	Push-Pull Maintained	$27.00

II. OPERATOR FUNCTION

CODE	DESCRIPTION
3A	Momentary Out, Maintained Center, Maintained In

III. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
A	Aluminum (Type 4)‡	$3.00

IV. CAP TYPE

CODE	DESCRIPTION	LIST
M	Mushroom	—
J	Jumbo Mushroom‡	$4.10

V. CAP COLOR

CODE	DESCRIPTION
R	Red
K	Black‡
B	Blue‡
G	Green‡
E	Grey‡
W	White‡
Y	Yellow‡

VI. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$ 16.20
02	2 Normally Closed Contact Blocks	$ 16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$ 16.20

VII. CONTACT BLOCK CONFIGURATION (CENTER)

(USE CHART VI FROM ABOVE)

VIII. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART VI FROM ABOVE)

DISCOUNT SCHEDULE **E**

O = OPEN   X = CLOSED

MOMENTARY OUT, MAINTAINED CENTER, MAINTAINED IN

	OUT	CENTER	IN
NC	X	O	O
DB	X	X	O
NO	O	O	X
EM	O	X	X

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

AVAILABLE CAP TYPES AND COLORS FOR 3-POSITION MAINTAINED NON-ILLUMINATED PUSH BUTTONS
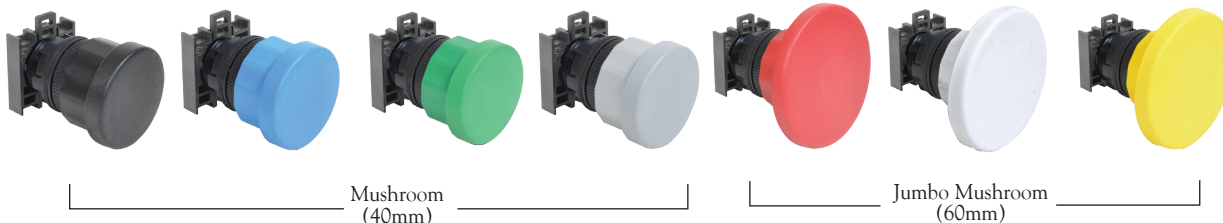
Mushroom (40mm)

Jumbo Mushroom (60mm)

22MM IEC MAINTAINED NON-ILLUMINATED PUSH BUTTONS

THE MOST RUGGED EMERGENCY STOP IN THE INDUSTRY!

All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Heavy-duty polyester construction for excellent durability, superior corrosion resistance, moisture rejection, and electrical insulation.

- Compact size, only 45.6mm (1-51/64") deep from the front of the panel.

- Removable latching device allows for easy installation and wiring for up to three contact blocks across.

- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~ 4mm^2 (#22 ~ #12 AWG)) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.

- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

UNIQUE PRODUCT FEATURES

WE PUT THE METAL ON THE INSIDE WHERE IT COUNTS - FOR SUPERIOR PERFORMANCE IN EMERGENCY STOP CIRCUIT APPLICATIONS!

c3controls Emergency Stops contain a solid brass detent mechanism and are the best-engineered, most reliable heavy-duty emergency stop buttons in the world. This rugged design ensures reliable operation in emergency applications, providing safe interruption of circuits, and much longer life when compared to any competitor's product. Direct drive contacts feature a mechanical linkage from the operator to ensure contact separation when actuated, even if the contacts have lightly welded.

IT'S EASY TO BUILD YOUR OWN PUSH BUTTON

Simply pick the code number from each of the sections below and combine them to build your part number.

Maintained Emergency Stop Push Buttons (Non-Illuminated) 2-Position Push-Twist Release

W22PTR – ☐ ☐ ☐ – ☐ / ☐ / ☐
I   *II*   *III*   *IV*   *V**   *VI**   *VII**

*NOTE: Contact block configurations are based on circuit designation. If only two contact blocks are selected, they will be assembled in the left and right positions.

Example: To build one of our most popular Push Buttons, the part number would be **W22PTR + II + III + IV + V + VI + VII** or **W22PTR-YMR-01/10**
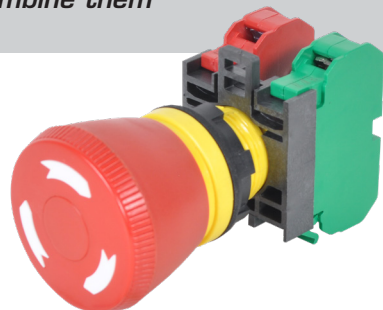
I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22PTR	Push-Twist Release	$31.00

II. HOUSING COLOR

CODE	DESCRIPTION	LIST
(Blank)	Black	—
Y	Yellow*	$ 3.00

*NOTE: A yellow housing with a red mushroom cap must be used to construct an EN418 Emergency Stop Push Button.

III. CAP TYPE

CODE	DESCRIPTIO	LIST
M	Mushroom	—
J	Jumbo Mushroom‡	$4.10

IV. CAP COLOR

CODE	DESCRIPTION
R	Red
K	Black‡
B	Blue‡
G	Green‡
Y	Yellow‡

V. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$ 16.20
02	2 Normally Closed Contact Blocks	$ 16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$ 16.20

VI. CONTACT BLOCK CONFIGURATION (CENTER)

(USE CHART V)

VII. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART V)

The linear push-off twist-to-release style operator requires a "twist" for the "out" or "on" position and a linear "push" for the "in" or "off" position. The twist mushroom cap is marked with arrows identifying the direction for the twist release.

DISCOUNT SCHEDULE **E**

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

O = OPEN   X = CLOSED

MAINTAINED IN/MAINTAINED OUT								
1 CIRCUIT (01)			**2 CIRCUIT (10/01)**			**2 CIRCUIT (01/01)**		
	OUT	IN		OUT	IN		OUT	IN
NC	X	O	NC	X	O	NC	X	O
			NO	O	X	NC	X	O

Mix and Match Any Color and Push-Twist Release Maintained Non-Illuminated Cap

Twist Mushroom (40mm)

Twist Jumbo Mushroom (60mm)

22MM IEC MAINTAINED NON-ILLUMINATED EMERGENCY STOP PUSH BUTTONS

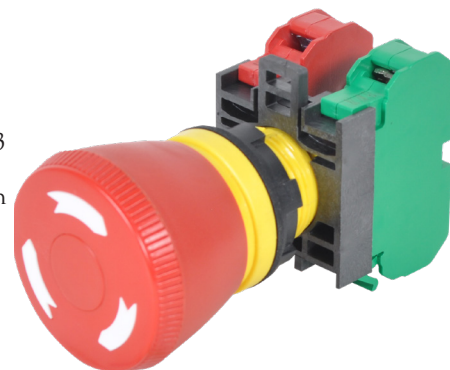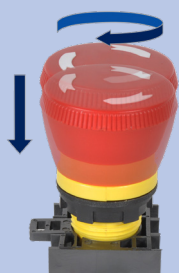Our 22mm IEC Maintained Non-Illuminated Push-Twist Release Push Buttons rugged design ensures reliable operation in emergency stop applications, providing safe interruption of circuits. The operators provide a trigger action function with direct drive contacts meeting global standards for emergency stop buttons. Contact blocks can be stacked up to 2 deep and 3 across for a total of 6 circuits per operator. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.

- Meets global standards for Emergency Stop buttons.

- An illuminated version is also available, see pages 22 & 23.

- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~ 4mm^2 (#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.

- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

UNIQUE PRODUCT FEATURES

ERGONOMICALLY DESIGNED

Cone shaped head with knurls fit easily into your hand for a comfortable operation.

EASE OF VISIBILITY

Molded bold white arrows (black arrows on yellow and white caps) indicate the 45° twist-to-release operation for easy visibility over the life of the product.

EN418 EMERGENCY STOP OPERATORS

c3controls maintained non-illuminated push-twist-release operators were designed to meet EN418 Standards for "Safety of Machinery." Constructing an EN418 Emergency Stop Push Button from our standard operators is easy—simply select a red mushroom cap with a yellow housing.

- Ergonomically designed red mushroom cap (40mm (1-9/16")) with white arrows for quick identification and ease of control.

- Trigger Action Function—Operator requires dedicated push action to operate contacts, eliminating accidental operation and meeting global standards.

- Latching mechanism which is activated when the actuator of the device is depressed to a certain point and the contacts open.

- The anti-teasing function guarantees the contacts will remain open until a person manually intervenes and releases the actuator.

- The direct drive design mechanically links the mushroom cap operator and contacts to drive the electrical contacts open. The trigger action makes the Emergency Stop operator more than a push button.

- Red operator, yellow housing, and molded white directional arrows are all designed to meet global standards for Emergency Stop operators.

IT'S EASY TO BUILD YOUR OWN PUSH BUTTON

Simply pick the code number from each of the sections below and combine them to build your part number.

Momentary Push Buttons (Illuminated)

W22IPB − ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ − ☐☐☐☐ ☐☐☐☐ − ☐☐☐☐ / ☐☐☐☐
/   II   III   IV   V   VI   VII*   VIII*

Example: To build one of our most popular Push Buttons, the part number would be **W22IPB + II + III + IV + V + VI + VII + VIII** or **W22IPB-FG-FM120LG-10**

*NOTE: Contact block configurations are based on circuit designation and light module unit.

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22IPB	Illuminated Push Button	$16.00

II. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
M	Chrome Plated (Type 4X)	$ 3.00
A	Aluminum (Type 4)‡	$ 3.00

III. LENS TYPE

CODE	DESCRIPTION	LIST
F	Flush	—
E	Extended	—
G	Guarded‡	$ 26.00
M	Mushroom‡	$ 14.00

IV. LENS COLOR

CODE	DESCRIPTION
A	Amber
B	Blue
G	Green
R	Red
W	White
C	Clear‡
Y	Yellow‡

See page 45 for Lamp Replacement Chart and page 46 for Lamp Technical Data.

V. LIGHT MODULE/VOLTAGE

CODE	DESCRIPTION	LIST
	FULL VOLTAGE	
FM12	12V AC/DC	$12.00
FM24	24V AC/DC	$12.00
FM120	120V AC/DC	$12.00
	MULTI-VOLTAGE, NON-RELAMPABLE	
MVD	20-277V AC or DC	$37.00

VI. LED LAMP COLOR

CODE	DESCRIPTION	LIST
	FOR FULL VOLTAGE MODULES	
LA	Amber	$14.00
LB	Blue	$14.00
LG	Green	$14.00
LR	Red	$14.00
LW	White	$14.00
	FOR MULTI-VOLTAGE MODULE	
LW	White	—
NL	No Lamp	− $ 1.80

VII. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$ 16.20
02	2 Normally Closed Contact Blocks	$ 16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$ 16.20

VIII. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART VII FROM ABOVE)

DISCOUNT SCHEDULE **E**

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

Mix and Match Any Bezel, Color and Momentary Illuminated Push Button Lens

Flush | Extended | Guarded | Mushroom (40mm) | Polyester (Type 4X) | Chrome (Type 4X) | Aluminum (Type 4)

22MM IEC MOMENTARY ILLUMINATED PUSH BUTTONS

Our 22mm IEC Momentary Illuminated Push Buttons feature contact blocks that are stackable up to 2 deep and 2 across for a total of 4 circuits per operator, depending on the light unit module. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Available state-of-the-art non-relampable multi-voltage light module with super-bright LED can be operated at any voltage from 20V to 277V AC or DC.
- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- Full voltage light modules use miniature bayonet base lamps to provide reliable lamp secureness.
- c3controls LED lamp design life is 100,000 hours – that's 11.4 years!
- Removable latching device allows for easy installation and wiring for up to two contact blocks across.
- Compact size, only 45.6mm (1-51/64") deep from the front of the panel.
- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~ 4mm^2 (#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

UNIQUE PRODUCT FEATURES

- Our rugged Lexan™ lenses provide better visibility and can resist high impact for reliable performance in most environments, even in high ambient temperatures.
- Our lenses feature a diffuser insert that provides outstanding light output from all angles, along with a thin O-ring which provides a watertight seal to meet Type 4/4X standards.
- Multi-Voltage and Full Voltage light units available in a wide range of voltages to meet your specific needs.

SOME OF OUR POPULAR CONFIGURATIONS:

MOMENTARY ILLUMINATED PUSH BUTTON OPERATORS					
		FLUSH LENS		**EXTENDED LENS**	
	LENS COLOR	**CATALOG NUMBER**	**LIST**	**CATALOG NUMBER**	**LIST**
Full Voltage	Amber	W22IPB-FA-FM120LA-10/01	$58.20	W22IPB-EA-FM120LA-10/01	$58.20
	Green	W22IPB-FG-FM120LG-10	$50.10	W22IPB-EG-FM120LG-10	$50.10
	Red	W22IPB-FR-FM120LR-01	$50.10	W22IPB-ER-FM120LR-01	$50.10
Multi-Voltage	Amber	W22IPB-FA-MVDLW-10/01	$69.20	W22IPB-EA-MVDLW-10/01	$69.20
	Green	W22IPB-FG-MVDLW-10	$61.10	W22IPB-EG-MVDLW-10	$61.10
	Red	W22IPB-FR-MVDLW-01	$61.10	W22IPB-ER-MVDLW-01	$61.10

IT'S EASY TO BUILD YOUR OWN PUSH BUTTON

Simply pick the code number from each of the sections below and combine them to build your part number.

Momentary Dual Push Buttons (Illuminated)

W22IDPB – ☐ ☐ ☐ ☐ – ☐ – ☐ ☐ – ☐ / ☐
I   II III IV V   VI   VII VIII   IX*   X*

Example: To build one of our most popular Push Buttons, the part number would be
W22IDPB + II + III + IV + V + VI + VII + VIII + IX + X or **W22IDPB-ERFG-C-MVDLW-01/10**
*NOTE: Contact block mounted on left side is operated by the bottom push button and contact block mounted on right side is operated by the top push button.

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22IDPB	Illuminated Dual Push Button	$20.00

II. CAP TYPE (BOTTOM)

CODE	DESCRIPTION
F	Flush
E	Extended

III. CAP COLOR (BOTTOM)

CODE	DESCRIPTION
G	Green
R	Red

IV. CAP TYPE (TOP)

CODE	DESCRIPTION
F	Flush
E	Extended

SEE PAGE 45 FOR LAMP REPLACEMENT CHART AND PAGE 46 FOR LAMP TECHNICAL DATA.

V. CAP COLOR (TOP)

CODE	DESCRIPTION
G	Green
R	Red
K	Black‡
B	Blue‡
E	Grey‡
W	White‡
Y	Yellow‡

VI. LENS COLOR (MIDDLE)

CODE	DESCRIPTION
A	Amber
C	Clear

VII. LIGHT MODULE/VOLTAGE

CODE	DESCRIPTION	LIST
	FULL VOLTAGE	
FM12	12V AC/DC	$12.00
FM24	24V AC/DC	$12.00
FM120	120V AC/DC	$12.00
	MULTI-VOLTAGE, NON-RELAMPABLE	
MVD	20-277V AC or DC	$37.00

VIII. LED LAMP COLOR

CODE	DESCRIPTION	LIST
	FOR FULL VOLTAGE MODULES	
LA	Amber	$14.00
LG	Green	$14.00
LR	Red	$14.00
LW	White	$14.00
	FOR MULTI-VOLTAGE MODULE	
LW	White	—
NL	**No Lamp**	– $ 1.80

IX. CONTACT BLOCK CONFIGURATION (LEFT SIDE) — OPERATED BY THE BOTTOM PUSH BUTTON

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$ 16.20
02	2 Normally Closed Contact Blocks	$ 16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$ 16.20

X. CONTACT BLOCK CONFIGURATION (RIGHT SIDE) — OPERATED BY THE TOP PUSH BUTTON

(USE CHART IX FROM ABOVE)

DISCOUNT SCHEDULE E

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

MIX AND MATCH ANY COLOR AND MOMENTARY ILLUMINATED DUAL PUSH BUTTON CAPS AND LENS

Flush/Flush   Extended/Flush   Flush/Extended

22MM IEC MOMENTARY ILLUMINATED DUAL PUSH BUTTONS

Our 22mm IEC Momentary Illuminated Dual Push Buttons are designed to operate independently of each other. The Dual Push Button design gives you the flexibility to mount two push buttons and one indicating light into one 22.5mm hole, allowing you to perform multiple operations from one device. These push buttons are great for motor and pump applications. Contact blocks can be stacked up to 2 deep and 2 across for a total of 4 circuits per operator. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- The Dual Push Button design incorporates all the features and advantages of the Series 22 IEC products.
- In addition to the two push buttons, an indicating light can be mounted between the two push buttons.
- Available state-of-the-art non-relampable multi-voltage light module with super-bright LED can be operated at any voltage from 20V to 277V AC or DC.
- Full voltage light modules use miniature bayonet base lamps to provide reliable lamp secureness.
- c3controls LED lamp design life is 100,000 hours – that's 11.4 years!
- Removable latching device allows for easy installation and wiring of contact blocks.
- A non-illuminated version is also available, see pages 8 & 9.
- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~ 4mm² (#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

UNIQUE PRODUCT FEATURES

Labor & Cost Savings

Combine the functionality of replacing up to three devices in one 22.5mm (7/8") hole—saving time, labor and space!

Environmentally Secure

The seal acts like a squeegee and forms a permanent watertight seal that meets Type 4/4X and IP66 without a rubber boot.

Wide Range of Operation

Full Voltage and Non-Relampable Multi-Voltage light units are available in a variety of voltages to meet your specific needs.

SOME OF OUR POPULAR CONFIGURATIONS:

MOMENTARY ILLUMINATED DUAL PUSH BUTTONS					
CONTACT SYMBOL	CONTACT BLOCK MOUNTING POSITION	COLOR		EXTENDED RED (BOTTOM) FLUSH GREEN (TOP)	LIST
		CAP	LENS		
1 NC & 1 NO	Left Right	Red/Green	Clear	W22IDPB-ERFG-C-FM120LG-01/10	$62.20
	Left Right	Red/Green	Clear	W22IDPB-ERFG-C-MVDLW-01/10	$73.20

IT'S EASY TO BUILD YOUR OWN PUSH BUTTON

Simply pick the code number from each of the sections below and combine them to build your part number.

Maintained Push Buttons (Illuminated)
2 & 3-Position Push-Pull Release

W22IPP [ ] – [ ] [ ] [ ] – [ ] [ ] – [ ] / [ ]
I   II   III IV V   VI   VII   VIII   IX

Example: To build one of our most popular Push Buttons, the part number would be **W22IPP + II + III + IV + V + VI + VII + VIII + IX** or **W22IPP2-MR-FM24LR-10/01**

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22IPP	Push-Pull Maintained	$22.00

II. OPERATOR FUNCTION

CODE	DESCRIPTION
2	2 Position
3A	3 Position Momentary Out, Maintained Center, Maintained In
3B	3 Position Momentary Out, Maintained Center, Momentary In

III. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
A	Aluminum (Type 4)‡	$3.00

IV. LENS TYPE

CODE	DESCRIPTION	LIST
M	Mushroom	—
J	Jumbo Mushroom‡	$4.10

SEE PAGE 45 FOR LAMP REPLACEMENT CHART AND PAGE 46 FOR LAMP TECHNICAL DATA.

V. LENS COLOR

CODE	DESCRIPTION
A	Amber
G	Green
R	Red
B	Blue‡
C	Clear‡
W	White‡
Y	Yellow‡

VI. LIGHT MODULE/VOLTAGE

CODE	DESCRIPTION	LIST
	FULL VOLTAGE	
FM12	12V AC/DC	$12.00
FM24	24V AC/DC	$12.00
FM120	120V AC/DC	$12.00
	MULTI-VOLTAGE, NON-RELAMPABLE	
MVD	20-277V AC or DC	$37.00

VII. LED LAMP COLOR

CODE	DESCRIPTION	LIST
	FOR FULL VOLTAGE MODULES	
LA	Amber	$14.00
LG	Green	$14.00
LR	Red	$14.00
LW	White	$14.00
LB	Blue‡	$14.00
	FOR MULTI-VOLTAGE MODULE	
LW	White	—
NL	**No Lamp**	– $ 1.80

VIII. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

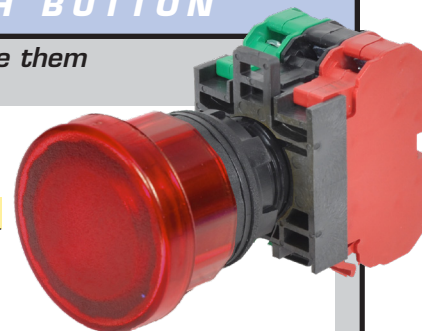| CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$ 16.20
02	2 Normally Closed Contact Blocks	$ 16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$ 16.20

IX. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART VIII FROM ABOVE)

The Push-Pull Illuminated devices are available in three basic styles. The two position push-pull is maintained in both the push and pull positions. The primary application is "push" to "stop" and "pull" to "start". The three position has two options. One features the "out" position as momentary, the "center" as maintained, and the "in" position as maintained. The other version features the "center" as maintained while the "out" and "in" positions are momentary.

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

DISCOUNT SCHEDULE **E**

O = OPEN   X = CLOSED

MAINTAINED IN/MAINTAINED OUT								
1 CIRCUIT (01)		**2 CIRCUIT (10/01)**			**2 CIRCUIT (01/01)**			
	OUT	IN		OUT	IN		OUT	IN
NC	X	O	NC	X	O	NC	X	O
			NO	O	X	NC	X	O

MOMENTARY OUT, MAINTAINED CENTER, MAINTAINED IN				MOMENTARY OUT, MAINTAINED CENTER, MOMENTARY IN			
	OUT	CENTER	IN		OUT	CENTER	IN
NC	X	O	O	NC	X	O	O
DB	X	X	O	DB	X	X	O
NO	O	O	X	NO	O	O	X
EM	O	X	X	EM	O	X	X

22MM IEC MAINTAINED ILLUMINATED PUSH BUTTONS

Our 22mm IEC Maintained Illuminated 2 & 3-Position Push Buttons feature contact blocks that are stackable up to 2 deep and 2 across for a total of 4 circuits per operator, depending on your light unit module. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Available state-of-the-art non-relampable multi-voltage light modules with super-bright LEDs can be operated at any voltage from 20V to 277V AC or DC.
- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- Wide variety of operator types and colors, and contact block configurations are available to meet your specific application needs.
- Full voltage light modules use miniature bayonet base lamps to provide reliable lamp secureness.
- c3controls LED lamp design life is 100,000 hours – that's 11.4 years!
- Removable latching device allows for easy installation and wiring.
- Compact size, only 45.6mm (1-57/64") deep from the front of the panel.
- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~4mm^2 (#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

UNIQUE PRODUCT FEATURES

WE PUT THE METAL ON THE INSIDE—WHERE IT COUNTS!

- The solid brass detent mechanism is the best engineered, most reliable heavy-duty emergency stop button in the world. This rugged design ensures reliable operation in emergency applications, providing safe interruption of circuits, and much longer life when compared to any competitor's product.
- Rugged Lexan™ lenses provide better visibility and can resist high impact for reliable performance in most environments – even high ambient temperatures.
- Our 22mm IEC Illuminated Push Buttons can be utilized with our state-of-the-art super bright LED multi-voltage light modules.

SOME OF OUR POPULAR CONFIGURATIONS:

2 & 3-POSITION PUSH-PULL MAINTAINED OPERATORS WITH POLYESTER CLAMP RING (TYPE 4X)				
	MOMENTARY OUT, MAINTAINED CENTER, MAINTAINED IN		MOMENTARY OUT, MAINTAINED CENTER, MOMENTARY IN	
TYPE	**CATALOG NUMBER**	**LIST**	**CATALOG NUMBER**	**LIST**
Full Voltage	W22IPP3A-MR-FM120LR-10/01	$64.20	W22IPP3B-MR-FM120LR-10/01	$64.20
Multi-Voltage	W22IPP3A-MR-MVDLW-10/01	$75.20	W22IPP3B-MR-MVDLW-10/01	$75.20

AVAILABLE LENS COLORS FOR 2 & 3 POSITION MAINTAINED ILLUMINATED PUSH BUTTONS

Mushroom (40mm)

Jumbo Mushroom (60mm)

IT'S EASY TO BUILD YOUR OWN PUSH BUTTON

Simply pick the code number from each of the sections below and combine them to build your part number.

Maintained Emergency Stop Push Buttons (Illuminated) 2-Position Push-Twist Release

W22IPTR – ☐☐☐ ☐☐ **R** – ☐☐☐ ☐☐ – ☐☐ / ☐☐

    I   *II*   *III*   *IV*   *V*   *VI*   *VII**   *VIII**

Example: To build one of our most popular Push Buttons, the part number would be **W22IPTR + II + III + R + V + VI + VII + VIII** or **W22IPTR-YMR-FM120LR-01/01**

*NOTE: Contact block configurations are based on circuit designation and light module unit.

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22IPTR	Illuminated Push-Twist Release	$ 47.00

II. HOUSING COLOR

CODE	DESCRIPTION	LIST
(Blank)	Black	—
Y	Yellow*	$3.00

*NOTE: A yellow housing with a red mushroom cap must be used to construct an EN418 Emergency Stop Push Button.

III. CAP TYPE

CODE	DESCRIPTION	LIST
M	Mushroom	—
J	Jumbo Mushroom‡	$4.10

IV. CAP/LENS COLOR

CODE	DESCRIPTION
R	Red

SEE PAGE 45 FOR LAMP REPLACEMENT CHART AND PAGE 46 FOR LAMP TECHNICAL DATA.

V. LIGHT MODULE/VOLTAGE

CODE	DESCRIPTION	LIST
	FULL VOLTAGE	
FM12	12V AC/DC	$ 12.00
FM24	24V AC/DC	$ 12.00
FM120	120V AC/DC	$ 12.00
	MULTI-VOLTAGE, NON-RELAMPABLE	
MVD	20-277V AC or DC	$ 37.00

VI. LED LAMP COLOR

CODE	DESCRIPTION	LIST
	FOR FULL VOLTAGE MODULES	
LR	Red	$ 14.00
LW	White	$ 14.00
	FOR MULTI-VOLTAGE MODULE	
LW	White	—
NL	No Lamp	– $ 1.80

DISCOUNT SCHEDULE E

VII. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$ 16.20
02	2 Normally Closed Contact Blocks	$ 16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$ 16.20

VIII. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART VII FROM ABOVE)

The linear push-off twist-to-release style operator requires a "twist" for the "out" or "on" position and a linear "push" for the "in" or "off" position. The twist mushroom cap is marked with arrows identifying the direction for the twist release.

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

O = OPEN   X = CLOSED

MAINTAINED IN/MAINTAINED OUT					
1 CIRCUIT (01)		**2 CIRCUIT (10/01)**		**2 CIRCUIT (01/01)**	
OUT	IN	OUT	IN	OUT	IN
NC X	O	NC X	O	NC X	O
		NO O	X	NC X	O

SOME OF OUR POPULAR CONFIGURATIONS:

| MAINTAINED EMERGENCY STOP PUSH BUTTON (ILLUMINATED) 2-POSITION PUSH-TWIST RELEASE					
CONTACT SYMBOL	**CONTACT BLOCK MOUNTING POSITION**	**COLOR**		**MUSHROOM CAP**	**LIST**
		CAP	LENS		
1 DB & 1 NC	Left Right	Red	Red	W22IPTR-YMR-FM120LR-01/D	$ 92.20
1 NO & 1 NC	Left Right	Red	Red	W22IPTR-MR-MVDLW-01/D	$100.20

22MM IEC PILOT DEVICES

22MM IEC MAINTAINED ILLUMINATED EMERGENCY STOP PUSH BUTTONS

Our 22mm IEC Maintained Illuminated Push-Twist Release Push Buttons rugged design ensures reliable operation in emergency stop applications, providing safe interruption of circuits. The operators provide a trigger action function with direct drive contacts meeting global standards for emergency stop buttons. Contact blocks can be stacked up to 2 deep and 2 across for a total of 4 circuits per operator. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- Meets global standards for Emergency Stop buttons.
- A non-Illuminated version is also available, see pages 14 & 15.
- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~ 4mm^2 (#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.
- Available state-of-the-art non-relampable multi-voltage light module with super-bright LED can be operated at any voltage from 20V to 277V AC or DC.
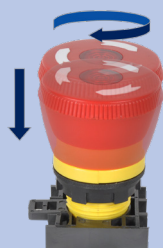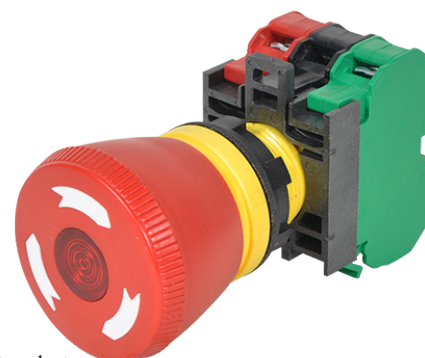
UNIQUE PRODUCT FEATURES

ERGONOMICALLY DESIGNED

Cone shaped head with knurls fit easily into your hand for a comfortable operation.

EASE OF VISIBILITY

Molded bold white arrows indicate the 45° twist-to-release operation for easy visibility over the life of the product.

EN418 EMERGENCY STOP OPERATORS

c3controls maintained illuminated push-twist-release operators were designed to meet EN418 Standards for "Safety of Machinery." Constructing an EN418 Emergency Stop Push Button from our standard operators is easy—simply select a red mushroom cap with a yellow housing.

- Ergonomically designed red mushroom cap (40mm (1-9/16")) with white arrows for quick identification and ease of control.
- Trigger Action Function—Operator requires dedicated push action to operate contacts, eliminating accidental operation and meeting global standards.
- Latching mechanism which is activated when the actuator of the device is depressed to a certain point and the contacts open.
- The anti-teasing function guarantees the contacts will remain open until a person manually intervenes and releases the actuator.
- The direct drive design mechanically links the mushroom cap operator and contacts to drive the electrical contacts open. The trigger action makes the Emergency Stop operator more than a push button.
- Red operator, yellow housing, and molded white directional arrows are all designed to meet global standards for Emergency Stop operators.
- Illuminated constructions available in full voltage and state-of-the-art non-relampable multi-voltage light module with super bright LED can be operated at any voltage from 20V to 277V AC or DC.

IT'S EASY TO BUILD YOUR OWN POTENTIOMETER

Simply pick the code number from each of the sections below and combine them to build your part number.

Potentiometer Operators

22POTO ☐ ― ☐ ― ☐
I ... *II* ... *III* ... *IV*

Example: To build one of our most popular Potentiometer Operators, the part number would be **22POTO + II + III + IV** or **22POTO5K-TBW**

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
22POTO	Potentiometer	$58.00

II. RESISTANCE

CODE	DESCRIPTION	LIST
(Blank)	Operator only	—
1K	1k Potentiometer	$22.00
2.5K	2.5k Potentiometer	$22.00
5K	5k Potentiometer	$22.00
10K	10k Potentiometer	$22.00

Special order values available — consult factory (not available for guaranteed same day shipping).

III. CLAMP RING

CODE	DESCRIPTION	LIST
(Blank)	Polyester (Type 4X)	—
PM	Aluminum (Type 4)‡	$4.30

IV. TERMINAL BLOCK

CODE	DESCRIPTION	LIST
(Blank)	Operator only	—
TBW	Terminal Block installed and wired*	$16.00

NOTE: Available for 1K, 2.5K, 5K and 10K potentiometers.

SEE PAGE 53 FOR WIRING DIAGRAM.

Terminal block kit may be ordered separately (part number TBK, List $9.60) or installed and wired at the factory to the potentiometer operator.

DISCOUNT SCHEDULE **E**

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

22mm IEC POTENTIOMETERS

Our single-turn Potentiometer Operators utilize standard 2 watt potentiometers with 6.4mm (1/4") bushing and 22.5mm (7/8") long slotted shafts. A 5/64" allen wrench is required for installation. All c3controls 22mm operators are UL Listed and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12 and 13, and meet global standards requirements.

Product features include:

- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- Three point terminal block and hardware.
- Single-turn standard 2 watt potentiometer.
- All frictional parts are molded with an internal self-lubricant to provide outstanding wear without troublesome greases used by others that attracts dust and other particles in the area.
- Our revolutionary U-Cup seal is infused with a Teflon coating to eliminate cracking when exposed to harsh conditions such as heat, dryness and sunlight.
- #6 terminal screws with self-lifting captive wire clamps accommodate 0.5 ~ 4mm^2 (#22 ~ two #12 AWG) wires per terminal.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units.
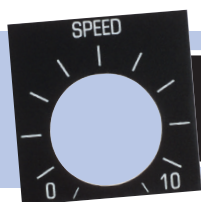
LEGEND PLATES FOR POTENTIOMETER OPERATORS *are available for same day shipping. See pages 41-43 for complete selection.*

22MM IEC PILOT DEVICES

IT'S EASY TO BUILD YOUR OWN PUSH BUTTON

Simply pick the code number from each of the sections below and combine them to build your part number.

Momentary Reset Push Buttons (Non-Illuminated)

W22RPB – [____] [____] [____] [____] – PK
　　　　I　　　II　　　III　　IV　　V　　　VI

Example: To build one of our most popular Push Buttons, the part number would be **W22RPB + II + III + IV + V + PK** or **W22RPB-FB18-PK**

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22RPB	Reset Push Button	$10.00

II. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
M	Chrome Plated (Type 4X)	$3.00
A	Aluminum (Type 4)‡	$3.00

III. CAP TYPE

CODE	DESCRIPTION
F	Flush
E	Extended‡

IV. CAP COLOR

CODE	DESCRIPTION
K	Black
B	Blue
R	Red
W	White‡

V. CAP MARKING

CODE	DESCRIPTION	LIST
(Blank)	No Marking	—
18	RESET	$ 3.00
102	R	$ 3.00

VI. ROD TYPE

| CODE	DESCRIPTION	LIST
PK	178mm (7") Plastic Rod	$ 4.40

DISCOUNT SCHEDULE **E**

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

UNIQUE PRODUCT FEATURES

- Designed to actuate the reset function of a Series 320 Overload Relay from outside of the enclosure.

- For use in an enclosure up to 254mm (10") deep when used with our Series 320 Overload Relays, providing superior performance in high shock and vibration applications. Refer to Section 6 Page 6 for our complete selection of Bimetallic Overload Relays.

- The rod can be easily cut to the desired length for use in a wide range of enclosure depths.

- Heavy-duty polyester construction for superior corrosion resistance and moisture rejection.

- Flush and extended cap types in a wide variety of colors are available for configuring products for any application.

- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

- UL Listed, CE Marked and Rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

SOME OF OUR POPULAR CONFIGURATIONS:

MOMENTARY NON-ILLUMINATED RESET PUSH BUTTONS

CATALOG NUMBER	CAP TYPE	CAP COLOR	CAP MARKING	LIST
W22RPB-FK102-PK	Flush	Black	R	$17.40
W22RPB-FB18-PK	Flush	Blue	RESET	$17.40

MIX AND MATCH ANY BEZEL, COLOR AND MOMENTARY NON-ILLUMINATED RESET PUSH BUTTON CAP

Polyester (Type 4X)　　Chrome (Type 4X)　　Aluminum (Type 4)

IT'S EASY TO BUILD YOUR OWN PILOT LIGHT

Simply pick the code number from each of the sections below and combine them to build your part number.

Unibody Pilot Lights (Relampable)

W22U – _____ _____ – _____ _____
   I   II   III   IV   V

Example: To build one of our most popular Pilot Lights, the part number would be **W22U + II + III + IV** or **W22U-120LR-WLR**

I. OPERATOR TYPE		
CODE	**DESCRIPTION**	**LIST**
W22U	Unibody Light Unit	$14.00

II. VOLTAGE	
CODE	**DESCRIPTION**
	FULL VOLTAGE (50/60 HZ)
12	12V AC/DC
24	24V AC/DC
120	120V AC/DC

c3controls LED lamp design life is 100,000 hours – that's 11.4 years!

III. LAMP TYPE/COLOR		
CODE	**DESCRIPTION**	**LIST**
	LED	
LA	Amber	$14.00
LB	Blue	$14.00
LG	Green	$14.00
LR	Red	$14.00
LW	White	$14.00
	INCANDESCENT	
I	Clear‡	—
NL	**No Lamp**	**– $ 1.80**

SEE PAGE 45 FOR LAMP REPLACEMENT CHART AND PAGE 46 FOR LAMP TECHNICAL DATA.

IV. LENS TYPE		
CODE	**DESCRIPTION**	**LIST**
WL	Extended	$ 4.80
WNL	Flush	$ 4.80

V. LENS COLOR	
CODE	**DESCRIPTION**
A	Amber
B	Blue
C	Clear
G	Green
R	Red
W	White‡
Y	Yellow‡

DISCOUNT SCHEDULE **E**

‡NOTE: The 12V unibody pilot light with an Incandescent lamp is not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

22MM IEC UNIBODY RELAMPABLE PILOT LIGHTS

Our 22mm IEC Unibody Pilot Lights were designed with simplicity in function to save you valuable time and money. This full voltage light unit is available in 12, 24 and 120 volts using either Incandescent or our LED lamps with leakage protection. We offer five different lens color options to add to your flexibility. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Vibration resistant compact design.
- Our seal is infused with a coating to eliminate cracking when exposed to harsh conditions such as heat, dryness and sunlight. This seal also acts as a light reflector because it is white which increases light output and improves visibility from all angles.
- Our rugged Lexan™ lenses provide better visibility and can resist high impact for reliable performance in most environments, even in high ambient temperatures.
- Wiring is made easy by utilizing rear access captive mounting screws with side wire entry.
- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

SOME OF OUR POPULAR CONFIGURATIONS:

UNIBODY PILOT LIGHTS		
CATALOG NUMBER	**DESCRIPTION**	**LIST**
W22U-120LA-WLA	120V Full Voltage Light w/Amber LED & Lens	$32.80
W22U-120LG-WLG	120V Full Voltage Light w/Green LED & Lens	$32.80
W22U-120LR-WLR	120V Full Voltage Light w/Red LED & Lens	$32.80
W22U-120I-WLR	120V Full Voltage Light w/Incan. Lamp & Red Lens	$18.80

AVAILABLE LENS COLORS FOR UNIBODY PILOT LIGHTS

IT'S EASY TO BUILD YOUR OWN PILOT LIGHT

Simply pick the code number from each of the sections below and combine them to build your part number.

Unibody Pilot Lights (Non-Relampable)

W22UNR – ☐☐☐ ☐☐☐ – ☐☐☐ ☐☐☐
  /   II   III   IV   V

Example: To build one of our most popular pilot lights, the part number would be W22UNR + II + III + IV + V or W22UNR-120LR-WNLR

I. OPERATOR TYPE		
CODE	**DESCRIPTION**	**LIST**
W22UNR	Unibody Light Unit, Non-Relampable	$15.00

II. VOLTAGE	
CODE	**DESCRIPTION**
	FULL VOLTAGE
12	12V AC/DC
24	24V AC/DC
120	110 – 130V AC/DC
240	220 – 240V AC‡

III. LED COLOR	
CODE	**DESCRIPTION**
LA	Amber
LB	Blue
LG	Green
LR	Red
LW	White

c3controls integral LED lamps last 100,000 hours — *that's 11.4 years!*

DISCOUNT SCHEDULE **E**

IV. LENS TYPE	
CODE	**DESCRIPTION**
WL	Extended
WNL	Flush

V. LENS COLOR	
CODE	**DESCRIPTION**
A	Amber
B	Blue
C	Clear
G	Green
R	Red
Y	Yellow‡

SEE page 46 for Lamp Technical Data.

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

22MM IEC UNIBODY NON-RELAMPABLE PILOT LIGHTS

Our 22mm IEC Non-Relampable Unibody Pilot Lights were designed with simplicity in function to save you valuable time and money. This full voltage light features integral LED lamps that provide great light output and leakage protection. Available in a variety of full voltage options and six lens color options. Wiring is made easy by utilizing rear access captive mounting screws with side wire entry. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13, IP66 and IP67 applications, and meet global standards requirements.

Product features include:

• Wider range of operation; from 12V to 240V.

• Shortest depth behind the panel 22mm IEC unibody pilot light by over 6mm (1/4") to allow mounting in shallow enclosures.

• High-tech integral LED lamps offer the latest and most current technology providing leakage protection, great light output and increased visibility from side views—and lasts up to 100,000 hours!

• Vibration resistant compact, low power consumption energy saving design.

• AC and DC devices are bi-polar design, functionality is independent of which lead is connected to each terminal.

• Rugged Lexan™ lenses provide better visibility and can resist high impact for reliable performance in most environments—even in high ambient temperatures.

• IP20 guarded terminals prevent accidental contact with live parts.

• Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.

• Terminal screws with self-lifting captive wire clamps accommodate 0.5 ~ 4mm² (#22 ~ two #12 AWG) wires per terminal.

• Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

SOME OF OUR POPULAR CONFIGURATIONS:

UNIBODY PILOT LIGHTS, NON-RELAMPABLE		
CATALOG NUMBER	**DESCRIPTION**	**LIST**
W22UNR-24LR-WNLR	Unibody Non-Relampable LED Pilot Light, 24V AC/DC, Red LED, Red Lens	$15.00
W22UNR-24LG-WNLG	Unibody Non-Relampable LED Pilot Light, 24V AC/DC, Green LED, Green Lens	$15.00
W22UNR-120LR-WNLR	Unibody Non-Relampable LED Pilot Light, 120V AC/DC, Red LED, Red Lens	$15.00
W22UNR-120LG-WNLG	Unibody Non-Relampable LED Pilot Light, 120V AC/DC, Green LED, Green Lens	$15.00
W22UNR-120LA-WNLA	Unibody Non-Relampable LED Pilot Light, 120V AC/DC, Amber LED, Amber Lens	$15.00

AVAILABLE LENS COLORS FOR NON-RELAMPABLE UNIBODY PILOT LIGHTS

Flush   Extended

IT'S EASY TO BUILD YOUR OWN LIGHT MODULE

Simply pick the code number from each of the sections below and combine them to build your part number.

20-277V AC/DC Multi-Voltage Light Module (Non-Relampable)

W22 MVD LW
  I   II   III

*Example: To build one of our most popular Pilot Lights, the part number would be **W22MVDLW***

I. OPERATOR TYPE	
CODE	**DESCRIPTION**
W22	Light Accessory Module

II. LIGHT MODULE/VOLTAGE		
CODE	**DESCRIPTION**	**LIST**
MVD	Multi-Voltage 20-277V AC/DC	$37.00

III. LED LAMP COLOR	
CODE	**DESCRIPTION**
LW	White

c3controls LED lamps last 100,000 hours — that's 11.4 years!

See page 46 for Lamp Technical Data.

DISCOUNT SCHEDULE **E**

UNIQUE PRODUCT FEATURES

c3 **Exclusive!**
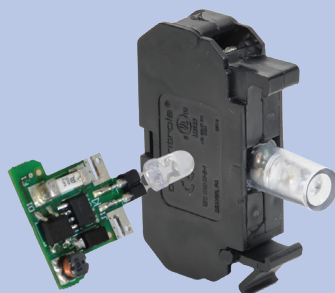
ELIMINATE THE HEADACHE OF MATCHING SPECIFIC LAMPS WITH SPECIFIC LIGHT UNITS!

Our state-of-the-art Non-Relampable Multi-Voltage Light Modules come with our super-bright white LEDs and can be operated from 20V to 277V AC or DC without losing light intensity – making them easily interchangeable between your applications and saving you inventory costs.

The compact design saves you valuable space in your control panel—delivering the shortest depth light modules engineered in the USA.

- Low power consumption energy saving design.

- Multi-voltage module can be used with modular pilot lights, illuminated push buttons, push-to-test lights, and illuminated selector switches.

- Bi-polar design, functionality is independent of which lead is connected to each terminal.

- When used with our illuminated pilot devices, our rugged Lexan™ lenses provide better visibility and can resist high impact for reliable performance in most environments, even high ambient temperatures.

- When used with our illuminated pilot devices, our seal is infused with a coating to eliminate cracking when exposed to harsh conditions such as heat, dryness and sunlight. This seal also acts as a light reflector because it is white which increases light output and improves visibility from all angles.

- Heavy-duty polyester construction for excellent durability, superior corrosion resistance, moisture rejection, and electrical insulation.

- Captive IP20 guarded terminals to prevent accidental contact with live parts.
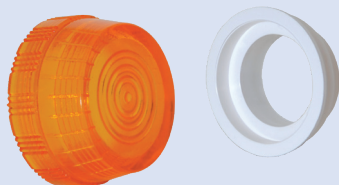
Enhanced visibility achieved in combination with the Lexan™ lens and seal available on all c3controls illuminated pilot devices.

22MM IEC PILOT DEVICES

IT'S EASY TO BUILD YOUR OWN PILOT LIGHT

Simply pick the code number from each of the sections below and combine them to build your part number.

Modular Pilot Lights

W22PL − [ ] [ ] − [ ] [ ]
/   II   III   IV   V

Example: To build one of our most popular Pilot Lights, the part number would be **W22PL + II + III + IV + V** or **W22PL-FM120LR-WLR**

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22PL	Pilot Light	$12.00

II. LIGHT MODULE/VOLTAGE

CODE	DESCRIPTION	LIST
	FULL VOLTAGE	
FM12	12V AC/DC	$12.00
FM24	24V AC/DC	$12.00
FM120	120V AC/DC	$12.00
	MULTI-VOLTAGE, NON-RELAMPABLE	
MVD	20-277V AC or DC	$37.00
	RESISTOR	
RM120	120V AC/DC‡	$15.00

III. LED LAMP COLOR

CODE	DESCRIPTION	LIST
	FOR FULL VOLTAGE & RESISTOR MODULES	
LA	Amber	$14.00
LB	Blue	$14.00
LG	Green	$14.00
LR	Red	$14.00
LW	White	$14.00
	FOR MULTI-VOLTAGE MODULE	
LW	White	—
NL	**No Lamp**	− $ 1.80

IV. LENS TYPE

CODE	DESCRIPTION	LIST
WL	Extended	$ 4.80
WNL	Flush	$ 4.80

V. LENS COLOR

CODE	DESCRIPTION
A	Amber
B	Blue
C	Clear
G	Green
R	Red
Y	Yellow‡

SEE PAGE 45 FOR LAMP REPLACEMENT CHART AND PAGE 46 FOR LAMP TECHNICAL DATA.

DISCOUNT SCHEDULE E

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

IT'S EASY TO BUILD YOUR OWN PILOT LIGHT

Simply pick the code number from each of the sections below and combine them to build your part number.

Push-To-Test Pilot Lights

W22PTT − [ ] [ ] − [ ] [ ] [ ]
/   II   III   IV   V   VI

Example: To build one of our most popular Pilot Lights, the part number would be **W22PTT + II + III + IV + V + VI** or **W22PTT-FM120LG-FG**
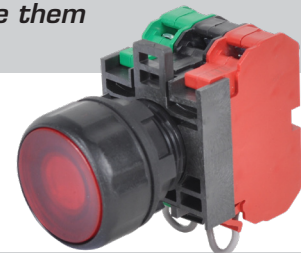
I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22PTT	Push-To-Test	$33.00

II. LIGHT MODULE/VOLTAGE

(USE CHART II FROM ABOVE)

Push-To-Test Pilot Lights combine an illuminated push button with normally open and normally closed contact blocks factory wired for three-point wiring in standard push-to-test circuits.

SEE PAGE 45 FOR LAMP REPLACEMENT CHART AND PAGE 46 FOR LAMP TECHNICAL DATA.

III. LAMP TYPE/COLOR

(USE CHART III FROM ABOVE)

IV. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
M	Chrome Plated (Type 4X)	$ 3.00
A	Aluminum (Type 4)‡	$ 3.00

V. LENS TYPE

CODE	DESCRIPTION
F	Flush
E	Extended

VI. LENS COLOR

CODE	DESCRIPTION	LIST
A	Amber	$ 4.80
B	Blue	$ 4.80
C	Clear	$ 4.80
G	Green	$ 4.80
R	Red	$ 4.80
W	White	$ 4.80
Y	Yellow‡	$ 4.80

DISCOUNT SCHEDULE E

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

22mm IEC Modular & Push-To-Test Pilot Lights

Our 22mm IEC Modular and Push-To-Test Pilot Lights are designed to offer flexibility by offering light units in Multi-Voltage and Full Voltage packages, all available in a wide range of voltages. The modules meet IP20 standards for finger-safe terminations. Wiring is made easy by utilizing self-lifting captive terminal screws that accommodate 0.5 ~ 4mm2(#22 ~ #12 AWG) wires (one or two wires per terminal). All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.
- Full voltage light modules use miniature bayonet base lamps to provide reliable lamp secureness.
- c3controls LED lamp design life is 100,000 hours – that's 11.4 years!
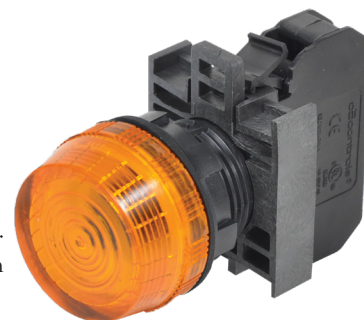
UNIQUE PRODUCT FEATURES
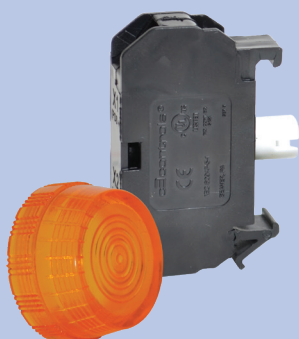
- Compact, thin design is also vibration resistant.
- Multi-Voltage and Full Voltage light units available in a wide range of voltages.
- Heavy duty polyester construction for excellent durability and corrosion resistance.
- Our seal is infused with a coating to eliminate cracking when exposed to harsh conditions such as heat, dryness and sunlight. This seal also acts as a light reflector because it is white which increases light output and improves visibility from all angles.
- Our rugged Lexan™ lenses provide better visibility and can resist high impact for reliable performance in most environments, even in high ambient temperatures.
- State-of-the-art non-relampable multi-voltage light modules with super-bright LEDs can be operated at any voltage from 20V to 277V AC or DC.

SOME OF OUR POPULAR CONFIGURATIONS:

MODULAR PILOT LIGHTS

CATALOG NUMBER	DESCRIPTION	LIST
W22PL-FM120LA-WLA	120V Full Voltage w/Amber LED & Lens	$42.80
W22PL-FM120LR-WLR	120V Full Voltage w/Red LED & Lens	$42.80
W22PL-MVDLW-WLR	Multi-Voltage w/White LED & Red Lens	$53.80

PUSH-TO-TEST PILOT LIGHTS

CATALOG NUMBER	DESCRIPTION	LIST
W22PTT-FM120LA-EA	Full Voltage 120V w/Amber LED and Amber Extended Lens	$63.80
W22PTT-FM120LG-FG	Full Voltage 120V w/Green LED and Green Flush Lens	$63.80
W22PTT-FM120LR-ER	Full Voltage 120V w/Red LED and Red Extended Lens	$63.80
W22PTT-MVDLW-ER	Multi-Voltage w/White LED and Red Extended Lens	$74.80

PTT WIRING DIAGRAM

Customer connections of line and test power supplies. Light unit is powered by the line circuit. Depressing the lens cap will disconnect the line and connect the test supply, confirming bulb status.

Test
Line
Common
X2   X1
Push-To-Test
Light Operator
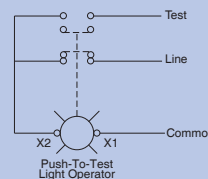
AVAILABLE LENS COLORS FOR MODULAR & PUSH-TO-TEST PILOT LIGHTS

Polyester (Type 4X)　　Chrome (Type 4X)　　Aluminum (Type 4)

IT'S EASY TO BUILD YOUR OWN SELECTOR SWITCH

Simply pick the code number from each of the sections below and combine them to build your part number.

Selector Switches (Illuminated)

W22I [____] – [____] [____] [____] – [____] [____] – [____] / [____]

/   II   III   IV   V   VI   VII   VIII *   IX*

Example: To build one of our most popular Selector Switches, the part number would be **W22I + II + III + IV + V + VI + VII + VIII + IX** or **W22ISRC-IHG-FM24LG-10**

*NOTE: Contact block configurations are based on circuit designations (see page 32 for circuit designation charts).

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22I	Illuminated Selector Switch	$14.00

II. OPERATOR FUNCTION

CODE	POSITION/FUNCTION	LIST
S2	2/Maintained	—
SRL	2/Spring Return, R to L	$ 2.90
S3	3/Maintained	—
SLC	3/Spring Return, L to C	$ 2.90
SRC	3/Spring Return, R to C	$ 2.90
SAC	3/Spring Return, L & R to C	$ 2.90

III. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
M	Chrome Plated (Type 4X)	$ 3.00
A	Aluminum (Type 4)‡	$ 3.00

HANDLE POSITIONS

2-POSITION	3-POSITION

IV. HANDLE TYPE

CODE	DESCRIPTION	LIST
IH	Illuminated Standard	$ 7.00
IL	Illuminated Lever	$ 7.00

V. HANDLE/INSERT COLOR

CODE	HANDLE COLOR	INSERT COLOR
A	Amber	White
B	Blue	White
G	Green	White
R	Red	White
W	White	Black
C	Clear‡	Black
Y	Yellow‡	Black

VI. VOLTAGE

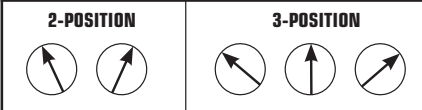| CODE	DESCRIPTION	LIST
	FULL VOLTAGE	
FM12	12V AC/DC	$12.00
FM24	24V AC/DC	$12.00
FM120	120V AC/DC	$12.00
	MULTI-VOLTAGE, NON-RELAMPABLE	
MVD	20-277V AC or DC	$37.00

SEE PAGE 45 FOR LAMP REPLACEMENT CHART AND PAGE 46 FOR LAMP TECHNICAL DATA.

VII. LED LAMP COLOR

CODE	DESCRIPTION	LIST
	FOR FULL VOLTAGE MODULES	
LA	Amber	$14.00
LB	Blue	$14.00
LG	Green	$14.00
LR	Red	$14.00
LW	White	$14.00
	FOR MULTI-VOLTAGE MODULE	
LW	White	—
NL	No Lamp	– $ 1.80

VIII. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$ 16.20
02	2 Normally Closed Contact Blocks	$ 16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$ 16.20

IX. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART VIII FROM ABOVE)

DISCOUNT SCHEDULE **E**

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

SOME OF OUR POPULAR CONFIGURATIONS:

2-POSITION ILLUMINATED SELECTOR SWITCH OPERATORS

CONTACT SYMBOL	CONTACT BLOCK MOUNTING POS. Viewed from front of operator	HANDLE POSITION O=OPEN X=CLOSED			TYPE OF OPERATOR	MAINTAINED POSITION		SPRING RETURN FROM RIGHT TO LEFT		SPRING RETURN FROM RIGHT TO CENTER	
		LEFT	CENTER	RIGHT		CATALOG #	LIST	CATALOG #	LIST	CATALOG #	LIST
	Either	O	N/A	X	IH	W22IS2-IHG-FM120LG-10	$55.10	W22ISRL-IHG-FM120LG-10	$58.00	W22ISRC-IHG-FM120LG-10	$58.00

22mm IEC Illuminated Selector Switches

c3controls Illuminated Selector Switches utilize multi-voltage and full voltage light units that come standard in a wide range of voltages. Our LED lamps offer long life, outstanding light output, and leakage protection. Using an illuminated selector switch can free up valuable space on a control panel by eliminating the need for an additional pilot light. Additionally, our illuminated handles are available in two styles and four different colors.

Our one cam and proper contact block sequence can perform the same functions as it takes for up to seven cams from our competitors units. Add our snap-on contact blocks and you can control up to four different circuits with just one selector switch. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- Compact size, only 45.6mm (1-51/64") deep from the front of the panel.
- Our rugged Lexan™ lenses provide better visibility and can resist high impact for reliable performance in most environments, even in high ambient temperatures.
- c3controls LED lamp design life is 100,000 hours—that's 11.4 years!
- Removable latching device allows for easy installation and wiring.
- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~ 4mm2 (#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

UNIQUE PRODUCT FEATURES

Save time & money - with c3controls, one cam does it all!

- One-Cam does it all vs. our competitors who need up to seven cams to perform the same function. This One-Cam design eliminates the need for multiple cam configurations and selector switch configuration nightmares, saving time, inventory, money, and ensuring 100% cam selection configuration accuracy.
- Multi-Voltage and Full Voltage light units available in a wide range of voltages.
- Compact, thin design for fitting into tight spaces.

O = OPEN   X = CLOSED

CONTACT BLOCK SELECTION FOR 2-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION		BLOCK CATALOG NUMBER	MOUNTING POSITION
	LEFT	RIGHT		
H	O	X	WNO	EITHER
G	X	O	WNC	EITHER

CONTACT BLOCK SELECTION FOR 3-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION			BLOCK CATALOG NUMBER	MOUNTING POSITION
	LEFT	CENTER	RIGHT		
A	X	O	O	WNO	LEFT
B	O	X	O	WNC	EITHER
C	O	O	X	WNO	RIGHT
D	O	X	X	WDB	LEFT
E	X	O	X	WEM	EITHER
F	X	X	O	WDB	RIGHT

Mix and Match Any Bezel, Insert Color and Illuminated Selector Switch Handle
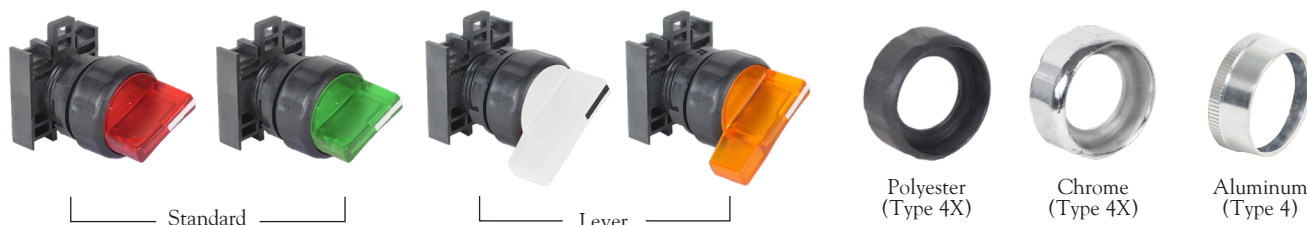
Standard

Lever

Polyester (Type 4X)

Chrome (Type 4X)

Aluminum (Type 4)

IT'S EASY TO BUILD YOUR OWN SELECTOR SWITCH

Simply pick the code number from each of the sections below and combine them to build your part number.

Selector Switches (Non-Illuminated)

W22 ☐ – ☐ ☐ ☐ – ☐ / ☐
I / II III IV V VI* VII*

Example: To build one of our most popular Selector Switches, the part number would be **W22 + II + III + IV + V + VI + VII** or **W22S3-HW-10/10**
*NOTE: Contact block configurations are based on circuit designations (see below for circuit designation charts).

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22	Selector Switch	$ 10.00

II. OPERATOR FUNCTION

CODE	POSITION/FUNCTION	LIST
S2	2/Maintained	—
SRL	2/Spring Return, R to L	$ 2.90
S3	3/Maintained	—
SLC	3/Spring Return, L to C	$ 2.90
SRC	3/Spring Return, R to C	$ 2.90
SAC	3/Spring Return, L & R to C	$ 2.90

DISCOUNT SCHEDULE **E**

‡NOTE: Products marked with ‡ are not available for same-day shipping. Contact our Customer First Team for lead times and minimum order quantities.

III. BEZEL TYPE

CODE	DESCRIPTION	LIST
(Blank)	Black Polyester (Type 4X)	—
M	Chrome Plated (Type 4X)	$ 3.00
A	Aluminum (Type 4)‡	$ 3.00

IV. HANDLE TYPE

CODE	DESCRIPTION	LIST
H	Standard	$ 5.10
L	Lever	$ 5.10

V. HANDLE INSERT COLOR

CODE	DESCRIPTION
B	Blue
E	Grey
R	Red
W	White
Y	Yellow‡

VI. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$ 16.20
02	2 Normally Closed Contact Blocks	$ 16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$ 16.20

VII. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART VI FROM ABOVE)

Each operating handle is black with a factory assembled color insert.

HANDLE POSITIONS

2-POSITION	3-POSITION

O = OPEN   X = CLOSED

CONTACT BLOCK SELECTION FOR 2-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION		BLOCK CATALOG NUMBER	MOUNTING POSITION
	LEFT	RIGHT		
H	O	X	WNO	EITHER
G	X	O	WNC	EITHER

CONTACT BLOCK SELECTION FOR 3-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION			BLOCK CATALOG NUMBER	MOUNTING POSITION
	LEFT	CENTER	RIGHT		
A	X	O	O	WNO	LEFT
B	O	X	O	WNC	EITHER
C	O	O	X	WNO	RIGHT
D	O	X	X	WDB	LEFT
E	X	O	X	WEM	EITHER
F	X	X	O	WDB	RIGHT

Mix and Match Any Bezel, Insert Color and Non-Illuminated Selector Switch Handle

Standard

Lever

Polyester (Type 4X)

Chrome (Type 4X)

Aluminum (Type 4)

22mm IEC Non-Illuminated Selector Switches

Our one cam and proper contact block sequence can perform the same functions as it takes for up to seven cams from our competitors units. Add our snap-on contact blocks and you can control up to four different circuits with just one selector switch. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- Compact size, only 45.6mm (1-51/64") deep from the front of the panel.
- Removable latching device allows for easy installation and wiring.
- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~ 4mm2(#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

UNIQUE PRODUCT FEATURES

Save time & money - with c3controls, one cam does it all!

- One-Cam does it all vs. our competitors who need up to seven cams to perform the same function. This One-Cam design eliminates the need for multiple cam configurations and selector switch configuration nightmares, saving time, inventory, money, and ensuring 100% cam selection configuration accuracy.
- Compact, thin design for fitting into tight spaces.

Some of Our Popular Configurations:

2-POSITION NON-ILLUMINATED SELECTOR SWITCHES

CONTACT SYMBOL	CONTACT BLOCK MOUNTING POS. Viewed from front of operator	HANDLE POSITION O=OPEN X=CLOSED		TYPE OF OPERATOR	MAINTAINED POSITION		SPRING RETURN- RIGHT TO LEFT	
		LEFT	RIGHT		CATALOG #	LIST	CATALOG #	LIST
1 NO	EITHER	O	X	Standard	W22S2-HW-10	$23.20	W22SRL-HW-10	$26.10
				Lever	W22S2-LW-10	$23.20	W22SRL-LW-10	$26.10
NC	EITHER	X	O	Standard	W22S2-HW-01	$23.20	W22SRL-HW-01	$26.10
				Lever	W22S2-LW-01	$23.20	W22SRL-LW-01	$26.10

3-POSITION NON-ILLUMINATED SELECTOR SWITCHES

CONTACT SYMBOL	CONTACT BLOCK MOUNTING POS. Viewed from front of operator	HANDLE POSITION O=OPEN X=CLOSED			TYPE OF OPERATOR	MAINTAINED POSITION		SPRING RETURN- LEFT TO CENTER		SPRING RETURN- RIGHT TO CENTER		SPRING RETURN- ALL EITHER TO CENTER	
		LEFT	CENTER	RIGHT		CATALOG #	LIST	CATALOG #	LIST	CATALOG #	LIST	CATALOG #	LIST
NO/NO	LEFT	X	O	O	Standard	W22S3-HW-10/10	$31.30	W22SLC-HW-10/10	$34.20	W22SRC-HW-10/10	$34.20	W22SAC-HW-10/10	$34.20
	RIGHT	O	O	X									

IT'S EASY TO BUILD YOUR OWN SELECTOR SWITCH

Simply pick the code number from each of the sections below and combine them to build your part number.

Keyed Selector Switches

W22K ☐ – K ☐ – ☐ / ☐
/   II   III   IV   V*   VI*

Example: To build one of our most popular Keyed Selector Switches, the part number would be **W22K + II + K + IV + V + VI** or **W22KS3-KRA-10/10**

*NOTE: Contact block configurations are based on circuit designations (see below for circuit designation charts).

I. OPERATOR TYPE

CODE	DESCRIPTION	LIST
W22K	Keyed Selector Switch	$22.00

II. OPERATOR FUNCTION

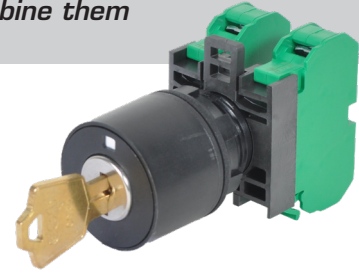| CODE	POS./FUNCTION	AVAIL. KEY REMOVAL POSITION(S)	LIST
S2	2/Maintained	RA,RR,RL	$16.00
SRL	2/Spring Return, R to L	RL	$18.00
S3	3/Maintained	RA,RL,RR,RC, RLC,RRC	$19.00
SLC	3/Spring Return, L to C	RC,RR,RRC	$22.00
SRC	3/Spring Return, R to C	RC,RL,RLC	$22.00
SAC	3/Spring Return, L & R to C	RC	$22.00

III. BEZEL/INDICATOR COLOR

CODE	DESCRIPTION
K	Black Bezel/White Indicator

IV. KEY REMOVAL POSITION

CODE	REMOVAL POSITION
RA	All
RL	Left Only
RR	Right Only
RC	Center Only
RLC	Left & Center Only
RRC	Right & Center Only

DISCOUNT SCHEDULE E

V. CONTACT BLOCK CONFIGURATION (LEFT SIDE)

CODE	DESCRIPTION	LIST
(Blank)	Operator without Contact Blocks	—
10	1 Normally Open Contact Block	$ 8.10
01	1 Normally Closed Contact Block	$ 8.10
E	1 Early Make Contact Block	$ 8.10
D	1 Delayed Break Contact Block	$ 8.10
20	2 Normally Open Contact Blocks	$ 16.20
02	2 Normally Closed Contact Blocks	$ 16.20
11	1 Normally Open and 1 Normally Closed Contact Blocks	$ 16.20

VI. CONTACT BLOCK CONFIGURATION (RIGHT SIDE)

(USE CHART V FROM ABOVE)

KEYED SWITCH OPTIONS

Alternate Key Combinations: Up to 9 different key combinations (CC series) are available. To order locks keyed differently, consult factory or specify on order and increase the List price $60.00 per operator.

Master Keys: A master key is available that works in all 9 CC series key combinations. To order, specify part number MS MK1250 ($43.00 per set of two master keys).

Extra or Replacement Keys: Available for standard keyed selector switches only. To order, specify part number ES201 ($8.60 per set of two keys). NOTE: Two keys come standard with each operator.

KEY POSITIONS

2-POSITION	3-POSITION

O = OPEN   X = CLOSED

CONTACT BLOCK SELECTION FOR 3-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION			BLOCK CATALOG NUMBER	MOUNTING POSITION
	LEFT	CENTER	RIGHT		
A	X	O	O	WNO	LEFT
B	O	X	O	WNC	EITHER
C	O	O	X	WNO	RIGHT
D	O	X	X	WDB	LEFT
E	X	O	X	WEM	EITHER
F	X	X	O	WDB	RIGHT

CONTACT BLOCK SELECTION FOR 2-POSITION SELECTOR SWITCHES

CIRCUIT DESIG.	HANDLE POSITION		BLOCK CATALOG NUMBER	MOUNTING POSITION
	LEFT	RIGHT		
H	O	X	WNO	EITHER
G	X	O	WNC	EITHER

22mm IEC Keyed Selector Switches

Our one cam and proper contact block sequence can perform the same functions as it takes for up to seven cams from our competitors units. Add our snap-on contact blocks and you can control up to four different circuits with just one selector switch. All c3controls 22mm IEC operators are UL Listed and CE marked and are rated Type 4/4X as standard for watertight and corrosion resistance. In addition, operators are also listed for Type 1, 2, 3, 3R, 12, 13 and IP66 applications, and meet global standards requirements.

Product features include:

- Polyester construction for superior corrosion resistance, moisture rejection and electrical insulation.
- Compact size, only 45.6mm (1-51/64") deep from the front of the panel.
- Removable latching device allows for easy installation and wiring.
- Modular contact blocks use M3.5 plated captive steel terminal screws with self-lifting captive wire clamps that accommodate 0.5 ~ 4mm2 (#22 ~ #12 AWG) wires (one or two wires per terminal) and have IP20 guarded terminals to prevent accidental contact with live parts.
- Operators conveniently mount in a round 22.5mm (7/8") hole that is directly interchangeable with competitors units and eliminates the labor required for notching.

UNIQUE PRODUCT FEATURES

Save time & money - with c3controls, one cam does it all!

- One-Cam does it all vs. our competitors who need up to seven cams to perform the same function. This One-Cam design eliminates the need for multiple cam configurations and selector switch configuration nightmares, saving time, inventory, money, and ensuring 100% cam selection configuration accuracy.
- Compact, thin design for fitting into tight spaces.

Some of Our Popular Configurations:

2-POSITION KEYED SELECTOR SWITCH OPERATORS

CONTACT SYMBOL	CONTACT BLOCK MOUNTING POS. Viewed from front of operator	HANDLE POSITION O=OPEN X=CLOSED LEFT	RIGHT	TYPE OF OPERATOR	MAINTAINED POSITION CATALOG #	LIST	SPRING RETURN- RIGHT TO LEFT CATALOG #	LIST
1 NO	EITHER	O	X	Key Removal Pos. LEFT RIGHT ALL	W22KS2-KRL-10 W22KS2-KRR-10 W22KS2-KRA-10	$46.10 $46.10 $46.10	W22KSRL-KRL-10 — —	$48.10 — —
1 NC	EITHER	X	O	Key Removal Pos. LEFT RIGHT ALL	W22KS2-KRL-01 W22KS2-KRR-01 W22KS2-KRA-01	$46.10 $46.10 $46.10	W22KSRL-KRL-01 — —	$48.10 — —

3-POSITION KEYED SELECTOR SWITCH OPERATORS

CONTACT SYMBOL	CONTACT BLOCK MOUNTING POS. Viewed from front of operator	HANDLE POSITION O=OPEN X=CLOSED LEFT	CENTER	RIGHT	TYPE OF OPERATOR	MAINTAINED POSITION CATALOG #	LIST	SPRING RETURN- LEFT TO CENTER CATALOG #	LIST	SPRING RETURN- RIGHT TO CENTER CATALOG #	LIST	SPRING RETURN- ALL EITHER TO CENTER CATALOG #	LIST
NO/NO	LEFT	X	O	O	Key Rem Pos. LEFT RIGHT CENTER	W22KS3-KRL-10/10 W22KS3-KRR-10/10 W22KS3-KRC-10/10	$57.20 $57.20 $57.20	— W22KSLC-KRR-10/10 W22KSLC-KRC-10/10	— $60.20 $60.20	W22KSRC-KRL-10/10 — W22KSRC-KRC-10/10	$60.20 — $60.20	— — W22KSAC-KRC-10/10	— — $60.20
	RIGHT	O	O	X	Key Rem Pos. L & C R & C	W22KS3-KRLC-10/10 W22KS3-KRRC-10/10	$57.20 $57.20	— W22KSLC-KRRC-10/10	— $60.20	W22KSRC-KRLC-10/10 —	$60.20 —	— —	— —

22MM IEC PILOT DEVICES

IT'S EASY TO BUILD YOUR OWN CONTROL STATION

Simply pick the code number from each of the sections below and combine them to build your part number.

Compact Control Stations (Polycarbonate)

EC W22 ☐ – ☐ – ☐ ☐ ☐ ☐ – ☐ ☐ ☐ ☐ – ☐ ☐ ☐ ☐

I *II* *III* *IV* *V* *VI* *VII* *VIII* *V* *VI* *VII* *VIII* *V* *VI* *VII* *VIII*

Position 1 | Position 2 | Position 3

Example: To build one of our most popular Control Stations, the part number would be EC + W22 + III + IV + V + VI + VII + VIII or ECW22V-H2P1-04R23-01G22

Position 3
Position 2
Position 3
Position 1
Position 2
Position 1

I. ENCLOSURE CONSTRUCTION

CODE	DESCRIPTION
EC	Enclosed Control Station (Polycarbonate)

II. HOLE DIAMETER

CODE	DESCRIPTION
W22	22.5mm (7/8")

III. CONDUIT ENTRY ORIENTATION

CODE	DESCRIPTION
V	Vertical
H	Horizontal*

*NOTE: Dual Push Button operators available in horizontal orientation only.

IV. NUMBER OF POSITIONS & ENCLOSURE DIMENSION

CODE	# OF POSITIONS	COVER COLOR	ENCLOSURE DIMENSION (H x W x D)	LIST
H1P1	1	Grey	75mm x 80mm x 57mm	$ 22.50
H1P1Y	1	Yellow	75mm x 80mm x 57mm	$ 22.50
H2P1	2	Grey	119mm x 80mm x 57mm	$ 30.50
H3P1	3	Grey	163mm x 80mm x 57mm	$ 39.00

Not finding what you need in our assembled compact control stations?

An endless variety of assemblies are available. Our polycarbonate enclosures are optimized for use with our line of 22mm IEC pilot and signaling devices. Consult factory or see page 40 for details.

DISCOUNT SCHEDULE **E**

SEE NEXT PAGE FOR PART BUILDER CHARTS V – VIII

SOME OF OUR POPULAR CONFIGURATIONS:

COMPACT CONTROL STATIONS

CODE	# OF POSITION(S)	OPERATOR(S)	CAP TYPE/COLOR	CONTACT(S)	LEGEND / COLOR	LIST
ECW22V-H1P1Y-10R04R	1	Push-Twist-Release Main. Non Illum.	40mm Mushroom/Red	NC	Emergency Stop / Yellow	$ 77.60
ECW22H-H1P1-2657	1	Dual-Push Button Mom. Non-Illum.	Flush/Green (Top)	NO	On Off / Black	$ 67.70
			Extended/Red (Bottom)	NC		
ECW22V-H2P1-04R23-01G22	2	2 Push Buttons Mom. Non-Illum.	Flush/Green (Pos. 2)	NO	Start / Black	$ 82.70
			Extended/Red (Pos. 1)	NC	Stop / Black	
ECW22H-H3P1-01G22-04R23-03B18	3	3 Push Buttons Mom. Non-Illum.	Flush/Green (Pos. 1)	NO	Start / Black	$117.30
			Extended/Red (Pos. 2)	NC	Stop / Black	
			Flush/Blue (Pos. 3)	NO	Reset / Black	
ECW22V-H3P1-04R23-01G22-25RMD20	3	Pilot Light	Red/Lens (Pos. 3)	—	Run / Black	$142.00
		2 Push Buttons	Flush/Green (Pos. 2)	NO	Start / Black	
		Mom. Non-Illum.	Extended/Red (Pos. 1)	NC	Stop / Black	

CONTROL STATION PART BUILDER (CONT.)

V. OPERATOR TYPE*

CODE	DESCRIPTION	LIST
MOMENTARY, NON-ILLUMINATED PUSH BUTTON		
01	Flush Cap with 1 NO Contact Block	$22.10
02	Flush Cap with 1 NC Contact Block	$22.10
03	Extended Cap with 1 NO Contact Block	$22.10
04	Extended Cap with 1 NC Contact Block	$22.10
MAINTAINED, NON-ILLUMINATED 2-POSITION PUSH-PULL		
07	40mm (1-9/16") Mushroom Cap with 1 NO Contact Block	$39.10
08	40mm (1-9/16") Mushroom Cap with 1 NC Contact Block	$39.10
MAINTAINED, NON-ILLUMINATED 2-POSITION PUSH-TWIST-RELEASE		
09	40mm (1-9/16") Mushroom Cap with Yellow Housing and 1 NO Contact Block	$46.10
10	40mm (1-9/16") Mushroom Cap with Yellow Housing and 1 NC Contact Block	$46.10
MAINTAINED, NON-ILLUMINATED SELECTOR SWITCH		
11	2 Position with 1 NO Contact Block	$27.20
12	3 Position with 2 NO Contact Blocks	$35.30
MOMENTARY, ILLUMINATED PUSH BUTTON		
13	Flush Lens with 1 NO Contact Block	$28.10
14	Flush Lens with 1 NC Contact Block	$28.10
15	Extended Lens with 1 NO Contact Block	$28.10
16	Extended Lens with 1 NC Contact Block	$28.10
MAINTAINED, ILLUMINATED 2-POSITION PUSH-PULL RELEASE		
19	40mm (1-9/16") Mushroom Lens with 1 NO Contact Block	$34.10
20	40mm (1-9/16") Mushroom Lens with 1 NC Contact Block	$34.10
MAINTAINED, ILLUMINATED 2-POSITION PUSH-TWIST-RELEASE		
21	40mm (1-9/16") Mushroom Cap with Yellow Housing and 1 NO Contact Block	$59.10
22	40mm (1-9/16") Mushroom Cap with Yellow Housing and 1 NC Contact Block	$59.10
MAINTAINED, ILLUMINATED SELECTOR SWITCH		
23	2-Position with 1 NO Contact Block	$33.10
24	3-Position with 2 NO Contact Blocks	$41.20
PILOT LIGHT		
25	Modular Pilot Light	$20.80
MOMENTARY, DUAL PUSH BUTTON**		
26	Non-Illuminated, Extended Red (Bottom) with 1 NC Contact Block and Flush Green (Top) with 1 NO Contact Block	$40.20
27	Illuminated, Extended Red (Bottom) with 1 NC Contact Block and Flush Green (Top) with 1 NO Contact Block and Clear Lens (Middle)	$40.20

NOTE: *All operators come standard with a black polyester (Type 4X) clamp ring.
**Dual Push Button operators available in horizontal conduit entry orientation only.

c3controls LED lamps last 100,000 hours—that's 11.4 years!

VI. OPERATOR CAP/LENS COLOR

		FOR USE WITH OPERATOR TYPES	
CODE	COLOR	NON-ILLUMINATED OPERATOR CODES	ILLUMINATED OPERATOR CODES
(Blank)	None*	26	27
A	Amber	—	13, 14, 15, 16, 19, 20, 23, 24, 25
K	Black	01, 02, 03, 04	—
B	Blue	01, 02, 03, 04, 11, 12	13, 14, 15, 16, 25
C	Clear	—	25
G	Green	01, 02, 03, 04, 07, 08	13, 14, 15, 16, 19, 20, 23, 24, 25
E	Grey	01, 02, 03, 04, 11, 12	—
R	Red	01, 02, 03, 04, 07, 08, 09, 10, 11, 12	13, 14, 15, 16, 19, 20, 21, 22, 23, 24, 25
W	White	01, 02, 03, 04, 11, 12	13, 14, 15, 16, 23, 24

*NOTE: Dual Push Button operators come standard with Extended Red (Bottom) and Flush Green (Top). Consult factory if you require a different color.

VII. ILLUMINATION

CODE	LIGHT MODULE	VOLTAGE	LAMP TYPE/COLOR	LIST
(Blank)	None*	—	—	—
	*NOTE: For use with non-illuminated operators only.			
MC	Full Voltage	24V AC/DC	LED**	$26.00
MD	Full Voltage	120V AC/DC	LED**	$26.00
MV	Multi-Voltage, Non-Relampable	20-277V AC/DC	LED/White	$37.00

**NOTE: LED lamp color will match selected lens color.

VIII. LEGEND PLATE*

CODE	LEGEND** LEFT/TOP	LEGEND CENTER	LEGEND** RIGHT/BOTTOM	LIST
(Blank)	No Legend Plate			—
00		(Blank)		$ 4.00
01		AUTO		$ 4.00
02		CLOSE		$ 4.00
03		DOWN		$ 4.00
04		EMERGENCY STOP		$ 4.00
04R		EMERGENCY STOP***		$ 9.00
07		FORWARD		$ 4.00
12		OFF		$ 4.00
13		ON		$ 4.00
14		OPEN		$ 4.00
16		POWER ON		$ 4.00
18		RESET		$ 4.00
20		RUN		$ 4.00
22		START		$ 4.00
23		STOP		$ 4.00
25		UP		$ 4.00
56	OFF		ON	$ 5.00
57	ON		OFF	$ 5.00
61	START		STOP	$ 5.00
72	UP		DOWN	$ 5.00
83	HAND	OFF	AUTO	$ 5.00

NOTE: *Legend plates are standard 1-3/4" x 1-3/4" (h x w) and face color is black with white letters (uppercase) unless otherwise specified. Consult factory for details.
**Top and bottom text location for Dual Push Buttons only.
***The 04R Emergency Stop legend plate, for use with a 1 position enclosure only, is round 2-13/32" diameter and face color is yellow with black letters (uppercase).

22MM IEC PILOT DEVICES

22MM IEC COMPACT CONTROL STATIONS – POLYCARBONATE

Our 22mm IEC Compact Control Stations feature polycarbonate construction for superior corrosion resistance, moisture rejection, UV resistance, electrical insulation and high-impact resistance. A variety of pilot devices are available, including non-illuminated and illuminated push buttons, emergency stop push buttons, momentary dual push buttons (flush green and extended red), maintained selector switches (2- and 3-position), and pilot lights for operation and indication. Designed for the most severe outdoor conditions, enclosures are suitable for use in equipment with vibration, frequent wash-down and varying temperatures from -40 to +55° C.

Product Features

- Factory assembly of our 22mm IEC Compact Control Stations provide the convenience of a single catalog number, no assembly required, shorter control panel bill of materials, and easier inventory management.

- Contact blocks available up to one deep and three across providing multiple circuits in a compact space.

- Our compact, high performance, polycarbonate enclosures are UL Listed and are rated for Type 1, 2, 3, 3R, 4/4X, 12, 13 and IP66, making them suitable for the most demanding applications – including wash-downs and corrosive environments.

- Manufactured with all stainless steel hardware including #8 thread form screws, ensuring 100% reliability in corrosive environments.

- For easy installation, the enclosure has two lateral M20 conduit entries and two base conduit entries.

- Enclosure cover is keyed for enhanced safety and to prevent misalignment during installation.

- Screw cover accessory, included as standard, prevents debris build-up.

UNIQUE PRODUCT FEATURES

DESIGNED WITH SEAMLESS COMPATIBILITY IN MIND!

1. The compact design of our polycarbonate enclosure is a custom fit specifically optimized for use with our 22mm IEC pilot and signaling devices—leading the industry with the shortest depth behind the panel.

2. All c3controls 22mm IEC pilot and signaling devices, including illuminated options with up to three contact blocks, are compatible for factory assembly and installation with our new polycarbonate enclosure. See page 40 for details.

3. The panel gasket provides an environmentally secure fit—creating a squeegee effect and forming a permanent watertight seal that provides Type 4/4X and IP66 ingress protection.

POLYCARBONATE ENCLOSURES

Polycarbonate Enclosures –
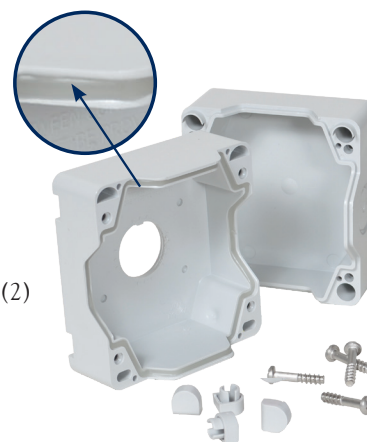### Optimized for use with 22mm IEC Pilot and Signaling Devices

POLYCARBONATE ENCLOSURE CONFIGURATION

CODE	# OF HOLES	FRAME DIMENSIONS (H x W x D)	COLOR	LIST
ECP1-A22H1	1	75mm x 80mm x 57mm (2-61/64" x 3-5/32" x 2-1/4")	Grey	$22.50
ECP1-A22H1Y	1	75mm x 80mm x 57mm (2-61/64" x 3-5/32" x 2-1/4")	Yellow	$22.50
ECP1-B22H2	2	119mm x 80mm x 57mm (4-11/16" x 3-5/32" x 2-1/4")	Grey	$30.50
ECP1-C22H3	3	163mm x 80mm x 57mm (6-27/64" x 3-5/32" x 2-1/4")	Grey	$39.00

DISCOUNT SCHEDULE **E**

CONSTRUCTION

- Rugged Polycarbonate construction, lightweight with high impact resistance.
- UV and corrosion resistant.
- Stainless steel hardware including #8 thread form screws.
- Enclosure cover is keyed for enhanced safety and to prevent misalignment during installation.
- Screw cover accessory, included as standard, to prevent debris build-up.
- For easy installation, the enclosure has two (2) lateral M20 conduit entries and two (2) base conduit entries.
- Standard colors: Grey and Yellow
- Available as fully-assembled control stations, see pages 37-39.

RATINGS / APPROVALS

- UL Listed Type 1, 2, 3, 3R, 4/4X, 12, 13
- IP66 protection
- Operating temperatures from -40 to +55° C (-40 to +131° F)

ENDLESS POSSIBILITIES

The compact design of our Polycarbonate Enclosure is a custom fit optimized for use with our 22mm IEC pilot and signaling devices—leading the industry with the shortest depth behind the panel.

We offer the option to configure and assemble the control station for you, under a single catalog number. Your control station will arrive factory assembled providing a shorter bill of material, reducing installation time, simplifying inventory management, and ultimately reducing cost.

Ordering a custom assembled compact control station is easy. Either choose from our already pre-configured assemblies on pages 37-39 or,

- Simply choose your enclosure frame size and number of holes, see options above.
- Select your operator(s) from our line of 22mm IEC pilot and signaling devices, see pages 6-36.
- Select your legend plate style, color, and designation, see page 41.
- Contact the c3controls factory to complete your order.
- Custom assembled compact control stations are not available for guaranteed same-day shipping—ships within 3 days.

MOUNTING FOOT KIT

Field installable mounting foot kit enables enclosure to be panel mounted and includes mounting feet and screws.

DISCOUNT SCHEDULE **E**

CODE	DESCRIPTION	LIST
ECP1-MFKIT	Mounting Foot Kit (4 mounting feet and screws)	$ 8.00

IT'S EASY TO BUILD YOUR OWN LEGEND PLATE

Simply pick the code number from each of the sections below and combine them to build your part number.

Legend Plates

I	**II**	**III**	**IV**

Legend plates feature 2 lines of text with approximately 16 characters per line. Uppercase is standard unless specified.

*The short legend plate (22LPS) features 1 line of text with approximately 16 characters and the Potentiometer legend plate comes standard with a scale and one or two lines of text, see chart D below.

**The Dual Push Button legend plates (22LPDHL, 22LPDHR &22LPDV) feature one line of text for each of the two push buttons, 5 characters per line.

I. LEGEND PLATE TYPE		
CODE	**DESCRIPTION**	**LIST**
	FOR USE WITH 22MM IEC OPERATORS	
22LP	Standard 1-3/4"h x 1-3/4"w	$ 4.00
22LPN	Narrow 1-3/4"h x 1-1/2"w	$ 4.00
22LPS	Short 1-1/2"h x 1-3/4"w*	$ 4.00
22LPT	Tall 2"h x 1-3/4"w	$ 5.00
22LPJ	Jumbo 2"h x 2"w	$ 5.00
22LPR	Standard Round 2-13/32" Dia.	$ 9.00
22LPRM	Medium Round 2-3/4" Dia.	$11.00
22LPRJ	Jumbo Round 3-3/4" Dia.	$12.00
22LPDHL	Text left of Dual Push Buttons (one line top, one line bottom, 5 characters per line) 51mm h x 48mm w**	$ 5.00
22LPDHR	Text right of Dual Push Buttons (one line top, one line bottom, 5 characters per line) 51mm h x 48mm w**	$ 5.00
22LPDV	Vertical—One line above (one line below Dual Push Buttons, 5 characters per line) 71mm h x 28mm w**	$ 5.00
	FOR USE WITH POLYCARBONATE ENCLOSURES OPTIMIZED FOR 22MM IEC OPERATORS	
22ECLP	Standard 1-47/64" h x 1-47/64" w	$ 4.00
22ECLPR	Round 2-21/64" Dia.	$ 9.00

II. FACE AND LETTER COLOR		
CODE	**FACE COLOR**	**LETTER COLOR**
AL	Aluminum	Black
(Blank)	Black	White
BE	Blue	White
GN	Green	White
RD	Red	White
WE	White	Black
YW	Yellow	Black

SEE NEXT PAGE FOR PART BUILDER CHART III →

DISCOUNT SCHEDULE **E**

SOME OF OUR POPULAR CONFIGURATIONS:

LEGEND PLATES		
CATALOG NO.	**DESIGNATION**	**LIST**
22LPRYW-04	EMERGENCY STOP	$9.00
22LP-22	START	$4.00
22LPT-83	HAND OFF AUTO	$5.00

LEGEND PLATE PART BUILDER (CONT.)

III. LEGEND DESIGNATION

A. PUSH BUTTONS AND LIGHTS

CODE	DESCRIPTION
00	(Blank)
01	AUTO
02	CLOSE
31	CYCLE START
100	CYCLE STOP
03	DOWN
102	EMERGENCY
04	EMERGENCY STOP
06	FAST
101	FAULT
07	FORWARD
08	HAND
32	HIGH
33	IN
09	INCH
10	JOG
38	JOG FORWARD
39	JOG REVERSE
34	LOW
35	LOWER
11	MANUAL
26	MOTOR RUN
12	OFF
13	ON
14	OPEN
36	OUT
27	OVERLOAD
15	POWER OFF
16	POWER ON
30	PUSH TO RESET
17	PUSH TO TEST
37	RAISE
109	READY
18	RESET
19	REVERSE
20	RUN
21	SLOW
22	START
23	STOP
24	TEST
29	TRIP
25	UP

B. 2-POSITION SELECTOR

CODE	LEGEND LEFT	LEGEND RIGHT
00	(Blank)	(Blank)
50	AUTO	HAND
68	AUTO	MANUAL
51	DOWN	UP
63	FAST	SLOW
52	FWD	REV
53	HAND	AUTO
73	HIGH	LOW
54	INCH	RUN
75	LEFT	RIGHT
70	LOCAL	REMOTE
55	MANUAL	AUTO
56	OFF	ON
57	ON	OFF
58	OPEN	CLOSE
65	PULL START	PUSH STOP
66	PUSH OFF	PULL ON
64	PUSH ON	PUSH OFF
67	PUSH TO STOP	PULL TO START
71	RAISE	LOWER
59	REV	FWD
60	RUN	JOG
69	SLOW	FAST
61	START	STOP
62	STOP	START
74	SUMMER	WINTER
72	UP	DOWN

C. 3-POSITION SELECTOR

CODE	LEGEND LEFT	LEGEND CENTER	LEGEND RIGHT
00	(Blank)	(Blank)	(Blank)
108	A	O	H
92	AUTO	OFF	HAND
93	AUTO	MAN	OFF
80	DOWN	OFF	UP
81	FWD	AUTO	REV
82	FWD	OFF	REV
107	H	O	A
83	HAND	OFF	AUTO
94	HIGH	OFF	LOW
99	JOG	OFF	AUTO
90	LOCAL	OFF	REMOTE
84	MANUAL	OFF	AUTO
89	OFF	RUN	START
85	OFF	START	RUN
86	OFF	1	2
95	OPEN	OFF	CLOSE
91	RAISE	OFF	LOWER
96	SLOW	OFF	FAST
97	SUMMER	OFF	WINTER
98	UP	OFF	DOWN
87	1	OFF	2
88	1	2	3

D. POTENTIOMETER

CODE	DESCRIPTION
40	Blank Legend 0 - 10
41	"SPEED" 0 - 10
43	Blank Legend 0 - 100
44	"SPEED" 0 - 100

E. DUAL PUSH BUTTONS

CODE	LEGEND TOP	LEGEND BOTTOM
00	(Blank)	(Blank)
63	FAST	SLOW
52	FWD	REV
57	ON	OFF
71	RAISE	LOWER
60	RUN	JOG
61	START	STOP
62	STOP	START
72	UP	DOWN

IV. ADHESIVE BACK

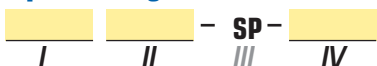| CODE	DESCRIPTION
(Blank)	No Adhesive Back
A	Adhesive Back

NOT FINDING WHAT YOU NEED IN A STANDARD PLATE?

We offer Special and Custom Engraving up to 12" x 24" (304.8mm x 609.6mm). Consult factory or see page 43 for details. While our standard legend plates are available for same day shipping, our special and custom legend plates are not.

IT'S EASY TO BUILD YOUR OWN LEGEND PLATE

Simply pick the code number from each of the sections below and combine them to build your part number.

Special Legend Plates

		– SP –	
I	II	III	IV

All legend plates are a 2-ply laminated plastic, laser engraved for a permanent and quality appearance.

Uppercase is standard unless specified.

I. LEGEND PLATE TYPE

CODE	DESCRIPTION	LIST
FOR USE WITH 22MM IEC OPERATORS		
22LP	Standard 1-3/4"h x 1-3/4"w	$ 4.00
22LPN	Narrow 1-3/4"h x 1-1/2"w	$ 4.00
22LPS	Short 1-1/2"h x 1-3/4"w*	$ 4.00
22LPT	Tall 2"h x 1-3/4"w	$ 5.00
22LPJ	Jumbo 2"h x 2"w	$ 5.00
22LPR	Standard Round 2-13/32" Dia.	$ 9.00
22LPRM	Medium Round 2-3/4" Dia.	$11.00
22LPRJ	Jumbo Round 3-3/4" Dia.	$12.00
FOR USE WITH POLYCARBONATE ENCLOSURES OPTIMIZED FOR 22MM IEC OPERATORS		
22ECLP	Standard 1-47/64" h x 1-47/64" w	$ 4.00
22ECLPR	Round 2-21/64" Dia.	$ 9.00

Legend plates feature 2 lines of text with approximately 16 characters per line.

*The short legend plate (22LPS) features 1 line of text with 16 characters per line.

II. FACE AND LETTER COLOR

CODE	FACE COLOR	LETTER COLOR
AL	Aluminum	Black
(Blank)	Black	White
BE	Blue	White
GN	Green	White
RD	Red	White
WE	White	Black
YW	Yellow	Black

III. LEGEND DESIGNATION

CODE	DESCRIPTION	LIST
SP	Special Legend	$14.00

IV. ADHESIVE BACK

CODE	DESCRIPTION
(Blank)	No Adhesive Back
A	Adhesive Back

Upon receipt of your order, legend plates will be set-up as specified and a proof will be sent to you prior to production to ensure accuracy.

To order, submit your drawing to:

Mail: c3controls
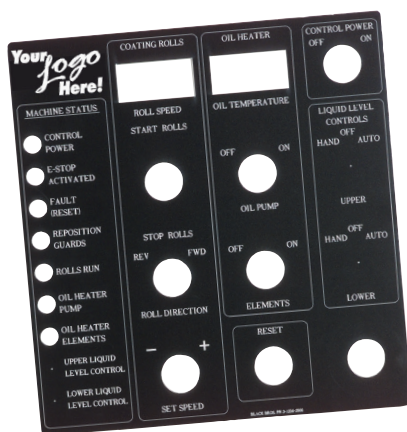Attn: Customer First
PO Box 496
Beaver, PA 15009

Fax: 724.775.5283

Email: legendplates@c3controls.com

To help simplify your order process, templates are available by calling our factory at 724.775.7926 or reference one of the drawings shown on page 55.

Special legend plates are not available for same day shipping.

DISCOUNT SCHEDULE E

CUSTOM LEGEND PLATES

(Sample custom plate)

- **Add your Corporate Logo!** Send us your corporate logo electronically to promote your company image in a clean professional legend plate.
- Available in 2-ply 304.8mm x 609.6mm (12" x 24") sheets of laminated plastic for custom laser engraving.
- To order, specify part number 22LP-CP (no adhesive back) or 22LP-CP-A (adhesive back).
- Initial Set-Up Fee Per Legend Plate: $50/hour (minimum fee $50.00).
- $2.00/Square Inch (minimum $18.00).
- Design services available. Consult factory for details and hourly rate.
- Custom legend plates are not available for same-day shipping.

To order, submit your drawing to:

Mail: c3controls
Attn: Customer First
PO Box 496
Beaver, PA 15009

Fax: 724.775.5283

Email: legendplates@c3controls.com

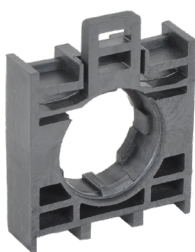## THRUST & TRIM WASHERS

Trim washer is not necessary when using a legend plate.

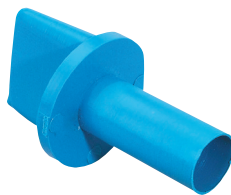| CODE	DESCRIPTION	LIST
22TWH	Thrust Washer	$ 4.00

LAMP REMOVAL TOOL

Used to facilitate the removal of lamps particularly in illuminated push buttons and push-to-test operators.

CODE	DESCRIPTION	LIST
LRT	Lamp Removal Tool	$ 8.00

CLAMP RING WRENCH

To simplify tightening and loosening of polyester clamp rings. Won't scratch your panel.

CODE	DESCRIPTION	LIST
W22CRW	Clamp Ring Wrench	$25.00

LATCHING DEVICE

The latching mechanism allows for easy installation and wiring for up to three contact blocks across. Fits all 22mm IEC operators (except Unibody Lights).

CODE	DESCRIPTION	LIST
W22-LD	Latching Device	$ 6.90

HOLE PLUGS

Use to close and seal unused 22.5mm (7/8") panel holes. Manufactured with integral "O" ring seal molded on both sides to provide Type 4X rating.

CODE	COLOR	LIST
HP22BK	Black	$11.00
HP22GY	Grey	$11.00

LOCK OFF ATTACHMENT

Our lock off attachment permits padlocking most 22mm operators.

Note: This product is not compatible with Jumbo Mushroom caps, Dual Push Buttons, and Selector Switches with lever handles.

CODE	FITS	LIST
22LOAFC	Most 22mm Push Buttons & Selector Switches	$50.00

DISCOUNT SCHEDULE **E**

LED & INCANDESCENT REPLACEMENT LAMPS

c3controls offers a full range of lamp options in a miniature bayonet base for direct interchangeability which provides flexibility in choosing the best lamp for each installation application. Multiple voltage options in Incandescent and LED lamps are available. Please refer to the chart below to determine the appropriate replacement lamp based on your operator voltage. For lamp technical data, see page 46.

LED Lamps

LED [   ] [   ]

/   II   III

To order LED Lamps, the part number would be LED + II + III

I. LAMP TYPE		
CODE	**DESCRIPTION**	**LIST**
LED	LED Lamp	$28.00

II. VOLTAGE	
CODE	**DESCRIPTION**
6	6V
12	12V
24	24V
130	130V

Our LED lamps feature built-in leakage protection.

III. LAMP COLOR	
CODE	**DESCRIPTION**
AR	Amber
BE	Blue
GN	Green
RD	Red
WE	White

22MM IEC REPLACEMENT LAMP REFERENCE CHART (FOR REFERENCE ONLY - USE CHARTS ABOVE TO ORDER)			
OPERATOR CODE	**OPERATOR VOLTAGE**	**LED (ALL COLORS)**	**INCANDESCENT**
FM6	Full Voltage 6V AC/DC	LED6	FVB6 or FVB6F
FM12	Full Voltage 12V AC/DC	LED12	FVB12
FM24	Full Voltage 24V AC/DC	LED24	FVB24
FM120	Full Voltage 120V AC/DC	LED130	FVB120

Incandescent Lamps

CODE	VOLTAGE	LIST
FVB6	6V	$ 4.00
FVB12	12V	$ 4.00
FVB24	24V	$ 4.00
FVB55	55V	$ 8.00
FVB120	120V	$ 8.00
FVB6F	6V Flashing*	$12.00

*NOTE: There may be a 5-15 second delay before flashing begins.

DISCOUNT SCHEDULE **E**

22MM IEC PILOT DEVICES

ELECTRICAL RATINGS

Lamp	Industry Number	Rated Volts	Lumens (MSCD)	Design Life (Hrs.)	Current Draw (mA)	Lamp Type	Shock & Vibration	Leakage Protection
FVB6	1866	6.3V	0.65	5,000	250	Incandescent	Very Good	N/A
FVB12	756	14V	0.31	15,000	80	Incandescent	Good	N/A
FVB24	757	28V	0.62	7,500	80	Incandescent	Good	N/A
FVB55	1835	55V	1.1	5,000	50	Incandescent	Good	N/A
FVB120	**	130V	0.36	10,000	20	Incandescent	Good	N/A
LED6	**	6V†	Varies w/ Color 2000 mcd Typical	100,000	50	LED*	Excellent	14 mA
LED12	**	12V†		100,000	<20	LED*	Excellent	4 mA
LED24	**	24V†		100,000	<20	LED*	Excellent	4 mA
LED130	**	120/130V†		100,000	<10	LED*	Excellent	2 mA
W22UNR-12L	**	12V AC/DC†	Varies w/ Color 2000 mcd Typical	100,000	<18	LED*	Excellent	<3 mA
W22UNR-24L	**	24V AC/DC†		100,000	<18	LED*	Excellent	<3 mA
W22UNR-120L	**	110-130V AC/DC†		100,000	<18	LED*	Excellent	<3 mA
W22UNR-240L	**	220-240V AC†		100,000	<18	LED*	Excellent	<3 mA

* Specify lamp color when ordering

** Designates a lamp design optimized for c3controls Illuminated Devices. See LED replacement lamps on page 45.

† LED voltage tolerance is +/-10%

MULTI-VOLTAGE POWER CONSUMPTION & CURRENT DRAW

System Voltage (V)	AC Current Draw (mA)	DC Current Draw (mA)	Power Consumption (W)
24	21	20	
48	17	7	
120	3.5	—	
125	—	3	AC: <1 DC: <1/2
240	2.5	—	
250	—	2	
277	2.5	—	

DIELECTRIC STRENGTH (MECHANICAL CONTACTS)   2200V FOR 1 MINUTE

STANDARD CONTACTS

		Utilization Category				
		IEC	UL	Make Rating	Break Rating	Ith-Thermal Current
	AC	AC-15	A600	7200VA	720VA	10A
	DC	DC-13	Q600	69VA	69VA	2.5A

NOTE: For AC voltage below 72V AC the maximum allowed switching current is 10A=Ith. For DC voltages below 28V DC the maximum allowed switching current is 2.5A=Ith.

	UNITS	
ENVIRONMENTAL RATINGS		
Operators		Rated and Certified for use in Type 1, 2, 3, 3R, 4/4X, 12 & 13
		IP-66 [per EN60529]
Operating Temperature	°C / °F	-40 to +55 / -40 to +131
Storage Temperature	°C / °F	-40 to +85 / -40 to +185

NOTE: Operating Environments for below freezing temperatures are assumed to be absent of freezing liquids or pollutants.

TERMINAL & WIRING CONSIDERATION

AWG Conductor		22-12 CU (Copper Only - Solid & Stranded) [.5 ~ 4mm²] One or Two wires permitted per termination
Recommended Torque	Lb-in. [Nm]	7 – 10 [.8]

22MM IEC PILOT DEVICES (CONTINUED)

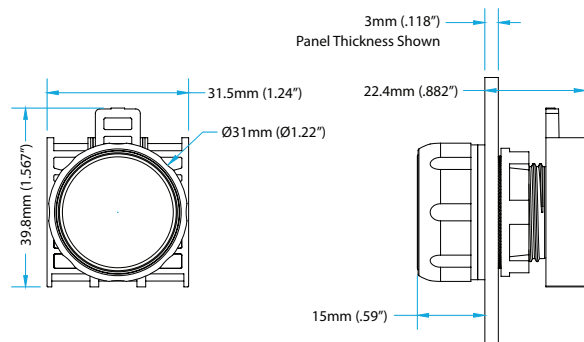|	UNITS	
CONSTRUCTION		
OPERATING FORCES		
PUSH BUTTONS (OPERATORS ONLY)		
Momentary	lbs. [N]	1.0 [4.45]
Illuminated (Momentary)	lbs. [N]	1.0 [4.45]
Maintained	lbs. [N]	1.0 [4.45]
Illuminated 2-Position (Maintained)	lbs. [N]	8.13 [36.18]
Illuminated 3-Position (Maintained Center and Depressed)	lbs. [N]	8.13 [36.18]
Illuminated 3-Position (All to Center)	lbs. [N]	11.5 [51.187]
SELECTOR SWITCHES (OPERATORS ONLY)		
Maintained	in-lbs. [Nm]	1.5 [.17]
Momentary	in-lbs. [Nm]	1.5 [.17]
Key Operated Maintained	in-lbs. [Nm]	1.5 [.17]
Key Operated Momentary	in-lbs. [Nm]	1.5 [.17]
CONTACT BLOCKS (SINGLE POLE)		
NO/EM	lbs. [N]	.80 [3.56]
NC/DB	lbs. [N]	.55 [2.45]
INDICATING LIGHTS		Refer to the appropriate Lamp Data
MECHANICAL ENDURANCE		
PUSH BUTTONS		
Momentary	Ops.	5,000,000
Maintained	Ops.	100,000
Dual	Ops.	1,000,000
EMERGENCY STOP (EN418)	Ops.	100,000
SELECTOR SWITCHES	Ops.	500,000
STANDARD CONTACT BLOCKS	Ops.	5,000,000
INDICATING LIGHTS		Refer to the appropriate Lamp Data
MATERIALS		
Operator Housings (Glass Reinforced Grades)		Thermoplastic Polyester and Polyester Blends (UV Stabilized for outdoor use)
Operator Caps and Handles - Non-Illuminated (Glass Reinforced Grades)		Thermoplastic Polyester and Polyester Blends (UV Stabilized for outdoor use)
Mounting Rings and Nuts (Glass Reinforced Grades)		Thermoplastic Polyester and Polyester Blends (UV Stabilized for outdoor use)
Thrust Washer		Thermoplastic Polyester and Polyester Blends (UV Stabilized for outdoor use)
Trim Washer		Thermoplastic Polyester and Polyester Blends (UV Stabilized for outdoor use)
Pilot Light Lens		High Impact Polycarbonate (UV Stabilized for outdoor use)
Transparent Push Buttons and Mushroom Caps		High Impact Polycarbonate (UV Stabilized for outdoor use)
Certain CAM and Bearing Parts		Custom Polymers: Teflon, Silicon and Moly-Disulfide impregnated for improved wearability
Seals		Neoprene Gaskets, BUNA N - Rubber - Teflon Coated, Thermoplastic - Elastomer Molded Seals
Push Pull Bushings		Brass (Plated and Unplated)
Detents for Maintained Devices		Brass (Plated and Unplated)
Springs		Stainless Steel throughout
ROHS COMPLIANCE		For RoHS compliance documentation by product, refer to www.c3controls.com

22MM IEC COMPACT CONTROL STATIONS

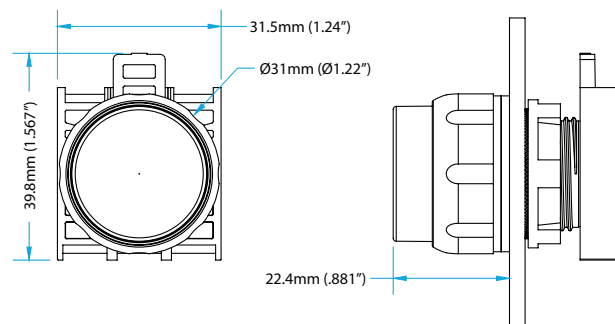|	UNITS	
CONSTRUCTION		
Enclosure		Polycarbonate
Assembly Screw		Stainless Steel
Gasket		Formed in place
Enclosure Conduit Entries		2 Lateral M20, (1/2 NPT) & 2 Base M16
Installation Torque (Cover to Base)	Nm [Lb-in.]	1 – 1.4 [8 – 12]
ENVIRONMENTAL RATINGS		
Ingress Protection		UL Listed Type 1, 2, 3, 3R, 4/4X, 12, 13 and IP66
Ambient Operating Temperature	°C / °F	-40 to +55 / -40 to +131
Ambient Storage Temperature	°C / °F	-40 to +85 / -40 to +185
ROHS COMPLIANCE		For RoHS compliance documentation by product, refer to www.c3controls.com

MOMENTARY NON-ILLUMINATED PUSH BUTTONS

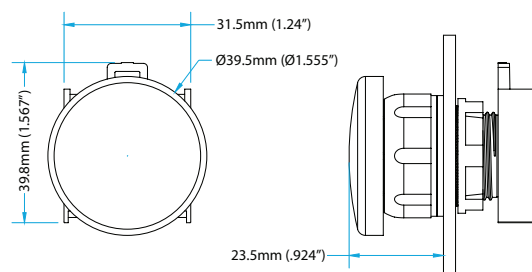Fully-assembled operators come standard with one 1.6mm (1/16") gasket.
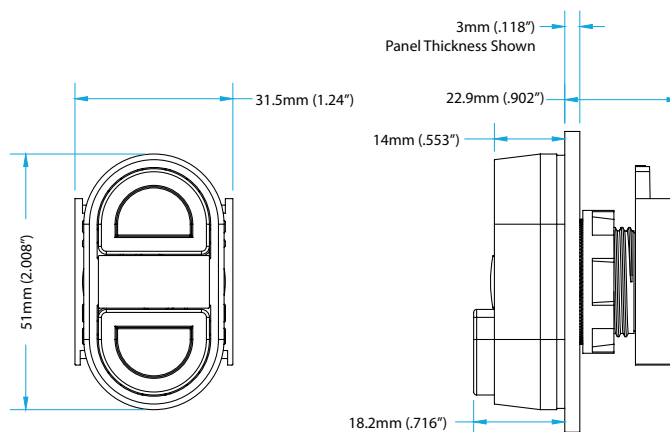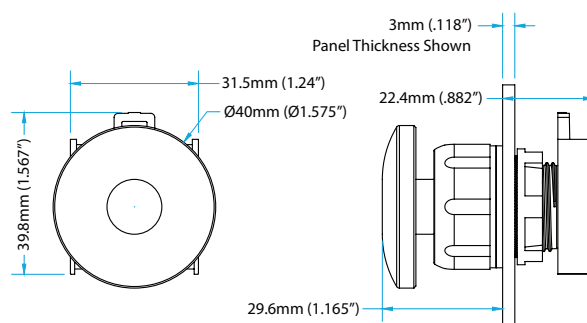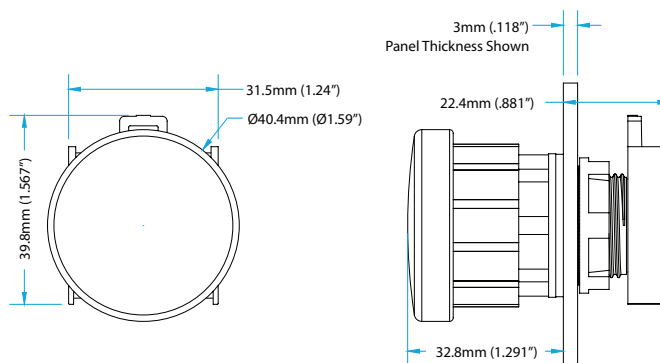
NON-ILLUMINATED OPERATOR
(SHOWN WITH FLUSH CAP)

3mm (.118")
Panel Thickness Shown

31.5mm (1.24")

22.4mm (.882")

Ø31mm (Ø1.22")

39.8mm (1.567")

15mm (.59")

NON-ILLUMINATED OPERATOR
(SHOWN WITH EXTENDED CAP)

31.5mm (1.24")

Ø31mm (Ø1.22")

39.8mm (1.567")

22.4mm (.881")

NON-ILLUMINATED OPERATOR
(SHOWN WITH 40MM [1-9/16"] MUSHROOM CAP)

31.5mm (1.24")

Ø39.5mm (Ø1.555")

39.8mm (1.567")

23.5mm (.924")

NON-ILLUMINATED DUAL PUSH BUTTON OPERATOR
(SHOWN WITH 1 FLUSH CAP AND 1 EXTENDED CAP)

3mm (.118")
Panel Thickness Shown

31.5mm (1.24")

22.9mm (.902")

14mm (.553")

51mm (2.008")

18.2mm (.716")

MAINTAINED NON-ILLUMINATED PUSH BUTTONS

Fully-assembled operators come standard with one 1.6mm (1/16") gasket.

2-POSITION PUSH-PULL MAINTAINED NON-ILLUMINATED
OPERATOR (SHOWN WITH 40MM [1-9/16"] MUSHROOM CAP)

3mm (.118")
Panel Thickness Shown

31.5mm (1.24")
Ø40mm (Ø1.575")
39.8mm (1.567")
22.4mm (.882")
29.6mm (1.165")

3-POSITION PUSH-PULL MAINTAINED NON-ILLUMINATED OPERATOR
(SHOWN WITH 40MM [1-9/16"] MUSHROOM CAP)

3mm (.118")
Panel Thickness Shown

31.5mm (1.24")
Ø40.4mm (Ø1.59")
39.8mm (1.567")
22.4mm (.881")
32.8mm (1.291")

2-POSITION PUSH-TWIST RELEASE MAINTAINED NON-ILLUMINATED
OPERATOR (SHOWN WITH 40MM [1-9/16"] MUSHROOM CAP)

3mm (.118")
Panel Thickness Shown

31.5mm (1.24")
39.8mm (1.567")
22.9mm (.902")
Ø40.6mm (1.600")
39.7mm (1.564")

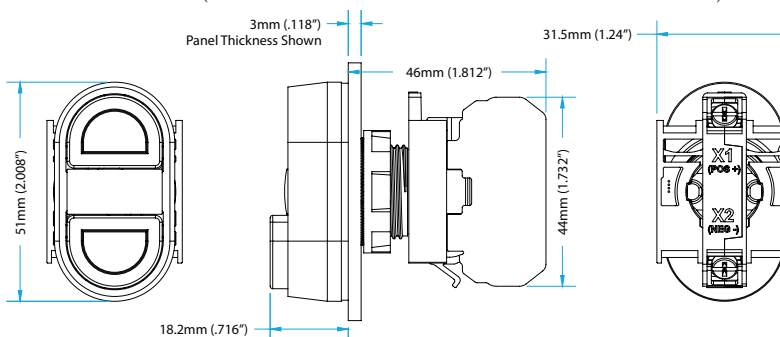Everything under control :: c3controls
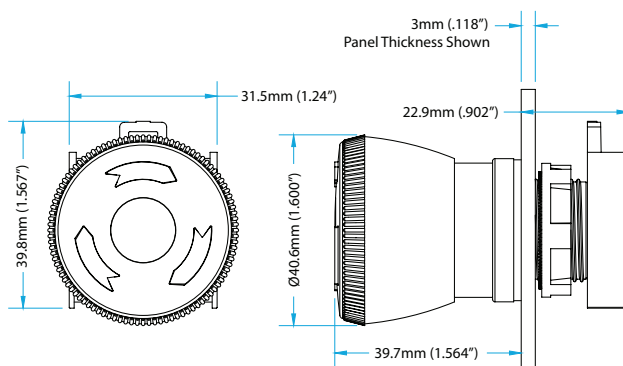
MOMENTARY ILLUMINATED PUSH BUTTONS

Fully-assembled operators come standard with one 1.6mm (1/16") gasket.

ILLUMINATED FULL VOLTAGE AND MULTI-VOLTAGE
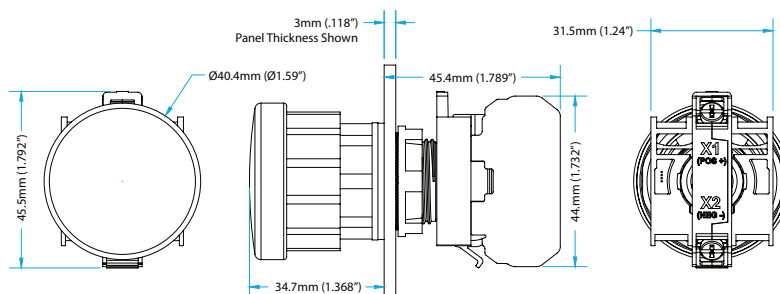OPERATORS (SHOWN WITH FLUSH LENS)
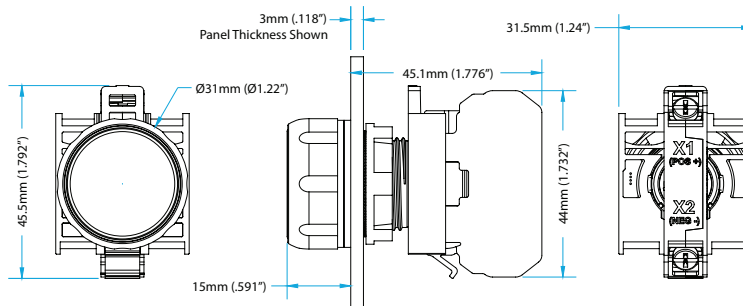
ILLUMINATED FULL VOLTAGE AND MULTI-VOLTAGE DUAL PUSH BUTTON
OPERATORS (SHOWN WITH 1 FLUSH CAP AND 1 EXTENDED CAP)

MAINTAINED ILLUMINATED PUSH BUTTONS

Fully-assembled operators come standard with one 1.6mm (1/16") gasket.

2 & 3-POSITION PUSH-PULL MAINTAINED ILLUMINATED 40MM (1-9/16") MUSHROOM
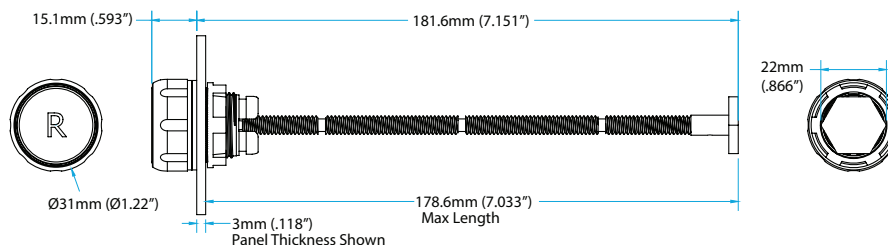LENS (SHOWN WITH FULL VOLTAGE AND MULTI-VOLTAGE MODULE)

2-POSITION PUSH-TWIST RELEASE MAINTAINED ILLUMINATED 40MM (1-9/16")
MUSHROOM CAP (SHOWN WITH FULL VOLTAGE AND MULTI-VOLTAGE MODULE)
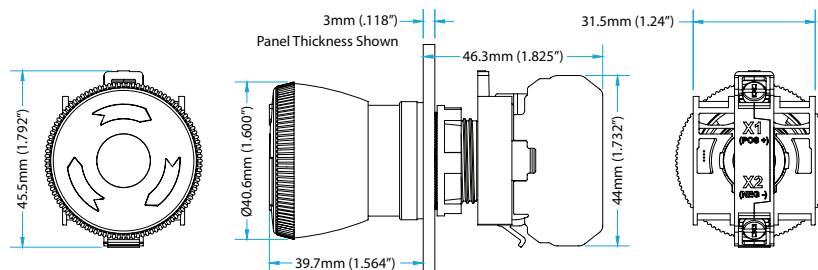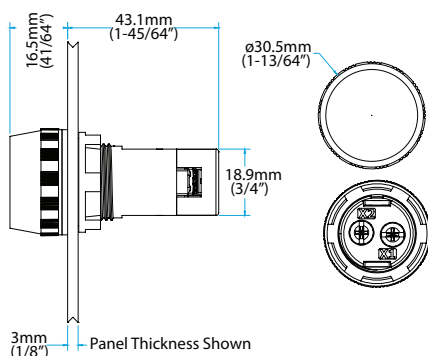
MOMENTARY NON-ILLUMINATED RESET PUSH BUTTONS

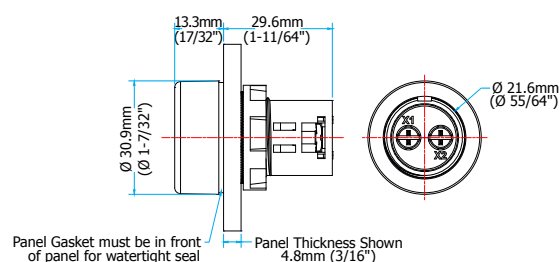Fully-assembled operators come standard with one 1.6mm (1/16") gasket.

15.1mm (.593") · 181.6mm (7.151") · 22mm (.866")
Ø31mm (Ø1.22") · 178.6mm (7.033") Max Length
3mm (.118") Panel Thickness Shown

PILOT LIGHTS

Fully-assembled operators come standard with one 1.6mm (1/16") gasket.

FULL VOLTAGE UNIBODY RELAMPABLE PILOT LIGHT OPERATOR

16.5mm (41/64") · 43.1mm (1-45/64") · ø30.5mm (1-13/64") · 18.9mm (3/4") · 3mm (1/8") Panel Thickness Shown

FULL VOLTAGE UNIBODY NON-RELAMPABLE PILOT LIGHT OPERATOR

13.3mm (17/32") · 29.6mm (1-11/64") · Ø 30.9mm (Ø 1-7/32") · Ø 21.6mm (Ø 55/64")
Panel Gasket must be in front of panel for watertight seal · Panel Thickness Shown 4.8mm (3/16")

FULL VOLTAGE AND MULTI-VOLTAGE MODULAR PILOT LIGHT OPERATORS

3mm (.118") Panel Thickness Shown · 31.5mm (1.24") · Ø30.6mm (Ø1.204") · 45.8mm (1.805") · 45.5mm (1.792") · 44mm (1.732") · 17mm (.668")
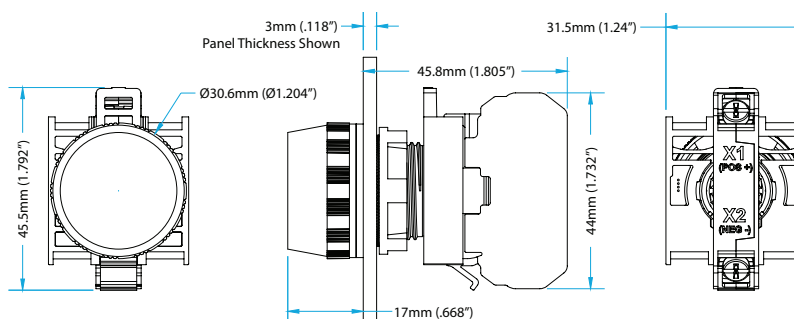
PUSH-TO-TEST PILOT LIGHTS

Fully-assembled operators come standard with one 1.6mm (1/16") gasket.

FULL VOLTAGE AND MULTI-VOLTAGE OPERATORS (SHOWN WITH FLUSH LENS)
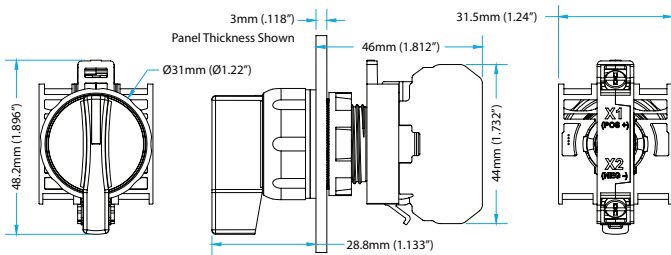

3mm (.118") Panel Thickness Shown · 31.5mm (1.24") · Ø31mm (Ø1.22") · 45.4mm (1.787") · 45.5mm (1.791") · 44mm (1.734") · 15mm (.591")
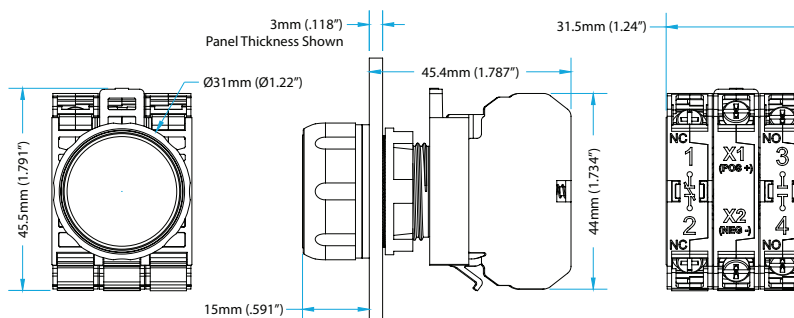
SELECTOR SWITCHES

Fully-assembled operators come standard with one 1.6mm (1/16") gasket.

NON-ILLUMINATED AND ILLUMINATED FULL VOLTAGE AND MULTI-VOLTAGE OPERATORS (SHOWN WITH STANDARD HANDLE)

3mm (.118") Panel Thickness Shown
Ø31mm (Ø1.220")
45.5mm (1.792")
46mm (1.812")
31.5mm (1.24")
44mm (1.732")
28.8mm (1.133")
X1 (POS ↔)
X2 (NEG –)
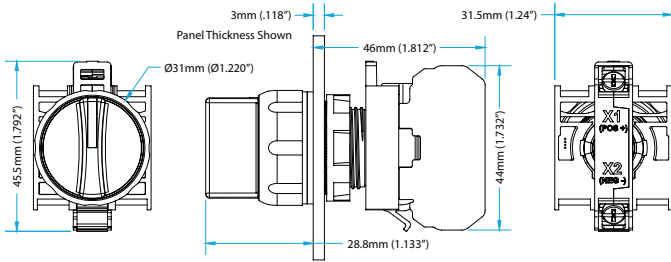
NON-ILLUMINATED AND ILLUMINATED FULL VOLTAGE AND MULTI-VOLTAGE OPERATORS (SHOWN WITH LEVER HANDLE)

3mm (.118") Panel Thickness Shown
Ø31mm (Ø1.22")
48.2mm (1.896")
46mm (1.812")
31.5mm (1.24")
44mm (1.732")
28.8mm (1.133")
X1 (POS ↔)
X2 (NEG –)

KEYED SELECTOR SWITCH OPERATOR (VERTICALLY MOUNTED)

3mm (.118") Panel Thickness Shown
22.7mm (.894")
Ø30.7mm (Ø1.208")
39.8mm (1.567")
31.5mm (1.24")
23.8mm (.937")
49.4mm (1.945")
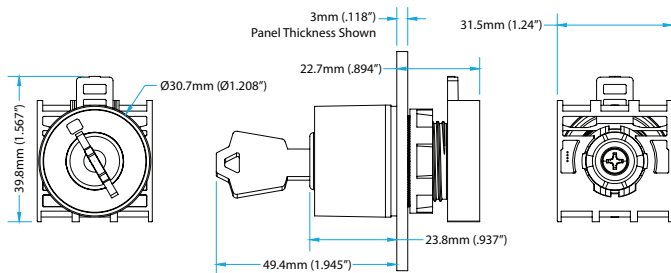
LOCK-OFF ATTACHMENT

22LOAFC

2" (50.9mm)
1-55/64" (47mm)
ø7/8" (ø22.2mm)

145° Max Open
2-33/64" (63.9mm)
4-13/16" (122.1mm)

2-11/16" (68.1mm)
1-15/32" (37.5mm) Cavity Height
1-21/32" (42mm)
3/16" (4.7mm)
37/64" (14.7mm)
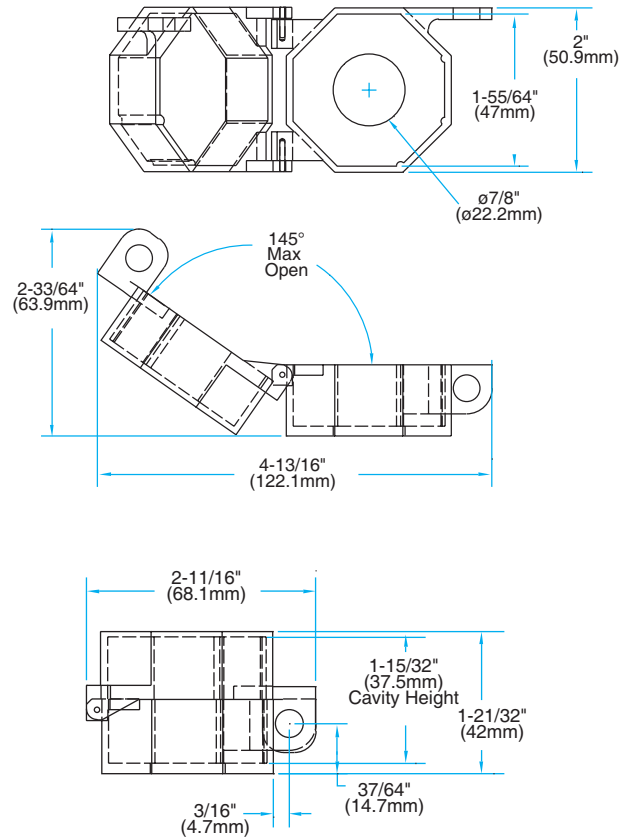
POTENTIOMETERS

Fully-assembled operators come standard with one 1.6mm (1/16") gasket.

POTENTIOMETER OPERATOR
(SHOWN WITHOUT TERMINAL BLOCK)

23.8mm (15/16")
47.9mm (1-7/8")
39.7mm (1-9/16")
33.3mm (1-5/16")
Panel Thk. shown 4.8mm (3/16")
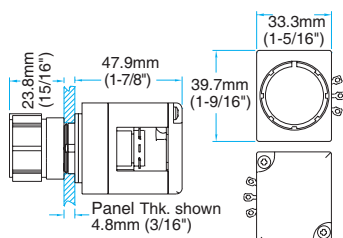
POTENTIOMETER OPERATOR
(SHOWN WITH TERMINAL BLOCK)

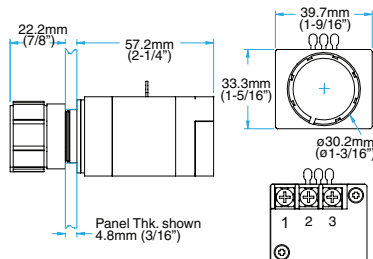22.2mm (7/8")
57.2mm (2-1/4")
39.7mm (1-9/16")
33.3mm (1-5/16")
ø30.2mm (ø1-3/16")
1   2   3
Panel Thk. shown 4.8mm (3/16")

WIRING DIAGRAM

2

1 Ω   3 0

Clockwise knob rotation as seen from the front of the panel

Measuring Between Terminals:

1 & 2 Decreasing Resistance (↓ Ω)

2 & 3 Increasing Resistance (↑ Ω)

2 is the common
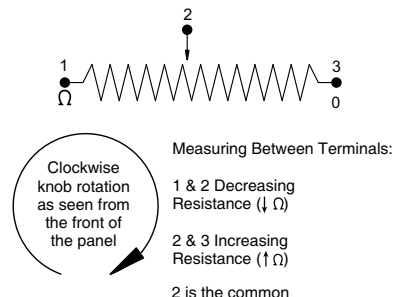
LATCHING DEVICE

Contact block latching device for use on all 22mm IEC operators.

39.8mm (1.567")
33.2mm (1.307")
8.8mm (.346")
31.5mm (1.24")
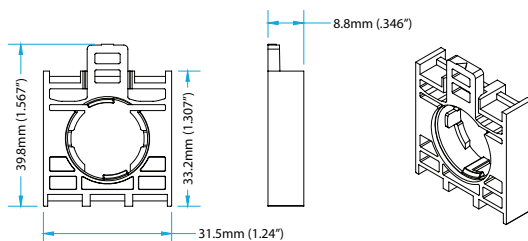
MOUNTING ADAPTER

MAK-1/22

2.8mm (7/64")
1.6mm (1/16")
1.4mm (1/16")
ø22.4mm (ø7/8")
ø30mm (ø1-3/16")
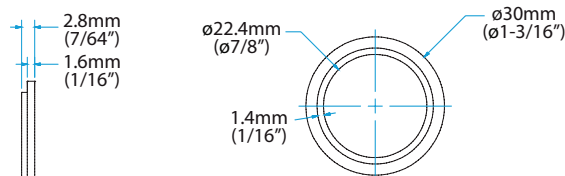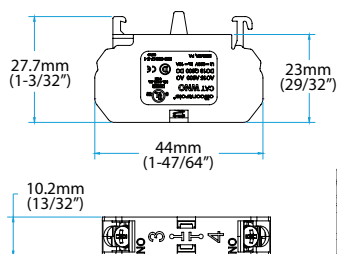
• Mounting Adapter for use with all 22mm IEC operators.
• Maximum enclosure thickness 1.3mm (3/64")
• No gasket is required.

CONTACT BLOCK

27.7mm (1-3/32")
23mm (29/32")
44mm (1-47/64")
10.2mm (13/32")

A600 (AC) Rating Designation: A600 (7,200 VA Make and 720 VA Break), 600V AC Maximum, Maximum Continuous Thermal Current, Ith: 10A

Q600 (DC) Rating Designation: Q600 (69 VA Make and 69 VA Break), 600V DC Maximum, Maximum Continuous Thermal Current, Ith: 2.5A

MOUNTING HOLE PATTERN

A
B
ø22.5mm (ø7/8")

3.2mm (1/8")
13.1mm (33/64")
22.5mm (7/8")
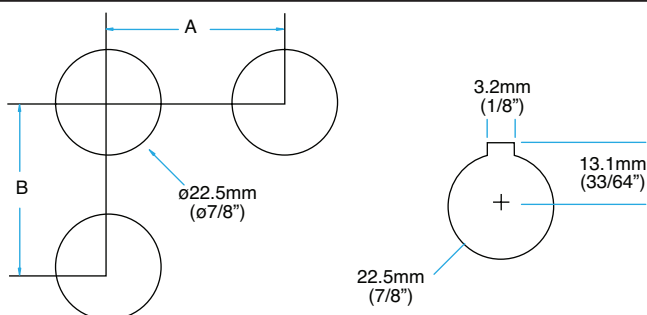
MOUNTING HOLE PATTERN		
SPACING	A	B*
Minimum	31.8mm (1-1/4")	47.9mm (1-7/8")
Standard	38.1mm (1-1/2")	57.2mm (2-1/4")
Staggered Contacts	44.5mm (1-3/4")	44.5mm (1-3/4")

*NOTE: When installing illuminated devices vertically adjacent to one another, use the "Standard" Spacing as the "Minimum".

POLYCARBONATE COMPACT CONTROL STATIONS – 1 POSTITION

ECW22∗-H1P1 OR ECW22∗-H1P1Y

- 75mm (2-61/64")
- 44.5mm (1-3/4")
- 40mm (1-37/64")
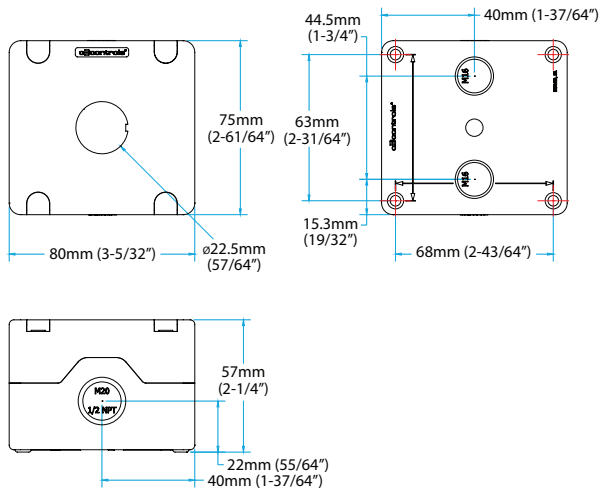- 63mm (2-31/64")
- 15.3mm (19/32")
- 80mm (3-5/32")
- ø22.5mm (57/64")
- 68mm (2-43/64")

- 57mm (2-1/4")
- 22mm (55/64")
- 40mm (1-37/64")

ECW22∗-H1P1 OR ECW22∗-H1P1Y
(SHOWN WITH EMERGENCY STOP PUSH BUTTON)

- 91.7mm (3-39/64")
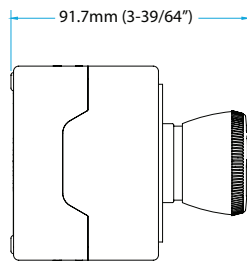
ECW22∗-H1P1 OR ECW22∗-H1P1Y
(SHOWN WITH SELECTOR SWITCH)

- 86.9mm (3.42")
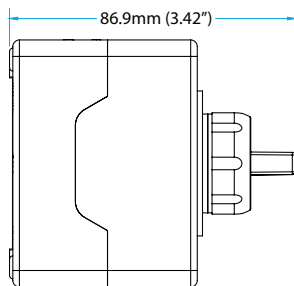
ECW22∗-H1P1 OR ECW22∗-H1P1Y
(SHOWN WITH FLUSH PUSH BUTTON)
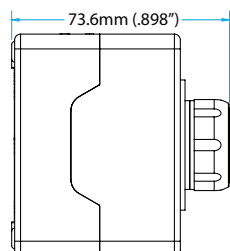
- 73.6mm (.898")

POLYCARBONATE COMPACT CONTROL STATIONS – 2 POSTITION

ECW22∗-H2P1

- 119mm (4-11/16")
- 107mm (4.-7/32")
- 40mm (1-37/64")
- 15.3mm (19/32")
- 80mm (3-5/32")
- 88.5mm (3-31/64")
- 68mm (2-43/64")

- 57mm (2-1/4")
- 22mm (55/64")
- 40mm (1-37/64")

POLYCARBONATE COMPACT CONTROL STATIONS – 3 POSTITION

ECW22∗-H3P1

- 132.5mm (5-7/32")
- 40mm (1-37/64")
- 163mm (6-27/64")
- 151mm (5-15/16")
- 15.3mm (19/32")
- 80mm (3-5/32")
- 68mm (2-43/64")

- 57mm (2-1/4")
- 22mm (55/64")
- 40mm (1-37/64")
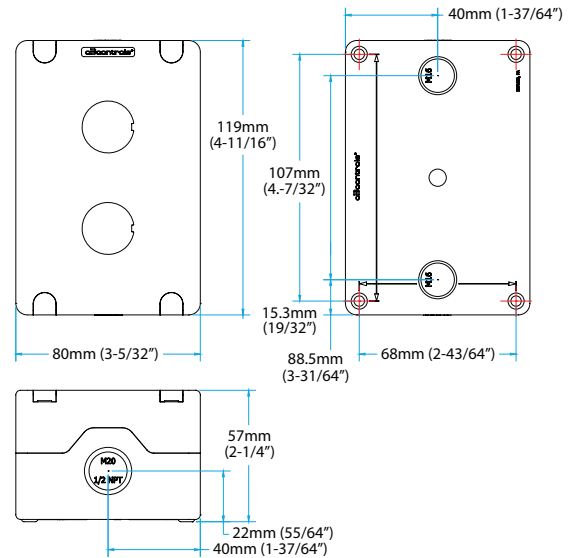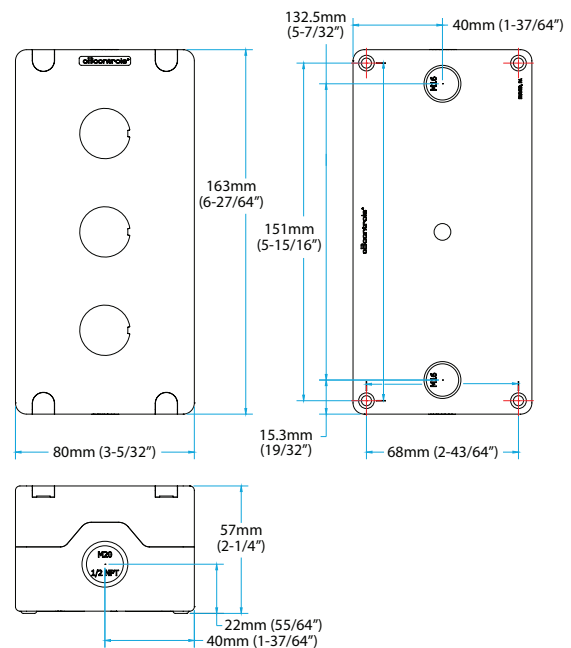
NOTE: ∗Represents the conduit entry orientation code. Refer to page 37.

LEGEND PLATES

FOR USE WITH 22MM IEC OPERATORS

22LP
Standard

22LPN
Narrow

22LPS
Short

22LPT
Tall

22LPJ
Jumbo

3.5mm
(1/64")

ø22.2mm
(ø7/8")

1.6mm
(1/16")

10.2mm
(25/64")

A

12.1mm
(31/64")

3.1mm
(1/64")

B

44.5mm
(1-3/4")

1.6mm
(1/16")

44.5mm
(1-3/4")

15.9mm
(5/8")

38.1mm
(1-1/2")

1.6mm
(1/16")

44.5mm
(1-3/4")

15.9mm
(5/8")

44.5mm
(1-3/4")

1.6mm
(1/16")

38.1mm
(1-1/2")

15.9mm
(5/8")

44.5mm
(1-3/4")

1.6mm
(1/16")

50.8mm
(2")

15.9mm
(5/8")

50.8mm
(2")

1.6mm
(1/16")

50.8mm
(2")

22.9mm
(29/32")

22LP-40
Standard POTO

22LPS-40
Short POTO

22LPT-40
Tall POTO

22LPJ-40
Jumbo POTO

44.5mm
(1-3/4")

1.6mm
(1/16")

44.5mm
(1-3/4")

19.1mm
(3/4")

44.5mm
(1-3/4")

1.6mm
(1/16")

35.1mm
(1-1/2")

15.9mm
(5/8")

44.5mm
(1-3/4")

1.6mm
(1/16")

50.8mm
(2")

15.9mm
(5/8")

50.8mm
(2")

1.6mm
(1/16")

50.8mm
(2")

22.9mm
(29/32")

22LPR
Standard Round

22LPRM
Medium Round

22LPRJ
Jumbo Round

3.5mm
(1/64")

10.2mm
(25/64")

12.1mm
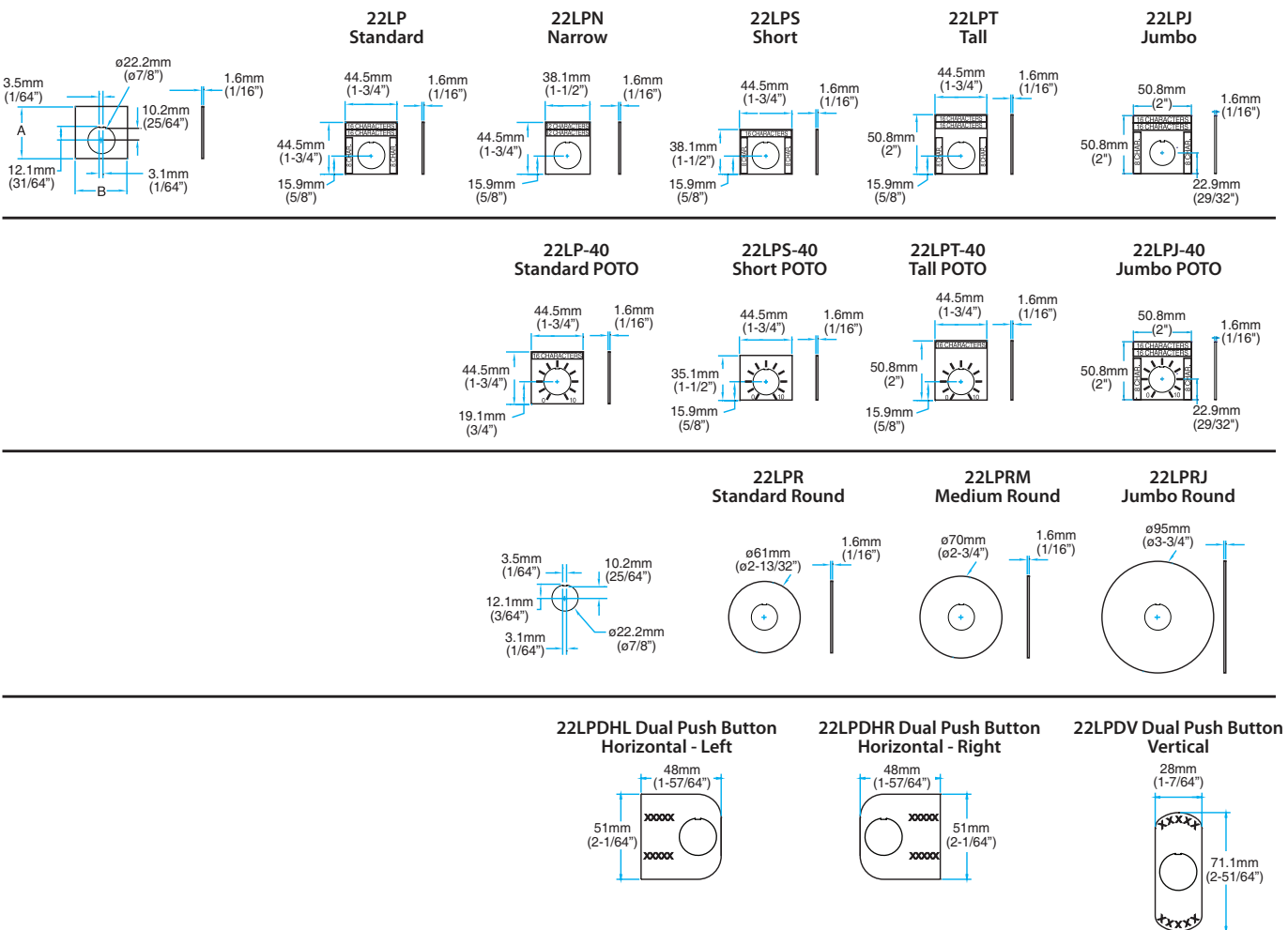(3/64")

3.1mm
(1/64")

ø22.2mm
(ø7/8")

ø61mm
(ø2-13/32")

1.6mm
(1/16")

ø70mm
(ø2-3/4")

1.6mm
(1/16")

ø95mm
(ø3-3/4")

1.6mm
(1/16")

**22LPDHL Dual Push Button
Horizontal - Left**

**22LPDHR Dual Push Button
Horizontal - Right**

**22LPDV Dual Push Button
Vertical**

48mm
(1-57/64")

51mm
(2-1/64")

48mm
(1-57/64")

51mm
(2-1/64")

28mm
(1-7/64")

71.1mm
(2-51/64")

Note: Legend plates feature a tab for optional break-away positioning and can be used in conjunction with the Thrust & Trim Washer accessory.

FOR USE WITH POLYCARBONATE ENCLOSURES OPTIMIZED FOR 22MM IEC OPERATORS

22ECLP
Standard

22ECLPR
Round

3.6mm
(9/64")

44mm
(1-47/64")

1.6mm
(1/16")

2.3mm
(3/32")

44mm
(1-47/64")

9.8mm
(25/64")

22mm
(55/64")

15.9mm
(5/8")

ø22.2mm
(7/8")

ø59mm
(2-21/64")

2.3mm
(3/32")

3.6mm
(9/64")

ø22.2mm
(7/8")

9.1mm
(23/64")

1.6mm
(1/16")