

Pushbuttons**Indicating Lights****Emergency Stops****Selector Switches****37.5 22.5 mm Compact Pushbuttons—C22**

Product Overview	2
Product Selection Guide	4
Pushbuttons—Non-Illuminated and Illuminated	5
Indicating Lights	14
Emergency Stops	16
Selector Switches	19
Technical Data and Specifications	24
Dimensions	26

Note: Supplement to Volume 7—Motor Controls, Logic and Connectivity, Tab 37.
For additional accessories, please see section 37.4, 22.5 mm Modular Pushbuttons—M22.

37.5 Pushbuttons and Indicating Lights

22.5 mm Compact Pushbuttons—C22

37

22.5 mm Compact Pushbuttons—C22



Product Overview

Product Description

The C22 compact pushbutton line offers an industry leading array of functional, attractive, and ergonomically designed “all-in-one” illuminated and non-illuminated pushbuttons, selector switches, emergency stops and indicating lights. The complete illuminated line is only offered in LED light units to ensure high-quality brightness and up to 100,000 hours of LED illumination. C22 operators are available with either a silver or black bezel and share the exact same front of the panel look and feel as Eaton’s M22 line. The C22’s compact, “all-in-one” design with the contact block(s) and operators integral provides the user with a simple solution.

Wide Product Breadth

- In addition to the standard compact offering of indicating lights and pushbuttons, Eaton’s C22 offers keyed and non-keyed operators and emergency stops
- Hundreds of styles with standard laser etch markings with the ability to use custom M22 laser etched buttons in conjunction with C22 buttonless operators

Contents

Description

22.5 mm Compact Pushbuttons—C22

	Page
Product Selection Guide	4
Pushbuttons—Non-Illuminated and Illuminated	5
Indicating Lights	14
Emergency Stops	16
Selector Switches	19
Technical Data and Specifications	24
Dimensions	26

LED Indicators

- 100,000 hours of life in high-vibration environments
- Lenses specifically designed for LED illumination

Rugged Design

- Pushbuttons (momentary) rated for 5 million mechanical operations and selector switches (non-keyed) rated for 1 million mechanical operations
- All components have IP65 rating, and some carry IP67 and IP69K for wash-down environment

Standards and Certifications

All operators are IEC/EN 60947 VDE 0660, UL Listed, and CSA Certified.

All operators carry an IP65, IP66, IP67 or IP69K rating.

All products carry ratings of NEMA 1, 3R, 4X, 12 and 13



Features

- Field convertible maintained pushbuttons from maintained to momentary
- Field convertible selector switches from momentary to maintained operation and vice versa
- LED offering only for all illuminated operators
- Laser engraved pushbuttons and lenses
- Heavy-duty construction with a minimum of IP65 and UL NEMA® Type 4X/13 on front of panel operators. Many operators even carry IP67 and IP69K, for the toughest applications
- Silver or black colored nylon bezels
- Notched hole mounting with anti-rotation tab and central nut mounting on each operator
- Pushbuttons (momentary) rated for 5 million mechanical operations and selector switches (non-keyed) rated for 1 million mechanical operations
- Unique compact offerings, including keyed and non-keyed operators and emergency stops

Benefits

- Compact, “all-in-one” operator and contact block design simplifies product selection, inventory, and installation
- Field convertibility of pushbuttons and selector switches helps distributors and customers reduce inventory and increase functionality
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- Plastic construction is corrosion resistant
- Operators are designed for rugged environments, ideal for wash-down applications (reference each operator’s IP ratings for ingress protection definition)
- Anti-rotation tab saves installation time and prevents operator rotation
- High mechanical and electrical life allows for use in tough and challenging applications
- Laser inscription capabilities allow for high quality, wear-resistant markings
- By having a compact design emergency stop, the C22 design eliminates the need for self-monitoring contact blocks

Product Selection Guide

Pushbuttons



Description	Non-illuminated, flush		Non-illuminated, extended		Illuminated, flush		Illuminated, extended	
Operator	Momentary	Maintained	Momentary	Maintained	Momentary	Maintained	Momentary	Maintained
Product Selection	Page 6	Page 7	Page 8	Page 9	Page 10	Page 11	Page 12	Page 13

Indicating Lights



Description	Indicating lights
Product Selection	Page 15

Emergency Stops



Description	Twist release	Keyed-release
Product Selection	Page 17	Page 17

Selector Switches



Description	Non-illuminated, knob type	Key-operated
Product Selection	Page 20	Page 21

Pushbuttons—Non-Illuminated and Illuminated**Contents****Description****Page**

Pushbuttons—Non-Illuminated and Illuminated	
Non-Illuminated, Flush, Momentary	6
Non-Illuminated, Flush, Maintained	7
Non-Illuminated, Extended, Momentary	8
Non-Illuminated, Extended, Maintained	9
Illuminated, Flush, Momentary	10
Illuminated, Flush, Maintained	11
Illuminated, Extended, Momentary	12
Illuminated, Extended, Maintained	13
Indicating Lights	14
Emergency Stops	16
Selector Switches	19
Technical Data and Specifications	24
Dimensions	26

Pushbuttons—Non-Illuminated and Illuminated**Product Description**

C22 Compact Pushbuttons are a complete line of monoblock type pushbuttons with the contact blocks, mounting adapter, and operator all-in-one. The C22 pushbuttons offer the same look and feel as their modular counterpart, the M22. They also carry many of the same rugged ratings and options, such as laser etching, field convertibility, and LED technology.

Note: For additional accessories, please see Volume 7—Motor Controls, Logic and Connectivity, CA08100008E, Tab 37, section 37.4, 22.5 mm Modular Pushbuttons—M22.

Features

- Field convertible maintained pushbuttons from maintained to momentary
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- Laser engraved pushbuttons and lenses
- Pushbuttons (momentary) rated for 5 million mechanical operations

Protection Type

- IP67/IP69K
- NEMA 4X, 13

37.5 Pushbuttons and Indicating Lights

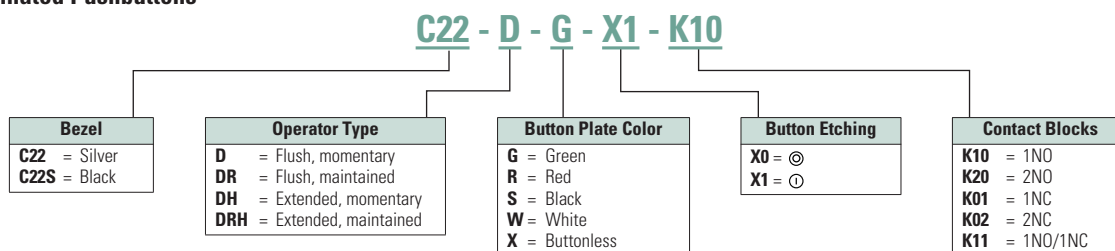
22.5 mm Compact Pushbuttons—C22

37

Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

Non-Illuminated Pushbuttons



Product Selection

Non-Illuminated, Flush, Momentary

C22(S)-D-__



Non-Illuminated Pushbuttons, Flush, Momentary

Button Color	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	—	1NO	C22-D-G-K10	C22S-D-G-K10
	—	2NO	C22-D-G-K20	C22S-D-G-K20
	—	1NO/1NC	C22-D-G-K11	C22S-D-G-K11
	X1	1NO	C22-D-G-X1-K10	C22S-D-G-X1-K10
	X1	2NO	C22-D-G-X1-K20	C22S-D-G-X1-K20
	X1	1NO/1NC	C22-D-G-X1-K11	C22S-D-G-X1-K11
Red	—	1NC	C22-D-R-K01	C22S-D-R-K01
	—	2NC	C22-D-R-K02	C22S-D-R-K02
	—	1NO/1NC	C22-D-R-K11	C22S-D-R-K11
	X0	1NC	C22-D-R-X0-K01	C22S-D-R-X0-K01
	X0	2NC	C22-D-R-X0-K02	C22S-D-R-X0-K02
	X0	1NO/1NC	C22-D-R-X0-K11	C22S-D-R-X0-K11
Black	—	1NC	C22-D-S-K01	C22S-D-S-K01
	—	2NC	C22-D-S-K02	C22S-D-S-K02
	—	1NO/1NC	C22-D-S-K11	C22S-D-S-K11
	X0	1NC	C22-D-S-X0-K01	C22S-D-S-X0-K01
	X0	2NC	C22-D-S-X0-K02	C22S-D-S-X0-K02
	X0	1NO/1NC	C22-D-S-X0-K11	C22S-D-S-X0-K11
White	—	1NO	C22-D-W-K10	C22S-D-W-K10
	—	2NO	C22-D-W-K20	C22S-D-W-K20
	—	1NO/1NC	C22-D-W-K11	C22S-D-W-K11
	X1	1NO	C22-D-W-X1-K10	C22S-D-W-X1-K10
	X1	2NO	C22-D-W-X1-K20	C22S-D-W-X1-K20
	X1	1NO/1NC	C22-D-W-X1-K11	C22S-D-W-X1-K11
Buttonless	—	1NO	C22-D-X-K10	C22S-D-X-K10
	—	2NO	C22-D-X-K20	C22S-D-X-K20
	—	1NC	C22-D-X-K01	C22S-D-X-K01
	—	2NC	C22-D-X-K02	C22S-D-X-K02
	—	1NO/1NC	C22-D-X-K11	C22S-D-X-K11

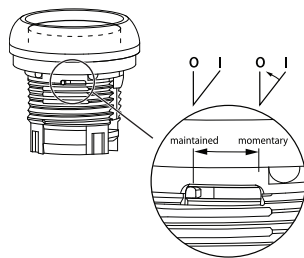
Non-Illuminated, Flush, Maintained

C22(S)-DR-

Non-Illuminated Pushbuttons, Flush, Maintained



Button Color	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	—	1NO	C22-DR-G-K10	C22S-DR-G-K10
	—	2NO	C22-DR-G-K20	C22S-DR-G-K20
	—	1NO/1NC	C22-DR-G-K11	C22S-DR-G-K11
	X1	1NO	C22-DR-G-X1-K10	C22S-DR-G-X1-K10
	X1	2NO	C22-DR-G-X1-K20	C22S-DR-G-X1-K20
	X1	1NO/1NC	C22-DR-G-X1-K11	C22S-DR-G-X1-K11
Red	—	1NC	C22-DR-R-K01	C22S-DR-R-K01
	—	2NC	C22-DR-R-K02	C22S-DR-R-K02
	—	1NO/1NC	C22-DR-R-K11	C22S-DR-R-K11
	X0	1NC	C22-DR-R-X0-K01	C22S-DR-R-X0-K01
	X0	2NC	C22-DR-R-X0-K02	C22S-DR-R-X0-K02
	X0	1NO/1NC	C22-DR-R-X0-K11	C22S-DR-R-X0-K11
Black	—	1NC	C22-DR-S-K01	C22S-DR-S-K01
	—	2NC	C22-DR-S-K02	C22S-DR-S-K02
	—	1NO/1NC	C22-DR-S-K11	C22S-DR-S-K11
	X0	1NC	C22-DR-S-X0-K01	C22S-DR-S-X0-K01
	X0	2NC	C22-DR-S-X0-K02	C22S-DR-S-X0-K02
	X0	1NO/1NC	C22-DR-S-X0-K11	C22S-DR-S-X0-K11
White	—	1NO	C22-DR-W-K10	C22S-DR-W-K10
	—	2NO	C22-DR-W-K20	C22S-DR-W-K20
	—	1NO/1NC	C22-DR-W-K11	C22S-DR-W-K11
	X1	1NO	C22-DR-W-X1-K10	C22S-DR-W-X1-K10
	X1	2NO	C22-DR-W-X1-K20	C22S-DR-W-X1-K20
	X1	1NO/1NC	C22-DR-W-X1-K11	C22S-DR-W-X1-K11
Buttonless	—	1NO	C22-DR-X-K10	C22S-DR-X-K10
	—	2NO	C22-DR-X-K20	C22S-DR-X-K20
	—	1NC	C22-DR-X-K01	C22S-DR-X-K01
	—	2NC	C22-DR-X-K02	C22S-DR-X-K02
	—	1NO/1NC	C22-DR-X-K11	C22S-DR-X-K11



Note: Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.

Non-Illuminated, Extended, Momentary

C22(S)-DH-



Non-Illuminated Pushbuttons, Extended, Momentary

Button Color	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	—	1NO	C22-DH-G-K10	C22S-DH-G-K10
	—	2NO	C22-DH-G-K20	C22S-DH-G-K20
	—	1NO/1NC	C22-DH-G-K11	C22S-DH-G-K11
	X1	1NO	C22-DH-G-X1-K10	C22S-DH-G-X1-K10
	X1	2NO	C22-DH-G-X1-K20	C22S-DH-G-X1-K20
	X1	1NO/1NC	C22-DH-G-X1-K11	C22S-DH-G-X1-K11
Red	—	1NC	C22-DH-R-K01	C22S-DH-R-K01
	—	2NC	C22-DH-R-K02	C22S-DH-R-K02
	—	1NO/1NC	C22-DH-R-K11	C22S-DH-R-K11
	X0	1NC	C22-DH-R-X0-K01	C22S-DH-R-X0-K01
	X0	2NC	C22-DH-R-X0-K02	C22S-DH-R-X0-K02
	X0	1NO/1NC	C22-DH-R-X0-K11	C22S-DH-R-X0-K11
Black	—	1NC	C22-DH-S-K01	C22S-DH-S-K01
	—	2NC	C22-DH-S-K02	C22S-DH-S-K02
	—	1NO/1NC	C22-DH-S-K11	C22S-DH-S-K11
	X0	1NC	C22-DH-S-X0-K01	C22S-DH-S-X0-K01
	X0	2NC	C22-DH-S-X0-K02	C22S-DH-S-X0-K02
	X0	1NO/1NC	C22-DH-S-X0-K11	C22S-DH-S-X0-K11
White	—	1NO	C22-DH-W-K10	C22S-DH-W-K10
	—	2NO	C22-DH-W-K20	C22S-DH-W-K20
	—	1NO/1NC	C22-DH-W-K11	C22S-DH-W-K11
	X1	1NO	C22-DH-W-X1-K10	C22S-DH-W-X1-K10
	X1	2NO	C22-DH-W-X1-K20	C22S-DH-W-X1-K20
	X1	1NO/1NC	C22-DH-W-X1-K11	C22S-DH-W-X1-K11

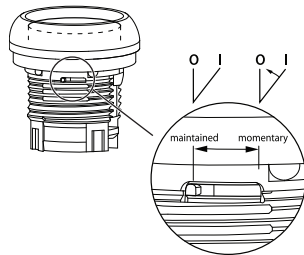
Non-Illuminated, Extended, Maintained

C22(S)-DRH-

Non-Illuminated Pushbuttons, Extended, Maintained



Button Color	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	—	1NO	C22-DRH-G-K10	C22S-DRH-G-K10
	—	2NO	C22-DRH-G-K20	C22S-DRH-G-K20
	—	1NO/1NC	C22-DRH-G-K11	C22S-DRH-G-K11
	X1	1NO	C22-DRH-G-X1-K10	C22S-DRH-G-X1-K10
	X1	2NO	C22-DRH-G-X1-K20	C22S-DRH-G-X1-K20
	X1	1NO/1NC	C22-DRH-G-X1-K11	C22S-DRH-G-X1-K11
Red	—	1NC	C22-DRH-R-K01	C22S-DRH-R-K01
	—	2NC	C22-DRH-R-K02	C22S-DRH-R-K02
	—	1NO/1NC	C22-DRH-R-K11	C22S-DRH-R-K11
	X0	1NC	C22-DRH-R-X0-K01	C22S-DRH-R-X0-K01
	X0	2NC	C22-DRH-R-X0-K02	C22S-DRH-R-X0-K02
	X0	1NO/1NC	C22-DRH-R-X0-K11	C22S-DRH-R-X0-K11
Black	—	1NC	C22-DRH-S-K01	C22S-DRH-S-K01
	—	2NC	C22-DRH-S-K02	C22S-DRH-S-K02
	—	1NO/1NC	C22-DRH-S-K11	C22S-DRH-S-K11
	X0	1NC	C22-DRH-S-X0-K01	C22S-DRH-S-X0-K01
	X0	2NC	C22-DRH-S-X0-K02	C22S-DRH-S-X0-K02
	X0	1NO/1NC	C22-DRH-S-X0-K11	C22S-DRH-S-X0-K11
White	—	1NO	C22-DRH-W-K10	C22S-DRH-W-K10
	—	2NO	C22-DRH-W-K20	C22S-DRH-W-K20
	—	1NO/1NC	C22-DRH-W-K11	C22S-DRH-W-K11
	X1	1NO	C22-DRH-W-X1-K10	C22S-DRH-W-X1-K10
	X1	2NO	C22-DRH-W-X1-K20	C22S-DRH-W-X1-K20
	X1	1NO/1NC	C22-DRH-W-X1-K11	C22S-DRH-W-X1-K11

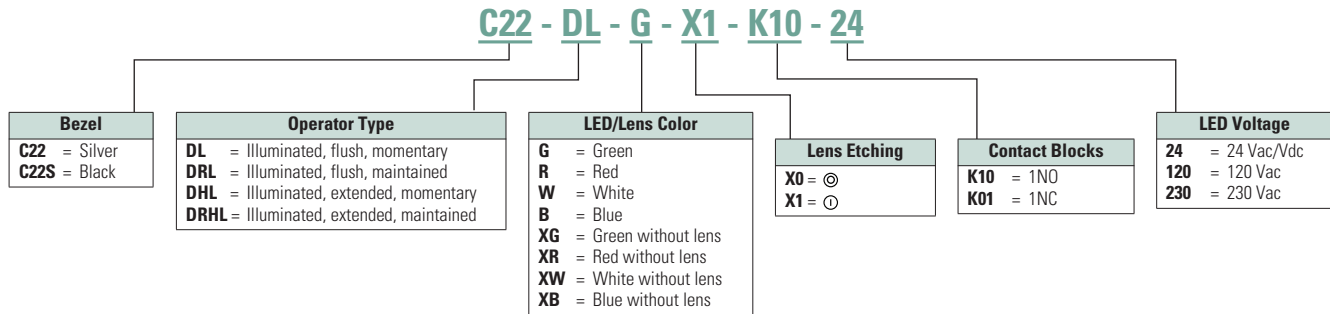


Note: Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.

Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

Illuminated Pushbuttons



Product Selection

Illuminated, Flush, Momentary

C22(S)-DL-

Illuminated Pushbuttons, Flush, Momentary



LED Color	Button Color	Voltage	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	Green	24 Vac/Vdc	—	1NO	C22-DL-G-K10-24	C22S-DL-G-K10-24
		120 Vac	—	1NO	C22-DL-G-K10-120	C22S-DL-G-K10-120
		230 Vac	—	1NO	C22-DL-G-K10-230	C22S-DL-G-K10-230
		24 Vac/Vdc	X1	1NO	C22-DL-G-X1-K10-24	C22S-DL-G-X1-K10-24
		120 Vac	X1	1NO	C22-DL-G-X1-K10-120	C22S-DL-G-X1-K10-120
		230 Vac	X1	1NO	C22-DL-G-X1-K10-230	C22S-DL-G-X1-K10-230
	Buttonless	24 Vac/Vdc	—	1NO	C22-DL-XG-K10-24	C22S-DL-XG-K10-24
		120 Vac	—	1NO	C22-DL-XG-K10-120	C22S-DL-XG-K10-120
		230 Vac	—	1NO	C22-DL-XG-K10-230	C22S-DL-XG-K10-230
	Red	24 Vac/Vdc	—	1NC	C22-DL-R-K01-24	C22S-DL-R-K01-24
		120 Vac	—	1NC	C22-DL-R-K01-120	C22S-DL-R-K01-120
		230 Vac	—	1NC	C22-DL-R-K01-230	C22S-DL-R-K01-230
		24 Vac/Vdc	X0	1NC	C22-DL-R-X0-K01-24	C22S-DL-R-X0-K01-24
		120 Vac	X0	1NC	C22-DL-R-X0-K01-120	C22S-DL-R-X0-K01-120
		230 Vac	X0	1NC	C22-DL-R-X0-K01-230	C22S-DL-R-X0-K01-230
	Buttonless	24 Vac/Vdc	—	1NC	C22-DL-XR-K01-24	C22S-DL-XR-K01-24
		120 Vac	—	1NC	C22-DL-XR-K01-120	C22S-DL-XR-K01-120
		230 Vac	—	1NC	C22-DL-XR-K01-230	C22S-DL-XR-K01-230
White	White	24 Vac/Vdc	—	1NO	C22-DL-W-K10-24	C22S-DL-W-K10-24
		120 Vac	—	1NO	C22-DL-W-K10-120	C22S-DL-W-K10-120
		230 Vac	—	1NO	C22-DL-W-K10-230	C22S-DL-W-K10-230
		24 Vac/Vdc	X1	1NO	C22-DL-W-X1-K10-24	C22S-DL-W-X1-K10-24
		120 Vac	X1	1NO	C22-DL-W-X1-K10-120	C22S-DL-W-X1-K10-120
		230 Vac	X1	1NO	C22-DL-W-X1-K10-230	C22S-DL-W-X1-K10-230
	Buttonless	24 Vac/Vdc	—	1NO	C22-DL-XW-K10-24	C22S-DL-XW-K10-24
		120 Vac	—	1NO	C22-DL-XW-K10-120	C22S-DL-XW-K10-120
		230 Vac	—	1NO	C22-DL-XW-K10-230	C22S-DL-XW-K10-230
	Blue	24 Vac/Vdc	—	1NO	C22-DL-B-K10-24	C22S-DL-B-K10-24
		120 Vac	—	1NO	C22-DL-B-K10-120	C22S-DL-B-K10-120
		230 Vac	—	1NO	C22-DL-B-K10-230	C22S-DL-B-K10-230
		24 Vac/Vdc	—	1NO	C22-DL-B-K10-24	C22S-DL-B-K10-24
		120 Vac	—	1NO	C22-DL-B-K10-120	C22S-DL-B-K10-120
		230 Vac	—	1NO	C22-DL-B-K10-230	C22S-DL-B-K10-230
	Buttonless	24 Vac/Vdc	—	1NO	C22-DL-XB-K10-24	C22S-DL-XB-K10-24
		120 Vac	—	1NO	C22-DL-XB-K10-120	C22S-DL-XB-K10-120
		230 Vac	—	1NO	C22-DL-XB-K10-230	C22S-DL-XB-K10-230

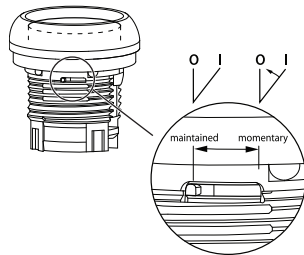
Illuminated, Flush, Maintained

C22(S)-DRL_

Illuminated Pushbuttons, Flush, Maintained



LED Color	Button Color	Voltage	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	Green	24 Vac/Vdc	1NO	C22-DRL-G-K10-24	C22S-DRL-G-K10-24
		120 Vac	1NO	C22-DRL-G-K10-120	C22S-DRL-G-K10-120
		230 Vac	1NO	C22-DRL-G-K10-230	C22S-DRL-G-K10-230
	Buttonless	24 Vac/Vdc	1NO	C22-DRL-XG-K10-24	C22S-DRL-XG-K10-24
		120 Vac	1NO	C22-DRL-XG-K10-120	C22S-DRL-XG-K10-120
		230 Vac	1NO	C22-DRL-XG-K10-230	C22S-DRL-XG-K10-230
	Red	24 Vac/Vdc	1NC	C22-DRL-R-K01-24	C22S-DRL-R-K01-24
		120 Vac	1NC	C22-DRL-R-K01-120	C22S-DRL-R-K01-120
		230 Vac	1NC	C22-DRL-R-K01-230	C22S-DRL-R-K01-230
Red	Red	24 Vac/Vdc	1NC	C22-DRL-R-K01-24	C22S-DRL-R-K01-24
		120 Vac	1NC	C22-DRL-R-K01-120	C22S-DRL-R-K01-120
		230 Vac	1NC	C22-DRL-R-K01-230	C22S-DRL-R-K01-230
	Buttonless	24 Vac/Vdc	1NC	C22-DRL-XR-K01-24	C22S-DRL-XR-K01-24
		120 Vac	1NC	C22-DRL-XR-K01-120	C22S-DRL-XR-K01-120
		230 Vac	1NC	C22-DRL-XR-K01-230	C22S-DRL-XR-K01-230
	White	24 Vac/Vdc	1NO	C22-DRL-W-K10-24	C22S-DRL-W-K10-24
		120 Vac	1NO	C22-DRL-W-K10-120	C22S-DRL-W-K10-120
		230 Vac	1NO	C22-DRL-W-K10-230	C22S-DRL-W-K10-230
White	White	24 Vac/Vdc	1NO	C22-DRL-W-K10-24	C22S-DRL-W-K10-24
		120 Vac	1NO	C22-DRL-W-K10-120	C22S-DRL-W-K10-120
		230 Vac	1NO	C22-DRL-W-K10-230	C22S-DRL-W-K10-230
	Buttonless	24 Vac/Vdc	1NO	C22-DRL-XW-K10-24	C22S-DRL-XW-K10-24
		120 Vac	1NO	C22-DRL-XW-K10-120	C22S-DRL-XW-K10-120
		230 Vac	1NO	C22-DRL-XW-K10-230	C22S-DRL-XW-K10-230
	Blue	24 Vac/Vdc	1NO	C22-DRL-B-K10-24	C22S-DRL-B-K10-24
		120 Vac	1NO	C22-DRL-B-K10-120	C22S-DRL-B-K10-120
		230 Vac	1NO	C22-DRL-B-K10-230	C22S-DRL-B-K10-230
Blue	Blue	24 Vac/Vdc	1NO	C22-DRL-B-K10-24	C22S-DRL-B-K10-24
		120 Vac	1NO	C22-DRL-B-K10-120	C22S-DRL-B-K10-120
		230 Vac	1NO	C22-DRL-B-K10-230	C22S-DRL-B-K10-230
	Buttonless	24 Vac/Vdc	1NO	C22-DRL-XB-K10-24	C22S-DRL-XB-K10-24
		120 Vac	1NO	C22-DRL-XB-K10-120	C22S-DRL-XB-K10-120
		230 Vac	1NO	C22-DRL-XB-K10-230	C22S-DRL-XB-K10-230



Note: Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.

Illuminated, Extended, Momentary

C22(S)-DLH-__

Illuminated Pushbuttons, Extended, Momentary



LED Color	Button Color	Voltage	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	Green	24 Vac/Vdc	—	1NO	C22-DLH-G-K10-24	C22S-DLH-G-K10-24
		120 Vac	—	1NO	C22-DLH-G-K10-120	C22S-DLH-G-K10-120
		230 Vac	—	1NO	C22-DLH-G-K10-230	C22S-DLH-G-K10-230
		24 Vac/Vdc	X1	1NO	C22-DLH-G-X1-K10-24	C22S-DLH-G-X1-K10-24
		120 Vac	X1	1NO	C22-DLH-G-X1-K10-120	C22S-DLH-G-X1-K10-12
		230 Vac	X1	1NO	C22-DLH-G-X1-K10-230	C22S-DLH-G-X1-K10-23
Red	Red	24 Vac/Vdc	—	1NC	C22-DLH-R-K01-24	C22S-DLH-R-K01-24
		120 Vac	—	1NC	C22-DLH-R-K01-120	C22S-DLH-R-K01-120
		230 Vac	—	1NC	C22-DLH-R-K01-230	C22S-DLH-R-K01-230
		24 Vac/Vdc	X0	1NC	C22-DLH-R-X0-K01-24	C22S-DLH-R-X0-K01-24
		120 Vac	X0	1NC	C22-DLH-R-X0-K01-120	C22S-DLH-R-X0-K01-12
		230 Vac	X0	1NC	C22-DLH-R-X0-K01-230	C22S-DLH-R-X0-K01-23
White	White	24 Vac/Vdc	—	1NO	C22-DLH-W-K10-24	C22S-DLH-W-K10-24
		120 Vac	—	1NO	C22-DLH-W-K10-120	C22S-DLH-W-K10-120
		230 Vac	—	1NO	C22-DLH-W-K10-230	C22S-DLH-W-K10-230
		24 Vac/Vdc	X1	1NO	C22-DLH-W-X1-K10-24	C22S-DLH-W-X1-K10-24
		120 Vac	X1	1NO	C22-DLH-W-X1-K10-120	C22S-DLH-W-X1-K10-12
		230 Vac	X1	1NO	C22-DLH-W-X1-K10-230	C22S-DLH-W-X1-K10-23
Blue	Blue	24 Vac/Vdc	—	1NO	C22-DLH-B-K10-24	C22S-DLH-B-K10-24
		120 Vac	—	1NO	C22-DLH-B-K10-120	C22S-DLH-B-K10-120
		230 Vac	—	1NO	C22-DLH-B-K10-230	C22S-DLH-B-K10-230

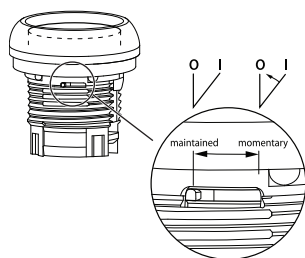
Illuminated, Extended, Maintained

C22(S)-DRLH-

Illuminated Pushbuttons, Flush, Maintained



LED Color	Button Color	Voltage	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	Green	24 Vac/Vdc	—	1NO	C22-DRLH-G-K10-24	C22S-DRLH-G-K10-24
		120 Vac	—	1NO	C22-DRLH-G-K10-120	C22S-DRLH-G-K10-120
		230 Vac	—	1NO	C22-DRLH-G-K10-230	C22S-DRLH-G-K10-230
		24 Vac/Vdc	X1	1NO	C22-DRLH-G-X1-K10-24	C22S-DRLH-G-X1-K10-24
		120 Vac	X1	1NO	C22-DRLH-G-X1-K10-120	C22S-DRLH-G-X1-K10-120
		230 Vac	X1	1NO	C22-DRLH-G-X1-K10-230	C22S-DRLH-G-X1-K10-230
Red	Red	24 Vac/Vdc	—	1NC	C22-DRLH-R-K01-24	C22S-DRLH-R-K01-24
		120 Vac	—	1NC	C22-DRLH-R-K01-120	C22S-DRLH-R-K01-120
		230 Vac	—	1NC	C22-DRLH-R-K01-230	C22S-DRLH-R-K01-230
		24 Vac/Vdc	X0	1NC	C22-DRLH-R-X0-K01-24	C22S-DRLH-R-X0-K01-24
		120 Vac	X0	1NC	C22-DRLH-R-X0-K01-120	C22S-DRLH-R-X0-K01-120
		230 Vac	X0	1NC	C22-DRLH-R-X0-K01-230	C22S-DRLH-R-X0-K01-230
White	White	24 Vac/Vdc	—	1NO	C22-DRLH-W-K10-24	C22S-DRLH-W-K10-24
		120 Vac	—	1NO	C22-DRLH-W-K10-120	C22S-DRLH-W-K10-120
		230 Vac	—	1NO	C22-DRLH-W-K10-230	C22S-DRLH-W-K10-230
		24 Vac/Vdc	X1	1NO	C22-DRLH-W-X1-K10-24	C22S-DRLH-W-X1-K10-24
		120 Vac	X1	1NO	C22-DRLH-W-X1-K10-120	C22S-DRLH-W-X1-K10-120
		230 Vac	X1	1NO	C22-DRLH-W-X1-K10-230	C22S-DRLH-W-X1-K10-230
Blue	Blue	24 Vac/Vdc	—	1NO	C22-DRLH-B-K10-24	C22S-DRLH-B-K10-24
		120 Vac	—	1NO	C22-DRLH-B-K10-120	C22S-DRLH-B-K10-120
		230 Vac	—	1NO	C22-DRLH-B-K10-230	C22S-DRLH-B-K10-230



Note: Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.

Indicating Lights



Contents

Description**Page**

Pushbuttons—Non-Illuminated and Illuminated	5
Indicating Lights	
Catalog Number Selection	15
Product Selection	15
Emergency Stops	16
Selector Switches	19
Technical Data and Specifications	24
Dimensions	26

Indicating Lights

Product Description

C22 indicating lights use a combination of a durable, bright LED unit and modern lenses designed specifically for this type of LED to create a bright and visible indicating light. As with the pushbuttons, the indicating light lenses can be laser etched, simply order without lens and order M22/C22 custom etched lenses to attach.

Note: For additional accessories, please see Volume 7—Motor Controls, Logic and Connectivity, CA08100008E, Tab 37, section 37.4, 22.5 mm Modular Pushbuttons—M22.

Features

- LED offering only for improved brightness quality and up to 100,000 hours of operation
- Lenses specifically designed for LED illumination
- Lenses capable of being laser etched for custom solutions that last

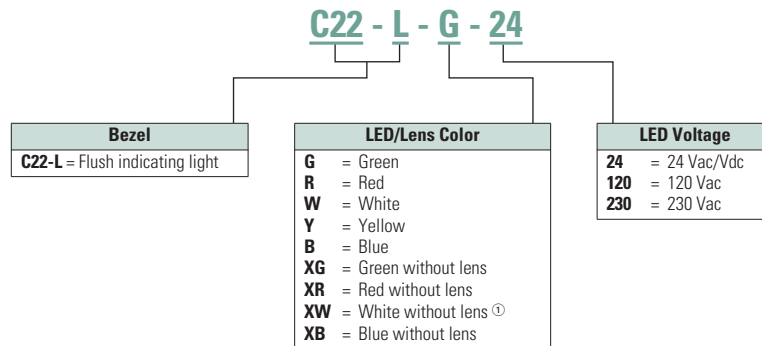
Protection Type

- IP67/IP69K
- NEMA 4X, 13

Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

Indicating Lights



Product Selection

Indicating Lights

C22-L-__



Indicating Lights

Lens Color	LED Color	Voltage	Catalog Number
Green	Green	24 Vac/Vdc	C22-L-G-24
		120 Vac	C22-L-G-120
		230 Vac	C22-L-G-230
Red	Red	24 Vac/Vdc	C22-L-R-24
		120 Vac	C22-L-R-120
		230 Vac	C22-L-R-230
White	White	24 Vac/Vdc	C22-L-W-24
		120 Vac	C22-L-W-120
		230 Vac	C22-L-W-230
Yellow	White	24 Vac/Vdc	C22-L-Y-24
		120 Vac	C22-L-Y-120
		230 Vac	C22-L-Y-230
Blue	Blue	24 Vac/Vdc	C22-L-B-24
		120 Vac	C22-L-B-120
		230 Vac	C22-L-B-230
Without Lens	Green	24 Vac/Vdc	C22-L-XG-24
		120 Vac	C22-L-XG-120
		230 Vac	C22-L-XG-230
	Red	24 Vac/Vdc	C22-L-XR-24
		120 Vac	C22-L-XR-120
		230 Vac	C22-L-XR-230
	White	24 Vac/Vdc	C22-L-XW-24
		120 Vac	C22-L-XW-120
		230 Vac	C22-L-XW-230
	Blue	24 Vac/Vdc	C22-L-XB-24
		120 Vac	C22-L-XB-120
		230 Vac	C22-L-XB-230

Note

① Use white LED for both white and yellow lenses.

Emergency Stops



Contents

Description	Page
Pushbuttons—Non-Illuminated and Illuminated	5
Indicating Lights	14
Emergency Stops	
Non-Illuminated, Twist-Release	17
Non-Illuminated, Keyed-Release	17
Selector Switches	19
Technical Data and Specifications	24
Dimensions	26

Emergency Stops

Product Description

C22 emergency stops are a durable and reliable solution to a variety of e-stop applications. This compact e-stop, available as twist-to-release and keyed-release, is a simple product that eliminates the need for self-monitoring contact blocks, all while still meeting almost all of the industry safety standards.

Note: For additional accessories, please see Volume 7—Motor Controls, Logic and Connectivity, CA08100008E, Tab 37, section 37.4, 22.5 mm Modular Pushbuttons—M22.

Features

- Available in both twist-release and keyed-release with either 45 mm or 60 mm operators

Protection Type

- Twist-Release
 - IP67/IP69K
- Keyed-Release
 - IP66
- NEMA 4X, 13

Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

Emergency Stops

C22 - PVS45P - MS1 - K01

Operator Type	Key Code	Contact Blocks
PVT45P = Twist-release, 45 mm	MS1 = MS1	K02 = 2NC
PVT60P = Twist-release, 60 mm	MS2 = MS2	K11 = 1NO/1NC
PVS45P = Key-release, 45 mm	MS3 = MS3	
PVS60P = Key-release, 60 mm	MS4 = MS4	
	MS5 = MS5	
	MS6 = MS6	
	MS7 = MS7	
	MS8 = MS8	
	RS = Ronis-445	

Product Selection

Non-Illuminated, Twist-Release

C22-PVT_

Non-Illuminated Emergency Stops, Twist-Release



Release Method	Operator Size	Contact Block Configuration	Catalog Number
Twist-release	45 mm	2NC	C22-PVT45P-K02
		1NO/1NC	C22-PVT45P-K11
	60 mm	2NC	C22-PVT60P-K02
		1NO/1NC	C22-PVT60P-K11

Non-Illuminated, Keyed-Release

C22-PVS_

Non-Illuminated Emergency Stops, Keyed-Release



Release Method	Operator Size	Key Code	Contact Block Configuration	Catalog Number
Keyed-release	45 mm	MS1	2NC	C22-PVS45P-MS1-K02
			1NO/1NC	C22-PVS45P-MS1-K11
		MS2	2NC	C22-PVS45P-MS2-K02
			1NO/1NC	C22-PVS45P-MS2-K11
		MS3	2NC	C22-PVS45P-MS3-K02
			1NO/1NC	C22-PVS45P-MS3-K11
		MS4	2NC	C22-PVS45P-MS4-K02
			1NO/1NC	C22-PVS45P-MS4-K11
		MS5	2NC	C22-PVS45P-MS5-K02
			1NO/1NC	C22-PVS45P-MS5-K11
		MS6	2NC	C22-PVS45P-MS6-K02
			1NO/1NC	C22-PVS45P-MS6-K11
		MS7	2NC	C22-PVS45P-MS7-K02
			1NO/1NC	C22-PVS45P-MS7-K11
		MS8	2NC	C22-PVS45P-MS8-K02
			1NO/1NC	C22-PVS45P-MS8-K11
		Ronis	2NC	C22-PVS45P-RS-K02
			1NO/1NC	C22-PVS45P-RS-K11

37.5

Pushbuttons and Indicating Lights

22.5 mm Compact Pushbuttons—C22

37

C22-PVS_



Non-Illuminated Emergency Stops, Keyed-Release, continued

Release Method	Operator Size	Key Code	Contact Block Configuration	Catalog Number
Keyed-release	60 mm	MS1	2NC	C22-PVS60P-MS1-K02
			1NO/1NC	C22-PVS60P-MS1-K11
		MS2	2NC	C22-PVS60P-MS2-K02
			1NO/1NC	C22-PVS60P-MS2-K11
		MS3	2NC	C22-PVS60P-MS3-K02
			1NO/1NC	C22-PVS60P-MS3-K11
		MS4	2NC	C22-PVS60P-MS4-K02
			1NO/1NC	C22-PVS60P-MS4-K11
		MS5	2NC	C22-PVS60P-MS5-K02
			1NO/1NC	C22-PVS60P-MS5-K11
		MS6	2NC	C22-PVS60P-MS6-K02
			1NO/1NC	C22-PVS60P-MS6-K11
		MS7	2NC	C22-PVS60P-MS7-K02
			1NO/1NC	C22-PVS60P-MS7-K11
		MS8	2NC	C22-PVS60P-MS8-K02
			1NO/1NC	C22-PVS60P-MS8-K11
		Ronis	2NC	C22-PVS60P-RS-K02
			1NO/1NC	C22-PVS60P-RS-K11

Selector Switches



Contents

Description	Page
Pushbuttons—Non-Illuminated and Illuminated	5
Indicating Lights	14
Emergency Stops	16
Selector Switches	
Non-Illuminated, Knob Type	20
Non-Illuminated, Key Operated	21
Technical Data and Specifications	24
Dimensions	26

Selector Switches

Product Description

With over 20 variations of operation and 8 varieties of key codes, the C22 line offers a very complete line of selector switches.

Note: For additional accessories, please see Volume 7—Motor Controls, Logic and Connectivity, CA08100008E, Tab 37, section 37.4, 22.5 mm Modular Pushbuttons—M22.

Features

- Selector switch (non-keyed) rated for 1 million mechanical operations
- Momentary selector switches are field convertible from momentary to maintained

Protection Type

- IP65
- NEMA 4X, 13

37.5 Pushbuttons and Indicating Lights

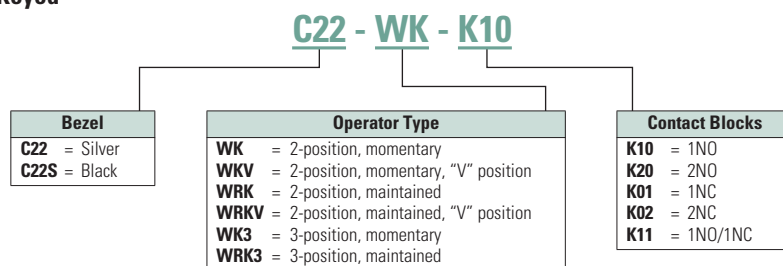
22.5 mm Compact Pushbuttons—C22

37

Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

Selector Switches—Non-Keyed



Product Selection

Non-Illuminated, Knob Type

C22(S)-WK- /
C22(S)-WRK-



Non-Illuminated Selector Switches, Knob Type

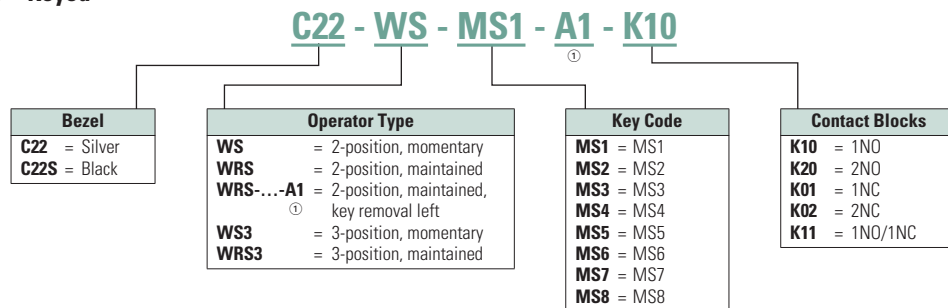
Type	Switching Position	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Two-position	Momentary 40°	1NO	C22-WK-K10	C22S-WK-K10
		2NO	C22-WK-K20	C22S-WK-K20
		1NC	C22-WK-K01	C22S-WK-K01
		2NC	C22-WK-K02	C22S-WK-K02
		1NO/1NC	C22-WK-K11	C22S-WK-K11
	Momentary 60°	1NO	C22-WKV-K10	C22S-WKV-K10
		2NO	C22-WKV-K20	C22S-WKV-K20
		1NC	C22-WKV-K01	C22S-WKV-K01
		2NC	C22-WKV-K02	C22S-WKV-K02
		1NO/1NC	C22-WKV-K11	C22S-WKV-K11
	Maintained 40°	1NO	C22-WRK-K10	C22S-WRK-K10
		2NO	C22-WRK-K20	C22S-WRK-K20
		1NC	C22-WRK-K01	C22S-WRK-K01
		2NC	C22-WRK-K02	C22S-WRK-K02
		1NO/1NC	C22-WRK-K11	C22S-WRK-K11
	Maintained 60°	1NO	C22-WRKV-K10	C22S-WRKV-K10
		2NO	C22-WRKV-K20	C22S-WRKV-K20
		1NC	C22-WRKV-K01	C22S-WRKV-K01
		2NC	C22-WRKV-K02	C22S-WRKV-K02
		1NO/1NC	C22-WRKV-K11	C22S-WRKV-K11
Three-position	Momentary 40°	2NO	C22-WK3-K20	C22S-WK3-K20
		2NC	C22-WK3-K02	C22S-WK3-K02
		1NO/1NC	C22-WK3-K11	C22S-WK3-K11
	Maintained 60°	2NO	C22-WRK3-K20	C22S-WRK3-K20
		2NC	C22-WRK3-K02	C22S-WRK3-K02
		1NO/1NC	C22-WRK3-K11	C22S-WRK3-K11

Note: Momentary selector switches can be field converted to maintained.

Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

Selector Switches—Keyed



Non-Illuminated, Key Operated

C22(S)-WS-MS_

Non-Illuminated Selector Switches, Key Operated



Position	Type	Key Code	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Two-position	Momentary key removal left 40°	MS1	1NO	C22-WS-MS1-K10	C22S-WS-MS1-K10
			2NO	C22-WS-MS1-K20	C22S-WS-MS1-K20
			1NC	C22-WS-MS1-K01	C22S-WS-MS1-K01
			2NC	C22-WS-MS1-K02	C22S-WS-MS1-K02
			1NO/1NC	C22-WS-MS1-K11	C22S-WS-MS1-K11
		MS2	1NO	C22-WS-MS2-K10	C22S-WS-MS2-K10
			2NO	C22-WS-MS2-K20	C22S-WS-MS2-K20
			1NC	C22-WS-MS2-K01	C22S-WS-MS2-K01
			2NC	C22-WS-MS2-K02	C22S-WS-MS2-K02
			1NO/1NC	C22-WS-MS2-K11	C22S-WS-MS2-K11
		MS3	1NO	C22-WS-MS3-K10	C22S-WS-MS3-K10
			2NO	C22-WS-MS3-K20	C22S-WS-MS3-K20
			1NC	C22-WS-MS3-K01	C22S-WS-MS3-K01
			2NC	C22-WS-MS3-K02	C22S-WS-MS3-K02
			1NO/1NC	C22-WS-MS3-K11	C22S-WS-MS3-K11
		MS4	1NO	C22-WS-MS4-K10	C22S-WS-MS4-K10
			2NO	C22-WS-MS4-K20	C22S-WS-MS4-K20
			1NC	C22-WS-MS4-K01	C22S-WS-MS4-K01
			2NC	C22-WS-MS4-K02	C22S-WS-MS4-K02
			1NO/1NC	C22-WS-MS4-K11	C22S-WS-MS4-K11
		MS5	1NO	C22-WS-MS5-K10	C22S-WS-MS5-K10
			2NO	C22-WS-MS5-K20	C22S-WS-MS5-K20
			1NC	C22-WS-MS5-K01	C22S-WS-MS5-K01
			2NC	C22-WS-MS5-K02	C22S-WS-MS5-K02
			1NO/1NC	C22-WS-MS5-K11	C22S-WS-MS5-K11

Note: Momentary selector switches can be field converted to maintained.

C22(S)-WRS-MS_



Non-Illuminated Selector Switches, Key Operated, continued

Position	Type	Key Code	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Two-position, continued	Momentary key removal left 40°	MS6	1NO	C22-WS-MS6-K10	C22S-WS-MS6-K10
			2NO	C22-WS-MS6-K20	C22S-WS-MS6-K20
			1NC	C22-WS-MS6-K01	C22S-WS-MS6-K01
			2NC	C22-WS-MS6-K02	C22S-WS-MS6-K02
			1NO/1NC	C22-WS-MS6-K11	C22S-WS-MS6-K11
		MS7	1NO	C22-WS-MS7-K10	C22S-WS-MS7-K10
			2NO	C22-WS-MS7-K20	C22S-WS-MS7-K20
			1NC	C22-WS-MS7-K01	C22S-WS-MS7-K01
			2NC	C22-WS-MS7-K02	C22S-WS-MS7-K02
			1NO/1NC	C22-WS-MS7-K11	C22S-WS-MS7-K11
		MS8	1NO	C22-WS-MS8-K10	C22S-WS-MS8-K10
			2NO	C22-WS-MS8-K20	C22S-WS-MS8-K20
			1NC	C22-WS-MS8-K01	C22S-WS-MS8-K01
			2NC	C22-WS-MS8-K02	C22S-WS-MS8-K02
			1NO/1NC	C22-WS-MS8-K11	C22S-WS-MS8-K11
Two-position	Maintained key removal left/right 40°	MS1	1NO	C22-WRS-MS1-K10	C22S-WRS-MS1-K10
			2NO	C22-WRS-MS1-K20	C22S-WRS-MS1-K20
			1NC	C22-WRS-MS1-K01	C22S-WRS-MS1-K01
			2NC	C22-WRS-MS1-K02	C22S-WRS-MS1-K02
			1NO/1NC	C22-WRS-MS1-K11	C22S-WRS-MS1-K11
		MS2	1NO	C22-WRS-MS2-K10	C22S-WRS-MS2-K10
			2NO	C22-WRS-MS2-K20	C22S-WRS-MS2-K20
			1NC	C22-WRS-MS2-K01	C22S-WRS-MS2-K01
			2NC	C22-WRS-MS2-K02	C22S-WRS-MS2-K02
			1NO/1NC	C22-WRS-MS2-K11	C22S-WRS-MS2-K11
		MS3	1NO	C22-WRS-MS3-K10	C22S-WRS-MS3-K10
			2NO	C22-WRS-MS3-K20	C22S-WRS-MS3-K20
			1NC	C22-WRS-MS3-K01	C22S-WRS-MS3-K01
			2NC	C22-WRS-MS3-K02	C22S-WRS-MS3-K02
			1NO/1NC	C22-WRS-MS3-K11	C22S-WRS-MS3-K11

Note: Momentary selector switches can be field converted to maintained.

C22(S)-WRS...-MS1_



Non-Illuminated Selector Switches, Key Operated, continued

Position	Type	Key Code	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Two-position, continued	Maintained key removal left/right 40°	MS4	1NO	C22-WRS-MS4-K10	C22S-WRS-MS4-K10
			2NO	C22-WRS-MS4-K20	C22S-WRS-MS4-K20
			1NC	C22-WRS-MS4-K01	C22S-WRS-MS4-K01
			2NC	C22-WRS-MS4-K02	C22S-WRS-MS4-K02
			1NO/1NC	C22-WRS-MS4-K11	C22S-WRS-MS4-K11
		MS5	1NO	C22-WRS-MS5-K10	C22S-WRS-MS5-K10
			2NO	C22-WRS-MS5-K20	C22S-WRS-MS5-K20
			1NC	C22-WRS-MS5-K01	C22S-WRS-MS5-K01
			2NC	C22-WRS-MS5-K02	C22S-WRS-MS5-K02
			1NO/1NC	C22-WRS-MS5-K11	C22S-WRS-MS5-K11
	Maintained key removal left 40°	MS6	1NO	C22-WRS-MS6-K10	C22S-WRS-MS6-K10
			2NO	C22-WRS-MS6-K20	C22S-WRS-MS6-K20
			1NC	C22-WRS-MS6-K01	C22S-WRS-MS6-K01
			2NC	C22-WRS-MS6-K02	C22S-WRS-MS6-K02
			1NO/1NC	C22-WRS-MS6-K11	C22S-WRS-MS6-K11
		MS7	1NO	C22-WRS-MS7-K10	C22S-WRS-MS7-K10
			2NO	C22-WRS-MS7-K20	C22S-WRS-MS7-K20
			1NC	C22-WRS-MS7-K01	C22S-WRS-MS7-K01
			2NC	C22-WRS-MS7-K02	C22S-WRS-MS7-K02
			1NO/1NC	C22-WRS-MS7-K11	C22S-WRS-MS7-K11
	Maintained key removal left 40°	MS8	1NO	C22-WRS-MS7-K10	C22S-WRS-MS7-K10
			2NO	C22-WRS-MS7-K20	C22S-WRS-MS7-K20
			1NC	C22-WRS-MS7-K01	C22S-WRS-MS7-K01
			2NC	C22-WRS-MS7-K02	C22S-WRS-MS7-K02
			1NO/1NC	C22-WRS-MS7-K11	C22S-WRS-MS7-K11
Two-position	Maintained key removal left 40°	MS1	1NO	C22-WRS-MS1-A1-K10	C22S-WRS-MS1-A1-K10
			2NO	C22-WRS-MS1-A1-K20	C22S-WRS-MS1-A1-K20
			1NC	C22-WRS-MS1-A1-K01	C22S-WRS-MS1-A1-K01
			2NC	C22-WRS-MS1-A1-K02	C22S-WRS-MS1-A1-K02
			1NO/1NC	C22-WRS-MS1-A1-K11	C22S-WRS-MS1-A1-K11
	Three Position Momentary Key Removal Center 40°	MS1	2NO	C22-WS3-MS1-K20	C22S-WS3-MS1-K20
			2NC	C22-WS3-MS1-K02	C22S-WS3-MS1-K02
			1NO/1NC	C22-WS3-MS1-K11	C22S-WS3-MS1-K11
	Maintained Key Removal Left/Right 60°	MS1	2NO	C22-WRS3-MS1-K20	C22S-WRS3-MS1-K20
			2NC	C22-WRS3-MS1-K02	C22S-WRS3-MS1-K02
			1NO/1NC	C22-WRS3-MS1-K11	C22S-WRS3-MS1-K11

Note: Momentary selector switches can be field converted to maintained.

Technical Data and Specifications

22.5 mm Compact Pushbuttons—C22

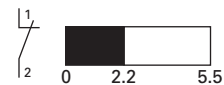
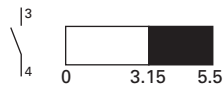
Description	Unit		Pushbutton Actuators		Indicator Lights C22	Selector Switch Actuators C22	Key-Operated Buttons C22	Emergency Stop/ Emergency Switching OFF Pushbuttons C22
			Illuminated Momentary	Pushbuttons C22 Maintained				
General								
Standards			IEC/EN 60947 VDE 0660					
Lifespan, mechanical	Operations	x 10 ⁶	5	1	—	1	0.1	0.05
Operating frequency	Operations/h		≥3600	≥3600	—	≥2000	≥100	≥300
Actuating force		N	≥5	≥5	—	—	—	≥50
Operating torque		Nm	—	—	—	≥0.3	≥0.5	—
Terminal screw tightening torque		Nm	0.8	0.8	0.8	0.8	0.8	0.8
Threaded ring tightening torque		Nm	2	2	2	2	2	2
Protection type			IP67, IP69K	IP67, IP69K	IP67, IP69K	IP65	IP66	IP67, IP69K
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30					
Ambient temperature								
Open		°C	–25° to 70°	–25° to 70°	–25° to 70°	–25° to 70°	–25° to 70°	–25° to 70°
Storage		°C	–30° to 80°	–30° to 80°	–30° to 80°	–30° to 80°	–30° to 80°	–30° to 80°
Mounting position			As required	As required	As required	As required	As required	As required
Mechanical shock resistance to IEC 60068-2-27 Shock duration 11 ms, half-sinusoidal		g	30	30	30	30	30	30
Terminal capacities								
Solid		mm ²	2 x 0.5–1.5	2 x 0.5–1.5	2 x 0.5–1.5	2 x 0.5–1.5	2 x 0.5–1.5	2 x 0.5–1.5
Flexible with ferrule		mm ²	2 x 0.5–1.5	2 x 0.5–1.5	2 x 0.5–1.5	2 x 0.5–1.5	2 x 0.5–1.5	2 x 0.5–1.5
Contacts								
Rated impulse withstand voltage	U _{imp}	Vac	4000	4000	4000	4000	4000	4000
Rated insulation voltage	U _i	V	250	250	250	250	250	250
Overvoltage category/pollution degree			III/3	III/3	III/3	III/3	III/3	III/3
Control circuit reliability								
at 5 Vdc/1 mA	H _F	Fault probability	Values follow	Values follow	—	Values follow	Values follow	Values follow
at 17 Vdc/7 mA	H _F	Fault probability	N/O contact: statistically determined 1 failure per 17 x 10 ⁶ operations N/C contact: statistically determined 1 failure per 0.9 x 10 ⁶ operations		—	N/O contact: statistically determined 1 failure per 17 x 10 ⁶ operations N/C contact: statistically determined 1 failure per 0.9 x 10 ⁶ operations		
at 24 Vdc/5 mA	H _F	Fault probability	Values follow	Values follow	—	Values follow	Values follow	Values follow
Max. short-circuit protective device								
Fuse	gG/gL	A	10	10	—	10	10	10

22.5 mm Compact Pushbuttons—C22, continued

Description	Unit	Push-button Actuators Illuminated Pushbuttons C22		Indicator Lights C22	Selector Switch Actuators C22	Key-Operated Buttons C22	Emergency Stop/ Emergency Switching OFF Pushbuttons C22
		Momentary	Maintained				
Switching Capacity							
Rated operational current							
AC-15							
24V	I _e	A	4	4	—	4	4
110V	I _e	A	2	2	—	2	2
230V	I _e	A	1.5	1.5	—	1.5	1.5
DC-13							
24V	I _e	A	3	3	—	3	3
60V	I _e	A	1	1	—	1	1
110V	I _e	A	0.6	0.6	—	0.6	0.6
220V	I _e	A	0.3	0.3	—	0.3	0.3
Lifespan, electrical							
AC-15							
230V/0.5A	Operations	x 10 ⁶	0.4	0.4	—	0.4	0.4
230V/1.0A		x 10 ⁶	0.6	0.6	—	0.6	0.6

Contact Travel

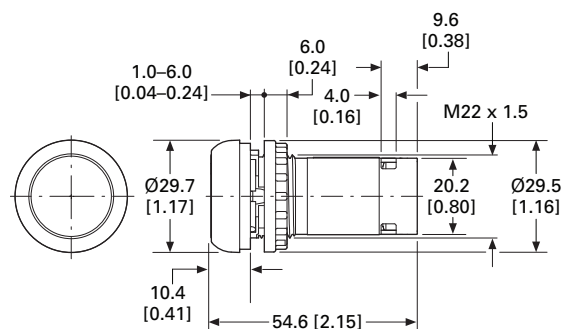
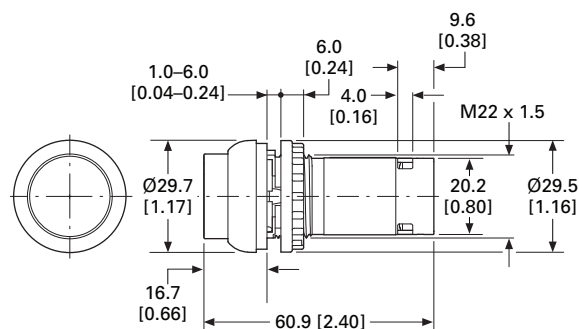
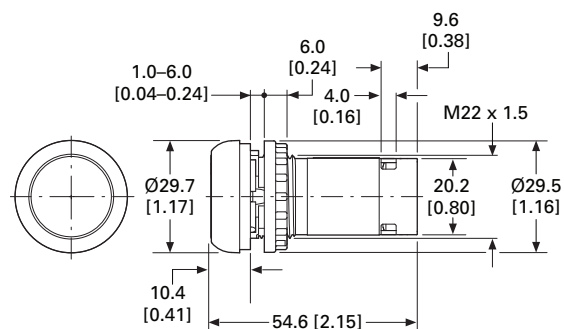
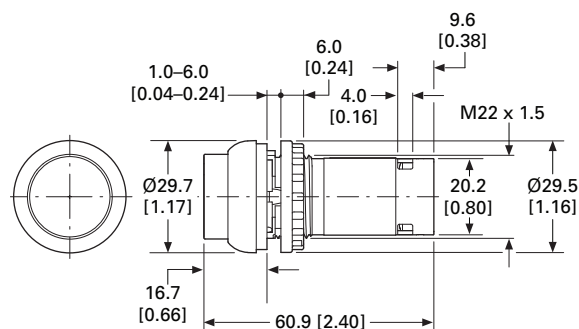
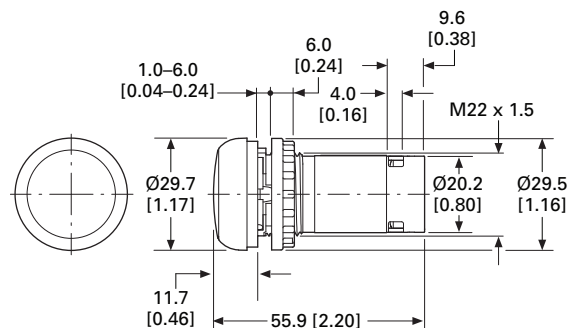
Contact Travel Diagram



 Contact closed
 Contact open

Dimensions

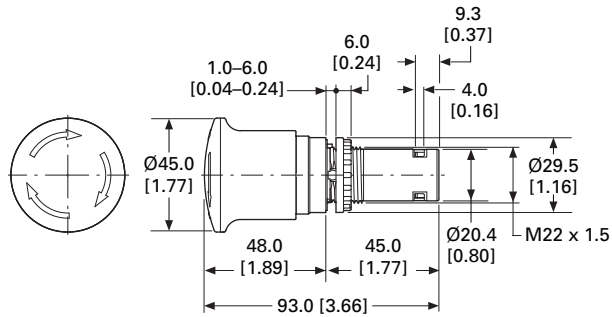
Approximate Dimensions in mm [in]

Illuminated Pushbuttons**Flat****C22(S)-DRL_/C22(S)-DL_****Extended****C22(S)-DRLH_/C22(S)-DLH_****Pushbutton Actuators****Flat****C22(S)-DR_/C22(S)-D_****Extended****C22(S)-DRH_/C22(S)-DH_****Indicating Lights****Flat****C22-L_**

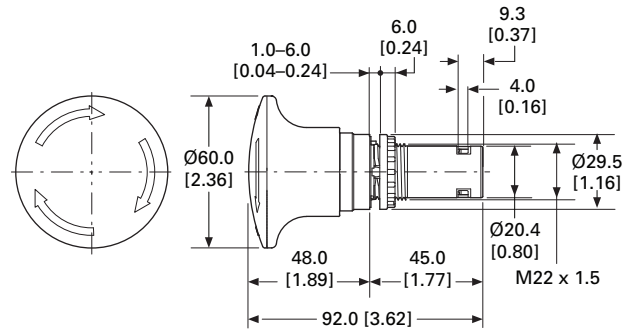
Approximate Dimensions in mm [in]

Emergency Stop/Emergency Switching OFF Pushbuttons

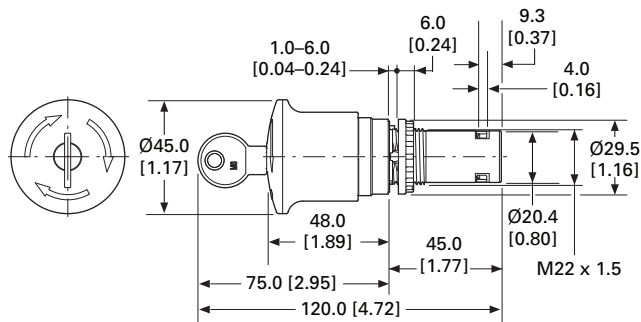
C22-PVT45P_



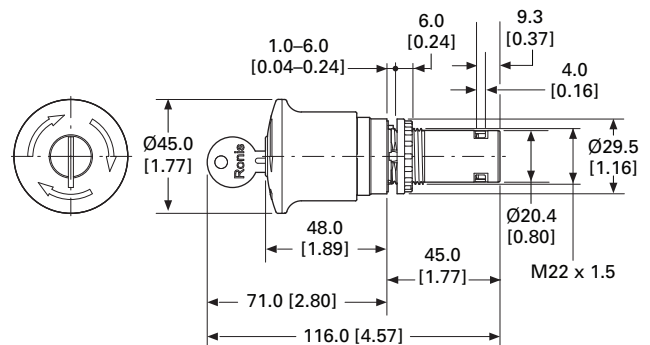
C22-PVT60P_



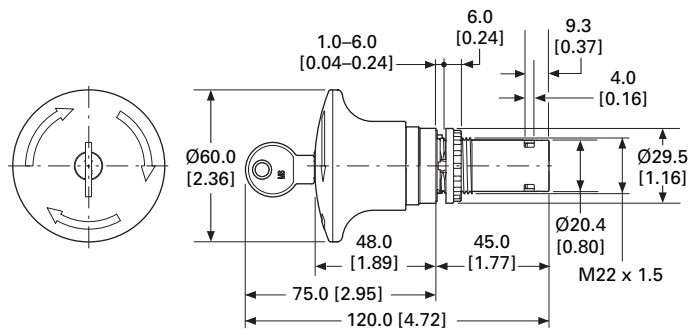
C22-PVT45P-MS_



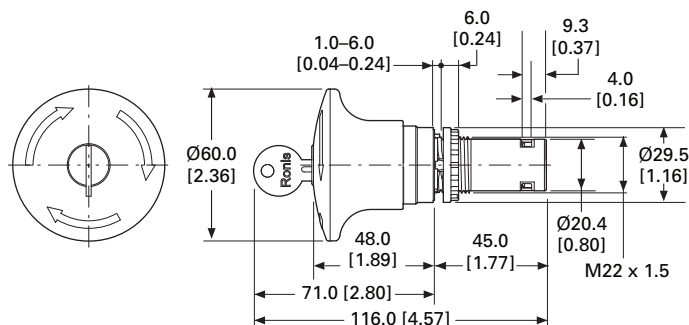
C22-PVT45P-RS_



C22-PVT60P-MS_



C22-PVT60P-MS_



37.5 Pushbuttons and Indicating Lights

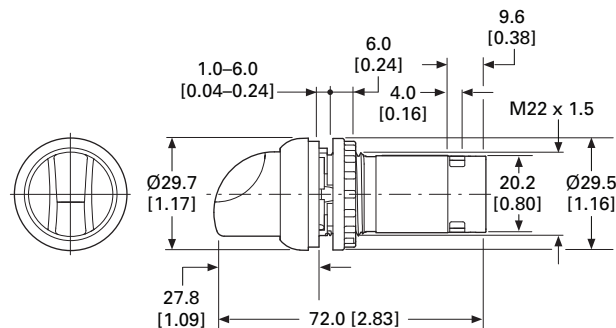
22.5 mm Compact Pushbuttons—C22

37

Approximate Dimensions in mm [in]

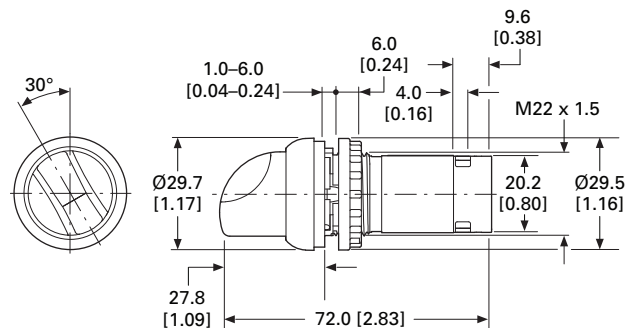
Selector Switch Actuators

C22(S)-W(R)K_



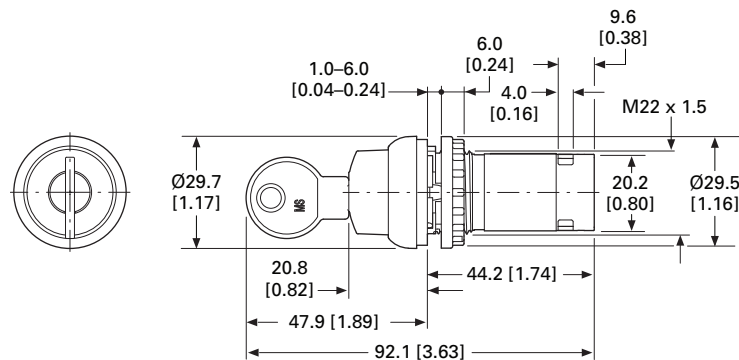
Selector Switch Actuators/V Position

C22(S)-W(R)KV_

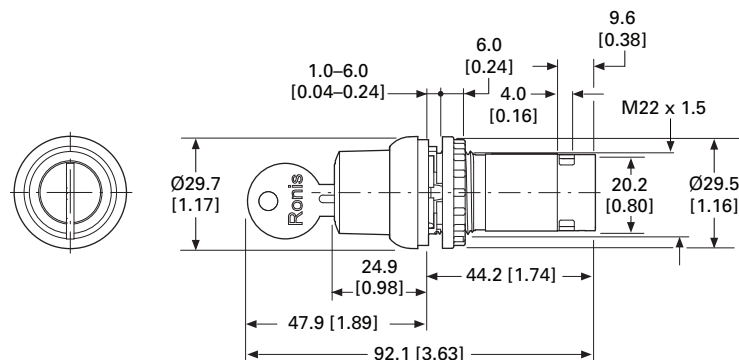


Key Operated Actuators

C22(S)-WS(3)-MS_/C22(S)-WRS(3)-MS_



C22(S)-WS(3)-RS_/C22(S)-WRS(3)-RS_



Eaton's Electrical Sector is a global leader in power distribution, power quality, control and automation, and monitoring products. When combined with Eaton's full-scale engineering services, these products provide customer-driven PowerChain™ solutions to serve the power system needs of the data center, industrial, institutional, public sector, utility, commercial, residential, IT, mission critical, alternative energy and OEM markets worldwide.

PowerChain solutions help enterprises achieve sustainable and competitive advantages through proactive management of the power system as a strategic, integrated asset throughout its life cycle, resulting in enhanced safety, greater reliability and energy efficiency. For more information, visit www.eaton.com/electrical.

Eaton Corporation

Electrical Sector
1111 Superior Ave.
Cleveland, OH 44114
United States
877-ETN-CARE (877-386-2273)
Eaton.com

©2011 Eaton Corporation
All Rights Reserved
Printed in USA
Publication No. CA04700001E / Z10857
June 2011



Powering Business Worldwide

Eaton is a registered trademark of Eaton Corporation. All other trademarks are property of their respective owners.