37

Pushbuttons and Indicating Lights

Pushbuttons



Indicating Lights



Emergency Stops



Selector Switches



37.5 22.5 mm Compact Pushbuttons—C22

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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.

22.5 mm Compact Pushbuttons—C22



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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

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



















22.5 mm Compact Pushbuttons—C22

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 nonkeyed 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

37

Product Selection Guide

Pushbuttons









Description	Non-illuminated,	flush	Non-illuminated,	extended	Illuminated, flush	1	Illuminated, exte	ended
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 Twi	rist release	Keyed-release
Product Selection Pag	nge 17	Page 17

Selector Switches





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

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Pushbuttons—Non-Illuminated and Illuminated



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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

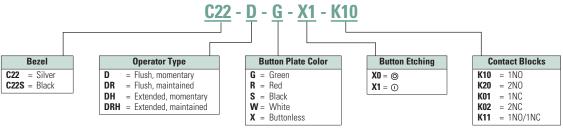
- Field convertible maintained pushbuttons from maintained to momentary
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- Laser engraved pushbuttons and lenses
- Pushbuttons (momentary) rated for 5 million mechanical operations

Protection Type

- IP67/IP69K
- NEMA 4X, 13

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
	=	2N0	C22-D-G-K20	C22S-D-G-K20
	_	1NO/1NC	C22-D-G-K11	C22S-D-G-K11
	X1	1N0	C22-D-G-X1-K10	C22S-D-G-X1-K10
	X1	2N0	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
	XO	1NC	C22-D-R-X0-K01	C22S-D-R-X0-K01
	XO	2NC	C22-D-R-X0-K02	C22S-D-R-X0-K02
	XO	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	1NC C22-D-S-X0-K01	
	X0	2NC	C22-D-S-X0-K02	C22S-D-S-X0-K02
	XO	1NO/1NC	C22-D-S-X0-K11	C22S-D-S-X0-K11
White	_	1N0	C22-D-W-K10	C22S-D-W-K10
	_	2N0	C22-D-W-K20	C22S-D-W-K20
	_	1NO/1NC	C22-D-W-K11	C22S-D-W-K11
	X1	1N0	C22-D-W-X1-K10	C22S-D-W-X1-K10
	X1	2N0	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
	_	2N0	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

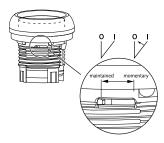
Non-Illuminated, Flush, Maintained

C22(S)-DR-_

Non-Illuminated Pushbuttons, Flush, Maintained



Button Color	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	_	1N0	C22-DR-G-K10	C22S-DR-G-K10
	_	2N0	C22-DR-G-K20	C22S-DR-G-K20
	_	1NO/1NC	C22-DR-G-K11	C22S-DR-G-K11
	X1	1N0	C22-DR-G-X1-K10	C22S-DR-G-X1-K10
	X1	2N0	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	_	1N0	C22-DR-W-K10	C22S-DR-W-K10
	_	2N0	C22-DR-W-K20	C22S-DR-W-K20
	_	1NO/1NC	C22-DR-W-K11	C22S-DR-W-K11
	X1	1N0	C22-DR-W-X1-K10	C22S-DR-W-X1-K10
	X1	2N0	C22-DR-W-X1-K20	C22S-DR-W-X1-K20
	X1	1NO/1NC	C22-DR-W-X1-K11	C22S-DR-W-X1-K11
Buttonless	_	1N0	C22-DR-X-K10	C22S-DR-X-K10
	_	2N0	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
	_	2N0	C22-DH-G-K20	C22S-DH-G-K20
	_	1NO/1NC	C22-DH-G-K11	C22S-DH-G-K11
	X1	1N0	C22-DH-G-X1-K10	C22S-DH-G-X1-K10
	X1	2N0	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	_	1N0	C22-DH-W-K10	C22S-DH-W-K10
	_	2N0	C22-DH-W-K20	C22S-DH-W-K20
	_	1NO/1NC	C22-DH-W-K11	C22S-DH-W-K11
	X1	1N0	C22-DH-W-X1-K10	C22S-DH-W-X1-K10
	X1	2N0	C22-DH-W-X1-K20	C22S-DH-W-X1-K20
	X1	1NO/1NC	C22-DH-W-X1-K11	C22S-DH-W-X1-K11

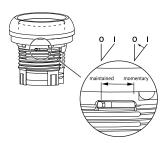
Non-Illuminated, Extended, Maintained

C22(S)-DRH-_

Non-Illuminated Pushbuttons, Extended, Maintained



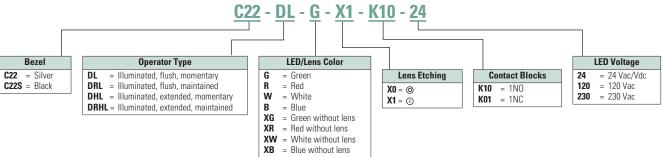
	Button Color	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
	Green	_	1NO	C22-DRH-G-K10	C22S-DRH-G-K10
X1		_	2N0	C22-DRH-G-K20	C22S-DRH-G-K20
X1		_	1NO/1NC	C22-DRH-G-K11	C22S-DRH-G-K11
NO		X1	1N0	C22-DRH-G-X1-K10	C22S-DRH-G-X1-K10
The color of the		X1	2N0	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
X0		_	2NC	C22-DRH-R-K02	C22S-DRH-R-K02
X0		_	1NO/1NC	C22-DRH-R-K11	C22S-DRH-R-K11
NO		X0	1NC	C22-DRH-R-X0-K01	C22S-DRH-R-X0-K01
Black		XO	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
X0		_	2NC	C22-DRH-S-K02	C22S-DRH-S-K02
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/1NC	C22-DRH-S-K11	C22S-DRH-S-K11
X0		XO	1NC	C22-DRH-S-X0-K01	C22S-DRH-S-X0-K01
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		XO	2NC	C22-DRH-S-X0-K02	C22S-DRH-S-X0-K02
— 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		X0	1NO/1NC	C22-DRH-S-X0-K11	C22S-DRH-S-X0-K11
— 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	White	_	1N0	C22-DRH-W-K10	C22S-DRH-W-K10
X1 1NO C22-DRH-W-X1-K10 C22S-DRH-W-X1-K10 X1 2NO C22-DRH-W-X1-K20 C22S-DRH-W-X1-K20		_	2N0	C22-DRH-W-K20	C22S-DRH-W-K20
X1 2N0 C22-DRH-W-X1-K20 C22S-DRH-W-X1-K20		_	1NO/1NC	C22-DRH-W-K11	C22S-DRH-W-K11
		X1	1N0	C22-DRH-W-X1-K10	C22S-DRH-W-X1-K10
X1 1NO/1NC C22-DRH-W-X1-K11 C22S-DRH-W-X1-K11		X1	2N0	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 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	_	1N0	C22-DL-G-K10-24	C22S-DL-G-K10-24
		120 Vac	_	1N0	C22-DL-G-K10-120	C22S-DL-G-K10-120
		230 Vac	_	1N0	C22-DL-G-K10-230	C22S-DL-G-K10-230
		24 Vac/Vdc	X1	1N0	C22-DL-G-X1-K10-24	C22S-DL-G-X1-K10-24
		120 Vac	X1	1N0	C22-DL-G-X1-K10-120	C22S-DL-G-X1-K10-120
		230 Vac	X1	1N0	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	_	1N0	C22-DL-XG-K10-120	C22S-DL-XG-K10-120
		230 Vac	_	1NO	C22-DL-XG-K10-230	C22S-DL-XG-K10-230
Red	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	_	1N0	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	1N0	C22-DL-W-X1-K10-230	C22S-DL-W-X1-K10-230
	Buttonless	24 Vac/Vdc	_	1N0	C22-DL-XW-K10-24	C22S-DL-XW-K10-24
		120 Vac	_	1N0	C22-DL-XW-K10-120	C22S-DL-XW-K10-120
		230 Vac	_	1N0	C22-DL-XW-K10-230	C22S-DL-XW-K10-230
Blue	Blue	24 Vac/Vdc	_	1N0	C22-DL-B-K10-24	C22S-DL-B-K10-24
		120 Vac	_	1N0	C22-DL-B-K10-120	C22S-DL-B-K10-120
		230 Vac	_	1N0	C22-DL-B-K10-230	C22S-DL-B-K10-230
	Buttonless	24 Vac/Vdc	_	1N0	C22-DL-XB-K10-24	C22S-DL-XB-K10-24
		120 Vac	_	1N0	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

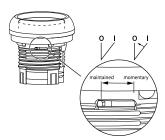
C22(S)-DRL-

Illuminated Pushbuttons, Flush, Maintained





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 24 Vac/Vdc 1NO C22-DRL-XG-K10-24 C22S-DRL-XG-K10-24 120 Vac 1NO C22-DRL-XG-K10-20 C22S-DRL-XG-K10-120 230 Vac 1NO C22-DRL-XG-K10-230 C22S-DRL-XG-K10-230 24 Vac/Vdc 1NC C22-DRL-XG-K10-230 C22S-DRL-XG-K10-230 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 24 Vac/Vdc 1NC C22-DRL-XR-K01-24 C22S-DRL-XR-K01-230 25 Vac 1NC C22-DRL-XR-K01-24 C22S-DRL-XR-K01-24 120 Vac 1NC C22-DRL-XR-K01-20 C22S-DRL-XR-K01-20 230 Vac 1NC C22-DRL-XR-K01-230 C22S-DRL-XR-K01-230 Vhite	LED Color	Button Color	Voltage	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Buttonless 24 Vac/Vdc 1NO C22-DRL-G-K10-230 C225-DRL-G-K10-230	Green	Green	24 Vac/Vdc	1NO	C22-DRL-G-K10-24	C22S-DRL-G-K10-24
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 C22S-DRL-XG-K10-120 C22S-DRL-XG-K10-120 C22S-DRL-XG-K10-120 C22S-DRL-XG-K10-120 C22S-DRL-XG-K10-230 C22S-DRL-XG-K10-230 C22S-DRL-XG-K10-230 C22S-DRL-XG-K10-230 C22S-DRL-R-K01-24 C22S-DRL-R-K01-24 C22S-DRL-R-K01-24 C22S-DRL-R-K01-120 C22S-DRL-R-K01-120 C22S-DRL-R-K01-120 C22S-DRL-R-K01-230 C22S-DRL-R-K01-230 C22S-DRL-XR-K01-230 C22S-DRL-XR-K01-230 C22S-DRL-XR-K01-24 C22S-DRL-XR-K01-120 C22S-DRL-XR-K10-120 C22S-DRL-X			120 Vac	1NO	C22-DRL-G-K10-120	C22S-DRL-G-K10-120
120 Vac			230 Vac	1NO	C22-DRL-G-K10-230	C22S-DRL-G-K10-230
Part		Buttonless	24 Vac/Vdc	1NO	C22-DRL-XG-K10-24	C22S-DRL-XG-K10-24
Red			120 Vac	1N0	C22-DRL-XG-K10-120	C22S-DRL-XG-K10-120
Buttonless			230 Vac	1NO	C22-DRL-XG-K10-230	C22S-DRL-XG-K10-230
Buttonless 24 Vac/Vdc 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
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			120 Vac	1NC	C22-DRL-R-K01-120	C22S-DRL-R-K01-120
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			230 Vac	1NC	C22-DRL-R-K01-230	C22S-DRL-R-K01-230
Variable Variable		Buttonless	24 Vac/Vdc	1NC	C22-DRL-XR-K01-24	C22S-DRL-XR-K01-24
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 Buttonless 24 Vac/Vdc 1NO C22-DRL-B-K10-24 C22S-DRL-B-K10-230 Buttonless 24 Vac/Vdc 1NO C22-DRL-B-K10-24 C22S-DRL-XB-K10-24			120 Vac	1NC	C22-DRL-XR-K01-120	C22S-DRL-XR-K01-120
120 Vac			230 Vac	1NC	C22-DRL-XR-K01-230	C22S-DRL-XR-K01-230
Buttonless 24 Vac/Vdc	Vhite	White	24 Vac/Vdc	1NO	C22-DRL-W-K10-24	C22S-DRL-W-K10-24
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-K10-230 100 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-K10-120 130 Vac 1NO C22-DRL-XB-K10-120 C22S-DRL-XB-K10-120 140 Vac 1NO C22-DRL-XB-K10-120 C22S-DRL-XB-K10-120 150 Vac 1NO C22-DRL-XB-K10-120 C22S-DRL-XB-K10-120 C22S-DRL-XB-K10-120 150 Vac 1NO C22-DRL-XB-K10-120 C22S-DRL-XB-K10-120 C22S-DRL-XB-K10-			120 Vac	1NO	C22-DRL-W-K10-120	C22S-DRL-W-K10-120
120 Vac			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
Hue 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			120 Vac	1NO	C22-DRL-XW-K10-120	C22S-DRL-XW-K10-120
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-XW-K10-230	C22S-DRL-XW-K10-230
Buttonless 24 Vac/Vdc 1NO C22-DRL-B-K10-230 C22S-DRL-B-K10-230 120 Vac 1NO C22-DRL-XB-K10-24 C22S-DRL-XB-K10-24 120 Vac 1NO C22-DRL-XB-K10-120 C22S-DRL-XB-K10-120	Blue	Blue	24 Vac/Vdc	1NO	C22-DRL-B-K10-24	C22S-DRL-B-K10-24
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			120 Vac	1NO	C22-DRL-B-K10-120	C22S-DRL-B-K10-120
120 Vac 1NO C22-DRL-XB-K10-120 C22S-DRL-XB-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
230 Vac 1NO C22-DRL-XB-K10-230 C22S-DRL-XB-K10-230			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	_	1N0	C22-DLH-G-K10-24	C22S-DLH-G-K10-24
		120 Vac	_	1N0	C22-DLH-G-K10-120	C22S-DLH-G-K10-120
		230 Vac	_	1N0	C22-DLH-G-K10-230	C22S-DLH-G-K10-230
		24 Vac/Vdc	X1	1N0	C22-DLH-G-X1-K10-24	C22S-DLH-G-X1-K10-24
		120 Vac	X1	1N0	C22-DLH-G-X1-K10-120	C22S-DLH-G-X1-K10-12
		230 Vac	X1	1N0	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	_	1N0	C22-DLH-W-K10-24	C22S-DLH-W-K10-24
		120 Vac	_	1N0	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	1N0	C22-DLH-W-X1-K10-230	C22S-DLH-W-X1-K10-23
Blue	Blue	24 Vac/Vdc	_	1N0	C22-DLH-B-K10-24	C22S-DLH-B-K10-24
		120 Vac	_	1N0	C22-DLH-B-K10-120	C22S-DLH-B-K10-120
		230 Vac	_	1N0	C22-DLH-B-K10-230	C22S-DLH-B-K10-230

Illuminated, Extended, Maintained

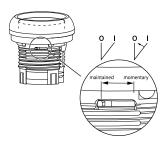
C22(S)-DRLH-

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	_	1N0	C22-DRLH-G-K10-24	C22S-DRLH-G-K10-24
		120 Vac	_	1N0	C22-DRLH-G-K10-120	C22S-DRLH-G-K10-120
		230 Vac	_	1N0	C22-DRLH-G-K10-230	C22S-DRLH-G-K10-230
		24 Vac/Vdc	X1	1N0	C22-DRLH-G-X1-K10-24	C22S-DRLH-G-X1-K10-24
		120 Vac	X1	1N0	C22-DRLH-G-X1-K10-120	C22S-DRLH-G-X1-K10-120
		230 Vac	X1	1N0	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	Х0	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	_	1N0	C22-DRLH-W-K10-230	C22S-DRLH-W-K10-230
		24 Vac/Vdc	X1	1N0	C22-DRLH-W-X1-K10-24	C22S-DRLH-W-X1-K10-24
		120 Vac	X1	1N0	C22-DRLH-W-X1-K10-120	C22S-DRLH-W-X1-K10-120
		230 Vac	X1	1N0	C22-DRLH-W-X1-K10-230	C22S-DRLH-W-X1-K10-230
Blue	Blue	24 Vac/Vdc	_	1N0	C22-DRLH-B-K10-24	C22S-DRLH-B-K10-24
		120 Vac	_	1N0	C22-DRLH-B-K10-120	C22S-DRLH-B-K10-120
		230 Vac	_	1N0	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.



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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

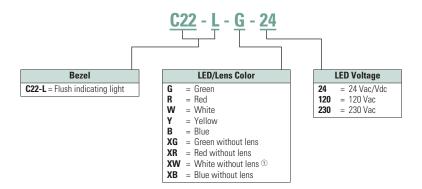
Protection Type

- IP67/IP69K
- NEMA 4X, 13

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

Valtana

Indicating Lights



Catalan Number

Product Selection

Indicating Lights

C22-L-_

Indicating Lights

Lana Calas



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.



Contents

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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

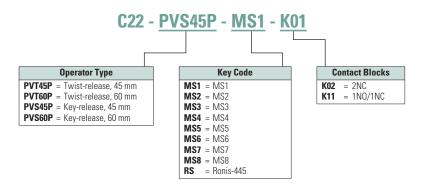
 Available in both twistrelease and keyed-release with either 45 mm or 60 mm operators

Protection Type

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

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

Emergency Stops



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

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

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22.5 mm Compact Pushbuttons—C22

37

Selector Switches

Contents

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 (nonkeyed) rated for 1 million mechanical operations
- Momentary selector switches are field convertible from momentary to maintained

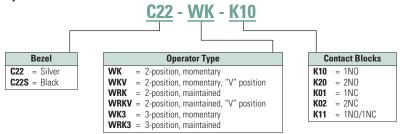
Protection Type

- IP65
- NEMA 4X, 13

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

Contact Block

Selector Switches—Non-Keyed



Silver Bezel

Black Bezel

Product Selection

Non-Illuminated, Knob Type



Non-Illuminated Selector Switches, Knob Type

Switching

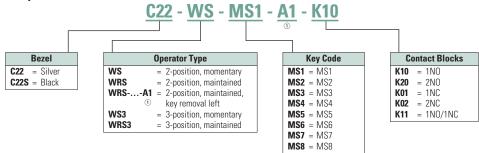


Туре	Position	Configuration	Catalog Number	Catalog Number
Two-position	Momentary	1N0	C22-WK-K10	C22S-WK-K10
	40°	2N0	C22-WK-K20	C22S-WK-K20
		1NC	C22-WK-K01	C22S-WK-K01
		2NC	C22-WK-K02	C22S-WK-K02
		1NO/1NC	C22-WK-K11	C22S-WK-K11
	Momentary	1N0	C22-WKV-K10	C22S-WKV-K10
	→ 60°	2N0	C22-WKV-K20	C22S-WKV-K20
	\checkmark	1NC	C22-WKV-K01	C22S-WKV-K01
		2NC	C22-WKV-K02	C22S-WKV-K02
		1NO/1NC	C22-WKV-K11	C22S-WKV-K11
	Maintained	1N0	C22-WRK-K10	C22S-WRK-K10
	40°	2N0	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	1NO	C22-WRKV-K10	C22S-WRKV-K10
	60°	2N0	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	2N0	C22-WK3-K20	C22S-WK3-K20
	^{40°} ₹ > ^{40°}	2NC	C22-WK3-K02	C22S-WK3-K02
	₩	1NO/1NC	C22-WK3-K11	C22S-WK3-K11
	Maintained	2N0	C22-WRK3-K20	C22S-WRK3-K20
	60° 60°	2NC	C22-WRK3-K02	C22S-WRK3-K02
	\checkmark	1NO/1NC	C22-WRK3-K11	C22S-WRK3-K11

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

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	Туре	Key Code	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
o-position	Momentary	MS1	1N0	C22-WS-MS1-K10	C22S-WS-MS1-K10
	key removal left		2N0	C22-WS-MS1-K20	C22S-WS-MS1-K20
	40°		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	1N0	C22-WS-MS2-K10	C22S-WS-MS2-K10
			2N0	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	1N0	C22-WS-MS3-K10	C22S-WS-MS3-K10
			2N0	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
		MS4	1NO/1NC	C22-WS-MS3-K11	C22S-WS-MS3-K11
			1N0	C22-WS-MS4-K10	C22S-WS-MS4-K10
			2N0	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	1N0	C22-WS-MS5-K10	C22S-WS-MS5-K10
			2N0	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.

22.5 mm Compact Pushbuttons—C22

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C22(S)-WRS-MS_

Non-Illuminated Selector Switches, Key Operated, continued



Position	Туре	Key Code	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Two-position, continued	Momentary key removal left	MS6	1N0	C22-WS-MS6-K10	C22S-WS-MS6-K10
			2N0	C22-WS-MS6-K20	C22S-WS-MS6-K20
	40°		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	1N0	C22-WS-MS7-K10	C22S-WS-MS7-K10
			2N0	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	1N0	C22-WS-MS8-K10	C22S-WS-MS8-K10
			2N0	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	1N0	C22-WRS-MS1-K10	C22S-WRS-MS1-K10
			2N0	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	1N0	C22-WRS-MS2-K10	C22S-WRS-MS2-K10
			2N0	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
			2N0	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	
			2N0	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	1N0	C22-WRS-MS5-K10	C22S-WRS-MS5-K10	
			2N0	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	
		MS6	1NO	C22-WRS-MS6-K10	C22S-WRS-MS6-K10	
			2N0	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	
			2N0	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	
		MS8	1NO	C22-WRS-MS7-K10	C22S-WRS-MS7-K10	
			2N0	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	
wo-position	Maintained key removal left 40°	MS1	1N0	C22-WRS-MS1-A1-K10	C22S-WRS-MS1-A1-K10	
			2N0	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	
hree Position	Momentary Key Removal Center 40° 40°	MS1	2N0	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	MS1	2N0	C22-WRS3-MS1-K20	C22S-WRS3-MS1-K20	
	Key Removal Left/Right		2NC	C22-WRS3-MS1-K02	C22S-WRS3-MS1-K02	
	60° 60°		1NO/1NC	C22-WRS3-MS1-K11	C22S-WRS3-MS1-K11	

 $\textbf{Note:} \ \mathsf{Momentary} \ \mathsf{selector} \ \mathsf{switches} \ \mathsf{can} \ \mathsf{be} \ \mathsf{field} \ \mathsf{converted} \ \mathsf{to} \ \mathsf{maintained}.$

Technical Data and Specifications

22.5 mm Compact Pushbuttons—C22

			Pushbutton Ad Illuminated Pu	shbuttons C22	Indicator	Selector Switch	Key-Operated	Emergency Stop/ Emergency Switching		
Description	Unit		Momentary	Maintained	Lights C22	Actuators C22	Buttons C22	OFF Pushbuttons C22		
General										
Standards					IE	EC/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						t, constant, to IEC 60068-2-78 vat, 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	Ui	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 — N/O contact: statistically determined 1 failure 1 failure per 17 x 106 operations N/C contact: statistically determined N/C contact: statistically determined 1 failure 1 failure per 0.9 x 10 ⁶ operations 0.9 x 10 ⁶ operations				tions rmined 1 failure per			
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	Α	10	10	_	10	10	10		

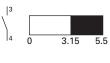
22.5 mm Compact Pushbuttons—C22

22.5 mm Compact Pushbuttons—C22, continued

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

Contact Travel

Contact Travel Diagram





Contact closed Contact open

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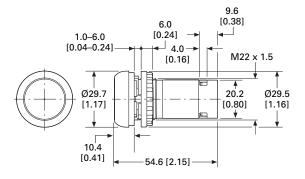
Dimensions

Approximate Dimensions in mm [in]

Illuminated Pushbuttons

Flat

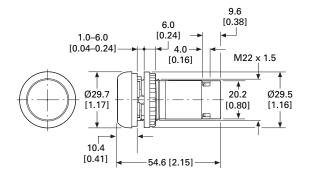
C22(S)-DRL_/C22(S)-DL_



Pushbutton Actuators

Flat

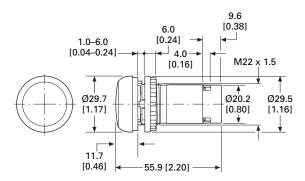
C22(S)-DR_/C22(S)-D_



Indicating Lights

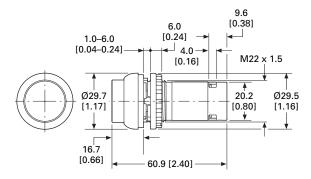
Flat

C22-L



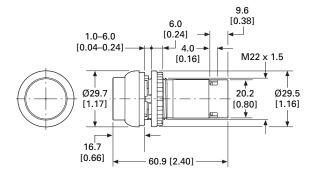
Extended

C22(S)-DRLH_/C22(S)-DLH_



Extended

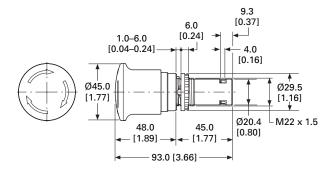
C22(S)-DRH_/C22(S)-DH_



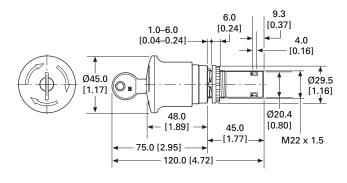
Approximate Dimensions in mm [in]

Emergency Stop/Emergency Switching OFF Pushbuttons

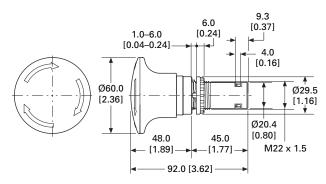
C22-PVT45P



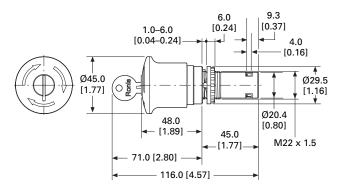
C22-PVT45P-MS



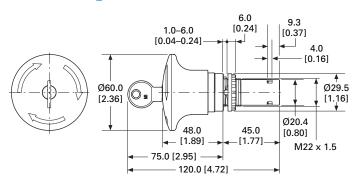
C22-PVT60P_



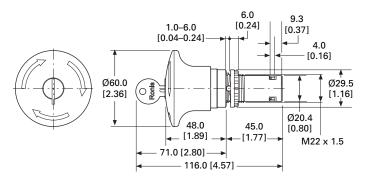
C22-PVT45P-RS



C22-PVT60P-MS_



C22-PVT60P-MS_

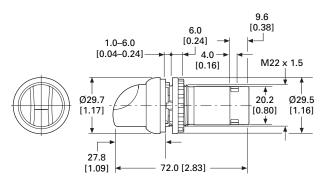


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Approximate Dimensions in mm [in]

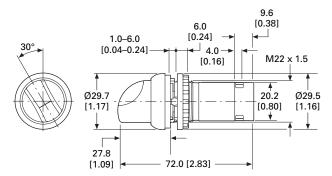
Selector Switch Actuators

C22(S)-W(R)K_



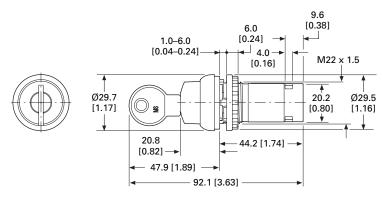
Selector Switch Actuators/V Position

C22(S)-W(R)KV_

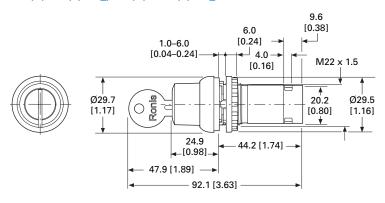


Key Operated Actuators

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



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



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