22.5 mm RMQ Compact Pushbuttons—C22

Contents

Product Overview

Product Description

Eaton's 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.

The 2017 product extension C22 with pigtail has more than doubled the portfolio. The C22 with pigtail now allows customers the ability to directly mount the product without the need for pushbutton enclosures. With three different connection methods and multiple lengths, the C22 with pigtail can be used for a wide range of applications.

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
- Pigtail lengths vary from 0.2 to 3.5 m and allow three connection options—M8, M12 and flying lead

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 washdown environment, which also means oil tight
- C22 with pigtail has an IP65 rear rating, eliminating the need for an enclosure in dust and water jet applications

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.

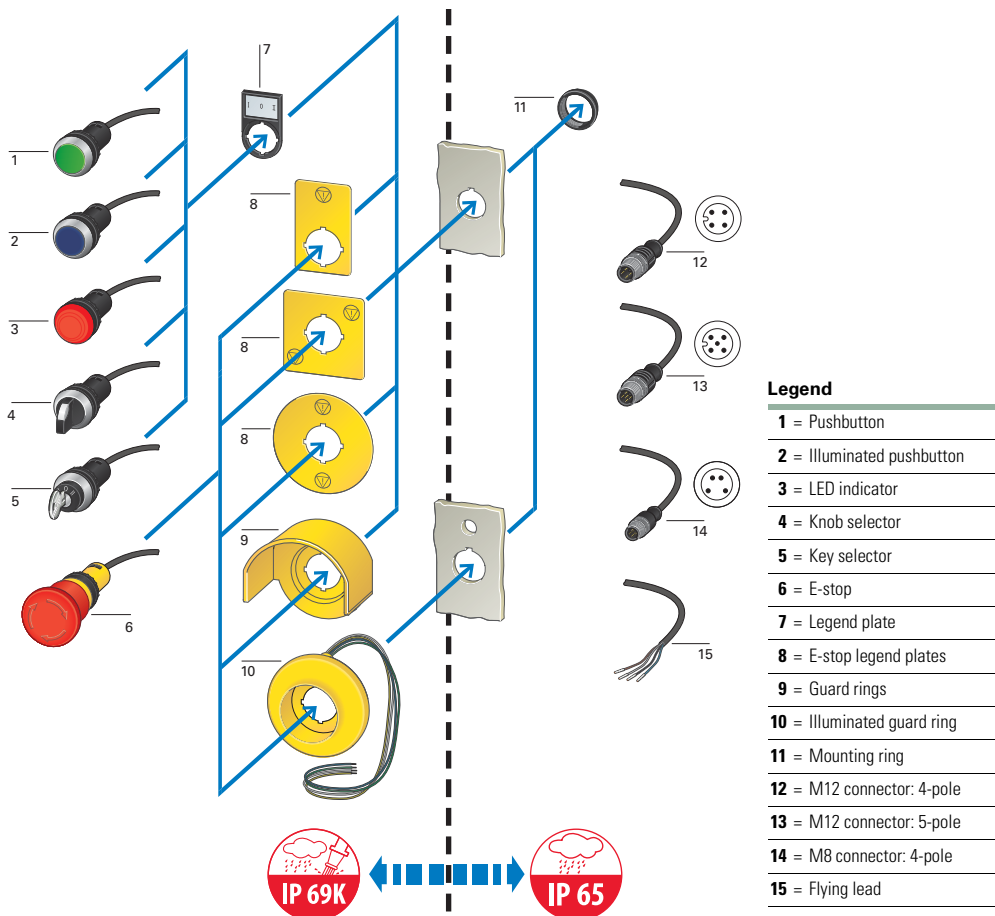All products carry ratings of NEMA 1, 3R, 4X, 12 and 13

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Features

- Field convertible maintained pushbuttons from maintained to momentary
- 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
- Eliminate enclosure, on machine installations

- 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
- M12/M8 connections allow connection directly into communications systems such as SmartWire-DT or AS6

Legend

1	=	Pushbutton
2	=	Illuminated pushbutton
3	=	LED indicator
4	=	Knob selector
5	=	Key selector
6	=	E-stop
7	=	Legend plate
8	=	E-stop legend plates
9	=	Guard rings
10	=	Illuminated guard ring
11	=	Mounting ring
12	=	M12 connector: 4-pole
13	=	M12 connector: 5-pole
14	=	M8 connector: 4-pole
15	=	Flying lead

IP 69K ⟷ IP 65

Product Selection Guide

Pushbuttons

Description	Non-illuminated, flush		Non-illuminated, flush, pigtail (M8/M12/flying lead)		Illuminated, flush		Illuminated, flush, pigtail (M8/M12/flying lead)	
Operator	Momentary	Maintained	Momentary	Maintained	Momentary	Maintained	Momentary	Maintained
Product Selection	Page V7-T1-135	Page V7-T1-137	Page V7-T1-136	Page V7-T1-138	Page V7-T1-141	Page V7-T1-143	Page V7-T1-142	Page V7-T1-144

Extended Pushbuttons

Description	Non-illuminated, extended		Illuminated, extended	
Operator	Momentary	Maintained	Momentary	Maintained
Product Selection	Page V7-T1-139	Page V7-T1-140	Page V7-T1-145	Page V7-T1-146

Indicating Lights

Description	Indicating lights	Indicating lights with pigtail (M8/M12/flying lead)
Product Selection	Page V7-T1-148	Page V7-T1-149

Emergency Stops

Description	Twist release	Keyed-release	Twist release with or without indicator and flying lead/M12	Push-Pull with Pigtail (flying lead/M12)
Product Selection	Page V7-T1-151	Page V7-T1-151	Page V7-T1-152	Page V7-T1-152

Selector Switches

Description	Non-illuminated, knob type	Key-operated	Non-illuminated, knob type, with pigtail	Key-operated with pigtail
Product Selection	Page V7-T1-154	Page V7-T1-156	Page V7-T1-155	Page V7-T1-158

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Pushbuttons—Non-Illuminated and Illuminated

Contents

Pushbuttons—Non-Illuminated and Illuminated

Product Description

Eaton's 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. They also feature IP65 rear ratings when purchased with pigtail, M8/M12/flying lead.

Note: For additional accessories, please see **Pages V7-T1-105** to **V7-T1-111**, 22.5 mm Modular Pushbuttons—M22 Accessories.

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
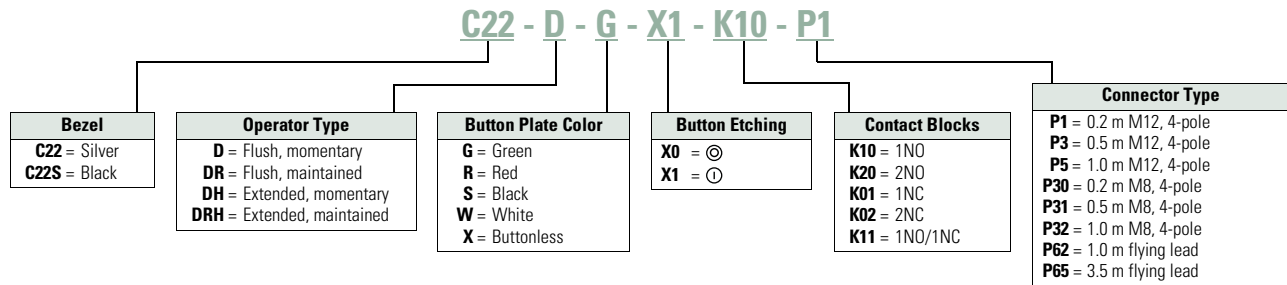- Pigtail option allows direct machine mounting

Protection Type

- IP67/IP69K
- NEMA 4X, 13
- IP65 rear (pigtail devices)

Catalog Number Selection

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

Non-Illuminated Pushbuttons

C22 - D - G - X1 - K10 - P1

Bezel		Operator Type		Button Plate Color		Button Etching		Contact Blocks		Connector Type
C22 = Silver		**D** = Flush, momentary		**G** = Green		**X0** = ◎		**K10** = 1NO		**P1** = 0.2 m M12, 4-pole
C22S = Black		**DR** = Flush, maintained		**R** = Red		**X1** = ①		**K20** = 2NO		**P3** = 0.5 m M12, 4-pole
		DH = Extended, momentary		**S** = Black				**K01** = 1NC		**P5** = 1.0 m M12, 4-pole
		DRH = Extended, maintained		**W** = White				**K02** = 2NC		**P30** = 0.2 m M8, 4-pole
				X = Buttonless				**K11** = 1NO/1NC		**P31** = 0.5 m M8, 4-pole
										P32 = 1.0 m M8, 4-pole
										P62 = 1.0 m flying lead
										P65 = 3.5 m flying lead

Product Selection

Non-Illuminated Pushbuttons, 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**

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Non-Illuminated Pushbuttons, Flush, Momentary, with Pigtail

C22-D-_

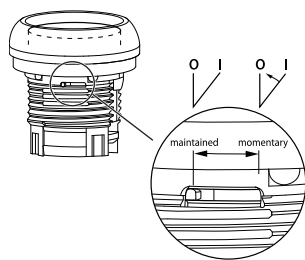| Button Color	Contacts	Connector Length	Connector Type	Silver Bezel Catalog Number
Green	1NO	0.2	M8	**C22-D-G-K10-P30**
	1NO	0.2	M12	**C22-D-G-K10-P1**
	1NO	0.5	M8	**C22-D-G-K10-P31**
	1NO	0.5	M12	**C22-D-G-K10-P3**
	1NO	1	M8	**C22-D-G-K10-P32**
	1NO	1	M12	**C22-D-G-K10-P5**
	1NO	1	Flying lead	**C22-D-G-K10-P62**
	1NO	3.5	Flying lead	**C22-D-G-K10-P65**
Red	1NC	0.2	M8	**C22-D-R-K01-P30**
	1NC	0.2	M12	**C22-D-R-K01-P1**
	1NC	0.5	M8	**C22-D-R-K01-P31**
	1NC	0.5	M12	**C22-D-R-K01-P3**
	1NC	1	M8	**C22-D-R-K01-P32**
	1NC	1	M12	**C22-D-R-K01-P5**
	1NC	1	Flying lead	**C22-D-R-K01-P62**
	1NC	3.5	Flying lead	**C22-D-R-K01-P65**
Black	1NC	0.2	M8	**C22-D-S-K01-P30**
	1NC	0.2	M12	**C22-D-S-K01-P1**
	1NC	0.5	M8	**C22-D-S-K01-P31**
	1NC	0.5	M12	**C22-D-S-K01-P3**
	1NC	1	M8	**C22-D-S-K01-P32**
	1NC	1	M12	**C22-D-S-K01-P5**
	1NC	1	Flying lead	**C22-D-S-K01-P62**
	1NC	3.5	Flying lead	**C22-D-S-K01-P65**
White	1NO	0.2	M8	**C22-D-W-K10-P30**
	1NO	0.2	M12	**C22-D-W-K10-P1**
	1NO	0.5	M8	**C22-D-W-K10-P31**
	1NO	0.5	M12	**C22-D-W-K10-P3**
	1NO	1	M8	**C22-D-W-K10-P32**
	1NO	1	M12	**C22-D-W-K10-P5**
	1NO	1	Flying lead	**C22-D-W-K10-P62**
	1NO	3.5	Flying lead	**C22-D-W-K10-P65**
Buttonless	1NO	0.2	M8	**C22-D-X-K10-P30**
	1NO	0.2	M12	**C22-D-X-K10-P1**
	1NO	0.5	M8	**C22-D-X-K10-P31**
	1NO	0.5	M12	**C22-D-X-K10-P3**
	1NO	1	M8	**C22-D-X-K10-P32**
	1NO	1	M12	**C22-D-X-K10-P5**
	1NO	1	Flying lead	**C22-D-X-K10-P62**
	1NO	3.5	Flying lead	**C22-D-X-K10-P65**
	2NO	1	Flying lead	**C22-D-X-K20-P62**
	2NO	3.5	Flying lead	**C22-D-X-K20-P65**
	1NC/1NO	1	Flying lead	**C22-D-X-K11-P62**
	1NC/1NO	3.5	Flying lead	**C22-D-X-K11-P65**
	1NC	0.2	M8	**C22-D-X-K01-P30**
	1NC	0.2	M12	**C22-D-X-K01-P1**
	1NC	0.5	M8	**C22-D-X-K01-P31**
	1NC	0.5	M12	**C22-D-X-K01-P3**
	1NC	1	M8	**C22-D-X-K01-P32**
	1NC	1	M12	**C22-D-X-K01-P5**
	1NC	1	Flying lead	**C22-D-X-K01-P62**
	1NC	3.5	Flying lead	**C22-D-X-K01-P65**
	2NC	1	Flying lead	**C22-D-X-K02-P62**
	2NC	3.5	Flying lead	**C22-D-X-K02-P65**

Non-Illuminated Pushbuttons, 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.

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Non-Illuminated Pushbuttons, Flush, Maintained, with Pigtail

C22-DR-_

Non-Illuminated Pushbuttons, Flush, Maintained, with Pigtail

Button Color	Contacts	Connector Length	Connector Type	Silver Bezel Catalog Number
Green	1NO	0.2	M8	C22-DR-G-K10-P30
	1NO	0.2	M12	C22-DR-G-K10-P1
	1NO	0.5	M8	C22-DR-G-K10-P31
	1NO	0.5	M12	C22-DR-G-K10-P3
	1NO	1	M8	C22-DR-G-K10-P32
	1NO	1	M12	C22-DR-G-K10-P5
	1NO	1	Flying lead	C22-DR-G-K10-P62
	1NO	3.5	Flying lead	C22-DR-G-K10-P65
Red	1NC	0.2	M8	C22-DR-R-K01-P30
	1NC	0.2	M12	C22-DR-R-K01-P1
	1NC	0.5	M8	C22-DR-R-K01-P31
	1NC	0.5	M12	C22-DR-R-K01-P3
	1NC	1	M8	C22-DR-R-K01-P32
	1NC	1	M12	C22-DR-R-K01-P5
	1NC	1	Flying lead	C22-DR-R-K01-P62
	1NC	3.5	Flying lead	C22-DR-R-K01-P65
Black	1NC	0.2	M8	C22-DR-S-K01-P30
	1NC	0.2	M12	C22-DR-S-K01-P1
	1NC	0.5	M8	C22-DR-S-K01-P31
	1NC	0.5	M12	C22-DR-S-K01-P3
	1NC	1	M8	C22-DR-S-K01-P32
	1NC	1	M12	C22-DR-S-K01-P5
	1NC	1	Flying lead	C22-DR-S-K01-P62
	1NC	3.5	Flying lead	C22-DR-S-K01-P65
White	1NO	0.2	M8	C22-DR-W-K10-P30
	1NO	0.2	M12	C22-DR-W-K10-P1
	1NO	0.5	M8	C22-DR-W-K10-P31
	1NO	0.5	M12	C22-DR-W-K10-P3
	1NO	1	M8	C22-DR-W-K10-P32
	1NO	1	M12	C22-DR-W-K10-P5
	1NO	1	Flying lead	C22-DR-W-K10-P62
	1NO	3.5	Flying lead	C22-DR-W-K10-P65
Buttonless	1NO	0.2	M8	C22-DR-X-K10-P30
	1NO	0.2	M12	C22-DR-X-K10-P1
	1NO	0.5	M8	C22-DR-X-K10-P31
	1NO	0.5	M12	C22-DR-X-K10-P3
	1NO	1	M8	C22-DR-X-K10-P32
	1NO	1	M12	C22-DR-X-K10-P5
	1NO	1	Flying lead	C22-DR-X-K10-P62
	1NO	3.5	Flying lead	C22-DR-X-K10-P65
	2NO	1	Flying lead	C22-DR-X-K20-P62
	2NO	3.5	Flying lead	C22-DR-X-K20-P65
	1NC/1NO	1	Flying lead	C22-DR-X-K11-P62
	1NC/1NO	3.5	Flying lead	C22-DR-X-K11-P65
	1NC	0.2	M8	C22-DR-X-K01-P30
	1NC	0.2	M12	C22-DR-X-K01-P1
	1NC	0.5	M8	C22-DR-X-K01-P31
	1NC	0.5	M12	C22-DR-X-K01-P3
	1NC	1	M8	C22-DR-X-K01-P32
	1NC	1	M12	C22-DR-X-K01-P5
	1NC	1	Flying lead	C22-DR-X-K01-P62
	1NC	3.5	Flying lead	C22-DR-X-K01-P65
	2NC	1	Flying lead	C22-DR-X-K02-P62
	2NC	3.5	Flying lead	C22-DR-X-K02-P65

Non-Illuminated Pushbuttons, Extended, Momentary

C22(S)-DH-_

Non-Illuminated Pushbuttons, Extended, Momentary

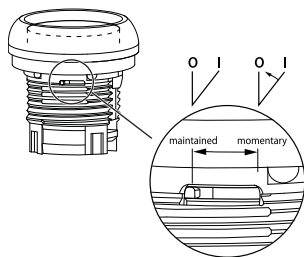| Button Color	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	—	1NO	C22-DH-G-K10	C22S-DH-G-K10
	—	2NO	C22-DH-G-K20	C22S-DH-G-K20
	—	1NO/1NC	C22-DH-G-K11	C22S-DH-G-K11
	X1	1NO	C22-DH-G-X1-K10	C22S-DH-G-X1-K10
	X1	2NO	C22-DH-G-X1-K20	C22S-DH-G-X1-K20
	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

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Non-Illuminated Pushbuttons, Extended, Maintained

C22(S)-DRH-_

Non-Illuminated Pushbuttons, Extended, Maintained

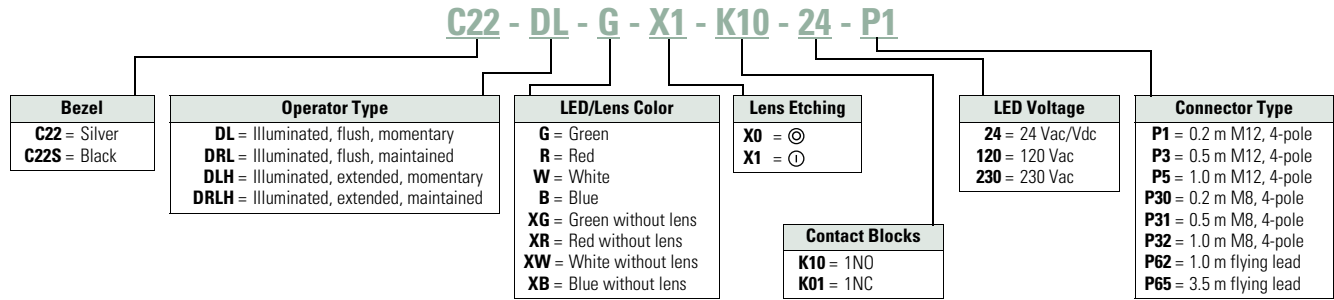| Button Color	Button Etching	Contact Block Configuration	Silver Bezel Catalog Number	Black Bezel Catalog Number
Green	—	1NO	C22-DRH-G-K10	C22S-DRH-G-K10
	—	2NO	C22-DRH-G-K20	C22S-DRH-G-K20
	—	1NO/1NC	C22-DRH-G-K11	C22S-DRH-G-K11
	X1	1NO	C22-DRH-G-X1-K10	C22S-DRH-G-X1-K10
	X1	2NO	C22-DRH-G-X1-K20	C22S-DRH-G-X1-K20
	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

C22 - DL - G - X1 - K10 - 24 - P1

Bezel	Operator Type	LED/Lens Color	Lens Etching	LED Voltage	Connector Type
C22 = Silver **C22S** = Black	**DL** = Illuminated, flush, momentary **DRL** = Illuminated, flush, maintained **DLH** = Illuminated, extended, momentary **DRLH** = Illuminated, extended, maintained	**G** = Green **R** = Red **W** = White **B** = Blue **XG** = Green without lens **XR** = Red without lens **XW** = White without lens **XB** = Blue without lens	**X0** = ◎ **X1** = ①	**24** = 24 Vac/Vdc **120** = 120 Vac **230** = 230 Vac	**P1** = 0.2 m M12, 4-pole **P3** = 0.5 m M12, 4-pole **P5** = 1.0 m M12, 4-pole **P30** = 0.2 m M8, 4-pole **P31** = 0.5 m M8, 4-pole **P32** = 1.0 m M8, 4-pole **P62** = 1.0 m flying lead **P65** = 3.5 m flying lead

Contact Blocks
K10 = 1NO
K01 = 1NC

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	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	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
	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

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Illuminated Pushbuttons, Flush, Momentary, with Pigtail

C22-DL-_

Illuminated Pushbuttons, Flush, Momentary, with Pigtail

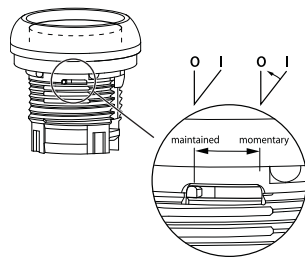| Button Color	Contacts	Connector Length	Connector Type	Silver Bezel Catalog Number
Green	1NO	0.2	M8	**C22-DL-G-K10-24-P30**
	1NO	0.2	M12	**C22-DL-G-K10-24-P1**
	1NO	0.5	M8	**C22-DL-G-K10-24-P31**
	1NO	0.5	M12	**C22-DL-G-K10-24-P3**
	1NO	1	M8	**C22-DL-G-K10-24-P32**
	1NO	1	M12	**C22-DL-G-K10-24-P5**
	1NO	1	Flying lead	**C22-DL-G-K10-24-P62**
	1NO	3.5	Flying lead	**C22-DL-G-K10-24-P65**
Red	1NC	0.2	M8	**C22-DL-R-K01-24-P30**
	1NC	0.2	M12	**C22-DL-R-K01-24-P1**
	1NC	0.5	M8	**C22-DL-R-K01-24-P31**
	1NC	0.5	M12	**C22-DL-R-K01-24-P3**
	1NC	1	M8	**C22-DL-R-K01-24-P32**
	1NC	1	M12	**C22-DL-R-K01-24-P5**
	1NC	1	Flying lead	**C22-DL-R-K01-24-P62**
	1NC	3.5	Flying lead	**C22-DL-R-K01-24-P65**
Blue	1NO	0.2	M8	**C22-DL-B-K10-24-P30**
	1NO	0.2	M12	**C22-DL-B-K10-24-P1**
	1NO	0.5	M8	**C22-DL-B-K10-24-P31**
	1NO	0.5	M12	**C22-DL-B-K10-24-P3**
	1NO	1	M8	**C22-DL-B-K10-24-P32**
	1NO	1	M12	**C22-DL-B-K10-24-P5**
	1NO	1	Flying lead	**C22-DL-B-K10-24-P62**
	1NO	3.5	Flying lead	**C22-DL-B-K10-24-P65**
White	1NO	0.2	M8	**C22-DL-W-K10-24-P30**
	1NO	0.2	M12	**C22-DL-W-K10-24-P1**
	1NO	0.5	M8	**C22-DL-W-K10-24-P31**
	1NO	0.5	M12	**C22-DL-W-K10-24-P3**
	1NO	1	M8	**C22-DL-W-K10-24-P32**
	1NO	1	M12	**C22-DL-W-K10-24-P5**
	1NO	1	Flying lead	**C22-DL-W-K10-24-P62**
	1NO	3.5	Flying lead	**C22-DL-W-K10-24-P65**

Illuminated Pushbuttons, 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	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	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	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.

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Illuminated Pushbuttons, Flush, Maintained, with Pigtail

C22_DRL-G-_

Illuminated Pushbuttons, Flush, Maintained, with Pigtail

Button Color	Contacts	Connector Length	Connector Type	Silver Bezel Catalog Number
Green	1NO	0.2	M8	**C22-DRL-G-K10-24-P30**
	1NO	0.2	M12	**C22-DRL-G-K10-24-P1**
	1NO	0.5	M8	**C22-DRL-G-K10-24-P31**
	1NO	0.5	M12	**C22-DRL-G-K10-24-P3**
	1NO	1	M8	**C22-DRL-G-K10-24-P32**
	1NO	1	M12	**C22-DRL-G-K10-24-P5**
	1NO	1	Flying lead	**C22-DRL-G-K10-24-P62**
	1NO	3.5	Flying lead	**C22-DRL-G-K10-24-P65**
Red	1NC	0.2	M8	**C22-DRL-R-K01-24-P30**
	1NC	0.2	M12	**C22-DRL-R-K01-24-P1**
	1NC	0.5	M8	**C22-DRL-R-K01-24-P31**
	1NC	0.5	M12	**C22-DRL-R-K01-24-P3**
	1NC	1	M8	**C22-DRL-R-K01-24-P32**
	1NC	1	M12	**C22-DRL-R-K01-24-P5**
	1NC	1	Flying lead	**C22-DRL-R-K01-24-P62**
	1NC	3.5	Flying lead	**C22-DRL-R-K01-24-P65**
Blue	1NO	0.2	M8	**C22-DRL-B-K10-24-P30**
	1NO	0.2	M12	**C22-DRL-B-K10-24-P1**
	1NO	0.5	M8	**C22-DRL-B-K10-24-P31**
	1NO	0.5	M12	**C22-DRL-B-K10-24-P3**
	1NO	1	M8	**C22-DRL-B-K10-24-P32**
	1NO	1	M12	**C22-DRL-B-K10-24-P5**
	1NO	1	Flying lead	**C22-DRL-B-K10-24-P62**
	1NO	3.5	Flying lead	**C22-DRL-B-K10-24-P65**
White	1NO	0.2	M8	**C22-DRL-W-K10-24-P30**
	1NO	0.2	M12	**C22-DRL-W-K10-24-P1**
	1NO	0.5	M8	**C22-DRL-W-K10-24-P31**
	1NO	0.5	M12	**C22-DRL-W-K10-24-P3**
	1NO	1	M8	**C22-DRL-W-K10-24-P32**
	1NO	1	M12	**C22-DRL-W-K10-24-P5**
	1NO	1	Flying lead	**C22-DRL-W-K10-24-P62**
	1NO	3.5	Flying lead	**C22-DRL-W-K10-24-P65**

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Illuminated Pushbuttons, 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 Pushbuttons, Extended, Maintained

C22(S)-DRLH-_

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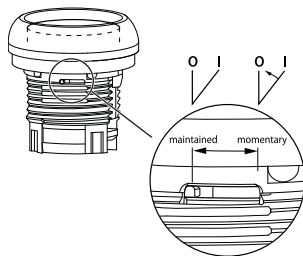
Note: Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.

Indicating Lights

Contents

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.

Indicating lights with pigtail have options for M12, M8, or flying lead connectors, providing high degree of protection options.

Note: For additional accessories, please see **Pages V7-T1-105** to **V7-T1-111**, 22.5 mm Modular Pushbuttons—M22 Accessories.

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
- Units with pigtail allow for direct machine mounting with high degree of protection backside
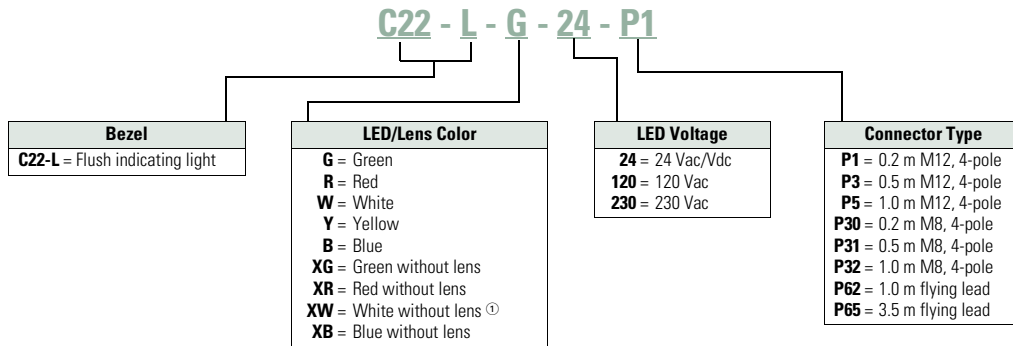
Protection Type

- IP67/IP69K
- NEMA 4X, 13
- IP65 rear rating with pigtail

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

Indicating Lights

<div align="center">

C22 - L - G - 24 - P1

</div>

Bezel	LED/Lens Color	LED Voltage	Connector Type
C22-L = Flush indicating light	**G** = Green **R** = Red **W** = White **Y** = Yellow **B** = Blue **XG** = Green without lens **XR** = Red without lens **XW** = White without lens ① **XB** = Blue without lens	**24** = 24 Vac/Vdc **120** = 120 Vac **230** = 230 Vac	**P1** = 0.2 m M12, 4-pole **P3** = 0.5 m M12, 4-pole **P5** = 1.0 m M12, 4-pole **P30** = 0.2 m M8, 4-pole **P31** = 0.5 m M8, 4-pole **P32** = 1.0 m M8, 4-pole **P62** = 1.0 m flying lead **P65** = 3.5 m flying lead

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.

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C22 with Pigtail LED Options
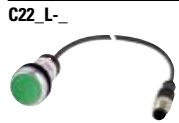
C22_L-_

C22 with Pigtail LED Options

24 Vac/Vdc only indicating lights.

Color	Connector Type	0.2 m Catalog Number	0.5 m Catalog Number	1.0 m Catalog Number	3.5 m Catalog Number
Green	M8	C22-L-G-24-P30	C22-L-G-24-P31	C22-L-G-24-P32	—
	M12	C22-L-G-24-P1	C22-L-G-24-P3	C22-L-G-24-P5	—
	Flying lead	—	—	C22-L-G-24-P62	C22-L-G-24-P65
Red	M8	C22-L-R-24-P30	C22-L-R-24-P31	C22-L-R-24-P32	—
	M12	C22-L-R-24-P1	C22-L-R-24-P3	C22-L-R-24-P5	—
	Flying lead	—	—	C22-L-R-24-P62	C22-L-R-24-P65
White	M8	C22-L-W-24-P30	C22-L-W-24-P31	C22-L-W-24-P32	—
	M12	C22-L-W-24-P1	C22-L-W-24-P3	C22-L-W-24-P5	—
	Flying lead	—	—	C22-L-W-24-P62	C22-L-W-24-P65
Yellow	M8	C22-L-Y-24-P30	C22-L-Y-24-P31	C22-L-Y-24-P32	—
	M12	C22-L-Y-24-P1	C22-L-Y-24-P3	C22-L-Y-24-P5	—
	Flying lead	—	—	C22-L-Y-24-P62	C22-L-Y-24-P65
Blue	M8	C22-L-B-24-P30	C22-L-B-24-P31	C22-L-B-24-P32	—
	M12	C22-L-B-24-P1	C22-L-B-24-P3	C22-L-B-24-P5	—
	Flying lead	—	—	C22-L-B-24-P62	C22-L-B-24-P65

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Emergency Stops

Contents

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.

E-stops with pigtails allow for direct machine mounting, eliminating the need for an enclosure with high degree of rear protection. Flying leads also allow for quick termination to nearby controls or functional safety devices.

Note: For additional accessories, please see **Pages V7-T1-105** to **V7-T1-111**, 22.5 mm Modular Pushbuttons—M22 Accessories.

Features

- Available in push-pull, twist-release, twist-release with indicator, and key release 38 mm through 60 mm operators
- Available with M12 or flying lead pigtails, allowing direct machine mounting and easy reliable connections
- Meet functional safety requirements for E-stops

Protection Type

- Twist-Release
  - IP67/IP69K
- Keyed-Release
  - IP66
- NEMA 4X, 13
- With pigtail
  - IP65 rear rating

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 - P10

Operator Type	Key Code	Contact Blocks	Connector Type
PVT45P = Twist-release, 45 mm **PVT60P** = Twist-release, 60 mm **PVS45P** = Key-release, 45 mm **PVS60P** = Key-release, 60 mm	**MS1** = MS1 **MS2** = MS2 **MS3** = MS3 **MS4** = MS4 **MS5** = MS5 **MS6** = MS6 **MS7** = MS7 **MS8** = MS8 **RS** = Ronis-445	**K02** = 2NC **K11** = 1NO/1NC	**P10** = 0.2 m M12, 5-pole **P62** = 1.0 m flying lead **P65** = 3.5 m flying lead
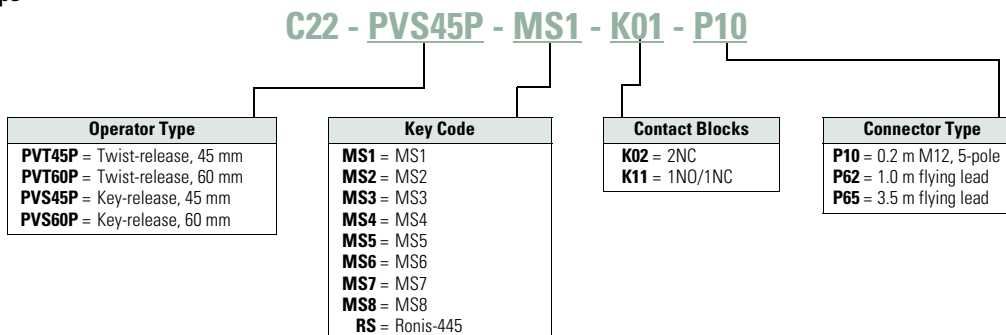
Product Selection

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**

Note: ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1.

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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**

E-stop

C22-PV-K11-P62

C22-PVT-K02-P65

C22-PVT45PMPIK 02-P65

E-stop

Release Method	Operator Size	Contacts	Connector Length	Connector Type	Catalog Number
Push-pull	38 mm	2NC	1	Flying lead	**C22-PV-K02-P62**
	38 mm	2NC	3.5	Flying lead	**C22-PV-K02-P65**
	38 mm	1NO/1NC	1	Flying lead	**C22-PV-K11-P62**
	38 mm	1NO/1NC	3.5	Flying lead	**C22-PV-K11-P65**
	45 mm	2NC	0.2	M12, 5-pole	**C22-PV-K02-P10**
Twist release	38 mm	2NC	1	Flying lead	**C22-PVT-K02-P62**
	38 mm	2NC	3.5	Flying lead	**C22-PVT-K02-P65**
	38 mm	1NO/1NC	1	Flying lead	**C22-PVT-K11-P62**
	38 mm	1NO/1NC	3.5	Flying lead	**C22-PVT-K11-P65**
	45 mm	2NC	1	Flying lead	**C22-PVT45P-K02-P62**
	45 mm	2NC	3.5	Flying lead	**C22-PVT45P-K02-P65**
	45 mm	1NO/1NC	1	Flying lead	**C22-PVT45P-K11-P62**
	45 mm	1NO/1NC	3.5	Flying lead	**C22-PVT45P-K11-P65**
	45 mm	2NC	0.2	M12, 5-pole	**C22-PVT45P-K02-P10**
Twist release mechanical indication	45 mm	2NC	1	Flying lead	**C22-PVT45PMPIK02-P62**
	45 mm	2NC	3.5	Flying lead	**C22-PVT45PMPIK02-P65**
	45 mm	1NO/1NC	1	Flying lead	**C22-PVT45PMPIK11-P62**
	45 mm	1NO/1NC	3.5	Flying lead	**C22-PVT45PMPIK11-P65**

Note: ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1.

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.

Pigtail units come in M12, M8 or flying lead options.

Note: For additional accessories, please see **Pages V7-T1-105** to **V7-T1-111**, 22.5 mm Modular Pushbuttons—M22 Accessories.

Features

- Selector switch (non-keyed) rated for 1 million mechanical operations
- Rear pigtails provide IP65 front and rear ratings, eliminating enclosure requirements and reducing installation times

Protection Type

- IP65
- NEMA 4X, 13

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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

C22 - WK - K10 - P1

Bezel	Operator Type	Contact Blocks	Connector Type
C22 = Silver **C22S** = Black	**WK** = 2-position, momentary **WKV** = 2-position, momentary, "V" position **WRK** = 2-position, maintained **WRKV** = 2-position, maintained, "V" position **WK3** = 3-position, momentary **WRK3** = 3-position, maintained	**K10** = 1NO **K20** = 2NO **K01** = 1NC **K02** = 2NC **K11** = 1NO/1NC	**P1** = 0.2 m M12, 4-pole **P3** = 0.5 m M12, 4-pole **P5** = 1.0 m M12, 4-pole **P30** = 0.2 m M8, 4-pole **P31** = 0.5 m M8, 4-pole **P32** = 1.0 m M8, 4-pole **P62** = 1.0 m flying lead **P65** = 3.5 m flying lead
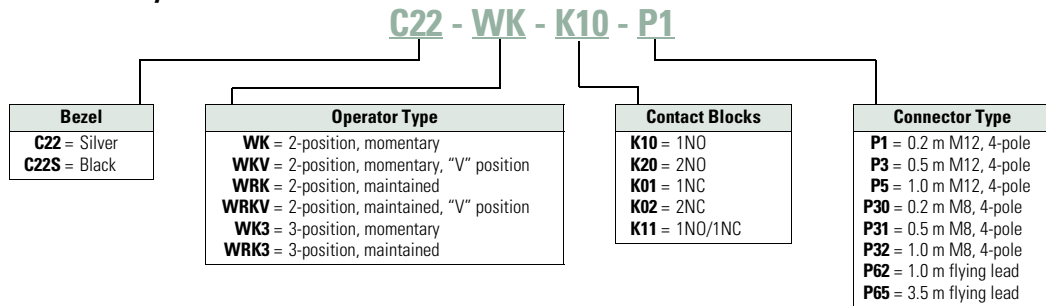
Product Selection

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° 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° 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.

Non-Illuminated Selector Switches, Knob Type, with Pigtail

C22-W_
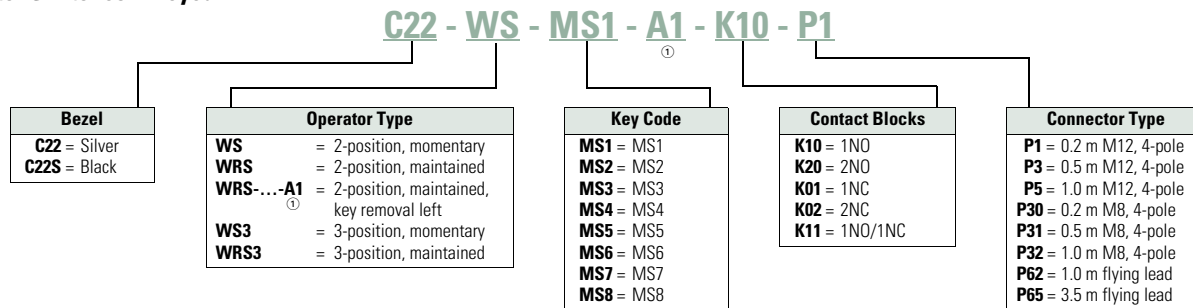

Non-Illuminated Selector Switches, Knob Type, with Pigtail

Type	Switching Position	Contacts	Connector Length	Connector Type	Silver Bezel Catalog Number
Two-position	Momentary	1NC	1	Flying lead	**C22-WK-K01-P62**
		1NC	3.5	Flying lead	**C22-WK-K01-P65**
		1NO	0.5	M8	**C22-WK-K10-P30**
		1NO	0.5	M12	**C22-WK-K10-P1**
		1NO	1	M8	**C22-WK-K10-P32**
		1NO	1	M12	**C22-WK-K10-P5**
		1NO	1	Flying lead	**C22-WK-K10-P62**
		1NO	3.5	Flying lead	**C22-WK-K10-P65**
		1NO/1NC	1	Flying lead	**C22-WK-K11-P62**
		1NO/1NC	3.5	Flying lead	**C22-WK-K11-P65**
		2NC	1	Flying lead	**C22-WK-K02-P62**
		2NC	3.5	Flying lead	**C22-WK-K02-P65**
		2NO	1	Flying lead	**C22-WK-K20-P62**
		2NO	3.5	Flying lead	**C22-WK-K20-P65**
	Maintained	1NC	1	Flying lead	**C22-WRK-K01-P62**
		1NC	3.5	Flying lead	**C22-WRK-K01-P65**
		1NO	0.5	M8	**C22-WRK-K10-P30**
		1NO	0.5	M12	**C22-WRK-K10-P1**
		1NO	1	M8	**C22-WRK-K10-P32**
		1NO	1	M12	**C22-WRK-K10-P5**
		1NO	1	Flying lead	**C22-WRK-K10-P62**
		1NO	3.5	Flying lead	**C22-WRK-K10-P65**
		1NO/1NC	1	Flying lead	**C22-WRK-K11-P62**
		1NO/1NC	3.5	Flying lead	**C22-WRK-K11-P65**
		2NC	1	Flying lead	**C22-WRK-K02-P62**
		2NC	3.5	Flying lead	**C22-WRK-K02-P65**
		2NO	1	Flying lead	**C22-WRK-K20-P62**
		2NO	3.5	Flying lead	**C22-WRK-K20-P65**
Three-position	Momentary	1NO/1NC	1	Flying lead	**C22-WK3-K11-P62**
		1NO/1NC	3.5	Flying lead	**C22-WK3-K11-P65**
		2NC	1	Flying lead	**C22-WK3-K02-P62**
		2NC	3.5	Flying lead	**C22-WK3-K02-P65**
		2NO	1	Flying lead	**C22-WK3-K20-P62**
		2NO	3.5	Flying lead	**C22-WK3-K20-P65**
	Maintained	1NO/1NC	1	Flying lead	**C22-WRK3-K11-P62**
		1NO/1NC	3.5	Flying lead	**C22-WRK3-K11-P65**
		2NC	1	Flying lead	**C22-WRK3-K02-P62**
		2NC	3.5	Flying lead	**C22-WRK3-K02-P65**
		2NO	1	Flying lead	**C22-WRK3-K20-P62**
		2NO	3.5	Flying lead	**C22-WRK3-K20-P65**

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Catalog Number Selection

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

Selector Switches—Keyed

C22 - WS - MS1 - A1 - K10 - P1
①

Bezel
C22 = Silver
C22S = Black

Operator Type	
WS	= 2-position, momentary
WRS	= 2-position, maintained
WRS-…-A1 ①	= 2-position, maintained, key removal left
WS3	= 3-position, momentary
WRS3	= 3-position, maintained

Key Code	
MS1	= MS1
MS2	= MS2
MS3	= MS3
MS4	= MS4
MS5	= MS5
MS6	= MS6
MS7	= MS7
MS8	= MS8

Contact Blocks	
K10 = 1NO
K20 = 2NO
K01 = 1NC
K02 = 2NC
K11 = 1NO/1NC

Connector Type	
P1 = 0.2 m M12, 4-pole
P3 = 0.5 m M12, 4-pole
P5 = 1.0 m M12, 4-pole
P30 = 0.2 m M8, 4-pole
P31 = 0.5 m M8, 4-pole
P32 = 1.0 m M8, 4-pole
P62 = 1.0 m flying lead
P65 = 3.5 m flying lead

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.

1

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
		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
		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° 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° 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.

Non-Illuminated Selector Switches, Key Operated, with Pigtail

C22-W_

Non-Illuminated Selector Switches, Key Operated, with Pigtail

Position	Switching Position	Contacts	Connector Length	Connector Type	Silver Bezel Catalog Number
Two-position	Momentary 40°	1NC	1 m	Flying lead	**C22-WS-MS1-K01-P62**
		1NC	3.5 m	Flying lead	**C22-WS-MS1-K01-P65**
		1NO	0.2 m	M12	**C22-WS-MS1-K10-P1**
		1NO	0.2 m	M8	**C22-WS-MS1-K10-P30**
		1NO	1 m	M12	**C22-WS-MS1-K10-P5**
		1NO	1 m	M8	**C22-WS-MS1-K10-P32**
		1NO	1 m	Flying lead	**C22-WS-MS1-K10-P62**
		1NO	3.5 m	Flying lead	**C22-WS-MS1-K10-P65**
		1NO/1NC	1 m	Flying lead	**C22-WS-MS1-K11-P62**
		1NO/1NC	3.5 m	Flying lead	**C22-WS-MS1-K11-P65**
		2NC	1 m	Flying lead	**C22-WS-MS1-K02-P62**
		2NC	3.5 m	Flying lead	**C22-WS-MS1-K02-P65**
		2NO	1 m	Flying lead	**C22-WS-MS1-K20-P62**
		2NO	3.5 m	Flying lead	**C22-WS-MS1-K20-P65**
	Maintained 60°	1NC	1 m	Flying lead	**C22-WRS-MS1-K01-P62**
		1NC	3.5 m	Flying lead	**C22-WRS-MS1-K01-P65**
		1NO	0.2 m	M12	**C22-WRS-MS1-K10-P1**
		1NO	0.2 m	M8	**C22-WRS-MS1-K10-P30**
		1NO	1 m	M12	**C22-WRS-MS1-K10-P5**
		1NO	1 m	M8	**C22-WRS-MS1-K10-P32**
		1NO	1 m	Flying lead	**C22-WRS-MS1-K10-P62**
		1NO	3.5 m	Flying lead	**C22-WRS-MS1-K10-P65**
		1NO/1NC	1 m	Flying lead	**C22-WRS-MS1-K11-P62**
		1NO/1NC	3.5 m	Flying lead	**C22-WRS-MS1-K11-P65**
		2NC	1 m	Flying lead	**C22-WRS-MS1-K02-P62**
		2NC	3.5 m	Flying lead	**C22-WRS-MS1-K02-P65**
		2NO	1 m	Flying lead	**C22-WRS-MS1-K20-P62**
		2NO	3.5 m	Flying lead	**C22-WRS-MS1-K20-P65**
Three-position	Momentary 40° 40°	1NO/1NC	1 m	Flying lead	**C22-WS3-MS1-K11-P62**
		1NO/1NC	3.5 m	Flying lead	**C22-WS3-MS1-K11-P65**
		2NC	1 m	Flying lead	**C22-WS3-MS1-K02-P62**
		2NC	3.5 m	Flying lead	**C22-WS3-MS1-K02-P65**
		2NO	1 m	Flying lead	**C22-WS3-MS1-K20-P62**
		2NO	3.5 m	Flying lead	**C22-WS3-MS1-K20-P65**
	Maintained 60° 60°	1NO/1NC	1 m	Flying lead	**C22-WRS3-MS1-K11-P62**
		1NO/1NC	3.5 m	Flying lead	**C22-WRS3-MS1-K11-P65**
		2NC	1 m	Flying lead	**C22-WRS3-MS1-K02-P62**
		2NC	3.5 m	Flying lead	**C22-WRS3-MS1-K02-P65**
		2NO	1 m	Flying lead	**C22-WRS3-MS1-K20-P62**
		2NO	3.5 m	Flying lead	**C22-WRS3-MS1-K20-P65**

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Technical Data and Specifications

22.5 mm RMQ Compact Pushbuttons—C22

Description	Unit		Pushbutton Actuators Illuminated Pushbuttons C22		Indicator Lights C22	Selector Switch Actuators C22	Key-Operated Buttons C22	Emergency Stop/ Emergency Switching OFF Pushbuttons C22
			Momentary	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 RMQ 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	4
110V	I_e	A	2	2	—	2	2	2
230V	I_e	A	1.5	1.5	—	1.5	1.5	1.5
DC-13								
24V	I_e	A	3	3	—	3	3	3
60V	I_e	A	1	1	—	1	1	1
110V	I_e	A	0.6	0.6	—	0.6	0.6	0.6
220V	I_e	A	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


```
|3
 \
|4
  0    3.15   5.5
```

```
|1
 /
|2
  0   2.2    5.5
```
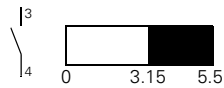
■ Contact closed

□ Contact open

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Dimensions

Approximate Dimensions in mm [in]

Illuminated Pushbuttons

Flat

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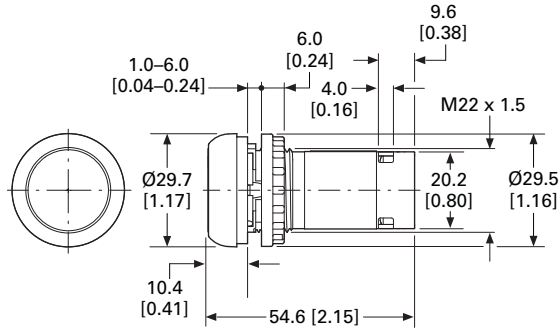
Extended

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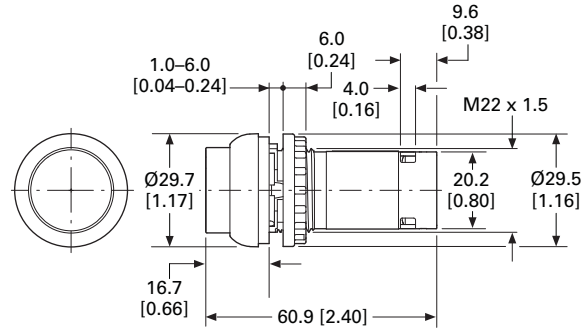
Pushbutton Actuators

Flat

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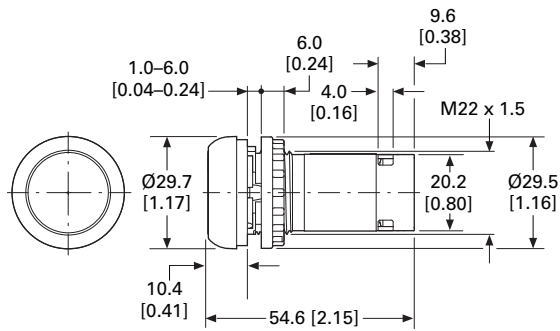
Extended

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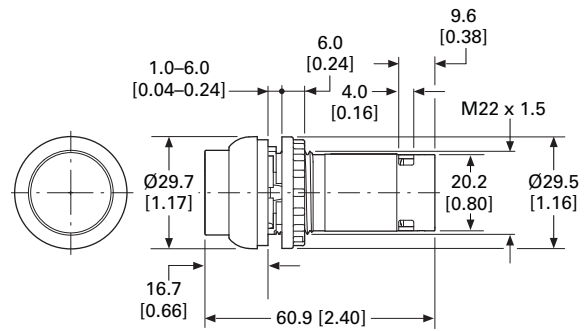
Indicating Lights

Flat

C22-L_
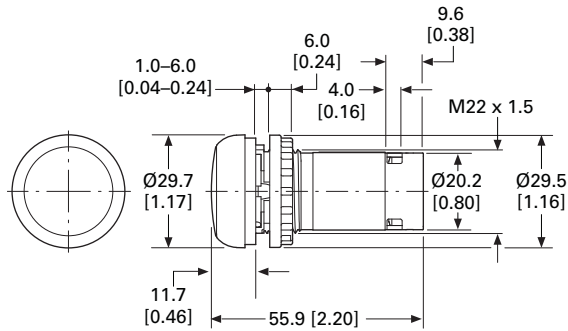
Approximate Dimensions in mm [in]

Emergency Stop/Emergency Switching OFF Pushbuttons

C22-PVT45P_
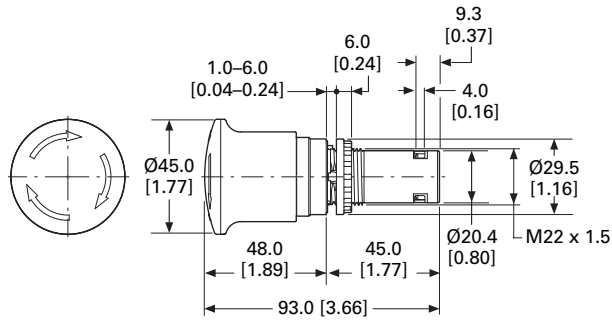
C22-PVT60P_
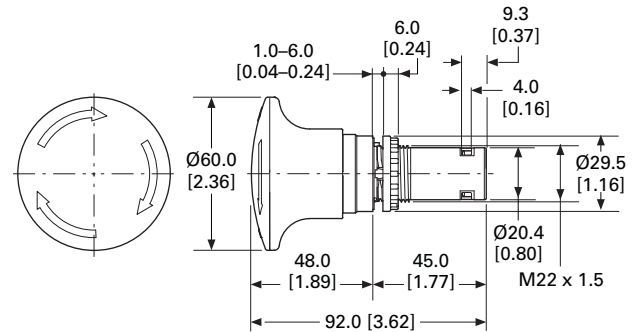
C22-PVT45P-MS_
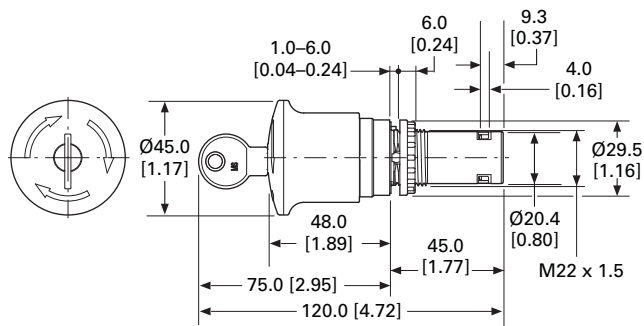
C22-PVT45P-RS_
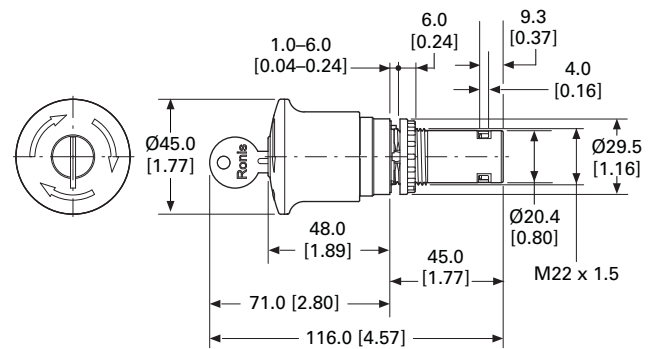
C22-PVT60P-MS_
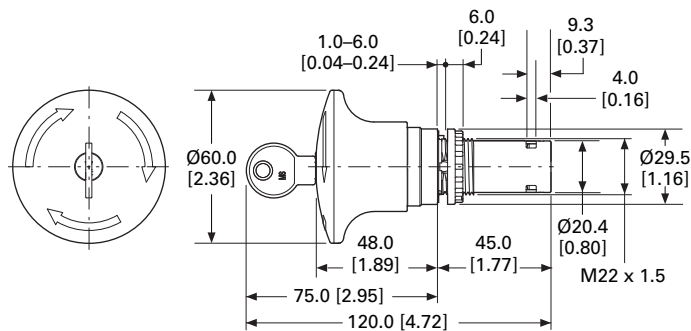
C22-PVT60P-MS_
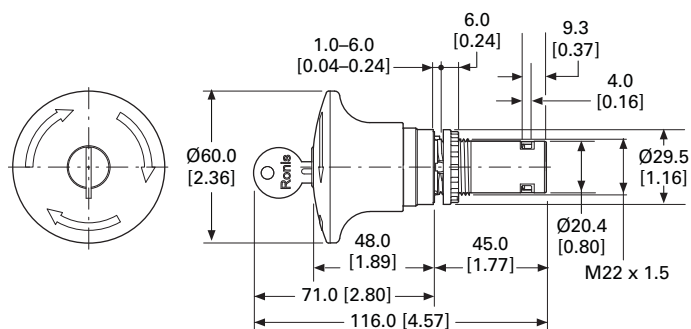
1

Approximate Dimensions in mm [in]

Selector Switch Actuators

C22(S)-W(R)K_
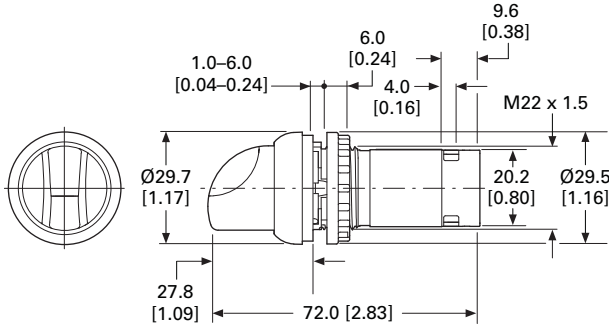
Selector Switch Actuators/V Position

C22(S)-W(R)KV_
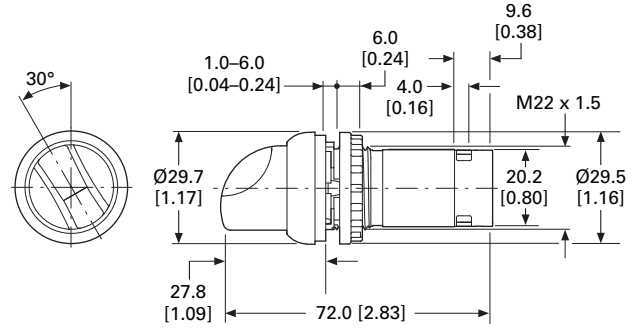
Key Operated Actuators

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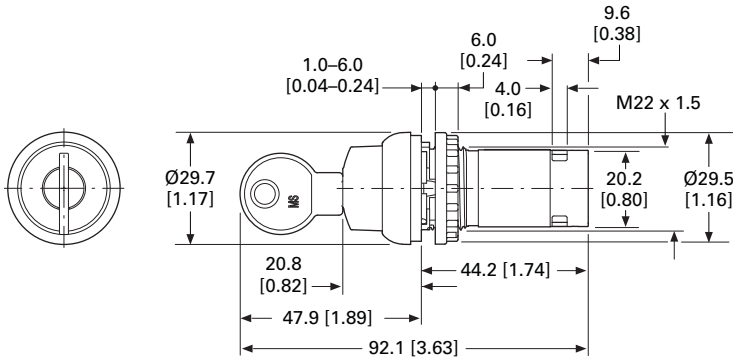
C22(S)-WS(3)-RS_/C22(S)-WRS(3)-RS_

1
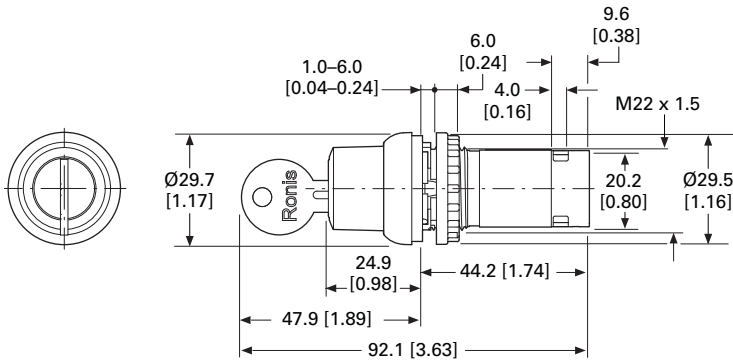
Approximate Dimensions in mm [in]

Pushbuttons, M12A
C22-D...-P1/-P3/-P5

M22 x 1.5

Ø29.7 [Ø1.17]

1.0–6.0 [0.04–0.24]

10.4 [0.41]

45.7 [1.80]
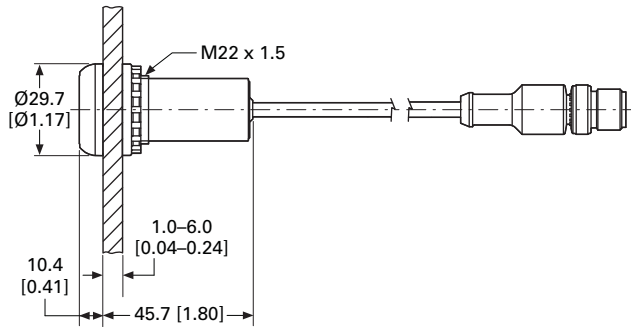
Pushbuttons, M8
C22-D...-P30/-P31/-P32

M22 x 1.5

Ø29.7 [Ø1.17]

1.0–6.0 [0.04–0.24]

10.4 [0.41]

45.7 [1.80]
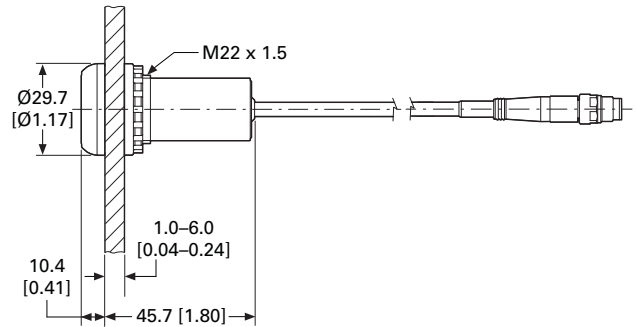
Pushbuttons, Unterminated Cable End, Flying Lead
C22-D...-P/-P62/-P65

M22 x 1.5

Ø29.7 [Ø1.17]

1.0–6.0 [0.04–0.24]

10.4 [0.41]

45.7 [1.80]
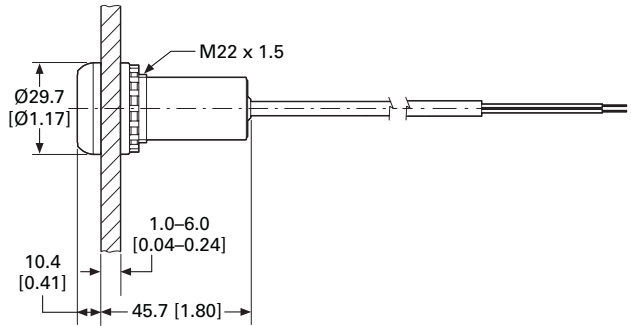
Indicator Lights, M12A
C22-L-...-P1/-P3/-P5

M22 x 1.5

Ø29.7 [Ø1.17]

1.0–6.0 [0.04–0.24]

11.7 [0.46]

45.7 [1.80]
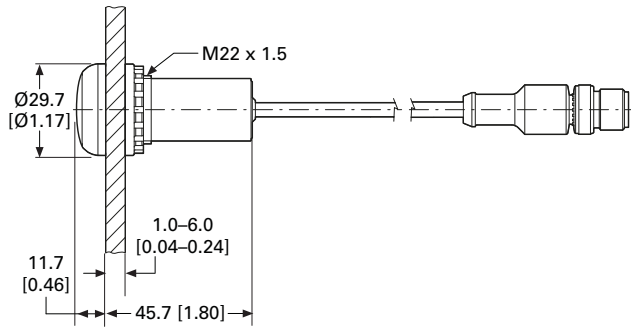
Indicator Lights, M8
C22-L-...-P30/-P31/-P32

M22 x 1.5

Ø29.7 [Ø1.17]

1.0–6.0 [0.04–0.24]

11.7 [0.46]

45.7 [1.80]
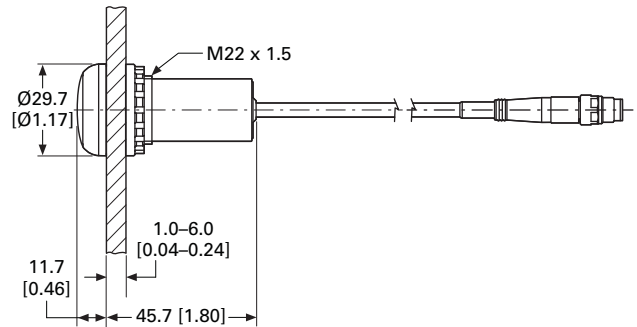
Indicator Lights, Unterminated Cable End, Flying Lead
C22-L-...-P62/-P65
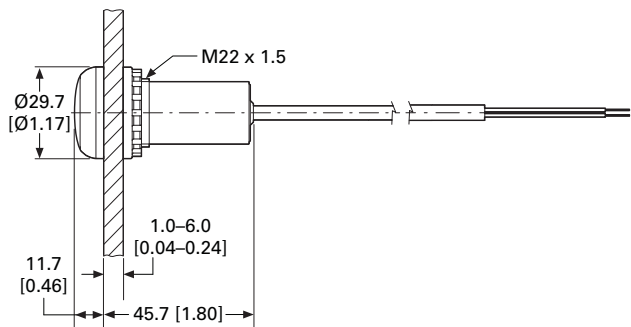
M22 x 1.5

Ø29.7 [Ø1.17]

1.0–6.0 [0.04–0.24]

11.7 [0.46]

45.7 [1.80]

1

Approximate Dimensions in mm [in]

Emergency Switching Off, M12A
C22-PVT...-P10

M22 x 1.5

Ø45.0 [Ø1.77]

1.0–6.0 [0.04–0.24]

48.4 [1.91]   45.7 [1.80]
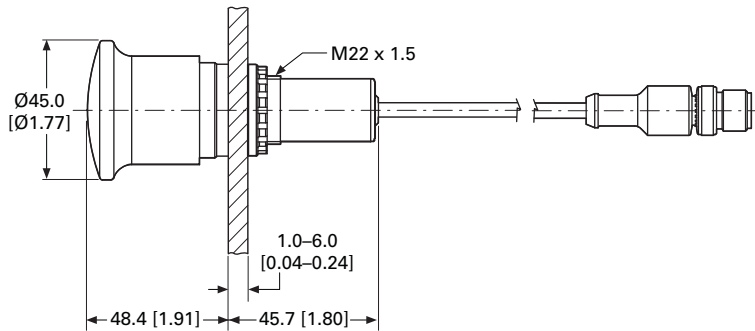
Emergency Switching Off, Unterminated Cable End, Flying Lead
C22-PVT...-P62/-P65

M22 x 1.5

Ø45.0 [Ø1.77]

1.0–6.0 [0.04–0.24]

48.4 [1.91]   45.7 [1.80]
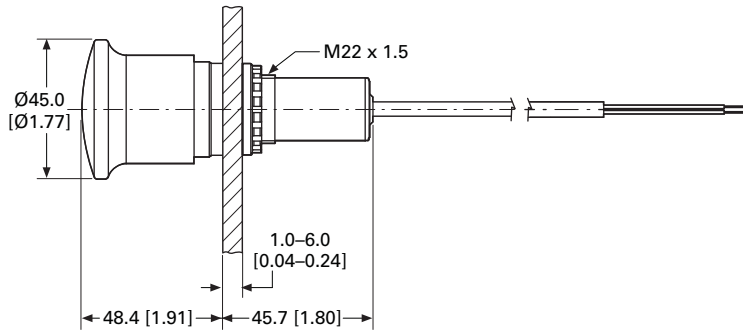
Emergency Switching Off, M12
C22-PV-...-P10

M22 x 1.5

Ø38.0 [Ø1.50]

1.0–6.0 [0.04–0.24]

48.3 [1.90]   45.7 [1.80]
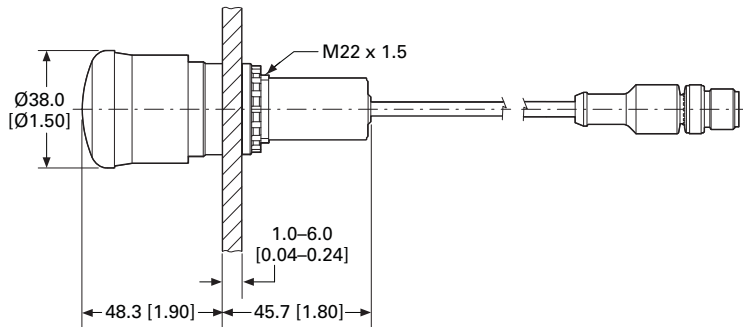
Emergency Switching Off, Unterminated Cable End, Flying Lead
C22-PV-...-P62/-P65

M22 x 1.5
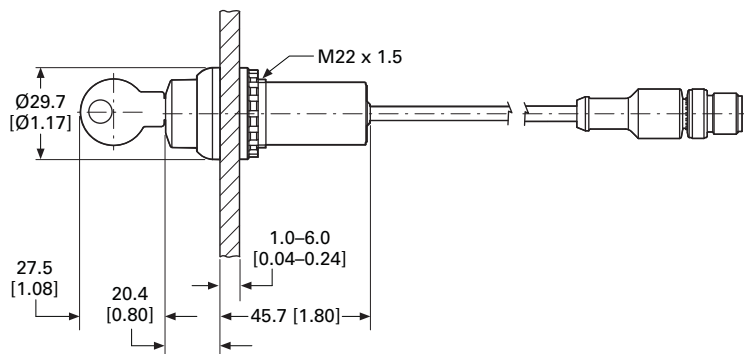
Ø38.0 [Ø1.50]

1.0–6.0 [0.04–0.24]

48.3 [1.90]   45.7 [1.80]
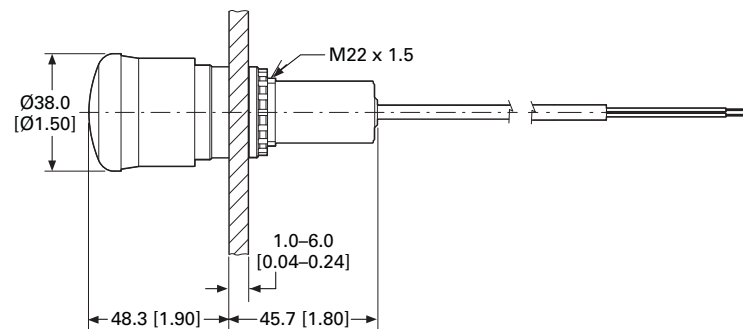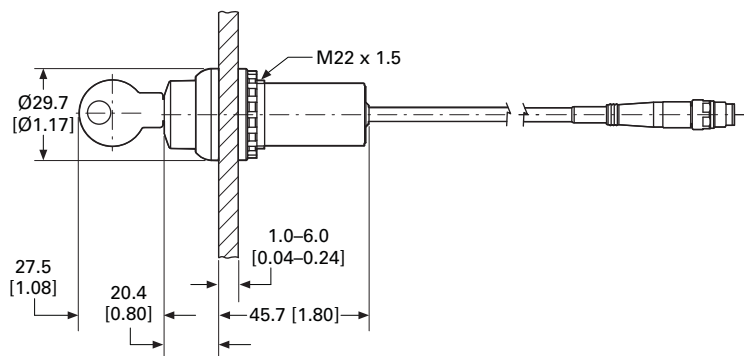
Approximate Dimensions in mm [in]

Key-Operated Buttons, M12A
C22-W(R)S(3)-MS1-...-P1/-P5

Key-Operated Buttons, M8
C22-W(R)S(3)-MS1-...-P30/-P32

Key-Operated Buttons, Unterminated Cable End, Flying Lead
C22-W(R)S(3)-MS1-...-P62/-P65