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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.

Non-Illuminated Pushbuttons

C22 - D - G - X1 - K10

Bezel		Operator Type		Button Plate Color		Button Etching		Contact Blocks	
C22	= Silver	**D**	= Flush, momentary	**G**	= Green	**X0**	= ◎	**K10**	= 1NO
C22S	= Black	**DR**	= Flush, maintained	**R**	= Red	**X1**	= ①	**K20**	= 2NO
		DH	= Extended, momentary	**S**	= Black			**K01**	= 1NC
		DRH	= Extended, maintained	**W**	= White			**K02**	= 2NC
				X	= Buttonless			**K11**	= 1NO/1NC
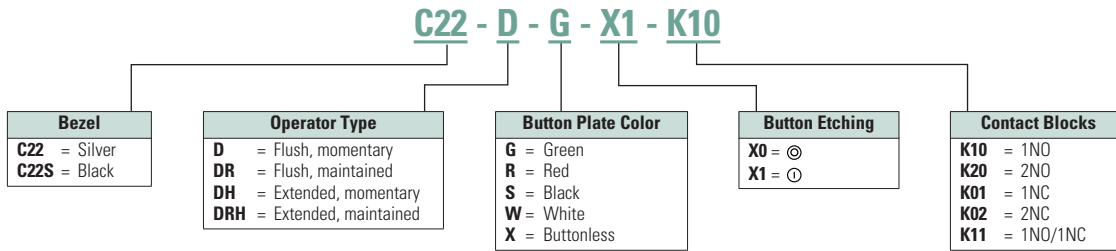
Product Selection

Non-Illuminated, Flush, Momentary

C22(S)-D-_

Non-Illuminated Pushbuttons, Flush, Momentary

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

Technical Data and Specifications

22.5 mm 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 106 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 106 operations N/C contact: statistically determined 1 failure per 0.9 x 10^6 operations		
at 24 Vdc/5 mA	H_F	Fault probability	Values follow	Values follow	—	Values follow	Values follow	Values follow
Max. short-circuit protective device								
Fuse	gG/gL	A	10	10	—	10	10	10

22.5 mm Compact Pushbuttons—C22, continued

Description	Unit		Push-button Actuators Illuminated Pushbuttons C22 Momentary	Maintained	Indicator Lights C22	Selector Switch Actuators C22	Key-Operated Buttons C22	Emergency Stop/ Emergency Switching OFF Pushbuttons C22
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	$\times 10^6$	0.4	0.4	—	0.4	0.4	0.4
230V/1.0A		$\times 10^6$	0.6	0.6	—	0.6	0.6	0.6

Contact Travel

Contact Travel Diagram

3
4
0   3.15   5.5

1
2
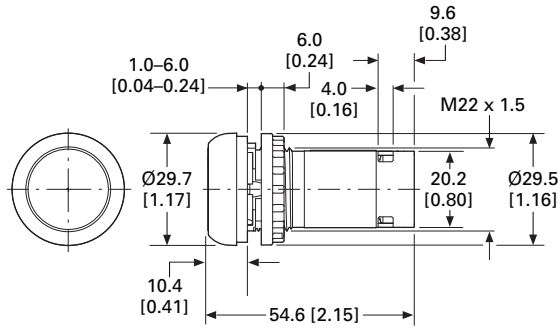0   2.2   5.5
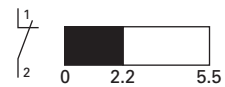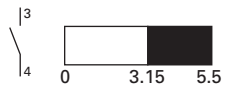
■ Contact closed
□ Contact open

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Dimensions
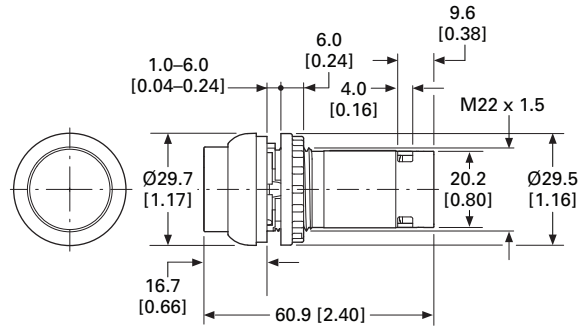Approximate Dimensions in mm [in]

Illuminated Pushbuttons

Flat

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

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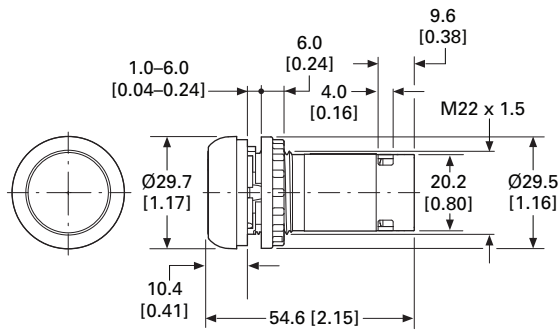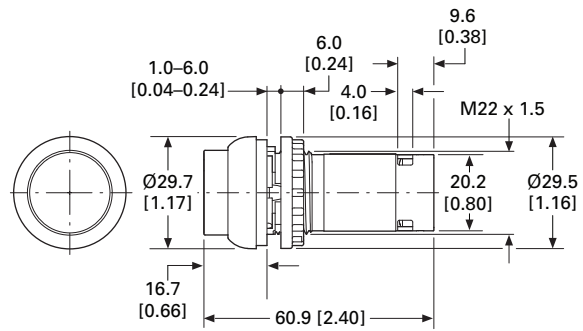
C22(S)-DRLH_/C22(S)-DLH_

Pushbutton Actuators

Flat

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

Extended

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

Indicating Lights

Flat

C22-L_