

37.5 Pushbuttons and Indicating Lights

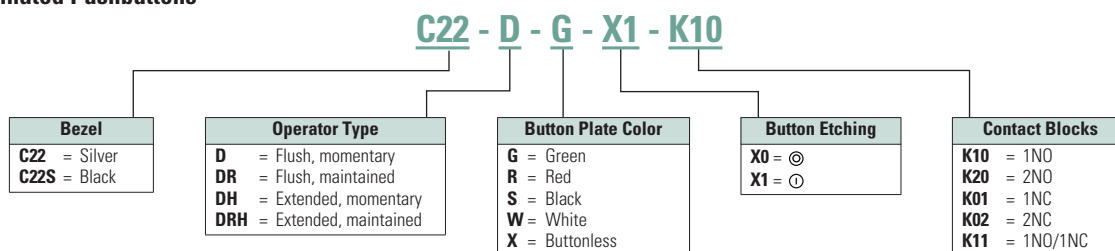
22.5 mm Compact Pushbuttons—C22

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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



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

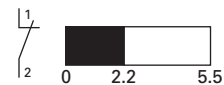
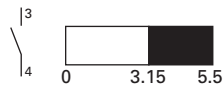
Description	Unit		Pushbutton Actuators		Indicator Lights C22	Selector Switch Actuators C22	Key-Operated Buttons C22	Emergency Stop/ Emergency Switching OFF Pushbuttons C22
			Illuminated Pushbuttons C22	Momentary				
General								
Standards		IEC/EN 60947 VDE 0660						
Lifespan, mechanical	Operations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

22.5 mm Compact Pushbuttons—C22, continued

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

Contact Travel

Contact Travel Diagram



 Contact closed
 Contact open

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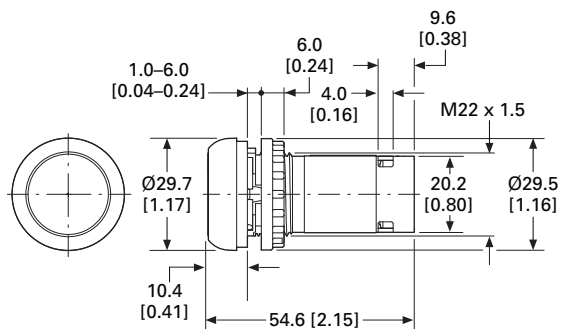
Dimensions

Approximate Dimensions in mm [in]

Illuminated Pushbuttons

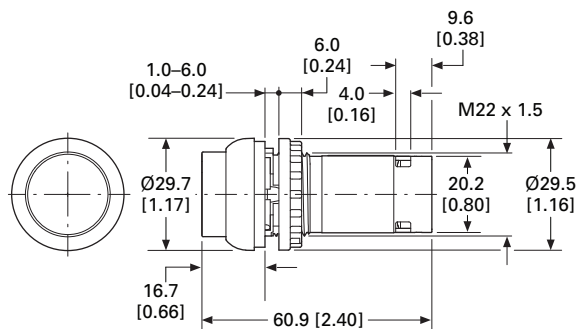
Flat

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



Extended

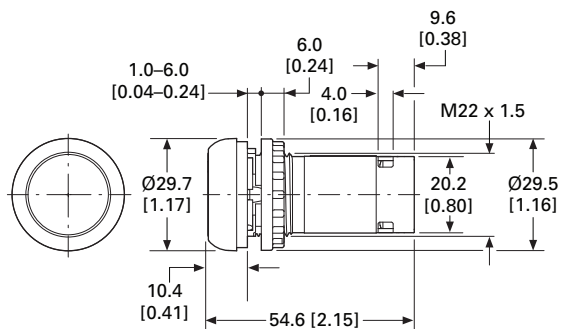
C22(S)-DRLH_/C22(S)-DLH_



Pushbutton Actuators

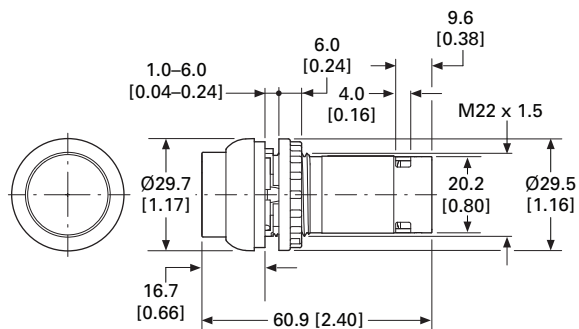
Flat

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



Extended

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



Indicating Lights

Flat

C22-L_

