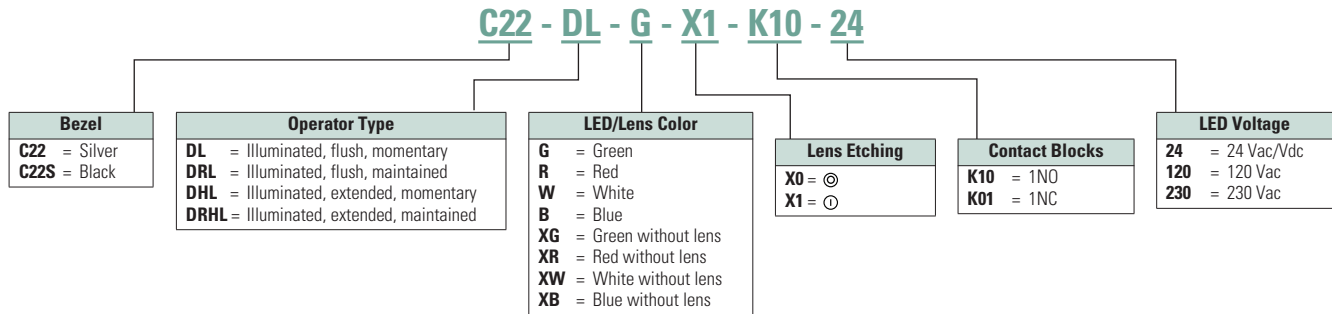


### Catalog Number Selection

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

#### Illuminated Pushbuttons



### Product Selection

#### Illuminated, Flush, Momentary

C22(S)-DL-

#### Illuminated Pushbuttons, Flush, Momentary



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

## Technical Data and Specifications

## 22.5 mm Compact Pushbuttons—C22

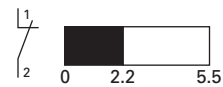
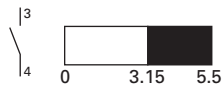
| Description   | Unit             | Pushbutton Actuators<br>Illuminated Pushbuttons C22 |   | Indicator<br>Lights C22 | Selector Switch<br>Actuators C22 | Key-Operated<br>Buttons C22   | Emergency Stop/<br>Emergency Switching<br>OFF Pushbuttons C22 |               |
|---|------------------|---|---|-------------------------|----------------------------------|---|---|---------------|
|   |                  | Momentary   | Maintained  |                         |                                  |   |   |               |
| <b>General</b>  |                  |   |   |                         |                                  |   |   |               |
| Standards   |                  | IEC/EN 60947 VDE 0660                               |   |                         |                                  |   |   |               |
| Lifespan, mechanical  | Operations       | x 10 <sup>6</sup>                                   | 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<br>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 <sup>2</sup>  |   | 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 <sup>2</sup>  |   | 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   |
| <b>Contacts</b>   |                  |   |   |                         |                                  |   |   |               |
| Rated impulse withstand voltage   | U <sub>imp</sub> | Vac   | 4000  | 4000                    | 4000                             | 4000  | 4000  | 4000          |
| Rated insulation voltage  | U <sub>i</sub>   | V   | 250   | 250                     | 250                              | 250   | 250   | 250           |
| Overtoltage category/pollution degree   |                  |   | III/3   | III/3                   | III/3                            | III/3   | III/3   | III/3         |
| Control circuit reliability   |                  |   |   |                         |                                  |   |   |               |
| at 5 Vdc/1 mA   | H <sub>F</sub>   | Fault probability                                   | Values follow   | Values follow           | —                                | Values follow   | Values follow   | Values follow |
| at 17 Vdc/7 mA  | H <sub>F</sub>   | Fault probability                                   | N/O contact: statistically determined 1 failure per 17 x 10 <sup>6</sup> operations<br>N/C contact: statistically determined 1 failure per 0.9 x 10 <sup>6</sup> operations | —                       | —                                | N/O contact: statistically determined 1 failure per 17 x 10 <sup>6</sup> operations<br>N/C contact: statistically determined 1 failure per 0.9 x 10 <sup>6</sup> operations |   |               |
| at 24 Vdc/5 mA  | H <sub>F</sub>   | 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       |           | Indicator Lights C22 | Selector Switch Actuators C22 | Key-Operated Buttons C22 | Emergency Stop/ Emergency Switching OFF Pushbuttons C22 |
|---------------------------|------------|-----------------------------|-----------|----------------------|-------------------------------|--------------------------|---|
|                           |            | Illuminated Pushbuttons C22 | Momentary |                      |                               |                          |   |
| <b>Switching Capacity</b> |            |                             |           |                      |                               |                          |   |
| 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 | $\times 10^6$               | 0.4       | 0.4                  | —                             | 0.4                      | 0.4   |
| 230V/1.0A                 |            | $\times 10^6$               | 0.6       | 0.6                  | —                             | 0.6                      | 0.6   |

Contact Travel

Contact Travel Diagram



- Contact closed
- Contact open

# 37.5

## Pushbuttons and Indicating Lights

### 22.5 mm Compact Pushbuttons—C22

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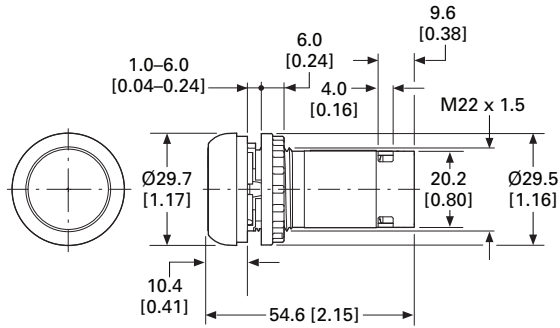
#### Dimensions

Approximate Dimensions in mm [in]

#### Illuminated Pushbuttons

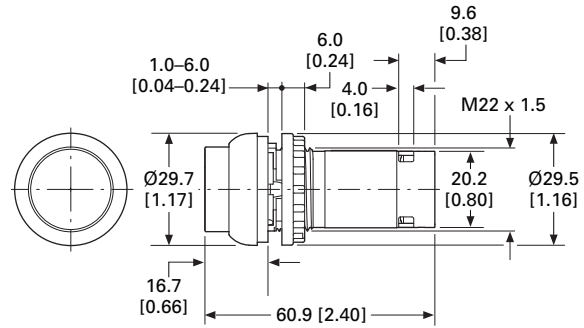
*Flat*

**C22(S)-DRL\_/C22(S)-DL\_**



*Extended*

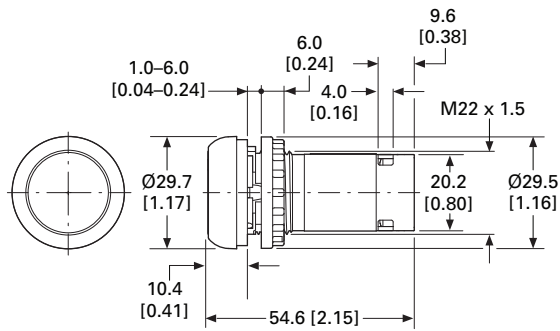
**C22(S)-DRLH\_/C22(S)-DLH\_**



#### Pushbutton Actuators

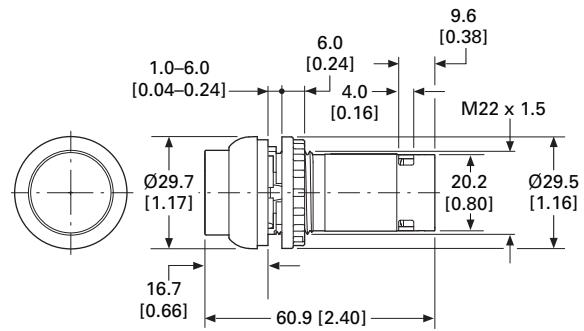
*Flat*

**C22(S)-DR\_/C22(S)-D\_**



*Extended*

**C22(S)-DRH\_/C22(S)-DH\_**



#### Indicating Lights

*Flat*

**C22-L\_**

