

## CR series

### Push button switch

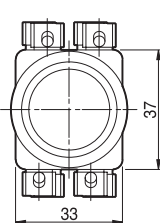
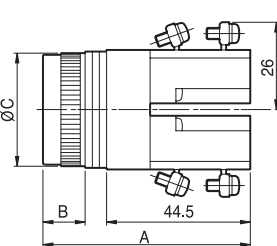
#### Suffix code

| Model                | Code                                                                                                | Description                              |
|----------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------|
| CR-                  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | CR series push button switch             |
| Installing dimension | 25                                                                                                  | Ø25                                      |
|                      | 30                                                                                                  | Ø30                                      |
| Type classification  | 1                                                                                                   | Push button switch (Momentary operation) |
| Contact composition  | 1                                                                                                   | 1a1b Contact                             |
|                      | 2                                                                                                   | 2a2b Contact                             |
| Cap color            | R                                                                                                   | Red                                      |
|                      | G                                                                                                   | Green                                    |
|                      | Y                                                                                                   | Yellow                                   |
|                      | B                                                                                                   | Blue                                     |
|                      | K                                                                                                   | Black                                    |

#### Specification

| Model    | Dimension | Operation function  | Contact composition | Rated current | Color of button cap                |
|----------|-----------|---------------------|---------------------|---------------|------------------------------------|
| CR-251-1 | Ø25       | Momentary operation | 1a1b Contact        | 5 A 250 V a.c | Red, Green, Yellow, Blue and Black |
| CR-251-2 |           |                     | 2a2b Contact        |               |                                    |
| CR-301-1 | Ø30       |                     | 1a1b Contact        |               |                                    |
| CR-301-2 |           |                     | 2a2b Contact        |               |                                    |

#### Dimension (unit : mm)

| Model                        | Design                                                                              | Dimension                                                                           |                                                                                      |  |  |
|------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|--|
| CR-251 (Ø25)<br>CR-301 (Ø30) |  |  |  |  |  |
|                              |                                                                                     |                                                                                     |                                                                                      |  |  |
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# CR series

## Emergency stop push button switch

### ●● Suffix code

| Model                | Code                                                                                                | Description                                              |
|----------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| CR-                  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | CR series emergency stop push button switch              |
| Installing dimension | 25                                                                                                  | Ø25                                                      |
|                      | 30                                                                                                  | Ø30                                                      |
| Type classification  | 7                                                                                                   | Emergency stop push button switch (momentary operation)  |
|                      | 7R                                                                                                  | Emergency stop push button switch (push lock–turn reset) |
| Contact composition  | 1                                                                                                   | 1a1b Contact                                             |
|                      | 2                                                                                                   | 2a2b Contact                                             |
| Cap color            | R                                                                                                   | Red                                                      |
|                      | G                                                                                                   | Green                                                    |

### ●● Specification

| Model     | Dimension | Operation function   | Contact composition | Rated current | Color of button cap |
|-----------|-----------|----------------------|---------------------|---------------|---------------------|
| CR-257-1  | Ø25       | Momentary operation  | 1a1b Contact        | 5 A 250 V a.c | red and green       |
| CR-257-2  |           |                      | 2a2b Contact        |               |                     |
| CR-307-1  | Ø30       | Momentary operation  | 1a1b Contact        | 5 A 250 V a.c | red and green       |
| CR-307-2  |           |                      | 2a2b Contact        |               |                     |
| CR-257R-1 | Ø25       | Push lock–turn reset | 1a1b Contact        | 5 A 250 V a.c | red and green       |
| CR-257R-2 |           |                      | 2a2b Contact        |               |                     |
| CR-307R-1 | Ø30       | Push lock–turn reset | 1a1b Contact        | 5 A 250 V a.c | red and green       |
| CR-307R-2 |           |                      | 2a2b Contact        |               |                     |

※ Default color of the emergency stop push button switch cap is red. Please order separately for the green color.

Control switch  
Combination display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued Products

### ●● Dimension (unit : mm)

| Model                                                                                                 | Design | Dimension                                                                                                                                                                                                                                                 |       |    |   |   |   |         |      |      |      |    |         |      |      |    |    |
|-------------------------------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----|---|---|---|---------|------|------|------|----|---------|------|------|----|----|
| <div>CR-257<br/>(Ø25, Momentary operation)</div> <div>CR-307<br/>(Ø30, Momentary operation)</div>     |        | <div></div> <div><table><tr><th>Model</th><th>A</th><th>B</th><th>C</th><th>D</th></tr><tr><td>CR-257</td><td>75.5</td><td>24.5</td><td>29.5</td><td>35</td></tr><tr><td>CR-307</td><td>76.5</td><td>24.5</td><td>34</td><td>40</td></tr></table></div>   | Model | A  | B | C | D | CR-257  | 75.5 | 24.5 | 29.5 | 35 | CR-307  | 76.5 | 24.5 | 34 | 40 |
| Model                                                                                                 | A      | B                                                                                                                                                                                                                                                         | C     | D  |   |   |   |         |      |      |      |    |         |      |      |    |    |
| CR-257                                                                                                | 75.5   | 24.5                                                                                                                                                                                                                                                      | 29.5  | 35 |   |   |   |         |      |      |      |    |         |      |      |    |    |
| CR-307                                                                                                | 76.5   | 24.5                                                                                                                                                                                                                                                      | 34    | 40 |   |   |   |         |      |      |      |    |         |      |      |    |    |
| <div>CR-257R<br/>(Ø25, push lock-turn reset)</div> <div>CR-307R<br/>(Ø30, push lock-turn reset)</div> |        | <div></div> <div><table><tr><th>Model</th><th>A</th><th>B</th><th>C</th><th>D</th></tr><tr><td>CR-257R</td><td>75.5</td><td>24.5</td><td>29.5</td><td>40</td></tr><tr><td>CR-307R</td><td>75.5</td><td>24.5</td><td>34</td><td>46</td></tr></table></div> | Model | A  | B | C | D | CR-257R | 75.5 | 24.5 | 29.5 | 40 | CR-307R | 75.5 | 24.5 | 34 | 46 |
| Model                                                                                                 | A      | B                                                                                                                                                                                                                                                         | C     | D  |   |   |   |         |      |      |      |    |         |      |      |    |    |
| CR-257R                                                                                               | 75.5   | 24.5                                                                                                                                                                                                                                                      | 29.5  | 40 |   |   |   |         |      |      |      |    |         |      |      |    |    |
| CR-307R                                                                                               | 75.5   | 24.5                                                                                                                                                                                                                                                      | 34    | 46 |   |   |   |         |      |      |      |    |         |      |      |    |    |

# CR series

## Pilot lamp

### Suffix code

| Model                  | Code                                                                                                                         | Description                                               |
|------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| CR-                    | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | CR series indicator                                       |
| Installing dimension   | 25                                                                                                                           | Ø25                                                       |
|                        | 30                                                                                                                           | Ø30                                                       |
| Type classification    | 2                                                                                                                            | Pilot lamp (Transformer attached type)                    |
|                        | 1                                                                                                                            | Pilot lamp (Without voltage dropping unit : 24 V d.c/a.c) |
| Power supply voltage   | 0                                                                                                                            | 24 V d.c/a.c                                              |
|                        | 1                                                                                                                            | 110 V a.c                                                 |
|                        | 2                                                                                                                            | 220 V a.c                                                 |
|                        | 3                                                                                                                            | 380 V a.c                                                 |
|                        | 4                                                                                                                            | 440 V a.c                                                 |
| Light source selection | L                                                                                                                            | LED (luminescent diode)                                   |
|                        |                                                                                                                              | Incandescent lamp                                         |
| Cap color              | R                                                                                                                            | Red                                                       |
|                        | G                                                                                                                            | Green                                                     |
|                        | Y                                                                                                                            | Yellow                                                    |
|                        | B                                                                                                                            | Blue                                                      |
|                        | W                                                                                                                            | White                                                     |

### Specification

#### Transformer attached type

| Model    | Installing dimension | Lamp voltage (Trans attached) |             | Color of lamp cap                  |
|----------|----------------------|-------------------------------|-------------|------------------------------------|
|          |                      | 1st voltage                   | 2nd voltage |                                    |
| CR-252-1 | Ø25                  | 110 V a.c                     | 6.3 V a.c   | Red, green, yellow, blue and white |
| CR-252-2 |                      | 220 V a.c                     |             |                                    |
| CR-252-3 |                      | 380 V a.c                     |             |                                    |
| CR-252-4 |                      | 440 V a.c                     |             |                                    |
| CR-302-1 | Ø30                  | 110 V a.c                     | 6.3 V a.c   | Red, green, yellow, blue and white |
| CR-302-2 |                      | 220 V a.c                     |             |                                    |
| CR-302-3 |                      | 380 V a.c                     |             |                                    |
| CR-302-4 |                      | 440 V a.c                     |             |                                    |

#### Without voltage dropping unit

| Model   | Installing dimension | Power supply voltage | Color of lamp cap                |
|---------|----------------------|----------------------|----------------------------------|
| CR-2510 | Ø25                  | 24 V d.c/a.c         | red, green, yellow, blue , white |
| CR-3010 | Ø30                  | 24 V d.c/a.c         | red, green, yellow, blue , white |

※ In case of the pilot lamp without voltage dropping unit, please refer to the "incandescent lamp and LED specification"

Control switch  
Combination display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

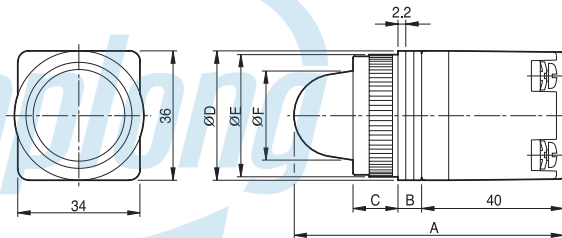
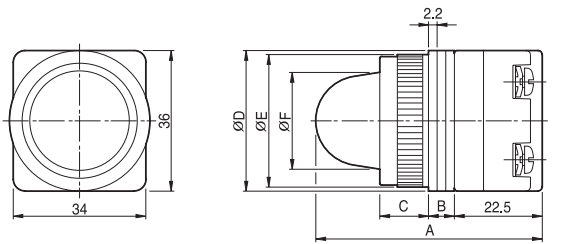
Control box  
Cable connector

Discontinued Products

### ●● Incandescent lamp and LED specification

| Classification | Incandescent lamp | LED (luminescent diode) |              |              |
|----------------|-------------------|-------------------------|--------------|--------------|
| Colors         | transparent       | Red                     | Green        | Yellow       |
| Rated current  | 6.3 V 150 mA      | 6 V 2.94 mA             | 6 V 9.6 mA   | 6 V 29.4 mA  |
|                | 24 V 40 mA        | 24 V 10.2 mA            | 24 V 10.8 mA | 24 V 10.2 mA |
|                | 110 V 18 mA       | 110 V 6.0 mA            | 110 V 4.6 mA | 110 V 6.0 mA |
|                | 220 V 14 mA       | 220 V 4.7 mA            | 220 V 5.1 mA | 220 V 4.7 mA |
| Base rating    | E10 (screw type)  |                         |              |              |

### ●● Dimension (unit : mm)

| Model                                                           | Design                                                                              | Dimension                                                                                                                                                                                                                                                                                                                                                                             |       |      |      |    |   |   |   |         |    |   |    |      |      |    |         |    |     |      |      |    |    |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|------|----|---|---|---|---------|----|---|----|------|------|----|---------|----|-----|------|------|----|----|
| CR-252 (Ø25)<br>CR-302 (Ø30)<br>Transformer attached type       |   |  <table><tr><th>Model</th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th></tr><tr><td>CR-252</td><td>70</td><td>6</td><td>13</td><td>31.5</td><td>29.5</td><td>20</td></tr><tr><td>CR-302</td><td>73</td><td>7.5</td><td>12.5</td><td>36.5</td><td>34</td><td>25</td></tr></table>     | Model | A    | B    | C  | D | E | F | CR-252  | 70 | 6 | 13 | 31.5 | 29.5 | 20 | CR-302  | 73 | 7.5 | 12.5 | 36.5 | 34 | 25 |
| Model                                                           | A                                                                                   | B                                                                                                                                                                                                                                                                                                                                                                                     | C     | D    | E    | F  |   |   |   |         |    |   |    |      |      |    |         |    |     |      |      |    |    |
| CR-252                                                          | 70                                                                                  | 6                                                                                                                                                                                                                                                                                                                                                                                     | 13    | 31.5 | 29.5 | 20 |   |   |   |         |    |   |    |      |      |    |         |    |     |      |      |    |    |
| CR-302                                                          | 73                                                                                  | 7.5                                                                                                                                                                                                                                                                                                                                                                                   | 12.5  | 36.5 | 34   | 25 |   |   |   |         |    |   |    |      |      |    |         |    |     |      |      |    |    |
| CR-2510 (Ø25)<br>CR-3010 (Ø30)<br>Without voltage dropping unit |  |  <table><tr><th>Model</th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th></tr><tr><td>CR-2510</td><td>54</td><td>6</td><td>13</td><td>31.5</td><td>29.5</td><td>20</td></tr><tr><td>CR-3010</td><td>57</td><td>7.5</td><td>12.5</td><td>31.5</td><td>34</td><td>25</td></tr></table> | Model | A    | B    | C  | D | E | F | CR-2510 | 54 | 6 | 13 | 31.5 | 29.5 | 20 | CR-3010 | 57 | 7.5 | 12.5 | 31.5 | 34 | 25 |
| Model                                                           | A                                                                                   | B                                                                                                                                                                                                                                                                                                                                                                                     | C     | D    | E    | F  |   |   |   |         |    |   |    |      |      |    |         |    |     |      |      |    |    |
| CR-2510                                                         | 54                                                                                  | 6                                                                                                                                                                                                                                                                                                                                                                                     | 13    | 31.5 | 29.5 | 20 |   |   |   |         |    |   |    |      |      |    |         |    |     |      |      |    |    |
| CR-3010                                                         | 57                                                                                  | 7.5                                                                                                                                                                                                                                                                                                                                                                                   | 12.5  | 31.5 | 34   | 25 |   |   |   |         |    |   |    |      |      |    |         |    |     |      |      |    |    |

# CR series

## Illuminated push button switch

### ●● Suffix code

| Model                  | Code                     |                          |                          |                          |                          | Description                                             |                               |
|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------------------------------------|-------------------------------|
| CR-                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | CR series illuminated push button switch                |                               |
| Installing dimension   | 25                       |                          |                          |                          |                          | Ø25                                                     |                               |
|                        | 30                       |                          |                          |                          |                          | Ø30                                                     |                               |
| Type classification    | 4                        |                          |                          |                          |                          | Illuminated push button switch (only with 1a1b contact) |                               |
| Power supply voltage   | 24                       |                          |                          |                          |                          | 24 V                                                    | Without voltage dropping unit |
|                        | 1                        |                          |                          |                          |                          | 110 V a.c                                               |                               |
|                        | 2                        |                          |                          |                          |                          | 220 V a.c                                               | Transformer attached type     |
|                        | 3                        |                          |                          |                          |                          | 380 V a.c                                               |                               |
|                        | 4                        |                          |                          |                          |                          | 440 V a.c                                               |                               |
| Light source selection |                          | L                        |                          |                          |                          | LED (luminescent diode)                                 |                               |
|                        |                          |                          |                          |                          |                          | Incandescent lamp                                       |                               |
| Cap color              |                          |                          | R                        |                          |                          | Red                                                     |                               |
|                        |                          |                          | G                        |                          |                          | Green                                                   |                               |
|                        |                          |                          | Y                        |                          |                          | Yellow                                                  |                               |
|                        |                          |                          | B                        |                          |                          | Blue                                                    |                               |
|                        |                          |                          | W                        |                          |                          | White                                                   |                               |

※ Illuminated push button switch cannot use 2a2b contact

### ●● Specification INDUSTRIAL AUTOMATION

#### ■ Transformer attached type

| Model    | Installing dimension | Power supply voltage (Trans attached) |                      | Contact composition | Contact capacity | Color of lamp cap                     |
|----------|----------------------|---------------------------------------|----------------------|---------------------|------------------|---------------------------------------|
|          |                      | 1st voltage                           | 2nd voltage          |                     |                  |                                       |
| CR-254-1 | Ø25                  | 110 V a.c                             | 6.3 V a.c<br>(5.5 V) | 1a1b                | 5 A<br>250 V a.c | red, green,<br>yellow, blue,<br>white |
| CR-254-2 |                      | 220 V a.c                             |                      |                     |                  |                                       |
| CR-254-3 |                      | 380 V a.c                             |                      |                     |                  |                                       |
| CR-254-4 |                      | 440 V a.c                             |                      |                     |                  |                                       |
| CR-304-1 | Ø30                  | 110 V a.c                             | 6.3 V a.c<br>(5.5 V) | 1a1b                | 5 A<br>250 V a.c | red, green,<br>yellow, blue,<br>white |
| CR-304-2 |                      | 220 V a.c                             |                      |                     |                  |                                       |
| CR-304-3 |                      | 380 V a.c                             |                      |                     |                  |                                       |
| CR-304-4 |                      | 440 V a.c                             |                      |                     |                  |                                       |

#### ■ Without voltage dropping unit

| Model     | Installing dimension | Power supply voltage               | Contact composition | Contact capacity | Color of lamp cap                  |
|-----------|----------------------|------------------------------------|---------------------|------------------|------------------------------------|
| CR-254-24 | Ø25                  | Without voltage dropping unit 24 V | 1a1b                | 5 A<br>250 V a.c | red, green, yellow,<br>blue, white |
| CR-304-24 | Ø30                  |                                    |                     |                  |                                    |

Control switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

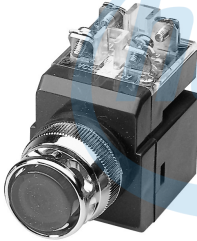
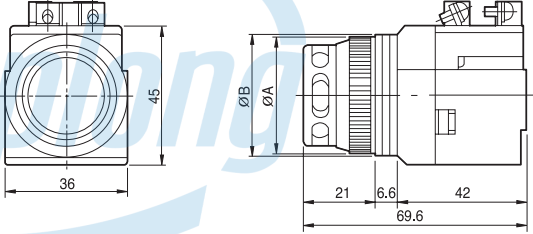
Control box  
Cable connector

Discontinued  
Products

### ●● Incandescent lamp and LED specification

| Classification | Incandescent lamp | LED (luminescent diode) |              |              |
|----------------|-------------------|-------------------------|--------------|--------------|
| Colors         | transparent       | red                     | green        | yellow       |
| Rated current  | 6.3 V 150 mA      | 6 V 2.94 mA             | 6 V 9.6 mA   | 6 V 29.4 mA  |
|                | 24 V 40 mA        | 24 V 10.2 mA            | 24 V 10.8 mA | 24 V 10.2 mA |
|                | 110 V 18 mA       | 110 V 6.0 mA            | 110 V 4.6 mA | 110 V 6.0 mA |
|                | 220 V 14 mA       | 220 V 4.7 mA            | 220 V 5.1 mA | 220 V 4.7 mA |
| Base rating    | E10 (screw type)  |                         |              |              |

### ●● Dimension (unit : mm)

| Model                        | Design                                                                             | Dimension                                                                                                                                                                                                                                                                                              |       |   |   |        |      |      |        |      |      |
|------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---|---|--------|------|------|--------|------|------|
| CR-254 (Ø25)<br>CR-304 (Ø30) |  |  <table border="1"> <thead> <tr> <th>Model</th><th>A</th><th>B</th></tr> </thead> <tbody> <tr> <td>CR-254</td><td>29.5</td><td>31.5</td></tr> <tr> <td>CR-304</td><td>34.5</td><td>36.5</td></tr> </tbody> </table> | Model | A | B | CR-254 | 29.5 | 31.5 | CR-304 | 34.5 | 36.5 |
| Model                        | A                                                                                  | B                                                                                                                                                                                                                                                                                                      |       |   |   |        |      |      |        |      |      |
| CR-254                       | 29.5                                                                               | 31.5                                                                                                                                                                                                                                                                                                   |       |   |   |        |      |      |        |      |      |
| CR-304                       | 34.5                                                                               | 36.5                                                                                                                                                                                                                                                                                                   |       |   |   |        |      |      |        |      |      |

## CR series

### Selector switch

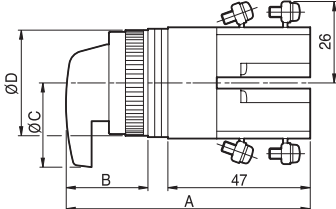
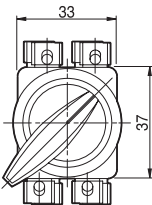
#### ●● Suffix code

| Model                           | Code                                                                       | Description               |
|---------------------------------|----------------------------------------------------------------------------|---------------------------|
| CR-                             | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | CR series selector switch |
| Installing dimension            | 25                                                                         | Ø25                       |
|                                 | 30                                                                         | Ø30                       |
| Type classification             | 3                                                                          | Selector switch           |
| 2 positions contact composition | 1                                                                          | 1a1b Contact              |
|                                 | 2                                                                          | 2a2b Contact              |
| 3 positions contact composition | 3                                                                          | 1a1b Contact              |
|                                 | 4                                                                          | 2a2b Contact              |

#### ●● Specification

| Model    | Installing dimension | Positions selection | Contact composition | Rated current | Color of actuator |
|----------|----------------------|---------------------|---------------------|---------------|-------------------|
| CR-253-1 | Ø25                  | 2 positions         | 1a1b Contact        | 5 A 250 V a.c | Black             |
| CR-253-2 |                      |                     | 2a2b Contact        |               |                   |
| CR-253-3 |                      | 3 positions         | 1a1b Contact        |               |                   |
| CR-253-4 |                      |                     | 2a2b Contact        |               |                   |
| CR-303-1 | Ø30                  | 2 positions         | 1a1b Contact        | 5 A 250 V a.c | Black             |
| CR-303-2 |                      |                     | 2a2b Contact        |               |                   |
| CR-303-3 |                      | 3 positions         | 1a1b Contact        |               |                   |
| CR-303-4 |                      |                     | 2a2b Contact        |               |                   |

#### ●● Dimension (unit : mm)

| Model                        | Design                                                                              | Dimension                                                                                                                                                                                                                                                                                                                                                                                                               |       |      |   |   |   |        |      |      |      |      |        |    |      |      |      |
|------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|---|---|---|--------|------|------|------|------|--------|----|------|------|------|
| CR-253 (Ø25)<br>CR-303 (Ø30) |  | <div></div> <table><tr><th>Model</th><th>A</th><th>B</th><th>C</th><th>D</th></tr><tr><td>CR-253</td><td>81,5</td><td>16,5</td><td>23,5</td><td>31,5</td></tr><tr><td>CR-303</td><td>82</td><td>16,5</td><td>28,5</td><td>36,5</td></tr></table> | Model | A    | B | C | D | CR-253 | 81,5 | 16,5 | 23,5 | 31,5 | CR-303 | 82 | 16,5 | 28,5 | 36,5 |
| Model                        | A                                                                                   | B                                                                                                                                                                                                                                                                                                                                                                                                                       | C     | D    |   |   |   |        |      |      |      |      |        |    |      |      |      |
| CR-253                       | 81,5                                                                                | 16,5                                                                                                                                                                                                                                                                                                                                                                                                                    | 23,5  | 31,5 |   |   |   |        |      |      |      |      |        |    |      |      |      |
| CR-303                       | 82                                                                                  | 16,5                                                                                                                                                                                                                                                                                                                                                                                                                    | 28,5  | 36,5 |   |   |   |        |      |      |      |      |        |    |      |      |      |

Control switch  
Combination display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued Products



## CR series

### Key selector switch

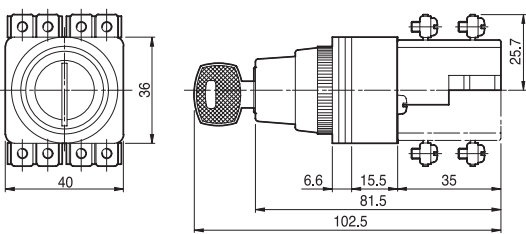
#### Suffix code

| Model                           | Code                                                                                                | Description                   |
|---------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------|
| CR-                             | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | CR series key selector switch |
| Installing dimension            | 25                                                                                                  | Ø25                           |
|                                 | 30                                                                                                  | Ø30                           |
| Type classification             | 11                                                                                                  | Key Selector switch           |
| 2 positions contact composition | 1                                                                                                   | 1a1b Contact                  |
|                                 | 2                                                                                                   | 2a2b Contact                  |
| 3 positions contact composition | 3                                                                                                   | 1a1b Contact                  |
|                                 | 4                                                                                                   | 2a2b Contact                  |
| Key removing position           | A                                                                                                   | Left                          |
|                                 | B                                                                                                   | Right                         |
|                                 | C                                                                                                   | Middle                        |
|                                 | D                                                                                                   | Left / Right                  |

#### Specification

| Model     | Installing dimension | Positions selection | Contact composition | Rated current | Key removing position                                   |
|-----------|----------------------|---------------------|---------------------|---------------|---------------------------------------------------------|
| CR-2511-1 | Ø25                  | 2 positions         | 1a1b Contact        | 5 A 250 V a.c | A : left<br>B : right<br>C : middle<br>D : left / right |
| CR-2511-2 |                      |                     | 2a2b Contact        |               |                                                         |
| CR-2511-3 |                      | 3 positions         | 1a1b Contact        |               |                                                         |
| CR-2511-4 |                      |                     | 2a2b Contact        |               |                                                         |
| CR-3011-1 | Ø30                  | 2 positions         | 1a1b Contact        | 5 A 250 V a.c |                                                         |
| CR-3011-2 |                      |                     | 2a2b Contact        |               |                                                         |
| CR-3011-3 |                      | 3 positions         | 1a1b Contact        |               |                                                         |
| CR-3011-4 |                      |                     | 2a2b Contact        |               |                                                         |

#### Dimension (unit : mm)

| Model                          | Design                                                                              | Dimension                                                                            |
|--------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| CR-2511 (Ø25)<br>CR-3011 (Ø30) |  |  |

# CR series

## Selector push button switch

### Selector (select) push button switch?

Besides the general push operation, this refers to a push button switch that can open/close a contact by using a selection ring, a lever, or rotating a button.

In automatic control, this control switch is used when one of two functions is selected and then an operation signal is needed to operate in the function. If the selector push-button switch is selected the desired direction of two directions, it only works (open/close) within the selected direction. It can be viewed as "selector switch" and "push button switch" together which is a convenient switch for machine tools and automatic controls.

| Model              | Installing dimension                                                                                    | Positions selection | Contact composition                         | Contact capacity |
|--------------------|---------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------|------------------|
| CR-308             | Ø30                                                                                                     | 2 Positions         | Left : 1a1b Contact<br>Right : 1a1b Contact | 5 A 250 V a.c    |
| Operation function | Press the actuator after selecting left/right side then only selected position contact will be operated |                     |                                             |                  |

### Dimension (unit : mm)

| Model           | Design | Dimension |
|-----------------|--------|-----------|
| CR-308<br>(Ø30) |        |           |

### Mounting cutout dimension (unit : mm)

| Mounting design  | Ø25               | Ø30               |
|------------------|-------------------|-------------------|
|                  | 25.5 (0, +0.5 mm) | 30.5 (0, +0.5 mm) |
| Cutout dimension |                   |                   |

Control switch  
Combination display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

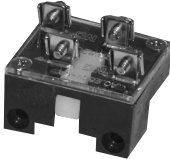
Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued Products

### ●● Protective cover and contact

| Push button protective cover                                                      |                                                                                   | Contact of each applying switch                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| CR-50                                                                             | CR-60                                                                             | CR-10                                                                             | CR-20                                                                              | CR-30                                                                               |
| Ø25<br>(Mounting design)                                                          | Ø30<br>(Mounting design)                                                          | Push button, selector<br>emergency stop<br>(alternative operation)                | Illuminated push<br>button for emergency<br>(push lock-turn reset)                 | Key selector                                                                        |
|  |  |  |  |  |

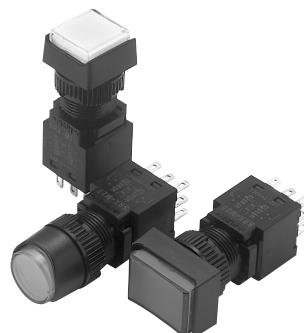


INDUSTRIAL AUTOMATION

## SR series

Push button switch (non-illuminating, illuminating)

- Ø16 panel mounting type  
(actuator and contact part detachable)
- Contact part composed of 1a1b and 2a2b
- Light source: incandescent lamp and LED selection
- 3 kinds of actuator and 5 kinds of color
- Various accessories such as guard cover, waterproof cover and etc



### ●● Suffix code

| Model                                                         | Code                     |                          |                          |                          |                          |                          | Description                                           |
|---------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------------------------|
| SRF-                                                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Ø16 push button switch                                |
| Protective cover                                              | A                        |                          |                          |                          |                          |                          | Standard type                                         |
|                                                               | B                        |                          |                          |                          |                          |                          | Waterproof type (Option)                              |
| Illumination                                                  | F                        |                          |                          |                          |                          |                          | Non-illuminating type                                 |
|                                                               | X                        |                          |                          |                          |                          |                          | Illuminating type                                     |
| Operation function                                            | M                        |                          |                          |                          |                          |                          | Momentary                                             |
|                                                               | A                        |                          |                          |                          |                          |                          | Alternate                                             |
| Shape of actuator                                             | 1                        |                          |                          |                          |                          |                          | Round type                                            |
|                                                               | 2                        |                          |                          |                          |                          |                          | Square type                                           |
|                                                               | 3                        |                          |                          |                          |                          |                          | Rectangle type                                        |
| Contact composition                                           | 1                        |                          |                          |                          |                          |                          | 1a1b Contact                                          |
|                                                               | 2                        |                          |                          |                          |                          |                          | 2a2b Contact                                          |
| Light source and voltage<br>(only illuminating type assigned) | 1                        |                          |                          |                          |                          |                          | 6.3 V Incandescent lamp                               |
|                                                               | 2                        |                          |                          |                          |                          |                          | 12 V Incandescent lamp                                |
|                                                               | 3                        |                          |                          |                          |                          |                          | 24 V Incandescent lamp                                |
|                                                               | 4                        |                          |                          |                          |                          |                          | 12 V Luminescent diode (LED)                          |
|                                                               | 5                        |                          |                          |                          |                          |                          | 24 V Luminescent diode (LED)                          |
| Color of actuator                                             |                          |                          |                          |                          |                          |                          | R R (Red), G (Green), Y (Yellow), W (White), B (Blue) |

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

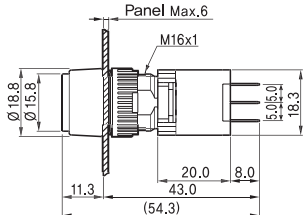
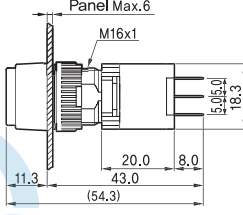
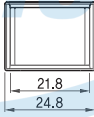
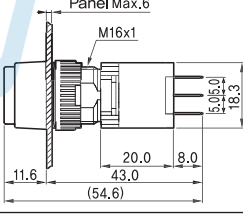
Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

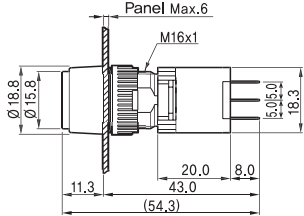
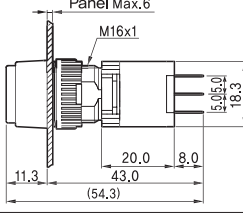
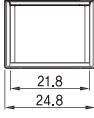
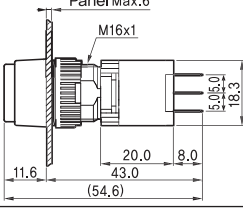
Discontinued  
Products

### ● Dimension (unit : mm)

#### ■ Non-illuminating type

| Model      | Design                                                                             | Dimension                                                                          |                                                                                     |
|------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SRF-AFM11R |   |   |   |
| SRF-AFM21G |   |   |   |
| SRF-AFM31Y |  |  |  |

#### ■ Illuminating type

| Model       | Design                                                                              | Dimension                                                                           |                                                                                      |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| SRF-AXM113R |  |  |  |
| SRF-AXM213G |  |  |  |
| SRF-AXM313Y |  |  |  |

# SR series

## Pilot lamp

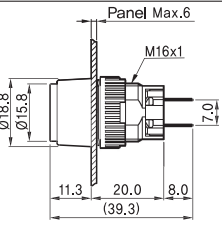
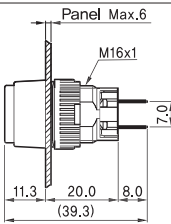
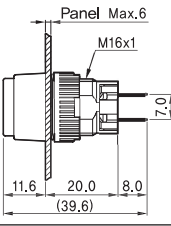
- One body type (Ø16 panel mounting type)
- Light source: incandescent lamp and LED selection
- Various actuator such as round, square, rectangular type and etc



### ●● Suffix code

| Model                                                         | Code                                                                                                | Description                                         |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| SRP-                                                          | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Ø16 Pilot lamp                                      |
| Protective type                                               | A                                                                                                   | Standard type                                       |
|                                                               | B                                                                                                   | Water proof type (Option)                           |
| Actuator type                                                 | 1                                                                                                   | Round type                                          |
|                                                               | 2                                                                                                   | Square type                                         |
|                                                               | 3                                                                                                   | Rectangle type                                      |
| Light source and voltage<br>(Only illuminating type assigned) | 1                                                                                                   | 6.3 V Incandescent lamp                             |
|                                                               | 2                                                                                                   | 12 V Incandescent lamp                              |
|                                                               | 3                                                                                                   | 24 V Incandescent lamp                              |
|                                                               | 4                                                                                                   | 12 V Luminescent diode (LED)                        |
|                                                               | 5                                                                                                   | 24 V Luminescent diode (LED)                        |
| Color of actuator                                             | R                                                                                                   | R (Red), G (Green), Y (Yellow), W (White), B (Blue) |

### ●● Dimension (unit : mm)

| Model    | Design                                                                              | Dimension                                                                            |
|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| SRP-A1□R |  |  |
| SRP-A2□G |  |  |
| SRP-A3□Y |  |  |

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

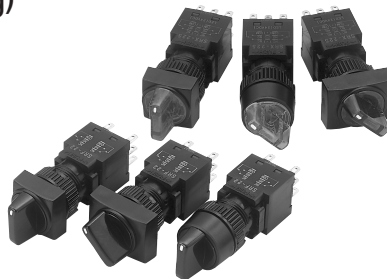
Control box  
Cable connector

Discontinued  
Products

## SR series

### Selector switch (non-illuminating, illuminating)

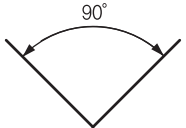
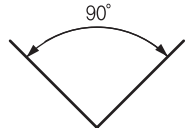
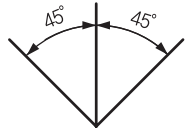
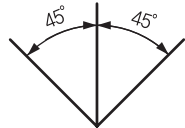
- Detachable type of actuator and contact part (Ø16 panel mounting type)
- Contact part composed of 1a1b and 2a2b
- Light source : incandescent lamp and LED selection
- Various actuator such as round, square, rectangular type and etc



### Suffix code

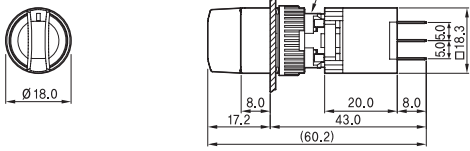
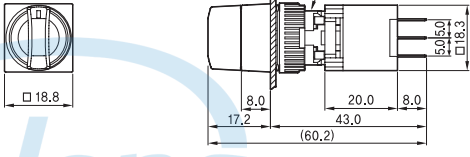
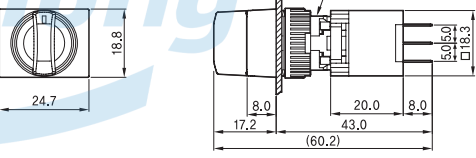
| Model                                                         | Code                     |                          |                          |                          |                          | Description                                         |
|---------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------------------------------------|
| SRS-                                                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Ø16 selector switch                                 |
| Illumination                                                  | F                        |                          |                          |                          |                          | Non-illuminating type                               |
|                                                               | X                        |                          |                          |                          |                          | Illuminating type                                   |
| Actuator type                                                 |                          | 1                        |                          |                          |                          | Round type                                          |
|                                                               |                          | 2                        |                          |                          |                          | Square type                                         |
|                                                               |                          | 3                        |                          |                          |                          | Rectangle type                                      |
| Number of positions                                           |                          | 1                        |                          |                          |                          | 2 positions momentary operation                     |
|                                                               |                          | 2                        |                          |                          |                          | 2 positions alternative operation                   |
|                                                               |                          | 3                        |                          |                          |                          | 3 positions alternative operation                   |
|                                                               |                          | 6                        |                          |                          |                          | 3 positions momentary operation                     |
| Contact composition                                           |                          | 1                        |                          |                          |                          | 1a1b Contact                                        |
|                                                               |                          | 2                        |                          |                          |                          | 2a2b Contact                                        |
| Light source and voltage<br>(Only illuminating type assigned) |                          |                          | 1                        |                          |                          | 6.3 V Incandescent lamp                             |
|                                                               |                          |                          | 2                        |                          |                          | 12 V Incandescent lamp                              |
|                                                               |                          |                          | 3                        |                          |                          | 24 V Incandescent lamp                              |
|                                                               |                          |                          | 4                        |                          |                          | 12 V Luminescent diode (LED)                        |
|                                                               |                          |                          | 5                        |                          |                          | 24 V Luminescent diode (LED)                        |
| Color of actuator<br>(Only illuminating type assigned)        |                          |                          | R                        |                          |                          | R (Red), G (Green), Y (Yellow), W (White), B (Blue) |

### Actuator of positions and angle

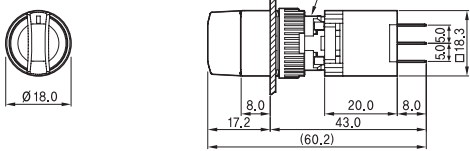
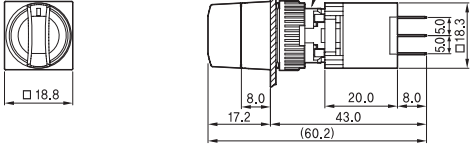
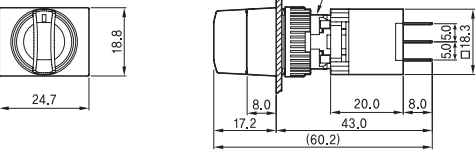
| Position selection | 2 positions automatic                                                               | 2 positions manual                                                                  | 3 positions automatic                                                                | 3 positions manual                                                                    |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Operation angle    |  |  |  |  |

●● Dimension (unit : mm)

■ Non-illuminating type

| Model    | Design                                                                             | Dimension                                                                           |
|----------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SRS-F1□□ |   |   |
| SRS-F2□□ |   |   |
| SRS-F3□□ |  |  |

■ Illuminating type

| Model      | Design                                                                              | Dimension                                                                            |
|------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| SRS-X1□□□G |  |  |
| SRS-X2□□□Y |  |  |
| SRS-X3□□□B |  |  |

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products



## SR series

### Key selector switch

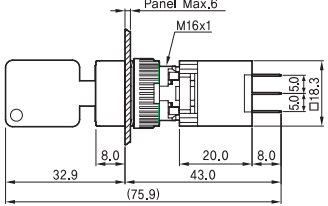
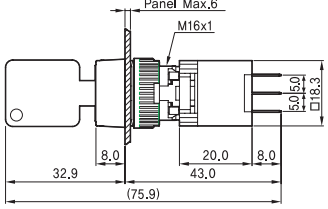
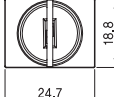
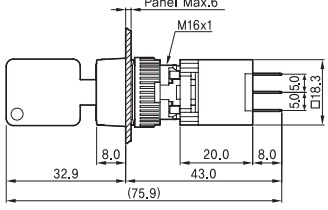
- Actuator and contact part detachable (Ø16 panel mounting type)
- Contact part composed of 1a1b and 2a2b
- Various actuator such as round, square, rectangular type and etc
- 2 positions, 3 positions, momentary type, alternative type and etc



### ●● Suffix code

| Model               | Code  | Description                       |
|---------------------|-------|-----------------------------------|
| SRK-                | □ □ □ | Ø16 key selector switch           |
| Actuator type       | 1     | Round type                        |
|                     | 2     | Square type                       |
|                     | 3     | Rectangle type                    |
| Position selection  | 1     | 2 positions momentary operation   |
|                     | 2     | 2 positions alternative operation |
|                     | 3     | 3 positions alternative operation |
|                     | 6     | 3 positions momentary operation   |
| Contact composition | 1     | 1a1b Contact                      |
|                     | 2     | 2a2b Contact                      |
| Color of actuator   |       | Only black color                  |

### ●● Dimension (unit : mm)

| Model   | Design                                                                              | Dimension                                                                                                                                                                |
|---------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SRK-1□□ |  |   |
| SRK-2□□ |  |   |
| SRK-3□□ |  |   |

## SR series

### Emergency switch (non-illuminating and illuminating)

- Detachable type of actuator and contact part (Ø16 panel mounting type)
- Contact part composed of 1a1b and 2a2b
- Light source : incandescent Lamp and LED selection
- Push lock–turn reset function



### ●● Suffix code

| Model                    | Code                                                                       | Description                                      |
|--------------------------|----------------------------------------------------------------------------|--------------------------------------------------|
| SRE–                     | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Ø16 emergency stop switch (push lock–turn reset) |
| Illumination             | F                                                                          | Non-illuminating type                            |
|                          | X                                                                          | Illuminating type                                |
| Contact composition      | 1                                                                          | 1a1b Contact                                     |
|                          | 2                                                                          | 2a2b Contact                                     |
| Light source and voltage | 1                                                                          | 6.3 V Incandescent lamp                          |
|                          | 2                                                                          | 12 V Incandescent lamp                           |
|                          | 3                                                                          | 24 V Incandescent lamp                           |
|                          | 4                                                                          | 12 V Luminescent diode (LED)                     |
|                          | 5                                                                          | 24 V Luminescent diode (LED)                     |
| Color of actuator        |                                                                            | Red (solid)                                      |

### ●● Dimension (unit : mm)

| Model   | Appearance | Dimension |
|---------|------------|-----------|
| SRE–F□  |            |           |
| SRE–X□□ |            |           |

Control switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

### Common specification

| Lists                        | Description                                                                                                        |
|------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Contact material             | Silver contact                                                                                                     |
| Rating                       | 6 A 250 V a.c                                                                                                      |
| Insulation resistance        | Min 100 M $\Omega$                                                                                                 |
| Dielectric strength          | 2,000 V a.c (each 50/60 Hz for 1min)                                                                               |
| Vibration resistance         | 10 – 55 Hz (double amplitude 0.75 mm)                                                                              |
| Contact resistance           | Max 0.05 $\Omega$ (default value) d.c 6 V 0.1 A voltage descending type                                            |
| Mechanical life expectancy   | Above 100thousand times / 1800 h<br>(button switch, illuminating button switch : above 500thousand times / 1800 h) |
| Electrical life expectancy   | 70 thousand times (with rated load)                                                                                |
| Ambient temperature          | -20 °C ~ 50 °C                                                                                                     |
| Ambient humidity             | 45 ~ 85 % R.H.                                                                                                     |
| Storage temperature          | -40 °C ~ 70 °C                                                                                                     |
| Force required for operation | 4.50 N                                                                                                             |

### Incandescent lamp and LED specification

| Classification    | Rated voltage                   | Rated current |
|-------------------|---------------------------------|---------------|
| Incandescent lamp | 6.3 V a.c/d.c                   | 60 mA         |
|                   | 6.3 V a.c/d.c                   | 40 mA         |
|                   | 6.3 V a.c/d.c                   | 20 mA         |
| LED               | 12 V d.c                        | 20 mA         |
|                   | 24 V d.c                        | 15 mA         |
| Base rating       | BA6S-B (Incandescent lamp, LED) |               |

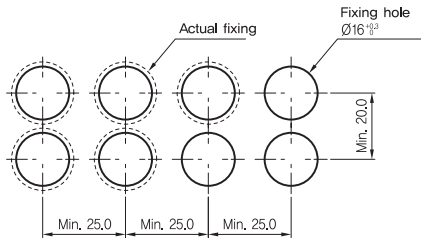
### Formation

| Standard type | Waterproof type |
|---------------|-----------------|
|               |                 |

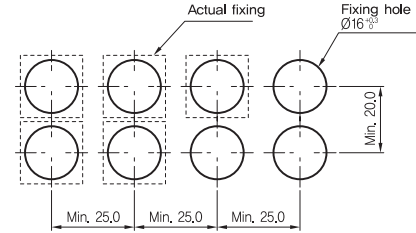
## ●● Panel cutout and min panel mounting dimension (unit : mm)

### ■ Standard

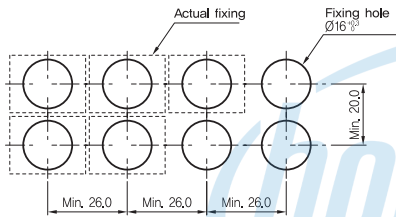
#### Round type



#### Square type



#### Rectangular type



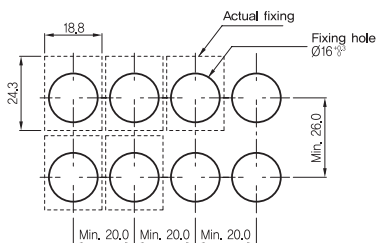
※ Panel mounting thickness 0.5 ~ 6 mm

### ■ Things to consider when using it

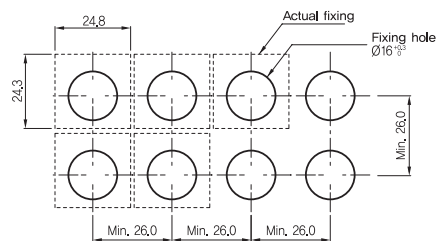
- Soldering the terminal : use soldering iron less than 40W in 40 sec
- Mounting to the panel : tightening torque of nut should be less than 0.49N.m
- Use a spin prevention ring when there are much of vibration
- For the safety after soldering the terminal, please insulate the terminal by tube or etc
- Alphabet film : Please use 0.1 mm thickness of heat-resistant film

### ■ Attaching the protective cover

#### Round and square type



#### Rectangular type



Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

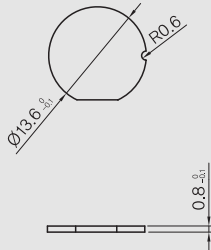
Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

### ■ In-cap dimension

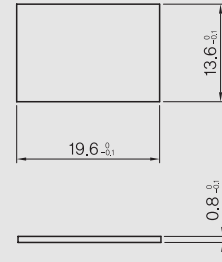
#### • Round type button



#### • Square type button

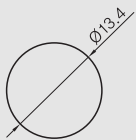


#### • Rectangular type button



### ■ Film rating when using the alphabet film

#### • Round type button



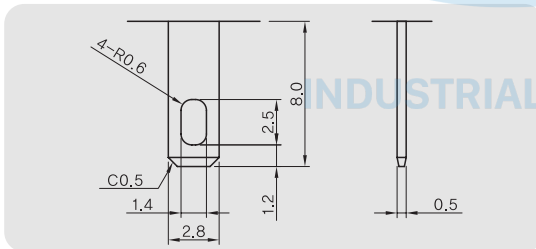
#### • Square type button



#### • Rectangular type button

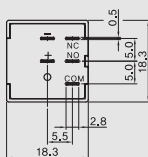
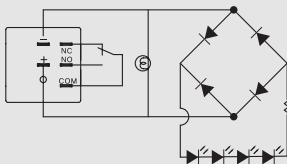


### ■ Terminal diagram

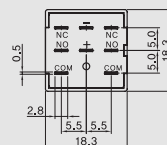
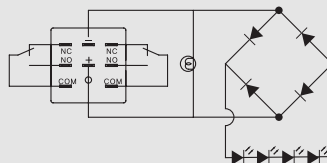


### ■ Terminal arrangement

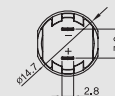
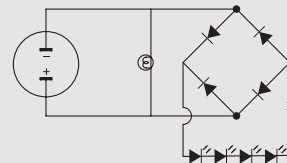
#### • Contact type 1a1b



#### • Contact type 2a2b

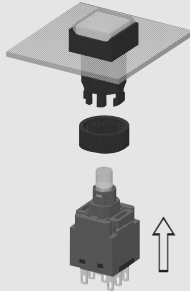


#### • Indicator



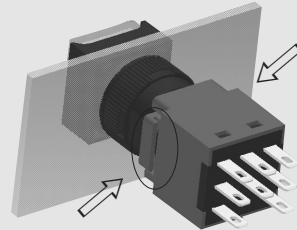
## ■ Assembling and disassembling method

### • Assembling method



Put upper switch part to the panel and tighten it by the nut. Adjust contact part to the groove and press it until it clicks.

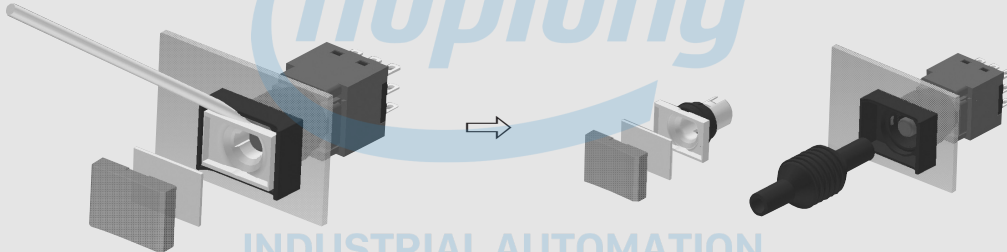
### • Disassembling method



Disassemble the contact part by pressing the lever to the indicated arrow direction. By using the contact replacing tool, disassemble the contact part by pressing the (○) part.

## ■ Lamp replacing method

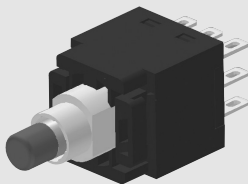
### • Replacing from the outside of panel



After turning off the power, disassemble the actuator cap and housing by using a screwdriver or other appropriate tool and replace the lamp by using the lamp extractor. At this moment, please check for the rating and replace the lamp.

※ May damage your hand if lamp is destroyed so please be cautious (⚠ Caution)

### • Replacing the contact part



Grip the lamp with your fingertip and pull it. At this moment, please check for the rating and then replace the lamp.

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

### ●● Suffix code of each part

SR series can clearly divide the suffix code of actuator (illuminating part) and contact part. Please use the suffix code formation which given in the below.

#### ■ Button switch suffix code

Button switch is largely divided into the push button switch, illuminating push button switch, emergency button switch and illuminating emergency button switch and it is compose of actuator and contact part.

#### Actuator

##### • Push button, illuminating push button “actuator suffix code”

| Model                | Code                                                                       | Description                                                                                    |
|----------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| SRF-                 | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Push button, illuminating push button actuator                                                 |
| Protective structure | A                                                                          | Standard type                                                                                  |
|                      | B                                                                          | Waterproof type                                                                                |
| Actuator type        | 1                                                                          | Round type                                                                                     |
|                      | 2                                                                          | Square type                                                                                    |
|                      | 3                                                                          | Rectangular type                                                                               |
| Color of actuator    | R                                                                          | R (Red), G (Green), Y (Yellow), W (White), B (Blue) ※ exclude white and blue incandescent lamp |

##### • Emergency button, illuminating emergency button

| Model         | Code                     | Description                                      |
|---------------|--------------------------|--------------------------------------------------|
| SRE-          | <input type="checkbox"/> | Emergency button actuator (push lock–turn reset) |
| Actuator type | X                        | Illuminating emergency button actuator           |
|               | F                        | Emergency button actuator (non-illuminating)     |

#### Contact part

##### • Push button, illuminating push button “contact part suffix code”

| Model                                                                | Code                                                                                                                           | Description                                                                                |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| SR                                                                   | <input type="checkbox"/> - <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Push button, illuminating push button, emergency button contact part                       |
| Illumination                                                         | X                                                                                                                              | Illuminating                                                                               |
|                                                                      | F                                                                                                                              | Non-illuminating                                                                           |
| Operation function                                                   | M                                                                                                                              | Momentary                                                                                  |
|                                                                      | A                                                                                                                              | Alternate                                                                                  |
| Contact composition                                                  | 1                                                                                                                              | 1a1b Contact                                                                               |
|                                                                      | 2                                                                                                                              | 2a2b Contact                                                                               |
| Light source and voltage<br>(assigned only to the illuminating type) | 1                                                                                                                              | 6.3 V incandescent lamp                                                                    |
|                                                                      | 2                                                                                                                              | 12 V incandescent lamp                                                                     |
|                                                                      | 3                                                                                                                              | 24 V incandescent lamp                                                                     |
|                                                                      | 4                                                                                                                              | 12 V luminescent diode (LED)                                                               |
|                                                                      | 5                                                                                                                              | 24 V luminescent diode (LED)                                                               |
| Color of light source<br>(assigned only to the illuminating type)    | R                                                                                                                              | R (Red), G (Green), Y (Yellow), W (White), B (Blue)<br>※ Emergency switch : only Red color |

■ Indicator suffix code

| Model                    | Code                                                                                                | Description                                                                            |
|--------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| SRP-                     | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Indicator                                                                              |
| Protective structure     | A                                                                                                   | Standard type                                                                          |
|                          | B                                                                                                   | Waterproof type                                                                        |
| Actuator type            | 1                                                                                                   | Round type                                                                             |
|                          | 2                                                                                                   | Square type                                                                            |
|                          | 3                                                                                                   | Rectangular type                                                                       |
| Light source and voltage | 1                                                                                                   | 6,3 V incandescent lamp                                                                |
|                          | 2                                                                                                   | 12 V incandescent lamp                                                                 |
|                          | 3                                                                                                   | 24 V incandescent lamp                                                                 |
|                          | 4                                                                                                   | 12 V luminescent diode (LED)                                                           |
|                          | 5                                                                                                   | 24 V luminescent diode (LED)                                                           |
| Color of actuator        | R                                                                                                   | R (Red), G (Green), Y (Yellow), W (White), B (Blue) ※ white and blue incandescent lamp |

■ Selector switch suffix code

Selector switch is largely divided into the non-illuminating selector, illuminating selector and key selector and composed of actuator and contact part. (But illuminating type is illuminating contact part)  
Therefore, it is necessary to indicate the actuator and contact part separately.  
(Caution) Selector contact part is not compatible with other products so please be cautious

Actuator

• Selector switch, illuminating selector switch “actuator suffix code”

| Model                                          | Code                                                                                                | Description                                                                            |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| SRS-                                           | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Selector switch, illuminating selector switch actuator                                 |
| Actuator type                                  | 1                                                                                                   | Round type                                                                             |
|                                                | 2                                                                                                   | Square type                                                                            |
|                                                | 3                                                                                                   | Rectangular type                                                                       |
| Number of position                             | 1                                                                                                   | 2 positions momentary operation                                                        |
|                                                | 2                                                                                                   | 2 positions alternative operation                                                      |
|                                                | 3                                                                                                   | 3 positions alternative operation                                                      |
|                                                | 6                                                                                                   | 3 positions momentary operation                                                        |
| Illumination                                   | X                                                                                                   | Illuminating                                                                           |
|                                                | F                                                                                                   | Non-illuminating (only black possible)                                                 |
| Color of actuator (Only for illuminating type) | R                                                                                                   | R (Red), G (Green), Y (Yellow), W (White), B (Blue) ※ white and blue incandescent lamp |

Control switch  
Combination display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued Products



### ■ Key selector switch “actuator suffix code”

| Model              | Code                                              | Description                       |
|--------------------|---------------------------------------------------|-----------------------------------|
| SRK-               | <input type="checkbox"/> <input type="checkbox"/> | Key selector switch actuator      |
| Actuator type      | 1                                                 | Round type                        |
|                    | 2                                                 | Square type                       |
|                    | 3                                                 | Rectangular type                  |
| Number of position | 1                                                 | 2 positions momentary operation   |
|                    | 2                                                 | 2 positions alternative operation |
|                    | 3                                                 | 3 positions alternative operation |
|                    | 6                                                 | 3 positions momentary operation   |

### Contact part

#### • Selector, illuminating selector, key selector “contact part suffix code”

| Model                                                                | Code                                                                                                                           | Description                                                |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| SR                                                                   | <input type="checkbox"/> - <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Selector, Illuminating selector, Key selector contact part |
| Illumination                                                         | X                                                                                                                              | Illuminating                                               |
|                                                                      | F                                                                                                                              | Non-illuminating (Including key selector)                  |
| Position selection                                                   | 2                                                                                                                              | 2 positions                                                |
|                                                                      | 3                                                                                                                              | 3 positions                                                |
| Contact composition                                                  | 1                                                                                                                              | 1a1b Contact                                               |
|                                                                      | 2                                                                                                                              | 2a2b Contact                                               |
| Light source and voltage<br>(assigned only to the illuminating type) | 1                                                                                                                              | 6.3 V Incandescent lamp                                    |
|                                                                      | 2                                                                                                                              | 12 V Incandescent lamp                                     |
|                                                                      | 3                                                                                                                              | 24 V Incandescent lamp                                     |
|                                                                      | 4                                                                                                                              | 12 V Luminescent diode (LED)                               |
|                                                                      | 5                                                                                                                              | 24 V Luminescent diode (LED)                               |
| Color of light source<br>(assigned only to the illuminating type)    | R                                                                                                                              | R (Red), G (Green), Y (Yellow), W (White), B (Blue)        |

■ Accessories

| Name                 | Model     | Appearance                                                                          | Reference                                                                                         |
|----------------------|-----------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Contact              | SRX / SRF |    | 6 A 250 V a.c 1a1b / 2a2b                                                                         |
| Spin prevention ring | SR-68     |    | Prevent the spinning                                                                              |
| Nut tightening tool  | SR-448    |    | Used to tightening the fixed nut at the back side of panel                                        |
| Lamp extractor       | SR-81     |    | It is made of rubber and used when replacing the light bulb                                       |
| Puller               | SR-82     |   | Used when replacing the contact after mounting the panel                                          |
| Protective cover     | SR-178    |  | Prevents the switch malfunction (round type and square type)                                      |
|                      | SR-239    |  | Prevents the switch malfunction (rectangular type) use it after removing the spin prevention ring |

Control switch  
Combination display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued Products

## SR series

### Emergency stop switch

- Ø16 panel mounting type  
(actuator and contact part are one body type)
- Contact parts composed of 1a1b and 2a2b
- Push lock–turn reset function



### Specification

| Model                      | SRE-121                                               | SRE-122 | SRE-121H | SRE-122H |
|----------------------------|-------------------------------------------------------|---------|----------|----------|
| Contact composition        | 1a1b                                                  | 2a2b    | 1a1b     | 2a2b     |
| Operation function         | Push lock–turn reset                                  |         |          |          |
| Contact material           | Silver contact (gold plating)                         |         |          |          |
| Rated current              | 3 A 250 V a.c                                         |         |          |          |
| Insulation resistance      | Min 100 MΩ                                            |         |          |          |
| Dielectric strength        | 1,000 V a.c for 1min (between the terminal and earth) |         |          |          |
| Vibration resistance       | 10 – 55 Hz (double amplitude 0.75 mm)                 |         |          |          |
| Contact resistance         | Max 30 mΩ (initial)                                   |         |          |          |
| Mechanical life expectancy | Above 200 thousand times (30 times per min)           |         |          |          |
| Electrical life expectancy | Above 70 thousand times (30 times per min)            |         |          |          |
| Ambient temperature        | –20 ~ 50 °C                                           |         |          |          |
| Ambient humidity           | 45 ~ 85 % R.H                                         |         |          |          |

### Dimension (unit : mm)

| Model    | Appearance | Dimension |  |
|----------|------------|-----------|--|
| SRE-12□  |            |           |  |
| SRE-12□H |            |           |  |

## CR-400 series

### Rectangular lamp

- Size of surface 40x32mm
- Light source : incandescent lamp / LED selection
- Change the color of indicator by replacing the alphabet plate
- Easy individual mounting, gathered / assembled mounting
- Gathered / assembled mounting by the + shape connector (die casting)



### ●● Suffix code

| Model                | Code    | Description                                                                                             |
|----------------------|---------|---------------------------------------------------------------------------------------------------------|
| CR-40                | □ □ □ □ | CR series, rectangular indicator                                                                        |
| Power supply voltage | 1 1     | 110 V a.c                                                                                               |
|                      | 1 2     | 220 V a.c                                                                                               |
|                      | 1 3     | 380 V a.c                                                                                               |
|                      | 1 4     | 440 V a.c                                                                                               |
|                      | 2 12    | 12 V a.c/d.c                                                                                            |
|                      | 2 24    | 24 V a.c/d.c                                                                                            |
| Light source type    | -       | Incandescent lamp                                                                                       |
|                      | L       | LED (Incandescent lamp)                                                                                 |
| Color of indicator   | W       | W (white) ※ Default color is white and color R, G, Y and B can be purchased by placing a separate order |

### ●● Specification

| Types      | Input voltage | 2nd voltage                   | Power consumption | Color of alphabet plate            | Reference                                                                                      |
|------------|---------------|-------------------------------|-------------------|------------------------------------|------------------------------------------------------------------------------------------------|
| CR-401-1□  | 110 V a.c     | 6.3 V<br>Trans attached       | 1.0 W             | white, red, green,<br>yellow, blue | • Size of alphabet plate (31.5 X 24 mm)<br><br>• Applying light source (incandescent lamp/LED) |
| CR-401-2□  | 220 V a.c     |                               |                   |                                    |                                                                                                |
| CR-401-3□  | 380 V a.c     |                               |                   |                                    |                                                                                                |
| CR-401-4□  | 440 V a.c     |                               |                   |                                    |                                                                                                |
| CR-402-12□ | 12 V d.c/a.c  | Without voltage dropping unit | 1.0 W             |                                    |                                                                                                |
| CR-402-24□ | 24 V d.c/a.c  |                               |                   |                                    |                                                                                                |

Control switch  
Combination display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

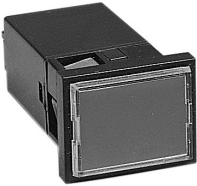
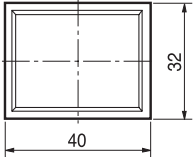
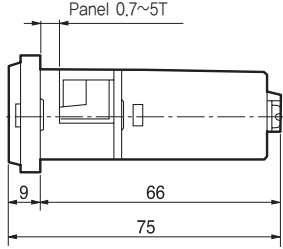
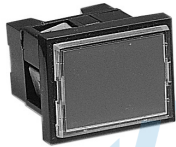
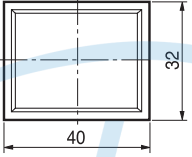
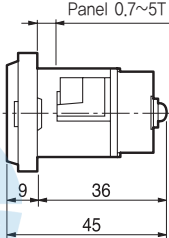
Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

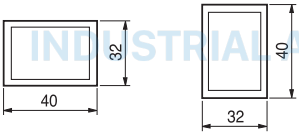
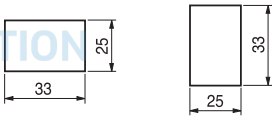
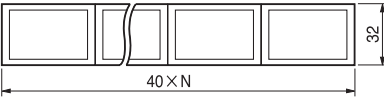
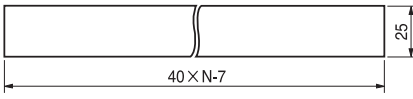
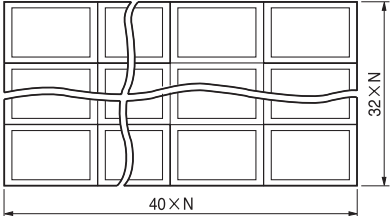
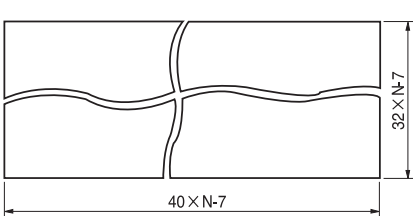
Control box  
Cable connector

Discontinued Products

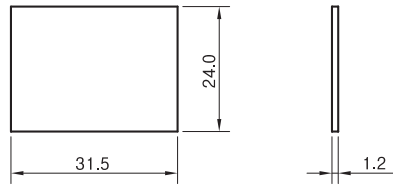
### ●● Dimension (unit : mm)

| Model                                     | Appearance                                                                        | Dimension                                                                         |                                                                                    |
|-------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| CR-401<br>(Trans attached)                |  |  |  |
| CR-402<br>(Without voltage dropping unit) |  |  |  |

### ●● Panel cutout dimension (unit : mm)

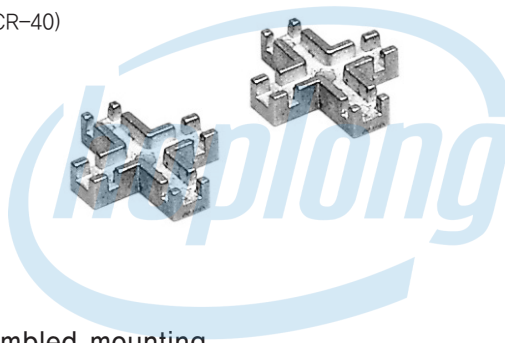
| Type                           | Front view (mm)                                                                     | Panel cutout dimension (mm)                                                          |
|--------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Independent mounting           |  |  |
| 1 row continuous mounting      |  |  |
| Multi rows continuous mounting |  |  |

■ Dimension of plate



■ + shape connector when performing the gathered / assembled mounting

(CR-40)



■ Gathered/assembled mounting



Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

## CD Series

### Combination display lights

- 2 types of surface dimension : 30x30mm, 30x40mm
- Applied high brightness square surface LED unit
- 6 types of various indicating colors
- Simple assembling and able to change to color in the field
- Max 200 compositions (10 rows 20 columns)



### ●● Suffix code

| Model                | Code                     |                          |                          | Description              |                                      |                                  |
|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------------------|----------------------------------|
| CD-                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | CD series Combination display lights |                                  |
| Standard type        | S                        |                          |                          |                          | Square type (30 X 30 mm)             |                                  |
|                      | R                        |                          |                          |                          | Rectangular type (30 X 40 mm)        |                                  |
| Power supply voltage | A                        |                          |                          |                          | 24 V a.c/d.c                         | Without voltage dropping         |
|                      | B                        |                          |                          |                          | 110 V, 125 V d.c                     | Resistance voltage dropping type |
|                      | C                        |                          |                          |                          | 110 V a.c                            | Condenser voltage dropping type  |
|                      | D                        |                          |                          |                          | 220 V a.c                            |                                  |
| LED indicating color | R                        |                          |                          |                          | Red                                  |                                  |
|                      | G                        |                          |                          |                          | Green                                |                                  |
|                      | Y                        |                          |                          |                          | Yellow                               |                                  |
|                      | W                        |                          |                          |                          | white                                |                                  |
|                      | O                        |                          |                          |                          | Orange                               |                                  |
|                      | A                        |                          |                          |                          | Blue                                 |                                  |
| Surface composition  |                          | 2                        |                          |                          | 1 row ~ 10 rows                      |                                  |
|                      |                          | 6                        |                          |                          | 1 column ~ 20 columns                |                                  |

### ●● Surface indication

|     |    |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----|----|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|     |    | Column |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Row | 1  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     | 2  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     | 3  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     | 4  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     | 5  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     | 6  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     | 7  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     | 8  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     | 9  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     | 10 |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## ●● Specification

|                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Power supply voltage  | 24 V d.c                                                                          |                                                                                   | 110 V, 125 V d.c                                                                  |                                                                                   | 110 V a.c, 220 V a.c                                                               |                                                                                     |
| Input type            | Without voltage dropping type                                                     |                                                                                   | Resistance voltage dropping type                                                  |                                                                                   | Condenser voltage dropping type                                                    |                                                                                     |
| Type                  | CD-SA                                                                             | CD-RA                                                                             | CD-SB                                                                             | CD-RB                                                                             | CD-SC, SD                                                                          | CD-RC, RD                                                                           |
| Appearance            |  |  |  |  |  |  |
| LED rated voltage     | 24 V d.c                                                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| LED base              | Exclusive unit                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| LED color             | red, green, yellow, white, orange and blue                                        |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Insulation resistance | Min 100 M $\Omega$                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Dielectric voltage    | 2,000 V a.c (for one minute)                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Power consumption     | 0.68 W (24 V d.c, 20 mA)                                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Life expectancy       | 50,000 hours (24 V d.c, 25 °C)                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Ambient temperature   | -20 °C ~ 40 °C                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Ambient humidity      | -25 °C ~ 55 °C                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Storage temperature   | 45 ~ 85 % R.H                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Weight                | About 65 g                                                                        | About 80 g                                                                        | About 75 g                                                                        | About 90 g                                                                        | About 80 g                                                                         | About 93 g                                                                          |

INDUSTRIAL AUTOMATION

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

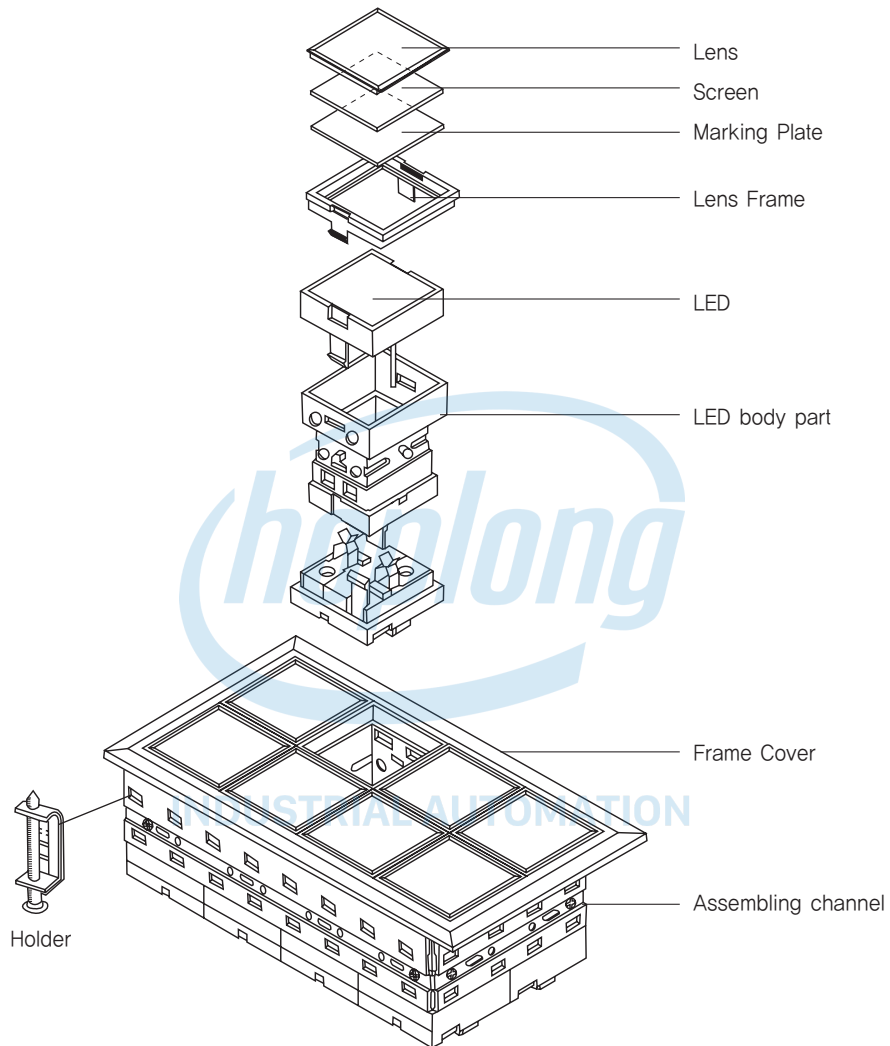
Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

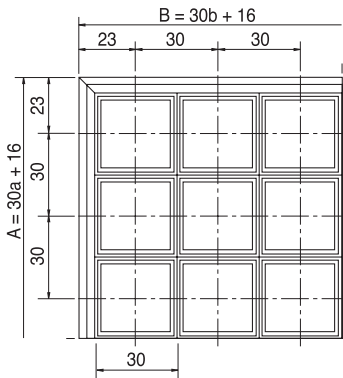


### ●● Nomenclature

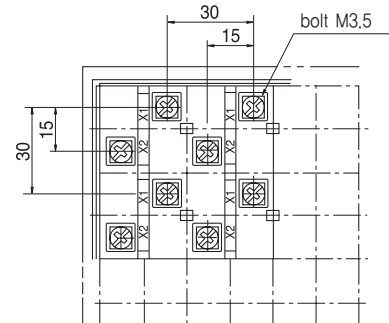


## ●● Dimension (CD-S : 30×30) (unit : mm)

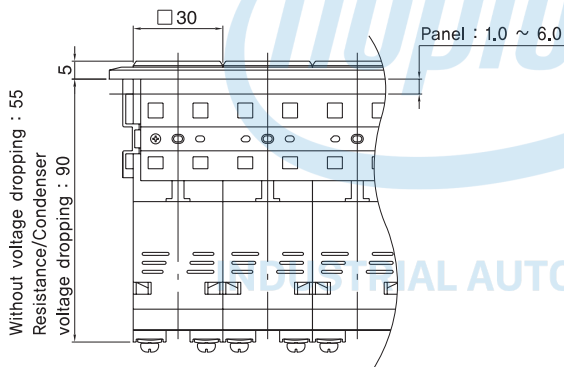
Front side view



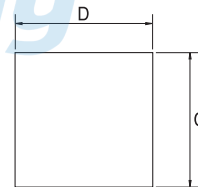
Back side view



Side view



Panel cutout

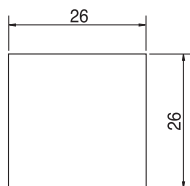


※ C :  $30n+5$  (n : number)

※ D :  $40n+5$  (n : number)

※ Please refer to panel cut out chart

Marking plate



Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

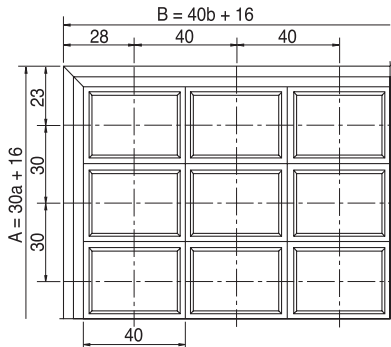
### ●● Panel cutout chart (CD-S : 30×30) (unit : mm)

|    | Column                      | b          | 01   | 02   | 03   | 04    | 05    | 06    | 07    | 08    | 09    | 10    |
|----|-----------------------------|------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
|    | Dimension<br>(Panel cutout) | B          | 46   | 76   | 106  | 136   | 166   | 196   | 226   | 256   | 286   | 316   |
| a  | A                           | (D)<br>(C) | (35) | (65) | (95) | (125) | (155) | (185) | (215) | (245) | (275) | (305) |
| 01 | 46                          | (35)       | 1    | 2    | 3    | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
| 02 | 76                          | (65)       | 2    | 4    | 6    | 8     | 10    | 12    | 14    | 16    | 18    | 20    |
| 03 | 106                         | (95)       | 3    | 6    | 9    | 12    | 15    | 18    | 21    | 24    | 27    | 30    |
| 04 | 136                         | (125)      | 4    | 8    | 12   | 16    | 20    | 24    | 28    | 32    | 36    | 40    |
| 05 | 166                         | (155)      | 5    | 10   | 15   | 20    | 25    | 30    | 35    | 40    | 45    | 50    |
| 06 | 196                         | (185)      | 6    | 12   | 18   | 24    | 30    | 36    | 42    | 48    | 54    | 60    |
| 07 | 226                         | (215)      | 7    | 14   | 21   | 28    | 35    | 42    | 49    | 56    | 63    | 70    |
| 08 | 256                         | (245)      | 8    | 16   | 24   | 32    | 40    | 48    | 56    | 64    | 72    | 80    |
| 09 | 286                         | (275)      | 9    | 18   | 27   | 36    | 45    | 54    | 63    | 72    | 81    | 90    |
| 10 | 316                         | (305)      | 10   | 20   | 30   | 40    | 50    | 60    | 70    | 80    | 90    | 100   |

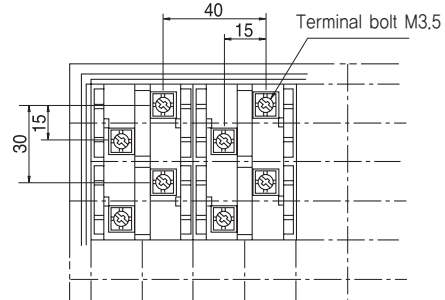
|    | Column | b                           | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    |
|----|--------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|    | Row    | Dimension<br>(Panel cutout) | B     | 346   | 376   | 406   | 436   | 466   | 496   | 526   | 556   | 586   |
| a  | A      | (D)<br>(C)                  | (335) | (365) | (395) | (425) | (455) | (485) | (515) | (545) | (575) | (605) |
| 01 | 46     | (35)                        | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    |
| 02 | 76     | (65)                        | 22    | 24    | 26    | 28    | 30    | 32    | 34    | 36    | 38    | 40    |
| 03 | 106    | (95)                        | 33    | 36    | 39    | 42    | 45    | 48    | 51    | 54    | 57    | 60    |
| 04 | 136    | (125)                       | 44    | 48    | 52    | 56    | 60    | 64    | 68    | 72    | 76    | 80    |
| 05 | 166    | (155)                       | 55    | 60    | 65    | 70    | 75    | 80    | 85    | 90    | 95    | 100   |
| 06 | 196    | (185)                       | 66    | 72    | 78    | 84    | 90    | 96    | 102   | 108   | 114   | 120   |
| 07 | 226    | (215)                       | 77    | 84    | 91    | 98    | 105   | 112   | 119   | 126   | 133   | 140   |
| 08 | 256    | (245)                       | 88    | 96    | 104   | 112   | 120   | 128   | 136   | 144   | 152   | 160   |
| 09 | 286    | (275)                       | 99    | 108   | 117   | 126   | 135   | 144   | 153   | 162   | 171   | 180   |
| 10 | 316    | (305)                       | 110   | 120   | 130   | 140   | 150   | 160   | 170   | 180   | 190   | 200   |

●● Dimension (CD-R : 30×40) (unit : mm)

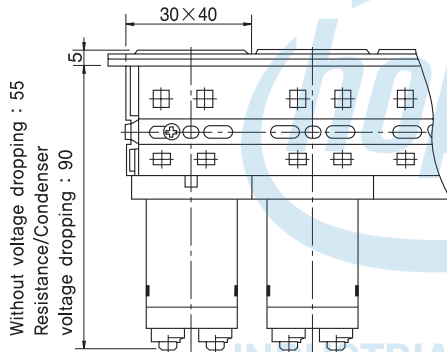
Front side view



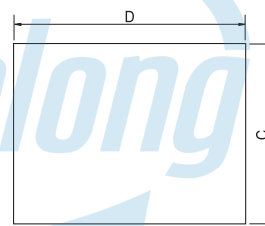
Back side view



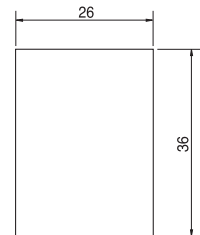
Side view



Panel cutout



Marking plate



※ C : 30n+5 (n : number)

※ D : 40n+5 (n : number)

※ Please refer to panel cut out chart

●● Panel cutout chart (CD-R : 30×40) (unit : mm)

| Row | Column                   |            | 01   | 02   | 03    | 04    | 05    | 06    | 07    | 08    | 09    | 10    | 11    | 12    | 13    | 14    | 15    | 16    |
|-----|--------------------------|------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|     | Dimension (Panel cutout) | B          | 56   | 96   | 136   | 176   | 216   | 256   | 296   | 336   | 376   | 416   | 456   | 496   | 536   | 576   | 616   | 656   |
| a   | A                        | (D)<br>(C) | (45) | (85) | (125) | (165) | (205) | (245) | (285) | (325) | (365) | (405) | (445) | (485) | (525) | (565) | (605) | (645) |
| 01  | 46                       | (35)       | 1    | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    |
| 02  | 76                       | (65)       | 2    | 4    | 6     | 8     | 10    | 12    | 14    | 16    | 18    | 20    | 22    | 24    | 26    | 28    | 30    | 32    |
| 03  | 106                      | (95)       | 3    | 6    | 9     | 12    | 15    | 18    | 21    | 24    | 27    | 30    | 33    | 36    | 39    | 42    | 45    | 48    |
| 04  | 136                      | (125)      | 4    | 8    | 12    | 16    | 20    | 24    | 28    | 32    | 36    | 40    | 44    | 48    | 52    | 56    | 60    | 64    |
| 05  | 166                      | (155)      | 5    | 10   | 15    | 20    | 25    | 30    | 35    | 40    | 45    | 50    | 55    | 60    | 65    | 70    | 75    | 80    |
| 06  | 196                      | (185)      | 6    | 12   | 18    | 24    | 30    | 36    | 42    | 48    | 54    | 60    | 66    | 72    | 78    | 84    | 90    | 96    |
| 07  | 226                      | (215)      | 7    | 14   | 21    | 28    | 35    | 42    | 49    | 56    | 63    | 70    | 77    | 84    | 91    | 98    | 105   | 112   |
| 08  | 256                      | (245)      | 8    | 16   | 24    | 32    | 40    | 48    | 56    | 64    | 72    | 80    | 88    | 96    | 104   | 112   | 120   | 128   |
| 09  | 286                      | (275)      | 9    | 18   | 27    | 36    | 45    | 54    | 63    | 72    | 81    | 90    | 99    | 108   | 117   | 126   | 135   | 144   |
| 10  | 316                      | (305)      | 10   | 20   | 30    | 40    | 50    | 60    | 70    | 80    | 90    | 100   | 110   | 120   | 130   | 140   | 150   | 160   |

Control switch  
Combination display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

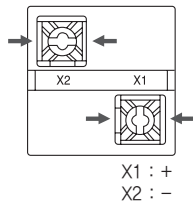
Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

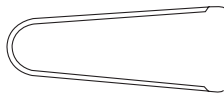
Discontinued Products

### Terminal wiring and parts

Wiring direction diagram



L.E.D and cover puller



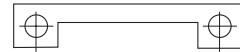
CD-10

Vertical terminal



CD-203  
CD-204

Horizontal terminal

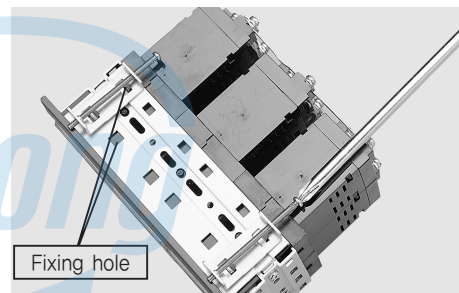


CD-303  
CD-304

### Holder quantity and holder position by the composition of assembled indicator

#### • Holder quantity

| width \ height | 1-2  | 3-8  | 9-15 | 16-20 |
|----------------|------|------|------|-------|
| 1-2            | 2    | 4    | 6    | 8     |
| 3-6            | 4(6) | 6(8) | 8    | 10    |
| 7-10           | 6(8) | 8    | 10   | 12    |



#### • Holder position

| width \ height | 1-2 | 3-8 | 9-15 | 16-20 |
|----------------|-----|-----|------|-------|
| 1-2            |     |     |      |       |
| 3-6            |     |     |      |       |
| 7-10           |     |     |      |       |

### Precautions

- When mounting the panel, select the thickness after considering the weight of device body part (such as assembled indicator and etc), weight of cables (by wiring) and etc.
- For the assembled type above 3x6, please have the gap (more than 50mm) in the left/right direction and wiring direction
- When replacing the LED luminous element, must turn OFF the indicator and replace it
- D.C rated voltage of LED luminous element indicates complete direct current voltage. Also, full-wave rectified or pulsating voltage might lead an error in measurement depending on the measuring instrument so please be cautious
- In case of PCB, overall weight will exceed 1kg once combining more than 12 devices so please consider the thickness of panel and combine them.
- Common of assembled indicator is composed of ⊕