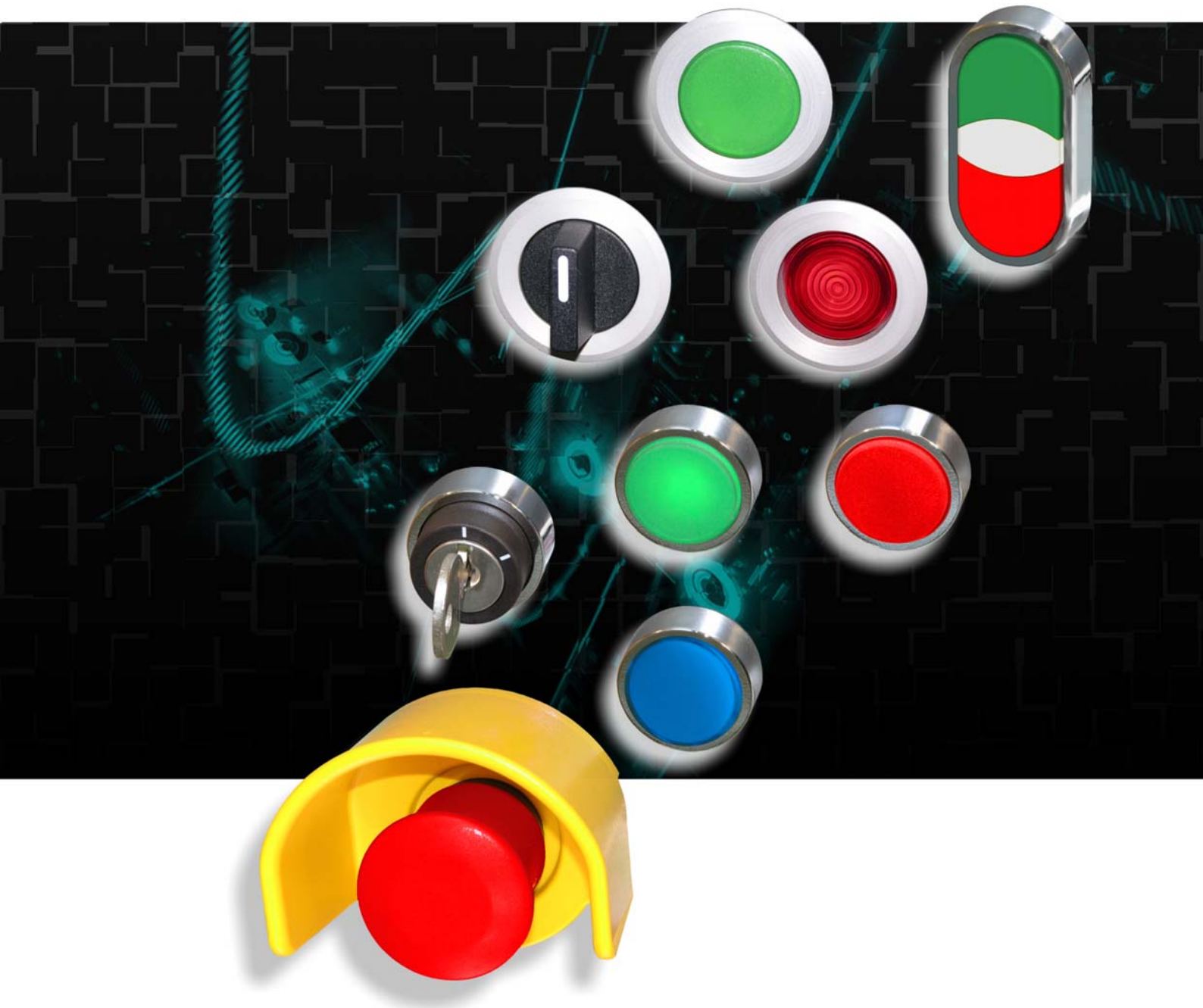


# Push Buttons



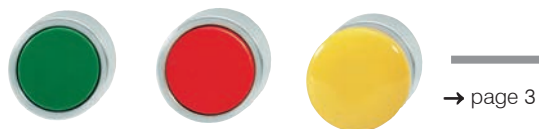
| Program B3                                                                                                                                                                                                                                            |                                            | 2      |
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|                                                                                                                                                                                                                                                       | Key Operated Rotary Switches               | 4      |
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|                                                                                                                                                                                                                                                       | Lens Caps                                  | 7      |
|                                                                                                                                                                                                                                                       | Monoblock-Multi-LED                        | 7      |
|    | Connector                                  | 8      |
|                                                                                                                                                                                                                                                       | Insert Actuator                            | 8      |
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|  Ø 30,5mm                                                                                                                                                                |                                 |    |
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# Acuators and Lens Caps 22mm IP67 (IP65), cULus Type12

## Push Buttons



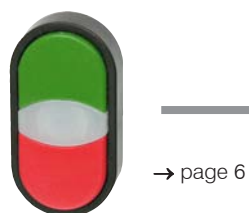
## EMERGENCY STOP Buttons



## Illuminated Operators



## Double Push Buttons with Indicator Lamp IP65



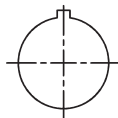
## Lens Caps



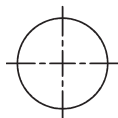
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Mounting hole  
Ø 22,5mm

with key way



without key way



→ page 4



→ page 10

Wrench  
for Actuators  
Lens Caps and  
Mono Block Multi Chip LED  
J7049



## Connectors

Thikness  
0,5 - 4 mm  
→ page 8

or



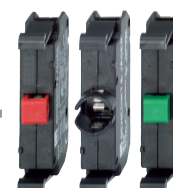
Thikness  
1 - 6 mm  
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## Connectors Lamp Holders



→ page 8



→ page 8



LED  
24-230V



Filament  
6-130V



Glow-discharge  
230V  
→ page 9

## Actuators 22mm IP67, Type12

| Ring                                                                                |        |           |  |  |  |           |               |
|-------------------------------------------------------------------------------------|--------|-----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|---------------|
|                                                                                     | Colour | Symbol    | Alu                                                                               | Black                                                                              | Chrome                                                                              | Pack pcs. | Weight kg/pc. |
| Push Buttons, Actuator Caps markable                                                |        |           |                                                                                   |                                                                                    |                                                                                     |           |               |
|    | red    |           | B3D RT                                                                            | BS3D RT                                                                            | BC3D RT                                                                             | 10        | 0,014         |
|                                                                                     | red    | 0         | B3D RT-0                                                                          | BS3D RT-0                                                                          | BC3D RT-0                                                                           | 10        | 0,014         |
|                                                                                     | green  |           | B3D GN                                                                            | BS3D GN                                                                            | BC3D GN                                                                             | 10        | 0,014         |
|                                                                                     | green  | I         | B3D GN-I                                                                          | BS3D GN-I                                                                          | BC3D GN-I                                                                           | 10        | 0,014         |
|                                                                                     | green  | II        | B3D GN-II                                                                         | BS3D GN-II                                                                         | BC3D GN-II                                                                          | 10        | 0,014         |
|                                                                                     | green  | →         | B3D GN-PF                                                                         | BS3D GN-PF                                                                         | BC3D GN-PF                                                                          | 10        | 0,014         |
|                                                                                     | yellow |           | B3D GE                                                                            | BS3D GE                                                                            | BC3D GE                                                                             | 10        | 0,014         |
|                                                                                     | blue   |           | B3D BL                                                                            | BS3D BL                                                                            | BC3D BL                                                                             | 10        | 0,014         |
|                                                                                     | weiß   |           | B3D WS                                                                            | BS3D WS                                                                            | BC3D WS                                                                             | 10        | 0,014         |
|                                                                                     | black  |           | B3D SW                                                                            | BS3D SW                                                                            | BC3D SW                                                                             | 10        | 0,014         |
| black                                                                               | →      | B3D SW-PF | BS3D SW-PF                                                                        | BC3D SW-PF                                                                         | 10                                                                                  | 0,014     |               |
| Push Buttons, Maintained, Actuator Caps markable                                    |        |           |                                                                                   |                                                                                    |                                                                                     |           |               |
|    | red    |           | B3DR RT                                                                           | BS3DR RT                                                                           | BC3DR RT                                                                            | 10        | 0,014         |
|                                                                                     | green  |           | B3DR GN                                                                           | BS3DR GN                                                                           | BC3DR GN                                                                            | 10        | 0,014         |
|                                                                                     | yellow |           | B3DR GE                                                                           | BS3DR GE                                                                           | BC3DR GE                                                                            | 10        | 0,014         |
|                                                                                     | blue   |           | B3DR BL                                                                           | BS3DR BL                                                                           | BC3DR BL                                                                            | 10        | 0,014         |
|                                                                                     | weiß   |           | B3DR WS                                                                           | BS3DR WS                                                                           | BC3DR WS                                                                            | 10        | 0,014         |
|                                                                                     | black  |           | B3DR SW                                                                           | BS3DR SW                                                                           | BC3DR SW                                                                            | 10        | 0,014         |
| Mushroom Head Ø28mm                                                                 |        |           |                                                                                   |                                                                                    |                                                                                     |           |               |
|  | red    |           | B3P1 RT                                                                           | BS3P1 RT                                                                           | BC3P1 RT                                                                            | 10        | 0,017         |
|                                                                                     | red    | 0         | B3P1 RT-0                                                                         | BS3P1 RT-0                                                                         | BC3P1 RT-0                                                                          | 10        | 0,017         |
|                                                                                     | green  |           | B3P1 GN                                                                           | BS3P1 GN                                                                           | BC3P1 GN                                                                            | 10        | 0,017         |
|                                                                                     | yellow |           | B3P1 GE                                                                           | BS3P1 GE                                                                           | BC3P1 GE                                                                            | 10        | 0,017         |
|                                                                                     | blue   |           | B3P1 BL                                                                           | BS3P1 BL                                                                           | BC3P1 BL                                                                            | 10        | 0,017         |
|                                                                                     | black  |           | B3P1 SW                                                                           | BS3P1 SW                                                                           | BC3P1 SW                                                                            | 10        | 0,017         |
| Mushroom Head Ø40mm                                                                 |        |           |                                                                                   |                                                                                    |                                                                                     |           |               |
|  | red    | 0         | B3P14 RT-0                                                                        | BS3P14 RT-0                                                                        | BC3P14 RT-0                                                                         | 10        | 0,020         |
|                                                                                     |        |           |                                                                                   |                                                                                    |                                                                                     |           |               |
| Mushroom Head Ø40mm                                                                 |        |           |                                                                                   |                                                                                    |                                                                                     |           |               |
|  | red    |           | BS3P44T RT                                                                        | BS3P44T RT                                                                         | BS3P44T RT                                                                          | 10        | 0,028         |
|                                                                                     |        |           |                                                                                   |                                                                                    |                                                                                     |           |               |
| Foot and Palm switch Ø70mm                                                          |        |           |                                                                                   |                                                                                    |                                                                                     |           |               |
|  | red    |           | BS3P14P RT                                                                        | BS3P14P RT                                                                         | BS3P14P RT                                                                          | 1         | 0,062         |
|                                                                                     | grey   |           | BS3P14P GR                                                                        | BS3P14P GR                                                                         | BS3P14P GR                                                                          | 1         | 0,062         |

## Actuators 22mm IP67, Type12

| Ring | Colour | Symbol<br>/ high |  |  |  | Pack<br>pcs. | Weight<br>kg/pc. |
|------|--------|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|------------------|
|      |        |                  | Alu                                                                               | Black                                                                             | Chrome                                                                              |              |                  |

### EMERGENCY STOP Push Buttons, according to EN418, push to trip, pull to release Ø40mm



|     |      |                  |                  |                  |    |       |
|-----|------|------------------|------------------|------------------|----|-------|
| red | 26mm | <b>BS3P44 RT</b> | <b>BS3P44 RT</b> | <b>BS3P44 RT</b> | 10 | 0,028 |
| red | 38mm | <b>BS3P45 RT</b> | <b>BS3P45 RT</b> | <b>BS3P45 RT</b> | 10 | 0,028 |

### EMERGENCY STOP Push Buttons, according to EN418, release by key, Ø40mm



|     |      |                 |                 |                 |   |       |
|-----|------|-----------------|-----------------|-----------------|---|-------|
| red | 38mm | <b>BS3P44S3</b> | <b>BS3P44S3</b> | <b>BS3P44S3</b> | 1 | 0,050 |
|-----|------|-----------------|-----------------|-----------------|---|-------|

Spare Key

|                 |                |   |        |
|-----------------|----------------|---|--------|
| lock Ronis R455 | <b>B4-R455</b> | 1 | 0,0077 |
|-----------------|----------------|---|--------|

### EMERGENCY STOP Push Buttons, release by turning, Ø28mm



|     |   |                  |                   |                   |    |       |
|-----|---|------------------|-------------------|-------------------|----|-------|
| red |   | <b>B3P3 RT</b>   | <b>BS3P3 RT</b>   | <b>BC3P3 RT</b>   | 10 | 0,017 |
| red | 0 | <b>B3P3 RT-0</b> | <b>BS3P3 RT-0</b> | <b>BC3P3 RT-0</b> | 10 | 0,017 |

### EMERGENCY STOP Push Buttons, release by turning, Ø40mm



|                    |   |                   |                    |                    |    |       |
|--------------------|---|-------------------|--------------------|--------------------|----|-------|
| red                | 0 | <b>B3P34 RT-0</b> | <b>BS3P34 RT-0</b> | <b>BC3P34 RT-0</b> | 10 | 0,020 |
| red<br>illuminated |   | <b>B3P34L RT</b>  | <b>BS3P34L RT</b>  | <b>BC3P34L RT</b>  | 10 | 0,020 |

### EMERGENCY STOP Push Buttons, release by turning, Ø70mm



|     |  |                   |                   |                   |   |       |
|-----|--|-------------------|-------------------|-------------------|---|-------|
| red |  | <b>BS3P34P RT</b> | <b>BS3P34P RT</b> | <b>BS3P34P RT</b> | 1 | 0,062 |
|-----|--|-------------------|-------------------|-------------------|---|-------|

Type Pack Weight  
pcs. kg/pc.

### Yellow Disk Ø70mm, Thickness 1mm



|                                             |                   |   |       |
|---------------------------------------------|-------------------|---|-------|
| neutral                                     | <b>B3-7603</b>    | 1 | 0,004 |
| with marking NOT-AUS                        | <b>B3-7603-1</b>  | 1 | 0,004 |
| with marking EMERGENCY STOP                 | <b>B3-7603-2</b>  | 1 | 0,004 |
| 2-side markings: NOT-AUS / EMERGENCY STOP   | <b>B3-7603-12</b> | 1 | 0,004 |
| 2-side markings: ARRET D`URGENCE / NØDSTOP  | <b>B3-7603-34</b> | 1 | 0,004 |
| 2-side markings: ARRET D`URGENCE / NOODSTOP | <b>B3-7603-35</b> | 1 | 0,004 |

### Protection cover against unintentional manipulation, Thickness 1mm



|                                         |                 |   |      |
|-----------------------------------------|-----------------|---|------|
| for Push Buttons Ø28mm and Ø40mm yellow | <b>B3-SK GE</b> | 1 | 0,04 |
|-----------------------------------------|-----------------|---|------|

Actuators 22mm  Type12

|      |                                                                                   |     |  |                                                                                    |  |  |                                                                                     |                            |  |
|------|-----------------------------------------------------------------------------------|-----|--|------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------|----------------------------|--|
| Ring |  |     |  |  |  |  |  |                            |  |
|      | Knob                                                                              | Alu |  | Black                                                                              |  |  | Chrome                                                                              |                            |  |
|      |                                                                                   |     |  |                                                                                    |  |  |                                                                                     | Pack Weight<br>pcs. kg/pc. |  |

Rotary Knobs and Swing Knobs, black IP65



Rotary



Swing

|                                     |        |               |  |                |  |                |  |    |       |
|-------------------------------------|--------|---------------|--|----------------|--|----------------|--|----|-------|
| maintained 60°                      |        |               |  |                |  |                |  |    |       |
|                                     | Rotary | <b>B3KN2</b>  |  | <b>BS3KN2</b>  |  | <b>BC3KN2</b>  |  | 10 | 0,020 |
|                                     | Swing  | <b>B3KRN2</b> |  | <b>BS3KRN2</b> |  | <b>BC3KRN2</b> |  | 10 | 0,020 |
| spring return 60°                   |        |               |  |                |  |                |  |    |       |
|                                     | Rotary | <b>B3KN8</b>  |  | <b>BS3KN8</b>  |  | <b>BC3KN8</b>  |  | 10 | 0,020 |
|                                     | Swing  | <b>B3KRN8</b> |  | <b>BS3KRN8</b> |  | <b>BC3KRN8</b> |  | 10 | 0,020 |
| spring return 60°                   |        |               |  |                |  |                |  |    |       |
|                                     | Rotary | <b>B3KN1</b>  |  | <b>BS3KN1</b>  |  | <b>BC3KN1</b>  |  | 10 | 0,020 |
|                                     | Swing  | <b>B3KRN1</b> |  | <b>BS3KRN1</b> |  | <b>BC3KRN1</b> |  | 10 | 0,020 |
| maintained 60°                      |        |               |  |                |  |                |  |    |       |
|                                     | Rotary | <b>B3KN3</b>  |  | <b>BS3KN3</b>  |  | <b>BC3KN3</b>  |  | 10 | 0,020 |
|                                     | Swing  | <b>B3KRN3</b> |  | <b>BS3KRN3</b> |  | <b>BC3KRN3</b> |  | 10 | 0,020 |
| maintained/spring return 60°        |        |               |  |                |  |                |  |    |       |
|                                     | Rotary | <b>B3KN6</b>  |  | <b>BS3KN6</b>  |  | <b>BC3KN6</b>  |  | 10 | 0,020 |
|                                     |        |               |  |                |  |                |  |    |       |
| spring return/maintained 60°        |        |               |  |                |  |                |  |    |       |
|                                     | Rotary | <b>B3KN7</b>  |  | <b>BS3KN7</b>  |  | <b>BC3KN7</b>  |  | 10 | 0,020 |
|                                     |        |               |  |                |  |                |  |    |       |
| maintained 120°                     |        |               |  |                |  |                |  |    |       |
|                                     | Rotary | <b>B3KN9</b>  |  | <b>BS3KN9</b>  |  | <b>BC3KN9</b>  |  | 10 | 0,020 |
|                                     |        |               |  |                |  |                |  |    |       |
| maintained 90°<br>entsprechend EN81 |        |               |  |                |  |                |  |    |       |
|                                     | Rotary | <b>B3KN10</b> |  | <b>BS3KN10</b> |  | <b>BC3KN10</b> |  | 10 | 0,020 |
|                                     |        |               |  |                |  |                |  |    |       |

Illuminated Rotary Knobs and Swing Knobs, clear IP67, lamp max. 1,2W, lamps see page 13



Rotary



Swing

|                               |        |               |  |                |  |                |  |    |       |
|-------------------------------|--------|---------------|--|----------------|--|----------------|--|----|-------|
| maintained 90°                |        |               |  |                |  |                |  |    |       |
|                               | Rotary | <b>B3KL2</b>  |  | <b>BS3KL2</b>  |  | <b>BC3KL2</b>  |  | 10 | 0,016 |
|                               |        |               |  |                |  |                |  |    |       |
| spring return 60°             |        |               |  |                |  |                |  |    |       |
|                               | Rotary | <b>B3KL1</b>  |  | <b>BS3KL1</b>  |  | <b>BC3KL1</b>  |  | 10 | 0,016 |
|                               | Swing  | <b>B3KRL1</b> |  | <b>BS3KRL1</b> |  | <b>BC3KRL1</b> |  | 10 | 0,016 |
| maintained 60°                |        |               |  |                |  |                |  |    |       |
|                               | Rotary | <b>B3KL3</b>  |  | <b>BS3KL3</b>  |  | <b>BC3KL3</b>  |  | 10 | 0,016 |
|                               | Swing  | <b>B3KRL3</b> |  | <b>BS3KRL3</b> |  | <b>BC3KRL3</b> |  | 10 | 0,016 |
| maintained /spring return 60° |        |               |  |                |  |                |  |    |       |
|                               | Rotary | <b>B3KL6</b>  |  | <b>BS3KL6</b>  |  | <b>BC3KL6</b>  |  | 10 | 0,016 |
|                               |        |               |  |                |  |                |  |    |       |

Toggle IP65



|       |            |             |             |    |       |
|-------|------------|-------------|-------------|----|-------|
| O - I | <b>B3E</b> | <b>BS3E</b> | <b>BC3E</b> | 10 | 0,017 |
|-------|------------|-------------|-------------|----|-------|



## Actuators 22mm IP65, Type12

Ring

key  
removeable in



Alu



Black



Chrome

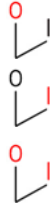
Pack Weight  
pcs. kg/pc.

### Key Operated Rotary Switch with lock Ronis 455



B3SAR 0

maintained 60°



B3SAR 0

BS3SAR 0

BC3SAR 0

1 0,044

B3SAR 1

BS3SAR 1

BC3SAR 1

1 0,044

B3SAR 01

BS3SAR 01

BC3SAR 01

1 0,044



B3SARR 0

spring return 60°



B3SAT 0

BS3SAT 0

BC3SAT 0

1 0,044

maintained 60°



B3SARR 0

BS3SARR 0

BC3SARR 0

1 0,044

B3SARR 102

BS3SARR 102

BC3SARR 102

1 0,044

spring return /maintained 60°



B3SATR 02

BS3SATR 02

BC3SATR 02

1 0,044

spring return 60°



B3SATT 0

BS3SATT 0

BC3SATT 0

1 0,044

Spare Key lock Ronis R455

B4-R455

1 0,007

Colour Symbol

pcs. kg/pc.

### Illuminated Push Buttons IP67, lamp max. 1,9W, lamps see page 13



red  
green  
yellow

B3DL RT

BS3DL RT

BC3DL RT

10 0,014

B3DL GN

BS3DL GN

BC3DL GN

10 0,014

B3DL GE

BS3DL GE

BC3DL GE

10 0,014

blue  
white

B3DL BL

BS3DL BL

BC3DL BL

10 0,014

B3DL WS

BS3DL WS

BC3DL WS

10 0,014

### Illuminated Push Buttons, Maintained IP67, lamp max. 1,9W, lamps see page 13



red  
green  
yellow

B3DLR RT

BS3DLR RT

BC3DLR RT

10 0,014

B3DLR GN

BS3DLR GN

BC3DLR GN

10 0,014

B3DLR GE

BS3DLR GE

BC3DLR GE

10 0,014

blue  
white

B3DLR BL

BS3DLR BL

BC3DLR BL

10 0,014

B3DLR WS

BS3DLR WS

BC3DLR WS

10 0,014

### Double Push Buttons, with indicator lamp white, lamp max. 1,9W, lamps see page 13



green  
red

B3DT G/R <sup>1)</sup>

BS3DT G/R

BC3DT G/R

10 0,016

white  
black

B3DT W/S <sup>1)</sup>

BS3DT W/S

BC3DT W/S

10 0,016

green  
red

I  
0

B3DT GI/RO <sup>1)</sup>

BS3DT GI/RO

BC3DT GI/RO

10 0,016

white  
black

I  
0

B3DT WI/SO <sup>1)</sup>

BS3DT WI/SO

BC3DT WI/SO

10 0,016

with non-standard marking on request

1) Plastic ring in alu design

suitable for Alu, Black and Chrome

Colour

Type

Pack Weight  
pcs. kg/pc.

**Lens Caps IP67** with fresnel lens, lamp max. 1,9W, lamps see page 13



|        |               |    |       |
|--------|---------------|----|-------|
| red    | <b>B3R RT</b> | 10 | 0,009 |
| green  | <b>B3R GN</b> | 10 | 0,009 |
| yellow | <b>B3R GE</b> | 10 | 0,009 |
| blue   | <b>B3R BL</b> | 10 | 0,009 |
| clear  | <b>B3R KL</b> | 10 | 0,009 |
| white  | <b>B3R WS</b> | 10 | 0,009 |

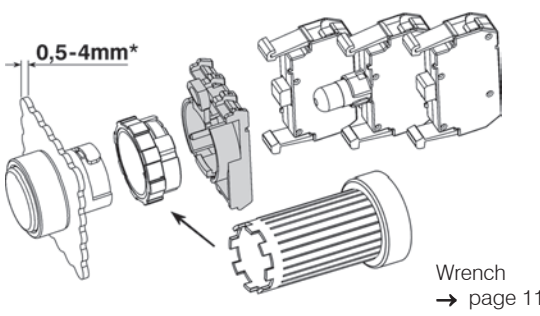
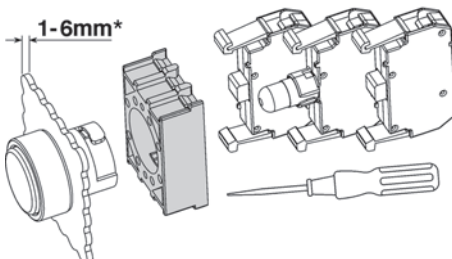
**Lens Caps IP67**, lamp max. 1,9W, lamps see page 13



|        |                |    |       |
|--------|----------------|----|-------|
| red    | <b>B3RF RT</b> | 10 | 0,009 |
| green  | <b>B3RF GN</b> | 10 | 0,009 |
| yellow | <b>B3RF GE</b> | 10 | 0,009 |
| blue   | <b>B3RF BL</b> | 10 | 0,009 |
| white  | <b>B3RF WS</b> | 10 | 0,009 |



Connectors

| Specification                                                                     | Description | Type | Pack pcs. | Weight kg/pc. |
|-----------------------------------------------------------------------------------|-------------|------|-----------|---------------|
| <b>Connector B3S</b>                                                              |             |      |           |               |
|  |             |      |           |               |
|  |             |      |           |               |
| <b>Connector B3M</b>                                                              |             |      |           |               |
|  |             |      |           |               |
|  |             |      |           |               |

\*) inclusive Thickness from Label Holder and Yellow Disk

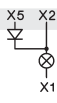
Contact Blocks and Lamp Holders for Panel Mounting

| for voltage                                                                         | Description                                                                              | Type                                                                                                           | Pack pcs. | Weight kg/pc. |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------|---------------|
| <b>Contact blocks</b>                                                               |                                                                                          |                                                                                                                |           |               |
|  |                                                                                          |                                                                                                                |           |               |
| max. 690V AC                                                                        | 1 NC  |  <b>B3T01</b> <sup>2)</sup> | 10        | 0,010         |
| max. 690V AC                                                                        | 1 NO                                                                                     |  <b>B3T10</b> <sup>2)</sup> | 10        | 0,010         |
|  |                                                                                          |                                                                                                                |           |               |
| <b>Actuator insert</b>                                                              | to actuate the center contact block                                                      | <b>P642</b>                                                                                                    | 10        | 0,001         |

Lamp holders, socket BA9s

|                                                                                     |                                                                                 |                                                                                                |    |       |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----|-------|
|  |                                                                                 |                                                                                                |    |       |
| max. 440V AC/DC                                                                     | direct connection, for lamps max. 1,9W (take care for active power consumption) |  <b>B3F</b> | 10 | 0,012 |

Lamp holders for lamp test circuits, socket BA9s

|                                                                                     |                                                                   |                                                                                                 |    |       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----|-------|
|  |                                                                   |                                                                                                 |    |       |
| max. 440V AC                                                                        | direct connection, for lamps max. 1,7W (active power consumption) |  <b>B3FT</b> | 10 | 0,020 |

1)  NC contact has a positive opening according to IEC/EN 60947-5-1

2) Contact blocks with gold contacts ( B3T..G) on request suitable for 17V= /1mA and for difficult ambient conditions.

## Lamps

|                                                                                   | Socket BA9s<br>Lamp voltage | Power<br>consumption |                      | Type               | Pack<br>pcs. | Weight<br>kg/pc. |
|-----------------------------------------------------------------------------------|-----------------------------|----------------------|----------------------|--------------------|--------------|------------------|
| <b>LED lamps</b> <sup>2)</sup> 10 years lifetime                                  |                             |                      |                      |                    |              |                  |
|  | 20-30V AC/DC                | 17mA / 0,4W          | for red lens caps    | <b>B3-L24 RTB</b>  | 10           | 0,005            |
|                                                                                   | 20-30V AC/DC                | 17mA / 0,4W          | for green lens caps  | <b>B3-L24 GNB</b>  | 10           | 0,005            |
|                                                                                   | 20-30V AC/DC                | 17mA / 0,4W          | for yellow lens caps | <b>B3-L24 GEB</b>  | 10           | 0,005            |
|                                                                                   | 20-30V AC/DC                | 17mA / 0,4W          | for blue lens caps   | <b>B3-L24 BLB</b>  | 10           | 0,005            |
|                                                                                   | 20-30V AC/DC                | 17mA / 0,4W          | for white lens caps  | <b>B3-L24 WSB</b>  | 10           | 0,005            |
|                                                                                   | 90-120V AC/DC               | 7mA / 0,8W           | for red lens caps    | <b>B3-L110 RTB</b> | 10           | 0,005            |
|  | 90-120V AC/DC               | 7mA / 0,8W           | for green lens caps  | <b>B3-L110 GNB</b> | 10           | 0,005            |
|                                                                                   | 90-120V AC/DC               | 7mA / 0,8W           | for yellow lens caps | <b>B3-L110 GEB</b> | 10           | 0,005            |
|                                                                                   | 90-120V AC/DC               | 7mA / 0,8W           | for blue lens caps   | <b>B3-L110 BLB</b> | 10           | 0,005            |
|                                                                                   | 90-120V AC/DC               | 7mA / 0,8W           | for white lens caps  | <b>B3-L110 WSB</b> | 10           | 0,005            |
|                                                                                   | 200-250V AC/DC              | 4mA / 0,9W           | for red lens caps    | <b>B3-L230 RTB</b> | 10           | 0,005            |
|                                                                                   | 200-250V AC/DC              | 4mA / 0,9W           | for green lens caps  | <b>B3-L230 GNB</b> | 10           | 0,005            |
|                                                                                   | 200-250V AC/DC              | 4mA / 0,9W           | for yellow lens caps | <b>B3-L230 GEB</b> | 10           | 0,005            |
|                                                                                   | 200-250V AC/DC              | 4mA / 0,9W           | for blue lens caps   | <b>B3-L230 BLB</b> | 10           | 0,005            |
|                                                                                   | 200-250V AC/DC              | 4mA / 0,9W           | for white lens caps  | <b>B3-L230 WSB</b> | 10           | 0,005            |
|                                                                                   |                             |                      |                      |                    |              |                  |

## Filament lamps

|                        |          |                   |                |    |       |
|------------------------|----------|-------------------|----------------|----|-------|
| 12V                    | 1,2W     | for all lens caps | <b>B4-G12</b>  | 50 | 0,005 |
| 24V                    | 1,2W     | for all lens caps | <b>B4-G24</b>  | 50 | 0,005 |
| 42V                    | 1,2W     | for all lens caps | <b>B4-G42</b>  | 50 | 0,005 |
| 48V                    | 1,2W     | for all lens caps | <b>B4-G48</b>  | 50 | 0,005 |
| 60V                    | 1,2W     | for all lens caps | <b>B4-G60</b>  | 50 | 0,005 |
| 110/120V <sup>1)</sup> | 1,5/1,8W | for all lens caps | <b>B4-G130</b> | 50 | 0,005 |

## Glow-discharge lamps



|             |      |                                  |                  |     |       |
|-------------|------|----------------------------------|------------------|-----|-------|
| 220-250V AC | 0,3W | for clear, red, yellow lens caps | <b>B4-GL230K</b> | 100 | 0,005 |
| 220-250V AC | 0,3W | for green, blue lens caps        | <b>B4-GL230G</b> | 100 | 0,005 |

1) Voltage marking 130V / 2W max. rated voltage 120V / 1,8W

2) suitable for B3FT lamp test lamp holders

## Accessories



|                                               |                                                                                       | Type            | VPE<br>Stk. | Gewicht<br>kg/Stk. |
|-----------------------------------------------|---------------------------------------------------------------------------------------|-----------------|-------------|--------------------|
| <b>Wrench</b>                                 | for mounting of actuators<br>and lens caps B(S)3..                                    | <b>J7049</b>    | 1           | 0,018              |
| <b>Marking plate</b>                          | for marking of contact blocks B3T.<br>and lamp holders B3F                            | <b>P672-1</b>   | 10          | 0,001              |
| <b>Lamp Installer</b>                         | used to install or replace lamps BA9s                                                 | <b>B4-7408</b>  | 1           | 0,010              |
| <b>Spare Key</b>                              | for B(S)3SA.. and BS3P44S3, Ronis R455                                                | <b>B4-R455</b>  | 1           | 0,007              |
|                                               | for B(S)3SB.., Ronis R786                                                             | <b>B4-R786</b>  | 1           | 0,007              |
| <b>Hole Plug</b>                              | black, for fixing holes Ø22,5mm                                                       | <b>B3-DU SW</b> | 10          | 0,007              |
|                                               | grey                                                                                  | <b>B3-DU GR</b> | 10          | 0,007              |
| <b>Sealing Cover</b>                          | ambient temp. 0° - +50° C                                                             | <b>P279-1</b>   | 1           | 0,003              |
| protection<br>against coarse<br>contamination | petrol-resistant, <i>not for B3D..R.. (maintained)</i><br>ambient temp. -25° - +55° C | <b>P279-3</b>   | 1           | 0,003              |
|                                               | for double push buttons, petrol-resistant<br>ambient temp. -25° - +55° C              | <b>P279-DT</b>  | 1           | 0,003              |
| <b>Protection cover</b>                       | against unintentional manipulation                                                    |                 |             |                    |
|                                               | Thickness 1mm yellow                                                                  | <b>B3-SK GE</b> | 1           | 0,04               |
|                                               | Thickness 1mm grey                                                                    | <b>B3-SK GR</b> | 1           | 0,04               |
| <b>Protection ring<br/>with thread</b>        | against unintentional manipulation                                                    |                 |             |                    |
|                                               | has to be mounted instead of the existing ring black                                  | <b>P921-1</b>   | 1           | 0,012              |
|                                               | chrome                                                                                | <b>P921-2</b>   | 1           | 0,012              |
|                                               | alu                                                                                   | <b>P921-3</b>   | 1           | 0,012              |

## Label Holder and Legend Plates for Push Buttons B3, 22mm

|                                                                                   |                                                           |  |  | Type | Pack pcs. | Weight kg/pc. |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------|--|--|------|-----------|---------------|
| Marking 1 or 2 lines                                                              |                                                           |  |  |      |           |               |
|  | Label holder for legend plate BK4, black, Thikness 0,8mm  |  |  |      | 100       | 0,002         |
|                                                                                   | Label holder for legend plate BK4, yellow, Thikness 0,8mm |  |  |      | 10        | 0,002         |
|                                                                                   |                                                           |  |  |      |           |               |
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## Marking 3 or 4 lines



|                                                                                        |  |                     |    |        |
|----------------------------------------------------------------------------------------|--|---------------------|----|--------|
| Label holder for legend plate BK8, black, Thikness 0,8mm                               |  | P761                | 10 | 0,002  |
| Label holder for legend plate BK8, yellow, Thikness 0,8mm                              |  | P761-3              | 10 | 0,002  |
| Label holder for BK8, for double push buttons only                                     |  | P761-DT             | 10 | 0,002  |
| Legend plate BK8 with for label holder P761 (with marking e. g.: BK8-WATER-PUMP-START) |  |                     |    |        |
| Legend plate without marking                                                           |  | BK8-9736            | 10 | 0,0004 |
| Text 3 lines, max. 3 x 11 letters, letter height 3mm                                   |  | BK8-...-...-...     | 10 | 0,0004 |
| Text 4 lines, max. 4 x 11 letters, letter height 3mm                                   |  | BK8-...-...-...-... | 10 | 0,0004 |

## Actuator Caps

| marking | Type | -suffix for marking | marking | Type | -suffix for marking. | Pack Weight pcs. kg/pc. |
|---------|------|---------------------|---------|------|----------------------|-------------------------|
|---------|------|---------------------|---------|------|----------------------|-------------------------|

Actuator Caps with markings, the Type must be completed with the code for colours (see below)



|         |                  |         |                  |    |       |
|---------|------------------|---------|------------------|----|-------|
| START   | DK(L) ..-START   | NOT AUS | DK(L) ..-NOT-AUS | 10 | 0,001 |
| EIN     | DK(L) ..-EIN     | STOP    | DK(L) ..-STOP    | 10 | 0,001 |
|         |                  | AUS     | DK(L) ..-AUS     | 10 | 0,001 |
| BETRIEB | DK(L) ..-BETRIEB | STÖRUNG | DK(L) ..-STÖRUNG | 10 | 0,001 |
| ANLAUF  | DK(L) ..-ANLAUF  | HALT    | DK(L) ..-HALT    | 10 | 0,001 |
| VOR     | DK(L) ..-VOR     | ZURÜCK  | DK(L) ..-ZURÜCK  | 10 | 0,001 |
| HEBEN   | DK(L) ..-HEBEN   | SENKEN  | DK(L) ..-SENKEN  | 10 | 0,001 |
| LINKS   | DK(L) ..-LINKS   | RECHTS  | DK(L) ..-RECHTS  | 10 | 0,001 |
| MEHR    | DK(L) ..-MEHR    | WENIGER | DK(L) ..-WENIGER | 10 | 0,001 |
| SCHNELL | DK(L) ..-SCHNELL | LANGSAM | DK(L) ..-LANGSAM | 10 | 0,001 |
| HELLER  | DK(L) ..-HELLER  | DUNKLER | DK(L) ..-DUNKLER | 10 | 0,001 |
| AUF     | DK(L) ..-AUF     | ZU      | DK(L) ..-ZU      | 10 | 0,001 |
| AB      | DK(L) ..-AB      | LAUF    | DK(L) ..-LAUF    | 10 | 0,001 |
| EILGANG | DK(L) ..-EILGANG | TIPPEN  | DK(L) ..-TIPPEN  | 10 | 0,001 |

Actuator Caps with symbols according to DIN 30600, the Type must be completed with the code for colours

|  |              |  |              |    |       |
|--|--------------|--|--------------|----|-------|
|  | DK(L) ..-100 |  | DK(L) ..-101 | 10 | 0,001 |
|  | DK(L) ..-102 |  | DK(L) ..-103 | 10 | 0,001 |
|  | DK(L) ..-200 |  | DK(L) ..-201 | 10 | 0,001 |
|  | DK(L) ..-202 |  | DK(L) ..-203 | 10 | 0,001 |
|  | DK(L) ..-204 |  | DK(L) ..-205 | 10 | 0,001 |
|  | DK(L) ..-300 |  | DK(L) ..-301 | 10 | 0,001 |
|  | DK(L) ..-302 |  | DK(L) ..-303 | 10 | 0,001 |
|  | DK(L) ..-304 |  | DK(L) ..-305 | 10 | 0,001 |
|  | DK(L) ..-306 |  | DK(L) ..-307 | 10 | 0,001 |
|  | DK(L) ..-400 |  | DK(L) ..-401 | 10 | 0,001 |
|  | DK(L) ..-402 |  | DK(L) ..-403 | 10 | 0,001 |
|  | DK(L) ..-404 |  | DK(L) ..-405 | 10 | 0,001 |
|  | DK(L) ..-406 |  | DK(L) ..-407 | 10 | 0,001 |
|  | DK(L) ..-408 |  | DK(L) ..-409 | 10 | 0,001 |
|  | DK(L) ..-410 |  | DK(L) ..-411 | 10 | 0,001 |
|  | DK(L) ..-412 |  | DK(L) ..-413 | 10 | 0,001 |

### Code for colours

| Colour | for buttons | for illuminated buttons | Colour | for buttons | for illuminated buttons |
|--------|-------------|-------------------------|--------|-------------|-------------------------|
| red    | DK RT-..    | DKL RT-..               | blue   | DK BL-..    | DKL BL-..               |
| green  | DK GN-..    | DKL GN-..               | white  | DK WS-..    | DKL WS-..               |
| yellow | DK GE-..    | DKL GE-..               | black  | DK SW-..    | -                       |

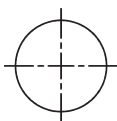
# Acuators and Lens Caps 30mm IP67 (IP65)

## Push Buttons



→ page 13

Mounting hole  
Ø 30,5mm



IP65

→ page 14, 15

## EMERGENCY STOP Buttons



→ page 13



→ page 13

## Illuminated Operators



→ page 15



→ page 17

## Lens Caps



→ page 15

Wrench  
J7049



## Connectors

## Connectors Lamp Holders



Actuator insert  
→ page 16



→ page 16



Thikness  
0,5 - 3 mm  
→ page 16



LED  
24-230V



Filament  
6-130V



Glow-discharge  
230V

→ page 17

## Actuators 30mm IP67

| Ring                                                                                |                             |        |  |  |  |           |               |
|-------------------------------------------------------------------------------------|-----------------------------|--------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|---------------|
|                                                                                     | Colour                      | Symbol | Alu                                                                               | Black                                                                              | Chrome                                                                              | Pack pcs. | Weight kg/pc. |
| Push Buttons, Actuator Caps markable                                                |                             |        |                                                                                   |                                                                                    |                                                                                     |           |               |
|    | red                         |        | B5D RT                                                                            | BS5D RT                                                                            | BC5D RT                                                                             | 10        | 0,029         |
|                                                                                     | red                         | 0      | B5D RT-0                                                                          | BS5D RT-0                                                                          | BC5D RT-0                                                                           | 10        | 0,029         |
|                                                                                     | green                       |        | B5D GN                                                                            | BS5D GN                                                                            | BC5D GN                                                                             | 10        | 0,029         |
|    | green                       | I      | B5D GN-I                                                                          | BS5D GN-I                                                                          | BC5D GN-I                                                                           | 10        | 0,029         |
|                                                                                     | green                       | II     | B5D GN-II                                                                         | BS5D GN-II                                                                         | BC 5D GN-II                                                                         | 10        | 0,029         |
|                                                                                     | green                       | →      | B5D GN-PF                                                                         | BS5D GN-PF                                                                         | BC5D GN-PF                                                                          | 10        | 0,029         |
|                                                                                     | yellow                      |        | B5D GE                                                                            | BS5D GE                                                                            | BC5D GE                                                                             | 10        | 0,029         |
|                                                                                     | blue                        |        | B5D BL                                                                            | BS5D BL                                                                            | BC5D BL                                                                             | 10        | 0,029         |
|                                                                                     | white                       |        | B5D WS                                                                            | BS5D WS                                                                            | BC 5D WS                                                                            | 10        | 0,029         |
|    | black                       |        | B5D SW                                                                            | BS5D SW                                                                            | BC5D SW                                                                             | 10        | 0,029         |
|                                                                                     | black                       | →      | B5D SW-PF                                                                         | BS5D SW-PF                                                                         | BC5D SW-PF                                                                          | 10        | 0,029         |
| Push Buttons, Maintained, Actuator Caps markable                                    |                             |        |                                                                                   |                                                                                    |                                                                                     |           |               |
|    | red                         |        | B5DR RT                                                                           | BS5DR RT                                                                           | BC5DR RT                                                                            | 10        | 0,029         |
|                                                                                     | green                       |        | B5DR GN                                                                           | BS5DR GN                                                                           | BC5DR GN                                                                            | 10        | 0,029         |
|                                                                                     | yellow                      |        | B5DR GE                                                                           | BS5DR GE                                                                           | BC5DR GE                                                                            | 10        | 0,029         |
|  | blue                        |        | B5DR BL                                                                           | BS5DR BL                                                                           | BC5DR BL                                                                            | 10        | 0,029         |
|                                                                                     | white                       |        | B5DR WS                                                                           | BS5DR WS                                                                           | BC5DR WS                                                                            | 10        | 0,029         |
|                                                                                     | black                       |        | B5DR SW                                                                           | BS5DR SW                                                                           | BC5DR SW                                                                            | 10        | 0,029         |
| Mushroom Head, Ø28mm                                                                |                             |        |                                                                                   |                                                                                    |                                                                                     |           |               |
|  | red                         |        | B5P1 RT                                                                           | BS5P1 RT                                                                           | BC5P1 RT                                                                            | 10        | 0,032         |
|                                                                                     | red                         | 0      | B5P1 RT-0                                                                         | BS5P1 RT-0                                                                         | BC5P1 RT-0                                                                          | 10        | 0,032         |
|                                                                                     | green                       |        | B5P1 GN                                                                           | BS5P1 GN                                                                           | BC5P1 GN                                                                            | 10        | 0,032         |
|  | yellow                      |        | B5P1 GE                                                                           | BS5P1 GE                                                                           | BC5P1 GE                                                                            | 10        | 0,032         |
|                                                                                     | blue                        |        | B5P1 BL                                                                           | BS5P1 BL                                                                           | BC5P1 BL                                                                            | 10        | 0,032         |
|                                                                                     | black                       |        | B5P1 SW                                                                           | BS5P1 SW                                                                           | BC5P1 SW                                                                            | 10        | 0,032         |
| Mushroom Head, Ø40mm                                                                |                             |        |                                                                                   |                                                                                    |                                                                                     |           |               |
|  | red                         | 0      | B5P14 RT-0                                                                        | BS5P14 RT-0                                                                        | BC5P14 RT-0                                                                         | 10        | 0,035         |
| EMERGENCY STOP Push Buttons, Ø 28mm, release by turning, with yellow ring           |                             |        |                                                                                   |                                                                                    |                                                                                     |           |               |
|  | red                         |        | B5P3 RT                                                                           | BS5P3 RT                                                                           | BC5P3 RT                                                                            | 10        | 0,032         |
|                                                                                     | red                         | 0      | B5P3 RT-0                                                                         | BS5P3 RT-0                                                                         | BC5P3 RT-0                                                                          | 10        | 0,032         |
| EMERGENCY STOP Push Buttons, Ø 40mm, release by turning                             |                             |        |                                                                                   |                                                                                    |                                                                                     |           |               |
|  | red                         | 0      | B5P34 RT-0                                                                        | BS5P34 RT-0                                                                        | BC5P34 RT-0                                                                         | 10        | 0,035         |
| Yellow Disk for EMERGENCY-STOP Push Buttons, Ø70mm, Thikness 1mm                    |                             |        |                                                                                   |                                                                                    |                                                                                     |           |               |
|  | neutral                     |        |                                                                                   | B5-7603                                                                            |                                                                                     | 1         | 0,004         |
|                                                                                     | with marking NOT-AUS        |        |                                                                                   | B5-7603-1                                                                          |                                                                                     | 1         | 0,004         |
|                                                                                     | with marking EMERGENCY STOP |        |                                                                                   | B5-7603-2                                                                          |                                                                                     | 1         | 0,004         |

## Actuators 30mm

Ring

Knob

Alu

Black

Chrome

Pack Weight  
pcs. kg/pc.

### Rotary Knobs and Swing Knobs, black IP65



Rotary



Swing

maintained 60°



Rotary  
Swing

**B5KN2**  
**B5KRN2**

**BS5KN2**  
**BS5KRN2**

**BC5KN2**  
**BC5KRN2**

10 0,035  
10 0,035

spring return 60°



Rotary  
Swing

**B5KN8**  
**B5KRN8**

**BS5KN8**  
**BS5KRN8**

**BC5KN8**  
**BC5KRN8**

10 0,035  
10 0,035

spring return 60°



Rotary  
Swing

**B5KN1**  
**B5KRN1**

**BS5KN1**  
**BS5KRN1**

**BC5KN1**  
**BC5KRN1**

10 0,035  
10 0,035

maintained 60°



Rotary  
Swing

**B5KN3**  
**B5KRN3**

**BS5KN3**  
**BS5KRN3**

**BC5KN3**  
**BC5KRN3**

10 0,035  
10 0,035

maintained /spring return 60°



Rotary

**B5KN6**

**BS5KN6**

**BC5KN6**

10 0,035

spring return /maintained 60°



Rotary

**B5KN7**

**BS5KN7**

**BC5KN7**

10 0,035

maintained 120°



Rotary

**B5KN9**

**BS5KN9**

**BC5KN9**

10 0,035

maintained 90°  
according to EN81



Rotary

**B5KN10**

**BS5KN10**

**BC5KN10**

10 0,035

### Illuminated Rotary Knobs and Swing Knobs IP67, clear, lamp max. 1,2W, lamps see page 13



Rotary



Swing

maintained 90°



Rotary

**B5KL2**

**BS5KL2**

**BC5KL2**

10 0,031

spring return 60°



Rotary  
Swing

**B5KL1**  
**B5KRL1**

**BS5KL1**  
**BS5KRL1**

**BC5KL1**  
**BC5KRL1**

10 0,031  
10 0,031

maintained 60°



Rotary  
Swing

**B5KL3**  
**B5KRL3**

**BS5KL3**  
**BS5KRL3**

**BC5KL3**  
**BC5KRL3**

10 0,031  
10 0,031

maintained /spring return 60°



Rotary

**B5KL6**

**BS5KL6**

**BC5KL6**

10 0,031

### Toggle IP65



O - I

**B5E**

**BS5E**

**BC5E**

10 0,032



## Actuators and Lens Caps 30mm IP65

| Ring                                                                              | key<br>removeable in                                                              | Alu                              | Black          | Chrome      | Pack<br>pcs. | Weight<br>kg/pc. |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------|----------------|-------------|--------------|------------------|
| <b>Key Operated Rotary Switch with lock Ronis 455</b>                             |                                                                                   |                                  |                |             |              |                  |
|  |  | B5SAR 0                          | BS5SAR 0       | BC5SAR 0    | 1            | 0,059            |
|                                                                                   |                                                                                   | B5SAR 1                          | BS5SAR 1       | BC5SAR 1    | 1            | 0,059            |
|                                                                                   |                                                                                   | B5SAR 01                         | BS5SAR 01      | BC5SAR 01   | 1            | 0,059            |
|  |  | B5SAT 0                          | BS5SAT 0       | BC5SAT 0    | 1            | 0,059            |
|                                                                                   |                                                                                   | B5SARR 0                         | BS5SARR 0      | BC5SARR 0   | 1            | 0,059            |
|                                                                                   |                                                                                   | B5SARR 102                       | BS5SARR 102    | BC5SARR 102 | 1            | 0,059            |
|  |  | B5SATR 02                        | BS5SATR 02     | BC5SATR 02  | 1            | 0,059            |
|                                                                                   |                                                                                   | B5SATT 0                         | BS5SATT 0      | BC5SATT 0   | 1            | 0,059            |
|                                                                                   |                                                                                   | <b>Spare Key</b> lock Ronis R455 | <b>B4-R455</b> |             | 1            | 0,007            |

Colour

pcs. kg/pc.

### Illuminated Push Buttons IP67, lamp max. 1,9W, lamps see page 17



|        |         |          |          |    |       |
|--------|---------|----------|----------|----|-------|
| red    | B5DL RT | BS5DL RT | BC5DL RT | 10 | 0,029 |
| green  | B5DL GN | BS5DL GN | BC5DL GN | 10 | 0,029 |
| yellow | B5DL GE | BS5DL GE | BC5DL GE | 10 | 0,029 |
| blue   | B5DL BL | BS5DL BL | BC5DL BL | 10 | 0,029 |
| white  | B5DL WS | BS5DL WS | BC5DL WS | 10 | 0,029 |

### Illuminated Push Buttons IP67, Maintained, lamp max. 1,9W, lamps see page 17



|        |          |           |           |    |       |
|--------|----------|-----------|-----------|----|-------|
| red    | B5DLR RT | BS5DLR RT | BC5DLR RT | 10 | 0,029 |
| green  | B5DLR GN | BS5DLR GN | BC5DLR GN | 10 | 0,029 |
| yellow | B5DLR GE | BS5DLR GE | BC5DLR GE | 10 | 0,029 |
| blue   | B5DLR BL | BS5DLR BL | BC5DLR BL | 10 | 0,029 |
| white  | B5DLR WS | BS5DLR WS | BC5DLR WS | 10 | 0,029 |

### Lens Caps with fresnel lens IP67, lamp max. 1,9W, lamps see page 17



|        |        |         |         |    |       |
|--------|--------|---------|---------|----|-------|
| red    | B5R RT | BS5R RT | BC5R RT | 10 | 0,029 |
| green  | B5R GN | BS5R GN | BC5R GN | 10 | 0,029 |
| yellow | B5R GE | BS5R GE | BC5R GE | 10 | 0,029 |
| blue   | B5R BL | BS5R BL | BC5R BL | 10 | 0,029 |
| clear  | B5R KL | BS5R KL | BC5R KL | 10 | 0,029 |
| white  | B5R WS | BS5R WS | BC5R WS | 10 | 0,029 |

# Connectors

| Specification        | Description | Type       | Pack pcs. | Weight kg/pc. |
|----------------------|-------------|------------|-----------|---------------|
| <b>Connector B3S</b> |             | <b>B3S</b> | 10        | 0,013         |

0,5-3mm\*

Wrench  
→ page 17

\*) inclusive Thickness from Label Holder and Yellow Disk

## Contact Blocks and Lamp Holders for Panel Mounting

|                                                                                     | for voltage            | Description                                                                            | Type                                                                                                                                                          | Pack pcs. | Weight kg/pc. |
|-------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------|
| Contact blocks                                                                      |                        |                                                                                        |                                                                                                                                                               |           |               |
|   | max. 690V AC           | 1 NC  | <div><div>21</div><div></div><div>22</div></div> <b>B3T01</b> <sup>2)</sup>  | 10        | 0,010         |
|                                                                                     | max. 690V AC           | 1 NO                                                                                   | <div><div>13</div><div></div><div>14</div></div> <b>B3T10</b> <sup>2)</sup> | 10        | 0,010         |
|  | <b>Actuator insert</b> | to actuate the center contact block                                                    | <b>P642</b>                                                                                                                                                   | 10        | 0,001         |

### Lamp holders, socket BA9s

|  |                 |                                                                                 |          |            |    |       |
|--|-----------------|---------------------------------------------------------------------------------|----------|------------|----|-------|
|  | max. 440V AC/DC | direct connection, for lamps max. 1,9W (take care for active power consumption) | X1<br>X2 | <b>B3F</b> | 10 | 0,012 |
|--|-----------------|---------------------------------------------------------------------------------|----------|------------|----|-------|

### Lamp holders for lamp test circuits, socket BA9s

|  |              |                                                                   |                |             |    |       |
|--|--------------|-------------------------------------------------------------------|----------------|-------------|----|-------|
|  | max. 440V AC | direct connection, for lamps max. 1,7W (active power consumption) | X5<br>X2<br>X1 | <b>B3FT</b> | 10 | 0,020 |
|--|--------------|-------------------------------------------------------------------|----------------|-------------|----|-------|

1) NC contact has a positive opening according to IEC/EN 60947-5-1

2) Contact blocks with gold contacts ( B3T..G) on request suitable for 17V= /1mA and for difficult ambient conditions.

## Lamps

### LED lamps <sup>2)</sup> 10 years lifetime



|                |             |                      |                    |    |       |
|----------------|-------------|----------------------|--------------------|----|-------|
| 20-30V AC/DC   | 17mA / 0,4W | for red lens caps    | <b>B3-L24 RTB</b>  | 10 | 0,005 |
| 20-30V AC/DC   | 17mA / 0,4W | for green lens caps  | <b>B3-L24 GNB</b>  | 10 | 0,005 |
| 20-30V AC/DC   | 17mA / 0,4W | for yellow lens caps | <b>B3-L24 GEB</b>  | 10 | 0,005 |
| 20-30V AC/DC   | 17mA / 0,4W | for blue lens caps   | <b>B3-L24 BLB</b>  | 10 | 0,005 |
| 20-30V AC/DC   | 17mA / 0,4W | for white lens caps  | <b>B3-L24 WSB</b>  | 10 | 0,005 |
| 90-120V AC/DC  | 7mA / 0,8W  | for red lens caps    | <b>B3-L110 RTB</b> | 10 | 0,005 |
| 90-120V AC/DC  | 7mA / 0,8W  | for green lens caps  | <b>B3-L110 GNB</b> | 10 | 0,005 |
| 90-120V AC/DC  | 7mA / 0,8W  | for yellow lens caps | <b>B3-L110 GEB</b> | 10 | 0,005 |
| 90-120V AC/DC  | 7mA / 0,8W  | for blue lens caps   | <b>B3-L110 BLB</b> | 10 | 0,005 |
| 90-120V AC/DC  | 7mA / 0,8W  | for white lens caps  | <b>B3-L110 WSB</b> | 10 | 0,005 |
| 200-250V AC/DC | 4mA / 0,9W  | for red lens caps    | <b>B3-L230 RTB</b> | 10 | 0,005 |
| 200-250V AC/DC | 4mA / 0,9W  | for green lens caps  | <b>B3-L230 GNB</b> | 10 | 0,005 |
| 200-250V AC/DC | 4mA / 0,9W  | for yellow lens caps | <b>B3-L230 GEB</b> | 10 | 0,005 |
| 200-250V AC/DC | 4mA / 0,9W  | for blue lens caps   | <b>B3-L230 BLB</b> | 10 | 0,005 |
| 200-250V AC/DC | 4mA / 0,9W  | for white lens caps  | <b>B3-L230 WSB</b> | 10 | 0,005 |

### Filament lamps



|                        |          |                   |                |    |       |
|------------------------|----------|-------------------|----------------|----|-------|
| 12V                    | 1,2W     | for all lens caps | <b>B4-G12</b>  | 50 | 0,005 |
| 24V                    | 1,2W     | for all lens caps | <b>B4-G24</b>  | 50 | 0,005 |
| 42V                    | 1,2W     | for all lens caps | <b>B4-G42</b>  | 50 | 0,005 |
| 48V                    | 1,2W     | for all lens caps | <b>B4-G48</b>  | 50 | 0,005 |
| 60V                    | 1,2W     | for all lens caps | <b>B4-G60</b>  | 50 | 0,005 |
| 110/120V <sup>1)</sup> | 1,5/1,8W | for all lens caps | <b>B4-G130</b> | 50 | 0,005 |

### Glow-discharge lamps



|             |      |                                  |                  |     |       |
|-------------|------|----------------------------------|------------------|-----|-------|
| 220-250V AC | 0,3W | for clear, red, yellow lens caps | <b>B4-GL230K</b> | 100 | 0,005 |
| 220-250V AC | 0,3W | for green, blue lens caps        | <b>B4-GL230G</b> | 100 | 0,005 |

1) Voltage marking 130V / 2W max. rated voltage 120V / 1,8W

2) suitable for B3FT lamp test lamp holders

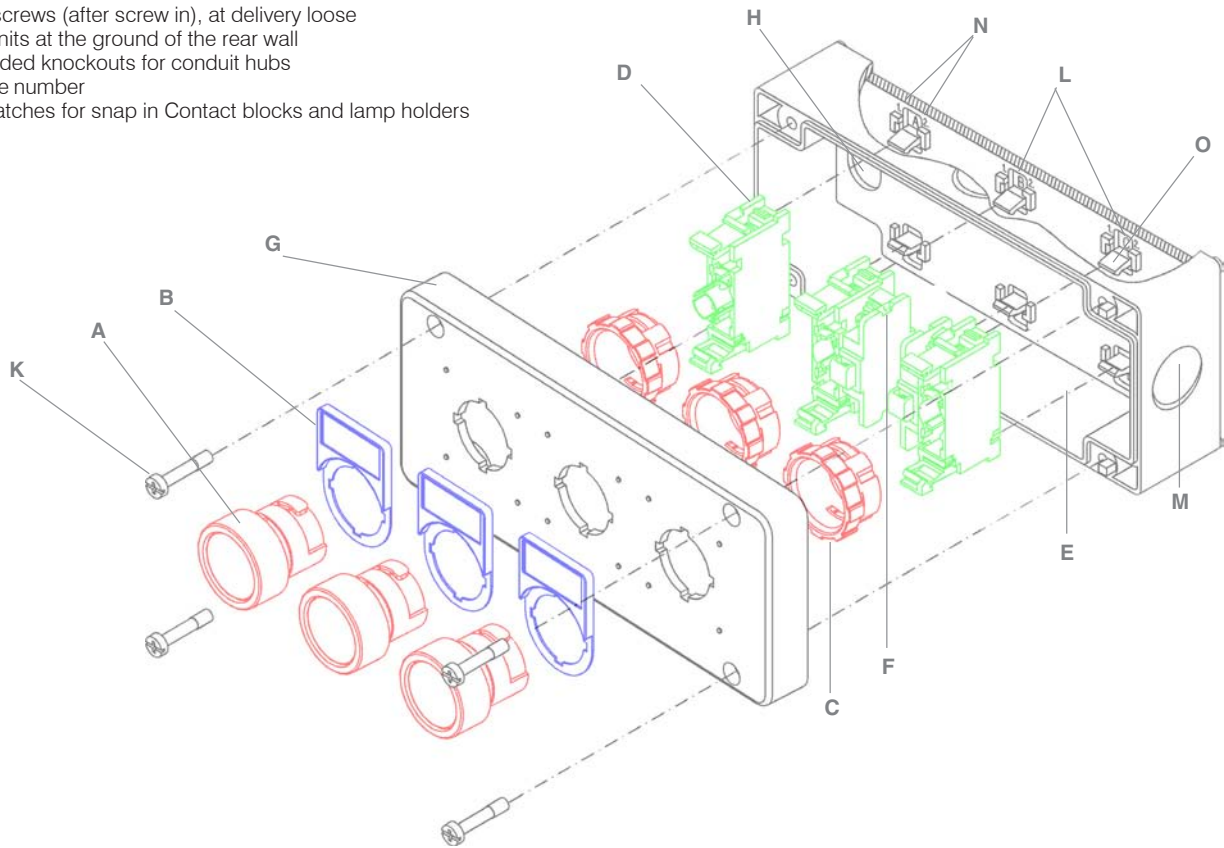
## Accessories



|                                     |                                                                                                                  | Type                             | VPE<br>Stk. | Gewicht<br>kg/Stk. |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------|--------------------|
| <b>Wrench</b>                       | for mounting of actuators<br>and lens caps B(S)3..                                                               | <b>J7049</b>                     | 1           | 0,018              |
| <b>Marking plate</b>                | for marking of contact blocks B3T.<br>and lamp holders B3F                                                       | <b>P672-1</b>                    | 10          | 0,001              |
| <b>Lamp Installer</b>               | used to install or replace lamps BA9s                                                                            | <b>B4-7408</b>                   | 1           | 0,010              |
| <b>Spare Key</b>                    | for B(S)3SA.. and BS3P44S3, Ronis R455<br>for B(S)3SB.. , Ronis R786                                             | <b>B4-R455</b><br><b>B4-R786</b> | 1<br>1      | 0,007<br>0,007     |
| <b>Protectiv cover<br/>sealable</b> | against unintentional manipulation of<br>buttons B5, <i>(not for mushroom heads,<br/>rotary and swing knobs)</i> | <b>B5-SAP</b>                    | 1           | 0,008              |
| <b>Label holder</b>                 | for legend plate BK5, black                                                                                      | <b>P942-1</b>                    | 10          | 0,002              |
| <b>Legend plate</b>                 | alu without marking<br>Text 1 or 2 lines, max. 4 x 13 letters, letter height 3mm                                 | <b>BK5-11374</b>                 | 10          | 0,002              |
| <b>Adapter</b>                      | to convert actuator Actuators 22mm to 30mm                                                                       |                                  |             |                    |
|                                     | alu                                                                                                              | <b>B5</b>                        | 10          | 0,017              |
|                                     | black                                                                                                            | <b>BS5</b>                       | 10          | 0,017              |
|                                     | chrome                                                                                                           | <b>BC5</b>                       | 10          | 0,017              |

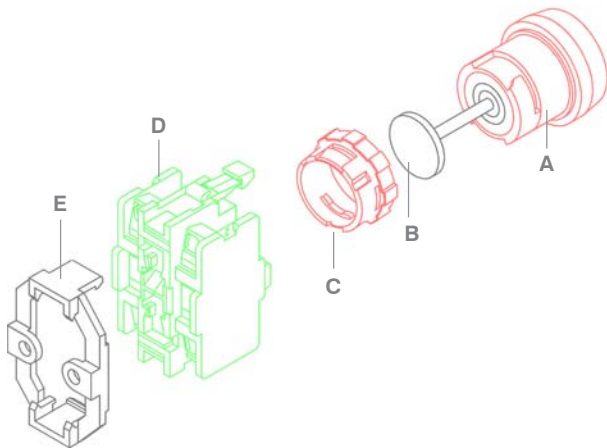
Assembled Stations BG.. IP67 cULus Type12

- A Actuators or Lens caps, see page 3 - 6
- B Legend plates with label holder
- C Ring and nut (included with actuator or lens cap)
- D Contact blocks and lamp holders, see page 20
- E Rear shroud
- F Function number
- G Cover
- H Pre-moulded knockouts in rear wall
- K Captive screws (after screw in), at delivery loose
- L Sign of units at the ground of the rear wall
- M Pre-moulded knockouts for conduit hubs
- N Sequence number
- O Spring-catches for snap in Contact blocks and lamp holders



Buttons for base mounting

- A Actuator Ø 22mm see page 3 - 6, Ø 30mm see page 13 - 15
- B Extension B4V...
- C Ring and nut (included with actuator or lens cap)
- D Contact block B4.. see page 20
- E Base B4U for base and DIN-rail mounting of contact blocks



| Type                                                            |                                                                           | Pack pcs. | Weight kg/pc. |
|-----------------------------------------------------------------|---------------------------------------------------------------------------|-----------|---------------|
| Mounting Plate for base and DIN-rail mounting of contact blocks |                                                                           |           |               |
| Mounting Plate                                                  | for base and DIN-rail mounting of contact blocks and lamp holders B4.U... | B4U       | 10 0,010      |
| Ring and Nut                                                    | for mounting former actuators and lens caps B4...                         | B3UP      | 10 0,004      |

## Assembled Stations IP67 (IP65) Typ12

For conduit entries are in top and both small sides only one knockouts for conduit hubs Ø20,5mm, for M20 or PG13,5 provided.

|                                                                                     |                                                                                    | Diagram                                                                                                                                                                                                                            | Type         | Pack pcs. | Weight kg/pc. |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------|---------------|
| <b>Plastic enclosed buttons and Pilot Lights</b>                                    |                                                                                    |                                                                                                                                                                                                                                    |              |           |               |
|    | ON push button green                                                               | <br>14 — 13                                                                                                                                       | BG10 GN      | 1         | 0,135         |
|    | OFF push button red                                                                | <br>22 — 21                                                                                                                                       | BG10 RT      | 1         | 0,135         |
|    | Pilot light green                                                                  | X2 — ⊗ — X1                                                                                                                                                                                                                        | BG01 GN      | 1         | 0,135         |
|    | Pilot light red                                                                    |                                                                                                                                                                                                                                    | BG01 RT      | 1         | 0,135         |
|    | Key operated 0 - I <sup>1)</sup><br>lock Ronis R455<br>60° maintained              | <br>14 — 13                                                                                                                                       | BG10SAR 0    | 1         | 0,165         |
|    | Key operated I - 0 - II <sup>1)</sup><br>lock Ronis R455<br>60° maintained         | <br>14 — 13<br>24 — 23                                                                                                                            | BG10SARR 0   | 1         | 0,172         |
|   | 2 push buttons 0 - I                                                               | <br>22 — 21 <br>14 — 13                                          | BG20         | 1         | 0,200         |
|  | 2 push buttons ← →                                                                 | ←      →<br>14 — 13      14 — 13<br>22 — 21      22 — 21                                                                                                                                                                           | BG20PF       | 1         | 0,200         |
|  | 3 push buttons ← 0 →                                                               | ← <br>14 — 13      22 — 21      14 — 13<br>22 — 21      22 — 21                                                                                 | BG30PF       | 1         | 0,283         |
|  | 3 push buttons I - 0 - II                                                          | <br>14 — 13 <br>22 — 21      14 — 13<br>22 — 21      22 — 21 | BG30         | 1         | 0,283         |
|  | 2 push buttons 0 - I<br>with pilot light green                                     | <br>X2 — ⊗ — X1 <br>22 — 21      14 — 13                     | BG21 GN      | 1         | 0,270         |
|  | Foot and palm button<br>mushroom Ø70mm                                             | <br>14 — 13<br>22 — 21                                                                                                                          | BG10P14P GR  | 1         | 0,187         |
| <b>Plastic enclosed EMERGENCY STOP buttons</b>                                      |                                                                                    |                                                                                                                                                                                                                                    |              |           |               |
|  | EMERGENCY STOP button<br>head Ø40mm<br>unlock by turning                           | <br>14 — 13<br>22 — 21                                                                                                                          | BG10P34-11   | 1         | 0,145         |
|  | EMERGENCY STOP<br>mushroom button Ø40mm<br>according to EN418<br>unlock by pull    | <br>14 — 13<br>22 — 21                                                                                                                          | BG10P44-11   | 1         | 0,145         |
|  | EMERGENCY STOP key<br>operated button Ø40mm<br>according to EN418<br>unlock by key | <br>14 — 13<br>22 — 21                                                                                                                          | BG10P44S3-11 | 1         | 0,178         |
|  | EMERGENCY STOP<br>mushroom button Ø70mm<br>unlock by turning                       | <br>14 — 13<br>22 — 21                                                                                                                          | BG10P34P-11  | 1         | 0,187         |

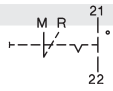
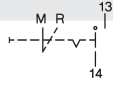
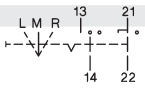
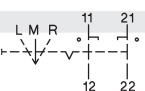
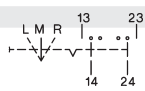
1) IP65

## Enclosures BG.. IP67, Type12



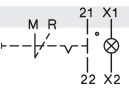
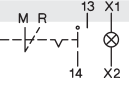
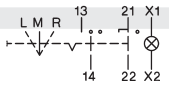
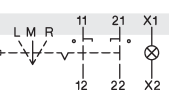
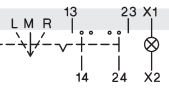
| Number of units | Description                         | Type | Pack pcs. | Weight kg/pc. |
|-----------------|-------------------------------------|------|-----------|---------------|
| 1               | 3 knockouts Ø20,5mm (M20 or PG13,5) | BG1  | 1         | 0,108         |
| 2               | 3 knockouts Ø20,5mm (M20 or PG13,5) | BG2  | 1         | 0,145         |
| 3               | 3 knockouts Ø20,5mm (M20 or PG13,5) | BG3  | 1         | 0,188         |

## Buttons and Lens Caps B3.. see page 3 to 6

| Contacts                                                                                                     | Lamp voltage | Wiring diagram                                                                      | actuators with 2 or 3 switch positions                                              | Type   | Pack pcs. | Weight kg/pc. |
|--------------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|-----------|---------------|
| <b>Contact blocks for enclosures BG..</b>                                                                    |              |                                                                                     |                                                                                     |        |           |               |
| 1NC <sup>1)</sup><br>       |              |    |    | B4TU01 | 10        | 0,015         |
| 1NO                                                                                                          |              |   |   | B4TU10 | 10        | 0,015         |
| 1NO+1NC <sup>1)</sup><br> |              |  |  | B4TU11 | 10        | 0,022         |
| 2NC <sup>1)</sup><br>     |              |  |  | B4TU02 | 10        | 0,022         |
| 2NO                                                                                                          |              |  |  | B4TU20 | 10        | 0,022         |

## Contact blocks with lamp holder, socket BA9s for LED or lamps, for enclosures BG..



|                                                                                                              |                 |                                                                                     |                                                                                     |         |    |       |
|--------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|----|-------|
| 1NC <sup>1)</sup><br>     | max. 440V AC/DC |  |  | B4TU01F | 10 | 0,020 |
| 1NO                                                                                                          | max. 440V AC/DC |  |  | B4TU10F | 10 | 0,020 |
| 1NO+1NC <sup>1)</sup><br> | max. 440V AC/DC |  |  | B4TU11F | 10 | 0,027 |
| 2NC <sup>1)</sup><br>     | max. 440V AC/DC |  |  | B4TU02F | 10 | 0,027 |
| 2NO                                                                                                          | max. 440V AC/DC |  |  | B4TU20F | 10 | 0,027 |

## Lamp holder, socket BA9s for LED or lamps

|                 |                                                                                 |                                                                                     |      |    |       |
|-----------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|----|-------|
| max. 440V AC/DC | direct connection, for lamps max. 1,9W (take care for active power consumption) |  | B4FU | 10 | 0,013 |
|-----------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|----|-------|

1)  NC contact has a positive opening according to IEC/EN 60947-5-1

# Accessories for Plastic enclosed buttons

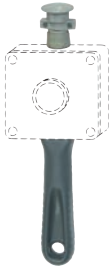


|               |                                                 | Type         | Pack pcs. | Weight kg/pc. |
|---------------|-------------------------------------------------|--------------|-----------|---------------|
| <b>Wrench</b> | for mounting of actuators and lens caps B(S)3.. | <b>J7049</b> | 1         | 0,018         |

|                    |                                                      |                |   |       |
|--------------------|------------------------------------------------------|----------------|---|-------|
| <b>Couple Part</b> | to couple enclosures BKLG or assembled stations BG.. | <b>B4-8852</b> | 1 | 0,018 |
|--------------------|------------------------------------------------------|----------------|---|-------|



|                       |                      |                |   |       |
|-----------------------|----------------------|----------------|---|-------|
| <b>Suspension Eye</b> | for hanging stations | <b>B4-9929</b> | 1 | 0,188 |
|-----------------------|----------------------|----------------|---|-------|



|                               |                                                                             |                |   |       |
|-------------------------------|-----------------------------------------------------------------------------|----------------|---|-------|
| <b>Handle and Cable Inlet</b> | to change enclosures BG.. or assembled stations BG.. into a hanging station | <b>B4-9149</b> | 1 | 0,064 |
|-------------------------------|-----------------------------------------------------------------------------|----------------|---|-------|



## Push Buttons for Enclosures 22mm IP65

| Specification                                                                     | Colour                               | Symbol | Length mm | Type  | Pack pcs.       | Weight kg/pc. |
|-----------------------------------------------------------------------------------|--------------------------------------|--------|-----------|-------|-----------------|---------------|
| <b>Push buttons grey RAL7035</b>                                                  |                                      |        |           |       |                 |               |
|  | Reset push button                    | blue   | R         | 8-22  | <b>B2GRB-22</b> | 10 0,005      |
|                                                                                   |                                      | blue   | R         | 22-60 | <b>B2GRB-60</b> | 10 0,016      |
|                                                                                   | Reset push button with stop function | red    | 0/R       | 8-22  | <b>B2GR-22</b>  | 10 0,005      |
|                                                                                   |                                      | red    | 0/R       | 22-60 | <b>B2GR-60</b>  | 10 0,016      |
|                                                                                   | Start push button                    | green  | I         | 8-22  | <b>B2GI-22</b>  | 10 0,005      |
|                                                                                   |                                      | green  | I         | 22-60 | <b>B2GI-60</b>  | 10 0,016      |
|                                                                                   | Stop push button                     | red    | 0         | 8-22  | <b>B2G0-22</b>  | 10 0,005      |
|                                                                                   |                                      | red    | 0         | 22-60 | <b>B2G0-60</b>  | 10 0,016      |
|                                                                                   | Mushroom head lockable Ø28mm         | red    | 0         | 8-22  | <b>B2GP-22</b>  | 10 0,005      |
|                                                                                   |                                      | red    | 0         | 22-60 | <b>B2GP-60</b>  | 10 0,016      |

## Push buttons with metal ring and self adjusting extension pin



|                                                                                   |                                      |       |     |           |                   |          |
|-----------------------------------------------------------------------------------|--------------------------------------|-------|-----|-----------|-------------------|----------|
|  | Reset push button                    | blue  | R   | 19,5-38,5 | <b>B3GRB-31,5</b> | 10 0,023 |
|                                                                                   |                                      | blue  | R   | 38,5-60   | <b>B3GRB-60</b>   | 10 0,026 |
|                                                                                   | Reset push button with stop function | red   | 0/R | 19,5-38,5 | <b>B3GR-31,5</b>  | 10 0,023 |
|                                                                                   |                                      | red   | 0/R | 38,5-60   | <b>B3GR-60</b>    | 10 0,026 |
|                                                                                   | Start push button                    | green | I   | 19,5-38,5 | <b>B3GI-31,5</b>  | 10 0,023 |
|                                                                                   |                                      | green | I   | 38,5-60   | <b>B3GI-60</b>    | 10 0,026 |
|                                                                                   | Stop push button                     | red   | 0   | 19,5-38,5 | <b>B3G0-31,5</b>  | 10 0,023 |
|                                                                                   |                                      | red   | 0   | 38,5-60   | <b>B3G0-60</b>    | 10 0,026 |
|                                                                                   | Mushroom head lockable Ø28mm         | red   |     | 19,5-38,5 | <b>B3GP-31,5</b>  | 10 0,023 |
|                                                                                   |                                      | red   |     | 38,5-60   | <b>B3GP-60</b>    | 10 0,026 |

| Specification                                                                       | Diameter Ø mm                       | Length mm | Type        | Pack pcs.      | Weight kg/pc. |
|-------------------------------------------------------------------------------------|-------------------------------------|-----------|-------------|----------------|---------------|
| <b>Extensions for push buttons</b>                                                  |                                     |           |             |                |               |
|  | self adjusting pin, for B(S, C)3D.. | 15        | 19,5 - 38,5 | <b>B4V31,5</b> | 10 0,001      |
|                                                                                     | and B(S, C)3P..                     | 18,5      | 38,5 - 60   | <b>B4V60</b>   | 10 0,004      |

## Technical Data

### Terminal markings for control units according to DIN EN 50013

| Distinc. number | Contact elements | Distinc. number | Contact elements | Distinc. number | Contact elements | Distinc. number | Contact elements | Distinc. number | Contact elements | Colour code                       |
|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------------------------|
| 10              |                  |                 |                  |                 |                  |                 |                  | 01              |                  | <br><b>NO</b> Green <b>NC</b> Red |
| 20              |                  | 11              |                  |                 |                  |                 |                  | 02              |                  |                                   |
| 30              |                  | 21              |                  | 12              |                  |                 |                  | 03              |                  |                                   |
| 40              |                  | 31              |                  | 22              |                  | 13              |                  | 04              |                  |                                   |
|                 |                  |                 |                  |                 |                  |                 |                  |                 |                  |                                   |

### Data according to IEC 947-5-1, VDE 0660, EN 60947-5-1

| Type                                                                                                                                                        |                        | B3T               | B4T               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------|-------------------|
| <b>Rated insulation voltage</b> $U_i$                                                                                                                       | V AC                   | 690 <sup>1)</sup> | 500               |
| <b>Utilization category AC12</b><br>Control of resistive loads and solid stateloads with isolation by opto couplers<br><b>Rated current</b> $I_n$           |                        |                   |                   |
|                                                                                                                                                             | 220-240V A             | 10                | 10                |
|                                                                                                                                                             | 380-415V A             | 10                | 10                |
|                                                                                                                                                             | 500V A                 | 10                | 10                |
|                                                                                                                                                             | 690V A                 | 10                | -                 |
| <b>Utilization category AC15</b><br>Control of electromagnetic load (> 72VA)<br><b>Rated current</b> $I_n$                                                  |                        |                   |                   |
|                                                                                                                                                             | 220-240V A             | 6                 | 6                 |
|                                                                                                                                                             | 380-415V A             | 5                 | 5                 |
|                                                                                                                                                             | 500V A                 | 3                 | 3                 |
|                                                                                                                                                             | 690V A                 | 2                 | -                 |
| <b>Utilization category DC12</b> L/R = 1ms<br>Control of resistive loads and solid stateloads with isolation by opto couplers<br><b>Rated current</b> $I_n$ |                        |                   |                   |
|                                                                                                                                                             | 24V A                  | 10                | 10                |
|                                                                                                                                                             | 60V A                  | 6                 | 6                 |
|                                                                                                                                                             | 110V A                 | 2,5               | 2,5               |
|                                                                                                                                                             | 220V A                 | 0,8               | 0,8               |
| <b>Utilization category DC14</b> L/R = 15ms<br>Control of electromagnetic loads having economy resistors in circuit<br><b>Rated current</b> $I_n$           |                        |                   |                   |
|                                                                                                                                                             | 24V A                  | 8                 | 8                 |
|                                                                                                                                                             | 60V A                  | 1                 | 1                 |
|                                                                                                                                                             | 110V A                 | 2                 | 2                 |
|                                                                                                                                                             | 220V A                 | 0,5               | 0,5               |
| <b>Utilization category DC13</b> L/R = 300ms<br>Control of electromagnets<br><b>Rated current</b> $I_n$                                                     |                        |                   |                   |
|                                                                                                                                                             | 24V A                  | 2                 | 2                 |
|                                                                                                                                                             | 60V A                  | 5                 | 5                 |
|                                                                                                                                                             | 110V A                 | 0,5               | 0,5               |
|                                                                                                                                                             | 220V A                 | 0,2               | 0,2               |
| <b>Making capacity</b>                                                                                                                                      | A                      | 60                | 60                |
| <b>Breaking capacity</b> $\cos \varphi = 0,7-1$                                                                                                             | 40-60Hz A              | 50                | 50                |
| <b>Mechanical life</b>                                                                                                                                      | millions of operations | 10                | 10                |
| <b>Contact life (AC15)</b>                                                                                                                                  |                        |                   |                   |
| 100VA                                                                                                                                                       | millions of operations | 10                | 10                |
| 300VA                                                                                                                                                       | millions of operations | 3                 | 3                 |
| 800VA                                                                                                                                                       | millions of operations | 1                 | 1                 |
| 1200VA                                                                                                                                                      | millions of operations | 0,5               | 0,5               |
| <b>Maximum frequency of operations</b>                                                                                                                      | ops. per hour          | 600               | 600               |
| <b>Short circuit protection</b>                                                                                                                             | slow, gL (gG) A        | 25                | 25                |
| <b>Type</b>                                                                                                                                                 |                        | <b>B3F</b>        | <b>B4F</b>        |
| <b>Rated insulation voltage</b> $U_i$                                                                                                                       | V AC                   | 440 <sup>2)</sup> | 440 <sup>2)</sup> |
| <b>Lamp base</b>                                                                                                                                            |                        | BA9s              |                   |

| Type                                                                                                 |                                                    | B3., B4.                      |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------|
| <b>Protection degree (according to IEC 947-1)</b><br>in assembled state, from the front<br>from rear |                                                    | IP65<br>IP00                  |
| <b>Ambient temperature</b>                                                                           | °C                                                 | -20 to +50                    |
| <b>Cable cross-section</b>                                                                           |                                                    |                               |
|                                                                                                      | solid, mm <sup>2</sup>                             | 0,5 - 2,5                     |
|                                                                                                      | flexible, mm <sup>2</sup>                          | 0,5 - 2,5                     |
|                                                                                                      | flexible with multicore cable end, mm <sup>2</sup> | 0,5 - 1,5                     |
|                                                                                                      | number                                             | 2                             |
| <b>Cables per clamp</b>                                                                              |                                                    |                               |
| <b>Mounting hole (according to IEC 947-1)</b>                                                        | Ø mm                                               | 22,5                          |
|                                                                                                      | Ø mm                                               | 30,5                          |
| <b>Mounting position</b>                                                                             |                                                    | optional                      |
| <b>Terminal screws</b>                                                                               |                                                    | Pozidriv No. 2<br>screws M3,5 |

### Data according to cULus

| Type                                   | B3.            | B4.            |
|----------------------------------------|----------------|----------------|
| <b>Contact Block</b><br>for NO and NC  | 600 V AC max.  | 600 V AC max.  |
| General use                            | 10A            | 10A            |
| Heavy pilot duty                       | A600           | A600           |
| <b>Lamp Holder</b><br>with socket BA9s | 240V 2,6W max. | 240V 2,6W max. |
| <b>Wire (Contact and lamp holder)</b>  | 14 - 18AWG     | 14 - 18AWG     |
| <b>Torque</b>                          | 9 lb/in.       | 9 lb/in.       |

## Approvals

| Country | USA, Canada<br>UL | Europe<br>CE | Register of Shipping<br>Great Britain<br>LRS | CENELEC<br>CB-<br>Certificates |
|---------|-------------------|--------------|----------------------------------------------|--------------------------------|
| Type    |                   |              |                                              |                                |
| B3T..   | o                 | o            | -                                            | o                              |
| B3F..   | o                 | o            | -                                            | o                              |
| B4TU..  | o                 | o            | o                                            | o                              |
| B4T..UF | o                 | o            | o                                            | o                              |
| B4FU..  | o                 | o            | o                                            | o                              |
| B3-MB.. | -                 | o            | -                                            | -                              |

o In standard version approved

- Not provided for test till now

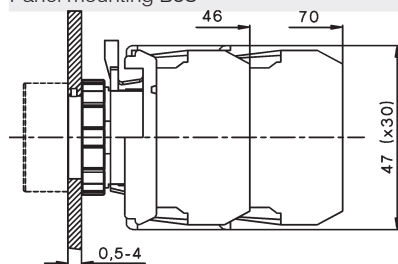
1) suitable for: earthed-neutral systems, overvoltage category I to IV, pollution degree 3 (standard-industry):  $U_{imp} = 6kV$ . Data for other conditions on request

2) suitable for: earthed-neutral systems, overvoltage category I to III, pollution degree 3 (standard-industry):  $U_{imp} = 4kV$

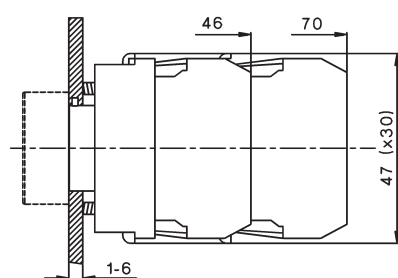
## Dimensions

### Actuators and Lens Caps 22mm

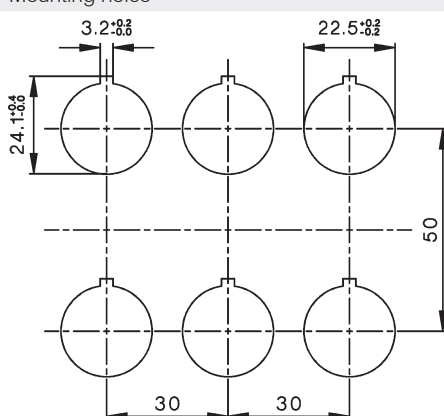
Panel mounting B3S



Panel mounting B3M

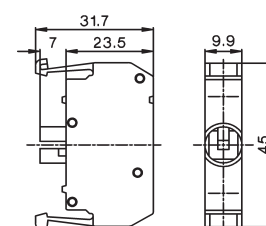


Mounting holes



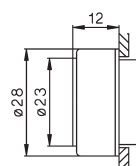
Dimensions of minimum space requirements according to IEC. Take to consideration the field of traverse of swing knobs (27mm) and the diameter of mushroom heads.

Contact blocks and Lampenhalter B3...



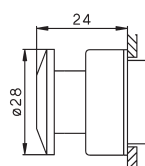
### Actuators and Lens caps

Flush Head  
Illuminated Flush Head



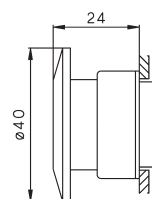
B3D(R), B3DL(R)  
BS3D(R), BS3DL(R)  
BC3D(R), BC3DL(R)

Mushroom Head Ø28mm  
Emergency Stop Ø28mm



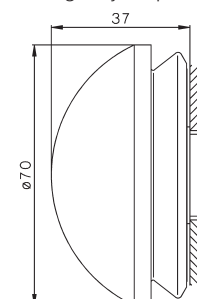
B3P1 bis B3P3  
BS3P1 bis BS3P3  
BC3P1 bis BC3P3

Mushroom Head Ø40mm  
Emergency Stop Ø40mm



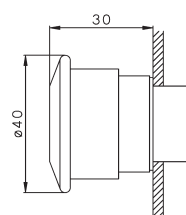
B3P14, B3P34  
BS3P14, BS3P34  
BC3P14, BC3P34

Mushroom Head Ø70mm  
Emergency Stop Ø70mm



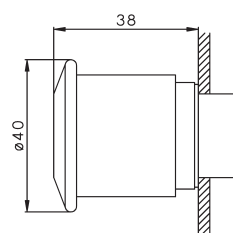
BS3P14P  
BS3P34P

Push-and pull button Ø40mm



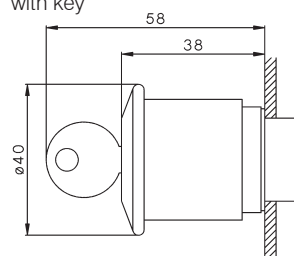
BS3P44

Push-and pull button Ø40mm



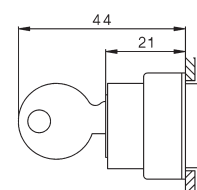
BS3P45

Push-and pull button Ø40mm  
with key



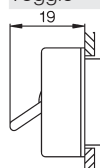
BS3P44S3

Lockable Push button



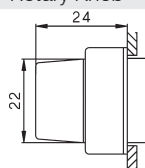
B3SAR., B3SAT.  
BS3SAR., BS3SAT.  
BC3SAR., BC3SAT.

Toggle



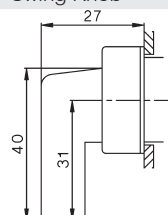
B3E  
BS3E  
BC3E

Rotary Knob



B3KN, B3KL  
BS3KN, BS3KL  
BC3KN, BC3KL

Swing Knob



B3KRL, B3KRN  
BS3KRL, BS3KRN  
BC3KRL, BC3KRN

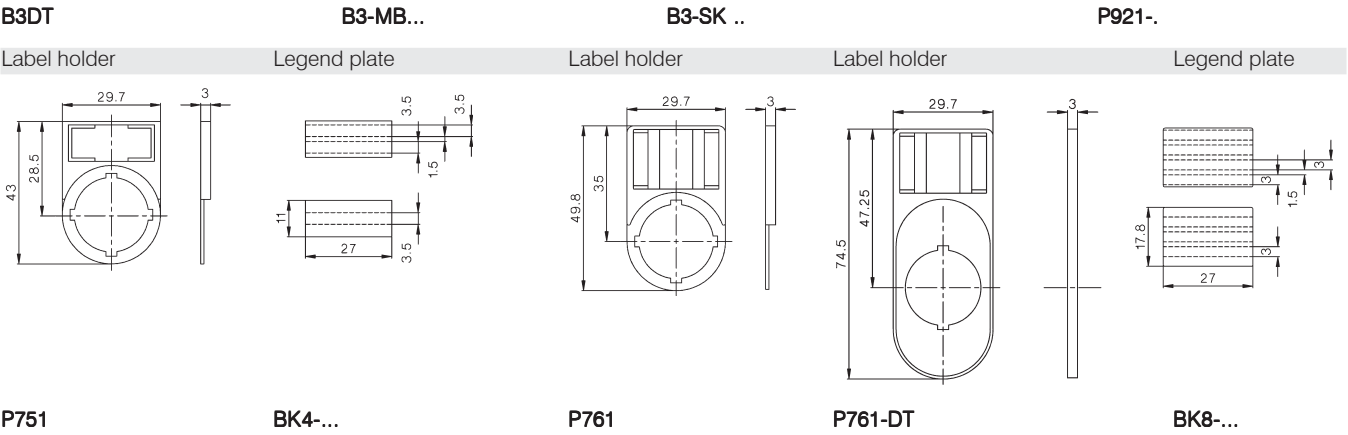
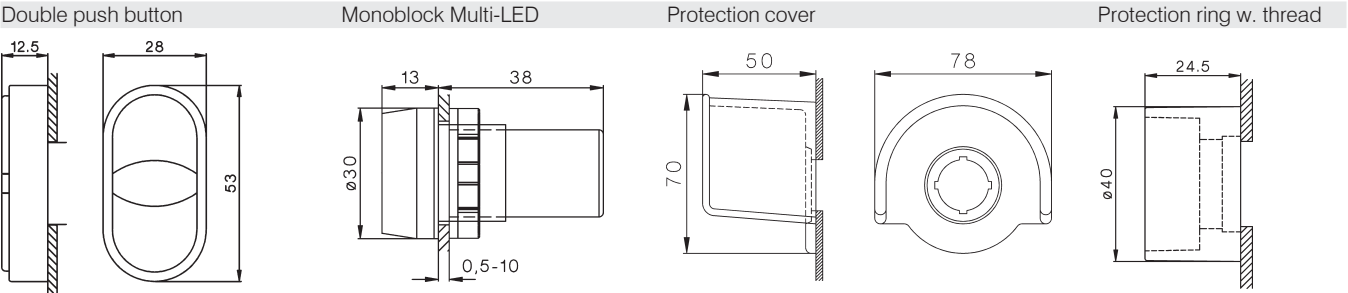
Lens Cap



B3R(F)

# Dimensions

## Actuators and Lens Caps 22mm

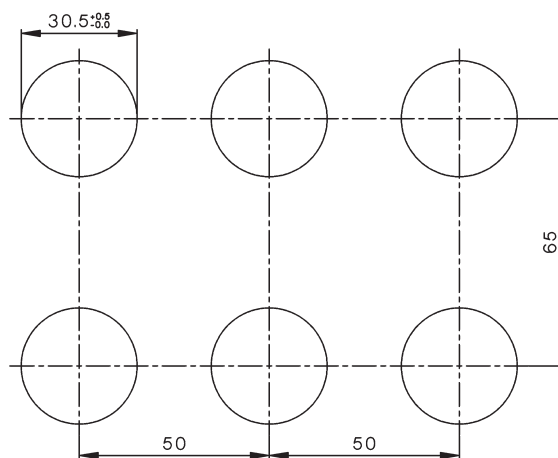
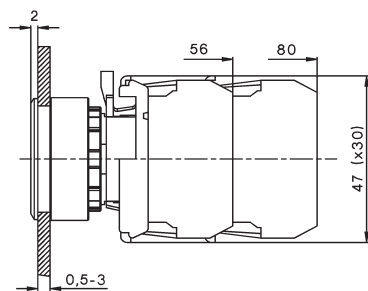


## Dimensions

## Actuators and Lens Caps 30mm

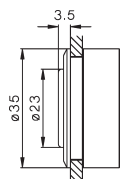
Panel mounting B3S

### Mounting holes

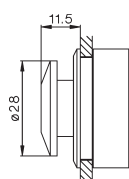


## Actuators and Lens caps

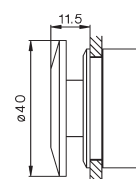
Flush Head  
Illuminated Flush Head



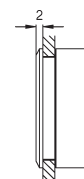
Mushroom Head Ø28mm  
Emergency Stop Ø28mm



Mushroom Head Ø40mm  
Emergency Stop Ø40mm



Lens Cap



B5D(R), B5DL(R)  
BS5D(R), BS5DL(R)

B5P1 to B5P3  
BS5P1 to BS5P3

B5P14, B5P34  
BS5P14, BS5P34

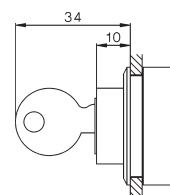
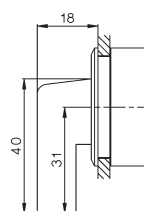
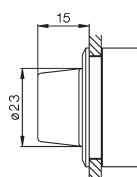
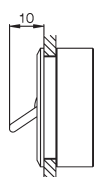
**B5RF**

Toggle

## Rotary Knob

## Swing Knob

Lockable Push button



B5E  
BS5E

B5KN, B5KL  
BS5KN, BS5KL

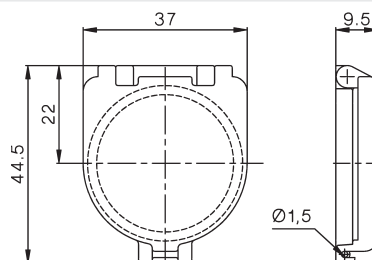
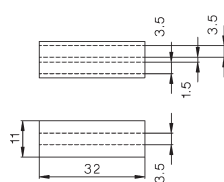
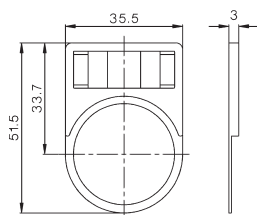
B5KRL, B5KRN  
BS5KRL, BS5KRN

B5SAR., B5SAT.  
BS5SAR., BS5SAT.

Label holder

Legend plate

Protectiv cover



P761

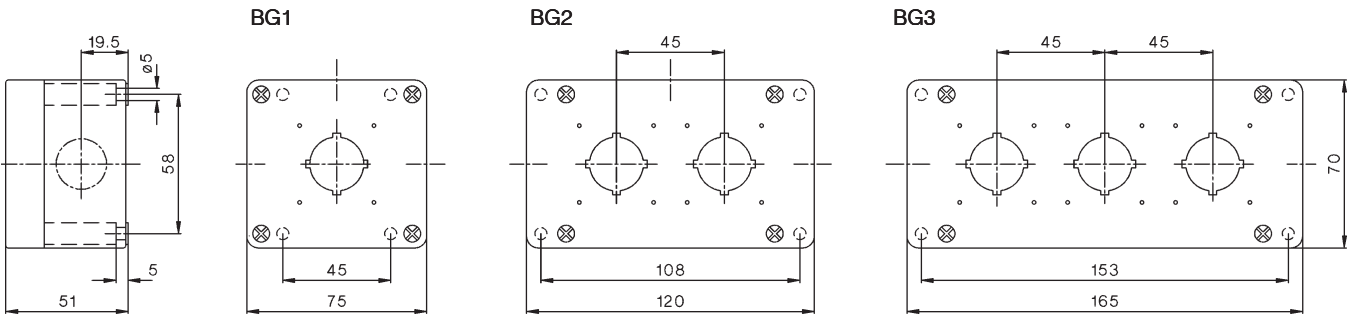
BK5-...

**B5-SAP**

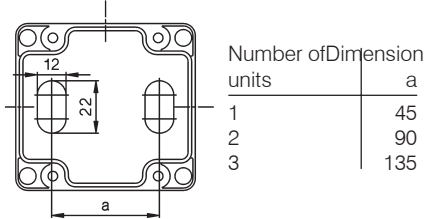
# Dimensions

## Enclosures for Custom Built Stations

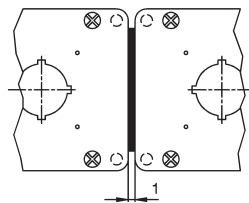
Three conduit entries (knockouts), each on top, left and right side, Ø20,5mm (M20 or PG13,5)



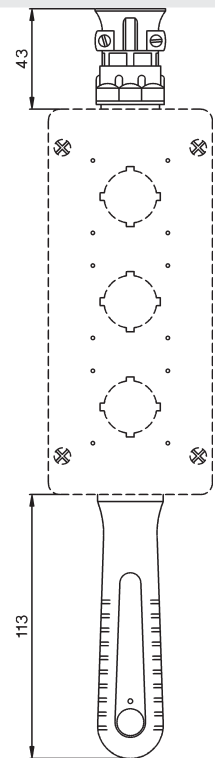
## Conduit entries in the bottom (knockouts)



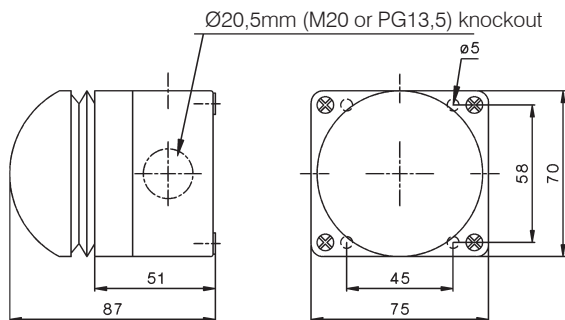
## Coupled Enclosures B4-8852



## Hanging Station B4-9149



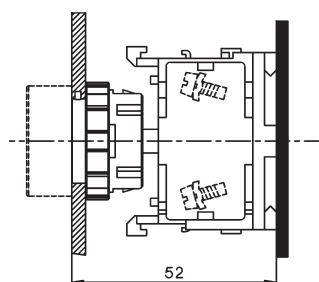
## EMERGENCY STOP Push Button Ø70 mm, Foot switch BG10P34P, BG10P14P



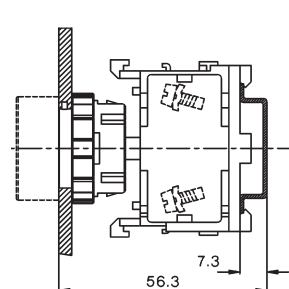
## Dimensions

### Actuators 22mm

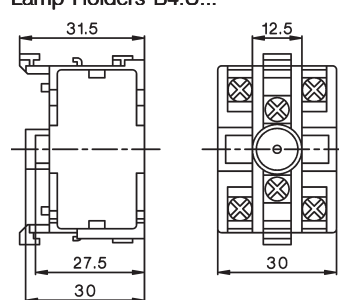
Base mounting



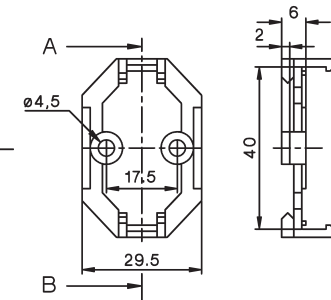
DIN-rail mounting



Contact blocks and  
Lamp Holders B4.U...

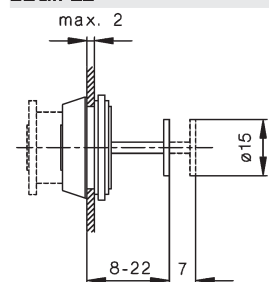


Base B4U



### Push buttons for enclosures

#### B2G...-22



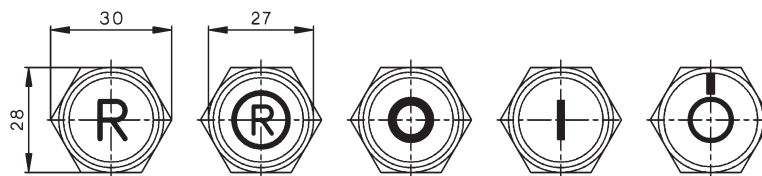
B2GRB

B2GR

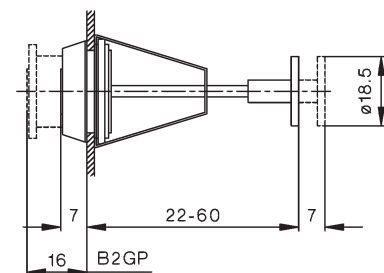
B2G0

B2GI

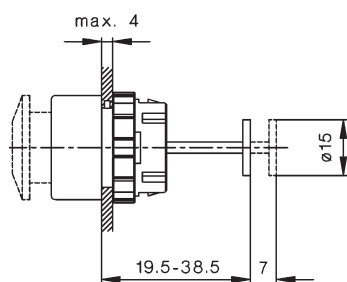
B2GP



#### B2G...-60



#### B3G...-31,5



B3GRB

B3GR

B3G0

B3GI

B3GP



#### B3G...-60

