## : ©hipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation, and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email \& Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, \#122 Zhenhua RD., Futian, Shenzhen, China

## Series



## Characteristics

The compact 16 mm Series 71 is particularly suited for:

- Flush design
- PCB mounting

The product range includes special switching elements for direct PCB installation.

## Functions

The Series 71 incorporates the following functions:

- Indicator
- Pushbutton
- Illuminated pushbutton
- Keylock switch
- Selector switch


## Market segments

The EAO Series 71 is especially suited for applications in the segments:

- Public transportation
- Machinery and Automation
- Construction machines and special-purpose vehicles
- Lifting and moving
- Panel building

Please refer to the EAO website to obtain detailed information regarding this series www.products.eao.com Configure a product to your exact needs and request a quotation.

Flush design
Indicator ..... 694
Illuminated pushbutton ..... 697
Mushroom-head pushbutton ..... 700
Keylock switch ..... 701
Selector switch ..... 711
Accessories ..... 715
Drawings ..... 733
Technical data ..... 734
Marking ..... 736
Application guidelines ..... 737


Mounting cut-outs [mm]

Equipment consisting of (schematic overview)
Lens page 715


Front bezel set
page 720


## Fixing nut

Lamp element page 727

Interlocking pin

Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.

Indicator actuator square
71-600.0

Indicator rectangular, IP 65

Equipment consisting of (schematic overview)
Lens page 715

Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.

| Part No. |  | Weight |
| :---: | :---: | :---: |

```
Indicator round, IP 65
```



Equipment consisting of (schematic overview)
Single-LED page 730

Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.

## Part No.

## Indicator actuator round

71-600.0

Illuminated pushbutton square, IP 65
Lens page 715

Each Part Number listed below includes all the black components shown in the 3D-drawing

To obtain a complete unit, please select the red components from the page s shown.

| Switching action | Part No. |  | Weight |
| :---: | :---: | :---: | :---: |
| Illuminated pushbutton actuator square |  |  |  |
| B | 71-611.0 | 1 | 0.005 kg |
| C | 71-612.0 | 2 | 0.005 kg |

## Switching action: $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintain

| E--- | E~- |
| :---: | :---: |



Product can differ from the current configuration.

## Additional Information

- For front dimension $24 \times 30 \mathrm{~mm}$
- Pitch of the front plate mounting cut-outs must agree with the printed circuit board holes $\varnothing 3.5$

Illuminated pushbutton actuator rectangular

| B | B | 71-611.0 | 1 | 0.005 kg |
| :---: | :---: | :---: | :---: | :---: |
|  | C | 71-612.0 | 2 | 0.005 kg |

Switching action: B = Momentary, C = Maintain

| E-ーー |  |
| :--- | :--- |
|  |  |
| Wiring diagram 1 | Wiring diagram 2 |

Illuminated pushbutton round, IP 65
Single-LED page 730

Each Part Number listed below includes all the black components shown in the 3D-drawing.


Dimensions [mm]


Mounting cut-outs [mm]

To obtain a complete unit, please select the red components from the page s shown.

| Switching action | Part No. |  | Weight |
| :---: | :---: | :---: | :---: |
| Illuminated pushbutton actuator round |  |  |  |
| B | 71-611.0 | 1 | 0.005 kg |
| C | 71-612.0 | 2 | 0.005 kg |

Switching action: $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintain

| E--ー | E~ー |
| :--- | :--- |
|  |  |
| Wiring diagram 1 | Wiring diagram 2 |



Product can differ from the current configuration．

## Additional Information

－Pitch of the front plate mounting cut－outs must agree with the printed circuit board holes $\varnothing 3.5$

Dimensions［mm］


Mounting cut－outs［mm］

Equipment consisting of（schematic overview）


Lens
page 718


Actuator

Front bezel set
page 721


聂

## Fixing nut

Switching ele－ ment
page 727

Each Part Number listed below includes all the black components shown in the 3D－drawing．

To obtain a complete unit，please select the red com－ ponents from the page s shown．

| Switching action | Part No． | $\begin{aligned} & \text { 으N } \\ & \text { 든 } \\ & 3 . \frac{\pi}{0} \end{aligned}$ | Weight |
| :---: | :---: | :---: | :---: |

## Mushroom－head pushbutton actuator，Front dimension Ø 32 mm

| B | $\mathbf{7 1 - 6 1 1 . 0}$ | 1 | 0.005 kg |
| :--- | :--- | :--- | :--- | :--- |
| C | $\mathbf{7 1 - 6 1 2 . 0}$ | 2 | 0.005 kg |

Switching action：B＝Momentary，C＝Maintain

| E－ーー | E～ー |
| :--- | :--- |
| Wiring diagram 1 | Wiring diagram 2 |

Keylock switch 2 positions square, IP 65



Dimensions [mm]


Mounting cut-outs [mm]

Each Part Number listed below includes all the black components shown in the 3D-drawing

To obtain a complete unit, please select the red components from the page s shown.


Switching positions ( $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintained )


Keylock switch actuator 2 positions square

| A-B | $\mathrm{B}=42^{\circ}$ | A | 71-621.0/D | 1 | 0.003 kg |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A - C | C $=90^{\circ}$ | A | 71-622.0/D | 2 | 0.003 kg |
|  |  | C | 71-623.0/D | 2 | 0.003 kg |
|  |  | A + C | 71-624.0/D | 2 | 0.003 kg |

Switching action: $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintain



Product can differ from the current configuration.

## Additional Information

- For front dimension $24 \times 30 \mathrm{~mm}$
- The standard lock: DOM 311
- Two keys are supplied with each key lock switch
- Optional lock numbers on request
- Pitch of the front plate mounting cut-outs must agree with the printed circuit board holes $\varnothing 3.5$


Dimensions [mm]


Mounting cut-outs [mm]

Equipment consisting of (schematic overview)



Actuator

Front bezel set page 722


## Fixing nut

Switching element
page 728

Interlocking pin
Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.


Switching positions ( $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintained )

| Switching action | Switching angle | Key remove | Part No. |  | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |

Keylock switch actuator 2 positions rectangular

| A - B | $B=42^{\circ}$ | A | 71-621.0/D | 1 | 0.003 kg |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A - C | $\mathrm{C}=90^{\circ}$ | A | 71-622.0/D | 2 | 0.003 kg |
|  |  | C | 71-623.0/D | 2 | 0.003 kg |
|  |  | A + C | 71-624.0/D | 2 | 0.003 kg |

Switching action: A = Rest, B = Momentary, C = Maintain

| Q- ${ }^{\text {- }}$---- | Q- - - - - |
| :---: | :---: |
| Wiring diagram 1 | Wiring diagram 2 |

Keylock switch 2 positions round, IP 65
Key
Front bezel set $\quad$ page 722
Anti-twist ring
Bezel


Dimensions [mm]


Mounting cut-outs [mm]

Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.


Switching positions ( $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintained )

| Switching action | Switching angle | Key remove | Part No. |  | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | tuator 2 posit |  |  |  |  |
| A - B | $B=42^{\circ}$ | A | 71-621.0/D | 1 | 0.003 kg |
| A - C | C $=90^{\circ}$ | A | 71-622.0/D | 2 | 0.003 kg |
|  |  | C | 71-623.0/D | 2 | 0.003 kg |
|  |  | A + C | 71-624.0/D | 2 | 0.003 kg |

[^0]
## 71 <br> Flush design



Keylock switch 3 positions square, IP 65
Key


Dimensions [mm]


Mounting cut-outs [mm]

Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.


Switching positions ( $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintained)


Keylock switch actuator 3 positions square

| $B-A-B$ | $\mathrm{B}=42^{\circ} / 42^{\circ}$ | A | 71-631.0/D | 1 | 0.003 kg |
| :---: | :---: | :---: | :---: | :---: | :---: |
| B - A - C | $B=42^{\circ}, C=90^{\circ}$ | A | 71-636.0/D | 2 | 0.003 kg |
|  |  | A + C | 71-637.0/D | 2 | 0.003 kg |
| C-A-B | $C=90^{\circ}, B=42^{\circ}$ | A | 71-638.0/D | 3 | 0.003 kg |
|  |  | $C+A$ | 71-639.0/D | 3 | 0.003 kg |
| C-A-C | $\mathrm{C}=90^{\circ} / 90^{\circ}$ | A | 71-632.0/D | 4 | 0.003 kg |
|  |  | --C | 71-633.0/D | 4 | 0.003 kg |
|  |  | $C+C$ | 71-634.0/D | 4 | 0.003 kg |
|  |  | $C+A+C$ | 71-635.0/D | 4 | 0.003 kg |

[^1]
## 71 <br> Flush design



Keylock switch 3 positions rectangular, IP 65



Dimensions [mm]


Mounting cut-outs [mm]

Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.


Switching positions ( $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintained)


Keylock switch actuator 3 positions rectangular

| $B-A-B$ | $B=42^{\circ} / 42^{\circ}$ | A | 71-631.0/D | 1 | 0.003 kg |
| :---: | :---: | :---: | :---: | :---: | :---: |
| B - A - C | $\mathrm{B}=42^{\circ}, \mathrm{C}=90^{\circ}$ | A | 71-636.0/D | 2 | 0.003 kg |
|  |  | A + C | 71-637.0/D | 2 | 0.003 kg |
| C-A - | $C=90^{\circ}, B=42^{\circ}$ | A | 71-638.0/D | 3 | 0.003 kg |
|  |  | $C+A$ | 71-639.0/D | 3 | 0.003 kg |
| C-A-C | $\mathrm{C}=90^{\circ} / 90^{\circ}$ | A | 71-632.0/D | 4 | 0.003 kg |
|  |  | --C | 71-633.0/D | 4 | 0.003 kg |
|  |  | $C+C$ | 71-634.0/D | 4 | 0.003 kg |
|  |  | $C+A+C$ | 71-635.0/D | 4 | 0.003 kg |

[^2]
## 71 <br> Flush design



Keylock switch 3 positions round, IP 65


Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.
$\nabla^{B}$

$\qquad$
Switching positions ( $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintained)

| Switching action | Switching angle | Key remove | Part No. |  | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Keylock switch actuator 3 positions round |  |  |  |  |  |
| B - A - B | $B=42^{\circ} / 42^{\circ}$ | A | 71-631.0/D | 1 | 0.003 kg |
| $B-A-C$ | $\mathrm{B}=90^{\circ}, \mathrm{C}=42^{\circ}$ | A | 71-636.0/D | 2 | 0.003 kg |
|  |  | A + C | 71-637.0/D | 2 | 0.003 kg |
| C-A - B | $\mathrm{C}=90^{\circ}, \mathrm{B}=42^{\circ}$ | A | 71-638.0/D | 3 | 0.003 kg |
|  |  | $C+A$ | 71-639.0/D | 3 | 0.003 kg |
| C-A - C | $\mathrm{C}=90^{\circ} / 90^{\circ}$ | A | 71-632.0/D | 4 | 0.003 kg |
|  |  | --C | 71-633.0/D | 4 | 0.003 kg |
|  |  | $C+C$ | 71-634.0/D | 4 | 0.003 kg |
|  |  | $C+A+C$ | 71-635.0/D | 4 | 0.003 kg |

[^3]
## 71 <br> Flush design



Selector switch 2 positions square, IP 65
Equipment consisting of (schematic overview)

Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.


Switching positions ( $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintained )



Mounting cut-outs [mm]


Product can differ from the current configuration.

## Additional Information

- For front dimension $24 \times 24 \mathrm{~mm}$
- Illuminative
- Pitch of the front plate mounting cut-outs must agree with the printed circuit board holes $\varnothing 3.5$


Product can differ from the current configuration.

## Additional Information

- For front dimension $\varnothing 25 \mathrm{~mm}$
- Illuminative
- Pitch of the front plate mounting cut-outs must agree with the printed circuit board holes $\varnothing 3.5$


Mounting cut-outs [mm]

Equipment consisting of (schematic overview)


Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.


Switching positions ( $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintained)

| Switching action | Switching angle | Part No. | $\begin{aligned} & \text { 으N } \\ & \text { 든 } \\ & \vdots \frac{\pi}{0} \end{aligned}$ | Weight |
| :---: | :---: | :---: | :---: | :---: |

Selector switch actuator 2 positions round

| B - A | $B=42^{\circ}$ | 71-641.0 | 1 | 0.003 kg |
| :---: | :---: | :---: | :---: | :---: |
| C-A | $\mathrm{C}=90^{\circ}$ | 71-642.0 | 2 | 0.003 kg |

Switching action: $A=$ Rest, $B=$ Momentary, $C=$ Maintain

| F--- -~- | F~- -~- |
| :--- | :--- |
|  |  |
| Wring diagram 1 | Wining diagram 2 |

Selector switch 3 positions square, IP 65


Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.

Switching positions ( $A=$ Rest, $B=$ Momentary, $C=$ Maintained )

| Switching action | Switching angle | Part No. |  | Weight |
| :---: | :---: | :---: | :---: | :---: |
|  | ns square |  |  |  |
| $B-A-B$ | $B=42^{\circ} / 42^{\circ}$ | 71-651.0 | 1 | 0.003 kg |
| $C-A-C$ | $\mathrm{C}=90^{\circ} / 90^{\circ}$ | 71-652.0 | 2 | 0.003 kg |
| $B-A-C$ | $B=42^{\circ}, C=90^{\circ}$ | 71-656.0 | 3 | 0.003 kg |
| C-A - B | $C=90^{\circ}, B=42^{\circ}$ | 71-658.0 | 4 | 0.003 kg |

Switching action: $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintain



Product can differ from the current configuration.

## Additional Information

- For front dimension $\varnothing 25 \mathrm{~mm}$
- Illuminative
- Pitch of the front plate mounting cut-outs must agree with the printed circuit board holes $\varnothing 3.5$
nsions [mm]


Mounting cut-outs [mm]

Equipment consisting of (schematic overview)

| $\square$ | Lever | page 719 |
| :---: | :---: | :---: |
| - | Single-LED | page 730 |
|  | Actuator |  |
|  | Front bezel set | page 723 |
|  | Anti-twist ring |  |
|  | Part of front bezel set |  |
|  | Fixing nut |  |
|  | Switching element | page 728 |
| G | Interlocking pin |  |

Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the page s shown.


Switching positions ( $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintained)

| Switching action | Switching angle | Part No. | $\begin{aligned} & \text { 으N } \\ & . \frac{5}{5} \\ & \overline{3} \frac{0}{0} \end{aligned}$ | Weight |
| :---: | :---: | :---: | :---: | :---: |

Selector switch 3 positions round

| B - A - B | $B=42^{\circ} / 42^{\circ}$ | 71-651.0 | 1 | 0.003 kg |
| :---: | :---: | :---: | :---: | :---: |
| C-A - C | $\mathrm{C}=90^{\circ} / 90^{\circ}$ | 71-652.0 | 2 | 0.003 kg |
| $B-A-C$ | $B=42^{\circ}, C=90^{\circ}$ | 71-656.0 | 3 | 0.003 kg |
| C-A - B | $\mathrm{C}=90^{\circ}, \mathrm{B}=42^{\circ}$ | 71-658.0 | 4 | 0.003 kg |

Switching action: $A=$ Rest, $B=$ Momentary, $C=$ Maintain
F--

## Front

## Lens plastic

## Additional Information

- Lens surface mat
- Lens profile flat


Lens plastic, flush design

| illuminative | $18 \times 18 \mathrm{~mm}$ | smoked transparent | 61-9671.1 | 0.002 kg |
| :---: | :---: | :---: | :---: | :---: |
|  |  | red transparent | 61-9671.2 | 0.002 kg |
|  |  | orange transparent | 61-9671.3 | 0.002 kg |
|  |  | yellow transparent | 61-9671.4 | 0.002 kg |
|  |  | green transparent | 61-9671.5 | 0.002 kg |
|  |  | blue transparent | 61-9671.6 | 0.002 kg |
|  |  | colourless transparent | 61-9671.7 | 0.002 kg |
| non-illuminative | $18 \times 18 \mathrm{~mm}$ | black opaque | 61-9771.0 | 0.002 kg |
|  |  | grey opaque | 61-9771.8 | 0.002 kg |
|  |  | white translucent | 61-9771.9 | 0.002 kg |


| Lens plastic, flush design |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| illuminative | $18 \times 24 \mathrm{~mm}$ | smoked transparent | 61-9681.1 | 0.002 kg |
|  |  | red transparent | 61-9681.2 | 0.002 kg |
|  |  | orange transparent | 61-9681.3 | 0.002 kg |
|  |  | yellow transparent | 61-9681.4 | 0.002 kg |
|  |  | green transparent | 61-9681.5 | 0.002 kg |
|  |  | blue transparent | 61-9681.6 | 0.002 kg |
|  |  | colourless transparent | 61-9681.7 | 0.002 kg |
| non-illuminative | $18 \times 24 \mathrm{~mm}$ | black opaque | 61-9781.0 | 0.002 kg |
|  |  | grey opaque | 61-9781.8 | 0.002 kg |
|  |  | white translucent | 61-9781.9 | 0.002 kg |



Lens plastic, flush design

| illuminative | $\varnothing 19.7 \mathrm{~mm}$ | smoked transparent | $\mathbf{6 1 - 9 6 4 2 . 1}$ | 0.002 kg |
| :--- | :--- | :--- | :--- | :--- |
|  | red transparent | $\mathbf{6 1 - 9 6 4 2 . 2}$ | 0.002 kg |  |
|  |  | orange transparent | $\mathbf{6 1 - 9 6 4 2 . 3}$ | 0.002 kg |
|  | yellow transparent | $\mathbf{6 1 - 9 6 4 2 . 4}$ | 0.002 kg |  |
|  | green transparent | $\mathbf{6 1 - 9 6 4 2 . 5}$ | 0.002 kg |  |
|  | blue transparent | $\mathbf{6 1 - 9 6 4 2 . 6}$ | 0.002 kg |  |
|  | colourless transparent | $\mathbf{6 1 - 9 6 4 2 . 7}$ | 0.002 kg |  |


[^0]:    Switching action: $A=$ Rest, $B=$ Momentary, $C=$ Maintain

[^1]:    Switching action: $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintain

[^2]:    Switching action: $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintain

[^3]:    Switching action: $\mathrm{A}=$ Rest, $\mathrm{B}=$ Momentary, $\mathrm{C}=$ Maintain

