



Front dimensions: 25 x 25 mm (24 x 24 mm for mosaic on request)  
Panel cut-out: Ø 16 mm  
Front bezel height: 12 mm  
Travel: 6 mm



# QUARTRON





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**Contact Blocks / Lampholders** page 414

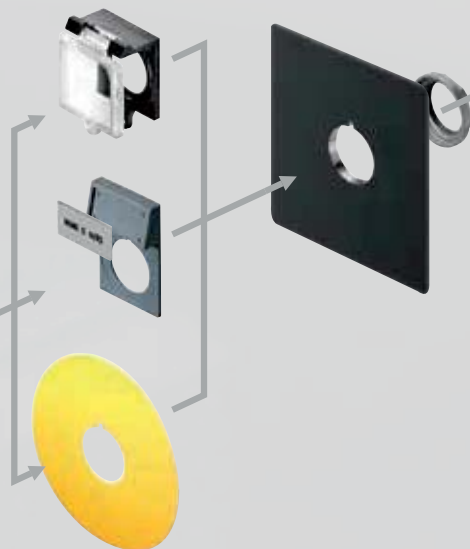
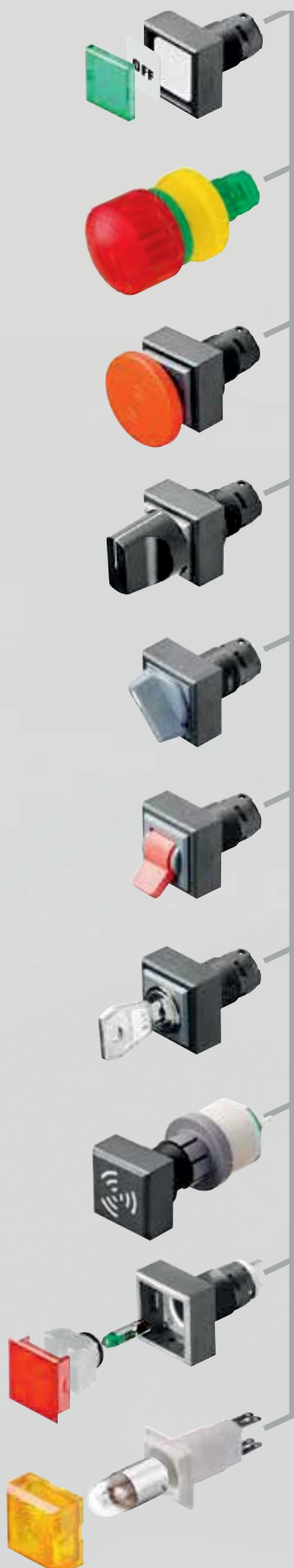


 degree of protection

 illuminating option

 operating travel

 labelling option



**AZ**  
 AT.../AF.../AZ...  
 Contact Blocks  
 Faston terminals  
**page 416**

**CT**  
 CT...  
 Contact Blocks  
 Faston terminals  
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**CTP**  
 CTP...  
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 PCB-mount terminals  
**page 486**

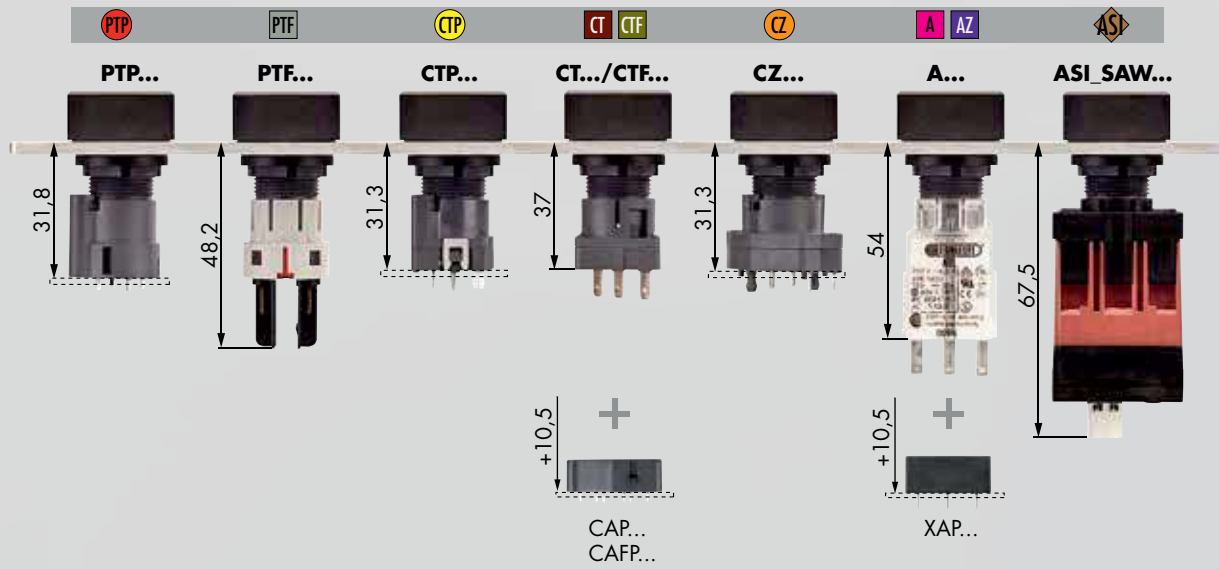
**CTF**  
 CTF...  
 Contact Blocks  
 Faston terminals  
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**PTP**  
 PTP...  
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 PCB-mount terminals  
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**PTF**  
 PTF...  
 Contact Blocks  
 Faston terminals  
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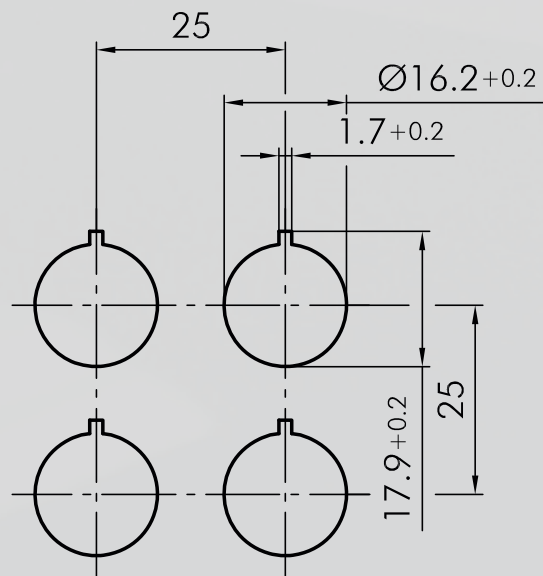
**ASl**  
 ASl...  
 Contact Blocks  
 for AS-Interface  
 Safety @ Work  
**page 564**

## Mounting Depth Dimensions

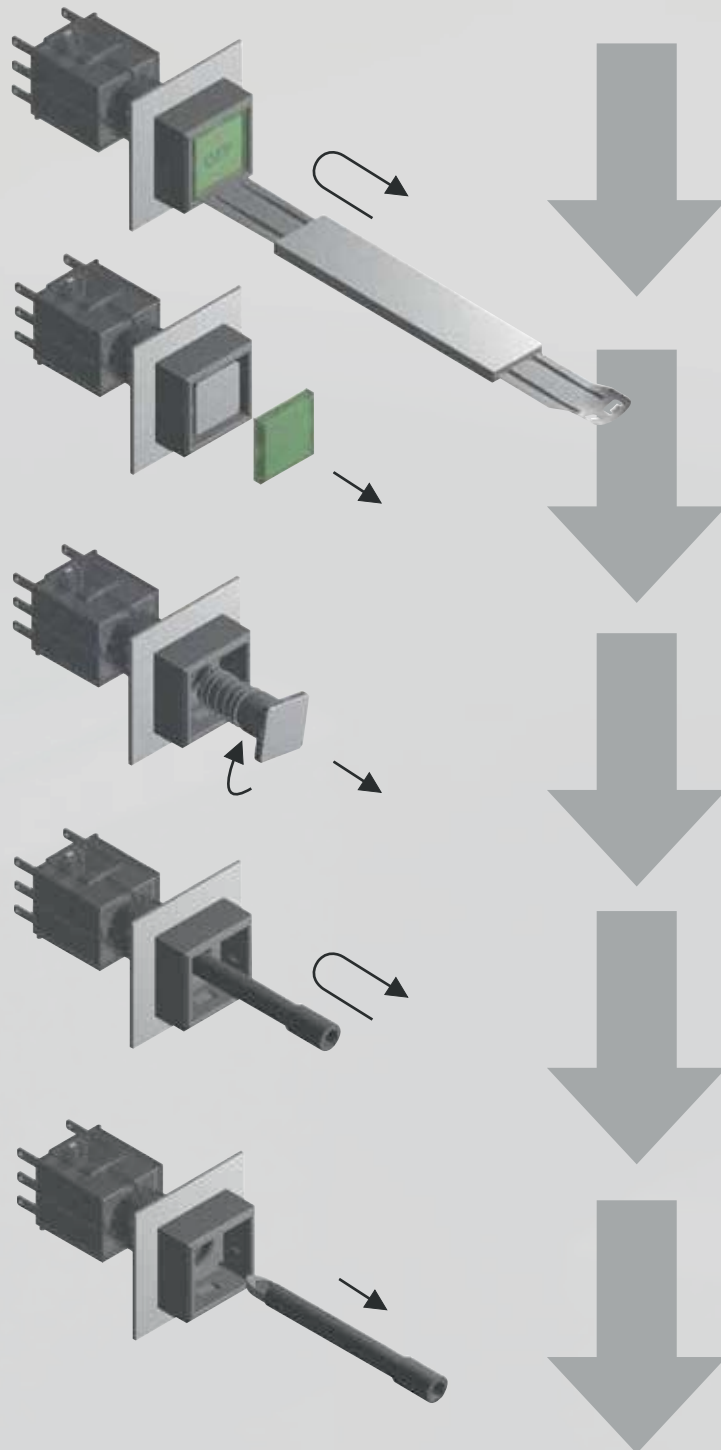


## Cutout Dimensions

Min. mounting grid 25 x 38 mm when using external nameplate holders



## Mounting and Service Instructions




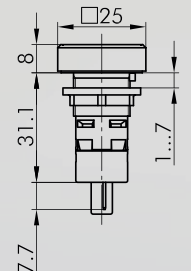







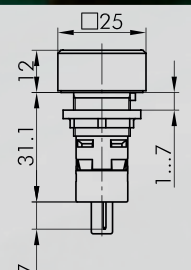






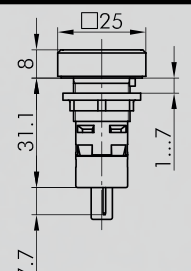






### Pushbutton Heads (momentary/push-push)

\*) 24 x 24 mm on request,  
lenses and nameplates to be ordered separately

| Illustration | Dimensions | Description  | Type                               |
|--------------|------------|--|------------------------------------|
|              |            | <b>Pushbutton Head*</b><br>suitable contact blocks<br>A AZ CT CTF CTP CZ<br>front bezel                      black<br>charcoal   | <b>QXT</b><br><b>QXTDG</b>         |
|              |            | <b>Pushbutton Head*</b><br>with transparent silicone cap<br>suitable contact blocks<br>A AZ CT CTF CTP CZ<br>front bezel                      black  | <b>QXP</b>                         |
|              |            | <b>Sealing Cap</b><br>made of silicone rubber, down to -50°C   | <b>TK25S</b>                       |
|              |            | <b>Short-stroke Membrane Pushbutton Head</b><br>- with transparent silicone cap, down to -50° C<br>- with transparent, flat lens, add code letter to type number, e.g. QXDMRT (red-RT, green-GN, yellow-GB, blue-BL, clear-KL)<br>- with illuminating option, blank nameplate included. Standard or special imprints on request.<br><br>suitable contact blocks<br>AS B BT BZ BA B CT CTF CTP CZ<br>front bezel                      black<br>charcoal | <b>QXDM...</b><br><b>QXDMDG...</b> |
|              |            | <b>Pushbutton 1 NO</b><br>with 2 Faston terminals 2.8x0.8 mm, 250 V, 6(4) A, AC,<br>with labelling option<br>(plug sockets for PCB's, type YAP...)<br>   | <b>QXTI</b>                        |

## Pushbutton Heads (momentary/push-push)

Lenses and nameplates to be ordered separately

| Illustration   | Dimensions  | Description  | Type         |
|--|---|--|--------------|
|  <p>IP65<br/>3mm</p>   |    | <p><b>Short-stroke Pushbutton 1 NO</b><br/>with 2 Faston terminals 2.8x0.8 mm,<br/>250 V, 6(4) A, AC<br/>(plug sockets for PCBs, type YAP...)</p> <p>    </p> <p>front bezel                      black</p>           | <b>QXDI</b>  |
|                      |   | <p><b>Height Compensation Spacer for QXDI and QXTI</b></p>   | <b>YAP21</b> |
|  <p>IP65<br/>6mm</p> |  | <p><b>Pushbutton 1 NC</b><br/>with 2 Faston terminals 2.8x0.8 mm, 250 V, 6(4) A, AC,<br/>(plug sockets for PCB's, type YAP...)</p> <p>    </p> <p>front bezel                      black</p>                | <b>QXTO</b>  |
|  <p>IP65<br/>3mm</p> |  | <p><b>Short-stroke Pushbutton 1 NC</b><br/>with 2 Faston terminals 2.8x0.8 mm,<br/>250 V, 6(4) A, AC<br/>(plug sockets for PCBs, type YAP...)</p> <p>    </p> <p>front bezel                      black</p> | <b>QXDO</b>  |
|                     |   | <p><b>Height Compensation Spacer for QXDO and QXTO</b></p>   | <b>YAP20</b> |



## Accessories for Actuators

| Illustration  | Dimensions | Description  | Type           |                |
|---|------------|--|----------------|----------------|
|   |            | <b>Concave Lens, transparent</b>   |                |                |
|   |            | colour   | blue           | <b>T25DBL</b>  |
|   |            |  | yellow         | <b>T25DGB</b>  |
|   |            |  | green          | <b>T25DGN</b>  |
|   |            |  | clear          | <b>T25DKL</b>  |
|   |            |  | red            | <b>T25DRT</b>  |
|   |            | opalwhite  | <b>T25DWS</b>  |                |
|   |            | <b>Flat Lens, transparent</b>  |                |                |
|   |            | colour   | blue           | <b>T25FBL</b>  |
|   |            |  | yellow         | <b>T25FGB</b>  |
|   |            |  | green          | <b>T25FGN</b>  |
|   |            |  | clear          | <b>T25FKL</b>  |
|   |            |  | red            | <b>T25FRT</b>  |
|   |            | opalwhite  | <b>T25FWS</b>  |                |
|   |            | <b>Flat Lens, non-transparent</b>  |                |                |
|   |            | colour   | blue           | <b>T25FGBL</b> |
|   |            |  | yellow         | <b>T25FGGB</b> |
|   |            |  | green          | <b>T25FGGN</b> |
|   |            | colour   | black          | <b>T25FGSW</b> |
|   |            |  | red            | <b>T25FGRT</b> |
|   |            | white  | <b>T25FGWS</b> |                |
|   |            | <b>High Lens, transparent</b>  |                |                |
|   |            | colour   | blue           | <b>T25HBL</b>  |
|   |            |  | yellow         | <b>T25HGB</b>  |
|   |            |  | green          | <b>T25HGN</b>  |
|   |            |  | clear          | <b>T25HKL</b>  |
|   |            | red  | <b>T25HRT</b>  |                |
|   |            | <b>Nameplate</b>   | <b>BSQX...</b> |                |
|   |            | with standard imprint, please specify index number (see nameplates on pages 410) |                |                |
|   |            | <b>Nameplate</b>   | <b>BSQXB</b>   |                |
| with special imprint according to customer's specifications |            |  |                |                |

## Emergency Stop Buttons

### Mushroom Heads

\*) 24 x 24 mm on request

Illustration

Dimensions

Description

Type



**Blank Nameplate**

**BSQXU**

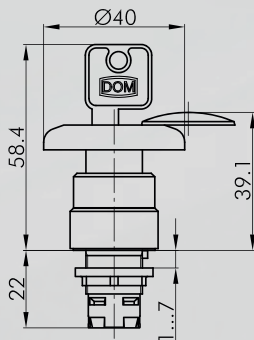


**For further emergency stops, please refer to the chapter „Emergency-stop Heads“ starting on page 362**

The emergency-stop heads can also be supplied as latching mushroom heads with mushrooms in different colours.

IP65

16mm



### Mushroom Head, latch-type\*

latching in depressed position, key reset, with keyhole cover

|                              |             |
|------------------------------|-------------|
| switching position indicator | No          |
| anti-lock collar             | No          |
| release                      | key release |

suitable contact blocks

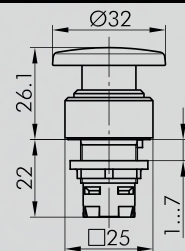
**A AZ PTP PTF**

|               |                   |
|---------------|-------------------|
| mushroom head | red               |
| front bezel   | black<br>charcoal |

**QXVSCH  
QXVSCHDG**

IP65

16mm



### Mushroom Head, momentary\*

other mushroom colours on request

|                              |    |
|------------------------------|----|
| switching position indicator | No |
| anti-lock collar             | No |

suitable contact blocks

**A AZ CT CTF CTP CZ**

|             |                   |
|-------------|-------------------|
| front bezel | black<br>charcoal |
|-------------|-------------------|

**QXS  
QXSDG**

**Knob Set for rotary switches**

\*) 24 x 24 mm on request

**Knob Set for potentiometers**

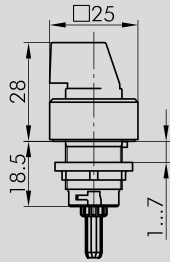
Illustration

Dimensions

Description

Type

IP65



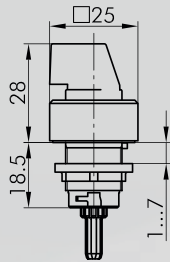
**Knob Set for rotary switches, without inscription\***

different versions on request

front bezel            black  
                                 charcoal

**QXDAU**  
**QXDAUDG**

IP65



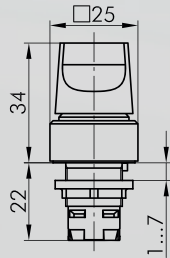
**Knob Set for rotary switches, with inscription\***

different versions on request

front bezel            black  
                                 charcoal

**QXDAB...**  
**QXDABDG...**

IP65



**Knob Set for potentiometers\***

for potentiometers of 6 mm shaft dia. and thread M10x0.75.  
Delivery without potentiometer.

Shaft length: approx. 50 mm ± 4 mm

front bezel            black  
                                 charcoal

**QXR**  
**QXRDG**


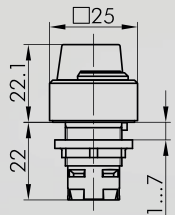
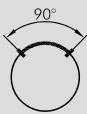


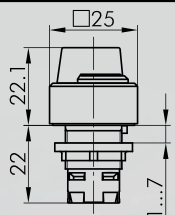
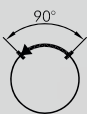


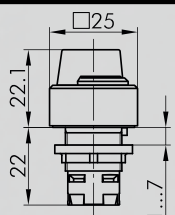


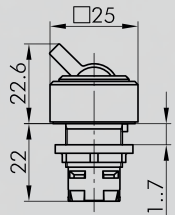
**Selector Heads (momentary/maintained)**

\*) 24 x 24 mm on request

**Toggle Heads**

I = Switching position

> = Spring return

| Illustration  | Dimensions  | Description  | Type   |
|---|---|--|--|
|    |    | <p><b>Selector Head*, maintained</b></p> <p>suitable contact blocks</p> <p>A AZ CT CTF CTP Z</p> <p>front bezel      black<br/>                         charcoal</p>                         |  <p><b>QXWA</b><br/><b>QXWADG</b></p>     |
|   |   | <p>suitable contact blocks</p> <p>A AZ</p> <p>front bezel      black<br/>                         charcoal</p>   |  <p><b>QXWB</b><br/><b>QXWBDG</b></p>     |
|   |   | <p><b>Selector Head*, momentary*</b></p> <p>suitable contact blocks</p> <p>A AZ CT CTF CTP Z</p> <p>front bezel      black<br/>                         charcoal</p>                         |  <p><b>QXSTA</b><br/><b>QXSTADG</b></p> |
|   |   | <p>suitable contact blocks</p> <p>A AZ</p> <p>front bezel      black<br/>                         charcoal</p>   |  <p><b>QXSTB</b><br/><b>QXSTBDG</b></p> |
|  |  | <p><b>Selector Head*, left maintained, right momentary</b></p> <p>suitable contact blocks</p> <p>A AZ</p> <p>front bezel      black<br/>                         charcoal</p>                |  <p><b>QXWC</b><br/><b>QXWCDG</b></p>   |
|  |  | <p><b>Toggle Head</b></p> <p>other toggle colours on request</p> <p>suitable contact blocks</p> <p>A AZ CT CTF CTP Z</p> <p>front bezel      black<br/>                         charcoal</p> | <p><b>QXK</b><br/><b>QXKDG</b></p>   |

## Key Actuators (momentary/maintained)

\*) 24 x 24 mm on request

I = Switching position

> = Spring return

○ = Key removable position

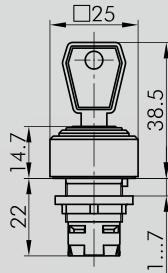
Illustration

Dimensions

Description

Type

IP65



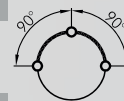
### Key Actuator\*

including two keys  
other lock types on request

suitable contact blocks

A AZ

front bezel            black  
                                 charcoal

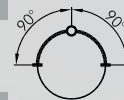


**QXSSA12E**  
**QXSSDGA12E**

suitable contact blocks

A AZ

front bezel            black  
                                 charcoal

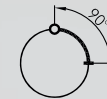


**QXSSA13E**  
**QXSSDGA13E**

suitable contact blocks

A AZ CT CTF CTP CZ

front bezel            black  
                                 charcoal

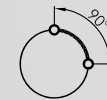


**QXSSA14E**  
**QXSSDGA14E**

suitable contact blocks

A AZ CT CTF CTP CZ

front bezel            black  
                                 charcoal



**QXSSA15E**  
**QXSSDGA15E**

suitable contact blocks

A AZ CT CTF CTP CZ

front bezel            black  
                                 charcoal



**QXSSA17E**  
**QXSSDGA17E**

suitable contact blocks

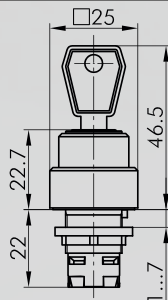
A AZ CT CTF CTP CZ

front bezel            black  
                                 charcoal



**QXSSA18E**  
**QXSSDGA18E**

IP65



### Key Actuator, momentary\*

including two keys  
other lock types on request

suitable contact blocks

A AZ

front bezel            black  
                                 charcoal

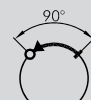


**QXSSA23E**  
**QXSSDGA23E**

suitable contact blocks

A AZ CT CTF CTP CZ

front bezel            black  
                                 charcoal



**QXSSA27E**  
**QXSSDGA27E**

## Key Actuators (momentary/maintained)

\*) 24 x 24 mm on request

- I = Switching position
- > = Spring return
- = Key removable position

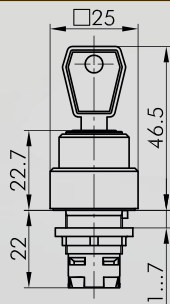
Illustration

Dimensions

Description

Type

IP65



### Key Actuator, left maintained, right momentary\*

including two keys  
other lock types on request

suitable contact blocks

A AZ

front bezel      black  
                         charcoal

suitable contact blocks

A AZ

front bezel      black  
                         charcoal

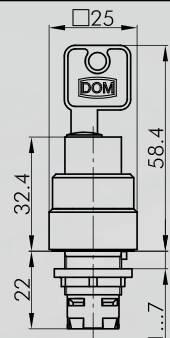


**QXSSA24E**  
**QXSSDGA24E**



**QXSSA25E**  
**QXSSDGA25E**

IP65



### Lockable Pushbutton Head\*

including two keys

#### Type N:

Depresses with or without key. Lock latches in depressed position and resets with key turned clockwise. Key removable in both positions.

#### Type 1:

Depresses only with key turned clockwise. Turn key into vertical position, the lock latches. Reset by turning key clockwise. Key removable in both vertical positions.

#### Type 2:

Depresses only with key in the right position (= basic position). Turn key into vertical position, the lock latches. Key only removable in the latching position. Reset by turning key clockwise.

#### Type 3:

Depresses only with key turned clockwise. The lock does NOT latch in depressed position (key neither turnable nor removable in depressed position; MOMENTARY). Key only removable in the off-position.

suitable contact blocks

A AZ CT CTF CTP CZ

front bezel      black  
front bezel      charcoal

**QXSCHA...**  
**QXSCHDGA...**

### Key Actuators (momentary/maintained)

\*) 24 x 24 mm on request

- I = Switching position
- > = Spring return
- = Key removable position

Illustration

Dimensions

Description

Type

IP65



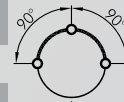
#### Key Actuator with protection cap, maintained\*

including two keys,  
other lock types on request

suitable contact blocks

A AZ

front bezel black

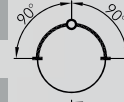


**QXSSKA12E**

suitable contact blocks

A AZ

front bezel black



**QXSSKA13E**

suitable contact blocks

A AZ CT CTF CTP CZ

front bezel black

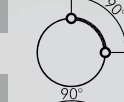


**QXSSKA14E**

suitable contact blocks

A AZ CT CTF CTP CZ

front bezel black

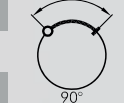


**QXSSKA15E**

suitable contact blocks

A AZ CT CTF CTP CZ

front bezel black



**QXSSKA17E**

suitable contact blocks

A AZ CT CTF CTP CZ

front bezel black



**QXSSKA18E**

IP65



#### Key Actuator with protection cap, momentary\*

including two keys,  
other lock types on request

suitable contact blocks

A AZ

front bezel black



**QXSSKA23E**

suitable contact blocks

A AZ CT CTF CTP CZ

front bezel black



**QXSSKA27E**

IP65



#### Key Actuator with protection cap, left momentary, right momentary\*

including two keys,  
other lock types on request

suitable contact blocks

A AZ

front bezel black



**QXSSKA24E**

suitable contact blocks



A AZ

front bezel black



**QXSSKA25E**

## Accessories for Actuators

| Illustration  | Dimensions | Description   | Type          |
|---|------------|---|---------------|
|  |            | <b>Spare Keys</b><br>standard spare key, specify key number for special locks           | <b>ES3A36</b> |
|  |            | <b>Spare Key (standard)</b><br>standard spare key, specify key number for special locks | <b>ESE845</b> |

- Accessories
- Central Units
- Bus Technology
- Locks
- Timers/Switches
- Push Buttons
- Special Models



## Buzzers

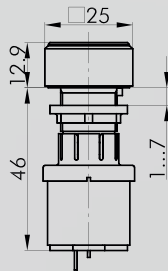
Illustration

Dimensions

Description

Type

IP65

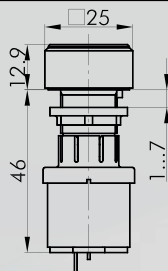


### Buzzer

operating voltage: 12 ... 24V AC/DC  
 operating current: max. 30mA  
 signal frequency: 3.5 +/- 0.5 Hz  
 volume: max. 85 db (10cm, 24V)  
 max. 80 db (10cm, 12V)  
 operating temperature: -20°C ... 60°C  
 front bezel: black

**QXNSG+SG-24V**

IP65

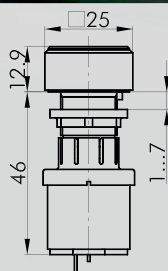


### Interval Buzzer

operating voltage: 12 ... 24V AC/DC  
 operating current: max. 30mA  
 signal frequency: 3.5 +/- 0.5 Hz  
 volume: max. 85 db (10cm, 24V)  
 max. 80 db (10cm, 12V)  
 interval: 1 s  
 operating temperature: -20°C ... 60°C  
 front bezel: black

**QXNSG+SGL-24V**

IP65

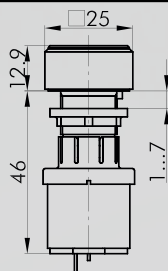


### Illuminated Buzzer

operating voltage: 12 ... 24V AC/DC  
 operating current: max. 30mA  
 signal frequency: 3.5 +/- 0.5 Hz  
 volume: max. 85 db (10cm, 24V)  
 max. 80 db (10cm, 12V)  
 operating temperature: -20°C ... 60°C  
 front bezel: black

**QXNSGL+SGLR-24V**

IP65



### Illuminated Interval Buzzer

operating voltage: 12 ... 24V AC/DC  
 operating current: max. 30mA  
 signal frequency: 3.5 +/- 0.5 Hz  
 volume: max. 85 db (10cm, 24V)  
 max. 80 db (10cm, 12V)  
 interval: 1 s  
 operating temperature: -20°C ... 60°C  
 front bezel: black

**QXNSGL+SGLR-24V**






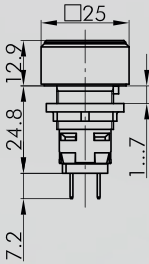

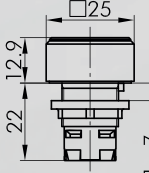

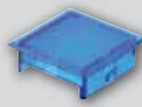
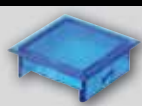
### Faston Clamp 2.8 x 0.8 mm with snap-in pin

**FH2,8**

Cross section 0.75 - 1.50 mm<sup>2</sup>, brass, with pin to snapfit into the socket XA, XAL and the insulating case IH2.8

## Pilot Light Heads/Pilot Lights

\*) 24 x 24 mm on request,  
lenses and nameplates to be ordered separately

| Illustration  | Dimensions | Description   | Type  |
|---|------------|---|---|
|    |            | <b>Insulating Case</b><br>for Faston clamp FH2,8, slip on from the front  | <b>IH2,8</b>  |
|    |            | <b>Double Faston</b><br>for the connection of 2 Faston clamps FH2.8   | <b>FD2,8</b>  |
|     |            | <b>Pilot Light with Faston terminals</b><br><b>2.8x0.8 mm*</b><br>front bezel      black<br>charcoal  | <b>QXL5</b><br><b>QXL5DG</b>  |
|   |            | <b>Pilot Light Head*</b><br>suitable lampholders<br><br>front bezel      black<br>charcoal | <b>QXN</b><br><b>QXNDG</b>  |
|    |            | <b>Flat Lens, depolished</b><br>colour              blue<br>yellow<br>green<br>red<br>opalwhite   | <b>KF25BL</b><br><b>KF25GB</b><br><b>KF25GN</b><br><b>KF25RT</b><br><b>KF25WS</b>           |
|    |            | <b>Flat Lens, transparent</b><br>colour              blue<br>yellow<br>green<br>clear<br>red  | <b>KF25KSBL</b><br><b>KF25KSGB</b><br><b>KF25KSGN</b><br><b>KF25KSKL</b><br><b>KF25KSRT</b> |

## Pilot Light Heads/Pilot Lights

Lenses and nameplates to be ordered separately

Illustration

Dimensions

Description

Type



### Nameplate

with standard imprint, please specify index number (see nameplates on pages 410)

**BSQX...**



### Lampholder

**L5**

### Nameplate

with special imprint according to customer's specifications

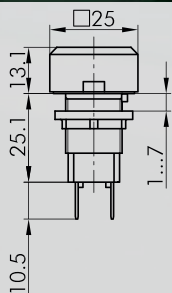
**BSQXB**



### Blank Nameplate

**BSQXU**

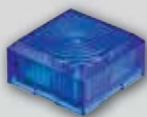
IP65



### Panoramic Pilot Light with Faston terminals

**6.3/2.8x0.8 mm**  
BA9s socket  
max. 250V 2W

**QXL9**




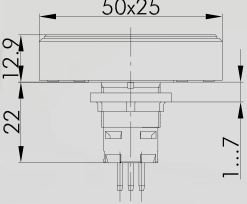
### Panoramic Lens


colour

blue  
yellow  
green  
clear  
red  
opalwhite

**KH25BL**  
**KH25GB**  
**KH25GN**  
**KH25KL**  
**KH25RT**  
**KH25WS**

**Seven-segment Displays**

| Illustration  | Dimensions  | Description  | Type               |
|---|---|--|--------------------|
|  |  | <p><b>4-Digit 7-Segment Display with serial interface</b></p> <p>Operating temperature : -30 bis +70°C<br/>           Operating voltage: 24V DC (18-28V)<br/>           Current consumption: 70mA at 24V<br/>           Inputs (Enable, Clock, Data): 24V PLC level<br/>           Clock pulse rate: 0...10kHz<br/>           Data telegram: 20 bit, serial<br/>           Available character set: 0..9, A, I, II, U, -, blank<br/>           Connection: via integrated 6-pole diode plug acc. to DIN 45322</p> <p>Option: parallel control (8 bit) via additional module</p> <p>front bezel black</p> | <b>LXLASCE-SPS</b> |

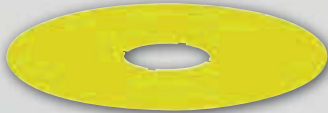


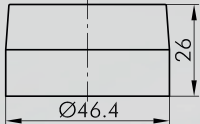


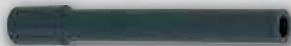


|   |   |             |
|---|---|-------------|
|  | <p><b>DIN Female Connector</b></p> <p>serves to connect the 7-segment displays in compliance with DIN 45322</p> | <b>MAK6</b> |
|---|---|-------------|



## Accessories for Actuators

| Illustration  | Dimensions | Description   | Type            |
|---|------------|---|-----------------|
|    |            | <b>Hexagonal Mounting Tool</b><br>with torque limitation,<br>for the series OKTRON, OKTRON-JUWEL, OKTRON-R,<br>RONTRON-R-JUWEL, RONTRON-R-Exclusive, RONTRON-Q-<br>JUWEL, RONTRON-Q-Exclusive, QUARTRON(-L), QUARTRON-<br>JUWEL(-L), RX, RX-JUWEL | <b>S16</b>      |
|    |            | <b>Mounting Tool Adapter with 1/4" connections</b><br>for mounting tools S16 and S22  | <b>SRA</b>      |
|    |            | <b>Threaded Adapter</b><br>Allows true-to-size mounting of actuators for 16 mm mounting dia.<br>into 22.5 mm holes.<br>Includes also a suitable sealing.  | <b>R16X1</b>    |
|   |            | <b>External Nameplate Holder</b><br>for outside marking of the actuators of the QUARTRON and<br>OKTRON series, accepts self-adhesive nameplates<br>colour charcoal  | <b>QXABT</b>    |
|   |            | <b>Self-adhesive Nameplate - laser-printed</b><br>Inscription according to customer's specification<br>Dimensions: 22 x 11 mm   | <b>BZ16G</b>    |
|    |            | <b>Self-adhesive Nameplate - blank</b><br>Dimensions: 22 x 11 mm  | <b>BZ16U</b>    |
|    |            | <b>Self-adhesive Nameplate</b><br>with standard inscription, please specify index no. (see<br>nameplates)<br>Dimensions: 22 x 11 mm   | <b>BZ16B...</b> |

## Accessories for Actuators

| Illustration  | Dimensions  | Description  | Type                   |
|---|---|--|------------------------|
|    |   | <b>Yellow Nameplate</b><br>self-adhesive PVC foil<br>printing on request<br>outer dia. 60 mm<br>for mounting dia. 16 mm<br>colour yellow     | <b>NAS_16</b>          |
|    |   | <b>Yellow Nameplate with quadrilingual imprint</b><br>self-adhesive PVC foil<br>outer dia. 60 mm<br>for mounting dia. 16 mm<br>colour yellow | <b>NAS_16_548</b>      |
|  |  | <b>Protective Shroud</b><br>for actuators of 16 mm mounting dia.<br>colour yellow charcoal   | <b>QXSK<br/>QXSKDG</b> |
|  |   | <b>Lead-sealable Protective Lid</b><br>fits onto the pushbuttons of the QUARTRON series  | <b>KDQ16</b>           |
|  |   | <b>Height Compensation Spacer for KDQ16</b><br>for height compensation on PCB assembly   | <b>KDAU16</b>          |
|  |   | <b>Lamp Remover</b>  | <b>LZ-MG</b>           |
|  |   | <b>Universal Lens Remover</b>  | <b>USK</b>             |
|  |   | <b>Square Dummy</b><br>to close unused mounting apertures<br>colour black  | <b>Q16</b>             |

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