



## RAFIX 22 QR

### **RAFIX 22 QR control component range**

- Mounting hole diameter of 22.3 mm to IEC 60947-5-1
- 250 V / 10 A max.
- Degree of protection: IP65 acc. to DIN EN 60529
- 2 collar shapes
- The contact blocks snap onto the actuators with a coupling
- Screw, cage clamp or quick connect terminals
- 3 NC + 3 NO for E-Stop on request
- Contact blocks with gold or silver plated contacts
- All products are RoHS compliant.

The specified data apply only if actuators are combined with contact blocks and signal indicators with lamp sockets within the same product range.

# CONTROL COMPONENTS

RAFIX 22 QR

## Content

|   |                |
|---|----------------|
| <b>RAFIX 22 QR Pushbuttons</b>  | <b>2 - 91</b>  |
| RAFIX 22 QR Pushbutton, flush lens, round collar                          | 2 - 92         |
| RAFIX 22 QR Pushbutton, protruding lens, round collar                     | 2 - 93         |
| RAFIX 22 QR Pushbutton, protruding front ring, round collar               | 2 - 94         |
| RAFIX 22 QR Pushbutton, flush lens, square collar                         | 2 - 95         |
| RAFIX 22 QR Pushbutton, protruding lens, square collar                    | 2 - 96         |
| RAFIX 22 QR Pushbutton, protruding front ring, square collar              | 2 - 97         |
| <b>RAFIX 22 QR Pushbuttons with protective cap</b>                        | <b>2 - 98</b>  |
| RAFIX 22 QR Pushbutton with protective cap, flush lens, round collar      | 2 - 99         |
| RAFIX 22 QR Pushbutton with protective cap, flush lens, square collar     | 2 - 100        |
| <b>RAFIX 22 QR Selector switches</b>                                      | <b>2 - 101</b> |
| RAFIX 22 QR Selector switch, round collar, short handle                   | 2 - 102        |
| RAFIX 22 QR Selector switch, round collar, long handle                    | 2 - 103        |
| RAFIX 22 QR Selector switch, square collar, short handle                  | 2 - 105        |
| RAFIX 22 QR Selector switch, square collar, long handle                   | 2 - 106        |
| <b>RAFIX 22 QR Keylock switches</b>                                       | <b>2 - 108</b> |
| RAFIX 22 QR Keylock switch, round collar                                  | 2 - 109        |
| RAFIX 22 QR Keylock switch, square collar                                 | 2 - 111        |
| <b>RAFIX 22 QR Mushroom-headed pushbuttons</b>                            | <b>2 - 114</b> |
| RAFIX 22 QR Mushroom-headed pushbutton 40 mm, round collar                | 2 - 115        |
| RAFIX 22 QR Mushroom-headed pushbutton 40 mm, illuminated, round collar   | 2 - 116        |
| RAFIX 22 QR Mushroom-headed pushbutton 40 mm, square collar               | 2 - 116        |
| RAFIX 22 QR Mushroom-headed pushbutton 40 mm, illuminated, square collar  | 2 - 117        |
| <b>RAFIX 22 QR Emergency stop pushbuttons, dupe-proof to EN ISO 13850</b> | <b>2 - 118</b> |
| RAFIX 22 QR Emergency stop pushbutton                                     | 2 - 119        |
| RAFIX 22 QR Emergency stop pushbutton, with indication                    | 2 - 120        |
| RAFIX 22 QR Emergency stop pushbutton, with keylock                       | 2 - 120        |
| RAFIX 22 QR Emergency stop pushbutton, illuminable                        | 2 - 121        |
| RAFIX 22 QR Emergency stop pushbutton, reset by pulling                   | 2 - 122        |
| <b>RAFIX 22 QR Toggle switches</b>  | <b>2 - 123</b> |
| RAFIX 22 QR Toggle switch, round collar                                   | 2 - 124        |
| RAFIX 22 QR Toggle switch, square collar                                  | 2 - 124        |
| <b>RAFIX 22 QR Twin pushbuttons</b>                                       | <b>2 - 125</b> |
| RAFIX 22 QR Twin pushbutton, oval collar                                  | 2 - 126        |
| RAFIX 22 QR Twin pushbutton, rectangular collar                           | 2 - 126        |
| <b>RAFIX 22 QR Potentiometer drives</b>                                   | <b>2 - 127</b> |
| RAFIX 22 QR Potentiometer drive, round collar                             | 2 - 128        |
| RAFIX 22 QR Potentiometer drive, square collar                            | 2 - 128        |
| <b>RAFIX 22 QR Buzzers</b>  | <b>2 - 129</b> |
| RAFIX 22 QR Buzzer, round collar  | 2 - 130        |
| RAFIX 22 QR Buzzer, square collar   | 2 - 130        |
| <b>RAFIX 22 QR Signal indicators</b>                                      | <b>2 - 131</b> |
| RAFIX 22 QR Signal indicator, flat, round collar, for legend inserts      | 2 - 132        |
| RAFIX 22 QR Signal indicator, high, round collar                          | 2 - 133        |
| RAFIX 22 QR Signal indicator, flat, square collar, for legend inserts     | 2 - 133        |
| RAFIX 22 QR Signal indicator, high, square collar                         | 2 - 134        |
| <b>RAFIX 22 QR Contact blocks with silver contacts</b>                    | <b>2 - 135</b> |
| RAFIX 22 QR Contact block with silver contacts                            | 2 - 136        |
| RAFIX 22 QR Contact block assembly, with coupling, silver contacts        | 2 - 137        |

2

RAFIX  
22 QR

---

## Content

|  |                |
|--|----------------|
| <b>RAFIX 22 QR Contact blocks with gold contacts</b>             | <b>2 - 138</b> |
| RAFIX 22 QR Contact block with gold contacts                     | 2 - 139        |
| RAFIX 22 QR Contact block assembly, with coupling, gold contacts | 2 - 140        |
| <b>RAFIX 22 QR Lamp sockets BA 9s (MBC/MCC)</b>                  | <b>2 - 141</b> |
| RAFIX 22 QR Lamp socket BA 9s, without coupling                  | 2 - 142        |
| RAFIX 22 QR Lamp socket BA 9s, assembly with coupling            | 2 - 142        |
| <b>RAFIX 22 QR LED units</b>                                     | <b>2 - 143</b> |
| RAFIX 22 QR LED unit, without coupling                           | 2 - 144        |
| <b>RAFIX 22 QR Special accessories</b>                           | <b>2 - 145</b> |
| Fixing spanner for ring nut and front ring                       | 2 - 145        |
| Label holder   | 2 - 145        |
| Legend label to clip into label holder 5.07.620.xxx              | 2 - 146        |
| Coupling   | 2 - 146        |
| RAFIX 22 QR Blanking cap, Ø 22.3 mm                              | 2 - 147        |
| Protective cover, suitable for pushbuttons with flush lens       | 2 - 147        |
| RAFIX Insulating housing IP65, Ø 22.3 mm                         | 2 - 148        |
| Emergency stop label, Ø 22.3 mm                                  | 2 - 149        |
| RAFIX 22 QR Protective Collar                                    | 2 - 150        |

# CONTROL COMPONENTS

RAFIX 22 QR

## Control Components RAFIX 22 QR



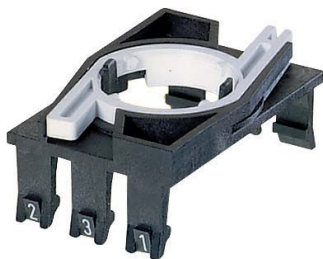
Contact blocks marked with different colors for ease of identification in stock and when connecting.

- NC contacts: red cover
- NO contacts: green cover
- NC/NO contacts: one cover red, one cover green
- Lamp socket: black
- Silver contacts: basic housing color is black
- Gold contacts: basic housing color is grey
- The terminals associated with a contact pair are color coded on the connection side and marked with the respective contact numbers:  
1, 2 = NC  
3, 4 = NO

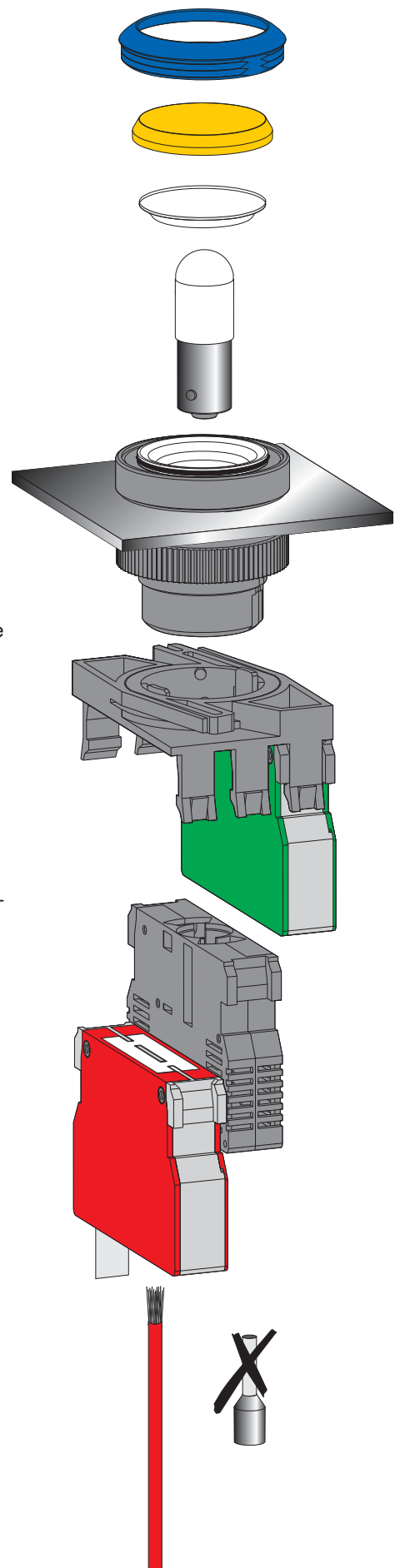
The lamps of pushbuttons and signal lamps can be replaced from the front. This method saves time and increases safety since it eliminates the need for accessing the machine/control station interior and handling live cables for lamp replacement. After unscrewing the front ring, the lens can be removed and the lamp replaced.



The components feature a removable locating lug. If installed without locating lug, the ring nut with claw can be used. Accurate alignment of the actuator can be achieved behind the front panel. The cast-on collar seal can not get lost nor be twisted during installation and allows single-person assembly: the actuator is held in the mounting hole by the cast-on seal and can then be fixed by screwing from the rear.



First, snap the lamp socket and contact blocks into the coupling. Then snap the assembly on to the actuator. To release it, the bayonet must be pressed (prevents inadvertent releasing at the same time)



2

RAFIX  
22 QR

## Terminals

The RAFIX 22 QR contact blocks are available in different connection styles as required for your application:

- **Screw terminals**  
The terminals are open and the captive screws are mounted in the terminal recess.
- **Quick connect/solder terminals 6.3 x 0.8 mm**
- **Spring-type terminals**  
Simply insert a screwdriver to open the terminal, insert the cable and remove the screwdriver to close the terminal.

### Your advantage:

This offers your savings in three ways:

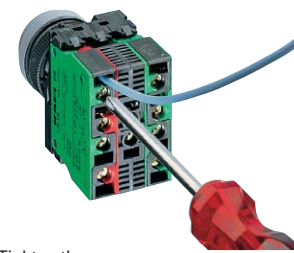
- Drastically reduced assembly time thanks to wire insertion from the rear, i. e. no more bending and lateral insertion of the wires required.
- You save material: No wire end sleeves are required.
- You save the time previously required for mounting the wire end sleeves.

## Assembly

### Screw terminals



Insert the wire



Tighten the screw

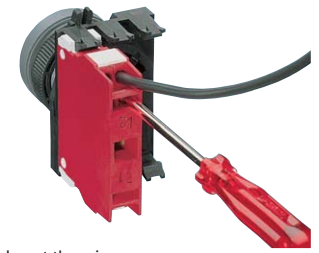


Done

### Spring-type terminals



Open the terminal



Insert the wire



Remove the screwdriver

2

RAFIX  
22 QR

## Versatility of design for customized panels



The RAFIX 22 QR system does not only have a particularly low profile and is also available in many different versions. Your design options for your customized panels are nearly unlimited thanks to the interchangeable front rings and lenses.

In this way you can achieve an attractive design while ensuring safe operation of your equipment at the same time. RAFIX 22 QR components are available either with a round or with a square collar.

# CONTROL COMPONENTS

RAFIX 22 QR

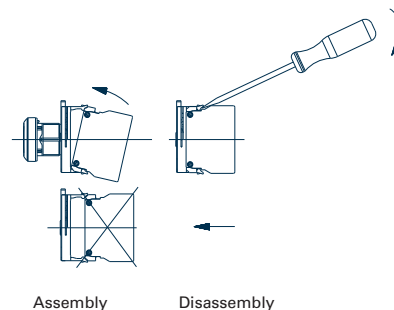
The RAFIX 22 QR control component range meets all the technical requirements and current standards for control units. The system is of modular design. Actuators, contact blocks and lamp sockets can be combined freely.



2

## Sequence of assembly/disassembly

- Fix the actuator in the front panel with the ring nut.
- Snap the individual elements (maximum two contact blocks together with a lamp socket) in the coupling. You can install them on any assembling axis.
- Insert the lamp or LED into the lamp socket or snap the LED unit.
- Snap the coupling with the contact blocks on to the actuator.
- Connect the cables.
- Disassembly is performed in reverse order. To remove the coupling from the actuator, the latch lever must be pressed (by hand or with a screwdriver).

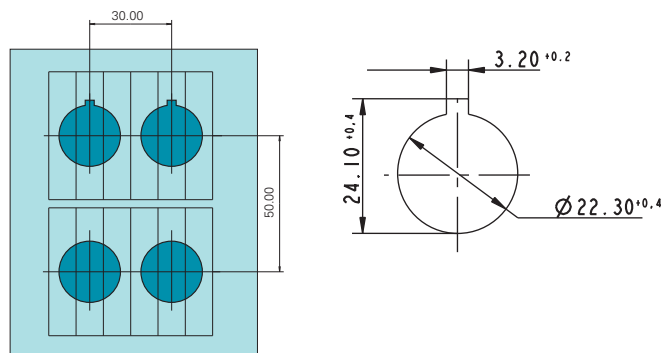


RAFIX  
22 QR

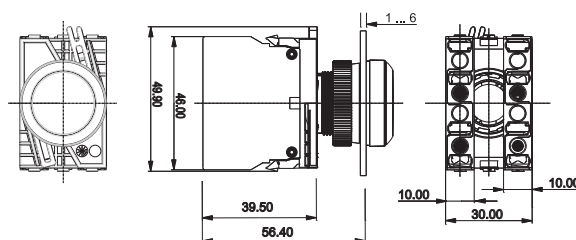
### Panel cut-out according to IEC 60947-5-1

All actuators are provided with a locating lug which may be removed using a screwdriver for installation into mounting holes if required.

With a grid spacing of 30 mm horizontally and 50 mm vertically, the collars of the square actuators touch each other. We recommend to use the same grid spacing also for the round collar shapes (IEC 60947-5-1)

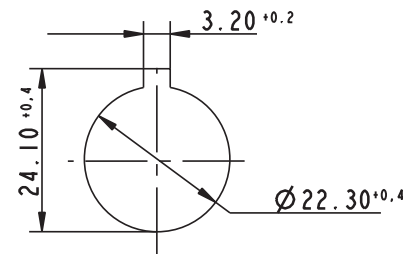
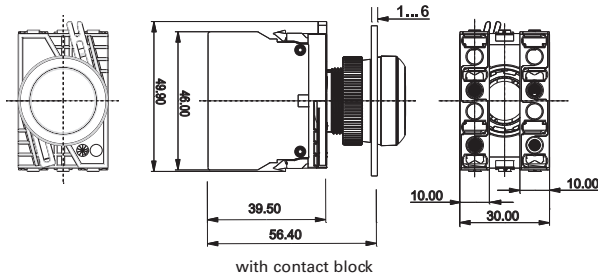


## Dimensional drawing





## RAFIX 22 QR Pushbuttons



Panel cut-out to IEC 60947-5-1

### Technical Data

#### → General information

|                     |                 |
|---------------------|-----------------|
| Form of lens        | see order block |
| Color of lens       | see order block |
| Color of front ring | see order block |
| Form of collar      | see order block |

#### → Dimensions

|                                   |                 |
|-----------------------------------|-----------------|
| Dimensions of collar              | see order block |
| Overall height                    | see order block |
| Mounting depth with contact block | 56.4 mm         |
| without cable                     |                 |
| Mounting hole                     | Ø 22.3 mm       |
| Mounting grid                     | 50 x 30 mm      |

#### → Mechanical design

|                  |                 |
|------------------|-----------------|
| Mounting         | ring nut        |
| Contact function | see order block |
| Illumination     | see order block |

#### → Mechanical characteristics

|                      |                                     |
|----------------------|-------------------------------------|
| Operating travel     | 4 mm                                |
| Operating force max. | approx. 5 N for 1 switching element |
| Robustness max.      | 100 N                               |

#### → Other specifications

|                                      |  |
|--------------------------------------|--|
| Operating life (operations)          | 1,000,000 momentary / 500,000 latching   |
| Degree of protection from front side | IP65 (DIN EN 60529)                      |
| Ambient temp. operating min.         | -25 °C                                   |
| Ambient temp. operating max.         | +70 °C                                   |
| Storage temperature min.             | -40 °C                                   |
| Storage temperature max.             | +80 °C                                   |
| Environmental resistance             | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                       | yes                                      |
| REACH compliant                      | yes                                      |

### Approvals



UL 508, C22.2 No.  
14-M91



2004 Steel Vessel  
Rules



Rules for the  
Classification of  
Steel Ships



Marine, offshore  
and industrial  
use



German Lloyds  
type approval



### Accessories RAFIX 22 QR - Pushbutton



#### → Description

| Description                                       | Photo | Order no. | Additional accessories see page |
|---|-------|-----------|---------------------------------|
| RAFIX - Insulating housing IP65, Ø 22.3 mm        |       | -         | 2 - 79, 2 - 148,<br>5 - 20      |
| RAFIX 22 QR - Contact blocks with gold contacts   |       | -         | 2 - 138                         |
| RAFIX 22 QR - Contact blocks with silver contacts |       | -         | 2 - 135                         |

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

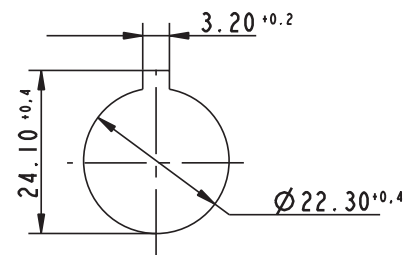
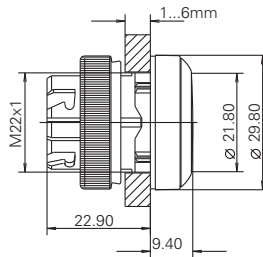
**– Table (continued) –  
Accessories RAFIX 22 QR - Pushbutton**

| → Description                           | Photo  | Order no.         | Additional accessories see page |
|---|--|-------------------|---------------------------------|
| Socket BA 9s (MBC/MCC), LED superbright |   | -                 | 5 - 8                           |
| Fixing spanner for ring nut             |  | 5.05.800.062/0000 | 2 - 145, 2 - 261,<br>5 - 25     |



## RAFIX 22 QR Pushbutton, flush lens, round collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1

| → Illumination | Color of lens      | Order no. momentary |                       | Order no. latching |                       |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
|                |                    | Plastic front ring  | Metallized front ring | Plastic front ring | Metallized front ring |
| yes            | transparent red    | 1.30.240.001/13xx   | 1.30.240.021/1300     | 1.30.240.011/13xx  | 1.30.240.031/1300     |
| yes            | transparent yellow | 1.30.240.001/14xx   | 1.30.240.021/1400     | 1.30.240.011/14xx  | 1.30.240.031/1400     |
| yes            | transparent green  | 1.30.240.001/15xx   | 1.30.240.021/1500     | 1.30.240.011/15xx  | 1.30.240.031/1500     |
| yes            | transparent blue   | 1.30.240.001/16xx   | 1.30.240.021/1600     | 1.30.240.011/16xx  | 1.30.240.031/1600     |
| yes            | transparent white  | 1.30.240.001/10xx   | 1.30.240.021/1000     | 1.30.240.011/10xx  | 1.30.240.031/1000     |
| no             | opaque red         | 1.30.240.101/03xx   | 1.30.240.121/0300     | 1.30.240.111/03xx  | 1.30.240.131/0300     |
| no             | opaque yellow      | 1.30.240.101/04xx   | 1.30.240.121/0400     | 1.30.240.111/04xx  | 1.30.240.131/0400     |
| no             | opaque green       | 1.30.240.101/05xx   | 1.30.240.121/0500     | 1.30.240.111/05xx  | 1.30.240.131/0500     |
| no             | opaque blue        | 1.30.240.101/06xx   | 1.30.240.121/0600     | 1.30.240.111/06xx  | 1.30.240.131/0600     |
| no             | opaque white       | 1.30.240.101/02xx   | 1.30.240.121/0200     | 1.30.240.111/02xx  | 1.30.240.131/0200     |
| no             | opaque slate-grey  | 1.30.240.101/07xx   | 1.30.240.121/0700     | 1.30.240.111/07xx  | 1.30.240.131/0700     |
| no             | opaque black       | 1.30.240.101/01xx   | 1.30.240.121/0100     | 1.30.240.111/01xx  | 1.30.240.131/0100     |

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08

Pushbuttons with plastic front ring and white lens are also available with the following front ring colors: red = 03, yellow = 04, green = 05, blue = 06. Other color combinations on request.

**Accessoires:**

Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.010/0000

Protective cover, suitable for pushbuttons with flush lens: see page 2 - 147

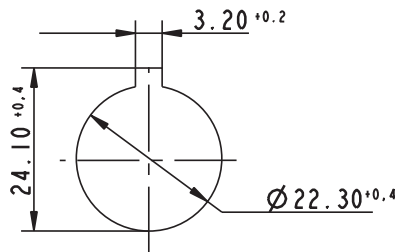
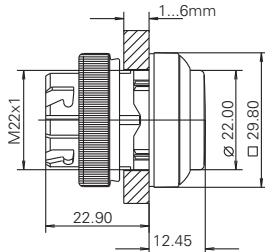
2

RAFIX  
22 QR



## RAFIX 22 QR Pushbutton, protruding lens, round collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1



2

| → Illumination | Color of lens      | Order no. momentary |                       | Order no. latching |                       |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
|                |                    | Plastic front ring  | Metallized front ring | Plastic front ring | Metallized front ring |
| yes            | transparent red    | 1.30.240.201/13xx   | 1.30.240.221/1300     | 1.30.240.211/13xx  | 1.30.240.231/1300     |
| yes            | transparent yellow | 1.30.240.201/14xx   | 1.30.240.221/1400     | 1.30.240.211/14xx  | 1.30.240.231/1400     |
| yes            | transparent green  | 1.30.240.201/15xx   | 1.30.240.221/1500     | 1.30.240.211/15xx  | 1.30.240.231/1500     |
| yes            | transparent blue   | 1.30.240.201/16xx   | 1.30.240.221/1600     | 1.30.240.211/16xx  | 1.30.240.231/1600     |
| yes            | transparent white  | 1.30.240.201/10xx   | 1.30.240.221/1000     | 1.30.240.211/10xx  | 1.30.240.231/1000     |
| no             | opaque red         | 1.30.240.301/03xx   | 1.30.240.321/0300     | 1.30.240.311/03xx  | 1.30.240.331/0300     |
| no             | opaque yellow      | 1.30.240.301/04xx   | 1.30.240.321/0400     | 1.30.240.311/04xx  | 1.30.240.331/0400     |
| no             | opaque green       | 1.30.240.301/05xx   | 1.30.240.321/0500     | 1.30.240.311/05xx  | 1.30.240.331/0500     |
| no             | opaque blue        | 1.30.240.301/06xx   | 1.30.240.321/0600     | 1.30.240.311/06xx  | 1.30.240.331/0600     |
| no             | opaque white       | 1.30.240.301/02xx   | 1.30.240.321/0200     | 1.30.240.311/02xx  | 1.30.240.331/0200     |
| no             | opaque slate-grey  | 1.30.240.301/07xx   | 1.30.240.321/0700     | 1.30.240.311/07xx  | 1.30.240.331/0700     |
| no             | opaque black       | 1.30.240.301/01xx   | 1.30.240.321/0100     | 1.30.240.311/01xx  | 1.30.240.331/0100     |

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08

Pushbuttons with plastic front ring and white lens are also available with the following front ring colors: red = 03, yellow = 04, green = 05, blue = 06. Other color combinations on request.

**Accessoires:**

Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07620.010/0000

RAFIX  
22 QR

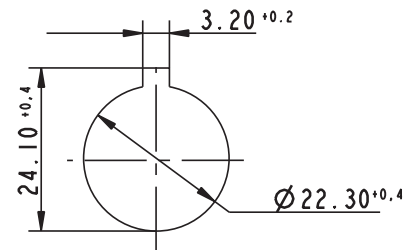
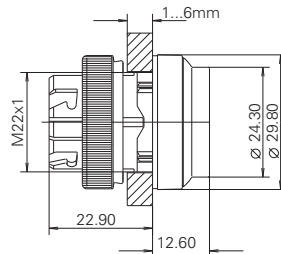
# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Pushbutton, protruding front ring, round collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1

| Illumination | Color of lens      | Order no. momentary |                       |
|--------------|--------------------|---------------------|-----------------------|
|              |                    | Plastic front ring  | Metallized front ring |
| yes          | transparent red    | 1.30.240.401/13xx   | 1.30.240.421/1300     |
| yes          | transparent yellow | 1.30.240.401/14xx   | 1.30.240.421/1400     |
| yes          | transparent green  | 1.30.240.401/15xx   | 1.30.240.421/1500     |
| yes          | transparent blue   | 1.30.240.401/16xx   | 1.30.240.421/1600     |
| yes          | transparent white  | 1.30.240.401/10xx   | 1.30.240.421/1000     |
| no           | opaque red         | 1.30.240.501/03xx   | 1.30.240.521/0300     |
| no           | opaque yellow      | 1.30.240.501/04xx   | 1.30.240.521/0400     |
| no           | opaque green       | 1.30.240.501/05xx   | 1.30.240.521/0500     |
| no           | opaque blue        | 1.30.240.501/06xx   | 1.30.240.521/0600     |
| no           | opaque white       | 1.30.240.501/02xx   | 1.30.240.521/0200     |
| no           | opaque slate-grey  | 1.30.240.501/07xx   | 1.30.240.521/0700     |
| no           | opaque black       | 1.30.240.501/01xx   | 1.30.240.521/0100     |

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08

The protruding collar offers protection against inadvertent operation and thereby fulfils the safety requirements of various machinery manufacturers, particularly from the printing industry.

### Accessoires:

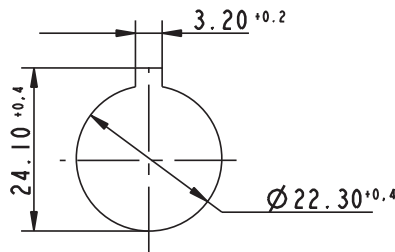
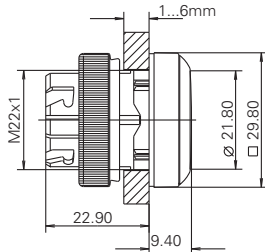
Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07620.010/0000

2

RAFIX  
22 QR

## RAFIX 22 QR Pushbutton, flush lens, square collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1



2

| → Illumination | Color of lens      | Order no. momentary |                       | Order no. latching |                       |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
|                |                    | Plastic front ring  | Metallized front ring | Plastic front ring | Metallized front ring |
| yes            | transparent red    | 1.30.240.051/13xx   | 1.30.240.071/1300     | 1.30.240.061/13xx  | 1.30.240.081/1300     |
| yes            | transparent yellow | 1.30.240.051/14xx   | 1.30.240.071/1400     | 1.30.240.061/14xx  | 1.30.240.081/1400     |
| yes            | transparent green  | 1.30.240.051/15xx   | 1.30.240.071/1500     | 1.30.240.061/15xx  | 1.30.240.081/1500     |
| yes            | transparent blue   | 1.30.240.051/16xx   | 1.30.240.071/1600     | 1.30.240.061/16xx  | 1.30.240.081/1600     |
| yes            | transparent white  | 1.30.240.051/10xx   | 1.30.240.071/1000     | 1.30.240.061/10xx  | 1.30.240.081/1000     |
| no             | opaque red         | 1.30.240.151/03xx   | 1.30.240.171/0300     | 1.30.240.161/03xx  | 1.30.240.181/0300     |
| no             | opaque yellow      | 1.30.240.151/04xx   | 1.30.240.171/0400     | 1.30.240.161/04xx  | 1.30.240.181/0400     |
| no             | opaque green       | 1.30.240.151/05xx   | 1.30.240.171/0500     | 1.30.240.161/05xx  | 1.30.240.181/0500     |
| no             | opaque blue        | 1.30.240.151/06xx   | 1.30.240.171/0600     | 1.30.240.161/06xx  | 1.30.240.181/0600     |
| no             | opaque white       | 1.30.240.151/02xx   | 1.30.240.171/0200     | 1.30.240.161/02xx  | 1.30.240.181/0200     |
| no             | opaque slate-grey  | 1.30.240.151/07xx   | 1.30.240.171/0700     | 1.30.240.161/07xx  | 1.30.240.181/0700     |
| no             | opaque black       | 1.30.240.151/01xx   | 1.30.240.171/0100     | 1.30.240.161/01xx  | 1.30.240.181/0100     |

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08

Pushbuttons with plastic front ring and white lens are also available with the following front ring colors: red = 03, yellow = 04, green = 05, blue = 06. Other color combinations on request.

**Accessoires:**

Label holder, square collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.011/0000

RAFIX  
22 QR

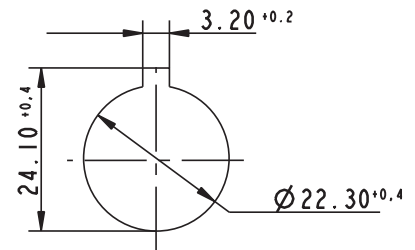
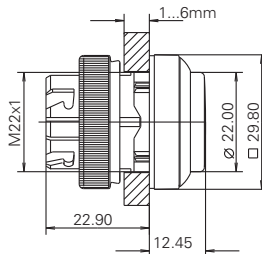
# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Pushbutton, protruding lens, square collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1

| → Illumination | Color of lens      | Order no. momentary |                       | Order no. latching |                       |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
|                |                    | Plastic front ring  | Metallized front ring | Plastic front ring | Metallized front ring |
| yes            | transparent red    | 1.30.240.251/13xx   | 1.30.240.271/1300     | 1.30.240.261/13xx  | 1.30.240.281/1300     |
| yes            | transparent yellow | 1.30.240.251/14xx   | 1.30.240.271/1400     | 1.30.240.261/14xx  | 1.30.240.281/1400     |
| yes            | transparent green  | 1.30.240.251/15xx   | 1.30.240.271/1500     | 1.30.240.261/15xx  | 1.30.240.281/1500     |
| yes            | transparent blue   | 1.30.240.251/16xx   | 1.30.240.271/1600     | 1.30.240.261/16xx  | 1.30.240.281/1600     |
| yes            | transparent white  | 1.30.240.251/10xx   | 1.30.240.271/1000     | 1.30.240.261/10xx  | 1.30.240.281/1000     |
| no             | opaque red         | 1.30.240.351/03xx   | 1.30.240.371/0300     | 1.30.240.361/03xx  | 1.30.240.381/0300     |
| no             | opaque yellow      | 1.30.240.351/04xx   | 1.30.240.371/0400     | 1.30.240.361/04xx  | 1.30.240.381/0400     |
| no             | opaque green       | 1.30.240.351/05xx   | 1.30.240.371/0500     | 1.30.240.361/05xx  | 1.30.240.381/0500     |
| no             | opaque blue        | 1.30.240.351/06xx   | 1.30.240.371/0600     | 1.30.240.361/06xx  | 1.30.240.381/0600     |
| no             | opaque white       | 1.30.240.351/02xx   | 1.30.240.371/0200     | 1.30.240.361/02xx  | 1.30.240.381/0200     |
| no             | opaque slate-grey  | 1.30.240.351/07xx   | 1.30.240.371/0700     | 1.30.240.361/07xx  | 1.30.240.381/0700     |
| no             | opaque black       | 1.30.240.351/01xx   | 1.30.240.371/0100     | 1.30.240.361/01xx  | 1.30.240.381/0100     |

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08

Pushbuttons with plastic front ring and white lens are also available with the following front ring colors: red = 03, yellow = 04, green = 05, blue = 06. Other color combinations on request.

### Accessoires:

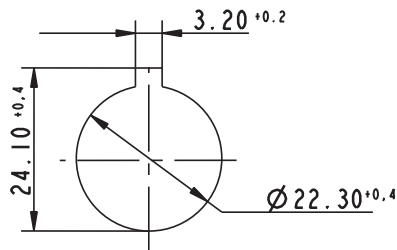
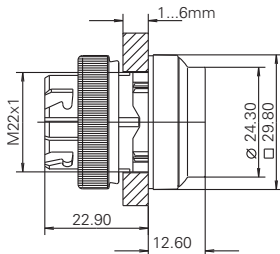
Label holder, square collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07620.011/0000

2

RAFIX  
22 QR

## RAFIX 22 QR Pushbutton, protruding front ring, square collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1



2

RAFIX  
22 QR

| Illumination | Color of lens      | Order no. momentary |                       |
|--------------|--------------------|---------------------|-----------------------|
|              |                    | Plastic front ring  | Metallized front ring |
| yes          | transparent red    | 1.30.240.451/13xx   | 1.30.240.471/1300     |
| yes          | transparent yellow | 1.30.240.451/14xx   | 1.30.240.471/1400     |
| yes          | transparent green  | 1.30.240.451/15xx   | 1.30.240.471/1500     |
| yes          | transparent blue   | 1.30.240.451/16xx   | 1.30.240.471/1600     |
| yes          | transparent white  | 1.30.240.451/10xx   | 1.30.240.471/1000     |
| no           | opaque red         | 1.30.240.551/03xx   | 1.30.240.571/0300     |
| no           | opaque yellow      | 1.30.240.551/04xx   | 1.30.240.571/0400     |
| no           | opaque green       | 1.30.240.551/05xx   | 1.30.240.571/0500     |
| no           | opaque blue        | 1.30.240.551/06xx   | 1.30.240.571/0600     |
| no           | opaque white       | 1.30.240.551/02xx   | 1.30.240.571/0200     |
| no           | opaque slate-grey  | 1.30.240.551/07xx   | 1.30.240.571/0700     |
| no           | opaque black       | 1.30.240.551/01xx   | 1.30.240.571/0100     |

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08

The protruding collar offers protection against inadvertent operation and thereby fulfils the safety requirements of various machinery manufacturers, particularly in the industry.

### Accessoires:

Label holder, square collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.011/0000

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

2



## RAFIX 22 QR Pushbuttons with protective cap

→ Pushbutton with protective cap for use under rugged conditions.

### Technical Data

#### → General information

|                     |                 |
|---------------------|-----------------|
| Form of lens        | flat lens       |
| Color of lens       | see order block |
| Color of front ring | see order block |
| Form of collar      | see order block |

#### → Dimensions

|   |                 |
|---|-----------------|
| Dimensions of collar                            | see order block |
| Overall height                                  | see order block |
| Mounting depth with contact block without cable | 56.4 mm         |
| Mounting hole                                   | Ø 22.3 mm       |
| Mounting grid                                   | 50 x 30 mm      |

#### → Mechanical design

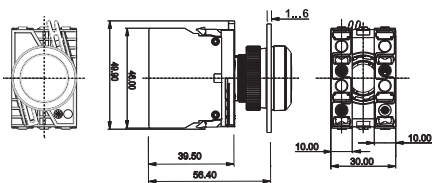
|                  |                 |
|------------------|-----------------|
| Mounting         | ring nut        |
| Contact function | momentary       |
| Illumination     | see order block |

#### → Mechanical characteristics

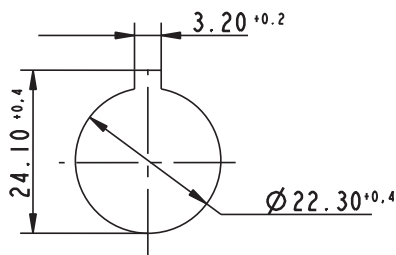
|                      |                                     |
|----------------------|-------------------------------------|
| Operating travel     | 4 mm                                |
| Operating force max. | approx. 5 N for 1 switching element |
| Robustness max.      | 100 N                               |

#### → Other specifications

|                                      |  |
|--------------------------------------|--|
| Operating life (operations)          | 1,000,000 momentary  |
| Degree of protection from front side | IP65 (DIN EN 60529); IP69K (ISO 20653),<br>water temp. 23 °C ±3 °C |
| Ambient temp. operating min.         | -25 °C   |
| Ambient temp. operating max.         | +70 °C   |
| Storage temperature min.             | -40 °C   |
| Storage temperature max.             | +80 °C   |
| Environmental resistance             | acc. to IEC 60068-2-14, -30, -33 and -78                           |
| ROHS compliant                       | yes  |
| REACH compliant                      | yes  |



with contact block



Panel cut-out to IEC 60947-5-1

### Approvals



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Marine, offshore and industrial use








German Lloyd's type approval



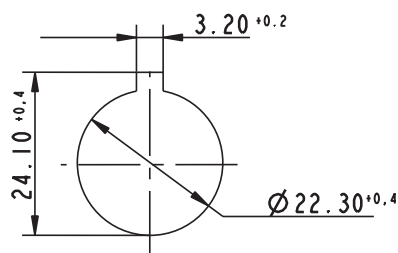
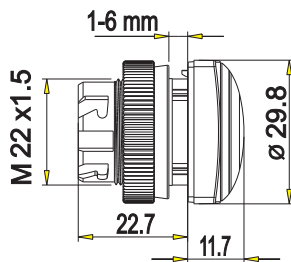


### Accessories RAFIX 22 QR - Pushbutton with protective cap

| → Description                                     | Photo  | Order no.         | Additional accessories see page |
|---|--|-------------------|---------------------------------|
| RAFIX - Insulating housing IP65, Ø 22.3 mm        |   | -                 | 2 - 79, 2 - 148, 5 - 20         |
| RAFIX 22 QR - Contact blocks with gold contacts   |   | -                 | 2 - 138                         |
| RAFIX 22 QR - Contact blocks with silver contacts |   | -                 | 2 - 135                         |
| Socket BA 9s (MBC/MCC), LED superbright           |   | -                 | 5 - 8                           |
| Fixing spanner for ring nut                       |  | 5.05.800.062/0000 | 2 - 145, 2 - 261, 5 - 25        |

## RAFIX 22 QR Pushbutton with protective cap, flush lens, round collar

Technical data see page 2 - 98



Panel cut-out to IEC 60947-5-1



| → Illumination | Color of lens      | Order no. momentary |                       | Order no. latching |                       |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
|                |                    | Plastic front ring  | Metallized front ring | Plastic front ring | Metallized front ring |
| yes            | transparent red    | 1.30.240.005/13xx   | -                     | -                  | -                     |
| yes            | transparent yellow | 1.30.240.005/14xx   | -                     | -                  | -                     |
| yes            | transparent green  | 1.30.240.005/15xx   | -                     | -                  | -                     |
| yes            | transparent blue   | 1.30.240.005/16xx   | -                     | -                  | -                     |
| yes            | transparent white  | 1.30.240.005/10xx   | -                     | -                  | -                     |
| no             | opaque red         | 1.30.240.105/03xx   | -                     | -                  | -                     |
| no             | opaque yellow      | 1.30.240.105/04xx   | -                     | -                  | -                     |
| no             | opaque green       | 1.30.240.105/05xx   | -                     | -                  | -                     |
| no             | opaque blue        | 1.30.240.105/06xx   | -                     | -                  | -                     |
| no             | opaque white       | 1.30.240.105/02xx   | -                     | -                  | -                     |
| no             | opaque slate-grey  | 1.30.240.105/07xx   | -                     | -                  | -                     |
| no             | opaque black       | 1.30.240.105/01xx   | -                     | -                  | -                     |

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

– Table (continued) –

## RAFIX 22 QR - Pushbutton with protective cap, flush lens, round collar

Pushbutton with protective cap for use under rugged conditions.

Legending on request.

xx = color of front ring: black = 01, silver grey = 08

### Accessoires:

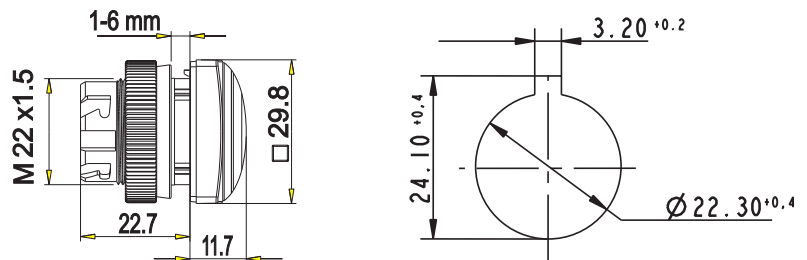
Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07620.010/0000

Protective cover, suitable for pushbuttons with flush lens: see page 2 - 147



## RAFIX 22 QR Pushbutton with protective cap, flush lens, square collar

Technical data see page 2 - 98



Panel cut-out to IEC 60947-5-1

| → Illumination | Color of lens      | Order no. momentary |                       | Order no. latching |                       |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
|                |                    | Plastic front ring  | Metallized front ring | Plastic front ring | Metallized front ring |
| yes            | transparent red    | 1.30.240.055/13xx   | -                     | -                  | -                     |
| yes            | transparent yellow | 1.30.240.055/14xx   | -                     | -                  | -                     |
| yes            | transparent green  | 1.30.240.055/15xx   | -                     | -                  | -                     |
| yes            | transparent blue   | 1.30.240.055/16xx   | -                     | -                  | -                     |
| yes            | transparent white  | 1.30.240.055/10xx   | -                     | -                  | -                     |
| no             | opaque red         | 1.30.240.155/03xx   | -                     | -                  | -                     |
| no             | opaque yellow      | 1.30.240.155/04xx   | -                     | -                  | -                     |
| no             | opaque green       | 1.30.240.155/05xx   | -                     | -                  | -                     |
| no             | opaque blue        | 1.30.240.155/06xx   | -                     | -                  | -                     |
| no             | opaque white       | 1.30.240.155/02xx   | -                     | -                  | -                     |
| no             | opaque slate-grey  | 1.30.240.155/07xx   | -                     | -                  | -                     |
| no             | opaque black       | 1.30.240.155/01xx   | -                     | -                  | -                     |

Pushbutton with protective cap for use under rugged conditions.

Legending on request.

xx = color of front ring: black = 01, silver grey = 08

### Accessoires:

Label holder, square collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07620.011/0000

## RAFIX 22 QR Selector switches

→ The illuminated selector switches are provided with translucent handle markings. These are opaque on the non-illuminated versions. For colored illumination of the translucent handle marking please use contact blocks with lamp sockets and colored LED BA9s (see chapter 5 Accessories).

### Technical Data

#### → General information

|                     |                 |
|---------------------|-----------------|
| Actuator            | handle          |
| Marking of handle   | white           |
| Color of front ring | see order block |
| Form of collar      | see order block |

#### → Dimensions

|   |                 |
|---|-----------------|
| Dimensions of collar                            | see order block |
| Overall height                                  | 22.2 mm         |
| Mounting depth with contact block without cable | 56.4 mm         |
| Mounting hole                                   | Ø 22.3 mm       |
| Mounting grid                                   | 50 x 30 mm      |

#### → Mechanical design

|                  |                 |
|------------------|-----------------|
| Mounting         | ring nut        |
| Contact function | see order block |
| Illumination     | see order block |
| Rotating angle   | see order block |

#### → Mechanical characteristics

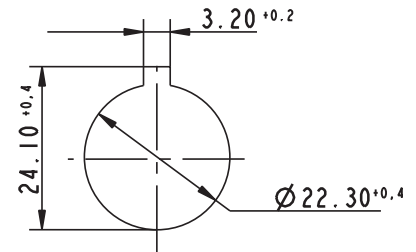
|                      |                                     |
|----------------------|-------------------------------------|
| Operating force max. | approx. 5 N for 1 switching element |
| Torque max.          | 2 Nm                                |

#### → Electrical characteristics

|                  |    |
|------------------|----|
| Protection class | II |
|------------------|----|

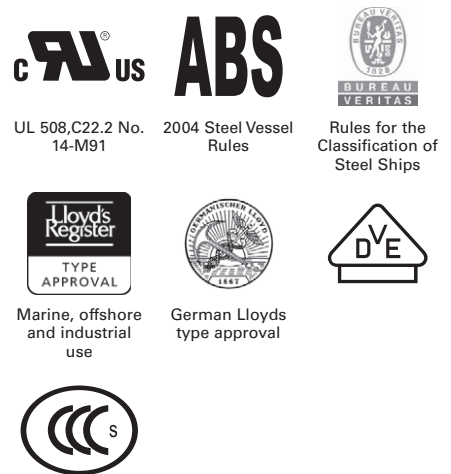
#### → Other specifications

|                                      |  |
|--------------------------------------|--|
| Operating life (operations)          | 500,000                                  |
| Degree of protection from front side | IP65 (DIN EN 60529)                      |
| Ambient temp. operating min.         | -25 °C                                   |
| Ambient temp. operating max.         | +70 °C                                   |
| Storage temperature min.             | -40 °C                                   |
| Storage temperature max.             | +80 °C                                   |
| Environmental resistance             | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                       | yes                                      |
| REACH compliant                      | yes                                      |



Panel cut-out to IEC 60947-5-1

### Approvals






### Accessories RAFIX 22 QR - Selector switch

| → Description  | Photo | Order no. | Additional accessories see page |
|--|-------|-----------|---------------------------------|
| BA 9s base (MBC/MCC), filament lamps, shape A, DIN 49851 |       | -         | 5 - 11                          |
| RAFIX - Insulating housing IP65, Ø 22.3 mm               |       | -         | 2 - 79, 2 - 148, 5 - 20         |
| RAFIX 22 QR - Contact blocks with gold contacts          |       | -         | 2 - 138                         |

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

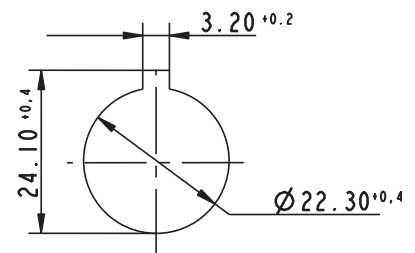
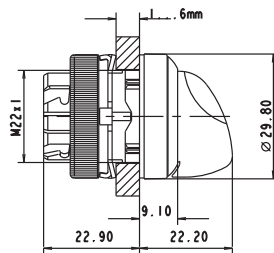
– Table (continued) –  
Accessories RAFIX 22 QR - Selector switch

| → Description                                     | Photo  | Order no.         | Additional accessories see page |
|---|--|-------------------|---------------------------------|
| RAFIX 22 QR - Contact blocks with silver contacts |   | -                 | 2 - 135                         |
| Socket BA 9s (MBC/MCC), LED superbright           |   | -                 | 5 - 8                           |
| Fixing spanner for ring nut                       |  | 5.05.800.062/0000 | 2 - 145, 2 - 261,<br>5 - 25     |











## RAFIX 22 QR Selector switch, round collar, short handle

Technical data see page 2 - 101









Panel cut-out to IEC 60947-5-1

| → Illumination | Contact function                       | Rotating angle      |   | Order no.          |                       |
|----------------|--|---------------------|---|--------------------|-----------------------|
|                |  |                     |   | Plastic front ring | Metallized front ring |
| yes            | momentary                              | 1 x 40°             |  | 1.30.242.001/22xx  | 1.30.242.002/2200     |
| yes            | momentary                              | 2 x 40°             |  | 1.30.242.026/22xx  | 1.30.242.027/2200     |
| yes            | latching                               | 1 x 90°, form L     |  | 1.30.242.101/22xx  | 1.30.242.102/2200     |
| yes            | latching                               | 1 x 90°, form V     |  | 1.30.242.201/22xx  | 1.30.242.202/2200     |
| yes            | latching                               | 2 x 60°             |  | 1.30.242.301/22xx  | 1.30.242.302/2200     |
| yes            | latching                               | 2 x 90°             |  | 1.30.242.126/22xx  | 1.30.242.127/2200     |
| yes            | latching 1 x 90° and momentary 1 x 40° | 1 x 90° and 1 x 40° |  | 1.30.242.426/22xx  | 1.30.242.427/2200     |
| no             | momentary                              | 1 x 40°             |  | 1.30.242.501/02xx  | 1.30.242.502/0200     |

2

RAFIX  
22 QR

– Table (continued) –  
RAFIX 22 QR - Selector switch, round collar, short handle

| → Illumination | Contact function                       | Rotating angle      |   | Order no.          |                       |
|----------------|--|---------------------|---|--------------------|-----------------------|
|                |  |                     |   | Plastic front ring | Metallized front ring |
| no             | momentary                              | 2 x 40°             |  | 1.30.242.526/02xx  | 1.30.242.527/0200     |
| no             | latching                               | 1 x 90°, form L     |  | 1.30.242.601/02xx  | 1.30.242.602/0200     |
| no             | latching                               | 1 x 90°, form V     |  | 1.30.242.701/02xx  | 1.30.242.702/0200     |
| no             | latching                               | 2 x 60°             |  | 1.30.242.801/02xx  | 1.30.242.802/0200     |
| no             | latching                               | 2 x 90°             |  | 1.30.242.626/02xx  | 1.30.242.627/0200     |
| no             | latching 1 x 90° and momentary 1 x 40° | 1 x 90° and 1 x 40° |  | 1.30.242.926/02xx  | 1.30.242.927/0200     |

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08; other colors on request.

Included: Ring nut with claw.

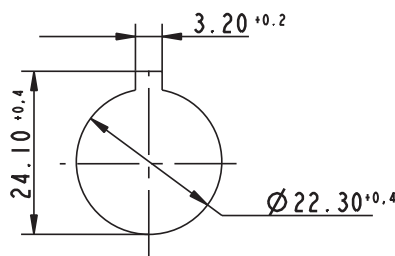
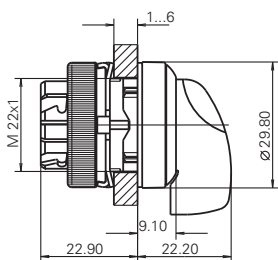
At keylock switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

**Accessoires:**

Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.010/0000



## RAFIX 22 QR Selector switch, round collar, long handle

Technical data see page 2 - 101



Panel cut-out to IEC 60947-5-1



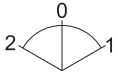
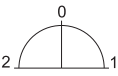
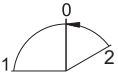




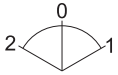
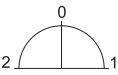
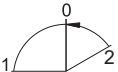


| → Illumination | Contact function | Rotating angle |   | Order no.          |                       |
|----------------|------------------|----------------|---|--------------------|-----------------------|
|                |                  |                |   | Plastic front ring | Metallized front ring |
| yes            | momentary        | 1 x 40°        |  | 1.30.242.011/xxxx  | 1.30.242.012/2200     |
| yes            | momentary        | 2 x 40°        |  | 1.30.242.036/xxxx  | 1.30.242.037/2200     |

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

– Table (continued) –  
RAFIX 22 QR - Selector switch, round collar, long handle

| → Illumination | Contact function                       | Rotating angle      |   | Order no.          |                       |
|----------------|--|---------------------|---|--------------------|-----------------------|
|                |  |                     |   | Plastic front ring | Metallized front ring |
| yes            | latching                               | 1 x 90°, form L     |    | 1.30.242.111/xxxx  | 1.30.242.112/2200     |
| yes            | latching                               | 1 x 90°, form V     |    | 1.30.242.211/xxxx  | 1.30.242.212/2200     |
| yes            | latching                               | 2 x 60°             |    | 1.30.242.311/xxxx  | 1.30.242.312/2200     |
| yes            | latching                               | 2 x 90°             |    | 1.30.242.136/xxxx  | 1.30.242.137/2200     |
| yes            | latching 1 x 90° and momentary 1 x 40° | 1 x 90° and 1 x 40° |    | 1.30.242.436/xxxx  | 1.30.242.437/xxxx     |
| no             | momentary                              | 1 x 40°             |    | 1.30.242.511/xxxx  | 1.30.242.512/0200     |
| no             | momentary                              | 2 x 40°             |    | 1.30.242.536/xxxx  | 1.30.242.537/0200     |
| no             | latching                               | 1 x 90°, form L     |   | 1.30.242.611/xxxx  | 1.30.242.612/0200     |
| no             | latching                               | 1 x 90°, form V     |  | 1.30.242.711/xxxx  | 1.30.242.712/0200     |
| no             | latching                               | 2 x 60°             |  | 1.30.242.811/xxxx  | 1.30.242.812/0200     |
| no             | latching                               | 2 x 90°             |  | 1.30.242.636/xxxx  | 1.30.242.637/0200     |
| no             | latching 1 x 90° and momentary 1 x 40° | 1 x 90° and 1 x 40° |  | 1.30.242.936/xxxx  | 1.30.242.937/0200     |

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08; other colors on request.

Included: Ring nut with claw.

At selector switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

**Accessoires:**

Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07620.010/0000

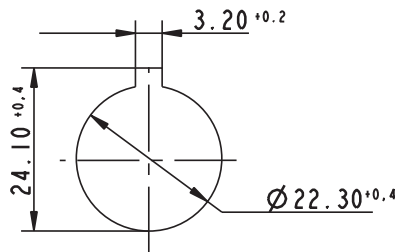
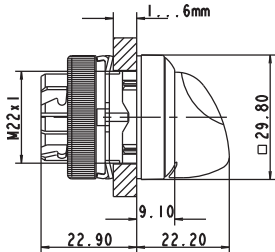
2

RAFIX  
22 QR



## RAFIX 22 QR Selector switch, square collar, short handle

Technical data see page 2 - 101



Panel cut-out to IEC 60947-5-1



| → Illumination | Contact function                       | Rotating angle      |  | Order no.          |                       |
|----------------|--|---------------------|--|--------------------|-----------------------|
|                |  |                     |  | Plastic front ring | Metallized front ring |
| yes            | momentary                              | 1 x 40°             |  | 1.30.242.051/xxxx  | 1.30.242.052/2200     |
| yes            | momentary                              | 2 x 40°             |  | 1.30.242.076/xxxx  | 1.30.242.077/2200     |
| yes            | latching                               | 1 x 90°, form L     |  | 1.30.242.151/xxxx  | 1.30.242.152/2200     |
| yes            | latching                               | 1 x 90°, form V     |  | 1.30.242.251/xxxx  | 1.30.242.252/2200     |
| yes            | latching                               | 2 x 60°             |  | 1.30.242.351/xxxx  | 1.30.242.352/2200     |
| yes            | latching                               | 2 x 90°             |  | 1.30.242.176/xxxx  | 1.30.242.177/2200     |
| yes            | latching 1 x 90° and momentary 1 x 40° | 1 x 90° and 1 x 40° |  | 1.30.242.476/xxxx  | 1.30.242.477/xxxx     |
| no             | momentary                              | 1 x 40°             |  | 1.30.242.551/xxxx  | 1.30.242.552/0200     |
| no             | momentary                              | 2 x 40°             |  | 1.30.242.576/xxxx  | 1.30.242.577/0200     |
| no             | latching                               | 1 x 90°, form L     |  | 1.30.242.651/xxxx  | 1.30.242.652/0200     |
| no             | latching                               | 1 x 90°, form V     |  | 1.30.242.751/xxxx  | 1.30.242.752/0200     |
| no             | latching                               | 2 x 60°             |  | 1.30.242.851/xxxx  | 1.30.242.852/0200     |
| no             | latching                               | 2 x 90°             |  | 1.30.242.676/xxxx  | 1.30.242.677/0200     |
| no             | latching 1 x 90° and momentary 1 x 40° | 1 x 90° and 1 x 40° |  | 1.30.242.976/xxxx  | 1.30.242.977/0200     |

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

– Table (continued) –

## RAFIX 22 QR - Selector switch, square collar, short handle

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08; other colors on request.

Included: Ring nut with claw.

At selector switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

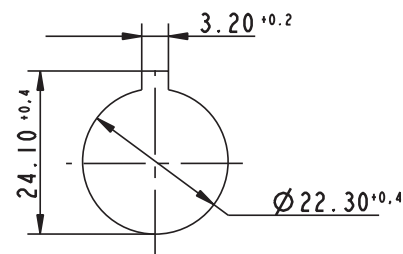
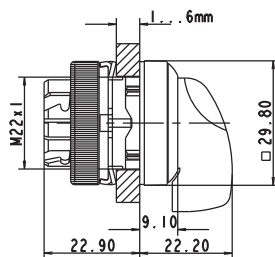
### Accessoires:

Label holder, square collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.011/0000



## RAFIX 22 QR Selector switch, square collar, long handle

Technical data see page 2 - 101




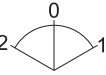
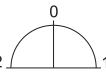
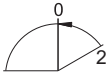
Panel cut-out to IEC 60947-5-1

| → Illumination | Contact function                       | Rotating angle      |  | Order no.          |                       |
|----------------|--|---------------------|--|--------------------|-----------------------|
|                |  |                     |  | Plastic front ring | Metallized front ring |
| yes            | momentary                              | 1 x 40°             |  | 1.30.242.061/xxxx  | 1.30.242.062/2200     |
| yes            | momentary                              | 2 x 40°             |  | 1.30.242.086/xxxx  | 1.30.242.087/2200     |
| yes            | latching                               | 1 x 90°, form L     |  | 1.30.242.161/xxxx  | 1.30.242.162/2200     |
| yes            | latching                               | 1 x 90°, form V     |  | 1.30.242.261/xxxx  | 1.30.242.262/2200     |
| yes            | latching                               | 2 x 60°             |  | 1.30.242.361/xxxx  | 1.30.242.362/2200     |
| yes            | latching                               | 2 x 90°             |  | 1.30.242.186/xxxx  | 1.30.242.187/2200     |
| yes            | latching 1 x 90° and momentary 1 x 40° | 1 x 90° and 1 x 40° |  | 1.30.242.486/xxxx  | 1.30.242.487/xxxx     |
| no             | momentary                              | 1 x 40°             |  | 1.30.242.561/xxxx  | 1.30.242.562/0200     |
| no             | momentary                              | 2 x 40°             |  | 1.30.242.586/xxxx  | 1.30.242.587/0200     |
| no             | latching                               | 1 x 90°, form L     |  | 1.30.242.661/xxxx  | 1.30.242.662/0200     |

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

– Table (continued) –  
RAFIX 22 QR - Selector switch, square collar, long handle

| → Illumination | Contact function                       | Rotating angle      |   | Order no.          |                       |
|----------------|--|---------------------|---|--------------------|-----------------------|
|                |  |                     |   | Plastic front ring | Metallized front ring |
| no             | latching                               | 1 x 90°, form V     |  | 1.30.242.761/xxxx  | 1.30.242.762/0200     |
| no             | latching                               | 2 x 60°             |  | 1.30.242.861/xxxx  | 1.30.242.862/0200     |
| no             | latching                               | 2 x 90°             |  | 1.30.242.686/xxxx  | 1.30.242.687/0200     |
| no             | latching 1 x 90° and momentary 1 x 40° | 1 x 90° and 1 x 40° |  | 1.30.242.986/xxxx  | 1.30.242.987/0200     |

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08; other colors on request.

Included: Ring nut with claw.

At selector switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

**Accessoires:**

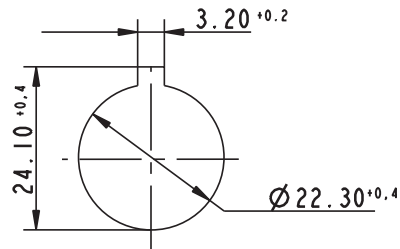
Label holder, square collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.011/0000

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Keylock switches



Panel cut-out to IEC 60947-5-1

2

### Approvals



UL 508, C22.2  
No. 14-M91



2004 Steel Vessel  
Rules



Rules for the  
Classification of  
Steel Ships



Marine, offshore  
and industrial  
use



Type approval



→ The locking systems we use are created according to DIN EN 1303 by leading lock manufacturers. They are open, mechanical systems that require occasional maintenance of the machinery or plant operator depending on environmental conditions.

### Technical Data

#### → General information

|                     |                 |
|---------------------|-----------------|
| Actuator            | Key             |
| Color of front ring | see order block |
| Form of collar      | see order block |

#### → Dimensions

|  |                 |
|--|-----------------|
| Dimensions of collar                               | see order block |
| Overall height                                     | 30.6 mm         |
| Mounting depth with contact block<br>without cable | 56.4 mm         |
| Mounting hole                                      | Ø 22.3 mm       |
| Mounting grid                                      | 50 x 30 mm      |

#### → Mechanical design

|                      |                 |
|----------------------|-----------------|
| Mounting             | ring nut        |
| Contact function     | see order block |
| Illumination         | no              |
| Lock                 | RONIS           |
| Wafers               | 4               |
| Lock type            | see order block |
| Main key             | no              |
| Symmetric key        | no              |
| Rotating angle       | see order block |
| Key removal position | see order block |

#### → Mechanical characteristics

|                      |                                     |
|----------------------|-------------------------------------|
| Operating force max. | approx. 5 N for 1 switching element |
| Torque max.          | 2 Nm                                |

#### → Electrical characteristics

|                  |    |
|------------------|----|
| Protection class | II |
|------------------|----|

#### → Other specifications

|                                      |  |
|--------------------------------------|--|
| Operating life (operations)          | 300,000 momentary / 50,000 latching      |
| Degree of protection from front side | IP65 (DIN EN 60529)                      |
| Ambient temp. operating min.         | -25 °C                                   |
| Ambient temp. operating max.         | +70 °C                                   |
| Storage temperature min.             | -40 °C                                   |
| Storage temperature max.             | +80 °C                                   |
| Environmental resistance             | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                       | yes                                      |
| REACH compliant                      | yes                                      |

# CONTROL COMPONENTS

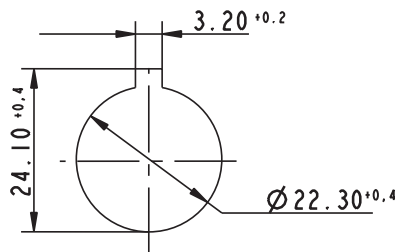
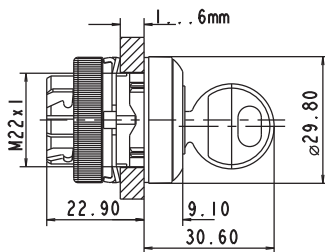
RAFIX 22 QR - ACTUATORS AND INDICATORS

## Accessories RAFIX 22 QR - Keylock switch

| → Description                                     | Photo  | Order no.         | Additional accessories see page |
|---|--|-------------------|---------------------------------|
| RAFIX - Insulating housing IP65, Ø 22.3 mm        |   | -                 | 2 - 79, 2 - 148, 5 - 20         |
| RAFIX 22 QR - Contact blocks with gold contacts   |   | -                 | 2 - 138                         |
| RAFIX 22 QR - Contact blocks with silver contacts |   | -                 | 2 - 135                         |
| Fixing spanner for ring nut                       |  | 5.05.800.062/0000 | 2 - 145, 2 - 261, 5 - 25        |
| Spare key RONIS 455, delivery content 2 keys      |   | 5.58.017.001/0000 | -                               |
| Spare key RONIS 1122E, delivery content 2 keys    |   | 5.58.017.403/0000 | -                               |
| Spare key RONIS 421, delivery content 2 keys      |   | 5.58.017.421/0000 | -                               |






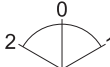
## RAFIX 22 QR Keylock switch, round collar

Technical data see page 2 - 108



Panel cut-out to IEC 60947-5-1



| → Lock type | Rotating angle  | Contact function | Key removal position | Rotating angle  | Order no.          |                       |
|-------------|-----------------|------------------|----------------------|---|--------------------|-----------------------|
|             |                 |                  |                      |   | Plastic front ring | Metallized front ring |
| 421         | 1 x 40°         | momentary        | 0                    |  | 1.30.245.003/xxxx  | 1.30.245.004/0000     |
| 421         | 2 x 40°         | momentary        | 0                    |  | 1.30.245.103/xxxx  | 1.30.245.104/0000     |
| 421         | 1 x 90°, form L | latching         | 0                    |  | 1.30.245.203/xxxx  | 1.30.245.204/0000     |
| 421         | 1 x 90°, form V | latching         | 0                    |  | 1.30.245.303/xxxx  | 1.30.245.304/0000     |
| 421         | 1 x 90°, form V | latching         | 0+1                  |  | 1.30.245.323/xxxx  | 1.30.245.324/0000     |
| 421         | 2 x 60°         | latching         | 0+1+2                |  | -                  | 1.30.245.734/0000     |

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

– Table (continued) –  
RAFIX 22 QR - Keylock switch, round collar

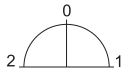
| → Lock type | Rotating angle      | Contact function                       | Key removal position | Rotating angle | Order no.          |                       |
|-------------|---------------------|--|----------------------|----------------|--------------------|-----------------------|
|             |                     |  |                      |                | Plastic front ring | Metallized front ring |
| 421         | 2 x 90°             | latching                               | 0                    |                | 1.30.245.403/xxxx  | 1.30.245.404/0000     |
| 421         | 2 x 90°             | latching                               | 0+1+2                |                | 1.30.245.433/xxxx  | 1.30.245.434/0000     |
| 421         | 1 x 90° and 1 x 40° | latching 1 x 90° and momentary 1 x 40° | 0+2                  |                | -                  | 1.30.245.524/0000     |
| 455         | 1 x 40°             | momentary                              | 0                    |                | 1.30.245.001/xxxx  | 1.30.245.002/0000     |
| 455         | 2 x 40°             | momentary                              | 0                    |                | 1.30.245.101/xxxx  | 1.30.245.102/0000     |
| 455         | 1 x 90°, form L     | latching                               | 0                    |                | 1.30.245.201/xxxx  | 1.30.245.202/0000     |
| 455         | 1 x 90°, form L     | latching                               | 0+1                  |                | 1.30.245.221/xxxx  | 1.30.245.222/0000     |
| 455         | 1 x 90°, form V     | latching                               | 0                    |                | 1.30.245.301/xxxx  | 1.30.245.302/0000     |
| 455         | 1 x 90°, form V     | latching                               | 0+1                  |                | 1.30.245.321/xxxx  | 1.30.245.322/0000     |
| 455         | 2 x 60°             | latching                               | 0+1+2                |                | 1.30.245.731/xxxx  | 1.30.245.732/0000     |
| 455         | 2 x 90°             | latching                               | 0+1+2                |                | 1.30.245.431/xxxx  | 1.30.245.432/0000     |
| 455         | 2 x 90°             | latching                               | 0                    |                | 1.30.245.401/xxxx  | 1.30.245.402/0000     |
| 455         | 1 x 90° and 1 x 40° | latching 1 x 90° and momentary 1 x 40° | 0                    |                | -                  | 1.30.245.502/0000     |
| 455         | 1 x 90° and 1 x 40° | latching 1 x 90° and momentary 1 x 40° | 0+2                  |                | -                  | 1.30.245.522/0000     |
| 1122E       | 1 x 40°             | momentary                              | 0                    |                | 1.30.245.005/xxxx  | 1.30.245.006/0000     |
| 1122E       | 2 x 40°             | momentary                              | 0                    |                | 1.30.245.105/xxxx  | 1.30.245.106/0000     |
| 1122E       | 1 x 90°, form L     | latching                               | 0                    |                | 1.30.245.205/xxxx  | 1.30.245.206/0000     |
| 1122E       | 1 x 90°, form V     | latching                               | 0                    |                | 1.30.245.305/xxxx  | 1.30.245.306/0000     |
| 1122E       | 1 x 90°, form V     | latching                               | 0+1                  |                | 1.30.245.325/xxxx  | 1.30.245.326/0000     |
| 1122E       | 2 x 90°             | latching                               | 0                    |                | 1.30.245.405/xxxx  | 1.30.245.406/0000     |

2

RAFIX  
22 QR



– Table (continued) –  
RAFIX 22 QR - Keylock switch, round collar

| → Lock type | Rotating angle | Contact function | Key removal position | Rotating angle  | Order no.          |                       |
|-------------|----------------|------------------|----------------------|---|--------------------|-----------------------|
|             |                |                  |                      |   | Plastic front ring | Metallized front ring |
| 1122E       | 2 x 90°        | latching         | 0+1+2                |  | 1.30.245.435/xxxx  | 1.30.245.436/0000     |

xxxx = Front ring color: black = 0100, slate grey = 0700, silver grey = 0800.  
Other versions on request.

Included: Ring nut with claw.

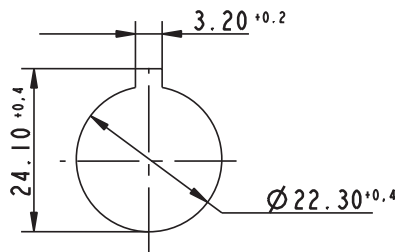
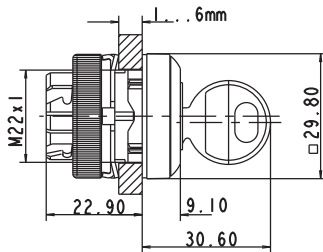
On selector switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

**Accessoires:**

Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.010/0000






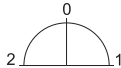
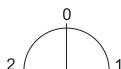
## RAFIX 22 QR Keylock switch, square collar

Technical data see page 2 - 108



Panel cut-out to IEC 60947-5-1




















| → Lock type | Rotating angle  | Contact function | Key removal position | Rotating angle  | Order no.          |                       |
|-------------|-----------------|------------------|----------------------|---|--------------------|-----------------------|
|             |                 |                  |                      |   | Plastic front ring | Metallized front ring |
| 421         | 1 x 40°         | momentary        | 0                    |  | 1.30.245.053/xxxx  | 1.30.245.054/0000     |
| 421         | 2 x 40°         | momentary        | 0                    |  | 1.30.245.153/xxxx  | 1.30.245.154/0000     |
| 421         | 1 x 90°, form L | latching         | 0                    |  | 1.30.245.253/xxxx  | 1.30.245.254/0000     |
| 421         | 1 x 90°, form V | latching         | 0                    |  | 1.30.245.353/xxxx  | 1.30.245.354/0000     |
| 421         | 1 x 90°, form V | latching         | 0+1                  |  | -                  | 1.30.245.374/0000     |
| 421         | 2 x 90°         | latching         | 0                    |  | 1.30.245.453/xxxx  | 1.30.245.454/0000     |
| 421         | 2 x 90°         | latching         | 0+1+2                |  | 1.30.245.483/xxxx  | 1.30.245.484/0000     |

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

– Table (continued) –  
RAFIX 22 QR - Keylock switch, square collar

| → Lock type | Rotating angle      | Contact function                       | Key removal position | Rotating angle  | Order no.          |                       |
|-------------|---------------------|--|----------------------|---|--------------------|-----------------------|
|             |                     |  |                      |   | Plastic front ring | Metallized front ring |
| 455         | 1 x 40°             | momentary                              | 0                    |    | 1.30.245.051/xxxx  | 1.30.245.052/0000     |
| 455         | 2 x 40°             | momentary                              | 0                    |    | 1.30.245.151/xxxx  | 1.30.245.152/0000     |
| 455         | 1 x 90°, form L     | latching                               | 0                    |    | 1.30.245.251/xxxx  | 1.30.245.252/0000     |
| 455         | 1 x 90°, form L     | latching                               | 0+1                  |    | 1.30.245.271/xxxx  | 1.30.245.272/0000     |
| 455         | 1 x 90°, form V     | latching                               | 0                    |    | 1.30.245.351/xxxx  | 1.30.245.352/0000     |
| 455         | 1 x 90°, form V     | latching                               | 0+1                  |    | 1.30.245.371/xxxx  | 1.30.245.372/0000     |
| 455         | 2 x 60°             | latching                               | 0+1+2                |   | 1.30.245.781/xxxx  | 1.30.245.782/0000     |
| 455         | 2 x 90°             | latching                               | 0+1+2                |  | 1.30.245.481/xxxx  | 1.30.245.482/0000     |
| 455         | 2 x 90°             | latching                               | 0                    |  | 1.30.245.451/xxxx  | 1.30.245.452/0000     |
| 455         | 1 x 90° and 1 x 40° | latching 1 x 90° and momentary 1 x 40° | 0+2                  |  | -                  | 1.30.245.572/0000     |
| 1122E       | 1 x 40°             | momentary                              | 0                    |  | 1.30.245.055/xxxx  | 1.30.245.056/0000     |
| 1122E       | 2 x 40°             | momentary                              | 0                    |  | 1.30.245.155/xxxx  | 1.30.245.156/0000     |
| 1122E       | 1 x 90°, form L     | latching                               | 0                    |  | 1.30.245.255/xxxx  | 1.30.245.256/0000     |
| 1122E       | 1 x 90°, form V     | latching                               | 0                    |  | 1.30.245.355/xxxx  | 1.30.245.356/0000     |
| 1122E       | 1 x 90°, form V     | latching                               | 0+1                  |  | 1.30.245.375/xxxx  | 1.30.245.376/0000     |
| 1122E       | 2 x 90°             | latching                               | 0                    |  | 1.30.245.455/xxxx  | 1.30.245.456/0000     |
| 1122E       | 2 x 90°             | latching                               | 0+1+2                |  | 1.30.245.485/xxxx  | 1.30.245.486/0000     |

xxxx = Front ring color: black = 0100, slate grey = 0700, silver grey = 0800.

Other versions on request.

Included: Ring nut with claw.

On keylock switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

---

– Table (continued) –  
RAFIX 22 QR - Keylock switch, square collar

---

**Accessoires:**

Label holder, square collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.011/0000

2

RAFIX  
22 QR

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Mushroom-headed pushbuttons

### Technical Data

#### → General information

|                     |                 |
|---------------------|-----------------|
| Actuator            | mushroom        |
| Color of mushroom   | see order block |
| Color of front ring | see order block |
| Form of collar      | see order block |

#### → Dimensions

|                      |                 |
|----------------------|-----------------|
| Dimensions of collar | see order block |
| Overall height       | 20.1 mm         |
| Mounting depth       | 56.4 mm         |
| Mounting hole        | Ø 22.3 mm       |
| Mounting grid        | 50 x 30 mm      |

#### → Mechanical design

|                  |                 |
|------------------|-----------------|
| Mounting         | ring nut        |
| Contact function | see order block |
| Illuminability   | see order block |

#### → Mechanical characteristics

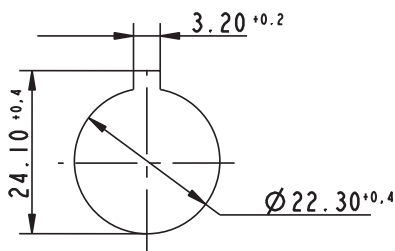
|                      |                                     |
|----------------------|-------------------------------------|
| Operating force max. | approx. 5 N for 1 switching element |
| Robustness max.      | 100 N                               |

#### → Electrical characteristics

|                  |   |
|------------------|---|
| Protection class | - |
|------------------|---|

#### → Other specifications

|                                      |  |
|--------------------------------------|--|
| Operating life (operations)          | 1,000,000                                |
| Degree of protection from front side | IP65 (DIN EN 60529)                      |
| Ambient temp. operating min.         | -25 °C                                   |
| Ambient temp. operating max.         | +70 °C                                   |
| Storage temperature min.             | -40 °C                                   |
| Storage temperature max.             | +80 °C                                   |
| Environmental resistance             | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                       | yes                                      |
| REACH compliant                      | yes                                      |



Panel cut-out to IEC 60947-5-1

### Approvals



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Marine, offshore and industrial use



German Lloyd's type approval



### Accessories RAFIX 22 QR - Mushroom-headed pushbutton

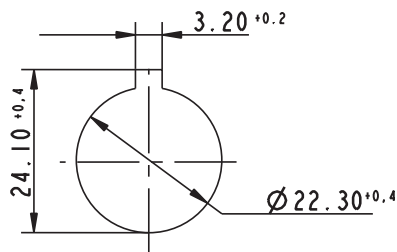
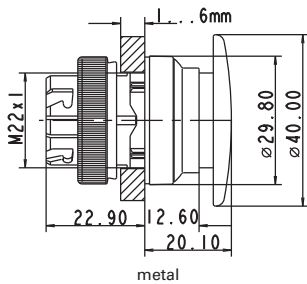
| → Description                                     | Photo | Order no. | Additional accessories see page |
|---|-------|-----------|---------------------------------|
| RAFIX - Insulating housing IP65, Ø 22.3 mm        |       | -         | 2 - 79, 2 - 148, 5 - 20         |
| RAFIX 22 QR - Contact blocks with gold contacts   |       | -         | 2 - 138                         |
| RAFIX 22 QR - Contact blocks with silver contacts |       | -         | 2 - 135                         |

– Table (continued) –  
Accessories RAFIX 22 QR - Mushroom-headed pushbutton

| → Description               | Photo  | Order no.         | Additional accessories see page |
|-----------------------------|--|-------------------|---------------------------------|
| Fixing spanner for ring nut |  | 5.05.800.062/0000 | 2 - 145, 2 - 261,<br>5 - 25     |

## RAFIX 22 QR Mushroom-headed pushbutton 40 mm, round collar

Technical data see page 2 - 114



2

RAFIX  
22 QR

| → Illuminability | Color of mushroom | Color of front ring | Contact function | Order no.         |
|------------------|-------------------|---------------------|------------------|-------------------|
| no               | opaque red        | plastic slate-grey  | momentary        | 1.30.246.501/0307 |
| no               | opaque red        | metal               | momentary        | 1.30.246.502/0300 |
| no               | opaque black      | plastic slate-grey  | momentary        | 1.30.246.501/0107 |
| no               | opaque black      | metal               | momentary        | 1.30.246.502/0100 |

xx = Front ring color: slate grey = 07

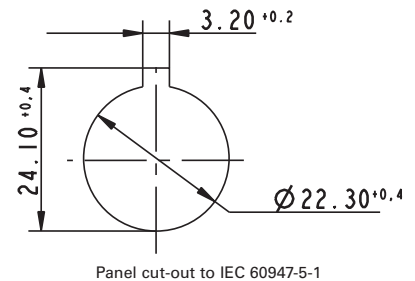
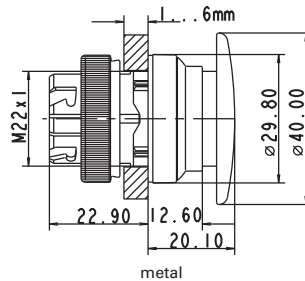
# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Mushroom-headed pushbutton 40 mm, illuminated, round collar

Technical data see page 2 - 114



| → Illuminability | Color of mushroom          | Color of front ring | Contact function | Order no.         |
|------------------|----------------------------|---------------------|------------------|-------------------|
| yes              | opaque red/transparent red | plastic slate-grey  | momentary        | 1.30.246.001/0307 |
| yes              | opaque red/transparent red | metal               | momentary        | 1.30.246.002/0300 |

2

RAFIX  
22 QR

xx = Front ring color: slate grey = 07

### Accessoires:

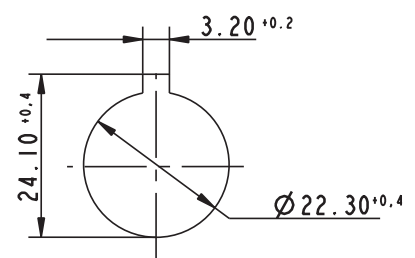
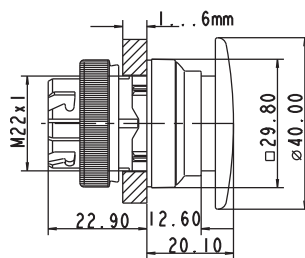
BA 9s base (MBC/MCC), filament lamp, shape A, DIN 49851: see page 5 - 11

Socket BA 9s (MBC/MCC), LED superbright: see page 5 - 8



## RAFIX 22 QR Mushroom-headed pushbutton 40 mm, square collar

Technical data see page 2 - 114

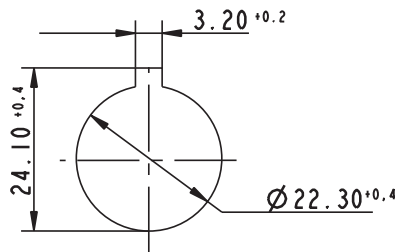
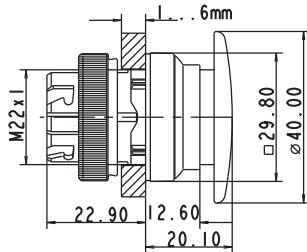


| → Illuminability | Color of mushroom | Color of front ring | Contact function | Order no.         |
|------------------|-------------------|---------------------|------------------|-------------------|
| no               | opaque red        | plastic slate-grey  | momentary        | 1.30.246.551/0307 |
| no               | opaque red        | plastic slate-grey  | momentary        | 1.30.246.551/0107 |
| no               | opaque red        | plastic silber      | momentary        | 1.30.246.551/0308 |
| no               | opaque red        | metal               | momentary        | 1.30.246.552/0300 |
| no               | opaque red        | metal               | momentary        | 1.30.246.552/0100 |

xx = Front ring color: slate grey = 07

## RAFIX 22 QR Mushroom-headed pushbutton 40 mm, illuminated, square collar

Technical data see page 2 - 114



Panel cut-out to IEC 60947-5-1



| → Illuminability | Color of mushroom          | Color of front ring | Contact function | Order no.         |
|------------------|----------------------------|---------------------|------------------|-------------------|
| yes              | opaque red/transparent red | plastic slate-grey  | momentary        | 1.30.246.051/0307 |
| yes              | opaque red/transparent red | plastic silver-gray | momentary        | 1.30.246.051/0308 |
| yes              | opaque red/transparent red | metal               | momentary        | 1.30.246.052/0300 |

xx = Front ring color: slate grey = 07

### Accessoires:

BA 9s base (MBC/MCC), filament lamp, shape A, DIN 49851: see page 5 - 11  
Socket BA 9s (MBC/MCC), LED superbright: see page 5 - 8

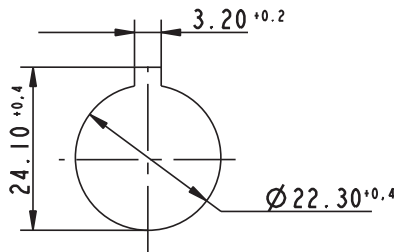
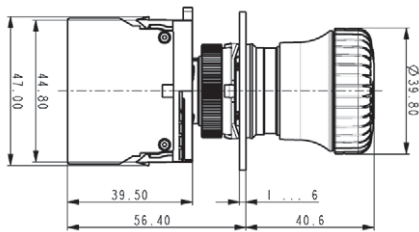
# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Emergency stop pushbuttons, dupe-proof to EN ISO 13850

2



Panel cut-out to IEC 60947-5-1

→ The emergency stop pushbuttons comply with IEC 60 947 and VDE 0113 Part 1.

They are designed dupe-proof according to EN ISO 13850 with a positive mechanical movement sequence. A certain operating force must be exerted at the action point in order to prevent inadvertent operation.

The pushbutton latches when pressed.

The special shape of the actuator prevents the emergency stop pushbutton from being blocked. This means that the emergency stop process - once initiated - cannot be impeded by any jamming objects.

Original operating instructions see Appendix.

### Technical Data

#### → General information

|                   |                 |
|-------------------|-----------------|
| Actuator          | mushroom        |
| Color of mushroom | see order block |
| Form of collar    | round           |

#### → Dimensions

|   |                 |
|---|-----------------|
| Dimensions of collar                            | Ø 29.8 mm       |
| Overall height                                  | see order block |
| Mounting depth with contact block without cable | 56.4 mm         |
| Mounting hole                                   | Ø 22.3 mm       |
| Mounting grid                                   | -               |

#### → Mechanical design

|                  |                 |
|------------------|-----------------|
| Mounting         | ring nut        |
| Contact function | latching        |
| Illuminability   | see order block |
| Reset            | see order block |
| Lock type        | see order block |

#### → Mechanical characteristics

|                      |                                     |
|----------------------|-------------------------------------|
| Entsperr-Kraft       | see order block                     |
| Operating force max. | approx. 5 N for 1 switching element |
| Robustness max.      | 100 N                               |
| Robustness           | acc. to IEC 60947-5-5               |

#### → Other specifications

|                                      |  |
|--------------------------------------|--|
| Operating life (operations)          | see order block                          |
| Degree of protection from front side | see order block                          |
| Ambient temp. operating min.         | -25 °C                                   |
| Ambient temp. operating max.         | +70 °C                                   |
| Storage temperature min.             | -40 °C                                   |
| Storage temperature max.             | +80 °C                                   |
| Environmental resistance             | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                       | yes                                      |
| REACH compliant                      | yes                                      |

### Approvals



UL 508, C22.2  
No. 14-M91



2004 Steel Vessel  
Rules



Rules for the  
Classification of  
Steel Ships



Marine, offshore  
and industrial  
use



German Lloyd's  
type approval



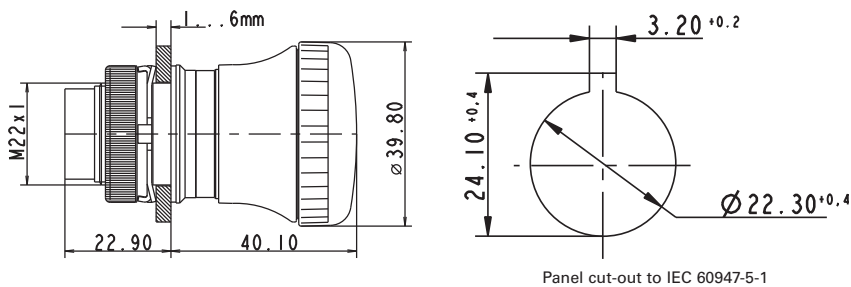


### Accessories RAFIX 22 QR - Emergency stop pushbutton, dupe-proof to EN ISO 13850

| → Description  | Photo | Order no.         | Additional accessories see page  |
|--|-------|-------------------|----------------------------------|
| Emergency stop label, Ø 22.3 mm                                      |       | -                 | 2 - 82, 2 - 149, 2 - 264, 5 - 21 |
| RAFIX 22 QR - Contact blocks with gold contacts                      |       | -                 | 2 - 138                          |
| RAFIX 22 QR - Contact blocks with silver contacts                    |       | -                 | 2 - 135                          |
| RAFIX - Insulating housing, Ø 22.3 mm, IP65, 1-module, yellow/yellow |       | 1.20.810.202/0000 | 2 - 79, 2 - 148, 5 - 20          |
| Fixing spanner for ring nut  |       | 5.05.800.062/0000 | 2 - 145, 2 - 261, 5 - 25         |

## RAFIX 22 QR Emergency stop pushbutton

Technical data see page 2 - 118



| → Degree of protection from front side | Reset                 | Illuminability | Operating life (operations) | Lock type | Order no.         |
|--|-----------------------|----------------|-----------------------------|-----------|-------------------|
| IP65 (DIN EN 60529)                    | by clockwise rotation | no             | 100,000                     | -         | 1.30.243.501/0300 |

Included: Ring nut with claw.

Switching position indication: In the non-operated condition, a green ring is visible on the side.

For E-stop pushbuttons max. 2 contact block units may be used (eventually with multiple contacts). The middle coupling position may only be used for lamp sockets / LED elements.

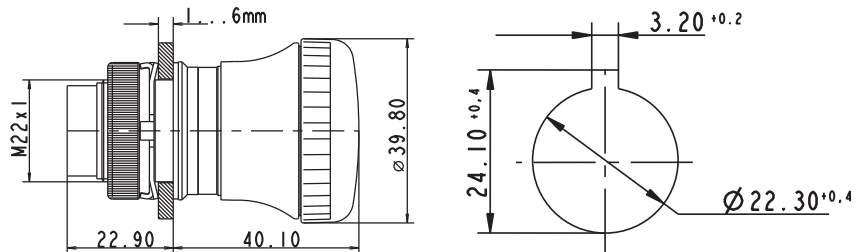
# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Emergency stop pushbutton, with indication

Technical data see page 2 - 118



Panel cut-out to IEC 60947-5-1

| → Degree of protection from front side | Reset                 | Illuminability | Operating life (operations) | Lock type | Order no.         |
|--|-----------------------|----------------|-----------------------------|-----------|-------------------|
| IP65 (DIN EN 60529)                    | by clockwise rotation | no             | 100,000                     | -         | 1.30.243.601/0300 |

Included: Ring nut with claw.

Switching position indication: In the non-operated condition, a green ring is visible on the side.

This switching position is visible in addition from the front; a mechanical indicator integrated into the mushroom head changes from green to red when actuated.

For E-stop pushbuttons max. 2 contact block units may be used (eventually with multiple contacts). The middle coupling position may only be used for lamp sockets / LED elements.

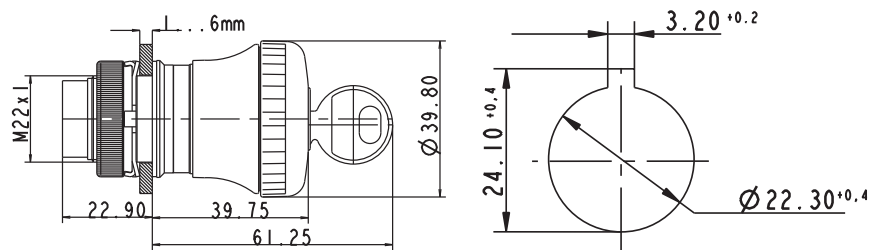
2

RAFIX  
22 QR



## RAFIX 22 QR Emergency stop pushbutton, with keylock

Technical data see page 2 - 118



Panel cut-out to IEC 60947-5-1

| → Degree of protection from front side | Reset                 | Illuminability | Operating life (operations) | Lock type | Order no.         |
|--|-----------------------|----------------|-----------------------------|-----------|-------------------|
| IP40 (DIN EN 60529)                    | by clockwise rotation | no             | 50,000                      | 421       | 1.30.243.702/0300 |
| IP40 (DIN EN 60529)                    | by clockwise rotation | no             | 50,000                      | 455       | 1.30.243.701/0300 |
| IP40 (DIN EN 60529)                    | by clockwise rotation | no             | 50,000                      | 1122E     | 1.30.243.703/0300 |

Included: Ring nut with claw, 2 keys.

– Table (continued) –

## RAFIX 22 QR - Emergency stop pushbutton, with keylock

Switching position indication: In the non-operated condition, a green ring is visible on the side.

Once actuated, the emergency stop pushbutton can only be reset with the key.

For E-stop pushbuttons max. 2 contact block units may be used (eventually with multiple contacts). The middle coupling position may only be used for lamp sockets / LED elements.

The locking systems we use are created according to DIN EN 1303 by leading lock manufacturers. They are open, mechanical systems that require occasional maintenance of the machinery or plant operator depending on environmental conditions.

### Accessoires:

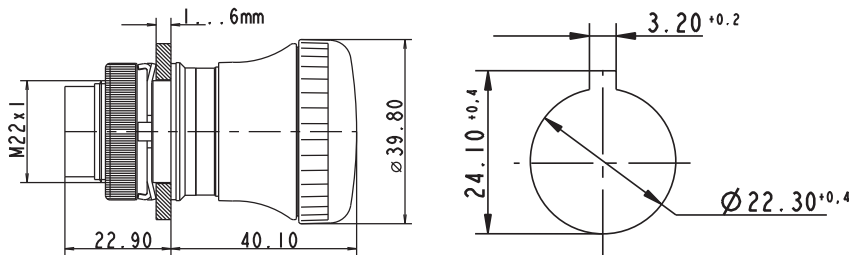
Spare key RONIS 1122E, delivery content 2 keys: 5.58.017.403/0000

Spare key RONIS 421, delivery content 2 keys: 5.58.017.421/0000

Spare key RONIS 455, delivery content 2 keys: 5.58.017.001/0000

## RAFIX 22 QR Emergency stop pushbutton, illuminable

Technical data see page 2 - 118



Panel cut-out to IEC 60947-5-1



2

RAFIX  
22 QR

| → Degree of protection from front side | Reset                 | Illuminability | Operating life (operations) | Lock type | Order no.         |
|--|-----------------------|----------------|-----------------------------|-----------|-------------------|
| IP65 (DIN EN 60529)                    | by clockwise rotation | yes            | 100,000                     | -         | 1.30.243.001/0300 |

Included: Ring nut with claw.

Switching position indication: In the non-operated condition, a green ring is visible on the side.

For E-stop pushbuttons max. 2 contact block units may be used (eventually with multiple contacts). The middle coupling position may only be used for lamp sockets / LED elements.

### Accessoires:

BA 9s base (MBC/MCC), filament lamp, shape A, DIN 49851: see page 5 - 11

Socket BA 9s (MBC/MCC), LED superbright: see page 5 - 8

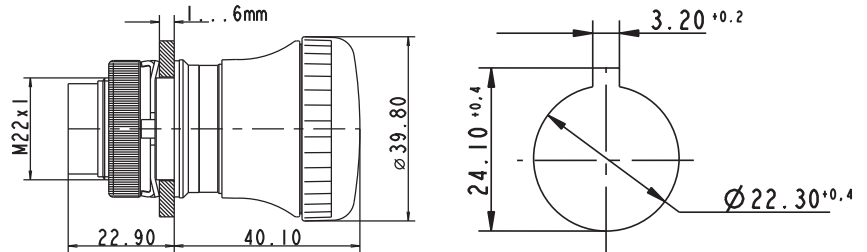
# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Emergency stop pushbutton, reset by pulling

Technical data see page 2 - 118



Panel cut-out to IEC 60947-5-1

| → Degree of protection from front side | Reset      | Illuminability | Operating life (operations) | Lock type | Order no.         |
|--|------------|----------------|-----------------------------|-----------|-------------------|
| IP65 (DIN EN 60529)                    | by pulling | no             | 100,000                     | -         | 1.30.243.901/0300 |

Included: Ring nut with claw.

Switching position indication: In the non-operated condition, a green ring is visible on the side.

For E-stop pushbuttons max. 2 contact block units may be used (eventually with multiple contacts). The middle coupling position may only be used for lamp sockets / LED elements.

2

RAFIX  
22 QR

## RAFIX 22 QR Toggle switches

### Technical Data

#### → General information

|                     |                 |
|---------------------|-----------------|
| Actuator            | toggle          |
| Color of toggle     | opaque white    |
| Color of front ring | see order block |
| Form of collar      | see order block |

#### → Dimensions

|                      |                 |
|----------------------|-----------------|
| Dimensions of collar | see order block |
| Overall height       | 22.2 mm         |
| Mounting depth       | 56.4 mm         |
| Mounting hole        | Ø 22.3 mm       |
| Mounting grid        | 50 x 30 mm      |

#### → Mechanical design

|                  |          |
|------------------|----------|
| Mounting         | ring nut |
| Contact function | latching |
| Immuniability    | no       |

#### → Mechanical characteristics

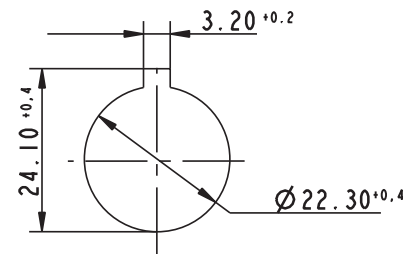
|                 |       |
|-----------------|-------|
| Robustness max. | 100 N |
|-----------------|-------|

#### → Electrical characteristics

|                  |   |
|------------------|---|
| Protection class | - |
|------------------|---|

#### → Other specifications

|                             |  |
|-----------------------------|--|
| Operating life (operations) | 100,000                                  |
| Degree of protection        | IP54 (DIN EN 60529)                      |
| Storage temperature min.    | -40 °C                                   |
| Storage temperature max.    | +80 °C                                   |
| Environmental resistance    | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant              | yes                                      |
| REACH compliant             | yes                                      |



Panel cut-out to IEC 60947-5-1

### Approvals



UL 508, C22.2 No.  
14-M91



2004 Steel Vessel  
Rules



Rules for the  
Classification of  
Steel Ships



Marine, offshore  
and industrial  
use



German Lloyd's  
type approval



### Accessories RAFIX 22 QR - Toggle switch

| → Description  | Photo | Order no.         | Additional accessories see page |
|--|-------|-------------------|---------------------------------|
| RAFIX 22 QR - Contact block with gold contacts, with coupling, without lamp socket, screw terminals, 1 NC + 1 NO |       | 1.20.124.117/0000 | 2 - 140                         |
| RAFIX 22 QR - Contact block with gold contacts, with coupling, without lamp socket, spring-type terminals, 1 NO  |       | 1.20.125.102/0000 | 2 - 140                         |
| Fixing spanner for ring nut  |       | 5.05.800.062/0000 | 2 - 145, 2 - 261,<br>5 - 25     |

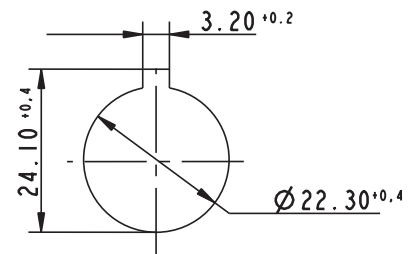
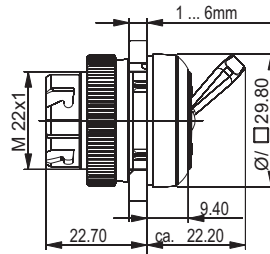
# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Toggle switch, round collar

Technical data see page 2 - 123



Panel cut-out to IEC 60947-5-1

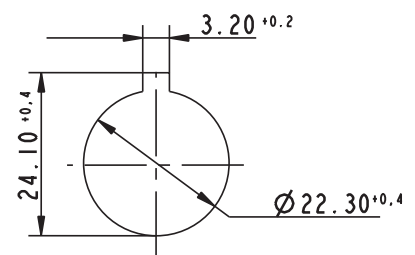
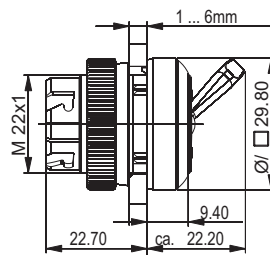
| → Illuminability | Color of toggle | Color of front ring | Contact function | Order no.         |
|------------------|-----------------|---------------------|------------------|-------------------|
| no               | opaque white    | plastic black       | latching         | 1.30.247.501/0201 |
| no               | opaque white    | plastic slate-grey  | latching         | 1.30.247.501/0207 |
| no               | opaque white    | plastic silver-grey | latching         | 1.30.247.501/0208 |
| no               | opaque white    | metal               | latching         | 1.30.247.502/0200 |

xx = Front ring color: black = 01, slate grey = 07, silver grey = 08



## RAFIX 22 QR Toggle switch, square collar

Technical data see page 2 - 123



Panel cut-out to IEC 60947-5-1

| → Illuminability | Color of toggle | Color of front ring | Contact function | Order no.         |
|------------------|-----------------|---------------------|------------------|-------------------|
| no               | opaque white    | plastic black       | latching         | 1.30.247.551/0201 |
| no               | opaque white    | plastic slate-grey  | latching         | 1.30.247.551/0207 |
| no               | opaque white    | plastic silver-grey | latching         | 1.30.247.551/0208 |
| no               | opaque white    | metal               | latching         | 1.30.247.552/0200 |

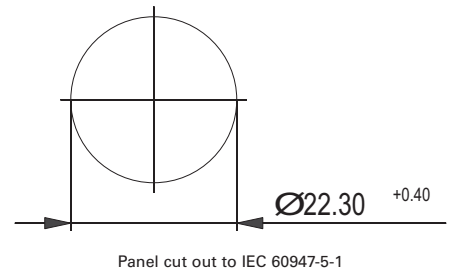
xx = Front ring color: black = 01, slate grey = 07, silver grey = 08

2

RAFIX  
22 QR

## RAFIX 22 QR Twin pushbuttons

- Lens legends are oriented for vertical installation of the twin pushbutton. Only the signal indicator is illuminated on twin pushbuttons prepared for illumination. This area is opaque slate grey on versions which cannot be illuminated.



### Technical Data

#### → General information

|                     |                         |
|---------------------|-------------------------|
| Legending           | see order block         |
| Color of lens       | opaque green/opaque red |
| Color of front ring | see order block         |
| Form of collar      | see order block         |

#### → Dimensions

|   |                |
|---|----------------|
| Dimensions of collar                            | 59.6 x 29.8 mm |
| Overall height                                  | 9.1 mm         |
| Mounting depth with contact block without cable | 56.4 mm        |
| Mounting hole                                   | Ø 22.3 mm      |
| Mounting grid                                   | -              |

#### → Mechanical design

|                  |                 |
|------------------|-----------------|
| Mounting         | ring nut        |
| Contact function | momentary       |
| Illuminability   | see order block |

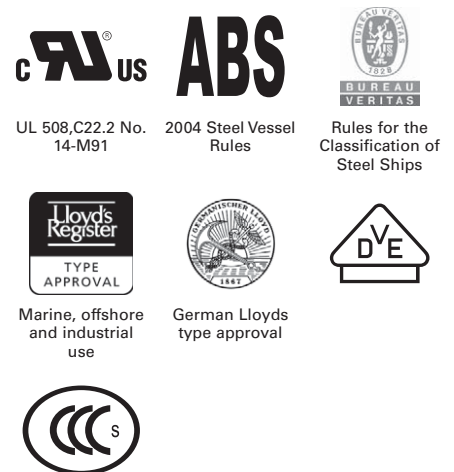
#### → Mechanical characteristics

|                      |                                     |
|----------------------|-------------------------------------|
| Operating force max. | approx. 5 N for 1 switching element |
| Robustness max.      | 100 N                               |

#### → Other specifications

|                                      |  |
|--------------------------------------|--|
| Degree of protection from front side | IP65 (DIN EN 60529)                      |
| Ambient temp. operating min.         | -25 °C                                   |
| Ambient temp. operating max.         | +70 °C                                   |
| Storage temperature min.             | -40 °C                                   |
| Storage temperature max.             | +80 °C                                   |
| Environmental resistance             | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                       | yes                                      |
| REACH compliant                      | yes                                      |

### Approvals



### Accessories RAFIX 22 QR - Twin pushbutton

| → Description  | Photo | Order no.         | Additional accessories see page |
|--|-------|-------------------|---------------------------------|
| RAFIX 22 QR - Contact block with silver contacts, with coupling and lamp socket, screw terminals, 1 NO, 1 NC     |       | 1.20.124.025/0000 | -                               |
| RAFIX 22 QR - Contact block with gold contacts, with coupling and lamp socket, spring-type terminals, 1 NO, 1 NC |       | 1.20.125.125/0000 | -                               |

For other contact blocks, refer to the chapter „Contact blocks“; for additional accessories, refer to „RAFIX 22 QR special accessories“

# CONTROL COMPONENTS

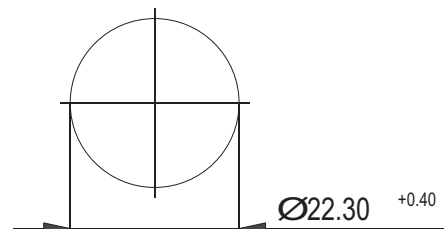
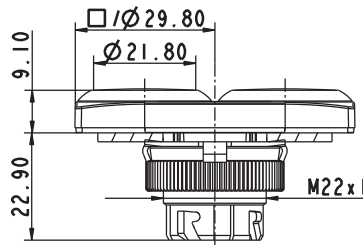
RAFIX 22 QR - ACTUATORS AND INDICATORS



Illuminated area

## RAFIX 22 QR Twin pushbutton, oval collar

Technical data see page 2 - 125



Panel cut out to IEC 60947-5-1

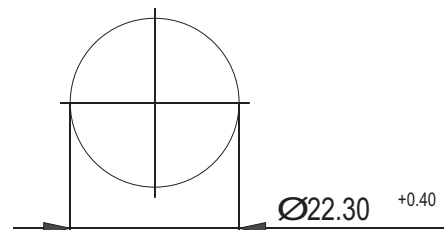
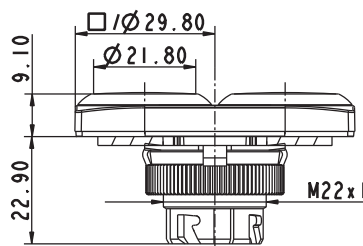
| → Illuminability | Color of lens           | Legending      | Color of front ring | Order no.         |
|------------------|-------------------------|----------------|---------------------|-------------------|
| yes              | opaque green/opaque red | none           | slate-grey          | 1.30.241.001/2207 |
| yes              | opaque green/opaque red | red 0, green I | slate-grey          | 1.30.241.002/2207 |

Either the left-hand or right-hand contact block is actuated, depending on the button pressed. For illuminated versions the centre position of the coupling is reserved for the lamp socket. A third contact block arranged in the centre would be actuated by either button.



## RAFIX 22 QR Twin pushbutton, rectangular collar

Technical data see page 2 - 125



Panel cut out to IEC 60947-5-1

| → Illuminability | Color of lens           | Legending      | Color of front ring | Order no.         |
|------------------|-------------------------|----------------|---------------------|-------------------|
| yes              | opaque green/opaque red | none           | slate-grey          | 1.30.241.051/2207 |
| yes              | opaque green/opaque red | red 0, green I | slate-grey          | 1.30.241.052/2207 |

Either the left-hand or right-hand contact block is actuated, depending on the button pressed. For illuminated versions the centre position of the coupling is reserved for the lamp socket. A third contact block arranged in the centre would be actuated by either button.

2

RAFIX  
22 QR



## RAFIX 22 QR Potentiometer drives



### Technical Data

→ **General information**

|                |                 |
|----------------|-----------------|
| Actuator       | knob            |
| Color of knob  | see order block |
| Front ring     | see order block |
| Form of collar | see order block |

→ **Dimensions**

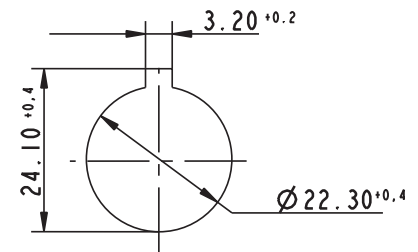
|                      |                            |
|----------------------|----------------------------|
| Dimensions of collar | see order block            |
| Overall height       | 26.2 mm                    |
| Mounting depth       | according to potentiometer |
| Mounting hole        | Ø 22.3 mm                  |
| Mounting grid        | 50 x 30 mm                 |

→ **Mechanical design**

|          |          |
|----------|----------|
| Mounting | ring nut |
|----------|----------|

→ **Other specifications**

|                                      |  |
|--------------------------------------|--|
| Degree of protection from front side | IP65 (DIN EN 60529)                      |
| Storage temperature min.             | -40 °C                                   |
| Storage temperature max.             | +80 °C                                   |
| Environmental resistance             | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                       | yes                                      |
| REACH compliant                      | yes                                      |



Panel cut-out to IEC 60947-5-1

### Approvals



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Marine, offshore and industrial use



German Lloyd's type approval

### Accessories RAFIX 22 QR - Potentiometer drive

→ **Description**

| Description                 | Photo  | Order no.         | Additional accessories see page |
|-----------------------------|--|-------------------|---------------------------------|
| Fixing spanner for ring nut |  | 5.05.800.062/0000 | 2 - 145, 2 - 261, 5 - 25        |

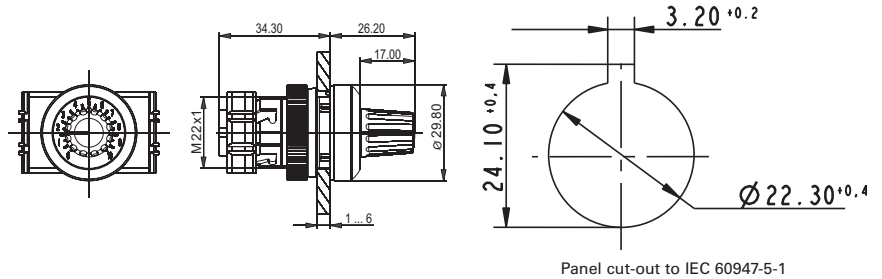
# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Potentiometer drive, round collar

Technical data see page 2 - 127



2

| → Front ring       | Color of knob     | Order no.         |
|--------------------|-------------------|-------------------|
| plastic slate-grey | opaque slate-grey | 1.30.248.001/0700 |

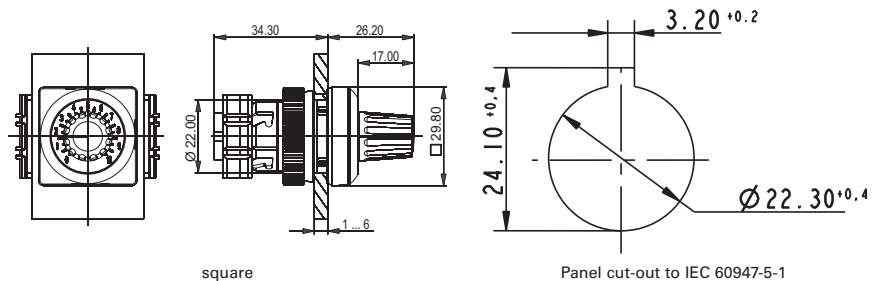
For potentiometers with 6 mm shaft diameter and 50 mm shaft length. Potentiometer not included.

RAFIX  
22 QR



## RAFIX 22 QR Potentiometer drive, square collar

Technical data see page 2 - 127



| → Front ring       | Color of knob     | Order no.         |
|--------------------|-------------------|-------------------|
| plastic slate-grey | opaque slate-grey | 1.30.248.021/0700 |

For potentiometers with 6 mm shaft diameter and 50 mm shaft length. Potentiometer not included.

## RAFIX 22 QR Buzzers

### Technical Data

#### → General information

|                |                   |
|----------------|-------------------|
| Form of lens   | flat lens         |
| Color of lens  | opaque slate-grey |
| Form of collar | see order block   |
| Sound          | see order block   |

#### → Dimensions

|                      |                 |
|----------------------|-----------------|
| Dimensions of collar | see order block |
| Overall height       | 9.8 mm          |
| Mounting depth       | 56.4 mm         |
| Mounting hole        | Ø 22.3 mm       |
| Mounting grid        | 50 x 30 mm      |

#### → Mechanical design

|          |          |
|----------|----------|
| Mounting | ring nut |
|----------|----------|

#### → Electrical characteristics

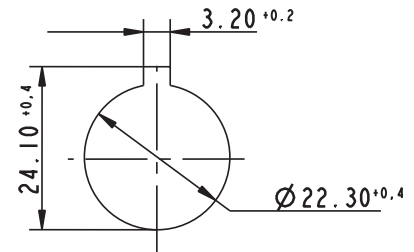
|                      |                 |
|----------------------|-----------------|
| Operating voltage DC | see order block |
| Input current        | see order block |

#### → Acoustic characteristics

|                                   |                 |
|-----------------------------------|-----------------|
| Sonic pressure, 1 m distance min. | see order block |
| Sound frequency                   | see order block |

#### → Other specifications

|                                      |  |
|--------------------------------------|--|
| Degree of protection from front side | IP65 (DIN EN 60529)                      |
| Storage temperature min.             | -40 °C                                   |
| Storage temperature max.             | +80 °C                                   |
| Environmental resistance             | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                       | yes                                      |
| REACH compliant                      | yes                                      |



Panel cut-out to IEC 60947-5-1

2

RAFIX 22 QR

### Approvals



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Marine, offshore and industrial use



German Lloyd's type approval

### Accessories RAFIX 22 QR - Buzzer

#### → Description

| Description                 | Photo  | Order no.         | Additional accessories see page |
|-----------------------------|--|-------------------|---------------------------------|
| Fixing spanner for ring nut |  | 5.05.800.062/0000 | 2 - 145, 2 - 261, 5 - 25        |

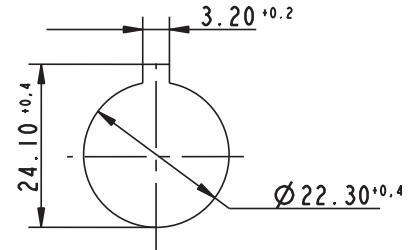
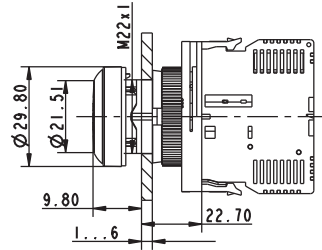
# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



## RAFIX 22 QR Buzzer, round collar

Technical data see page 2 - 129



Panel cut-out to IEC 60947-5-1

2

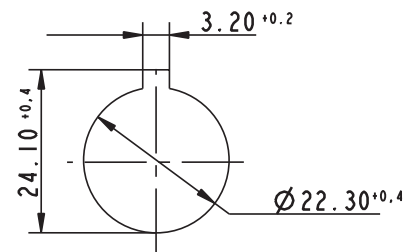
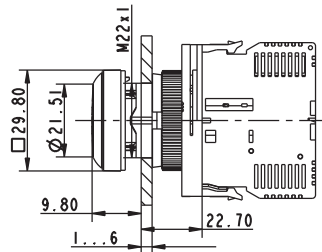
| → Operating voltage DC | Input current | Sound          | Sonic pressure, 1 m distance min. | Sound frequency | Order no.         |
|------------------------|---------------|----------------|-----------------------------------|-----------------|-------------------|
| 12 V                   | 25 mA         | continuos beep | 70 dB                             | 2400 - 3100 Hz  | 1.30.249.002/0000 |
| 24 V                   | 25 mA         | continuos beep | 70 dB                             | 2400 - 3100 Hz  | 1.30.249.001/0000 |

RAFIX  
22 QR



## RAFIX 22 QR Buzzer, square collar

Technical data see page 2 - 129



Panel cut-out to IEC 60947-5-1

| → Operating voltage DC | Input current | Sound          | Sonic pressure, 1 m distance min. | Sound frequency | Order no.         |
|------------------------|---------------|----------------|-----------------------------------|-----------------|-------------------|
| 12 V                   | 25 mA         | continuos beep | 70 dB                             | 2400 - 3100 Hz  | 1.30.249.022/0000 |
| 24 V                   | 25 mA         | continuos beep | 70 dB                             | 2400 - 3100 Hz  | 1.30.249.021/0000 |

## RAFIX 22 QR Signal indicators

### Technical Data

#### → General information

|                             |                 |
|-----------------------------|-----------------|
| Form of lens                | see order block |
| Color of lens               | see order block |
| Legend insert accommodation | see order block |
| Form of collar              | see order block |

#### → Dimensions

|                      |                 |
|----------------------|-----------------|
| Dimensions of collar | see order block |
| Overall height       | see order block |
| Mounting depth       | 56.4 mm         |
| Mounting hole        | Ø 22.3 mm       |
| Mounting grid        | 50 x 30 mm      |

#### → Mechanical design

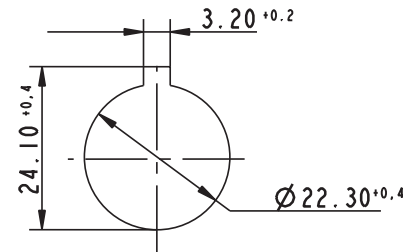
|                |          |
|----------------|----------|
| Mounting       | ring nut |
| Illuminability | yes      |

#### → Electrical characteristics

|                  |   |
|------------------|---|
| Protection class | - |
|------------------|---|

#### → Other specifications

|                                      |  |
|--------------------------------------|--|
| Degree of protection from front side | IP65 (DIN EN 60529)                      |
| Ambient temp. operating min.         | -25 °C                                   |
| Ambient temp. operating max.         | +70 °C                                   |
| Storage temperature min.             | -40 °C                                   |
| Storage temperature max.             | +80 °C                                   |
| Environmental resistance             | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                       | yes                                      |
| REACH compliant                      | yes                                      |



Panel cut-out to IEC 60947-5-1

2

RAFIX  
22 QR

### Approvals



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Marine, offshore and industrial use



German Lloyds type approval






### Accessories RAFIX 22 QR - Signal indicator

| → Description  | Photo | Order no. | Additional accessories see page |
|--|-------|-----------|---------------------------------|
| BA 9s base (MBC/MCC), filament lamps, shape A, DIN 49851 |       | -         | 5 - 11                          |
| RAFIX - Insulating housing IP65, Ø 22.3 mm               |       | -         | 2 - 79, 2 - 148, 5 - 20         |
| RAFIX 22 QR - Lamp sockets BA 9s (MBC/MCC)               |       | -         | 2 - 141                         |

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

**- Table (continued) -  
Accessories RAFIX 22 QR - Signal indicator**

| → Description                           | Photo  | Order no.         | Additional accessories see page |
|---|--|-------------------|---------------------------------|
| RAFIX 22 QR - LED unit                  |   | -                 | 2 - 143                         |
| Socket BA 9s (MBC/MCC), LED superbright |   | -                 | 5 - 8                           |
| Fixing spanner for ring nut             |  | 5.05.800.062/0000 | 2 - 145, 2 - 261,<br>5 - 25     |

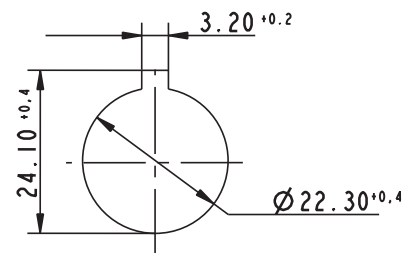
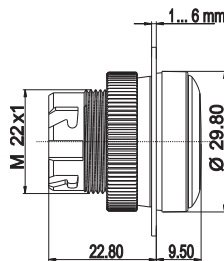
2

RAFIX  
22 QR



## RAFIX 22 QR Signal indicator, flat, round collar, for legend inserts

Technical data see page 2 - 131



Panel cut-out to IEC 60947-5-1

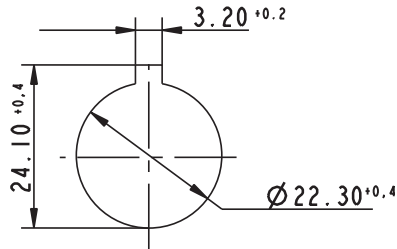
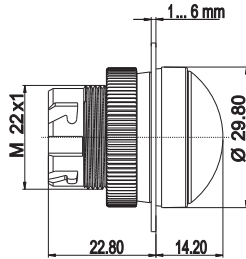
| → Color of lens       | Form of collar | Order no.         |
|-----------------------|----------------|-------------------|
| transparent red       | round          | 1.74.505.501/1300 |
| transparent yellow    | round          | 1.74.505.501/1400 |
| transparent green     | round          | 1.74.505.501/1500 |
| transparent blue      | round          | 1.74.505.501/1600 |
| transparent colorless | round          | 1.74.505.501/1000 |

**Accessoires:**

Legend insert without legend, use only in combination with transparent lenses.: 5.70.803.000/2000

## RAFIX 22 QR Signal indicator, high, round collar

Technical data see page 2 - 131



Panel cut-out to IEC 60947-5-1



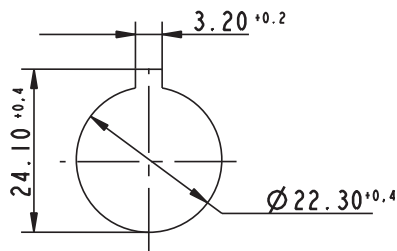
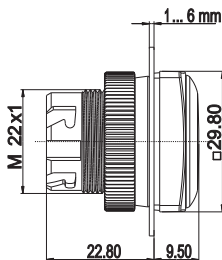
| → Color of lens       | Form of collar | Order no.         |
|-----------------------|----------------|-------------------|
| transparent red       | round          | 1.74.505.511/1300 |
| transparent yellow    | round          | 1.74.505.511/1400 |
| transparent green     | round          | 1.74.505.511/1500 |
| transparent blue      | round          | 1.74.505.511/1600 |
| transparent colorless | round          | 1.74.505.511/1000 |

2

RAFIX  
22 QR

## RAFIX 22 QR Signal indicator, flat, square collar, for legend inserts

Technical data see page 2 - 131



Panel cut-out to IEC 60947-5-1



| → Color of lens       | Form of collar | Order no.         |
|-----------------------|----------------|-------------------|
| transparent red       | square         | 1.74.505.551/1300 |
| transparent yellow    | square         | 1.74.505.551/1400 |
| transparent green     | square         | 1.74.505.551/1500 |
| transparent blue      | square         | 1.74.505.551/1600 |
| transparent colorless | square         | 1.74.505.551/1000 |

# CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

– Table (continued) –

RAFIX 22 QR - Signal indicator, flat, square collar, for legend inserts

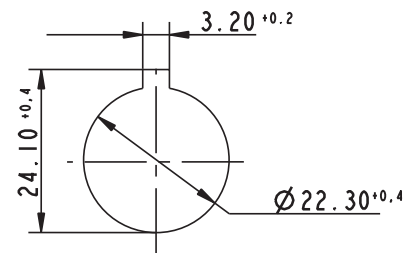
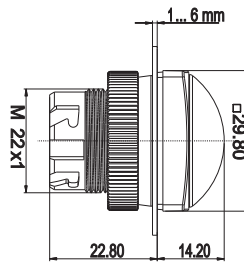
**Accessoires:**

Legend insert without legend, use only in combination with transparent lenses.: 5.70.803.000/2000



## RAFIX 22 QR Signal indicator, high, square collar

Technical data see page 2 - 131



Panel cut-out to IEC 60947-5-1

| → Color of lens    | Form of collar | Order no.         |
|--------------------|----------------|-------------------|
| transparent red    | square         | 1.74.505.561/1300 |
| transparent yellow | square         | 1.74.505.561/1400 |
| transparent green  | square         | 1.74.505.561/1500 |
| transparent blue   | square         | 1.74.505.561/1000 |
| transparent blue   | square         | 1.74.505.561/1600 |

2

RAFIX  
22 QR



## RAFIX 22 QR Contact blocks with silver contacts

→ Most of the values specified apply to all terminal versions.

Any deviating values specific to the cage clamp or quick-connect version are given in parentheses ( ).



### Technical Data

#### → Dimensions

|                              |                     |
|------------------------------|---------------------|
| Dimensions with coupling     | 39.5 x 49.9 x 30 mm |
| Mounting depth without cable | 56.4 mm             |

#### → Mechanical design

|  |  |
|--|--|
| Mounting   | snap on coupling and actuator                    |
| Contact system                                     | bridge-contact self cleaning                     |
| Contact materials                                  | Ag   |
| Contact arrangement                                | see order block                                  |
| Coupling position 1 (1/2)                          | see order block                                  |
| Coupling position 3 (5/6), centre                  | see order block                                  |
| Coupling position 2 (3/4)                          | see order block                                  |
| NC contact forcibly actuated acc. to IEC 60947-5-1 | yes  |
| Terminals  | see order block                                  |
| Terminal marking                                   | color encoded                                    |
| Robustness   | 100 N  |
| Wire range solid wires without wire end sleeves    | 2 x 0.75 ... 2.5 mm <sup>2</sup>                 |
| Wire range stranded wires without end sleeves      | 2 x 1.0...1.5 (2 x 0.08 ... 2.5) mm <sup>2</sup> |
| Stripping length, solid or stranded                | 8 mm   |
| Wire range with wire end sleeves                   | 2 x 0.75 ... 1.5 mm <sup>2</sup>                 |

#### → Electric characteristics acc. to IEC 60947

|  |  |
|--|--|
| Rated insulation voltage AC/DC                       | 400 V  |
| Rated peak voltage                                   | 6,000 V                                      |
| Rated operating current I <sub>e</sub> AC 12 / DC 12 | 10 A   |
| Rated operating current I <sub>e</sub> AC-15         | 125 V/10 A, 250 V/6 A, 400 V/3.5 A           |
| Rated operating current I <sub>e</sub> DC-13 Q300    | 24V/2.75A, 60V/1.1A, 125V/0.55A, 250V/0.275A |
| Degree of pollution                                  | 3  |
| Positive opening travel                              | 3 mm   |
| Operating speed                                      | 5 ... 1000 mm/c                              |

#### → Electric characteristics acc. to IEC 61058

|                                     |  |
|-------------------------------------|--|
| Resistive load AC                   | 10 A / 250 V; 7.5 A / 400 V            |
| Motor load AC                       | 6 A / 250 V; 4 A / 400 V (5 A / 250 V) |
| Peak input current filament lamp AC | 36 A                                   |
| Peak capacity input current AC      | 100 A                                  |
| Protection class                    | II                                     |

#### → Other specifications

|  |  |
|--|--|
| Operating life at 10 A/250 V AC                | 70,000 (10A), 200,000 (5A)               |
| Switching reliability at 24V/5mA DC            | 10 x 10 <sup>-6</sup>                    |
| Robustness                                     | acc. to IEC 60947-5-5                    |
| Corresponding to CE                            | acc. EU-guideline NSR 72/73              |
| Shock resistance acc. to IEC 60068-2-27        | 15 g at 11 ms, amplitude half sinusoidal |
| Resistance to vibrations acc. to IEC 60068-2-6 | 5 g at 10 ... 500 Hz                     |
| Ambient temp. operating min.                   | -25 °C                                   |
| Ambient temp. operating max.                   | +70°C (+50°C)                            |
| Storage temperature min.                       | -40 °C                                   |
| Storage temperature max.                       | +80 °C                                   |

### Approvals



UL 508, C22.2  
No. 14-M91



2004 Steel Vessel  
Rules



Rules for the  
Classification of  
Steel Ships



Marine, offshore  
and industrial  
use



German Lloyds  
type approval  
only valid for  
version with  
screw terminals



IEC 61058 only  
for versions with  
spring-type  
terminal



# CONTROL COMPONENTS

RAFIX 22 QR - CONTACT BLOCKS AND INDICATORS

## - Technical data (continued) -

### RAFIX 22 QR - Contact blocks with silver contacts

|   |  |
|---|--|
| Flame class acc. to UL 94               | V 0                                      |
| Hot wire ignition acc. to IEC 60695-2-1 | yes                                      |
| Environmental resistance                | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                          | yes                                      |
| REACH compliant                         | yes                                      |

## Accessories RAFIX 22 QR - Contact blocks with silver contacts

| → Description                                     | Photo   | Order no. | Additional accessories see page |
|---|---|-----------|---------------------------------|
| RAFIX 22 QR - Lamp socket BA 9s, without coupling |  | -         | 2 - 142                         |
| RAFIX 22 QR - LED unit                            |  | -         | 2 - 143                         |
| Socket BA 9s (MBC/MCC), LED superbright           |  | -         | 5 - 8                           |



## RAFIX 22 QR Contact block with silver contacts

Technical data see page 2 - 135



Silver contacts, 1 NC, spring-type terminals



Silver contacts, 1 NO, quick connector

| → Contact arrangement | Terminals                           | Coupling position 1 (1/2) | Coupling position 3 (5/6), centre | Coupling position 2 (3/4) | Order no.         |
|-----------------------|-------------------------------------|---------------------------|-----------------------------------|---------------------------|-------------------|
| 1 NO                  | screw terminals                     | -                         | -                                 | -                         | 5.00.100.140/0000 |
| 1 NO                  | spring type                         | -                         | -                                 | -                         | 5.00.100.145/0000 |
| 1 NO                  | solder/quick connector 6.3 x 0.8 mm | -                         | -                                 | -                         | 5.00.100.196/0000 |
| 1 NC                  | screw terminals                     | -                         | -                                 | -                         | 5.00.100.139/0000 |
| 1 NC                  | spring type                         | -                         | -                                 | -                         | 5.00.100.144/0000 |
| 1 NC                  | solder/quick connector 6.3 x 0.8 mm | -                         | -                                 | -                         | 5.00.100.194/0000 |
| 2 NO                  | screw terminals                     | -                         | -                                 | -                         | 5.00.100.142/0000 |
| 2 NC                  | screw terminals                     | -                         | -                                 | -                         | 5.00.100.141/0000 |
| 1 NO, 1 NC            | screw terminals                     | -                         | -                                 | -                         | 5.00.100.143/0000 |

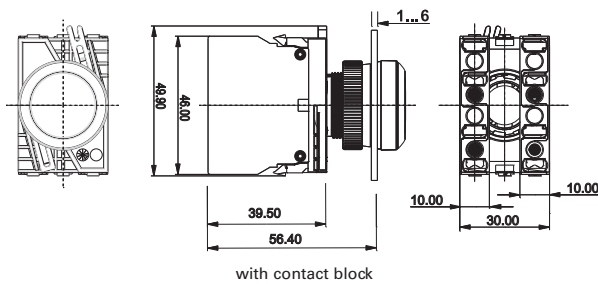
– Table (continued) –  
**RAFIX 22 QR - Contact block with silver contacts**

**Accessoires:**

Coupling: see page 2 - 146

## RAFIX 22 QR Contact block assembly, with coupling, silver contacts

Technical data see page 2 - 135



2

RAFIX  
22 QR

| → Contact arrangement    | Terminals       | Coupling position 1<br>(1/2) | Coupling position 3<br>(5/6), centre | Coupling position 2<br>(3/4) | Order no.         |
|--------------------------|-----------------|------------------------------|--------------------------------------|------------------------------|-------------------|
| 1 NO                     | screw terminals | 1 NO                         | -                                    | -                            | 1.20.124.002/0000 |
| 1 NO                     | spring type     | 1 NO                         | -                                    | -                            | 1.20.125.002/0000 |
| 1 NC                     | screw terminals | -                            | -                                    | 1 NC                         | 1.20.124.001/0000 |
| 1 NC                     | spring type     | -                            | -                                    | 1 NC                         | 1.20.125.001/0000 |
| 2 NO                     | screw terminals | 2 NO                         | -                                    | -                            | 1.20.124.020/0000 |
| 1 NO, 1 NO               | screw terminals | 1 NO                         | -                                    | 1 NO                         | 1.20.124.004/0000 |
| 1 NO, 1 NO               | spring type     | 1 NO                         | -                                    | 1 NO                         | 1.20.125.004/0000 |
| 2 NC                     | screw terminals | -                            | -                                    | 2 NC                         | 1.20.124.019/0000 |
| 1 NC, 1 NC               | screw terminals | 1 NC                         | -                                    | 1 NC                         | 1.20.124.003/0000 |
| 1 NC, 1 NC               | spring type     | 1 NC                         | -                                    | 1 NC                         | 1.20.125.003/0000 |
| 1 NC + 1 NO              | screw terminals | 1 NC + 1 NO                  | -                                    | -                            | 1.20.124.017/0000 |
| 1 NO, 1 NC               | screw terminals | 1 NO                         | -                                    | 1 NC                         | 1.20.124.005/0000 |
| 1 NO, 1 NC               | spring type     | 1 NO                         | -                                    | 1 NC                         | 1.20.125.005/0000 |
| 1 NC + 1 NO, 1 NC + 1 NO | screw terminals | 1 NC + 1 NO                  | -                                    | 1 NC + 1 NO                  | 1.20.124.018/0000 |

**Contact arrangement example (1 NO = 1 normally open contact, 1 NC = 1 normally closed contact)**

The centre coupling position 3 (5/6) is provided for the LED element resp. the lamp socket element.



# RAFIX 22 QR

## Contact blocks with gold contacts

→ Most of the values specified apply to all terminal and cage clamp terminal versions. Any deviating values specific to the cage clamp or quick connect version are given in parentheses ( ).

### Technical Data

#### → Dimensions

|                              |                     |
|------------------------------|---------------------|
| Dimensions with coupling     | 39.5 x 49.9 x 30 mm |
| Mounting depth without cable | 56.4 mm             |

#### → Mechanical design

|  |                                  |
|--|----------------------------------|
| Mounting   | snap on coupling and actuator    |
| Contact system                                     | bridge-contact self cleaning     |
| Contact materials                                  | Au                               |
| Contact arrangement                                | see order block                  |
| Coupling position 1 (1/2)                          | see order block                  |
| Coupling position 3 (5/6), centre                  | see order block                  |
| Coupling position 2 (3/4)                          | see order block                  |
| NC contact forcibly actuated acc. to IEC 60947-5-1 | yes                              |
| Terminals  | see order block                  |
| Terminal marking                                   | color encoded                    |
| Robustness   | 100 N                            |
| Operating force                                    | -                                |
| Wire range solid wires without wire end sleeves    | 2 x 0.75 ... 2.5 mm <sup>2</sup> |
| Wire range stranded wires without wire end sleeves | 2 x 1.0 ... 1.5 mm <sup>2</sup>  |
| Stripping length, solid or stranded                | 8 mm                             |
| Wire range with wire end sleeves                   | 2 x 0.75 ... 1.5 mm <sup>2</sup> |

#### → Electrical characteristics

|                         |                  |
|-------------------------|------------------|
| Operating voltage AC/DC | 1 ... 35 V       |
| Operating current AC/DC | 0.01 ... 100 mA  |
| Rated power max.        | 1 W (ohmic load) |

#### → Other specifications

|  |  |
|--|--|
| Operating life (operations)                    | 1,000,000 (24 V DC 10 mA)                |
| Switching reliability at 24V/5mA DC            | 10 x 10 <sup>-6</sup>                    |
| Robustness                                     | acc. to IEC 60947-5-5                    |
| Corresponding to CE                            | acc. EU-guideline NSR 72/73              |
| Shock resistance acc. to IEC 60068-2-27        | 15 g at 11 ms, amplitude half sinusoidal |
| Resistance to vibrations acc. to IEC 60068-2-6 | 5 g at 10 ... 500 Hz                     |
| Ambient temp. operating min.                   | -25 °C                                   |
| Ambient temp. operating max.                   | +70 °C                                   |
| Storage temperature min.                       | -40 °C                                   |
| Storage temperature max.                       | +80 °C                                   |
| Environmental resistance                       | acc. to IEC 60068-2-14, -30, -33 and -78 |
| ROHS compliant                                 | yes                                      |
| REACH compliant                                | yes                                      |

# CONTROL COMPONENTS

RAFIX 22 QR - CONTACT BLOCKS AND INDICATORS

## Accessories RAFIX 22 QR - Contact blocks with gold contacts

| → Description  | Photo   | Order no. | Additional accessories see page |
|--|---|-----------|---------------------------------|
| BA 9s base (MBC/MCC), filament lamps, shape A, DIN 49851 |  | -         | 5 - 11                          |
| RAFIX 22 QR - Lamp socket BA 9s, without coupling        |  | -         | 2 - 142                         |
| RAFIX 22 QR - LED unit                                   |  | -         | 2 - 143                         |
| Socket BA 9s (MBC/MCC), LED superbright                  |  | -         | 5 - 8                           |

## RAFIX 22 QR Contact block with gold contacts

Technical data see page 2 - 138



Gold contacts, 1 NO, spring-type terminals



Gold contacts, 1 NO, quick connector



| → Contact arrangement | Terminals                              | Coupling position 1 (1/2) | Coupling position 3 (5/6), centre | Coupling position 2 (3/4) | Order no.         |
|-----------------------|--|---------------------------|-----------------------------------|---------------------------|-------------------|
| 1 NO                  | screw terminals                        | -                         | -                                 | -                         | 5.00.100.165/0000 |
| 1 NO                  | spring type                            | -                         | -                                 | -                         | 5.00.100.160/0000 |
| 1 NO                  | solder/quick connector<br>6.3 x 0.8 mm | -                         | -                                 | -                         | 5.00.100.195/0000 |
| 1 NC                  | screw terminals                        | -                         | -                                 | -                         | 5.00.100.164/0000 |
| 1 NC                  | spring type                            | -                         | -                                 | -                         | 5.00.100.159/0000 |
| 1 NC                  | solder/quick connector<br>6.3 x 0.8 mm | -                         | -                                 | -                         | 5.00.100.193/0000 |
| 2 NO                  | screw terminals                        | -                         | -                                 | -                         | 5.00.100.162/0000 |
| 2 NC                  | screw terminals                        | -                         | -                                 | -                         | 5.00.100.161/0000 |
| 1 NC + 1 NO           | screw terminals                        | -                         | -                                 | -                         | 5.00.100.163/0000 |

### Accessoires:

Coupling: see page 2 - 146

2

RAFIX  
22 QR

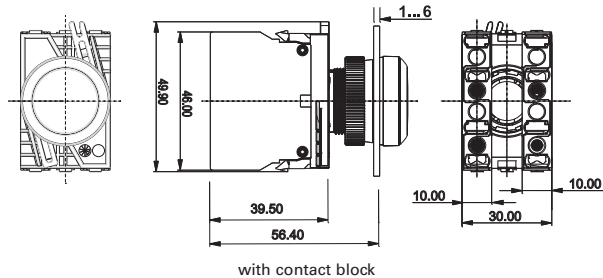
# CONTROL COMPONENTS

RAFIX 22 QR - CONTACT BLOCKS AND INDICATORS



## RAFIX 22 QR Contact block assembly, with coupling, gold contacts

Technical data see page 2 - 138



2

RAFIX  
22 QR

| → Contact arrangement    | Terminals       | Coupling position 1<br>(1/2) | Coupling position 3<br>(5/6), centre | Coupling position 2<br>(3/4) | Order no.         |
|--------------------------|-----------------|------------------------------|--------------------------------------|------------------------------|-------------------|
| 1 NO                     | screw terminals | 1 NO                         | -                                    | -                            | 1.20.124.102/0000 |
| 1 NO                     | spring type     | 1 NO                         | -                                    | -                            | 1.20.125.102/0000 |
| 1 NC                     | screw terminals | -                            | -                                    | 1 NC                         | 1.20.124.101/0000 |
| 1 NC                     | spring type     | -                            | -                                    | 1 NC                         | 1.20.125.101/0000 |
| 2 NO                     | screw terminals | 2 NO                         | -                                    | -                            | 1.20.124.120/0000 |
| 1 NO, 1 NO               | screw terminals | 1 NO                         | -                                    | 1 NO                         | 1.20.124.104/0000 |
| 1 NO, 1 NO               | spring type     | 1 NO                         | -                                    | 1 NO                         | 1.20.125.104/0000 |
| 2 NC                     | screw terminals | -                            | -                                    | 2 NC                         | 1.20.124.119/0000 |
| 1 NC, 1 NC               | screw terminals | 1 NC                         | -                                    | 1 NC                         | 1.20.124.103/0000 |
| 1 NC, 1 NC               | spring type     | 1 NC                         | -                                    | 1 NC                         | 1.20.125.103/0000 |
| 1 NC + 1 NO              | screw terminals | 1 NC + 1 NO                  | -                                    | -                            | 1.20.124.117/0000 |
| 1 NO, 1 NC               | screw terminals | 1 NO                         | -                                    | 1 NC                         | 1.20.124.105/0000 |
| 1 NO, 1 NC               | spring type     | 1 NO                         | -                                    | 1 NC                         | 1.20.125.105/0000 |
| 1 NC + 1 NO, 1 NC + 1 NO | screw terminals | 1 NC + 1 NO                  | -                                    | 1 NC + 1 NO                  | 1.20.124.118/0000 |

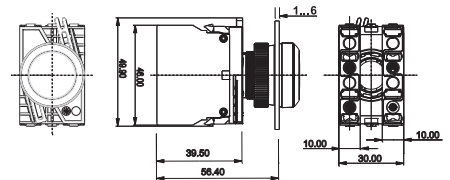
**Contact arrangement example (1 NO = 1 normally open contact, 1 NC = 1 normally closed contact)**

The centre coupling position 3 (5/6) is provided for the LED element resp. the lamp socket element.

## RAFIX 22 QR Lamp sockets BA 9s (MBC/MCC)

### Technical Data

|  |  |
|--|--|
| <b>→ Dimensions</b>                            |  |
| Dimensions with coupling                       | 39.5 x 49.9 x 30 mm                      |
| Mounting depth without cable                   | 56.4 mm                                  |
| <b>→ Mechanical design</b>                     |  |
| Mounting                                       | snap on coupling and actuator            |
| Diode and resistor                             | see order block                          |
| Terminals                                      | see order block                          |
| Terminal marking                               | X1 = anode, X2 = cathode                 |
| <b>→ Lamp characteristics</b>                  |  |
| Lamp socket                                    | BA 9 s                                   |
| Operating voltage AC/DC                        | see order block                          |
| Lamp power max.                                | 2 W                                      |
| Lamp voltage                                   | see order block                          |
| <b>→ Other specifications</b>                  |  |
| Approvals                                      | see order block                          |
| Robustness                                     | acc. to IEC 60947-5-5                    |
| Shock resistance acc. to IEC 60068-2-27        | 50 g at 11 ms, amplitude half sinusoidal |
| Resistance to vibrations acc. to IEC 60068-2-6 | 10 g at 40 ... 500 Hz                    |
| Environmental resistance                       | acc. to IEC 60068-2-14, -30, -33 and -78 |
| Ambient temp. operating max.                   | +70 °C                                   |
| Ambient temp. operating min.                   | -25 °C                                   |
| Storage temperature min.                       | -40 °C                                   |
| Storage temperature max.                       | +80 °C                                   |
| Flame class acc. to UL 94                      | V 0                                      |
| Hot wire ignition acc. to IEC 60695-2-1        | yes                                      |
| ROHS compliant                                 | yes                                      |
| REACH compliant                                | yes                                      |



with contact block

### Approvals



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Marine, offshore and industrial use



Type approval only valid for version with screw terminals



### Accessories RAFIX 22 QR - Lamp sockets BA 9s (MBC/MCC)

| → Description  | Photo | Order no. | Additional accessories see page |
|--|-------|-----------|---------------------------------|
| BA 9s base (MBC/MCC), filament lamps, shape A, DIN 49851 |       | -         | 5 - 11                          |
| Socket BA 9s (MBC/MCC), LED superbright                  |       | -         | 5 - 8                           |



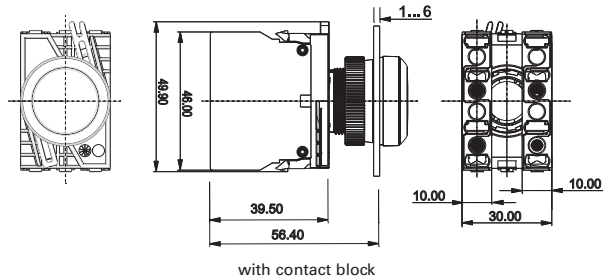
# CONTROL COMPONENTS

RAFIX 22 QR - CONTACT BLOCKS AND INDICATORS



## RAFIX 22 QR Lamp socket BA 9s, without coupling

Technical data see page 2 - 141

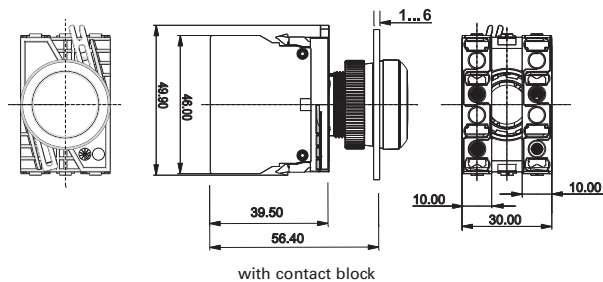


| → Terminals                         | Operating voltage AC/DC | Lamp voltage | Diode and resistor | Order no.         |
|-------------------------------------|-------------------------|--------------|--------------------|-------------------|
| spring type                         | 6 ... 250 V             | 6 ... 250 V  | no                 | 5.00.070.078/0000 |
| solder/quick connector 6.3 x 0.8 mm | 6 ... 250 V             | 6 ... 250 V  | no                 | 5.00.070.087/0000 |
| screw terminals                     | 250 V                   | 130 V        | yes                | 5.00.070.080/0000 |



## RAFIX 22 QR Lamp socket BA 9s, assembly with coupling

Technical data see page 2 - 141



| → Terminals     | Operating voltage AC/DC              | Lamp voltage | Diode and resistor | Order no.         |
|-----------------|--------------------------------------|--------------|--------------------|-------------------|
| screw terminals | 6 ... 250 V                          | 6 ... 250 V  | no                 | 1.71.213.001/0000 |
| spring type     | 6 ... 250 V                          | 6 ... 250 V  | no                 | 1.71.214.001/0000 |
| screw terminals | with diode and series resistor 250 V | 130 V        | yes                | 1.71.213.004/0000 |

The lamp socket is mounted in the middle coupling position 3 (5/6).



## RAFIX 22 QR LED units

### Technical Data

|  |  |
|--|--|
| <b>→ Dimensions</b>                            |  |
| Dimensions without coupling                    | 46 x 10 x 39.5 mm                        |
| Mounting depth without cable                   | 56.4 mm                                  |
| <b>→ Mechanical design</b>                     |  |
| Mounting                                       | snap on coupling and actuator            |
| Diode and resistor                             | see order block                          |
| LED color                                      | see order block                          |
| Terminals                                      | screw terminals                          |
| Terminal marking                               | X1 = anode, X2 = cathode                 |
| <b>→ Lamp characteristics</b>                  |  |
| Operating voltage                              | see order block                          |
| Max. current, I <sub>F</sub>                   | see order block                          |
| <b>→ Other specifications</b>                  |  |
| Robustness                                     | acc. to IEC 60947-5-1                    |
| Shock resistance acc. to IEC 60068-2-27        | 50 g at 11 ms, amplitude half sinusoidal |
| Resistance to vibrations acc. to IEC 60068-2-6 | 10 g at 40 ... 500 Hz                    |
| Environmental resistance                       | acc. to IEC 60068-2-14, -30, -33 and -78 |
| Ambient temp. operating max.                   | +65 °C                                   |
| Ambient temp. operating min.                   | -20 °C                                   |
| Storage temperature min.                       | -40 °C                                   |
| Storage temperature max.                       | +80 °C                                   |
| Flame class acc. to UL 94                      | V 0                                      |
| Hot wire ignition acc. to IEC 60695-2-1        | yes                                      |
| ROHS compliant                                 | yes                                      |
| REACH compliant                                | yes                                      |



### Approvals



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships




Marine, offshore and industrial use



German Lloyd's type approval

### Accessories RAFIX 22 QR - LED unit

| Description | Photo   | Order no. | Additional accessories see page |
|-------------|---|-----------|---------------------------------|
| Coupling    |  | -         | 2 - 146                         |

# CONTROL COMPONENTS

RAFIX 22 QR - CONTACT BLOCKS AND INDICATORS



## RAFIX 22 QR LED unit, without coupling

Technical data see page 2 - 143

2

RAFIX  
22 QR

| → LED color | Operating voltage | Max. current, I <sub>F</sub> | Terminals       | Order no.         |
|-------------|-------------------|------------------------------|-----------------|-------------------|
| red         | AC/DC 24 V        | 15 mA                        | screw terminals | 5.00.070.083/0300 |
| red         | AC 115 V          | 16 mA                        | screw terminals | 5.00.070.085/0300 |
| red         | AC 230 V          | 16 mA                        | screw terminals | 5.00.070.086/0300 |
| yellow      | AC/DC 24 V        | 15 mA                        | screw terminals | 5.00.070.083/0400 |
| yellow      | AC 115 V          | 16 mA                        | screw terminals | 5.00.070.085/0400 |
| yellow      | AC 230 V          | 16 mA                        | screw terminals | 5.00.070.086/0400 |
| green       | AC/DC 24 V        | 15 mA                        | screw terminals | 5.00.070.083/0500 |
| green       | AC 115 V          | 16 mA                        | screw terminals | 5.00.070.085/0500 |
| green       | AC 230 V          | 16 mA                        | screw terminals | 5.00.070.086/0500 |
| blue        | AC/DC 24 V        | 15 mA                        | screw terminals | 5.00.070.083/0600 |
| blue        | AC 115 V          | 16 mA                        | screw terminals | 5.00.070.085/0600 |
| blue        | AC 230 V          | 16 mA                        | screw terminals | 5.00.070.086/0600 |
| white       | AC/DC 24 V        | 15 mA                        | screw terminals | 5.00.070.083/0200 |
| white       | AC 115 V          | 16 mA                        | screw terminals | 5.00.070.085/0200 |
| white       | AC 230 V          | 16 mA                        | screw terminals | 5.00.070.086/0200 |

# RAFIX 22 QR Special accessories



2

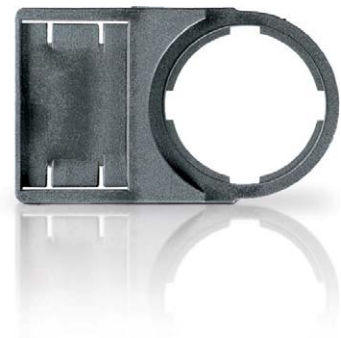
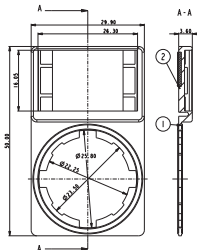
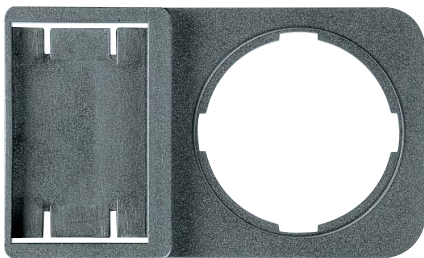
## Fixing spanner for ring nut and front ring



RAFIX  
22 QR

| → Description               | Fitting for    | Order no.         |
|-----------------------------|----------------|-------------------|
| Fixing spanner for ring nut | RAFIX 22 QR/FS | 5.05.800.062/0000 |

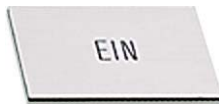
## Label holder



| → Description   | Dimensions       | Order no.         |
|---|------------------|-------------------|
| Label holder, round collar, with adhesive tape and release liner on back<br>50 x 30 x 3.6 mm  | 50 x 30 x 3,6 mm | 5.07.620.010/0000 |
| Label holder, square collar, with adhesive tape and release liner on back<br>50 x 30 x 3.6 mm | 50 x 30 x 3,6 mm | 5.07.620.011/0000 |

# CONTROL COMPONENTS

RAFIX 22 QR - SPECIAL ACCESSORIES



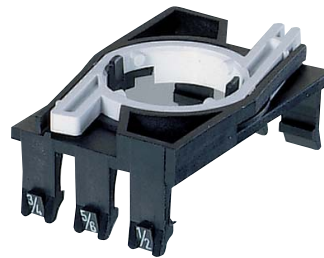
## Legend label to clip into label holder 5.07.620.xxx

| → Dimensions     | Label       | Order no.         |
|------------------|-------------|-------------------|
| 28 x 16 x 0,9 mm | -           | 5.73.110.000/0000 |
| 28 x 16 x 0,9 mm | EIN         | 5.73.110.004/0000 |
| 28 x 16 x 0,9 mm | AUS         | 5.73.110.005/0000 |
| 28 x 16 x 0,9 mm | HAND 0 AUTO | 5.73.110.021/0000 |
| 28 x 16 x 0,9 mm | AUTO HAND   | 5.73.110.022/0000 |
| 28 x 16 x 0,9 mm | HAND 0 AUTO | 5.73.110.023/0000 |
| 28 x 16 x 0,9 mm | 0 I         | 5.73.110.026/0000 |
| 28 x 16 x 0,9 mm | I 0 II      | 5.73.110.027/0000 |
| 28 x 16 x 0,9 mm | EIN AUS     | 5.73.110.028/0000 |
| 28 x 16 x 0,9 mm | AUS EIN     | 5.73.110.029/0000 |

Legending available on request.



## Coupling

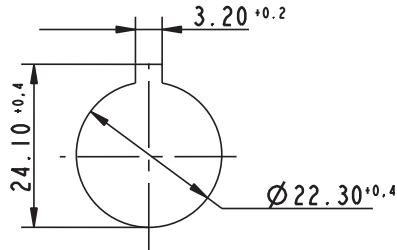


| → Description  | Order no.         |
|--|-------------------|
| Coupling with reference numbers 1-3-2, for contact blocks with single contacts       | 5.05.510.935/0000 |
| Coupling with reference numbers 1/2-5/6-3/4, for contact blocks with double contacts | 5.05.510.936/0000 |

## RAFIX 22 QR Blanking cap, Ø 22.3 mm



round blanking cap



Panel cut-out to IEC 60947-5-1



| → Description                                   | Order no.         |
|---|-------------------|
| Blanking cap IP65, ring nut, square, slate grey | 5.05.800.065/0000 |
| Blanking cap IP65, ring nut, round, slate grey  | 5.05.800.064/0000 |

Protection acc. to DIN EN 60529

## Protective cover, suitable for pushbuttons with flush lens



Protective cover, mounted



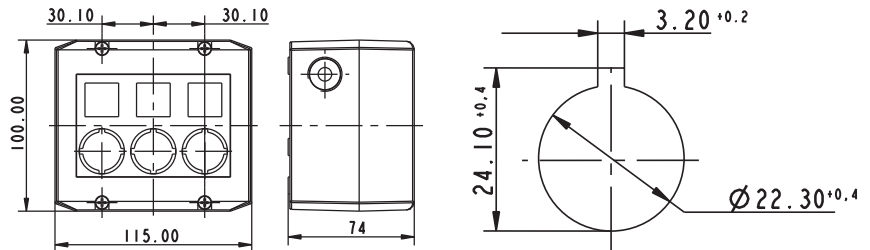
| → Description                  | Order no.         |
|--------------------------------|-------------------|
| Protective cover, latching     | 5.05.511.195/0000 |
| Protective cover, auto-closing | 5.05.511.194/0000 |

# CONTROL COMPONENTS

RAFIX 22 QR - SPECIAL ACCESSORIES



## RAFIX Insulating housing IP65, Ø 22.3 mm



Panel cut-out to IEC 60947-5-1

| → Description   | Number of cut-outs | Ø       | Dimensions    | Order no.         |
|---|--------------------|---------|---------------|-------------------|
| RAFIX - Insulating housing, Ø 22.3 mm, IP65, 1-module, light grey/dark grey | 1                  | 22,3 mm | 100x55x74 mm  | 1.20.810.201/0000 |
| RAFIX - Insulating housing, Ø 22.3 mm, IP65, 1-module, yellow/yellow        | 1                  | 22,3 mm | 100x55x74 mm  | 1.20.810.202/0000 |
| RAFIX - Insulating housing, Ø 22.3 mm, IP65, 2-module, light grey/dark grey | 2                  | 22,3 mm | 100x115x74 mm | 1.20.820.201/0000 |
| RAFIX - Insulating housing, Ø 22.3 mm, IP65, 3-module, light grey/dark grey | 3                  | 22,3 mm | 100x115x74 mm | 1.20.830.201/0000 |
| RAFIX - Insulating housing, Ø 22.3 mm, IP65, 4-module, light grey/dark grey | 4                  | 22,3 mm | 100x145x74 mm | 1.20.840.201/0000 |

- Plastic housing to accommodate up to 4 control components
- 2 cable entries prepared: 1-,2-,3-part: M20x1.5, 4-part: M25x1.5
- Degree of protection IP65 to DIN EN 60529

- All grey housings with overlay, legending possible with legend inserts
- Wall mounting with 2 screws through housing bottom prepared
- Dimensions: (feature 2) x 100 mm x 74 mm
- Accessories: 50 pre-perforated legend inserts on a DIN A4 sheet

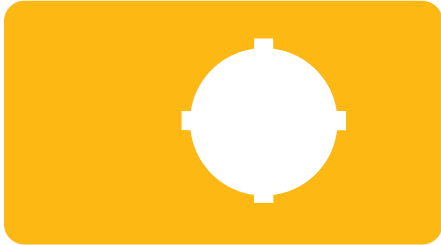
#### Accessoires:

Label sheet for housing (50 foil legend inserts): 5.40.451.283/0000

2

RAFIX  
22 QR

## Emergency stop label, Ø 22.3 mm



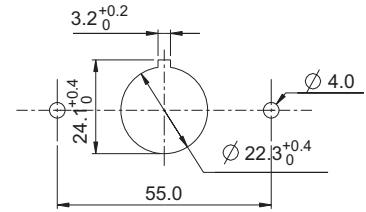
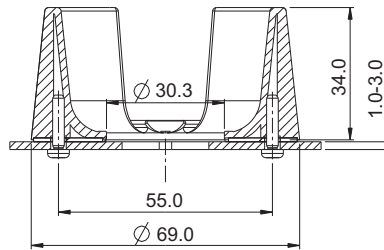
| → Dimensions | inside Ø | Label  | Order no.         |
|--------------|----------|--|-------------------|
| 36 x 64 mm   | 22.3 mm  | -  | 5.76.205.011/0400 |
| Ø 40 mm      | 22.3 mm  | „NOT-HALT, EMERGENCY STOP, ARRET D'URGENCE, EMERGENZA“ | 5.76.204.115/0400 |
| Ø 40 mm      | 22.3 mm  | 4 x „NOT-HALT“   | 5.76.204.117/0400 |
| Ø 40 mm      | 22.3 mm  | 4 x „NOT-AUS“  | 5.76.204.119/0400 |
| Ø 40 mm      | 22.3 mm  | 4 x „EMERGENCY STOP“                                   | 5.76.204.121/0400 |
| Ø 60 mm      | 22.3 mm  | 1 x „NOT-AUS“  | 5.76.207.001/0400 |
| Ø 60 mm      | 22.3 mm  | „EMERGENCY-STOP / ARRET D'URGENCE“                     | 5.76.207.002/0400 |
| Ø 60 mm      | 22.3 mm  | 1 x „NOT-AUS“  | 5.76.204.101/0400 |
| Ø 60 mm      | 22.3 mm  | 1 x „ARRET D'URGENCE“                                  | 5.76.204.102/0400 |
| Ø 60 mm      | 22.3 mm  | 1 x „EMERGENCY STOP“                                   | 5.76.204.103/0400 |
| Ø 60 mm      | 22.3 mm  | „NOT-HALT, EMERGENCY STOP, ARRET D'URGENCE, EMERGENZA“ | 5.76.204.107/0400 |
| Ø 60 mm      | 22.3 mm  | 4 x „NOT-HALT“   | 5.76.204.109/0400 |
| Ø 60 mm      | 22.3 mm  | 4 x „NOT-AUS“  | 5.76.204.111/0400 |
| Ø 60 mm      | 22.3 mm  | 4 x „EMERGENCY STOP“                                   | 5.76.204.113/0400 |

# CONTROL COMPONENTS

RAFIX 22 QR - SPECIAL ACCESSORIES



## RAFIX 22 QR Protective Collar



2

→ Description

Order no.

Protective Collar for emergency stop RAFIX 22 QR

5.00.456.002/0000

RAFI protective collars protect the pushbuttons from unintentional operation and damage. Another great advantage is that they can be mounted directly on the front panel using two screws and without mechanical attachment to the actuator and/or emergency stop pushbutton. This provides for additional safety because lateral forces are not transferred to the actuator housing.

RAFIX  
22 QR