



General Data

RAFIX 22QR control component range

- For a mounting hole diameter of 22.3 mm to IEC 60947-5-1
- 250V/10A max.
- Water-jet proof IP65
- 2 collar shapes
- The lamps of the pushbuttons can also be replaced from the front
- The contact blocks (silver or gold contacts) snap onto the actuators with a coupling
- Screw, cage clamp, quick connect terminals or RJ12 connector
- 3 NC + 3 NO max.
- Contact blocks for AS-Interface connection

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

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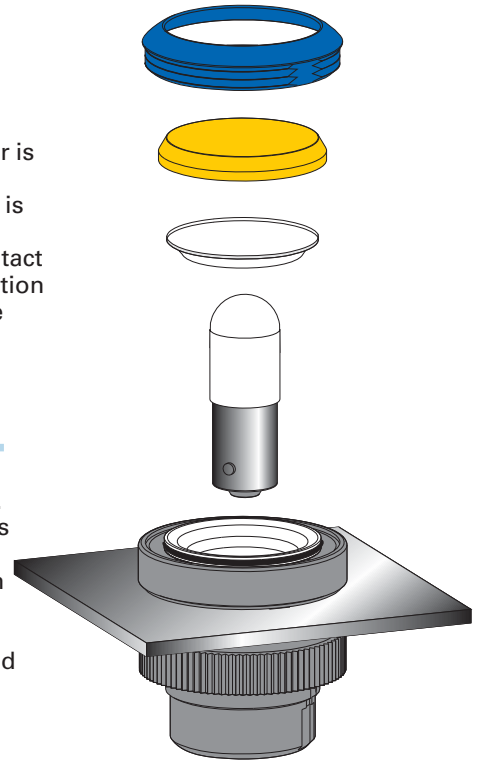
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Contact blocks marked with different colours for ease of identification in stock and when connecting.

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

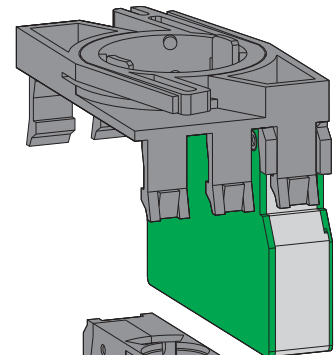
The lamps of pushbuttons and signal lamps can be replaced from the front. This method saves time and increases safety since it eliminates the need for accessing the machine/control station interior and handling live cables for lamp replacement. After unscrewing the front ring, the lens can be removed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



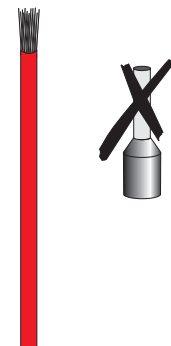
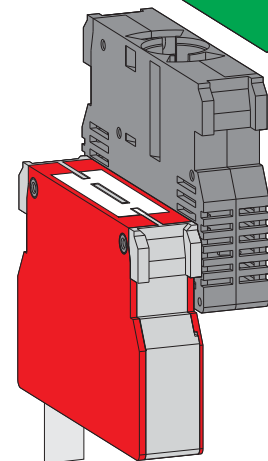
2

RAFIX
22 QR

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).



Terminals

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

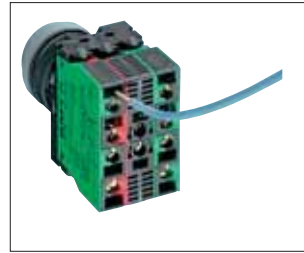
- **Screw terminals**
The terminals are open and the captive screws are mounted in the terminal recess.
- **Quick connect/solder terminals 6.3 x 0.8 mm**
- **Spring-type terminals**
Simply insert a screwdriver to open the terminal, insert the cable and remove the screwdriver to close the terminal.
- **RJ 12-terminal**
Just plug in the cable with a RJ 12 connector.
- **AS-Interface**

Your advantage:

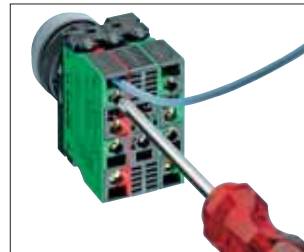
- This offers your savings in three ways:
- Drastically reduced assembly time thanks to wire insertion from the rear, i. e. no more bending and lateral insertion of the wires required.
 - You save material: No wire end sleeves are required.
 - You save the time previously required for mounting the wire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

Assembly

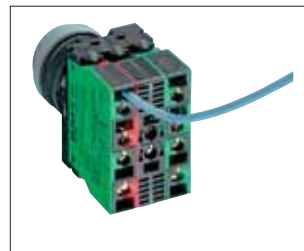
Screw terminals



Insert the wire

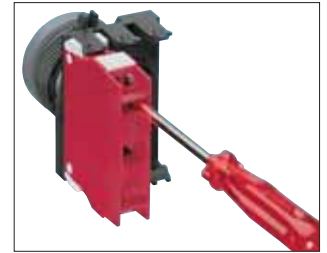


Tighten the screw

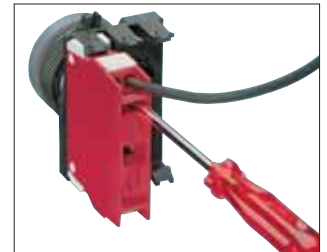


Done

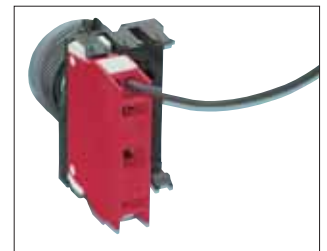
Spring-type terminals



Open the terminal



Insert the wire



Remove the screwdriver



Versatility of design for customized panels

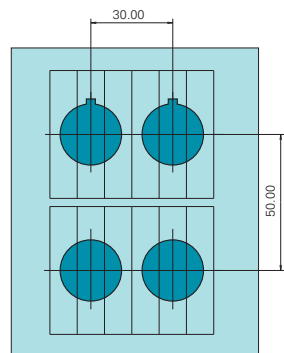
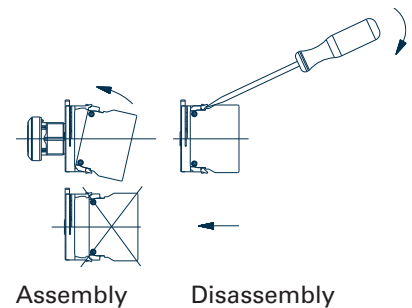
The RAFIX 22 QR system does not only have a particularly low profile and is also available in many different versions. Your design options for your customized panels are nearly unlimited thanks to the interchangeable front rings and lenses. In this way you can achieve an attractive design while ensuring safe operation of your equipment at the same time. RAFIX 22 QR components are available either with a round or with a square collar.

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.



Sequence of assembly/disassembly at screw, spring-type and quick connect terminal

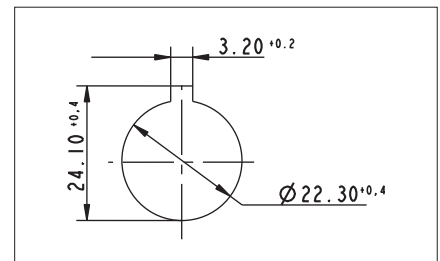
- Fix the actuator in the front panel with the ring nut.
- Snap the individual elements (a maximum three contact blocks or two contact blocks together with a lamp socket) in the coupling. You can install them on any assembling axis.
- Insert the lamp or LED into the lamp socket.
- Snap the coupling with 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).



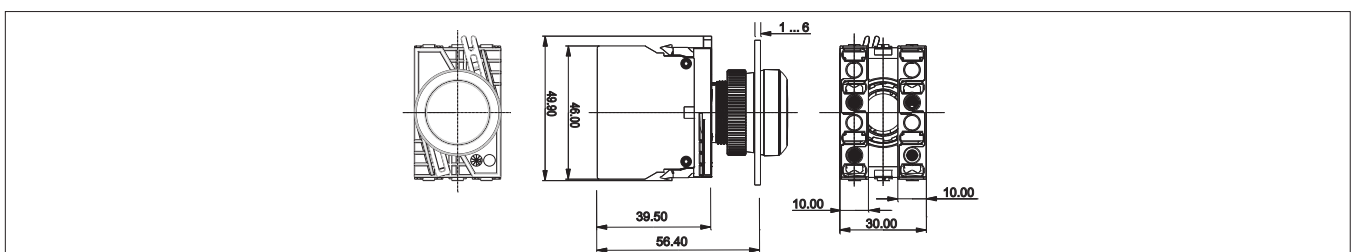
Panel cut-out according to IEC 60947-5-1

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).



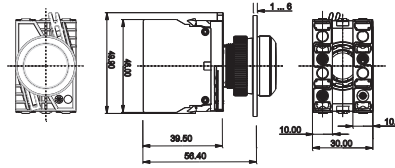
Dimensional drawing



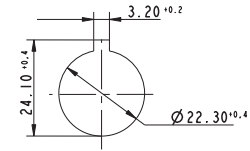
RAFIX 22 QR - Pushbutton



Pict.: transparent green



with contact block



Panel cut-out to IEC 60947-5-1

2

Technical Data

General information

Form of lens	see order block
Colour of lens	see order block
Colour 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	see order block
Illumination	see order block

Mechanical characteristics

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

Other specifications

Operating life (operations)	1,000,000 momentary/ 500,000 latching
Degree of protection from front side	IP65
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

RAFIX 22 QR

Approvals



IEC 61058



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Classification of Ships...Rules



Marine, offshore and industrial use



German Lloyds type approval

Typical accessories RAFIX 22 QR - Pushbutton

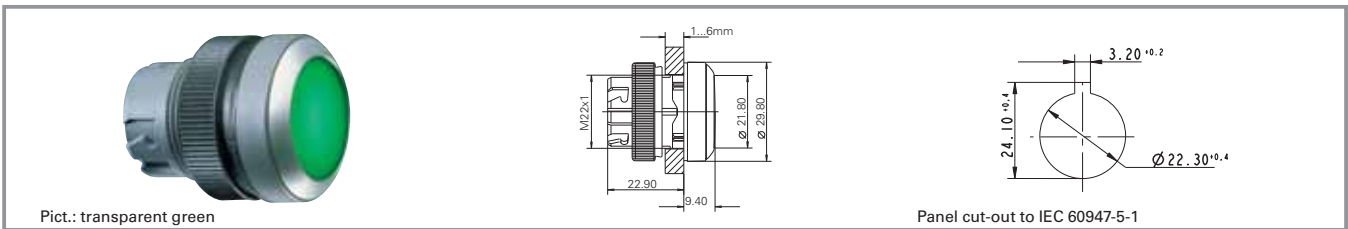
Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Contact block with silver contacts, with coupling, without lamp socket, screw terminals, 1 NO		1.20.124.002/0000	2 - 149
RAFIX 22 QR - Contact block with silver contacts, with coupling and lamp socket, screw terminals, 1 NC + 1 NO		1.20.124.027/0000	
RAFIX 22 QR - Contact block with gold contacts, with coupling and lamp socket, screw terminals, 1 NO		1.20.124.122/0000	

Typical accessories RAFIX 22 QR - Pushbutton

Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Contact block with silver contacts, with coupling and lamp socket, spring-type terminals, 1 NO, 1 NC		1.20.125.025/0000	
RAFIX 22 QR - Contact block with RJ 12 connector, 2 NO, white LED		1.20.128.015/0000	2 - 155
RAFIX 22 QR - Contact block AS-I, standard		1.20.129.101/0000	2 - 157
RAFIX 22 QR - Contact block AS-I, standard, white LED		1.20.129.121/0000	2 - 157
Filament lamp, BA 9s base (MBC/MCC), 24 - 30 V		1.90.060.133/0000	5 - 7
LED BA 9s (MBC/MCC) superbright, white, 24 V		1.90.690.345/0000	5 - 17
Fixing spanner for ring nut and front ring		5.05.800.062/0000	5 - 21
Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm		5.07.620.010/0000	2 - 168

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

RAFIX 22 QR - Pushbutton, flush lens, round collar



Pict.: transparent green

Panel cut-out to IEC 60947-5-1

Lamp socket	Colour of lens	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	transparent white	1.30.240.001/10xx	1.30.240.021/1000	1.30.240.011/10xx	1.30.240.031/1000
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
no	opaque black	1.30.240.101/01xx	1.30.240.121/0100	1.30.240.111/01xx	1.30.240.131/0100
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 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 slate-grey	1.30.240.101/07xx	1.30.240.121/0700	1.30.240.111/07xx	1.30.240.131/0700

Technical data see page 2 - 106

Accessoires:

Protective cover, auto-closing: 5.05.511.194/0000

Protective cover, latching: 5.05.511.195/0000

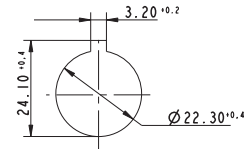
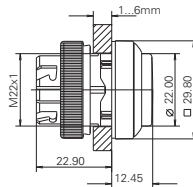
xx = Front ring colour: black = 01, slate grey = 07, silver grey = 08

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

RAFIX 22 QR - Pushbutton, protruding lens, round collar



Pict.: transparent red



Panel cut-out to IEC 60947-5-1

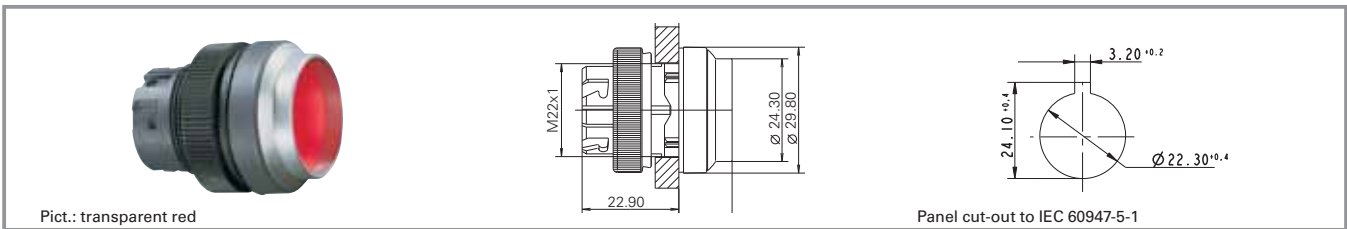
Lamp socket	Colour of lens	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	transparent white	1.30.240.201/10xx	1.30.240.221/1000	1.30.240.211/10xx	1.30.240.231/1000
yes	transparent red	1.30.240.201/13xx	1.30.240.221/1300	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
no	opaque black	1.30.240.301/01xx	1.30.240.321/0100	1.30.240.311/01xx	1.30.240.331/0100
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 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 slate-grey	1.30.240.301/07xx	1.30.240.321/0700	1.30.240.311/07xx	1.30.240.331/0700

Technical data see page 2 - 106

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

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

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



Pict.: transparent red

Panel cut-out to IEC 60947-5-1

Lamp socket	Colour of lens	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	transparent white	1.30.240.401/10xx	1.30.240.421/1000	-	-
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	-	-
no	opaque black	1.30.240.501/01xx	1.30.240.521/0100	-	-
no	opaque white	1.30.240.501/02xx	1.30.240.521/0200	-	-
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 slate-grey	1.30.240.501/07xx	1.30.240.521/0700	-	-

Technical data see page 2 - 106

Accessoires:

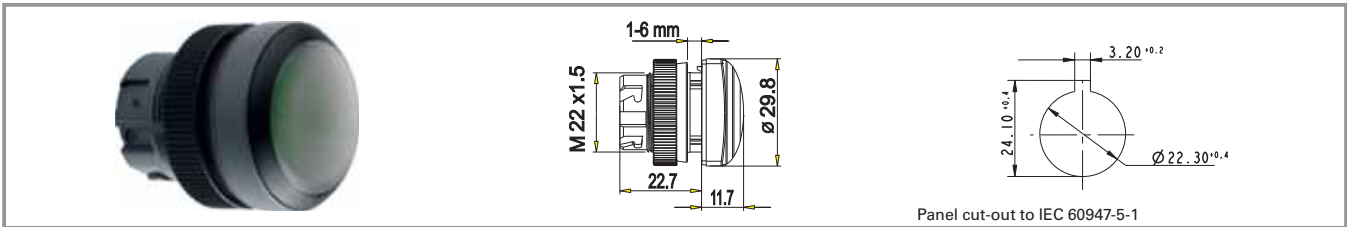
Legend insert without legend, use only in combination with transparent lenses.: **5.70.800.000/2000**

xx = Front ring colour: 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.

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

NEW



Lamp socket	Colour of lens	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	transparent white	1.30.240.005/10xx	-	-	-
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	-	-	-
no	opaque black	1.30.240.105/01xx	-	-	-
no	opaque white	1.30.240.105/02xx	-	-	-
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 slate-grey	1.30.240.105/07xx	-	-	-

Technical data see page 2 - 106

Pushbutton with protective cap for use under rugged conditions.

Legending on request.

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

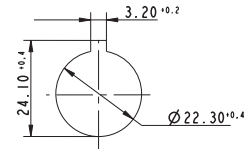
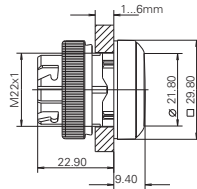
2

RAFIX
22 QR

RAFIX 22 QR - Pushbutton, flush lens, square collar



Pict.: transparent red



Panel cut-out to IEC 60947-5-1

Lamp socket	Colour of lens	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	transparent white	1.30.240.051/10xx	1.30.240.071/1000	1.30.240.061/10xx	1.30.240.081/1000
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
no	opaque black	1.30.240.151/01xx	1.30.240.171/0100	1.30.240.161/01xx	1.30.240.181/0100
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 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 slate-grey	1.30.240.151/07xx	1.30.240.171/0700	1.30.240.161/07xx	1.30.240.181/0700

Technical data see page 2 - 106

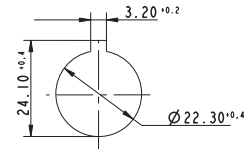
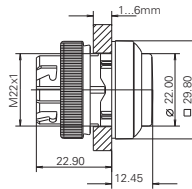
xx = Front ring colour: black = 01, slate grey = 07, silver grey = 08

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

RAFIX 22 QR - Pushbutton, protruding lens, square collar



Pict.: transparent red



Panel cut-out to IEC 60947-5-1

Lamp socket	Colour of lens	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	transparent white	1.30.240.251/10xx	1.30.240.271/1000	1.30.240.261/10xx	1.30.240.281/1000
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
no	opaque black	1.30.240.351/01xx	1.30.240.371/0100	1.30.240.361/01xx	1.30.240.381/0100
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 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 slate-grey	1.30.240.351/07xx	1.30.240.371/0700	1.30.240.361/07xx	1.30.240.381/0700

Technical data see page 2 - 106

Accessoires:

Legend insert without legend, use only in combination with transparent lenses.: 5.70.800.000/2000

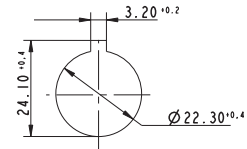
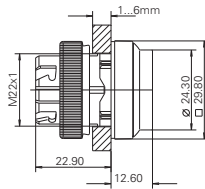
xx = Front ring colour: black = 01, slate grey = 07, silver grey = 08

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

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



Pict.: transparent green



Panel cut-out to IEC 60947-5-1

Lamp socket	Colour of lens	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	transparent white	1.30.240.451/10xx	1.30.240.471/1000	-	-
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	-	-
no	opaque black	1.30.240.551/01xx	1.30.240.571/0100	-	-
no	opaque white	1.30.240.551/02xx	1.30.240.571/0200	-	-
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 slate-grey	1.30.240.551/07xx	1.30.240.571/0700	-	-

Technical data see page 2 - 106

Accessoires:

Legend insert without legend, use only in combination with transparent lenses.: **5.70.800.000/2000**

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

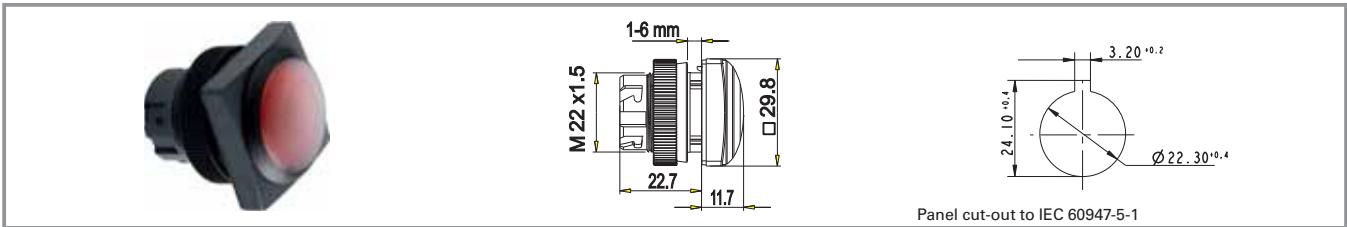
The protruding collar offers protection against inadvertent operation and thereby fulfils the safety requirements of various machinery manufacturers, particularly in the industry.

2

RAFIX
22 QR

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

NEW



Lamp socket	Colour of lens	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	transparent white	1.30.240.055/10xx	-	-	-
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	-	-	-
no	opaque black	1.30.240.155/01xx	-	-	-
no	opaque white	1.30.240.155/02xx	-	-	-
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 slate-grey	1.30.240.155/07xx	-	-	-

Technical data see page 2 - 106

Pushbutton with protective cap for use under rugged conditions.

Legending on request.

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

2

RAFIX
22 QR

RAFIX 22 QR - Selector switch



Pict.: Front ring, black, non-illuminated

Front ring, metallized, illuminated

Panel cut-out to IEC 60947-5-1

2

General Data

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

Technical Data

General information

Actuator	handle
Marking of handle	white
Colour 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
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

Approvals



IEC 61058



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Classification of Ships...Rules







Marine, offshore and industrial use



German Lloyd's type approval

Typical accessories RAFIX 22 QR - Selector switch

Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Contact block with silver contacts, with coupling, without lamp socket, screw terminals, 1 NC + 1 NO		1.20.124.017/0000	2 - 149
RAFIX 22 QR - Contact block with silver contacts, with coupling and lamp socket, screw terminals, 1 NC + 1 NO		1.20.124.027/0000	
RAFIX 22 QR - Contact block with gold contacts, with coupling and lamp socket, screw terminals, 1 NC + 1 NO, 1 NC + 1 NO		1.20.124.128/0000	
RAFIX 22 QR - Contact block with coupling, gold RAFIX 22 QR - Contacts, RJ 12 connector, 1 NC + 1 NO, white LED		1.20.128.013/0000	2 - 155
RAFIX 22 QR - Contact block AS-I, standard, white LED		1.20.129.121/0000	2 - 157
Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm		5.07.620.010/0000	2 - 168

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

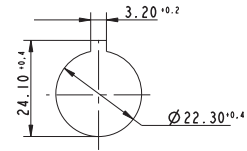
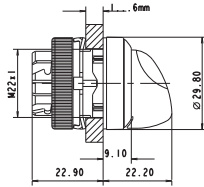
2

RAFIX
22 QR

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



Pict.: Front ring, silver grey, non-illuminated



Panel cut-out to IEC 60947-5-1

2

RAFIX
22 QR

Lamp socket	Contact function	Rotation angle	Rotation 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
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

Technical data see page 2 - 116

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

Included: Ring nut with claw.

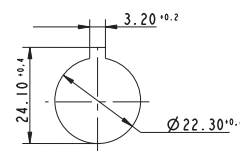
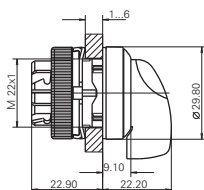
On keylock switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

Other contact versions on request

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



Pict.: Front ring, metallized, illuminated



Panel cut-out to IEC 60947-5-1

Lamp socket	Contact function	Rotation angle	Rotation angle	Order no.	
				Plastic front ring	Metallized front ring
yes	momentary	1 x 40°		1.30.242.011/22xx	1.30.242.012/2200
yes	momentary	2 x 40°		1.30.242.036/22xx	1.30.242.037/2200
yes	latching	1 x 90°, form L		1.30.242.111/22xx	1.30.242.112/2200
yes	latching	1 x 90°, form V		1.30.242.211/22xx	1.30.242.212/2200
yes	latching	2 x 60°		1.30.242.311/22xx	1.30.242.312/2200
yes	latching	2 x 90°		1.30.242.136/22xx	1.30.242.137/2200
yes	latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		1.30.242.436/22xx	1.30.242.437/2200
no	momentary	1 x 40°		1.30.242.511/02xx	1.30.242.512/0200
no	momentary	2 x 40°		1.30.242.536/02xx	1.30.242.537/0200
no	latching	1 x 90°, form L		1.30.242.611/02xx	1.30.242.612/0200
no	latching	1 x 90°, form V		1.30.242.711/02xx	1.30.242.712/0200
no	latching	2 x 60°		1.30.242.811/02xx	1.30.242.812/0200
no	latching	2 x 90°		1.30.242.636/02xx	1.30.242.637/0200
no	latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		1.30.242.936/02xx	1.30.242.937/0200

Technical data see page 2 - 116

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

Included: Ring nut with claw.

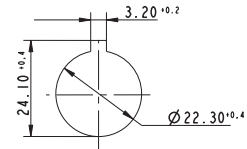
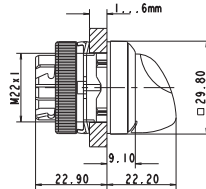
At selector switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

Other contact versions on request.

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



Pict.: Frontring rot, nicht beleuchtbar



Panel cut-out to IEC 60947-5-1

2

RAFIX 22 QR

Lamp socket	Contact function	Rotation angle	Rotation angle	Order no.	
				Plastic front ring	Metallized front ring
yes	momentary	1 x 40°		1.30.242.051/22xx	1.30.242.052/2200
yes	momentary	2 x 40°		1.30.242.076/22xx	1.30.242.077/2200
yes	latching	1 x 90°, form L		1.30.242.151/22xx	1.30.242.152/2200
yes	latching	1 x 90°, form V		1.30.242.251/22xx	1.30.242.252/2200
yes	latching	2 x 60°		1.30.242.351/22xx	1.30.242.352/2200
yes	latching	2 x 90°		1.30.242.176/22xx	1.30.242.177/2200
yes	latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		1.30.242.476/22xx	1.30.242.477/2200
no	momentary	1 x 40°		1.30.242.551/02xx	1.30.242.552/0200
no	momentary	2 x 40°		1.30.242.576/02xx	1.30.242.577/0200
no	latching	1 x 90°, form L		1.30.242.651/02xx	1.30.242.652/0200
no	latching	1 x 90°, form V		1.30.242.751/02xx	1.30.242.752/0200
no	latching	2 x 60°		1.30.242.851/02xx	1.30.242.852/0200
no	latching	2 x 90°		1.30.242.676/02xx	1.30.242.677/0200
no	latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		1.30.242.976/02xx	1.30.242.977/0200

Technical data see page 2 - 116

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

Included: Ring nut with claw.

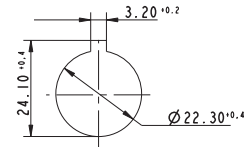
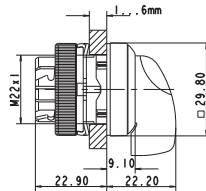
At selector switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

Other contact versions on request.

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



Pict.: Front ring, black, non-illuminated



Panel cut-out to IEC 60947-5-1

Lamp socket	Contact function	Rotation angle	Rotation angle	Order no.	
				Plastic front ring	Metallized front ring
yes	momentary	1 x 40°		1.30.242.061/22xx	1.30.242.062/2200
yes	momentary	2 x 40°		1.30.242.086/22xx	1.30.242.087/2200
yes	latching	1 x 90°, form L		1.30.242.161/22xx	1.30.242.162/2200
yes	latching	1 x 90°, form V		1.30.242.261/22xx	1.30.242.262/2200
yes	latching	2 x 60°		1.30.242.361/22xx	1.30.242.362/2200
yes	latching	2 x 90°		1.30.242.186/22xx	1.30.242.187/2200
yes	latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		1.30.242.486/22xx	1.30.242.487/2200
no	momentary	1 x 40°		1.30.242.561/02xx	1.30.242.562/0200
no	momentary	2 x 40°		1.30.242.586/02xx	1.30.242.587/0200
no	latching	1 x 90°, form L		1.30.242.661/02xx	1.30.242.662/0200
no	latching	1 x 90°, form V		1.30.242.761/02xx	1.30.242.762/0200
no	latching	2 x 60°		1.30.242.861/02xx	1.30.242.862/0200
no	latching	2 x 90°		1.30.242.686/02xx	1.30.242.687/0200
no	latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		1.30.242.986/02xx	1.30.242.987/0200

Technical data see page 2 - 116

xx = Front ring colour: black = 01, slate grey = 07, silver grey = 08; other colours 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.

Other contact versions on request.

RAFIX 22 QR - Keylock switch



Pict.: Front ring, metallized

Front ring, metallized

Panel cut-out to IEC 60947-5-1

2

Technical Data

General information

Actuator	Key
Colour 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 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
Ambient temp. operating min.	-25 °C
Storage temperature min.	-40 °C
Ambient temp. operating max.	+70 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78

RAFIX 22 QR

Approvals



IEC 61058



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Classification of Ships...Rules



Marine, offshore and industrial use



Type approval

Typical accessories RAFIX 22 QR - Keylock switch

Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Contact block with silver contacts, with coupling, without lamp socket, screw terminals, 1 NC + 1 NO		1.20.124.017/0000	2 - 149

Typical accessories RAFIX 22 QR - Keylock switch

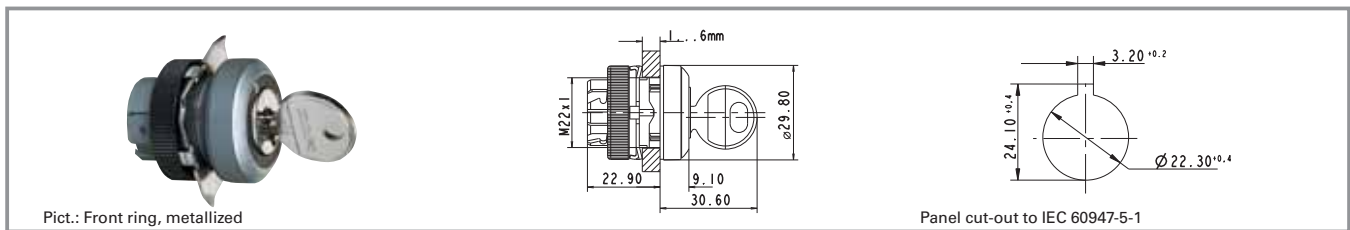
Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Contact block with silver contacts, with coupling, without lamp socket, spring-type terminals, 1 NO		1.20.125.002/0000	2 - 149
RAFIX 22 QR - Contact block with coupling, gold RAFIX 22 QR - Contacts, RJ 12 connector, 1 NC + 1 NO, without LED		1.20.128.003/0000	2 - 155
RAFIX 22 QR - Contact block AS-I, standard		1.20.129.101/0000	2 - 157
Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm		5.07.620.010/0000	2 - 168
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	

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

2

RAFIX 22 QR

RAFIX 22 QR - Keylock switch, round collar



Lock type	Rotation angle	Contact function	Key removal position	Rotation 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
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

2

RAFIX 22 QR

Lock type	Rotation angle	Contact function	Key removal position	Rotation angle	Order no.	
					Plastic front ring	Metallized front ring
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		1.30.245.401/xxxx	1.30.245.402/0000
455	2 x 90°	latching	0+1+2		1.30.245.431/xxxx	1.30.245.432/0000
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
1122E	2 x 90°	latching	0+1+2		1.30.245.435/xxxx	1.30.245.436/0000

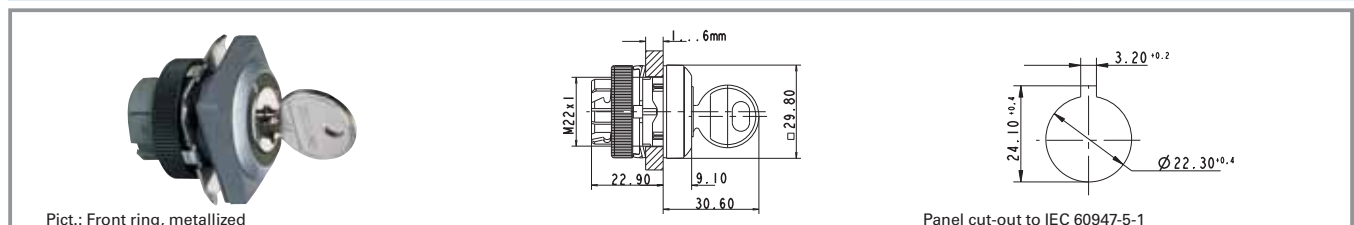
Technical data see page 2 - 122

xxxx = Front ring colour: 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.

RAFIX 22 QR - Keylock switch, square collar



Lock type	Rotation angle	Contact function	Key removal position	Rotation 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

Lock type	Rotation angle	Contact function	Key removal position	Rotation angle	Order no.	
					Plastic front ring	Metallized front ring
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
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		1.30.245.451/xxxx	1.30.245.452/0000
455	2 x 90°	latching	0+1+2		1.30.245.481/xxxx	1.30.245.482/0000
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

Technical data see page 2 - 122

xxxx = Front ring colour: 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.

RAFIX 22 QR - Mushroom-headed pushbutton



Pict.: Front ring, metallized

Front ring, slate grey

Panel cut-out to IEC 60947-5-1

2

Technical Data

General information

Actuator	mushroom
Colour of mushroom	see order block
Colour 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 min.	100 N

Electrical characteristics

Protection class	-
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Other specifications

Operating life (operations)	1,000,000
Degree of protection from front side	IP65
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

Approvals



IEC 61058



UL 508, C22.2 No.
14-M91



2004 Steel Vessel
Rules



Rules for the
Classification of
Steel Ships



Classification of
Ships...Rules



Marine, offshore
and industrial use



German Lloyds
type approval

Typical accessories RAFIX 22 QR - Mushroom-headed pushbutton

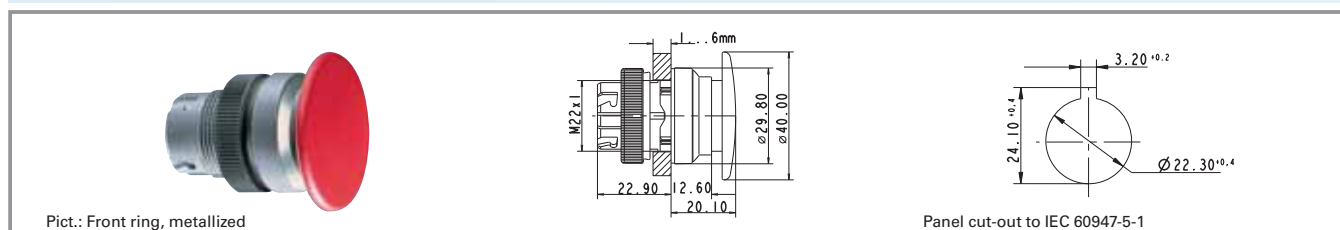
Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Contact block with silver contacts, with coupling, without lamp socket, screw terminals, 1 NC + 1 NO		1.20.124.017/0000	2 - 149

Typical accessories RAFIX 22 QR - Mushroom-headed pushbutton

Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Contact block with gold contacts, with coupling, without lamp socket, spring-type terminals, 1 NO		1.20.125.102/0000	2 - 153
RAFIX 22 QR - Contact block with coupling, gold RAFIX 22 QR - Contacts, RJ 12 connector, 1 NO, without LED		1.20.128.002/0000	2 - 155
Fixing spanner for ring nut and front ring		5.05.800.062/0000	5 - 21

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

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

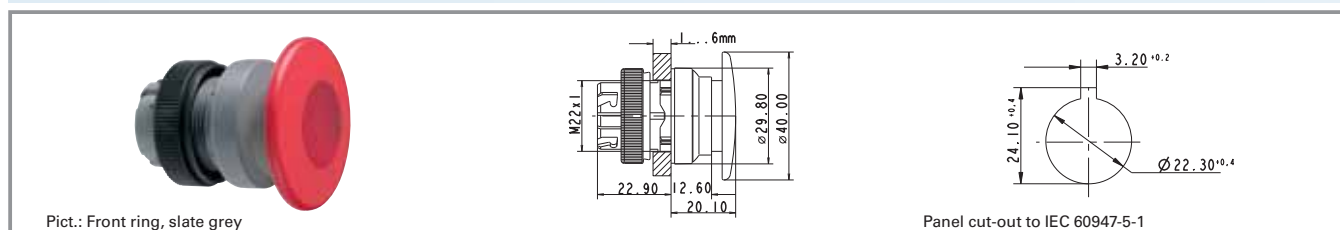


Illuminability	mushroom colour	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
no	opaque black	1.30.246.501/01xx	1.30.246.502/0100	-	-
no	opaque red	1.30.246.501/03xx	1.30.246.502/0300	-	-

Technical data see page 2 - 126

xx = Front ring colour: slate grey = 07

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

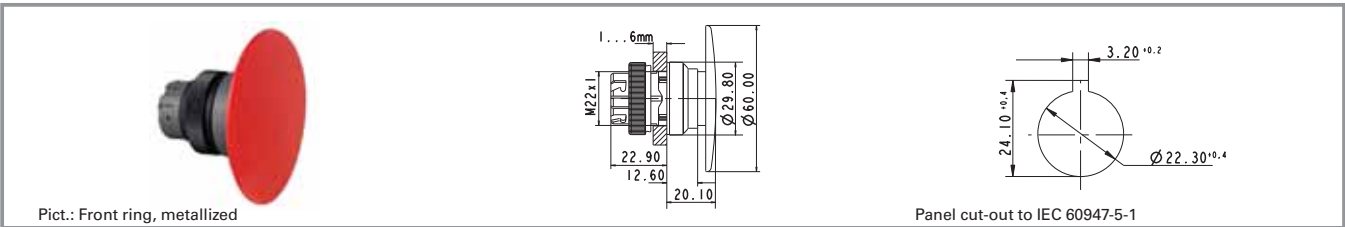


Illuminability	mushroom colour	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	opaque red/ transparent red	1.30.246.001/03xx	1.30.246.002/0300	-	-

Technical data see page 2 - 126

xx = Front ring colour: slate grey = 07

RAFIX 22 QR - Mushroom-headed pushbutton 60 mm, round collar



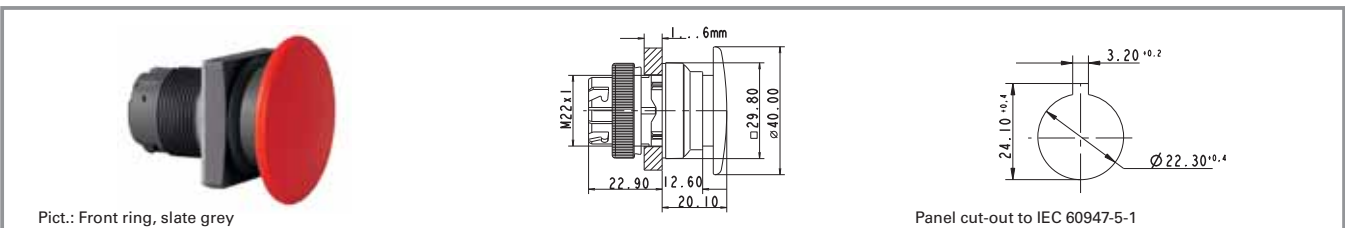
Illuminability	mushroom colour	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
no	opaque red	1.30.246.601/03xx	1.30.246.602/0300	-	-

Technical data see page 2 - 126

xx = Front ring colour: slate grey = 07

2

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



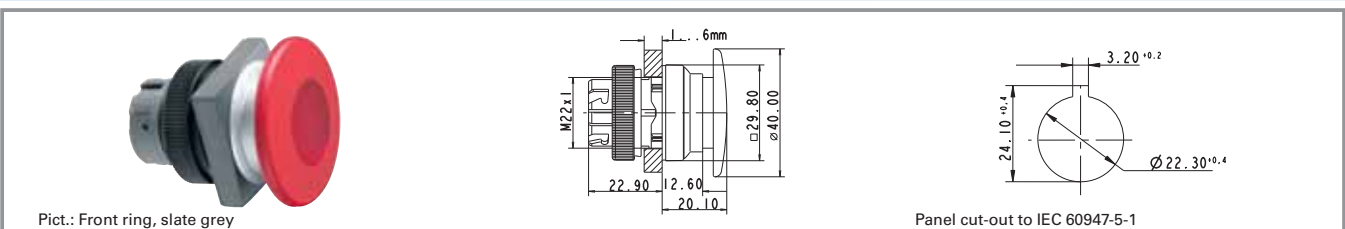
Illuminability	mushroom colour	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
no	opaque red	1.30.246.551/03xx	1.30.246.552/0300	-	-

Technical data see page 2 - 126

xx = Front ring colour: slate grey = 07

RAFIX 22 QR

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

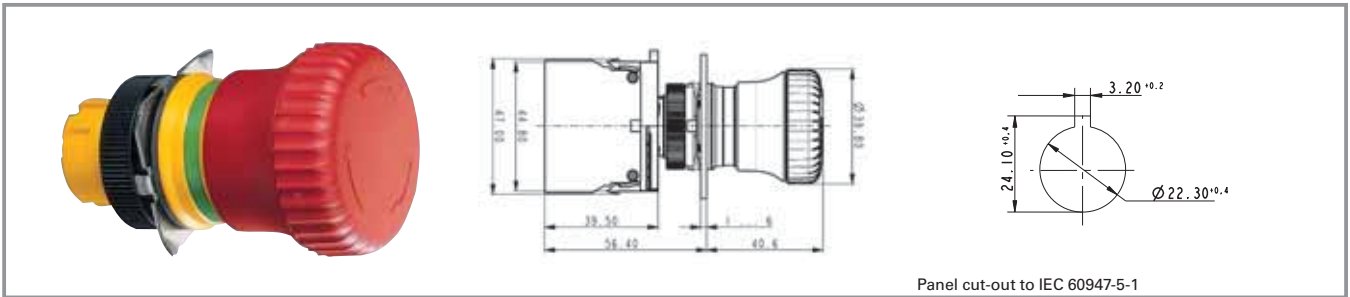


Illuminability	mushroom colour	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	opaque red/ transparent red	1.30.246.051/03xx	1.30.246.052/0300	-	-

Technical data see page 2 - 126

xx = Front ring colour: slate grey = 07

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



2

General Data

The emergency stop pushbuttons comply with IEC 60 204, IEC 60 073, 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.

RAFIX
22 QR

Technical Data

General information

Actuator mushroom
Colour 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 50 x 50 mm

Mechanical design

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

Mechanical characteristics

Operating force max. approx. 5 N for 1 switching element
Entsperr-Kraft see order block
Robustness min. 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

Approvals



IEC 60947-5-x, 60904, 60073



IEC 61058



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Classification of Ships...Rules



Marine, offshore and industrial use



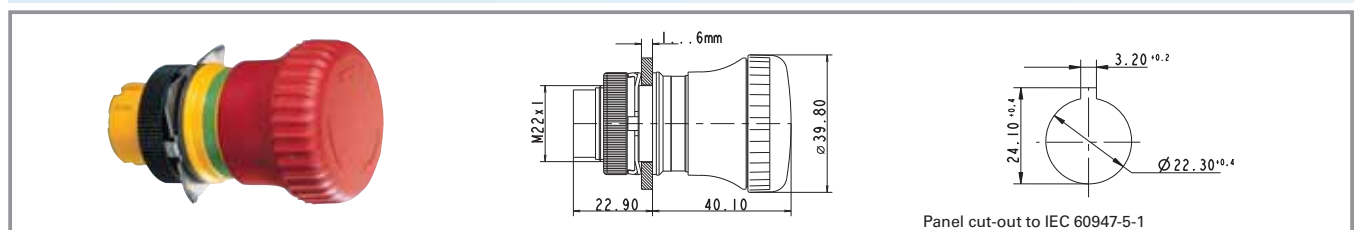
German Lloyds type approval

Typical accessories RAFIX 22 QR - Emergency stop pushbutton, dupe-proof to EN ISO 13850

Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Contact block with silver contacts, with coupling, without lamp socket, screw terminals, 1 NC		1.20.124.001/0000	2 - 149
RAFIX 22 QR - Contact block with silver contacts, with coupling, without lamp socket, screw terminals, 2 NC		1.20.124.019/0000	2 - 149
RAFIX 22 QR - Contact block AS-I, E-stop, coupling contact, LED		1.20.129.011/0000	2 - 159
Fixing spanner for ring nut and front ring		5.05.800.062/0000	5 - 21
Adhesive label yellow, round 22.3 / 60 mm, without legend		5.76.204.100/0400	2 - 99, 2 - 172, 2 - 238, 5 - 29
Adhesive label yellow, round 22.3 / 60 mm, with legend 1 x „Not-Aus“		5.76.204.101/0400	2 - 99, 2 - 172, 2 - 238, 5 - 29
Adhesive label yellow, round 22.3 / 60 mm, with legend „NOT-HALT, EMERGENCY STOP, ARRET D'URGENCE, EMERGENZA“		5.76.204.107/0400	2 - 99, 2 - 172, 2 - 238, 5 - 29
Adhesive label yellow, round 22.3 / 60 mm, with legend 4 x „NOT-HALT“		5.76.204.109/0400	2 - 99, 2 - 172, 2 - 238, 5 - 29
Adhesive label yellow, round 22.3 / 40 mm, with legend 4 x „EMERGENCY STOP“		5.76.204.121/0400	2 - 99, 2 - 172, 2 - 238, 5 - 29
Emergency stop label, yellow rectangular 36 x 64 mm, without legend		5.76.205.011/0400	2 - 99, 2 - 172, 2 - 238, 5 - 29

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

RAFIX 22 QR - Emergency stop pushbutton



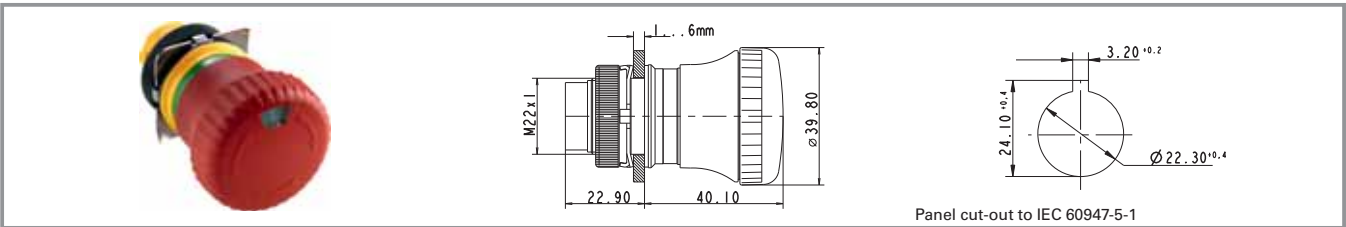
Degree of protection from front side	Reset	Illuminability	Operating life (operations)	Lock type	Order no.
IP65	by clockwise rotation	no	100,000	-	1.30.243.501/0300

Technical data see page 2 - 130

Included: Ring nut with claw.

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

RAFIX 22 QR - Emergency stop pushbutton, with indication



Panel cut-out to IEC 60947-5-1

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

Technical data see page 2 - 130

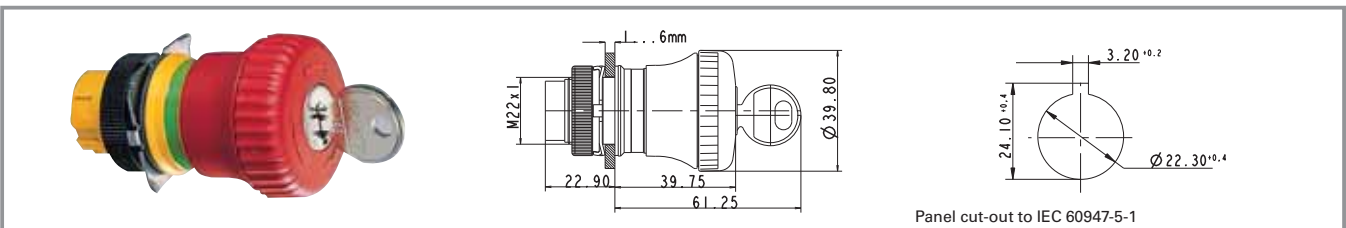
Included: Ring nut with claw.

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.

2

RAFIX 22 QR - Emergency stop pushbutton, with keylock



Panel cut-out to IEC 60947-5-1

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

Technical data see page 2 - 130

Accessoires:

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

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

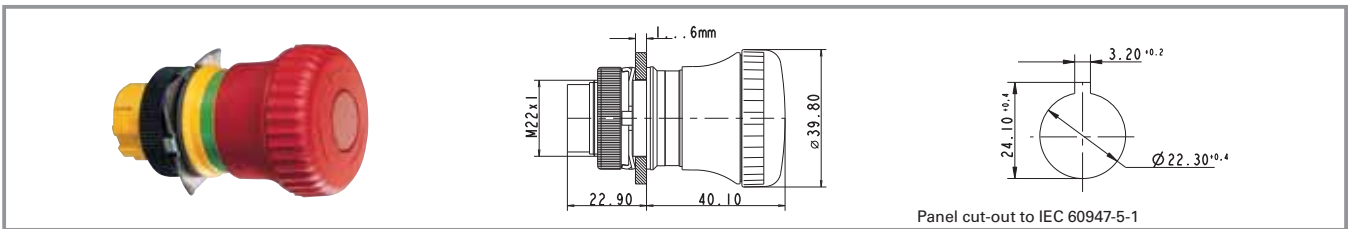
Spare key RONIS 1122E, delivery content 2 keys: 5.58.017.403/0000

Included: Ring nut with claw, 2 keys.

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.

RAFIX 22 QR - Emergency stop pushbutton, illuminable



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

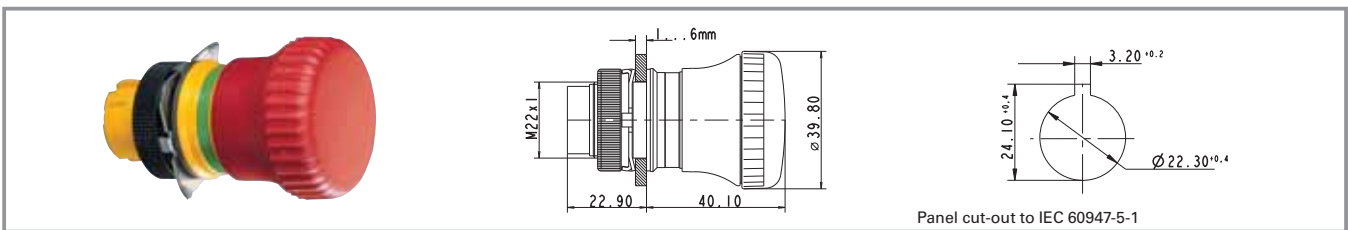
Technical data see page 2 - 130

Included: Ring nut with claw.

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

2

RAFIX 22 QR - Emergency stop pushbutton, reset by pulling



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

Technical data see page 2 - 130

Included: Ring nut with claw.

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

RAFIX
22 QR

RAFIX 22 QR - Toggle switch



Pict.: Front ring, metallized

Front ring, slate grey

Panel cut-out to IEC 60947-5-1

2

Technical Data

General information

Actuator	toggle
Colour of toggle	opaque white
Colour 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
Immunity	no

Mechanical characteristics

Robustness min.	100 N
-----------------	-------

Electrical characteristics

Protection class	-
------------------	---

Other specifications

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

RAFIX 22 QR

Approvals



IEC 61058



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Classification of Ships...Rules



Marine, offshore and industrial use



German Lloyds type approval

Typical 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 - 153
RAFIX 22 QR - Contact block with gold contacts, with coupling, without lamp socket, spring-type terminals, 1 NO		1.20.125.102/0000	2 - 153
RAFIX 22 QR - Contact block with coupling, gold RAFIX 22 QR - Contacts, RJ 12 connector, 1 NO, without LED		1.20.128.002/0000	2 - 155

Typical accessories RAFIX 22 QR - Toggle switch

Description	Photo	Order no.	Additional accessories see page
Fixing spanner for ring nut and front ring		5.05.800.062/0000	5 - 21

RAFIX 22 QR - Toggle switch, round collar

Pict.: Front ring, slate grey

Panel cut-out to IEC 60947-5-1

Illuminability	Colour of toggle marking	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
no	opaque white	-	-	1.30.247.501/02xx	1.30.247.502/0200

Technical data see page 2 - 134

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

RAFIX 22 QR - Toggle switch, square collar

Pict.: Front ring, metallized

Panel cut-out to IEC 60947-5-1

Illuminability	Colour of toggle marking	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
no	opaque white	-	-	1.30.247.551/02xx	1.30.247.552/0200

Technical data see page 2 - 134

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

RAFIX 22 QR - Twin pushbutton



2

General Data

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



RAFIX 22 QR

General information		Mechanical characteristics	
Legending	see order block	Operating force max.	approx. 5 N for 1 switching element
Colour of lens	opaque green/ opaque red	Robustness min.	100 N
Colour of front ring	see order block	Other specifications	
Form of collar	see order block	Degree of protection from front side	IP65
Dimensions		Ambient temp. operating min.	-25 °C
Dimensions of collar	59.6 x 29.8 mm	Ambient temp. operating max.	+70 °C
Overall height	9.1 mm	Storage temperature min.	-40 °C
Mounting depth with contact block without cable	56.4 mm	Storage temperature max.	+80 °C
Mounting hole	Ø 22.3 mm	Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Mounting grid	-		
Mechanical design			
Mounting	ring nut		
Contact function	momentary		
Illuminability	see order block		

Approvals

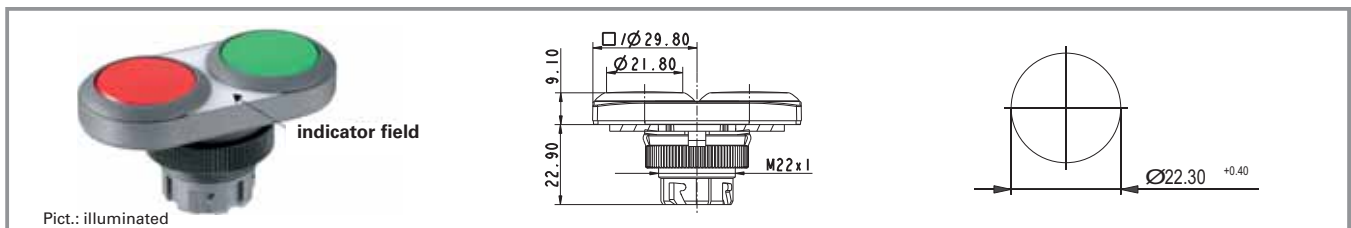
IEC 61058	UL 508, C22.2 No. 14-M91	2004 Steel Vessel Rules	Rules for the Classification of Steel Ships	Classification of Ships....Rules	Marine, offshore and industrial use	German Lloyds type approval

Typical 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“.

RAFIX 22 QR - Twin pushbutton, oval collar

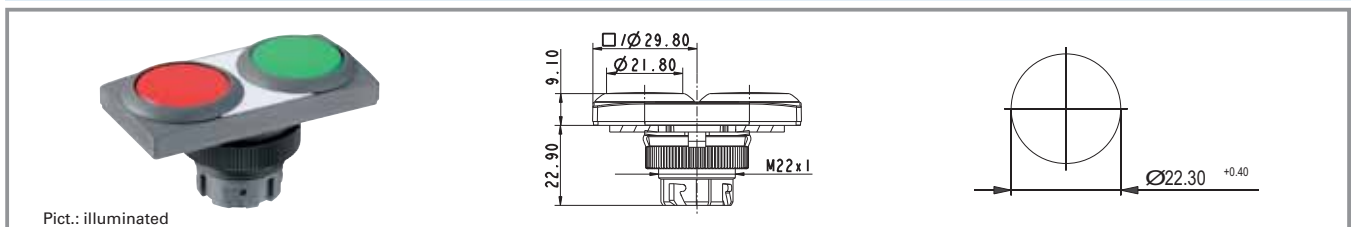


Illuminability	Colour of lens	Legending	Colour of front ring	Order no.
yes	opaque green/ opaque red	none	slate-grey	1.30.241.001/2207
yes	opaque green/ opaque red	red 0, green I	slate-grey	1.30.241.002/2207

Technical data see page 2 - 136

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



Illuminability	Colour of lens	Legending	Colour 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

Technical data see page 2 - 136

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 - Potentiometer drive



Pict.: slate grey with potentiometer

state grey, delivery content

Panel cut-out to IEC 60947-5-1

2

Technical Data

General information

Actuator	knob
Colour 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
----------	----------

Mechanical characteristics

Robustness min.	100 N
-----------------	-------

Other specifications

Degree of protection from front side	IP65
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78

RAFIX 22 QR

Approvals



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Classification of Ships...Rules



Marine, offshore and industrial use

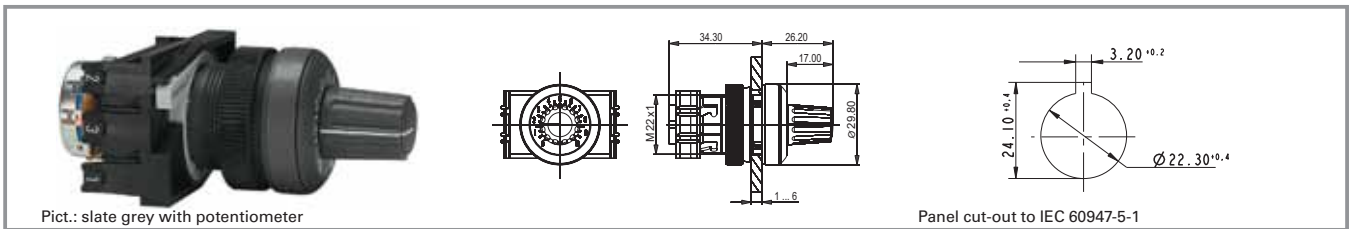


German Lloyd's type approval

Typical accessories RAFIX 22 QR - Potentiometer drive

Description	Photo	Order no.	Additional accessories see page
Fixing spanner for ring nut and front ring		5.05.800.062/0000	5 - 21

RAFIX 22 QR - Potentiometer drive, round collar



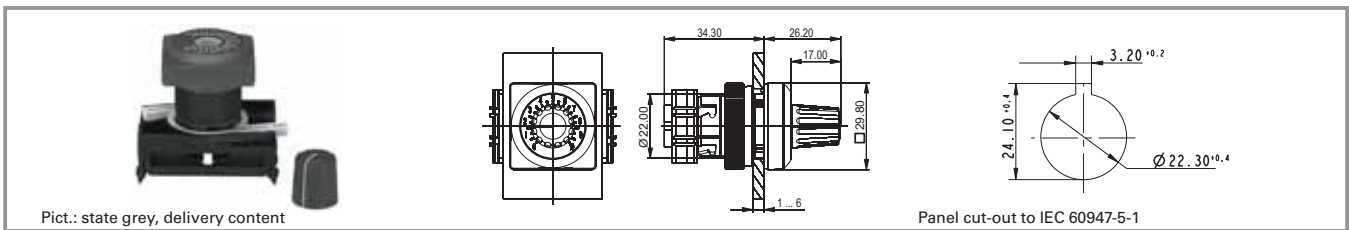
Front ring	Colour of knob	Order no.
plastic slate-grey	opaque slate-grey	1.30.248.001/0700

Technical data see page 2 - 138

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

2

RAFIX 22 QR - Potentiometer drive, square collar



Front ring	Colour of knob	Order no.
plastic slate-grey	opaque slate-grey	1.30.248.021/0700

Technical data see page 2 - 138

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

RAFIX 22 QR

RAFIX 22 QR - Buzzer



2

Technical Data

General information

Form of lens	flat lens
Colour 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
----------	----------

Mechanical characteristics

Robustness min.	-
-----------------	---

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
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78

RAFIX
22 QR

Approvals



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Classification of Ships...Rules



Marine, offshore and industrial use

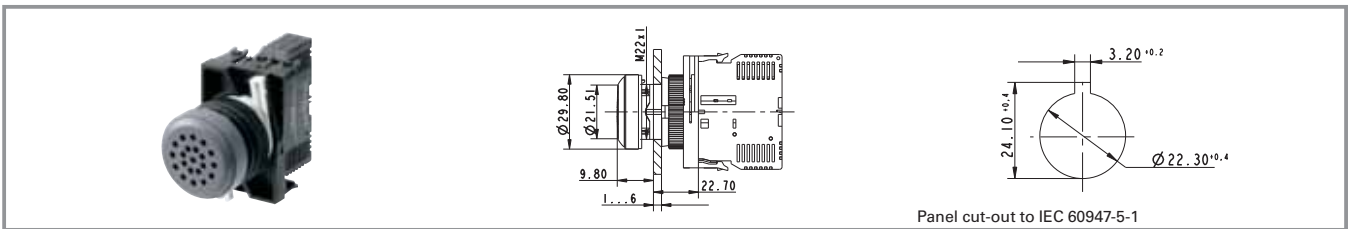


German Lloyds type approval

Typical accessories RAFIX 22 QR - Buzzer

Description	Photo	Order no.	Additional accessories see page
Fixing spanner for ring nut and front ring		5.05.800.062/0000	5 - 21

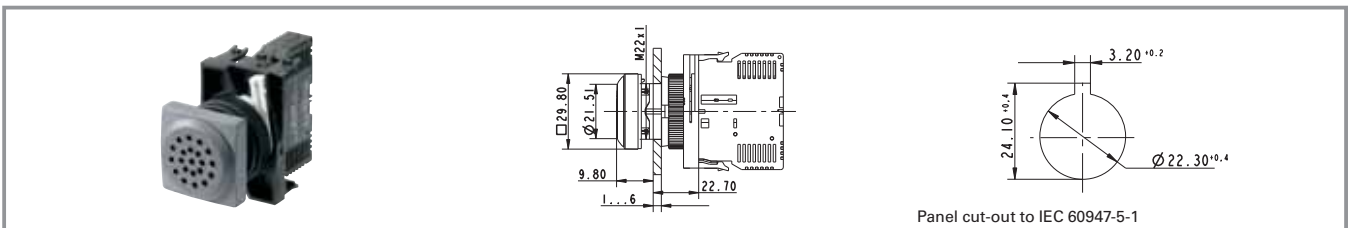
RAFIX 22 QR - Buzzer, round collar



Operating voltage DC	Input current	Sound	Sonic pressure, 1 m distance min.	Sound frequency	Order no.
12 V	25 mA	continuos beep	70 dB	2,400 - 3,100 Hz	1.30.249.002/0000
24 V	25 mA	continuos beep	70 dB	2,400 - 3,100 Hz	1.30.249.001/0000

Technical data see page 2 - 140

RAFIX 22 QR - Buzzer, square collar



Operating voltage DC	Input current	Sound	Sonic pressure, 1 m distance min.	Sound frequency	Order no.
12 V	25 mA	continuos beep	70 dB	2,400 - 3,100 Hz	1.30.249.022/0000
24 V	25 mA	continuos beep	70 dB	2,400 - 3,100 Hz	1.30.249.021/0000

Technical data see page 2 - 140

2

RAFIX 22 QR

RAFIX 22 QR - Signal indicator



2

Technical Data

General information

Form of lens	see order block
Colour of lens	see order block
Legend insert accomodation	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
Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental restistance	acc. to IEC 60068-2 -14, -30, -33 and -78

RAFIX
22 QR

Approvals



IEC 61058



UL 508, C22.2 No.
14-M91



2004 Steel Vessel
Rules



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Classification of
Ships....Rules



Marine, offshore
and industrial use

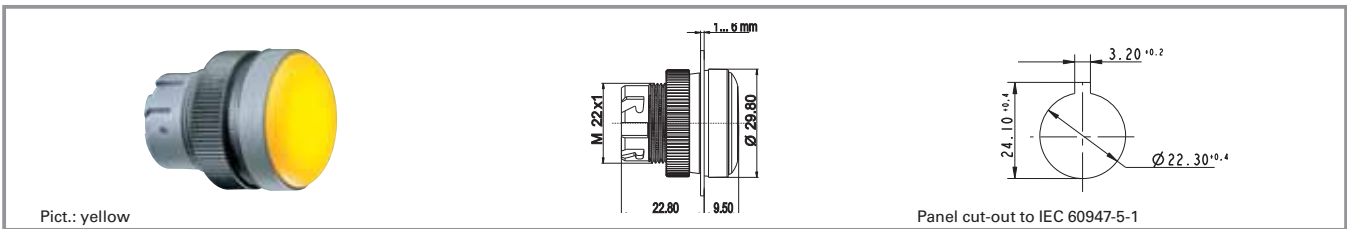


German Lloyds
type approval

Typical accessories RAFIX 22 QR - Signal indicator

Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Lamp socket assembly, screw terminals, with coupling		1.71.213.001/0000	2 - 162
RAFIX 22 QR - Lamp socket assembly, screw terminals, with coupling, diode and series resistor 130 V		1.71.213.004/0000	2 - 162
RAFIX 22 QR - Lamp socket assembly, spring-type terminals, with coupling		1.71.214.001/0000	2 - 162

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



Colour of lens	form of collar	Order no.
transparent colourless	round	1.74.505.501/1000
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

Technical data see page 2 - 142

Accessoires:

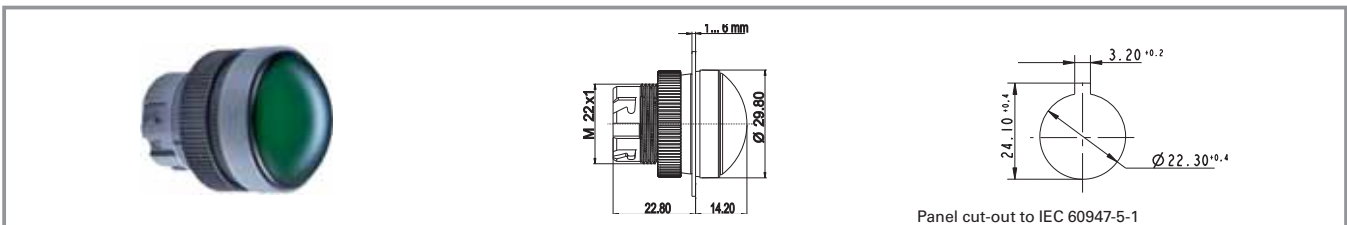
Legend insert without legend, use only in combination with transparent lenses.: **5.70.803.000/2000**

2

RAFIX
22 QR

RAFIX 22 QR - Signal indicator, high, round collar

NEW

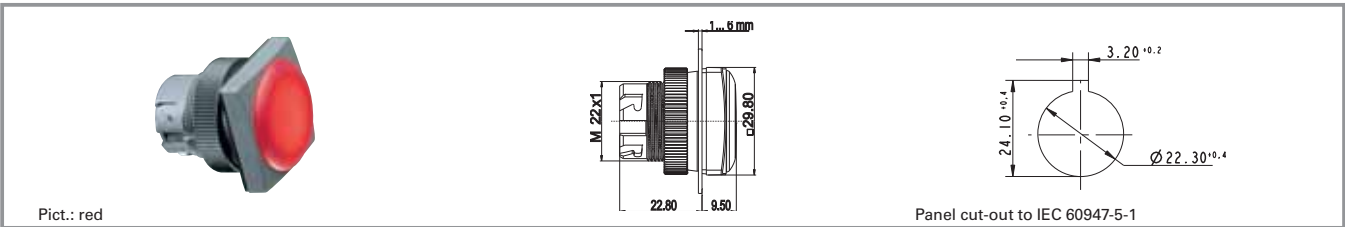


Colour of lens	form of collar	Order no.
transparent colourless	round	1.74.505.511/1000
transparent red	round	1.74.505.511/1300
transparent yellow	round	1.74.505.511/1400
transparent green	round	1.74.505.511/1500
transparent blue	round	1.74.505.511/1600

Technical data see page 2 - 142

Legend insert on request

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



Colour of lens	form of collar	Order no.
transparent colourless	square	1.74.505.551/1000
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

2

RAFIX 22 QR

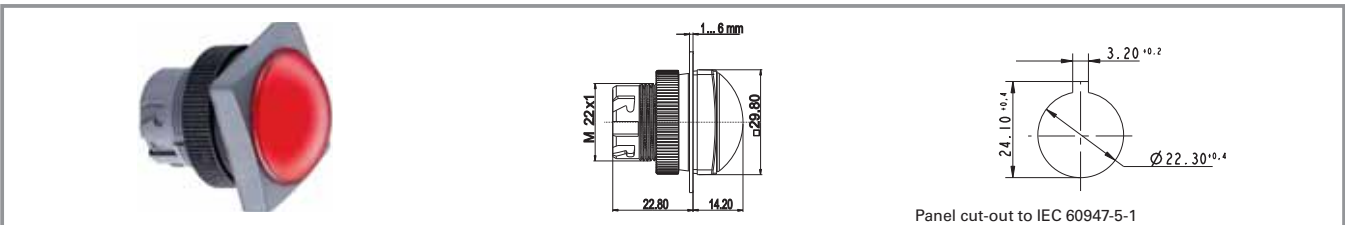
Technical data see page 2 - 142

Accessoires:

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

NEW

RAFIX 22 QR - Signal indicator, high, square collar



Colour of lens	form of collar	Order no.
transparent colourless	square	1.74.505.561/1000
transparent blue	square	1.74.505.561/1600
transparent red	square	1.74.505.561/1300
transparent yellow	square	1.74.505.561/1400
transparent green	square	1.74.505.561/1500

Technical data see page 2 - 142

Legend insert on request

RAFIX 22 QR - Contact blocks with silver contacts



Pict.: Silver contacts, 1 NC, spring-type terminals



Silver contacts, 2 NC, screw terminals



1NC+1NO, lamp socket, 1NC+1NO

2

General Data

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

RAFIX 22 QR

Dimensions		Degree of pollution	3
Dimensions with coupling	39.5 x 49.9 x 30 mm	Positive opening travel	3 mm
Mounting depth without cable	56.4 mm	Operating speed	5 ... 1000 mm/c
Mechanical design		Electrice characteristics acc. to IEC 61058	
Mounting	snap on coupling and actuator	Resistive load AC	10 A / 250 V; 7.5 A / 400 V
Contact system	bridge-contact self cleaning	Motor load AC	6 A / 250 V; 4 A / 400 V (5 A / 250 V)
Contact materials	Ag	Peak input current filament lamp AC	36 A
Contact arrangement	see order block	Peak capacity input current AC	100 A
Coupling position 1 (1/2)	see order block	Protection class	II
Coupling position 3 (5/6), centre	see order block	Other specifications	
Coupling position 2 (3/4)	see order block	Operating life at 10 A/250 V AC	70,000 (10A), 200,000 (5A)
NC contact forcibly actuated acc. to IEC 60947-5-1	yes	Switching reliability at 24V/5mA DC	10 x 10 ⁻⁶
Terminals	see order block	Robustness	acc. to IEC 60947-5-5
Terminal marking	colour encoded	Corresponding to CE	acc. EU-guideline NSR 72/73
Robustness	100 N	Shock resistance acc. to IEC 60068-2-27	15 g at 11 ms, amplitude half sinusoidal
Wire range solid wires without wire end sleeves	2 x 0.75 ... 2.5 mm ²	Resistance to vibrations acc. to IEC 60068-2-6	5 g at 10 ... 500 Hz
Wire range stranded wires without end sleeves	2 x 1.0...1.5 (2 x 0.08 ... 2.5) mm ²	Ambient temp. operating min.	-25 °C
Stripping length, solid or stranded	8 mm	Ambient temp. operating max.	+70°C (+50° C)
Wire range with wire end sleeves	2 x 0.75 ... 1.5 mm ²	Storage temperature min.	-40 °C
		Storage temperature max.	+80 °C
Electrice characteristics acc. to IEC 60947		Flame class acc. to UL 94	V 0
Rated insulation voltage AC/DC	400 V	Hot wire ignition acc. to IEC 60695-2-1	yes
Rated peak voltage	6,000 V	Environmental restistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Rated operating current I _e AC 12 / DC 12	10 A		
Rated operating current I _e AC-15	125 V/10 A, 250 V/6 A, 400 V/3.5 A		
Rated operating current I _e DC-13 Q300	24V/2.75A, 60V/1.1A, 125V/0.55A, 250V/0.275A		

Approvals



IEC 61058 only for versions with spring-type terminal



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Classification of Ships....Rules



Marine, offshore and industrial use



German Lloyd's type approval only valid for version with screw terminals

Typical accessories RAFIX 22 QR - Contact blocks with silver contacts

Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Lamp socket, screw terminals, without coupling		5.00.070.074/0000	2 - 161
RAFIX 22 QR - Lamp socket, screw terminals, without coupling, minus switching		5.00.070.081/0000	2 - 161
RAFIX 22 QR - Lamp socket, screw terminals, without coupling, plus switching		5.00.070.082/0000	2 - 161
RAFIX 22 QR - LED unit, white LED, 230 V, without coupling		5.00.070.086/0200	2 - 165
Coupling with reference numbers 1-3-2, for contact blocks with single contacts		5.05.510.935/0000	2 - 169
Coupling with reference numbers 1/2-5/6-3/4, for contact blocks with double contacts		5.05.510.936/0000	2 - 169

RAFIX 22 QR - Contact block with silver contacts



Pict.: Silver contacts, 2 NC, screw terminals



Silver contacts, 1 NC, spring-type terminals



Au contacts, quick connector, 1S

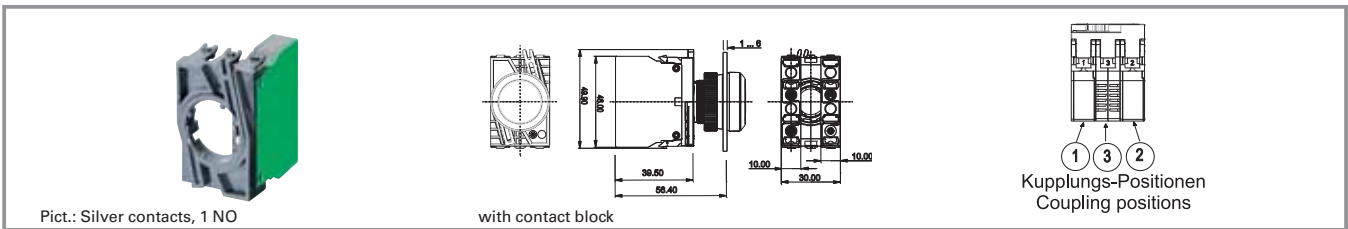
Terminals	Contact arrangement	Coupling position 1 (1/2)	Coupling position 3 (5/6), centre	Coupling position 2 (3/4)	Order no.
screw terminals	1 NC	-	-	-	5.00.100.139/0000
screw terminals	1 NO	-	-	-	5.00.100.140/0000
screw terminals	2 NC	-	-	-	5.00.100.141/0000
screw terminals	2 NO	-	-	-	5.00.100.142/0000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

Technical data see page 2 - 146

2

RAFIX 22 QR

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



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

Technical data see page 2 - 146

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. As an alternative you can use a third contact block here.

2

RAFIX
22 QR

RAFIX 22 QR - Contact blocks with gold contacts



Pict.: Gold contacts, 1 NC, screw terminals

Gold contacts, 1 NO, spring-type terminals

Assembly: Gold contacts, 1NC + 1NO

2

General Data

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

RAFIX
22 QR

Dimensions		Electrical characteristics	
Dimensions with coupling	39.5 x 49.9 x 30 mm	Operating voltage AC/DC	1 ... 35 V
Mounting depth without cable	56.4 mm	Operating current AC/DC	0.01 ... 100 mA
		Rated power max.	1 W (ohmic load)
Mechanical design		Other specifications	
Mounting	snap on coupling and actuator	Operating life (operations)	1,000,000 (24 V DC 10 mA)
Contact system	bridge-contact self cleaning	Switching reliability at 24V/5mA DC	10 x 10 ⁻⁶
Contact materials	Au	Robustness	acc. to IEC 60947-5-5
Contact arrangement	see order block	Corresponding to CE	acc. EU-guideline NSR 72/73
Coupling position 1 (1/2)	see order block	Shock resistance acc. to IEC 60068-2-27	15 g at 11 ms, amplitude half sinusoidal
Coupling position 3 (5/6), centre	see order block	Resistance to vibrations acc. to IEC 60068-2-6	5 g at 10 ... 500 Hz
Coupling position 2 (3/4)	see order block	Ambient temp. operating min.	-25 °C
NC contact forcibly actuated acc. to IEC 60947-5-1	yes	Ambient temp. operating max.	+70 °C
Terminals	see order block	Storage temperature min.	-40 °C
Terminal marking	colour encoded	Storage temperature max.	+80 °C
Robustness	100 N	Environmental resistance	acc. to IEC 60068-2 -14, -30, -33 and -78
Operating force	-		
Wire range solid wires without wire end sleeves	2 x 0.75 ... 2.5 mm ²		
Wire range stranded wires without wire end sleeves	2 x 1.0 ... 1.5 mm ²		
Stripping length, solid or stranded	8 mm		
Wire range with wire end sleeves	2 x 0.75 ... 1.5 mm ²		

Typical accessories RAFIX 22 QR - Contact blocks with gold contacts

Description	Photo	Order no.	Additional accessories see page
Filament lamp, BA 9s base (MBC/MCC), 24 - 30 V		1.90.060.133/0000	5 - 7
Neon lamp BA 9s (MBC/MCC), 220 V AC		1.90.560.102/0000	5 - 8
LED BA 9s (MBC/MCC) superbright, white, 24 V		1.90.690.345/0000	5 - 17
RAFIX 22 QR - Lamp socket, screw terminals, without coupling		5.00.070.074/0000	2 - 161
RAFIX 22 QR - Lamp socket, screw terminals, without coupling, minus switching		5.00.070.081/0000	2 - 161
RAFIX 22 QR - Lamp socket, screw terminals, without coupling, plus switching		5.00.070.082/0000	2 - 161
RAFIX 22 QR - LED unit, white LED, 24 V, without coupling		5.00.070.083/0200	2 - 165
Coupling with reference numbers 1-3-2, for contact blocks with single contacts		5.05.510.935/0000	2 - 169
Coupling with reference numbers 1/2-5/6-3/4, for contact blocks with double contacts		5.05.510.936/0000	2 - 169

RAFIX 22 QR - Contact block with gold contacts



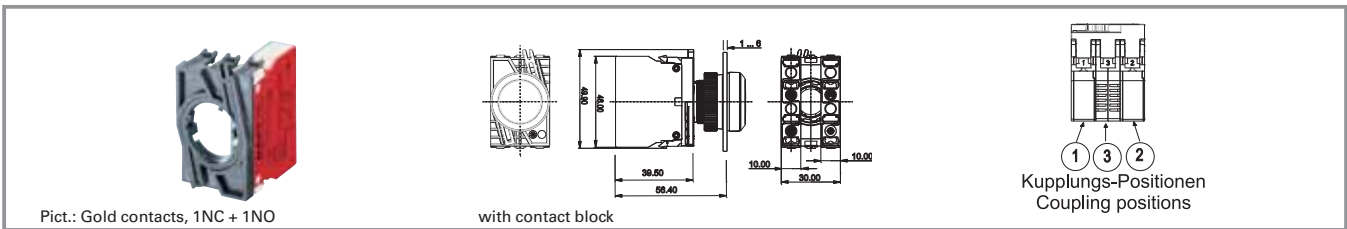
Terminals	Contact arrangement	Coupling position 1 (1/2)	Coupling position 3 (5/6), centre	Coupling position 2 (3/4)	Order no.
screw terminals	2 NC	-	-	-	5.00.100.161/0000
screw terminals	2 NO	-	-	-	5.00.100.162/0000
screw terminals	1 NC + 1 NO	-	-	-	5.00.100.163/0000
screw terminals	1 NC	-	-	-	5.00.100.164/0000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

Technical data see page 2 - 150

2

RAFIX 22 QR

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



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

Technical data see page 2 - 150

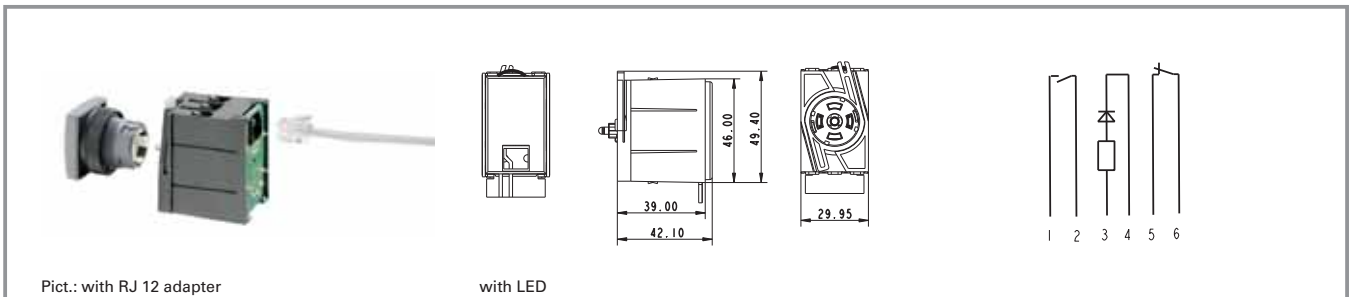
Contact arrangement example (1 NO = 1 normally open contact, 1 NC = 1 normally closed contact)

The centre coupling position 3 (5/6) is provided for the LED element resp. the lamp socket element. As an alternative you can use a third contact block here.

2

RAFIX
22 QR

RAFIX 22 QR - Contact blocks with gold contacts, RJ 12 connector, integrated LED



Pict.: with RJ 12 adapter

with LED

2

Technical Data

Dimensions

Dimensions with coupling 49.4 x 42.1 x 29.95 mm
Mounting depth 62 mm

Mechanical design

Mounting snap on actuator
Contact system bridge-contact self cleaning
Contact materials Au
Contact arrangement see order block
NC contact forcibly actuated acc. to IEC 60947-5-1 yes
Terminals RJ-12
Terminal marking RJ-12 plug
Mounting grid min. 30 x 50
Robustness 100 N

Other specifications

Operating life (operations) 1,000,000 (24 V DC 50 mA)
Switching reliability at 24V/5mA DC 10×10^{-6}
Ambient temp. operating min. -25 °C
Ambient temp. operating max. without lamp /LED +70 °C
Ambient temp. operating max. with lamp /LED +50 °C
Storage temperature min. -30 °C
Storage temperature max. +80 °C
Integrated LED see order block
LED colour see order block
Environmental resistance acc. to IEC 60068-2 -14, -30, -33 and -78

Electrical characteristics

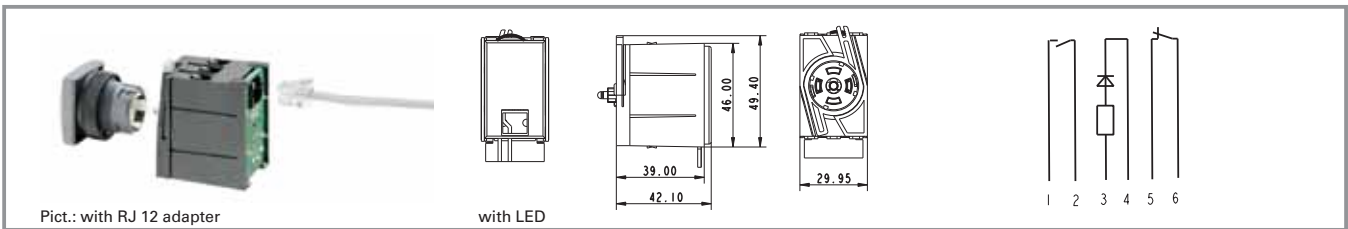
Operating voltage AC/DC 24 V
Operating current AC/DC 0.01 ... 50 mA

RAFIX 22 QR

Typical accessories RAFIX 22 QR - Contact blocks with gold contacts, RJ 12 connector, integrated LED

Description	Photo	Order no.	Additional accessories see page
RAFIX 22 QR - Contact module for CANopen bus		3.60.101.148/0000	2 - 167

RAFIX 22 QR - Contact block with gold contacts, RJ 12 connector, integrated LED

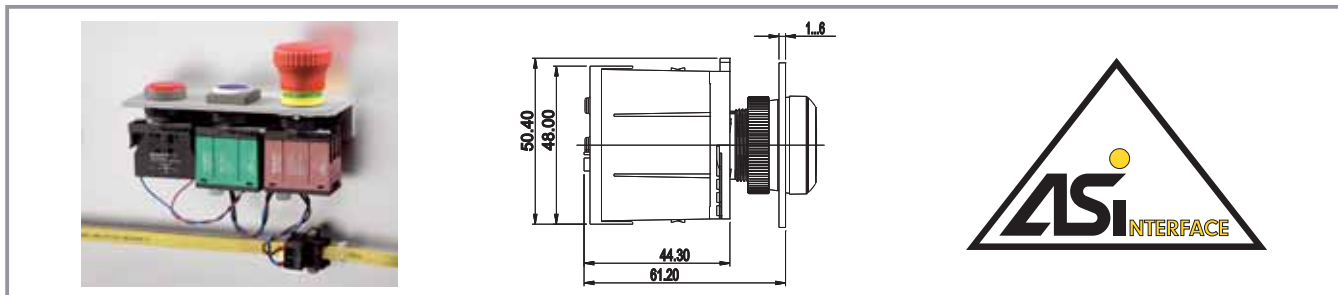


Contact arrangement	Operating voltage AC/DC	Integrated LED	LED colour	Order no.
1 NC	24 V	no	-	1.20.128.002/0000
1 NC	24 V	yes	white	1.20.128.012/0000
1 NC	24 V	yes	green	1.20.128.042/0000
1 NC + 1 NO	24 V	no	-	1.20.128.003/0000
1 NC + 1 NO	24 V	yes	white	1.20.128.013/0000
1 NC + 1 NO	24 V	yes	red	1.20.128.023/0000
1 NC	24 V	no	-	1.20.128.004/0000
1 NC	24 V	yes	white	1.20.128.014/0000
1 NC	24 V	yes	red	1.20.128.024/0000
1 NC	24 V	no	-	1.20.128.005/0000
1 NC	24 V	yes	white	1.20.128.015/0000
1 NC	24 V	yes	green	1.20.128.045/0000

Technical data see page 2 - 154

Other LED colours and contact arrangement versions available on request.

RAFIX 22 QR - Contact blocks AS-Interface, standard



2

General Data

The AS-Interface standard contact block is a slave with 2 input / 1 output lines for the AS-I fieldbus system. It is designed for the extended address range and meets the AS-I profile S-B.A.B.E (2 inputs / 2 outputs). Some versions offer an additional overload- and short-circuit-proof output for connection and control of an external LED or buzzer. Both outputs can reduce the rated current to 50%, 25% or 12.5%, so a dimming function can be realized. More information / detailed manual on request.

RAFIX
22 QR

Technical Data

Dimensions		Operating voltage	26.5 ... 31.6 V
Dimensions with coupling	50.4 x 50.5 x 29.95 mm	Rated current max.	30 mA
Mounting depth	68 mm	Deceleration time for readiness	1
Key grid	50 x 30 mm	AS-Interface IC	AS-I-SW
Mechanical design		AS-Interface specification	V3.0
Mounting	snap on coupling actuator	AS-Interface certificate	62901
Contact system	bridge-contact self cleaning	Other specifications	
Contact materials	Au	Operating life (operations)	1,000,000 (24 V DC 50 mA)
Contact arrangement	2 NO	Switching reliability	< 10 x 10 ⁻⁶ at 24 V/5 mA DC
Illumination	see order block	Approvals / CE	acc. to 89/336/EWG
Mounting position	variable	Operating temperature min.:	-25 °C
Terminals	supplied connector	Operating temperature max.:	70 °C
Contact function	momentary	Storage temperature min.:	-40 °C
2-pole digital output, 24 V/15 mA	yes	Storage temperature max.:	70 °C
Robustness	100 N	Resistance to constant environment:	IEC 60068-2-78
Coupling contact (S3)	no	Resistance to vibrations acc. to IEC 60068-2-6	10 g at 40...500 Hz
Electrical characteristics		Shock resistance acc. to IEC 60068-2-27	50 g at 11 ms amplitude, half sinusoidal
Rated voltage AC / DC	24 V		
Operating current AC/DC	1 .. 250 mA		
AS-I Schnittstelle			
AS-Interface profile	S-B.A.E		
Terminal code	yes		

Approvals

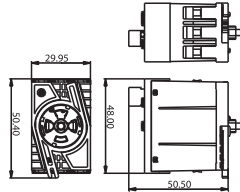


IEC 60947-5-x,
60904, 60073



62901

RAFIX 22 QR - Contact block AS-I, standard

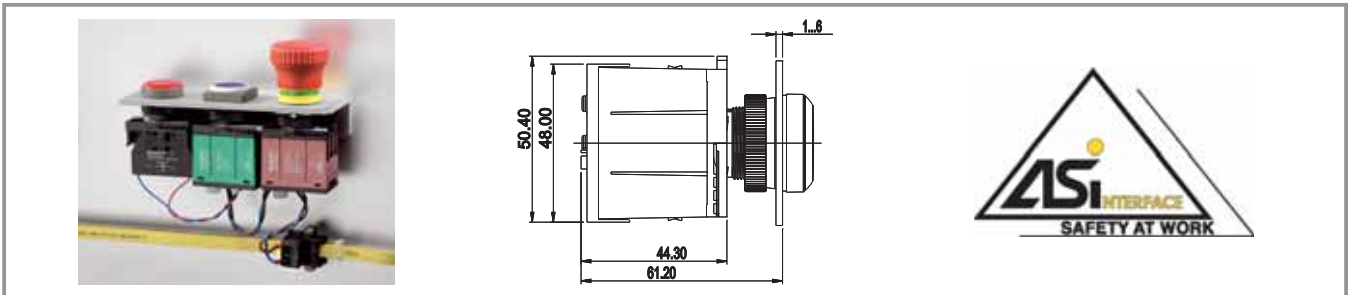


Contact arrangement	Illumination	Coupling contact (S3)	2-pole digital output, 24V / 15 mA	Order no.
2 NO	no	no	yes	1.20.129.101/0000
2 NO	1 LED red	no	yes	1.20.129.111/0000
2 NO	1 LED white	no	yes	1.20.129.121/0000
2 NO	1 LED yellow	no	yes	1.20.129.131/0000
2 NO	1 LED green	no	yes	1.20.129.141/0000
2 NO	1 LED blue	no	yes	1.20.129.151/0000

Technical data see page 2 - 156

Digital output: cable length max. 10 cm

RAFIX 22 QR - Contact blocks AS-Interface, E-stop, Safety at Work



2

General Data

The AS-Interface E-stop contact block is a slave for the AS-I fieldbus system. It is designed for the standard address range and meets the AS-I profile S-7.B.E (safety slave with max. 4 input / 4 output lines). Up to 30 of these contact blocks can be linked to one AS-I line, the 31st. member is a safety monitor. The four (safe) input lines are used for the safe transfer of the E-stop switching position signal. The (not safe) output line is used to control the lamp in the E-stop or for an external signal lamp (option).

The coupling contact is an additional safety feature. It supervises the coupling between E-stop actuator and contact block and informs the AS-I bus, when this connection is interrupted.

RAFIX
22 QR

Technical Data

Dimensions		Operating voltage	26.5 ... 31.6 V
Dimensions with coupling	50.4 x 50.5 x 29.95 mm	Rated current max.	< 50 mA (S-0.B.E.) / 60 mA (S-7.B.E.) mA
Mounting depth	68 mm	Deceleration time for readiness	1
Key grid	-	AS-Interface IC	A ² SI
Mechanical design		AS-Interface specification	V3.0
Mounting	snap on coupling actuator	AS-Interface certificate	63001, 63701
Contact system	bridge-contact self cleaning	Probability to failure acc. to IEC 61508	PFDTot: 2.2 x 10 ⁻⁴ , PFH/h: 2.5 x 10 ⁻⁹
Contact materials	Au	Other specifications	
Contact arrangement	2 NC	Operating life (operations)	1,000,000 (24 V DC 50 mA)
Illumination	see order block	Operating temperature min.:	-25 °C
Mounting position	variable	Operating temperature max.:	70 °C
Terminals	supplied connector	Storage temperature min.:	-40 °C
Contact function	momentary	Storage temperature max.:	70 °C
2-pole digital output, 24 V/15 mA	yes	Resistance to constant environment:	IEC 60068-2-78
Additional addressing plug	see order block	Resistance to vibrations acc. to IEC 60068-2-6	10 g at 40...500 Hz
Robustness	100 N	Shock resistance acc. to IEC 60068-2-27	50 g at 11 ms amplitude, half sinusoidal
Coupling contact (S3)	see order block		
Electrical characteristics			
Rated voltage AC / DC	24 V		
Operating current AC/DC	0.01 ... 50 mA		
AS-I Schnittstelle			
AS-Interface profile	S-0.B.E / S-7.B.E		
Terminal code	yes		

Approvals

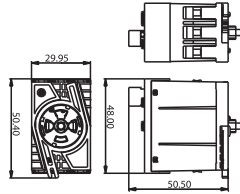


IEC 60947-5-x,
60904, 60073



63001, 63701

RAFIX 22 QR - Contact blocks AS-Interface, E-stop, Safety at Work



Contact arrangement	Illumination	Coupling contact (S3)	Additional addressing plug	Order no.
2NC	no	yes	yes	1.20.129.001/0000
2NC	no	no	no	1.20.129.002/0000
2NC	1 x LED red	yes	yes	1.20.129.011/0000

Technical data see page 2 - 158

2

RAFIX
22 QR

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



2

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
Diode and resistor	see order block
Terminals	see order block
Terminal marking	X1 = anode, X2 = cathode

Lamp characteristics

Lamp socket	BA 9 s
Operating voltage AC/DC	see order block
Lamp power max.	2 W
Lamp voltage	see order block sinusoidal

Other specifications

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
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 min.	-25 °C
Ambient temp. operating max.	+70 °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

RAFIX 22 QR

Approvals



IEC 61058



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Classification of Ships....Rules



Marine, offshore and industrial use



Type approval only valid for version with screw terminals

Typical accessories RAFIX 22 QR - Lamp sockets BA 9s (MBC/MCC)

Description	Photo	Order no.	Additional accessories see page
Filament lamp, BA 9s base (MBC/MCC), 12 - 15 V		1.90.060.132/0000	5 - 7
Filament lamp, BA 9s base (MBC/MCC), 24 - 30 V		1.90.060.133/0000	5 - 7

Typical accessories RAFIX 22 QR - Lamp sockets BA 9s (MBC/MCC)

Description	Photo	Order no.	Additional accessories see page
Filament lamp, BA 9s base (MBC/MCC), 110 - 130 V		1.90.060.137/0000	5 - 7
Neon lamp BA 9s (MBC/MCC), 220 V AC		1.90.560.102/0000	5 - 8
LED BA 9s (MBC/MCC) superbright, red, 24 V		1.90.690.341/0000	5 - 17
LED BA 9s (MBC/MCC) superbright, green, 24 V		1.90.690.342/0000	5 - 17
LED BA 9s (MBC/MCC) superbright, yellow, 24 V		1.90.690.343/0000	5 - 17
LED BA 9s (MBC/MCC) superbright, blue, 24 V		1.90.690.344/0000	5 - 17
LED BA 9s (MBC/MCC) superbright, white, 24 V		1.90.690.345/0000	5 - 17
Coupling with reference numbers 1-3-2, for contact blocks with single contacts		5.05.510.935/0000	2 - 169
Coupling with reference numbers 1/2-5/6-3/4, for contact blocks with double contacts		5.05.510.936/0000	2 - 169

2

RAFIX
22 QR

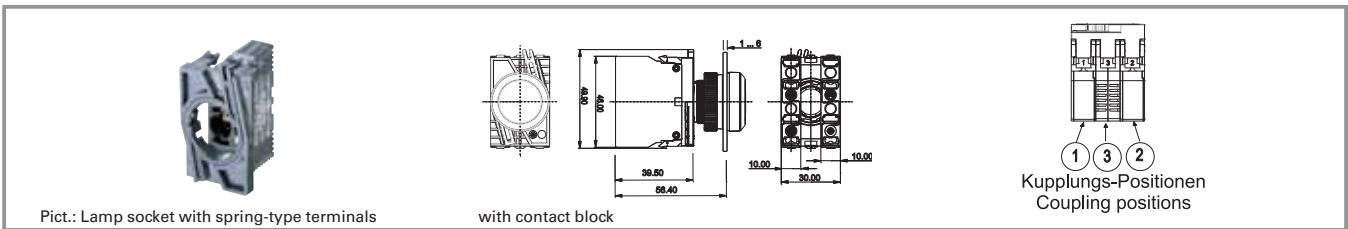
RAFIX 22 QR - Lamp socket BA 9s, without coupling



Terminals	Operating voltage AC/DC	Lamp voltage	Diode and resistor	Order no.
screw terminals	6 ... 250 V	6 ... 250 V	no	5.00.070.074/0000
screw terminals	minus switching 250 V	6 ... 250 V	no	5.00.070.081/0000
screw terminals	plus switching 250 V	6 ... 250 V	no	5.00.070.082/0000
screw terminals	250 V	130 V	yes	5.00.070.080/0000
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

Technical data see page 2 - 160

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



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
screw terminals	with diode and series resistor 250 V	130 V	yes	1.71.213.004/0000
spring type	6 ... 250 V	6 ... 250 V	no	1.71.214.001/0000

Technical data see page 2 - 160

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

2

RAFIX
22 QR

RAFIX 22 QR - LED unit



2

Technical Data

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

RAFIX 22 QR

Approvals



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Classification of Ships...Rules



Marine, offshore and industrial use



German Lloyds type approval

Typical accessories RAFX 22 QR - LED unit

Description	Photo	Order no.	Additional accessories see page
Coupling with reference numbers 1-3-2, for contact blocks with single contacts		5.05.510.935/0000	2 - 169
Coupling with reference numbers 1/2-5/6-3/4, for contact blocks with double contacts		5.05.510.936/0000	2 - 169

RAFIX 22 QR - LED unit, without coupling



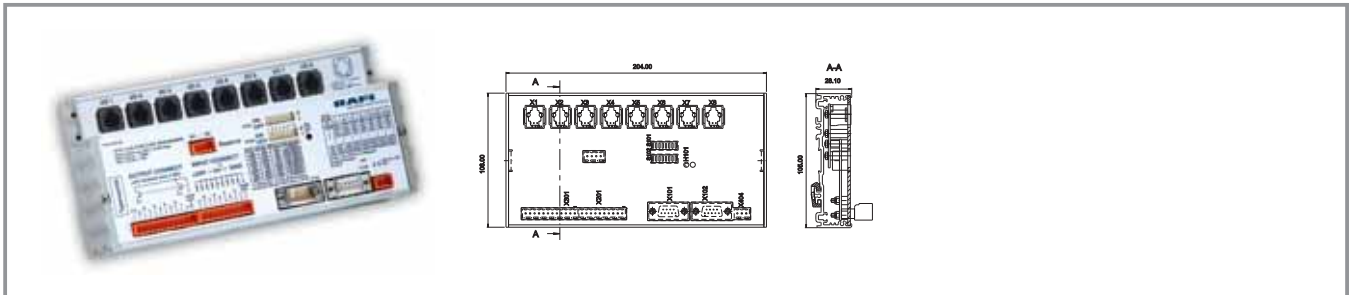
Terminals	LED colour	Max. current, I _F	Operating voltage	Order no.
screw terminals	white	15 mA	AC/DC 24 V	5.00.070.083/0200
screw terminals	red	15 mA	AC/DC 24 V	5.00.070.083/0300
screw terminals	yellow	15 mA	AC/DC 24 V	5.00.070.083/0400
screw terminals	green	15 mA	AC/DC 24 V	5.00.070.083/0500
screw terminals	blue	15 mA	AC/DC 24 V	5.00.070.083/0600
screw terminals	white	16 mA	AC 115 V	5.00.070.085/0200
screw terminals	red	16 mA	AC 115 V	5.00.070.085/0300
screw terminals	yellow	16 mA	AC 115 V	5.00.070.085/0400
screw terminals	green	16 mA	AC 115 V	5.00.070.085/0500
screw terminals	blue	16 mA	AC 115 V	5.00.070.085/0600
screw terminals	white	16 mA	AC 230 V	5.00.070.086/0200
screw terminals	red	16 mA	AC 230 V	5.00.070.086/0300
screw terminals	yellow	16 mA	AC 230 V	5.00.070.086/0400
screw terminals	green	16 mA	AC 230 V	5.00.070.086/0500
screw terminals	blue	16 mA	AC 230 V	5.00.070.086/0600

Technical data see page 2 - 164

2

RAFIX
22 QR

RAFIX 22 QR - Contact module for field buses



2

General Data

Highly flexible bus gateway for structured connection of RAFIX control components. The RAFIX contact blocks with RJ 12 connectors can be plugged directly into the eight RJ 12 female connectors. In addition, you can connect further control components or other sensors or actuators via a male quick connector, e.g. limit switches or proximity switches, solenoid valves or luminous elements. The bus parameters can be set directly on the module to facilitate quick and easy start-up.

RAFIX
22 QR

Technical Data

Dimensions

Length	204 mm
Width	106 mm
Height	28 mm

Electrical characteristics

Bus interface	see order block
Rated voltage DC	24 V +/-20%
Rated power max.	10

Mechanical design

Mounting	quick mounting on rails or back panels
Terminals	8 x RJ 12 e.g. for RAFIX 22 QR contact block
Digital inputs 24 V, electrically isolated	9
Digital outputs 24 V, 500 mA	see order block

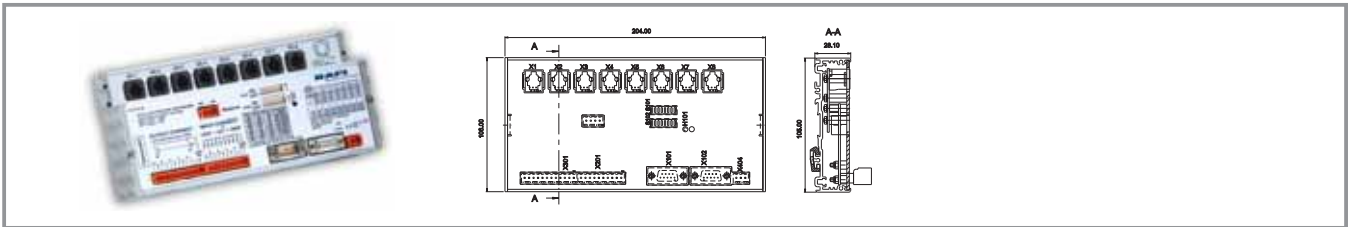
Other specifications

Degree of protection	IP 20
Operation temperature min.	-10 °C
Operation temperature max.	+60 °C
Storage temperature min.	-25 °C
Storage temperature max.	+60 °C

Typical accessories RAFIX 22 QR - Contact module for field buses

Description	Photo	Order no.	Additional accessories see page
LUMOTAST FK - Pushbutton with flush lens, square collar, housing		1.15.114.906/0000	1 - 13
RAFIX 22 QR - Contact block with coupling, gold RAFIX 22 QR - Contacts, RJ 12 connector, 1 NO, without LED		1.20.128.002/0000	2 - 155
RAFIX 22 QR - Contact block with coupling, gold RAFIX 22 QR - Contacts, RJ 12 connector, 1 NO, white LED		1.20.128.012/0000	2 - 155
RAFIX 16 - Pushbutton, illuminated, flush lens, square collar		1.30.070.001/1002	2 - 10

RAFIX 22 QR - Contact module



Bus interface	Digital inputs 24 V, electrically isolated	Digital outputs 24 V, 500 mA	Order no.
CANopen	9	9	3.60.101.148/0000

Technical data see page 2 - 166

2

RAFIX
22 QR

RAFIX 22 QR - Special accessories



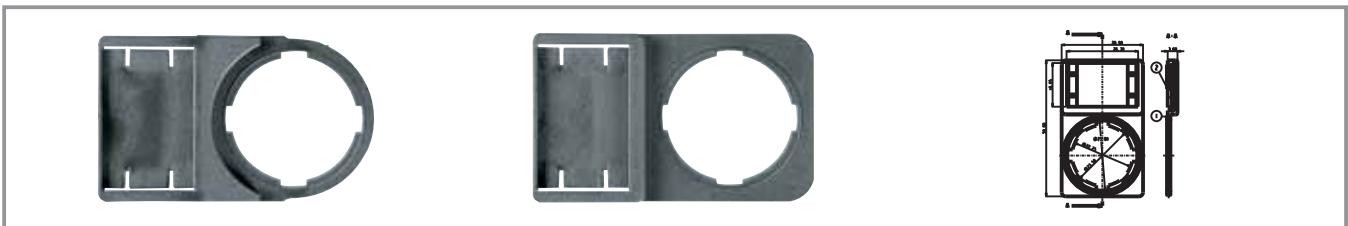
2

Typical accessories RAFIX 22 QR - Special accessories

Description	Photo	Order no.	Additional accessories see page
Fixing spanner for ring nut and front ring		5.05.800.062/0000	5 - 21

RAFIX
22 QR

Label holder



Short text	Feature 1	Feature 2	Order no.
Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm	-	-	5.07.620.010/0000
Label holder, square collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm	-	-	5.07.620.011/0000

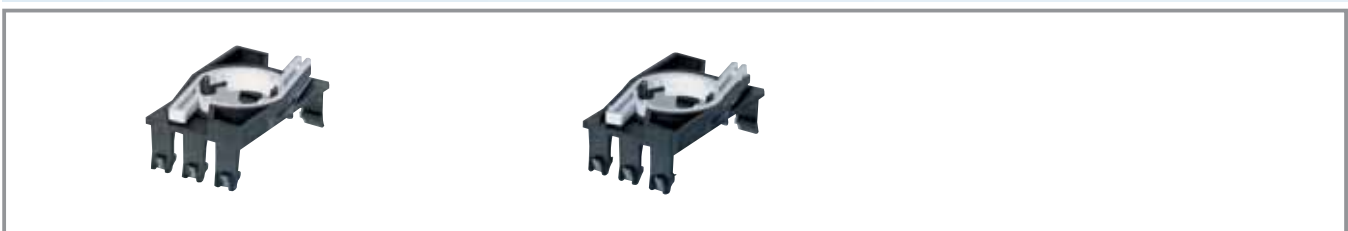
Legend label to clip into label holder 5.07.620.xxx



Short text	Feature 1	Feature 2	Order no.
Label for label holder, without legend, 16 x 28 x 0,9 mm	-	-	5.73.110.000/0000
Label for label holder, legend „EIN“	-	-	5.73.110.004/0000
Label for label holder, legend „AUS“	-	-	5.73.110.005/0000
Label for label holder, legend „HAND AUTO“	-	-	5.73.110.021/0000
Label for label holder, legend „AUTO HAND“	-	-	5.73.110.022/0000
Label for label holder, legend „HAND 0 AUTO“	-	-	5.73.110.023/0000
Label for label holder, legend „0 I“	-	-	5.73.110.026/0000
Label for label holder, legend „I 0 II“	-	-	5.73.110.027/0000
Label for label holder, legend „EIN AUS“	-	-	5.73.110.028/0000
Label for label holder, legend „AUS EIN“	-	-	5.73.110.029/0000

Legending available on request.

Coupling



Short text	Feature 1	Feature 2	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

2

RAFIX
22 QR

Blanking cap



Pict.: square

Panel cut-out to IEC 60947-5-1

Short text	Feature 1	Feature 2	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

2

Protective cover, suitable for pushbuttons with flush lens



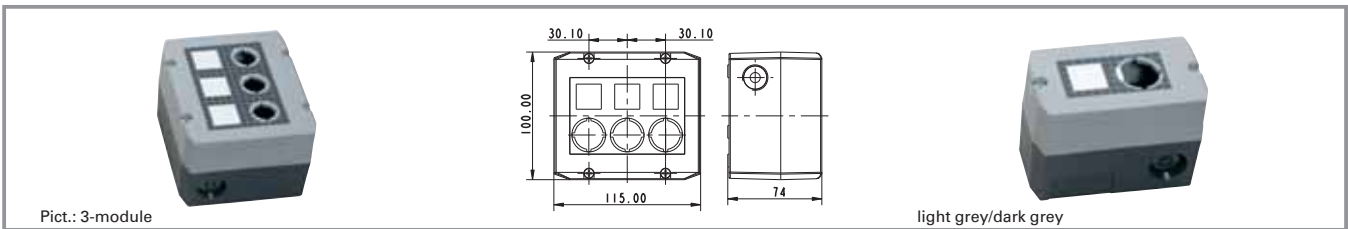
Pict.: Protective cover

Protective cover, mounted

Short text	Feature 1	Feature 2	Order no.
Protective cover, latching	-	-	5.05.511.195/0000
Protective cover, auto-closing	-	-	5.05.511.194/0000

RAFIX
22 QR

RAFIX 22 QR - Insulating housing IP65, Ø 22.3 mm



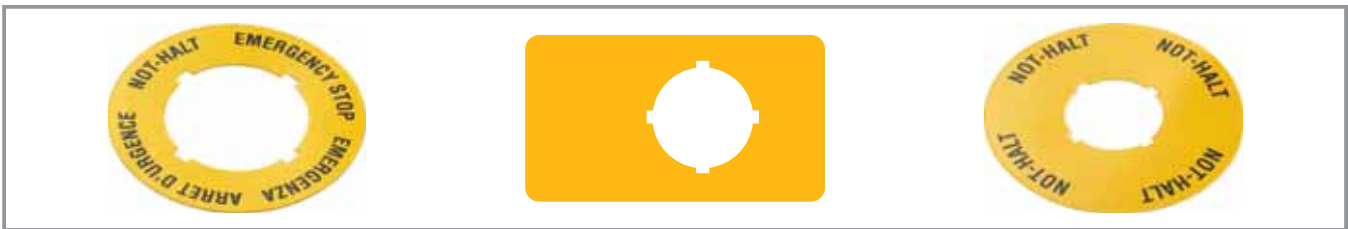
Short text	Feature 1	Feature 2	Order no.
RAFIX - Insulating housing, Ø 22.3 mm, IP65, 1-module, light grey/dark grey	100 mm	55 mm	1.20.810.201/0000
RAFIX - Insulating housing, Ø 22.3 mm, IP65, 1-module, yellow/yellow	100 mm	55 mm	1.20.810.202/0000
RAFIX - Insulating housing, Ø 22.3 mm, IP65, 2-module, light grey/dark grey	100 mm	115 mm	1.20.820.201/0000
RAFIX - Insulating housing, Ø 22.3 mm, IP65, 3-module, light grey/dark grey	100 mm	115 mm	1.20.830.201/0000
RAFIX - Insulating housing, Ø 22.3 mm, IP65, 4-module, light grey/dark grey	100 mm	145 mm	1.20.840.201/0000

Accessoires:

Label sheet for housings: 5.40.451.283/0000

- Attractive 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
- 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 for printing with a PC printer

Emergency stop label, Ø 22.3 mm



2

RAFIX
22 QR

Short text	Feature 1 Ø outward	Feature 2 Ø inward	Order no.
Emergency stop label, yellow, round 60 mm, rigid PVC, with legend „Not-Aus“	60 mm	22.3 mm	5.76.207.001/0400
Emergency stop label, yellow, round 60 mm, rigid PVC, with legend „EMERGENCY-STOP/ARRET D'URGENCE“	60 mm	22.3 mm	5.76.207.002/0400
Adhesive label yellow, round 22.3 / 60 mm, without legend	60 mm	22.3 mm	5.76.204.100/0400
Adhesive label yellow, round 22.3 / 60 mm, with legend 1 x „Not-Aus“	60 mm	22.3 mm	5.76.204.101/0400
Adhesive label yellow, round 22.3 / 60 mm, with legend 1 x „ARRET D'URGENCE“	60 mm	22.3 mm	5.76.204.102/0400
Adhesive label yellow, round 22.3 / 60 mm, with legend 1 x „EMERGENCY-STOP“	60 mm	22.3 mm	5.76.204.103/0400
Emergency stop label, yellow rectangular 36 x 64 mm, without legend	36 x 64 mm	22.3 mm	5.76.205.011/0400
Adhesive label yellow, round 22.3 / 60 mm, with legend „NOT-HALT, EMERGENCY STOP, ARRET D'URGENCE, EMERGENZA“	60 mm	22.3 mm	5.76.204.107/0400
Adhesive label yellow, round 22.3 / 60 mm, with legend 4 x „NOT-HALT“	60 mm	22.3 mm	5.76.204.109/0400
Adhesive label yellow, round 22.3 / 60 mm, with legend 4 x „NOT-AUS“	60 mm	22.3 mm	5.76.204.111/0400
Adhesive label yellow, round 22.3 / 60 mm, with legend 4 x „EMERGENCY STOP“	60 mm	22.3 mm	5.76.204.113/0400
Adhesive label yellow, round 22.3 / 40 mm, with legend „NOT-HALT, EMERGENCY STOP, ARRET D'URGENCE, EMERGENZA“	40 mm	22.3 mm	5.76.204.115/0400
Adhesive label yellow, round 22.3 / 40 mm, with legend 4 x „NOT-HALT“	40 mm	22.3 mm	5.76.204.117/0400
Adhesive label yellow, round 22.3 / 40 mm, with legend 4 x „NOT-AUS“	40 mm	22.3 mm	5.76.204.119/0400
Adhesive label yellow, round 22.3 / 40 mm, with legend 4 x „EMERGENCY STOP“	40 mm	22.3 mm	5.76.204.121/0400

Degree of protection: Rigid PVC: IP40, adhesive foil: IP65

Accessories AS-i - Bus



Short text	Feature 1	Feature 2	Order no.
Female connector with cover, 10 pieces	-	-	5.30.159.158/0000
Crimping tool	-	-	5.55.104.656/0000
Stranded wire, 2 x 1.0 mm ² , 50 m	-	-	5.03.772.620/0002
2-pole stranded wire with crimped connector	-	-	5.03.772.619/0002

2

RAFIX
22 QR