



**GET IN
TOUCH**

**WITH OUR
COMPONENTS**

Electromechanical Components

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WHO WE ARE

RAFI is one of the world's leading suppliers of efficient solutions for human-machine communication – for over 100 years now. With about 2,000 employees, the RAFI Group is characterised by independence, healthy growth and profitability. Our long-standing customer relationships are based on our internationally superior performance, quality and cross-industry experience. When developing complex solutions, we place great emphasis on involving the customer in the process – from the very start. This helps to build customer satisfaction as well as very stable relationships.

RAFI products are also very impressive in terms of their quality and sustainability. Their quality is dictated by the customers' needs and requirements. Legal regulations can also play a role, along with the

current state of the art. Economical use of natural resources is an important aspect of the RAFI corporate philosophy. The company's environmental management system is certified according to ISO 14001.

Subsidiaries and locations

The company originally founded in 1900 by Ernst Bucher in Ravensburg, Germany as "Optisches, mechanisches und elektrotechnisches Institut" has evolved to become today's RAFI Group with subsidiaries in China, France, Italy, Hungary and the USA. Thanks to its own in-house sales staff and field service as well as a dense worldwide network of dealers and distributors, RAFI is extremely flexible and can always be reached by its customers.

RAFI Electronics

WHAT WE DO

As a business, we hold a solid position in the market for electromechanical components, complete control systems as well as electronic assemblies and devices.

From buttons, switches, signal lamps, PCB keyswitches and short-travel keyswitches to control and signalling units, all of our products stand out for their reliability and long operating life. We deliver solutions that meet your needs, and if you cannot use a standard product, we will custom-manufacture a product to fulfil your specific requirements.

Moreover, we are known as pioneers in the world of industrial touch data entry systems, providing clever solutions with just the right effect – RAFI is always one step ahead. Let us help you to obtain efficient and cost-effective production of your goods.



RAFI Berg/Ravensburg

Certifications:

DIN EN ISO 9001: 2008
DIN EN ISO 9001: 2008 with Road Traffic Regulations,
EN ISO 13485: 2003
ISO /TS 16949: 2009,
DIN EN ISO: 2004 + Cor 1: 2009



CONTROL SYSTEMS: This is the classic application for our components: short-travel keyswitches below an overlay or RAFIX control components and emergency stop buttons for control and safety functions. Also available as an additional input element for touchscreen units.



CONSUMER GOODS: Our components turn up in countless everyday consumer goods – and not just in washing machines. In most cases, they are customer-specific developments or standard components that have been transformed in some way.



AUTOMOTIVE INDUSTRY: Controls for inside of vehicles are our speciality, involving steering wheels, consoles, door handles as well as remote control systems. Example: A typical overhead control panel contains up to 20 MICON short-travel keyswitches, working together to give the vehicle a highly exclusive brand feeling.

While the contact that is made might only last for seconds and be barely perceptible, its effect is usually far greater.

Whenever someone presses a key, flips a switch or operates a joystick, a reaction is triggered, causing something to happen. Since people usually do not give these fleeting moments a second thought, many of our products go unnoticed in everyday life.

Upon closer examination, however, it is clear that RAFI products are used day after day in all sorts of modern consumer goods in a wide range of situations. From pushbuttons, signal lamps, keylock switches, signalling units and PCB keyswitches to short- and full-travel keyswitches, we have prepared an overview of the various core industries where our products are commonly used.

INDUSTRIES

ELEVATOR AND TRANSPORT SYSTEMS: We supply elevator, cabin and display panels to elevator manufacturers for all types of buildings, including optional digital printing with custom designs for any location. Vandal-proof buttons are used, just in case ...



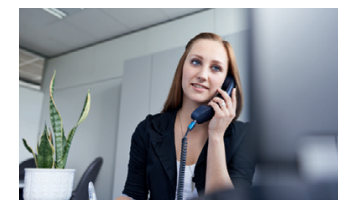
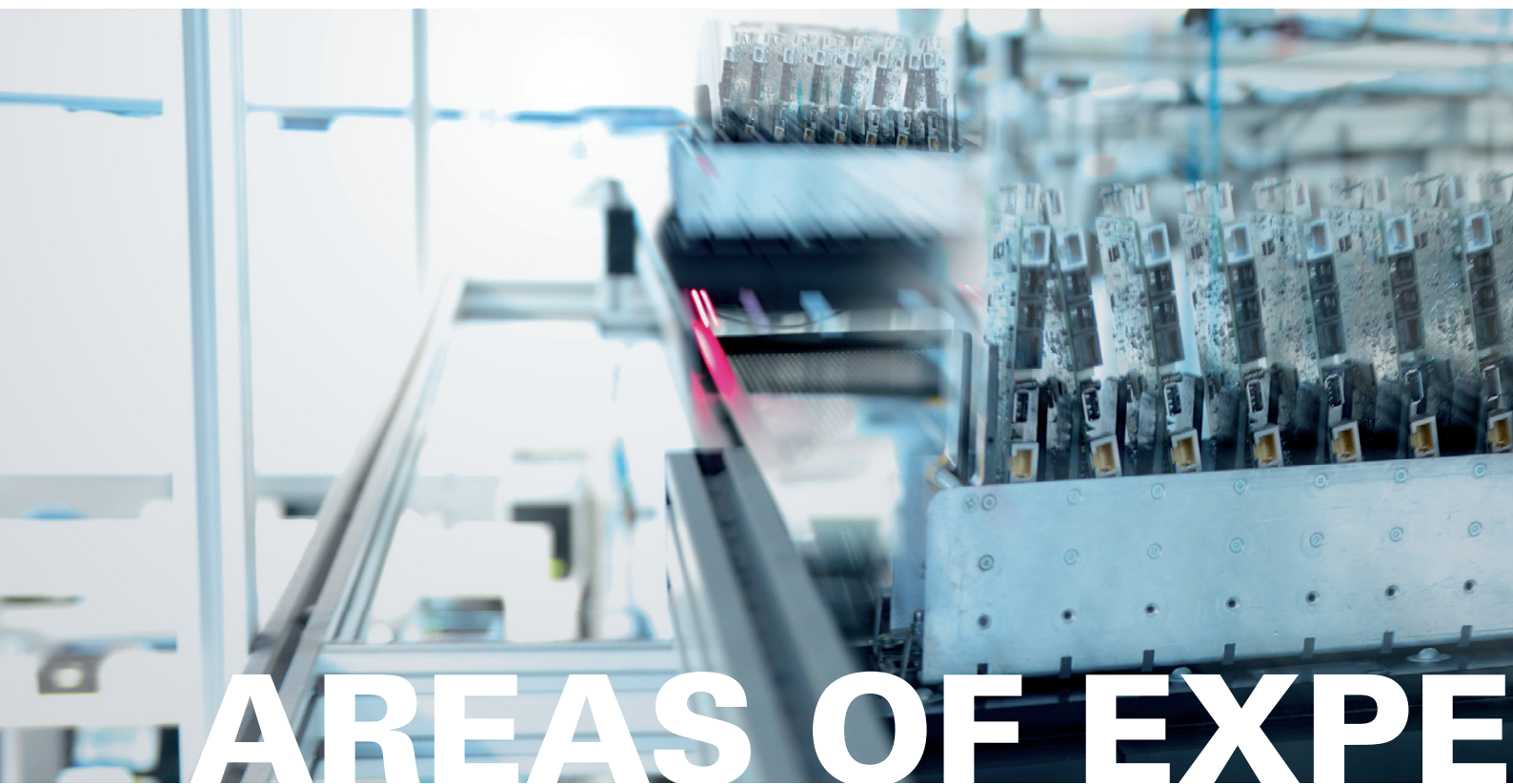
SPECIAL MECHANICAL ENGINEERING: The RG 85 button system was originally developed for vending machines and elevators. Nowadays, coffee machines are controlled using capacitive switches and systems, with intuitive operation and guaranteed hygiene being critical features. Of course, it is all made by RAFI.



TELECOMMUNICATIONS: We rank among the ten largest providers of electronic manufacturing services in Germany. Our customers include the market leader for broadband terminal equipment and smart home products. Any RAFI customer who relies on electronic circuitry will benefit from our advanced expertise.



CLEARLY THE RIGHT SOLUTION FOR YOUR APPLICATION



SALES: We like to keep the focus on our customers. We will work together with you from the start to develop the best solution to meet your needs. Our industry-oriented sales structure reflects our consistent customer focus around the globe.

Within our sales divisions, different industries are handled by independent teams under the leadership of key account managers. This highly targeted approach ensures that our customers receive optimum care and support. We speak your language.



PRODUCTION: From contact technology, plastic injection moulding, sheet metal machining, printing technology and mechanics all the way to electronics, we have a broad spectrum of production capabilities – subject to clearly defined quality standards and optimum cost-effectiveness.



DEVELOPMENT: Ranging from development to product realization and series production, we possess development expertise covering the entire production process. This includes development of mechanics, electronics, and software.

All of this is based on state-of-the-art technologies and simulation tools as well as highly efficient processes. Our development teams accompany products from the initial idea to series-production readiness, ensuring top quality along with comprehensive after-sales service.

MATERIALS MANAGEMENT: Our materials management covers everything from purchasing and order processing to logistics. Purchasing is divided into strategic and operational areas to ensure we remain competitive in the international marketplace. Order processing aims to achieve the optimum balance between cost-effectiveness and availability.



AN INTEGRATED SUPPLY CHAIN WITH CAREFULLY TAILORED CONCEPTS.

PRODUCT OVERVIEW

ELECTROMECHANICAL COMPONENTS

PUSHBUTTONS



**LUMOTAST
FK**



**LUMOTAST
25**



**LUMOTAST
75**



**Keylock
switches**









**Other
pushbuttons**



**RAFIX 16/
RAFIX 16 F**

	LUMOTAST FK	LUMOTAST 25	LUMOTAST 75	Keylock switches	Other pushbuttons	RAFIX 16/ RAFIX 16 F
Panel cut-out	Ø 16.2 mm	Ø 16.2 mm	Ø 16.2 mm	Ø 16.2 mm	Ø 9.1/20.3 mm	Ø 16.2 mm □ 23.1 mm Ø 22.3 mm
Contacts	1 NO	1 NO	1 NC + 1 NO 2 NC + 2 NO	1 to 4 NO	1 NC, 1 NO, 1 NC + 1 NO, 2 NO	1 NC, 1 NO, 1 NC + 1 NO, 2 NC, 2 NO
Contact material	Au	Au	Ag	Au	Ag	Ag / Au
Voltage max./min.	35 V / 0.02 V	35 V / 0.02 V	250 V	35 V	250 V / 0.02 V	250 V / 0.02 V
Current max./min.	100 mA / 0.1 mA	100 mA / 0.1 mA	4 A	100 mA	16 A / 0.1 mA	6 A / 1 mA
Current max./min.	Ribbon cable with connector, PCB plug-in socket	Ribbon cable with connector, PCB plug-in socket	Solder	PCB	Solder, screw, quick connect	Quick-connect, screw, PCB, plug-in socket
Degree of protection	IP 65	IP 65	IP 40 / 65	IP 65	IP 40	IP 65
Terminals	Bi-Pin T1 / T1 1¼	Bi-Pin T1 / T1 1¼	T 4.5	-	BA 9s	W 2 x 4.6d
Lamp socket	Filament lamp, LED	Filament lamp, LED	Filament lamp, LED	-	Filament lamp, LED	Filament lamp, LED
Collar shape	□□□	□	○□□	○□	○	○□
Variants	Illuminated pushbutton, signal lamp	Illuminated pushbutton, EMERGENCY STOP button, keylock switch, selector switch, signal lamp	Illuminated pushbutton, signal lamp, keylock switch	Keylock switch, priority keylock switch	Pushbutton, illuminated pushbutton	Pushbutton, stop button, EMERGENCY STOP button, keylock switch, selector switch, toggle switch, potentiometer drive, signal-lamp unit, signal indicator

CONTROL COMPONENTS				SIGNAL LAMPS	
					
RAFIX 22 FS+	RAFIX 22 FSR	RAFIX 30 FS+	RAFIX 22 QR	Integrated LED	Integrated neon lamp
Ø 22.3 mm	Ø 22.3 mm	Ø 30.5 mm	Ø 22.3 mm	Ø 5–30 mm	Ø 7–14 mm
1 NC, 1 NO, 1 NC + 1 NO, 2 NC, 2 NO	1 NC, 1 NO, 1 NC + 1 NO, 2 NC, 2 NO	1 NC, 1 NO, 1 NC + 1 NO, 2 NC, 2 NO	1 NC, 1 NO, up to 6 NC, 6 NO	–	–
Ag / Au	Ag / Au	Ag / Au	Ag / Au	–	–
250 V / 0.02 V	250 V / 0.02 V	250 V / 0.02 V	500 V / 0.02 V	28 V	230 V
4 A / 1 mA	4 A / 1 mA	4 A / 1 mA	10 A / 1 mA	0.25 – 1 W	–
PCB, quick-connect (QC)	PCB, quick-connect (QC)	PCB, quick-connect (QC)	Screw, cage clamp, quick-connect	Solder, quick-connect	Solder, quick-connect
IP 65	IP 65 / 69 K	IP 65	IP 65	IP 40	IP 40
–	–	–	BA 9s	None	None
LED, clip	LED, clip	LED, clip	Filament lamp, neon lamp, LED	LED	Neon lamp
□	○	○	□	△	□ ↑
Pushbutton, EMERGENCY STOP button, signal indicator, keylock switch, selector switch, potentiometer drive, USB feed- through	Pushbutton, EMERGENCY STOP button, signal indicator, keylock switch, selector switch, USB feedthrough	Pushbutton, signal indicator, keylock switch, selector switch, USB feed- through	Pushbutton, mushroom actuator, EMERGENCY STOP button, twin push- button, signal indica- tor, keylock switch, selector switch, potentiometer drive, signalling unit		


PRODUCT OVERVIEW

ELECTROMECHANICAL COMPONENTS

SHORT-TRAVEL KEYSWITCHES

**MICON 5****RACON 8****RACON 12****RF 15/15 H****RF 15 R****RF 15 N**

Grid min.	6 x 8 mm	12 mm	15,24 mm	19,05 mm	15,24 mm	15,24 mm
Overall height, min.	3.85 mm, variable	5 mm, variable	5 mm, variable	9.7 / 12.5 mm	9.7 / 12.5 mm	6.2 mm, variable
Contacts	1 NO	1 NO	1 NO	1 NO	1 NO	1 NO
Contact material	Au	Au	Au	Ag / Au	Ag / Au	Ag / Au
Rated voltage	0.02...35 V	0.02...35 V	0.02...35 V	0.02...50 V	0.02...50 V	0.02...50 V
Rated current	0,01...100 mA	0,01...100 mA	0,01...100 mA	0,01...250 mA	0,01...250 mA	0,01...250 mA
Operating travel	0.7 ... 1.1 mm	0.34 mm	0.61 mm	0.5 mm	0.5 mm	0.5 mm
Operating force	3.0 ... 8.0 N	3.3 ... 6.3 N	3.6 ... 9.7 N	2 - 3 N	2 - 3 N	2 - 3 N
Terminals	PCB SMT & THT	PCB SMT & THT	PCB SMT & THT	PCB THT	PCB THT	PCB THT
Illumination	Separate LED	separate LED	separate LED	Full / spot	Full / spot	Full / spot
Operating life min.	250,000 / 1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Special features	Variable height by use of plungers, different operating forces	Variable height by use of plungers, different operating forces	Variable height by use of plungers, 90° vertical adapter, different operating forces	Variable height by use of plungers, 1-module indicator field		Variable height by use of plungers

				FULL-TRAVEL KEYSWITCHES		KEYLOCK SWITCHES
						
RF 19/19 H	KN 19	RK 90/II	RG 85 III	RS 76 M	RS 76 C	Keylock switches
23 mm	19,05 x 38,1 mm	12,5 / 19,05 mm	35 mm	19.05 mm	19.05 mm	19.05 mm
9.7 / 12.5 mm	9.7 mm		12.08 mm	15.5 mm	15.5 mm	40 mm
1 NO	1 NC + 1 NO/ 2 NC / 2 NO		1 NO	1 NO	1 NO	1 NO – 4 NO
Ag / Au	Ag		Ag	Au	Contactless	Au
0.02...50 V	12...250 V		3...50 V	2...35 V	4.75...5.25 V	2...35 V
0,01...250 mA	6 A		0,1...250 mA	0.01...100 mA	–	0.01...100 mA
0.5 mm	0.5 mm		1 mm	4 mm	4 mm	1...4 x 90° rotating angle
2 - 3 N	9 ± 3 N		3.5 - 4.5 N	0.9...1.4 N	0.7...1 N	–
PCB THT	PCB THT		8-pin Micro Match connector	PCB THT	PCB THT	PCB THT
Full / spot	Spot	Full	Edge and symbol	Full / spot	Spotl	–
1,000,000	50,000 – 200,000		1,000,000	10,000,000	100,000,000	10,000
Indicator fields 1/2-, 1- and 2-module	Mains switch under overlay or keycaps	Plastic or alumi- nium surface, compatible with MICON, RACON, RF and KN 19	Vandal-proof	Fully illumina- ble keycaps (RS 76 MX)	Very soft stroke, ext- remely long operating life	Degree of protection IP 54, priority keylock switch

NEW PRODUCTS IN THE CATALOGUE

ELECTROMECHANICAL COMPONENTS



GET IN TOUCH NEW PRODUCTS

NEW PRODUCTS IN THE CATALOGUE

ELECTROMECHANICAL COMPONENTS



LUMOTAST 22

E-Stop pushbuttons, 22.3 mm

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RAFIX 22 FS+

Pushbuttons FLEXLAB

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RAFIX 22 FS+

Keylock switches compact

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RAFIX 22 FS+

Emergency stop pushbuttons compact

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RAFIX 22 FSR

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RAFIX 22 FSR

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RAFIX 22 FSR

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RAFIX 22 FSR

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RAFIX 30 FS+

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RAFIX 30 FS+

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RAFIX 30 FS+

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RAFIX 30 FS+

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RAFIX 30 FS+

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RAFIX FS

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MICON 5

Plungers round, ring illumination

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MICON 5

Plungers square, spot-illumination

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HOW TO USE THE CATALOGUE

ELECTROMECHANICAL COMPONENTS

Latest online version as the basis for your order

Since this catalogue is published in paper format only at certain intervals, it is not as up-to-date as our website. For this reason, we recommend using the datasheets on our website when ordering standard products.

You can always find the latest information on our products here: <http://www.shop.rafi.de>

Creation of individual datasheets in PDF format

You can create PDF datasheets in our online catalogue at <http://www.shop.rafi.de>. Find the product you want using the search tool or by entering the order number and then click on the "Create datasheet" link.

3D data and 2D drawings

For many of our products, we can provide 3D models in the *.stp file format. For older products, we usually still have dimensional drawings in dxf format. This data can be found in our online catalogue where the individual products are specified: <http://www.shop.rafi.de>

Correction sheets for the printed catalogue

We provide correction sheets on our home page if we discover errors after the catalogue has been printed. Alternatively, you can download the individual (corrected) chapters of this catalogue in PDF format at [x/Downloads](#).

Availability

We always strive to satisfy the needs of our customers. However, it is necessary to mention that our production is contingent on the availability and delivery of the appropriate base materials. Such issues, in addition to changing legislation, can result in modification or discontinuation of our products.

Specifications

The specifications, depictions and other information about our products are merely the results of individual technical inspections. The conditions are derived from the pertinent standards. These inspections should be considered to be independent of one another and they cannot be used to infer possible interactions, especially also in terms of the applicable usage category, installation situation and/or environmental conditions. If you need an evaluation of your application, we will be happy to prepare an offer on request.

Subject to change

We, the RAFI Group, reserve the right to deviate from the specifications in this catalogue, especially in terms of the technical and exterior designs, colours and materials from which the products are manufactured. Excluded from this provision are the basic core functions of our products, on which our customers rely.

Information about our products (e.g. weights, dimensions, practical values, capacity, tolerances and specifications) as well as the depictions (e.g. drawings, CAD data and figures), both in printed and in electronic format, is authoritative only as an approximation unless usability for the express and contractually stipulated purpose requires precise conformity. Such information and depictions do not represent guaranteed quality features but are non-binding descriptions or indicators of the product characteristics. Deviations which are customary in the trade and deviations which are required by law or represent technical improvements, as well as the substitution of components with equivalent parts (form/fit/function), are permissible insofar as they do not impair the usability for the express and contractually stipulated purpose. This applies in particular to spare parts and subsequent orders.

RoHS conformity



The products in this catalogue are RoHS-compliant (RoHS = Restriction of Hazardous Substances).

The components are qualified for lead-free soldering processes. See the glossary for more details.

Terms and conditions

Our current terms and conditions (sales) can be found at [x/AGBs](#).



2

RAFIX
22 QR

RAFIX 22 QR

RAFIX 22 QR control component range

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

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

CONTROL COMPONENTS

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RAFIX
22 QR

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CONTROL COMPONENTS

RAFIX 22 QR

Control Components RAFIX 22 QR



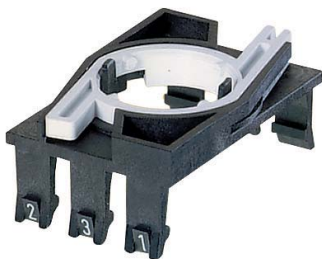
Contact blocks marked with different colors for ease of identification in stock and when connecting.

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

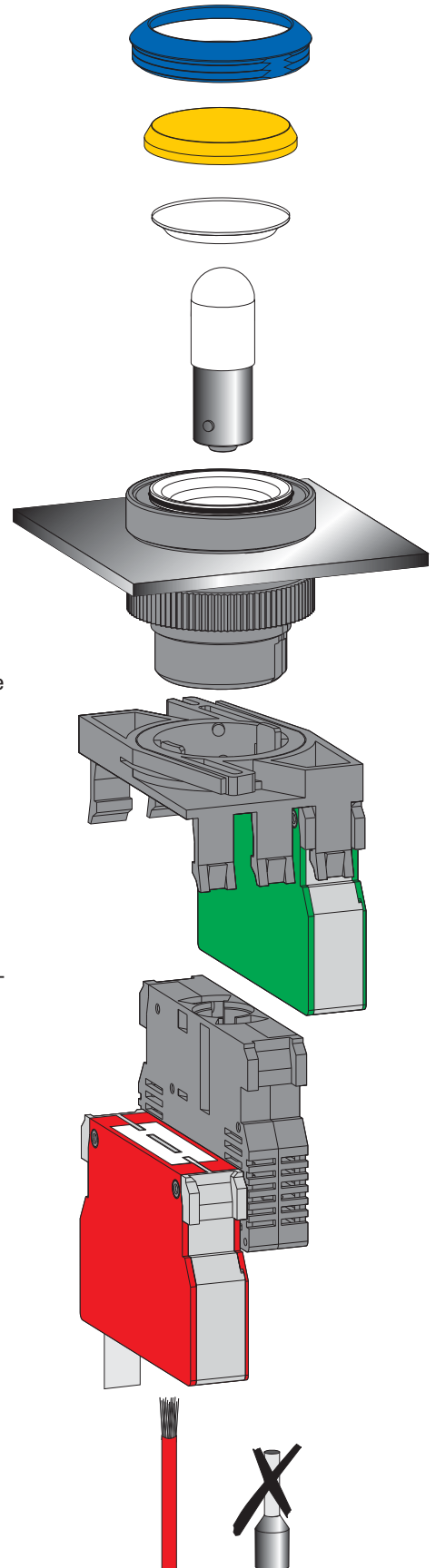
The lamps of pushbuttons and signal lamps can be replaced from the front. This method saves time and increases safety since it eliminates the need for accessing the machine/control station interior and handling live cables for lamp replacement. After unscrewing the front ring, the lens can be removed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



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



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



2

RAFIX
22 QR

Terminals

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

- **Screw terminals**

The terminals are open and the captive screws are mounted in the terminal recess.

- **Quick connect/solder terminals 6.3 x 0.8 mm**

- **Spring-type terminals**

Simply insert a screwdriver to open the terminal, insert the cable and remove the screwdriver to close the terminal.

Your advantage:

This offers your savings in three ways:

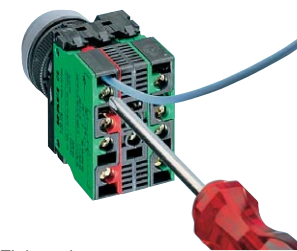
- Drastically reduced assembly time thanks to wire insertion from the rear, i. e. no more bending and lateral insertion of the wires required.
- You save material: No wire end sleeves are required.
- You save the time previously required for mounting the wire end sleeves.

Assembly

Screw terminals



Insert the wire



Tighten the screw

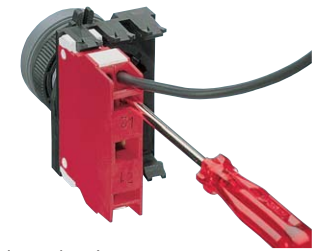


Done

Spring-type terminals



Open the terminal



Insert the wire



Remove the screwdriver

2

RAFIX
22 QR

Versatility of design for customized panels



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

CONTROL COMPONENTS

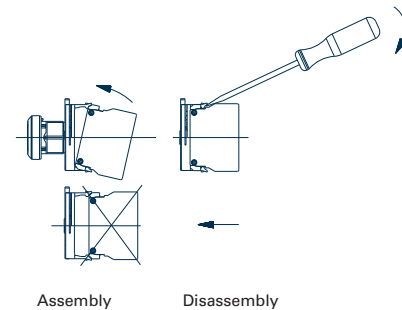
RAFIX 22 QR

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



Sequence of assembly/disassembly

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



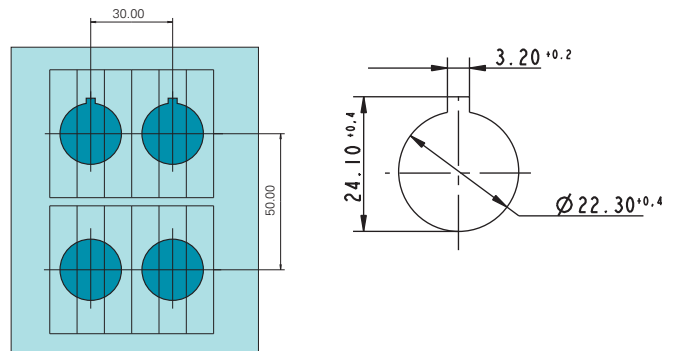
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RAFIX
22 QR

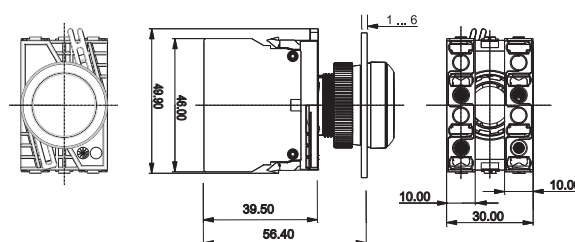
Panel cut-out according to IEC 60947-5-1

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

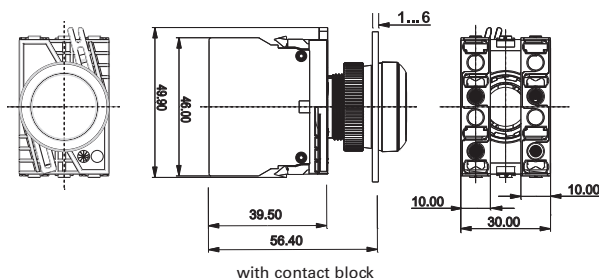
With a grid spacing of 30 mm horizontally and 50 mm vertically, the collars of the square actuators touch each other. We recommend to use the same grid spacing also for the round collar shapes (IEC 60947-5-1)



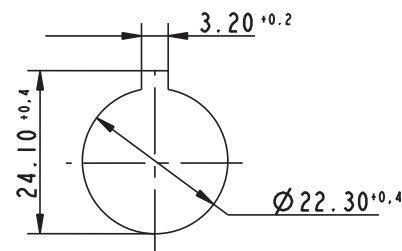
Dimensional drawing



RAFIX 22 QR Pushbuttons



with contact block



Panel cut-out to IEC 60947-5-1

Technical Data

→ General information

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

→ Dimensions

Dimensions of collar	see order block
Overall height	see order block
Mounting depth with contact block	56.4 mm
without cable	
Mounting hole	$\varnothing 22.3$ mm
Mounting grid	50 x 30 mm

→ Mechanical design

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

→ Mechanical characteristics

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

→ Other specifications

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

Approvals

UL 508, C22.2 No.
14-M912004 Steel Vessel
RulesRules for the
Classification of
Steel ShipsMarine, offshore
and industrial
useGerman Lloyds
type approval

Accessories RAFIX 22 QR - Pushbutton



→ Description

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

CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

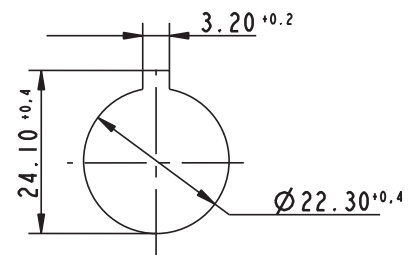
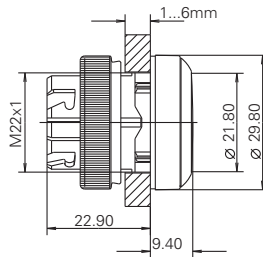
- Table (continued) - Accessories RAFIX 22 QR - Pushbutton

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



RAFIX 22 QR Pushbutton, flush lens, round collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1

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

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

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

Accessoires:

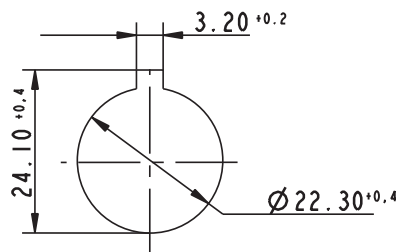
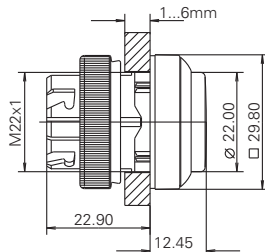
Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.010/0000

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

RAFIX 22 QR

Pushbutton, protruding lens, round collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1



2

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

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

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

Accessoires:

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

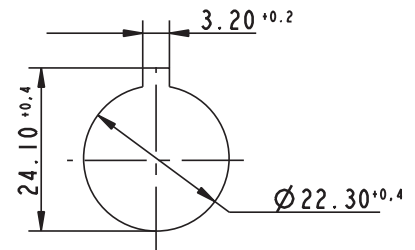
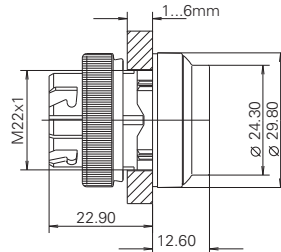
CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



RAFIX 22 QR Pushbutton, protruding front ring, round collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1

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

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

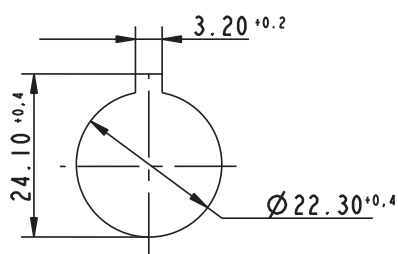
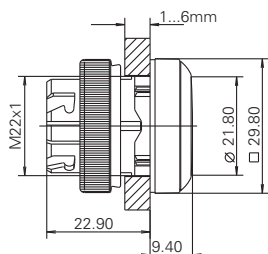
The protruding collar offers protection against inadvertent operation and thereby fulfils the safety requirements of various machinery manufacturers, particularly from the printing industry.

Accessoires:

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

RAFIX 22 QR Pushbutton, flush lens, square collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1



2

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

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

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

Accessoires:

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

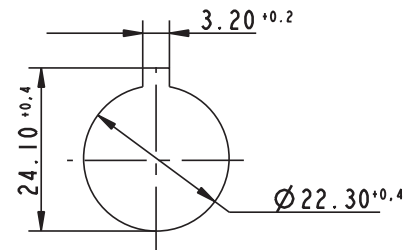
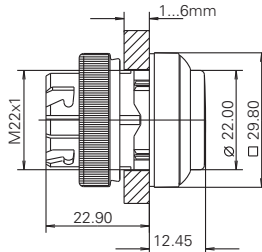
CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



RAFIX 22 QR Pushbutton, protruding lens, square collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1

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

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

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

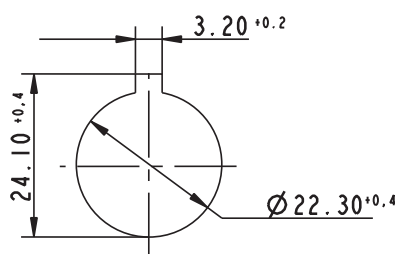
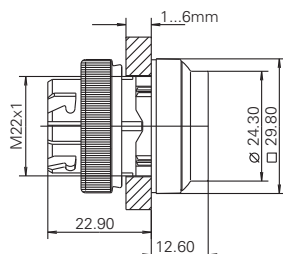
Accessoires:

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

RAFIX 22 QR

Pushbutton, protruding front ring, square collar

Technical data see page 2 - 91



Panel cut-out to IEC 60947-5-1



2

RAFIX
22 QR

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

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

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

Accessoires:

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

CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



RAFIX 22 QR Pushbuttons with protective cap

→ Pushbutton with protective cap for use under rugged conditions.

Technical Data

→ General information

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

→ Dimensions

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

→ Mechanical design

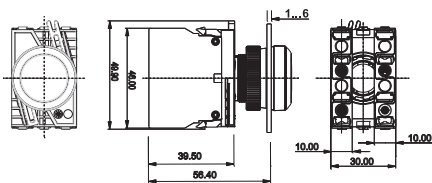
Mounting	ring nut
Contact function	momentary
Illumination	see order block

→ Mechanical characteristics

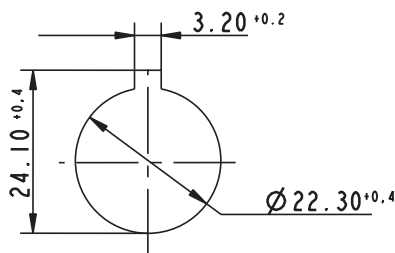
Operating travel	4 mm
Operating force max.	approx. 5 N for 1 switching element
Robustness max.	100 N

→ Other specifications

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



with contact block







Panel cut-out to IEC 60947-5-1

Approvals

UL 508, C22.2 No.
14-M912004 Steel Vessel
RulesRules for the
Classification of
Steel ShipsMarine, offshore
and industrial
useGerman Lloyd's
type approval

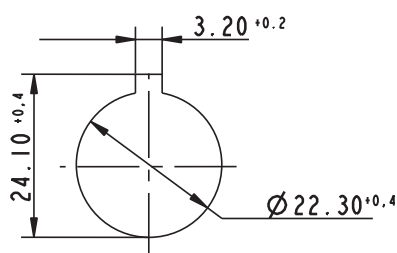
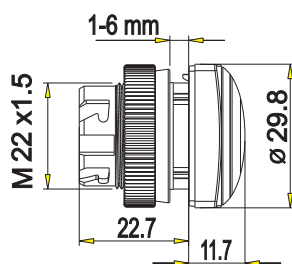
Accessories RAFIX 22 QR - Pushbutton with protective cap

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

RAFIX 22 QR

Pushbutton with protective cap, flush lens, round collar

Technical data see page 2 - 98



Panel cut-out to IEC 60947-5-1



2

RAFIX
22 QR

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

CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

– Table (continued) –

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

Pushbutton with protective cap for use under rugged conditions.

Legending on request.

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

Accessoires:

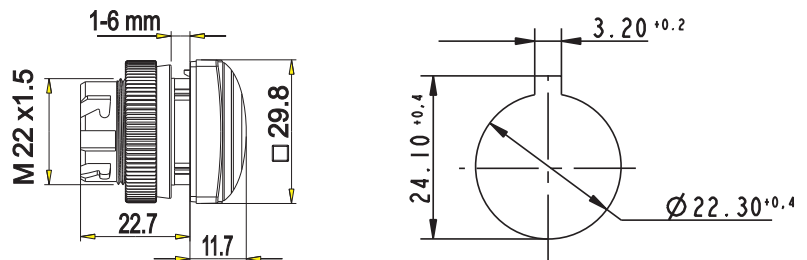
Label holder, round collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07620.010/0000

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



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

Technical data see page 2 - 98



Panel cut-out to IEC 60947-5-1

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

Pushbutton with protective cap for use under rugged conditions.

Legending on request.

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

Accessoires:

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

RAFIX 22 QR Selector switches

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

Technical Data

→ General information

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

→ Dimensions

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

→ Mechanical design

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

→ Mechanical characteristics

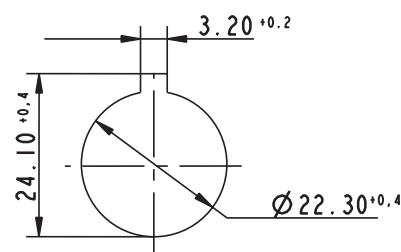
Operating force max.	approx. 5 N for 1 switching element
Torque max.	2 Nm

→ Electrical characteristics

Protection class	II
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→ Other specifications

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



Panel cut-out to IEC 60947-5-1

Approvals



UL 508, C22.2 No. 14-M91



2004 Steel Vessel Rules



Rules for the Classification of Steel Ships



Marine, offshore and industrial use



German Lloyds type approval






Accessories RAFIX 22 QR - Selector switch

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

CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

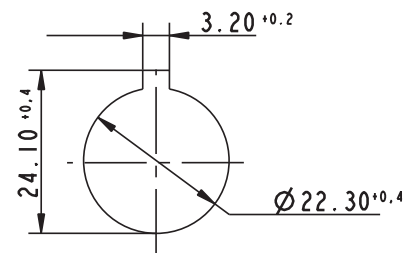
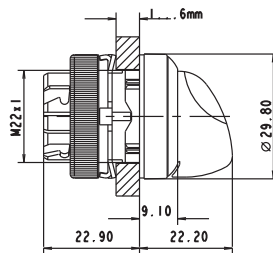
- Table (continued) - Accessories RAFIX 22 QR - Selector switch

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











RAFIX 22 QR Selector switch, round collar, short handle







Technical data see page 2 - 101



Panel cut-out to IEC 60947-5-1

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

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

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

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

Included: Ring nut with claw.

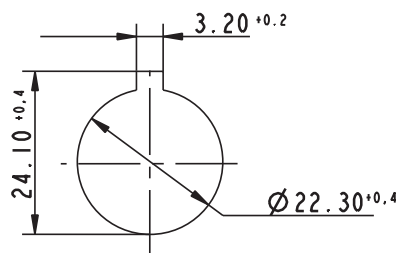
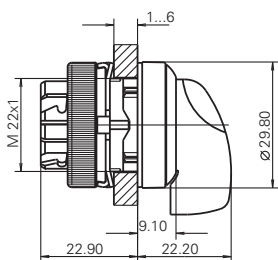
At keylock switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

Accessoires:

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



RAFIX 22 QR Selector switch, round collar, long handle

Technical data see page 2 - 101



Panel cut-out to IEC 60947-5-1



→ Illumination	Contact function	Rotating angle		Order no.	
				Plastic front ring	Metallized front ring
yes	momentary	1 x 40°		1.30.242.011/22xx	1.30.242.012/2200
yes	momentary	2 x 40°		1.30.242.036/22xx	1.30.242.037/2200

CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

– Table (continued) –

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

→ Illumination	Contact function	Rotating angle		Order no.	
				Plastic front ring	Metallized front ring
yes	latching	1 x 90°, form L		1.30.242.111/22xx	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

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

Included: Ring nut with claw.

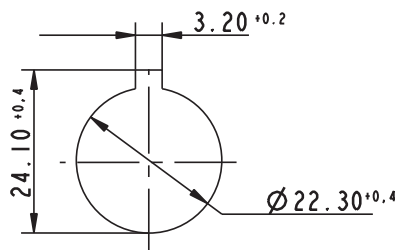
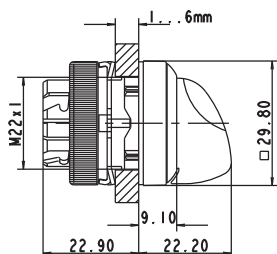
At selector switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

Accessoires:

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

RAFIX 22 QR Selector switch, square collar, short handle

Technical data see page 2 - 101



Panel cut-out to IEC 60947-5-1



2

→ Illumination	Contact function	Rotating 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

RAFIX
22 QR

CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

– Table (continued) –

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

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

Included: Ring nut with claw.

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

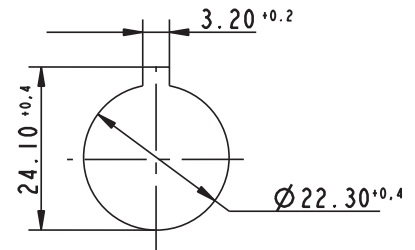
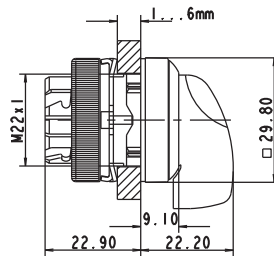
Accessoires:

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



RAFIX 22 QR Selector switch, square collar, long handle

Technical data see page 2 - 101


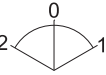
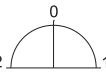
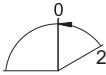


Panel cut-out to IEC 60947-5-1

→ Illumination	Contact function	Rotating angle		Order no.	
				Plastic front ring	Metallized front ring
yes	momentary	1 x 40°		1.30.242.061/22xx	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

– Table (continued) –

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

→ Illumination	Contact function	Rotating angle		Order no.	
				Plastic front ring	Metallized front ring
no	latching	1 x 90°, form V		1.30.242.761/02xx	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

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

Included: Ring nut with claw.

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

Accessoires:

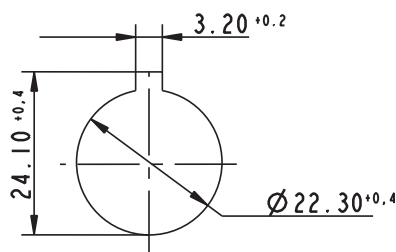
Label holder, square collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.011/0000

CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS



RAFIX 22 QR Keylock switches



Panel cut-out to IEC 60947-5-1

2

Approvals

UL 508, C22.2
No. 14-M912004 Steel Vessel
RulesRules for the
Classification of
Steel ShipsMarine, offshore
and industrial
use

Type approval



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

Technical Data

→ General information

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

→ Dimensions

Dimensions of collar	see order block
Overall height	30.6 mm
Mounting depth with contact block 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
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→ Other specifications

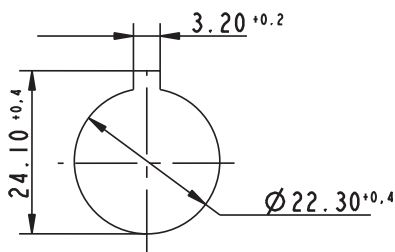
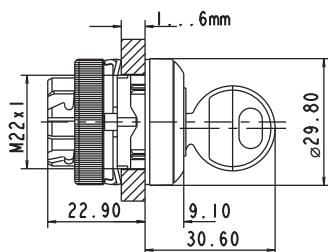
Operating life (operations)	300,000 momentary / 50,000 latching
Degree of protection from front side	IP65 (DIN EN 60529)
Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2-14,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

Accessories RAFIX 22 QR - Keylock switch

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






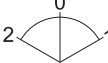
RAFIX 22 QR Keylock switch, round collar

Technical data see page 2 - 108



Panel cut-out to IEC 60947-5-1

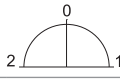
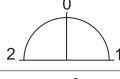
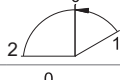






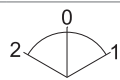
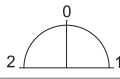
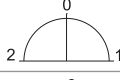
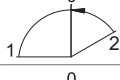
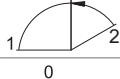





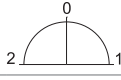


→ Lock type	Rotating angle	Contact function	Key removal position	Rotating angle	Order no.	
					Plastic front ring	Metallized front ring
421	1 x 40°	momentary	0		1.30.245.003/xxxx	1.30.245.004/0000
421	2 x 40°	momentary	0		1.30.245.103/xxxx	1.30.245.104/0000
421	1 x 90°, form L	latching	0		1.30.245.203/xxxx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

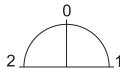
CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

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

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

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

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

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

Included: Ring nut with claw.

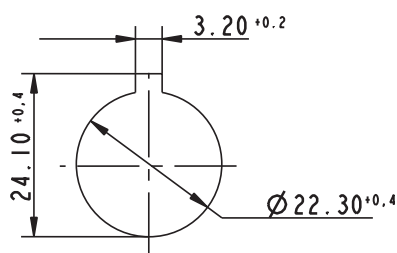
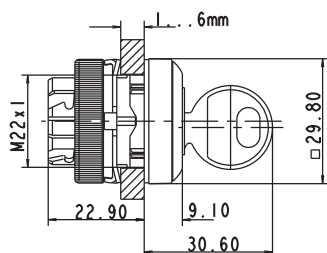
On selector switches with 3 switching positions (e.g. 2 x 90 degrees), either the left-hand or right-hand contact block is activated, depending on the sense of rotation.

Accessoires:

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






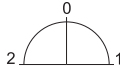
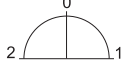
RAFIX 22 QR Keylock switch, square collar

Technical data see page 2 - 108



Panel cut-out to IEC 60947-5-1




















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

CONTROL COMPONENTS

RAFIX 22 QR - ACTUATORS AND INDICATORS

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

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

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

Other versions on request.

Included: Ring nut with claw.



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

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

Accessoires:

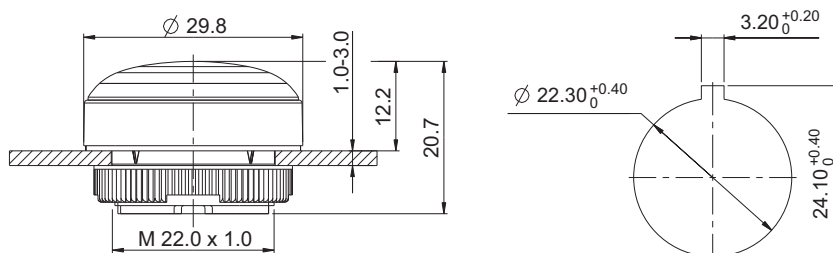
Label holder, square collar, with adhesive tape and release liner on back 50 x 30 x 3.6 mm: 5.07.620.011/0000

– Table (continued) –
Accessories RAFIX 22 FS⁺ - Pushbuttons with protective cap

→ Description	Photo	Order no.	Additional accessories see page
RAFIX FS - Contact block PCB silver, Universal		-	2 - 248
Fixing spanner for ring nut		5.05.800.062/0000	2 - 145, 2 - 261, 5 - 25

RAFIX 22 FS⁺ Pushbutton, with protective cap, flush lens, round collar

Technical data see page 2 - 170



Panel cut-out to IEC 60947-5-1



2

RAFIX
22 FS⁺

→ Illuminability	Color of lens	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	translucent red	1.30.270.005/23xx	-	-	-
yes	translucent yellow	1.30.270.005/24xx	-	-	-
yes	translucent green	1.30.270.005/25xx	-	-	-
yes	translucent blue	1.30.270.005/26xx	-	-	-
yes	translucent white	1.30.270.005/22xx	-	-	-
no	opaque slate-grey	1.30.270.005/07xx	-	-	-
no	opaque black	1.30.270.005/01xx	-	-	-

Pushbutton with protective cap for use under rugged conditions.

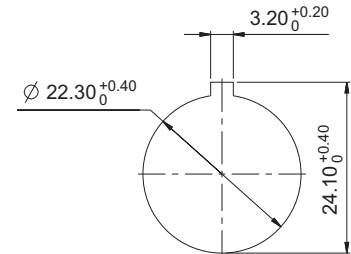
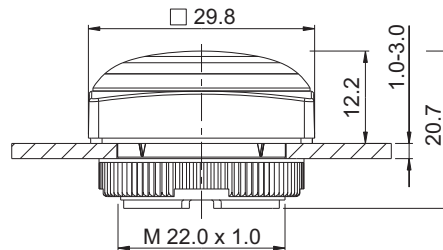
xx = color of front ring: black = 01, silver grey = 08

Legending on request.

CONTROL COMPONENTSRAFIX 22 FS⁺ - ACTUATORS

RAFIX 22 FS⁺ Pushbutton, with protective cap, flush lens, square collar

Technical data see page 2 - 170



Panel cut-out to IEC 60947-5-1

→ Illuminability	Color of lens	Order no. momentary		Order no. latching	
		Plastic front ring	Metallized front ring	Plastic front ring	Metallized front ring
yes	translucent red	1.30.270.055/23xx	-	-	-
yes	translucent yellow	1.30.270.055/24xx	-	-	-
yes	translucent green	1.30.270.055/25xx	-	-	-
yes	translucent blue	1.30.270.055/26xx	-	-	-
yes	translucent white	1.30.270.055/22xx	-	-	-
no	opaque slate-grey	1.30.270.055/07xx	-	-	-
no	opaque black	1.30.270.055/01xx	-	-	-

Pushbutton with protective cap for use under rugged conditions.

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

Legending on request.

RAFIX 22 FS⁺ Selector switches

→ The illuminated selector switches are provided with translucent handle markings. These are opaque on the non-illuminated versions.

Technical Data

→ General information

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

→ Dimensions

Dimensions of collar	see order block
Overall height	22.24 mm
Mounting depth	PCB 9.2 mm, QC 27 mm
Mounting hole	22.3 mm
Key grid	30 x 30 mm

→ Mechanical design

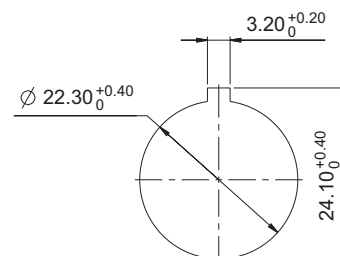
Mounting	ring nut
Contact function	see order block
Illuminability	see order block
Rotating angle	see order block
Torque for nut ring	1.2 Nm

→ Mechanical characteristics

Torque max.	1.5 Nm
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→ Other specifications

Operating life (operations)	500,000 momentary / 300,000 latching
Operating life (operations)	650,000 momentary / 400,000 latching
Degree of protection from front side	IP65 (DIN EN 60529)
Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2-14, -30, -33 and -78
Salt spray	IEC 600 68-2-11
ROHS compliant	yes
REACH compliant	yes



Panel cut-out to IEC 60947-5-1

Approvals



IEC 60947-5-x



UL 508



RAFIX
22 FS⁺



Accessories RAFIX 22 FS⁺ - Selector switches

→ Description	Photo	Order no.	Additional accessories see page
RAFIX 22 FS ⁺ - Contact block PCB silver, Universal, with light conductor		-	2 - 247
RAFIX 22 FS ⁺ - Contact block QC gold, Universal, with light conductor		-	2 - 253
RAFIX 22 FS ⁺ - Contact block QC silver, Universal, with light conductor		-	2 - 256
RAFIX FS - Contact block PCB gold, Universal		-	2 - 243
RAFIX FS - Contact block PCB gold, Universal, with light conductor		-	2 - 242

CONTROL COMPONENTS

RAFIX 22 FS⁺ - ACTUATORS

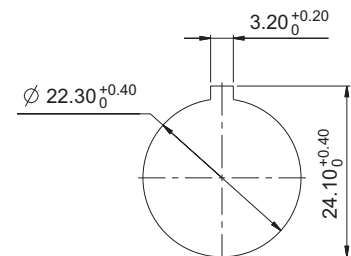
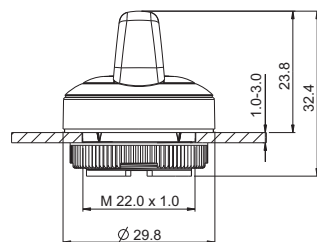
– Table (continued) –
Accessories RAFIX 22 FS⁺ - Selector switches

→ Description	Photo	Order no.	Additional accessories see page
RAFIX FS - Contact block PCB silver, Universal		-	2 - 248
Fixing spanner for ring nut		5.05.800.062/0000	2 - 145, 2 - 261, 5 - 25





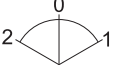
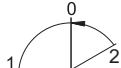


RAFIX 22 FS⁺ Selector switch, round collar

Technical data see page 2 - 173



Panel cut-out to IEC 60947-5-1

→ Illuminability	Contact function	Rotating angle		Order no.	
				Plastic front ring	Metallized front ring
yes	momentary	1 x 40°		1.30.272.001/22xx	1.30.272.002/2200
yes	momentary	2 x 40°		1.30.272.026/22xx	1.30.272.027/2200
yes	latching	1 x 90°, form L		1.30.272.101/22xx	1.30.272.102/2200
yes	latching	1 x 90°, form V		1.30.272.201/22xx	1.30.272.202/2200
yes	latching	2 x 60°		1.30.272.301/22xx	1.30.272.302/2200
yes	latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		1.30.272.426/22xx	1.30.272.427/2200

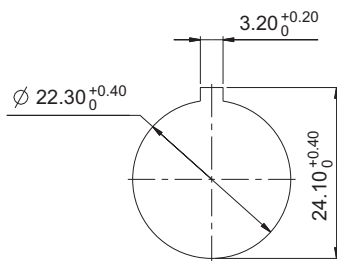
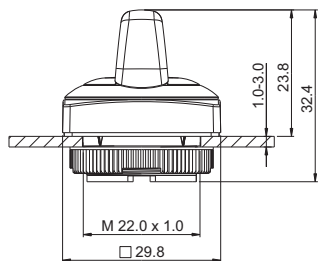
xx = Front ring color: black = 01, red = 03, yellow = 04, green = 05, blue = 06, slate grey = 07, silver grey = 08

Other contact functions and handle marking colors available on request.

For colored illumination of the handle marking please use colored LED.

RAFIX 22 FS⁺ Selector switch, square collar

Technical data see page 2 - 173



Panel cut-out to IEC 60947-5-1



2

→ Illuminability	Contact function	Rotating angle	Order no.	
			Plastic front ring	Metallized front ring
yes	momentary	1 x 40°	1.30.272.051/22xx	1.30.272.052/2200
yes	momentary	2 x 40°	1.30.272.076/22xx	1.30.272.077/2200
yes	latching	1 x 90°, form L	1.30.272.151/22xx	1.30.272.152/2200
yes	latching	1 x 90°, form V	1.30.272.251/22xx	1.30.272.252/2200
yes	latching	2 x 60°	1.30.272.351/22xx	1.30.272.352/2200
yes	latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°	1.30.272.476/22xx	1.30.272.477/2200

RAFIX 22 FS⁺

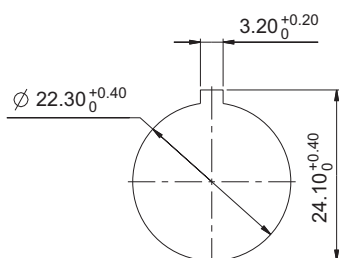
xx = Front ring color: black = 01, red = 03, yellow = 04, green = 05, blue = 06, slate grey = 07, silver grey = 08

Other contact functions and handle marking colors available on request.

For colored illumination of the handle marking please use colored LED.

CONTROL COMPONENTS

RAFIX 22 FS⁺ - ACTUATORS



Panel cut-out to IEC 60947-5-1

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RAFIX
22 FS⁺

Approvals



IEC 60947-5-x



UL 508



RAFIX 22 FS⁺ Keylock switches

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

Technical Data

→ General information

Color of front ring	see order block
Form of collar	see order block

→ Dimensions

Dimensions of collar	see order block
Overall height	44.1 mm
Mounting depth	PCB 9.2 mm, QC 27 mm
Mounting hole	22.3 mm
Key grid	30 x 30 mm

→ Mechanical design

Mounting	ring nut
Contact function	see order block
Lock	Micromec
Illuminability	see order block
Wafers	5
Lock type	001
Number of locking positions	500
Main key	on request
Rotating angle	see order block
Key removal position	see order block
Torque for nut ring	1.2 Nm

→ Mechanical characteristics

Torque max.	1.3 Nm
-------------	--------

→ Other specifications





Operating life	300,000 momentary / 50,000 latching / 30,000 with key removal
B10	400,000 momentary / 65,000 latching / 40,000 with key removal
Degree of protection from front side	IP65 (DIN EN 60529)
Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2-14, -30, -33 and -78
ESD-strength lock / contact	15 kV
ESD-strength key / front panel	15 kV
Salt spray	IEC 600 68-2-11
ROHS compliant	yes
REACH compliant	yes

Accessories RAFIX 22 FS⁺ - Keylock switch

→ Description	Photo	Order no.	Additional accessories see page
RAFIX FS - Contact block PCB gold, Universal		-	2 - 243

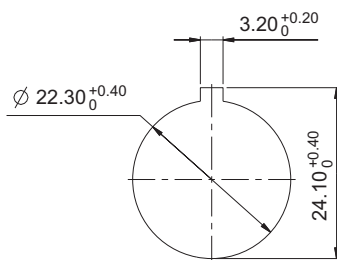
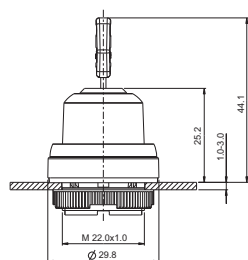
- Table (continued) -

Accessories RAFIX 22 FS⁺ - Keylock switch

→ Description	Photo	Order no.	Additional accessories see page
RAFIX FS - Contact block PCB silver, Universal		-	2 - 248
Fixing spanner for ring nut		5.05.800.062/0000	2 - 145, 2 - 261, 5 - 25
Spare key, (delivery content 1 key)		5.58.007.001/0000	-
Spare key, for double action, e.g. 2 x 90° (delivery content 1 key)		5.58.008.001/0000	-








RAFIX 22 FS⁺ Keylock switch, round collar

Technical data see page 2 - 176



Panel cut-out to IEC 60947-5-1



→ Contact function	Rotating angle	Key removal position	Order no.		
			Plastic front ring	Metallized front ring	
momentary	1 x 40°		0	1.30.255.001/xxxx	1.30.255.002/0000
momentary	2 x 40°		0	1.30.255.101/xxxx	1.30.255.102/0000
latching	1 x 90°, L shape		0	1.30.255.201/xxxx	1.30.255.202/0000
latching	1 x 90°, L shape		0+1	1.30.255.221/xxxx	1.30.255.222/0000
latching	1 x 90°, V shape		0	1.30.255.301/xxxx	1.30.255.302/0000
latching	1 x 90°, V shape		0+1	1.30.255.321/xxxx	1.30.255.322/0000
latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		0	1.30.255.501/xxxx	1.30.255.502/0000

xxxx = Front ring color: black = 0100, red = 0300, yellow = 0400, green = 0500, blue = 0600, slate grey = 0700, silver grey = 0800

CONTROL COMPONENTS

RAFIX 22 FS⁺ - ACTUATORS

– Table (continued) –

RAFIX 22 FS⁺ - Keylock switch, round collar

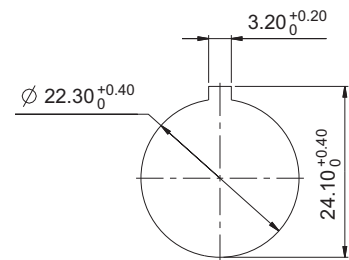
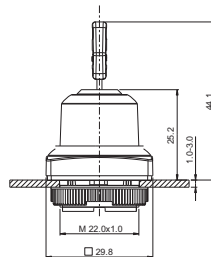
Other lock variants available on request.

Included: 2 keys.



RAFIX 22 FS⁺ Keylock switch, square collar

Technical data see page 2 - 176



Panel cut-out to IEC 60947-5-1

→ Contact function	Rotating angle	Key removal position	Order no.		
			Plastic front ring	Metallized front ring	
momentary	1 x 40°		0	1.30.255.051/xxxx	1.30.255.052/0000
momentary	2 x 40°		0	1.30.255.151/xxxx	1.30.255.152/0000
latching	1 x 90°, L shape		0	1.30.255.251/xxxx	1.30.255.252/0000
latching	1 x 90°, L shape		0+1	1.30.255.271/xxxx	1.30.255.272/0000
latching	1 x 90°, V shape		0	1.30.255.351/xxxx	1.30.255.352/0000
latching	1 x 90°, V shape		0+1	1.30.255.371/xxxx	1.30.255.372/0000
latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		0	1.30.255.551/xxxx	1.30.255.552/0000

xxxx = Front ring color: black = 0100, red = 0300, yellow = 0400, green = 0500, blue = 0600, slate grey = 0700, silver grey = 0800

Other lock variants available on request.

Included: 2 keys.

RAFIX 22 FS⁺

Keylock switches compact

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

Technical Data

→ General information

Color of front ring	see order block
Form of collar	see order block

→ Dimensions

Dimensions of collar	see order block
Overall height	44.1 mm
Mounting depth	PCB 9.2 mm, QC 27 mm
Mounting hole	22.3 mm
Key grid	30 x 30 mm

→ Mechanical design

Mounting	ring nut
Contact function	see order block
Illuminability	see order block
Wafers	5
Lock type	001
Main key	on request
Rotating angle	see order block
Key removal position	see order block
Torque for nut ring	1.2 Nm

→ Mechanical characteristics

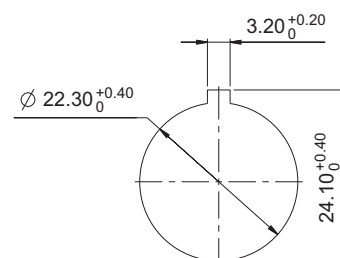
Torque max.	1.3 Nm
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→ Other specifications

Operating life	300,000 momentary / 50,000 latching / 30,000 with key removal
B10	400,000 momentary / 65,000 latching / 40,000 with key removal
Degree of protection from front side	IP65 (DIN EN 60529)
Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2-14, -30, -33 and -78
ESD-strength lock / contact	15 kV
ESD-strength key / front panel	15 kV
Salt spray	IEC 600 68-2-11
ROHS compliant	yes
REACH compliant	yes



NEW



Panel cut-out to IEC 60947-5-1

Approvals



IEC 60947-5-x



UL 508



RAFIX
22 FS⁺

2

Accessories RAFIX 22 FS⁺ - Keylock switch compact




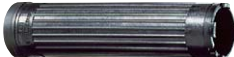


→ Description	Photo	Order no.	Additional accessories see page
RAFIX 22 FS ⁺ - Contact block QC gold, Universal, with light conductor		-	2 - 253

CONTROL COMPONENTS

RAFIX 22 FS⁺ - ACTUATORS

- Table (continued) -

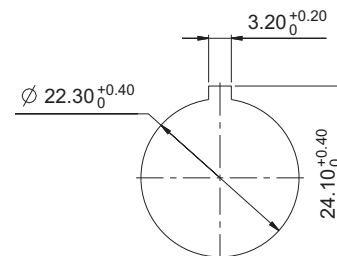
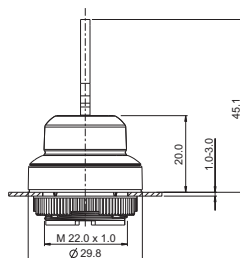
Accessories RAFIX 22 FS⁺ - Keylock switch compact

→ Description	Photo	Order no.	Additional accessories see page
RAFIX 22 FS ⁺ - Contact block QC silver, Universal, with light conductor		-	2 - 256
RAFIX FS - Contact block PCB gold, Universal		-	2 - 243
RAFIX FS - Contact block PCB silver, Universal		-	2 - 248
Fixing spanner for ring nut		5.05.800.062/0000	2 - 145, 2 - 261, 5 - 25
RAFIX FS - Protective cap for keylock switch		5.55.105.454/0111	2 - 267
Spare key, for single action, e.g. 1 x 90° (delivery content 1 key)		5.58.018.001/0000	-








RAFIX 22 FS⁺ Keylock switch compact, round collar

Technical data see page 2 - 179



Panel cut-out to IEC 60947-5-1

→ Contact function	Rotating angle	Key removal position	Order no.		
			Plastic front ring	Metallized front ring	
momentary	1 x 40°		0	1.30.275.001/xxxx	1.30.275.002/0000
momentary	2 x 40°		0	1.30.275.101/xxxx	1.30.275.102/0000
latching	1 x 90°, L shape		0+1	1.30.275.221/xxxx	1.30.275.222/0000
latching	1 x 90°, V shape		0+1	1.30.275.321/xxxx	1.30.275.322/0000
latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		0	1.30.275.501/xxxx	1.30.275.502/0000

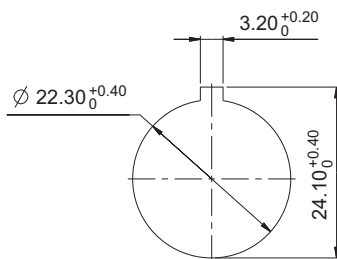
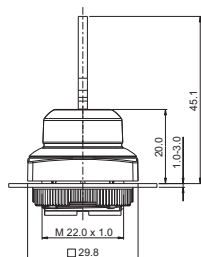
xxxx = Front ring color: black = 0100, slate grey = 0700, silver grey = 0800

- Table (continued) -
RAFIX 22 FS⁺ - Keylock switch compact, round collar

Other lock variants available on request.
 Included: 2 keys.

RAFIX 22 FS⁺
Keylock switch compact,
square collar

Technical data see page 2 - 179



2

→ Contact function	Rotating angle	Key removal position	Order no.		
			Plastic front ring	Metallized front ring	
momentary	1 x 40°		0	1.30.275.051/xxxx	1.30.275.052/0000
momentary	2 x 40°		0	1.30.275.151/xxxx	1.30.275.152/0000
latching	1 x 90°, L shape		0+1	1.30.275.271/xxxx	1.30.275.272/0000
latching	1 x 90°, V shape		0+1	1.30.275.371/xxxx	1.30.275.372/0000
latching 1 x 90° and momentary 1 x 40°	1 x 90° and 1 x 40°		0	1.30.275.551/xxxx	1.30.275.552/0000

RAFIX 22 FS⁺

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

Other lock variants available on request.
 Included: 2 keys.

CONTROL COMPONENTS

RAFIX 22 FS⁺ - ACTUATORS

RAFIX 22 FS⁺ Mushroom-headed pushbuttons

Technical Data

→ General information

Form of lens	conical mushroom form
Color of lens	black
Form of collar	round

→ Dimensions

Mushroom Diameter	30 mm
Overall height	see order block
Mounting depth	PCB 9.2 mm, QC 27 mm
Mounting hole	22.3 mm
Diameter of collar	29.8 mm

→ Mechanical design

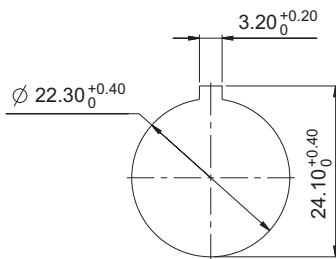
Mounting	ring nut
Contact function	see order block
Illuminability	see order block
Reset	see order block
Torque for nut ring	1.2 Nm

→ Mechanical characteristics

Robustness max.	100 N
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→ Other specifications

Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Operating life	50,000
B10	65,000
Degree of protection from front side	IP65 (DIN EN 60529)
Environmental resistance	acc. to IEC 60068-2-14, -30, -33 and -78
Salt spray	IEC 600 68-2-11
Robustness	acc. to IEC 600 68-2-3 und 2-30
ROHS compliant	yes
REACH compliant	yes



Panel cut-out to IEC 60947-5-1

2

RAFIX
22 FS⁺

Approvals



IEC 60947-5-x

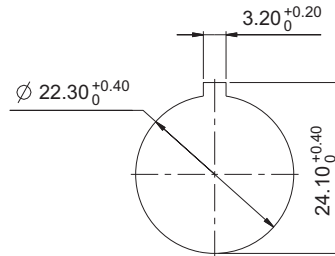
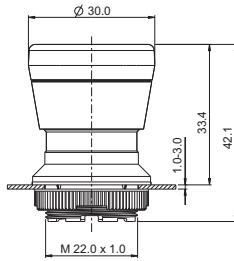
UL 508
in preparation

Accessories RAFIX 22 FS⁺ - Mushroom-headed pushbutton

→ Description	Photo	Order no.	Additional accessories see page
RAFIX 22 FS ⁺ - Contact block PCB silver, E-Stop		-	2 - 249
RAFIX 22 FS ⁺ - Contact block QC gold, E-Stop, with light conductor		-	2 - 253
RAFIX 22 FS ⁺ - Contact block QC silver, E-Stop, with light conductor		-	2 - 257
RAFIX FS - Contact block PCB gold, E-Stop		-	2 - 244
Fixing spanner for ring nut		5.05.800.062/0000	2 - 145, 2 - 261, 5 - 25

RAFIX 22 FS⁺ Mushroom-headed pushbutton

Technical data see page 2 - 182



Panel cut-out to IEC 60947-5-1



→ Contact function	Illuminability	Reset	Order no.
momentary	yes	-	1.30.276.201/2200
momentary	no	-	1.30.276.701/0000
latching	yes, lens translucent transparent	by pulling	1.30.276.101/2200
latching	yes, lens translucent transparent	by clockwise rotation	1.30.276.001/2200
latching	no	by pulling	1.30.276.601/0000
latching	no	by clockwise rotation	1.30.276.501/0000

Only use with contact blocks type E-Stop.

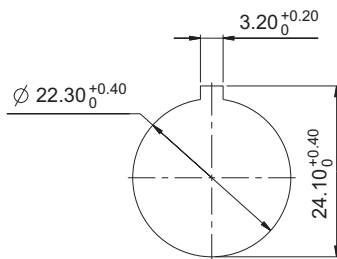
2

RAFIX
22 FS⁺

CONTROL COMPONENTS

RAFIX 22 FS⁺ - ACTUATORS

RAFIX 22 FS⁺ Potentiometer drives



Panel cut-out to IEC 60947-5-1

2

RAFIX
22 FS⁺

Approvals



IEC 60947-5-x

Technical Data

→ General information

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

→ Dimensions

Dimensions of collar	see order block
Overall height	26 mm
Mounting depth	according to potentiometer
Mounting hole	22.3 mm
Key grid	according to potentiometer

→ Mechanical design

Mounting	ring nut
Torque for nut ring	1.2 Nm

→ Other specifications

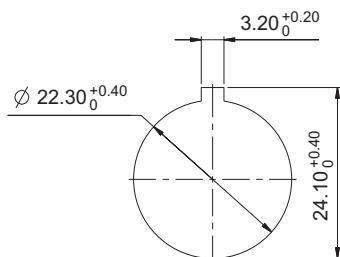
Degree of protection from front side	IP65 (DIN EN 60529)
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2-14, -30, -33 and -78
Salt spray	IEC 600 68-2-11
ROHS compliant	yes
REACH compliant	yes

Accessories RAFIX 22 FS⁺ - Potentiometer drive

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

RAFIX 22 FS⁺ Potentiometer drive, round collar

Technical data see page 2 - 192



Panel cut-out to IEC 60947-5-1

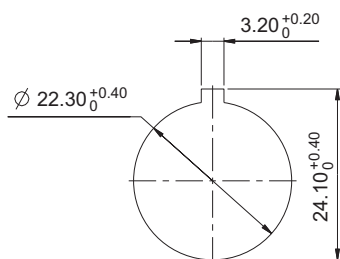


→ Front ring	Color of knob	Order no.
plastic slate-grey	opaque slate-grey	1.30.258.001/0700

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

RAFIX 22 FS⁺ Potentiometer drive, square collar

Technical data see page 2 - 192



Panel cut-out to IEC 60947-5-1



→ Front ring	Color of knob	Order no.
plastic slate-grey	opaque slate-grey	1.30.258.021/0700

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

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RAFIX
22 FS⁺

CONTROL COMPONENTS

RAFIX 22 FS⁺ - INDICATORS

RAFIX 22 FS⁺ Signal indicators



Technical Data

→ General information

Form of lens	see order block
Color of lens	see order block
Form of collar	see order block

→ Dimensions

Length of collar	see order block
Overall height	see order block
Mounting depth	PCB 9.2 mm, QC 27 mm
Mounting hole	22.3 mm
Key grid	30 x 30 mm

→ Mechanical design

Mounting	ring nut
Illuminability	yes
Torque for nut ring	1.2 Nm

→ Other specifications

Degree of protection from front side	IP65 (DIN EN 60529)
Ambient temp. operating min.	-25 °C
Ambient temp. operating max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+80 °C
Environmental resistance	acc. to IEC 60068-2-14, -30, -33 and -78
Salt spray	IEC 600 68-2-11
ROHS compliant	yes
REACH compliant	yes

Approvals



IEC 60947-5-x



UL 508



2

RAFIX
22 FS⁺

Accessories RAFIX 22 FS⁺ - Signal indicator

→ Description	Photo	Order no.	Additional accessories see page
LED 3 mm		-	-
LED base for 3 mm THT LED, used in signal indicators, for RAFIX FS PCB		-	2 - 263
QC LED base for signal indicators		-	2 - 261
Fixing spanner for ring nut		5.05.800.062/0000	2 - 145, 2 - 261, 5 - 25

CONTROL COMPONENTS

RAFIX 22 FSR - ACTUATORS

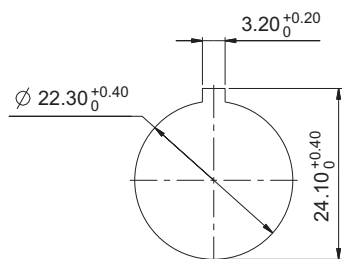
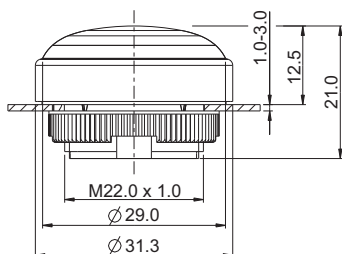


RAFIX 22 FSR Pushbuttons

→ The RAFIX 22 FSR pushbutton is equipped with a protective cap. The pushbutton is resistant to external impacts and offers a degree of protection to IP 65 and/or IP 69 k as per IEC 60529, which means protection against the ingress of water when highly pressurized water/steam jet cleaners are used at a pressure of 80 – 100 bar.

Preliminary technical data

Due to increasing application experience the specifications of this product are successively added. For current status, see RAFI online catalog at x.



Panel cut-out to IEC 60947-5-1

Technical Data

→ General information

Form of lens	flush
Color of lens	see order block
Color of front ring	black
Form of collar	round

→ Dimensions

Dimensions of collar	Ø 31.3 mm
Overall height	12.2 mm
Mounting hole	22.3 mm
Key grid	35 x 35 mm

→ Mechanical design

Mounting	ring nut
Contact function	momentary
Illuminability	see order block
Torque for nut ring	1.2 Nm

→ Mechanical characteristics

Operating travel	4 mm
Robustness max.	100 N

→ Other specifications

Ambient temp. operating min.	-40 °C
Ambient temp. operating max.	+85 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Degree of protection from front side	IP65 (DIN EN 60529), IP69K (ISO 20653) water temp. 23 °C +/- 3 °C
Environmental resistance	acc. to IEC 60068-2-14, -30, -33 and -78
Salt spray	IEC 600 68-2-11
ROHS compliant	yes
REACH compliant	yes

Approvals



IEC 60947-5-x



UL 508



Accessories RAFIX 22 FSR - Pushbutton

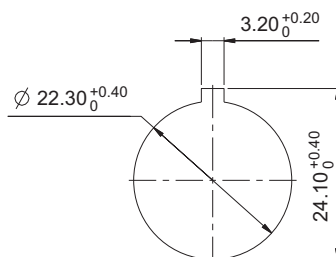
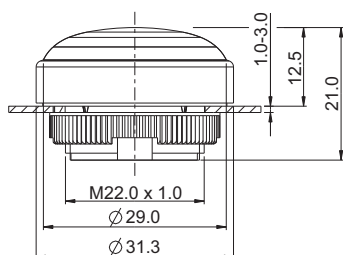
→ Description	Photo	Order no.	Additional accessories see page
RAFIX 22 FS ⁺ - Contact block PCB silver, Universal, with light conductor		-	2 - 247
RAFIX 22 FS ⁺ - Contact block QC gold, Universal, with light conductor		-	2 - 253

**- Table (continued) -
Accessories RAFIX 22 FSR - Pushbutton**

→ Description	Photo	Order no.	Additional accessories see page
RAFIX 22 FS ⁺ - Contact block QC silver, Universal, with light conductor		-	2 - 256
RAFIX FS - Contact block PCB gold, Universal		-	2 - 243
RAFIX FS - Contact block PCB gold, Universal, with light conductor		-	2 - 242
RAFIX FS - Contact block PCB silver, Universal		-	2 - 248
Fixing spanner for ring nut		5.05.800.062/0000	2 - 145, 2 - 261, 5 - 25

RAFIX 22 FSR Pushbutton

Technical data see page 2 - 206



Panel cut-out to IEC 60947-5-1



2

RAFIX 22 FSR

→ Illuminability	Color of lens	Order no.
yes	translucent red	1.30.280.001/2301
yes	translucent yellow	1.30.280.001/2401
yes	translucent green	1.30.280.001/2501
yes	translucent blue	1.30.280.001/2601
yes	translucent white	1.30.280.001/2201
no	opaque black	1.30.280.001/0101

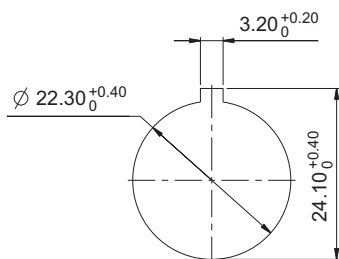
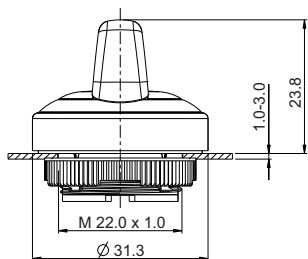
Legending and front rings in other colors on request

CONTROL COMPONENTS

RAFIX 22 FSR - ACTUATORS



NEW



Panel cut-out to IEC 60947-5-1

Approvals



IEC 60947-5-x



UL 508



RAFIX 22 FSR Selector switches

→ The marks on the selector switch turning handle are translucent and can be illuminated if required. Colored LEDs or LED clips can be used for colored illuminations.

Preliminary technical data

Due to increasing application experience the specifications of this product are successively added. For current status, see RAFI online catalog at x.

Technical Data

→ General information

Actuator	handle
Marking of handle	see order block
Color of front ring	black
Form of collar	round

→ Dimensions

Dimensions of collar	Ø 31.3 mm
Overall height	23.8 mm
Mounting hole	22.3 mm
Key grid	35 x 35 mm

→ Mechanical design

Mounting	ring nut
Contact function	see order block
Illuminability	yes
Rotating angle	see order block
Torque for nut ring	1.2 Nm

→ Mechanical characteristics

Torque max.	2 Nm
-------------	------

→ Other specifications



Degree of protection from front side	IP65 (DIN EN 60529); IP69K (ISO 20653)
Ambient temp. operating min.	-40 °C
Ambient temp. operating max.	+85 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Environmental resistance	acc. to IEC 60068-2-14, -30, -33 and -78
Salt spray	IEC 600 68-2-11
ROHS compliant	yes
REACH compliant	yes

Accessories RAFIX 22 FSR - Selector switch

→ Description

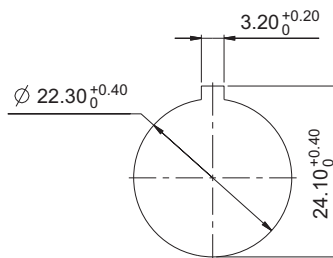
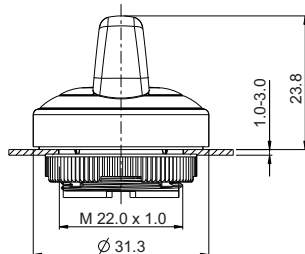
Description	Photo	Order no.	Additional accessories see page
RAFIX 22 FS ⁺ - Contact block PCB silver, Universal, with light conductor		-	2 - 247
RAFIX 22 FS ⁺ - Contact block QC gold, Universal, with light conductor		-	2 - 253
RAFIX 22 FS ⁺ - Contact block QC silver, Universal, with light conductor		-	2 - 256

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

→ Description	Photo	Order no.	Additional accessories see page
RAFIX FS - Contact block PCB gold, Universal, with light conductor		-	2 - 242
Fixing spanner for ring nut		5.05.800.062/0000	2 - 145, 2 - 261, 5 - 25






RAFIX 22 FSR Selector switch

Technical data see page 2 - 208



Panel cut-out to IEC 60947-5-1



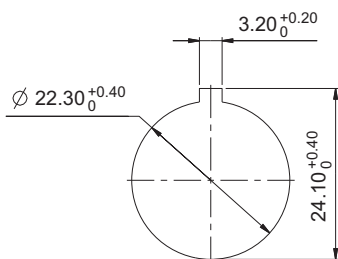
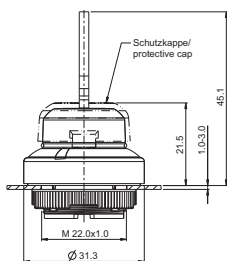
→ Illuminability	Contact function	Rotating angle		Order no.
yes	momentary	1 x 40°		1.30.282.001/2201
yes	momentary	2 x 40°		1.30.282.026/2201
yes	latching	1 x 90°, L shape		1.30.282.101/2201
yes	latching	1 x 90°, V shape		1.30.282.201/2201
yes	latching	2 x 60°		1.30.282.301/2201

CONTROL COMPONENTS

RAFIX 22 FSR - ACTUATORS



NEW



Panel cut-out to IEC 60947-5-1

Approvals



IEC 60947-5-x



UL 508



RAFIX 22 FSR Keylock switches

- The RAFIX 22 FSR keylock switches are equipped with a plastic protective cap which protects against dirt, water and danger of icing when it is closed. Two keys respectively are included in the delivery. The locking systems we use were created according to DIN EN 1303 by leading lock manufacturers. They are open, mechanical systems that require occasional maintenance of the machinery or plant operator depending on environmental conditions.

Two keys are included.

Preliminary technical data

Due to increasing application experience the specifications of this product are successively added. For current status, see RAFI online catalog at x.

Technical Data

→ General information

Color of front ring	black
Form of collar	round

→ Dimensions

Dimensions of collar	Ø 31.3 mm
Overall height	45.1 mm
Mounting hole	22.3 mm
Key grid	35 x 35 mm

→ Mechanical design

Mounting	ring nut
Contact function	see order block
Illuminability	no
Wafers	5
Lock type	001
Main key	on request
Rotating angle	see order block
Key removal position	see order block
Torque for nut ring	1.2 Nm

→ Mechanical characteristics

Torque max.	1.3 Nm
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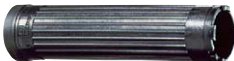
→ Other specifications

Degree of protection from front side	IP65 (DIN EN 60529); IP69K (ISO 20653)
water temp.	23 °C +/- 3 °C
Ambient temp. operating min.	-40 °C
Ambient temp. operating max.	+85 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Environmental resistance	acc. to IEC 60068-2-14, -30, -33 and -78
Salt spray	IEC 600 68-2-11
ROHS compliant	yes
REACH compliant	yes

2

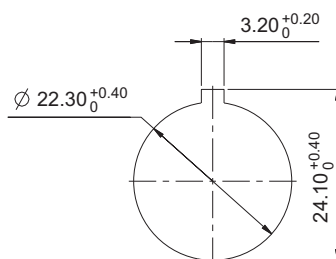
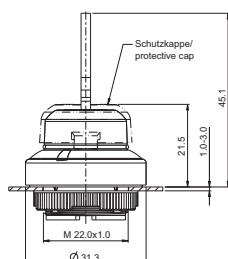
RAFIX
22 FSR

Accessories RAFIX 22 FSR - Keylock switch

→ Description	Photo	Order no.	Additional accessories see page
RAFIX 22 FS ⁺ - Contact block QC gold, Universal, with light conductor		-	2 - 253
RAFIX 22 FS ⁺ - Contact block QC silver, Universal, with light conductor		-	2 - 256
RAFIX FS - Contact block PCB gold, Universal		-	2 - 243
RAFIX FS - Contact block PCB silver, Universal		-	2 - 248
Fixing spanner for ring nut		5.05.800.062/0000	2 - 145, 2 - 261, 5 - 25

**RAFIX 22 FSR
Keylock switch**

Technical data see page 2 - 210







Panel cut-out to IEC 60947-5-1



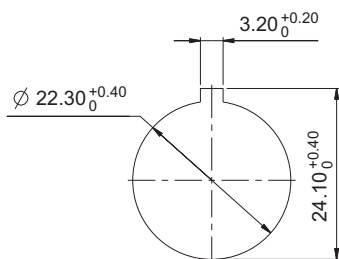
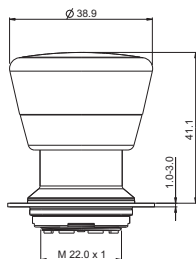
2

RAFIX
22 FSR

→ Contact function	Rotating angle		Key removal position	Order no.
momentary	1 x 40°		0	1.30.285.001/0100
momentary	2 x 40°		0	1.30.285.101/0100
latching	1 x 90°, L shape		0+1	1.30.285.221/0100
latching	1 x 90°, V shape		0+1	1.30.285.321/0100

CONTROL COMPONENTS

RAFIX 22 FSR - ACTUATORS



Panel cut-out to IEC 60947-5-1

Approvals



IEC 60947-5-x



UL 508



RAFIX 22 FSR Emergency stop pushbuttons

- The emergency stop pushbuttons comply with IEC 60 947, and VDE 0113 part 1. The positively guided mechanical movement of the pushbuttons makes them dupe-proof according to DIN EN ISO 13850. To prevent accidental actuation, the pushbutton has a pressure point which must be pressed first before the pushbutton snaps into place in the pressed position. The emergency stop pushbutton is non-blocking thanks to the actuator's design. For example, an initiated emergency stop procedure cannot be interrupted by jammed objects. Use only with an emergency stop contact block.

Original manual, see Appendix.

Preliminary technical data

Due to increasing application experience the specifications of this product are successively added. For current status, see RAFI online catalog at x.

Technical Data

→ General information

Form of lens	conical mushroom form
Color of lens	red
Form of collar	round

→ Dimensions

Mushroom Diameter	37.5 mm
Overall height	41.1 mm
Mounting hole	22.3 mm
Key grid	40 x 40 mm

→ Mechanical design

Mounting	Metal threaded rings
Contact function	latching
Reset	by pulling
Illuminability	see order block
Torque for nut ring	1.2 Nm

→ Mechanical characteristics

Robustness max.	100 N
	750 N static







→ Other specifications

Degree of protection from front side	IP65 (DIN EN 60529); IP69K (ISO 20653)
Ambient temp. operating min.	-40 °C
Ambient temp. operating max.	+85 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Environmental resistance	acc. to IEC 60068-2-14, -30, -33 and -78
Salt spray	IEC 600 68-2-11
ROHS compliant	yes
REACH compliant	yes

2

RAFIX
22 FSR

Accessories RAFIX 22 FSR - Emergency stop pushbutton

→ Description	Photo	Order no.	Additional accessories see page
Emergency stop label, Ø 22.3 mm		-	2 - 82, 2 - 149, 2 - 264, 5 - 21
RAFIX FS - Contact block PCB gold, E-Stop		-	2 - 244
RAFIX FS - Contact block PCB gold, E-Stop, with light conductor		-	2 - 243
RAFIX FS - Contact block PCB silver, E-Stop		-	2 - 249
RAFIX FS - Contact block PCB silver, E-Stop, with light conductor		-	2 - 248
RAFIX FS - Contact block QC gold, E-Stop, with light conductor		-	2 - 253
RAFIX FS - Contact block QC silver, E-Stop, with light conductor		-	2 - 257
Protective Collar for emergency stop RAFIX 22 QR / RAFIX 22 FSR		5.00.456.002/0000	2 - 150
Fixing spanner for ring nut		5.05.800.062/0000	2 - 145, 2 - 261, 5 - 25

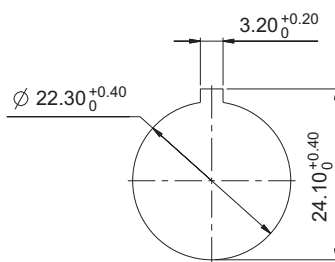
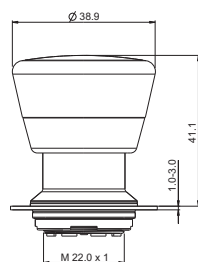
2

RAFIX 22 FSR

Emergency stop pushbutton, metal mushroom

RAFIX
22 FSR

Technical data see page 2 - 212



Panel cut-out to IEC 60947-5-1

→ Illuminability	Degree of protection from front side	Order no.
yes, window white	IP65 (DIN EN 60529); IP69K (ISO 20653)	1.30.283.111/0300
no	IP65 (DIN EN 60529); IP69K (ISO 20653)	1.30.283.611/0300