



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

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

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



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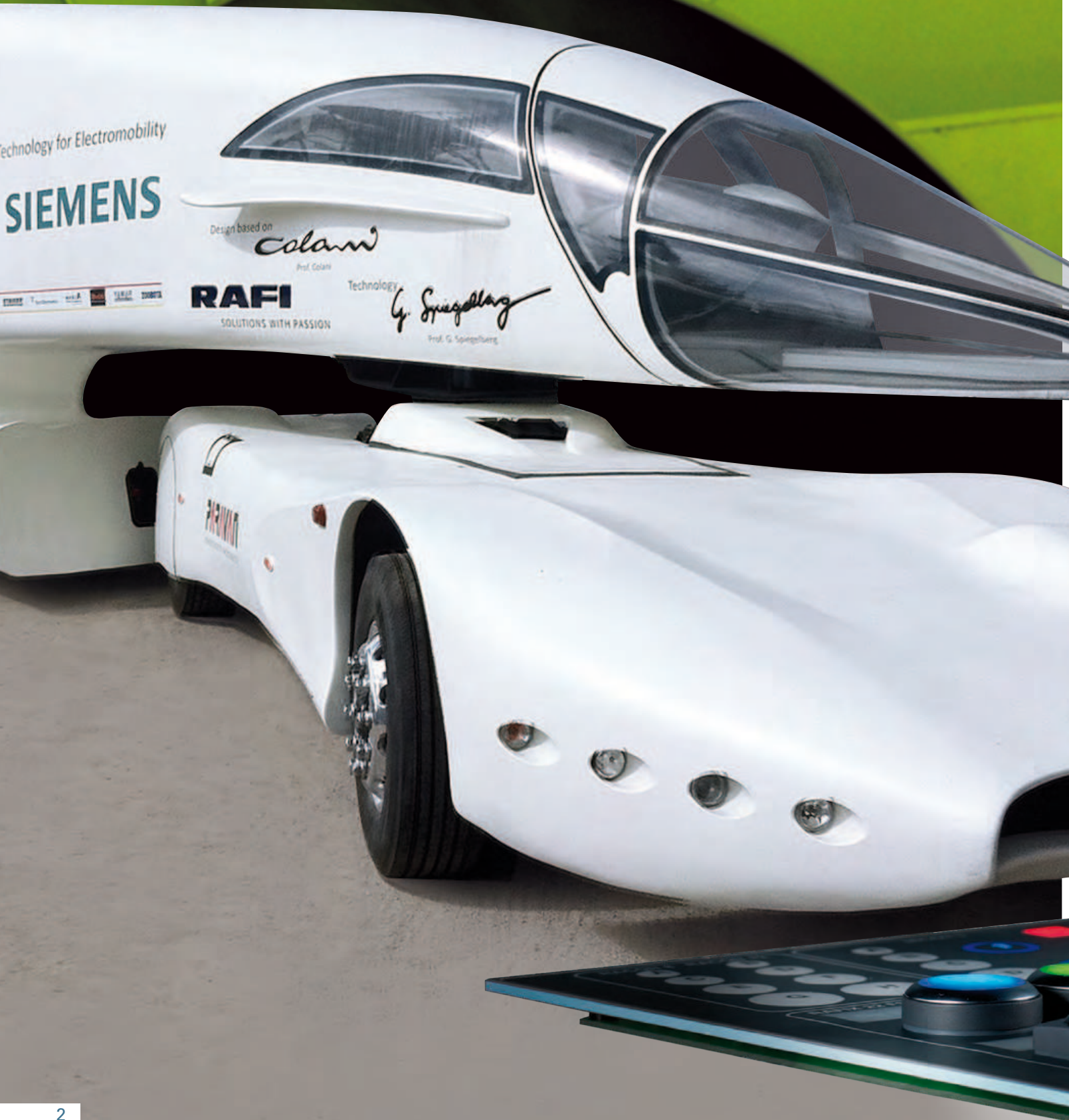
RAFIX 22 FS⁺

FAST & SLIM

Everything else is outdated.



RAFIX 22 FS⁺
FAST & SLIM



RAFIX 22 FS⁺ FAST & SLIM EVERYTHING ELSE IS OUTDATED.

Design is the key! New technologies and new materials make new design worlds possible. That not only goes for Colani and his motor truck vision of the future but also for the control unit in your machine.

The RAFIX 22 FS+ control component generation provides your designers a basis for new designs, plus fast and cost-efficient installation options requiring a minimum amount of space, and is now optimized to the latest generation of super bright SMT LEDs.

Fast

The fastest connection type for every application: with a printed circuit board or right with quick-connect terminals.

- A printed circuit board is the best and fastest solution already for medium-size production volumes. In addition, PCB contact blocks can ideally be combined with displays, short-travel key switches and electronic assemblies on one common printed circuit board.
- Alternatively, QC (= Quick Connect) contact blocks can easily be snapped into the actuators without tools. Blade terminals are used directly for wiring in a conventional manner. The fast and cost-effective variant - where no PCB is profitable.

Slim

Now it's a snap to slim the design of your control systems thanks to the low mounting depth.

- Designs with PCB contact blocks feature a distance between the front panel and printed circuit board of only 9.2 mm; the same goes for contact blocks with silver contacts for mains voltage.

That's as slim as it gets.

- Also when fitted with QC contact blocks, RAFIX 22 FS+ panels are extremely flat. With a small footprint of only 27 mm behind the front panel, they provide tremendous design scope for inspiring control panels.

+

RAFIX 22 FS⁺ offer additional benefits for you:

- Diverse actuators and contact block options – a complete series
- Variable thanks to round or square operating components
- Variable thanks to gold contacts from 5V silver contacts up to 250 V
- Variable design thanks to diverse front ring colors
- Variable illumination, compatible with 3 mm THT or newly with SMT LEDs



RAFIX 22 FS⁺
FAST & SLIM

DESIGN IS THE KEY

Enjoy the look of your operating panel just like your customer will. The front elements feature a classically elegant design and guarantee reliable data input.



Design

The RAFIX 22 FS⁺ series sets new standards in the control component field. Extremely flat construction and functional esthetic design are absolutely essential in an increasingly design-oriented industrial environment. The wide variety and variability of actuators give your designer complete de-

sign freedom: round or square collar types, radiant colors and homogenous illumination of the large actuating areas are basic features. Combined with the various front rings, this makes it possible to create your panel with a distinctive design. For example, a defined color can always be assigned to a specific

command. What's more, the large number of color options for the front ring makes it a snap to customize it to the corporate colors of the various OEMs.



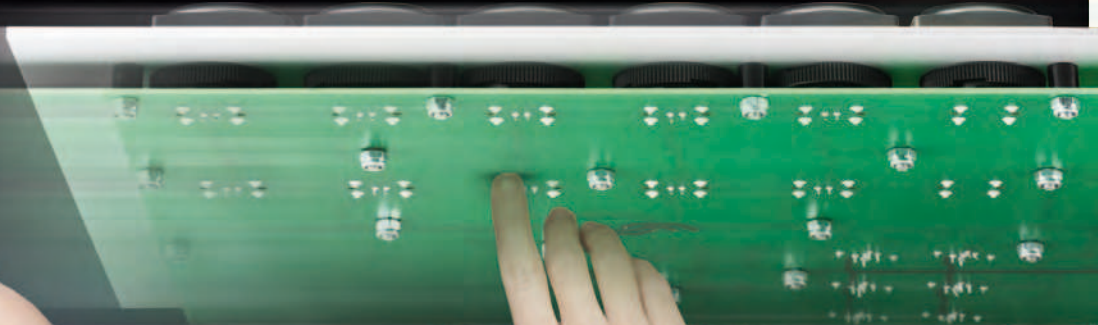
Safe and reliable

The actuators featured in the RAFIX 22 FS⁺ series are water-jet proof and consistently ensure a degree of protection to at least IP 65, which makes them suitable for many diverse applications. For increased environmental requirements, the series also features actuators with a degree of protection to IP 65/ IP 69K.

Durable

The mechanical lifetime of all actuators is optimally suited for the long-lasting operation of even much-used panels.

RAFIX 22 FS⁺
FAST & SLIM

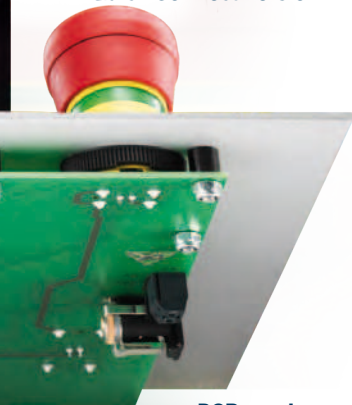


PCB & QC – TWO SYSTEMS, ONE TARGET: EFFICIENCY

In front of the front panel control components are functionally identical. Behind it you'll find the differences which make life easier for your production engineer and number work simpler for your accountant.



Quick Connect version



PCB version

Quick Connect

QC contact blocks for maximum variability

When the investment for the layout and production of a printed circuit board does not pay off, your best choice is our QC contact blocks with quick connect terminals. The contact blocks are plugged into the actuators from behind and lock firmly into place.

Blade terminals enable simple wiring, without any additional devices or special tools. The enclosed space in the RAFIX 22 FS⁺ control components is also used efficiently for the QC contact blocks whose mounting depth including the LED clip and cable lugs is only 27 mm.

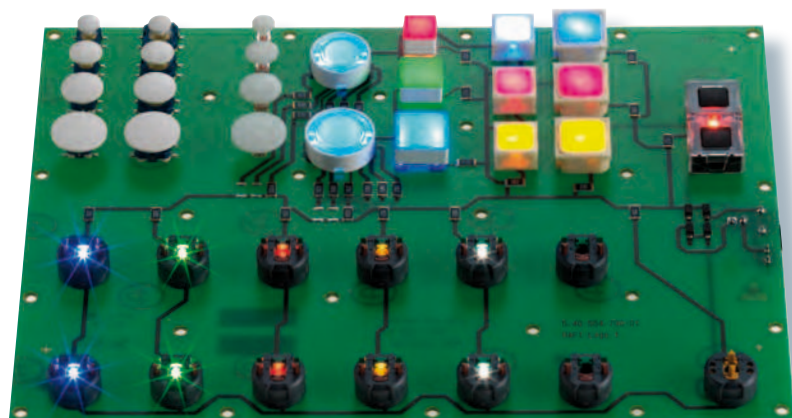
Easy to assemble on the printed circuit board

PCB contact blocks for high production volumes

- If you produce your input systems in large volumes, or
- if you use a printed circuit board for the electronics, displays and other components anyway, or
- if you are planning combination with short-travel keyswitches, RAFIX 22 FS⁺ with PCB contact blocks is the only real choice.

Simply include the PCB contacts and LEDs in the layout of the printed circuit board and solder them during production – just as simply as the other components on a common printed board.

Your benefits: cost savings and reduction of assembly errors. And don't worry about using up space: the contact blocks require only 9.2 mm of space between the printed circuit board and the front panel.



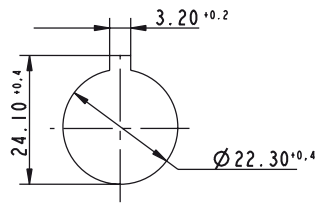
PCB version

COMMON SYSTEM DATA

Front panel

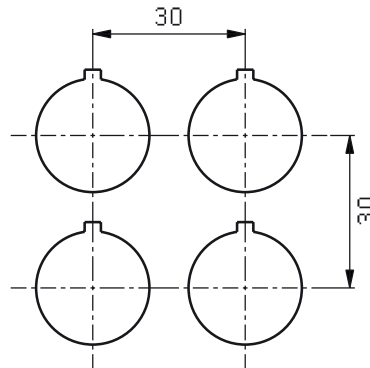
Panel cut-out

The actuators featured in the RAFIX 22 FS⁺ series are suitable for 22.3 mm panel cut-outs according to IEC 60947-5-1. All actuators are equipped with a locating pip. This locating pip ensures the perfect fit of actuators and contact blocks for PCB-mounted components and is therefore essential for a design built with these contact blocks.



Grid spacing

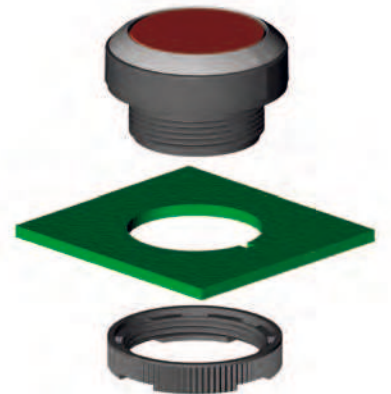
The design principle makes it possible to use a minimum grid spacing of 30 mm x 30 mm. In such an arrangement, actuators with square collars can be aligned directly without any gaps. When designing the grid spacing, it is recommended to consider any external legending required (for example, using labels strips inserted into the front panel).



Assembly of the front actuators

Single-handed assembly method

For assembly, insert the actuator into the mounting hole from the front side. It is clamped in the panel cutout. Subsequently you can screw on the actuator from the rear using the ring nut. You can perform these steps one after the other with one hand! Even better: you can start by inserting all actuators from the front side first and subsequently fasten the threaded rings from the rear in one go. We recommend using the RAFIX fixing spanner to ensure proper tightening.



SYSTEM STRUCTURE WITH PCB CONTACT BLOCKS

PCB mounting

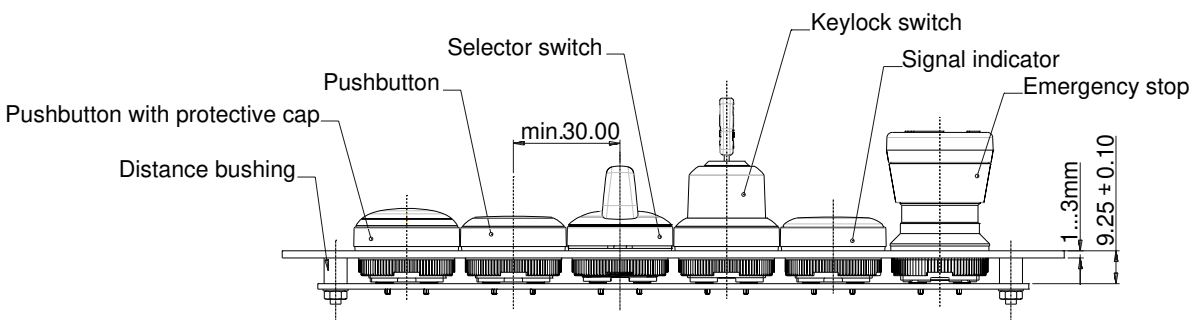
The PCB contact blocks are soldered on the printed circuit board. Two options for actuator illumination are available:

1.) A 3 mm LED which is inserted into the base of the contact block and soldered together with the contact block on the printed circuit board.

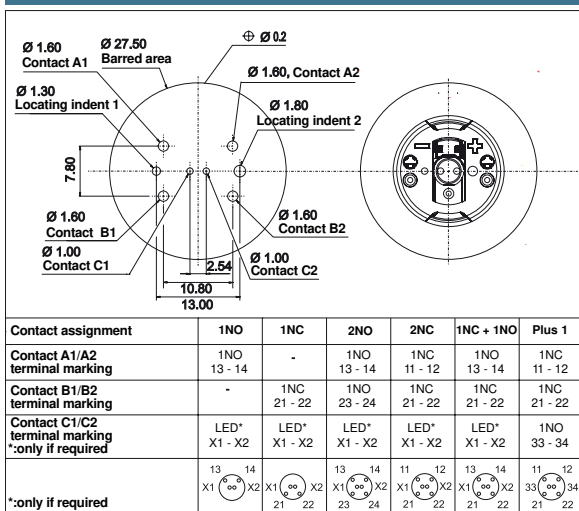
2.) A separately placed SMT LED whose light is transported by the light conductor and distributed over the entire surface of the lenses.

The printed circuit board is fastened to the front panel with bolts, while the contact blocks are almost fully submerged

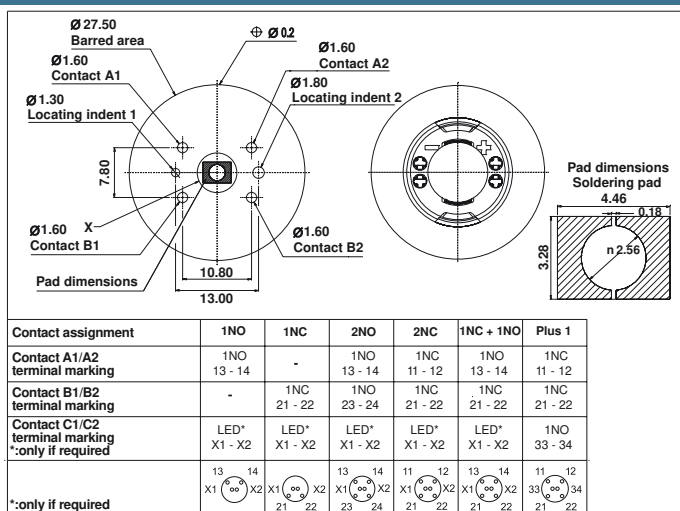
in the actuators, so the entire system is very low. Further benefits: individual wiring is not required, and it is no longer necessary to cut out the printed circuit board around the control components.



PCB hole pattern with THT LED (view of component side)



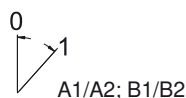
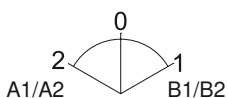
PCB hole pattern with SMT LED (view of component side)



Contact diagram for selector and keylock switches

All actuators with 3 switch positions

All actuators with 2 switch positions



SYSTEM STRUCTURE WITH QC CONTACT BLOCKS

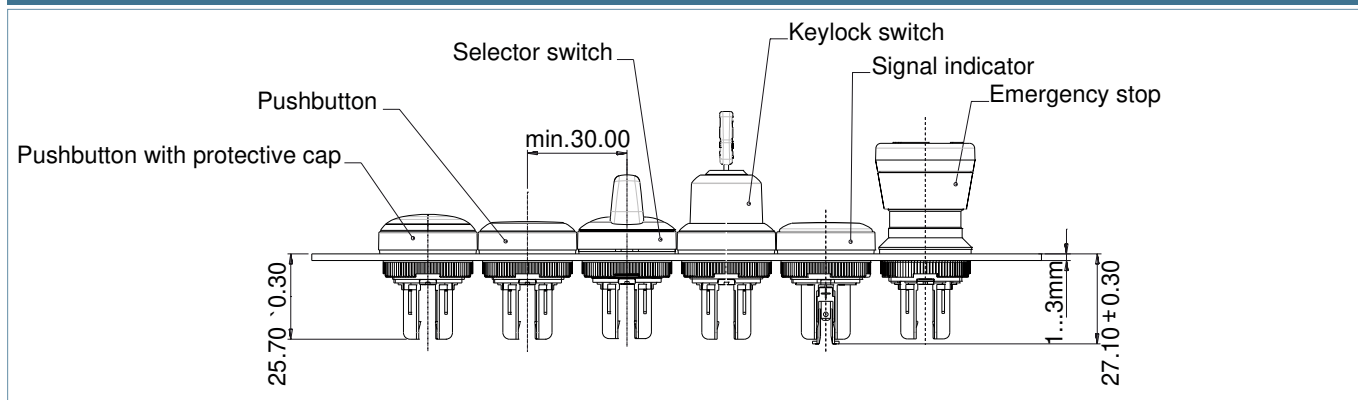
Essential features

- Mounting depth only 27 mm including LED clip and cable lugs
- Quick-connect/solder terminals 2.8 x 0.8 mm
- The contact block engages permanently with the actuator only at the time of final assembly
- Compatible with all RAFIX 22 FS⁺ actuators: pushbuttons, selector switches, keylock switches, emergency stop buttons and signal indicators, with all benefits this series offers
 - Large actuating and indicating areas
 - Round or square collar shapes
 - Panel cut-out to IEC 60947: 22.3 mm with locating indent
- Degree of protection IP 65 (water-jet proof)
- Protection against contact for quick-connect terminals and cable lugs: short-circuit proof even when the connection wires are under tensile strain
- Gold contacts for totally reliable switching of low voltages (5V/1 mA min.) or
- Silver contacts (250V/4A max.) for mains voltage
- Contact assignments: 1NC, 1NO, 2NC, 2NO, 1NC + 1NO
- Illumination with replaceable super bright LED clips in various LED colors, with quick-connect terminals 2.8 x 0.8 mm
- Actuators/contact blocks, signal indicators/lamp sockets and LED clips can be stocked separately and are not assembled until final assembly. This ensures maximum flexibility and economical stock-keeping for this range

Safe assembly process



Dimensional drawing with QC contact blocks



Terminal diagram (view from below)

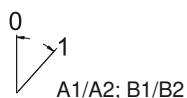
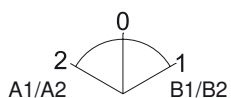
Contact block with LED clip
(view from below)

Contact block "Plus 1"
(view from below)

| Contact assignment | 1NO | 1NC | 2NO | 2NC | 1NC + 1NO | Plus 1 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|
| Contact A1/A2 terminal marking | 1NO 13 - 14 | - | 1NO 13 - 14 | 1NC 11 - 12 | 1NO 13 - 14 | 1NC 11 - 12 |
| Contact B1/B2 terminal marking | - | 1NC 21 - 22 | 1NO 23 - 24 | 1NC 21 - 22 | 1NC 21 - 22 | 1NC 21 - 22 |
| Contact C1/C2 terminal marking *:only if required | LED* X1 - X2 | LED* X1 - X2 | LED* X1 - X2 | LED* X1 - X2 | LED* X1 - X2 | 1NO 33 - 34 |

Contact diagram for selector and keylock switches

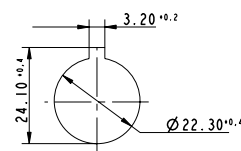
All actuators with 3 switch positions All actuators with 2 switch positions



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RAFIX 22 FS⁺ - Pushbuttons



Panel cut-out to IEC 60947-5-1

Technical Data

General information

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

Dimensions

| | |
|----------------------|-----------------|
| Dimensions of collar | see order block |
| Overall height | see order block |
| Mounting depth | see order block |
| 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 |
| Torque for nut ring | 1.2 Nm |

Mechanical characteristics

| | |
|------------------|-------|
| Operating travel | 4 mm |
| Robustness min. | 100 N |

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 | 1,000,000 momentary / 500,000 latching |
| B10 | 1,300,000 momentary / 650,000 latching |
| Degree of protection from front side | IP65 |
| Environmental resistance | acc. to IEC 60068-2-14, -30, -33 and -78 |
| Salt spray | IEC 600 68-2-11 |

Approvals



IEC 60947-5-x,
60904, 60073










UL 508, C22.2 No.
14-M91

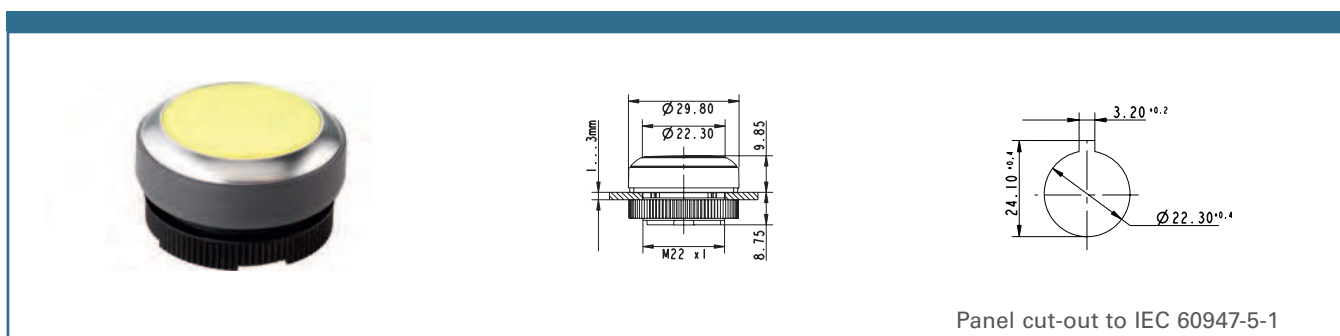


CCC in preparation

Accessories RAFIX 22 FS⁺ - Pushbuttons

| Description | Photo | Order no. | Additional accessories see page |
|--|---|-------------------|---------------------------------|
| RAFIX 22 FS ⁺ - Contact block PCB gold, Universal |  | - | 59 |
| RAFIX 22 FS ⁺ - Contact block PCB gold, Universal, with light conductor |  | - | 58 |
| RAFIX 22 FS ⁺ - Contact block PCB silver, Universal |  | - | 63 |
| RAFIX 22 FS ⁺ - Contact block PCB silver, Universal, with light conductor |  | - | 63 |
| RAFIX 22 FS ⁺ - Contact block QC gold, Universal, with light conductor |  | - | 52 |
| RAFIX 22 FS ⁺ - Contact block QC silver, Universal, with light conductor |  | - | 55 |
| Fixing spanner for ring nut and front ring |  | 5.05.800.062/0000 | 65 |

RAFIX 22 FS⁺ - Pushbutton, flush lens, round collar



Panel cut-out to IEC 60947-5-1

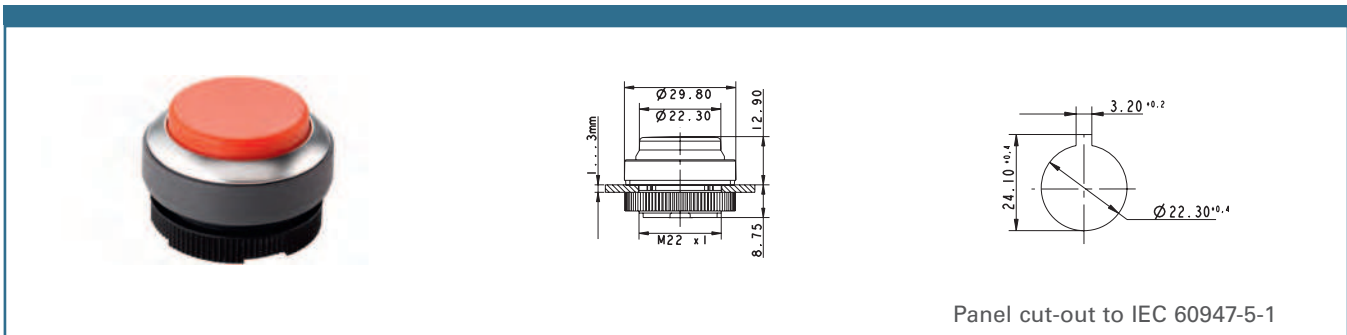
| Illuminability | Colour of lens | Order no. momentary | | Order no. latching | |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
| | | Plastic front ring | Metallized front ring | Plastic front ring | Metallized front ring |
| yes | translucent white | 1.30.270.001/22xx | 1.30.270.021/2200 | 1.30.270.011/22xx | 1.30.270.031/2200 |
| yes | translucent red | 1.30.270.001/23xx | 1.30.270.021/2300 | 1.30.270.011/23xx | 1.30.270.031/2300 |
| yes | translucent yellow | 1.30.270.001/24xx | 1.30.270.021/2400 | 1.30.270.011/24xx | 1.30.270.031/2400 |
| yes | translucent green | 1.30.270.001/25xx | 1.30.270.021/2500 | 1.30.270.011/25xx | 1.30.270.031/2500 |
| yes | translucent blue | 1.30.270.001/26xx | 1.30.270.021/2600 | 1.30.270.011/26xx | 1.30.270.031/2600 |
| no | opaque black | 1.30.270.001/01xx | 1.30.270.021/0100 | 1.30.270.011/01xx | 1.30.270.031/0100 |
| no | opaque slate-grey | 1.30.270.001/07xx | 1.30.270.021/0700 | 1.30.270.011/07xx | 1.30.270.031/0700 |

Technical data see page 13

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

Legending on request.

RAFIX 22 FS⁺ - Pushbutton, protruding lens, round collar



Panel cut-out to IEC 60947-5-1

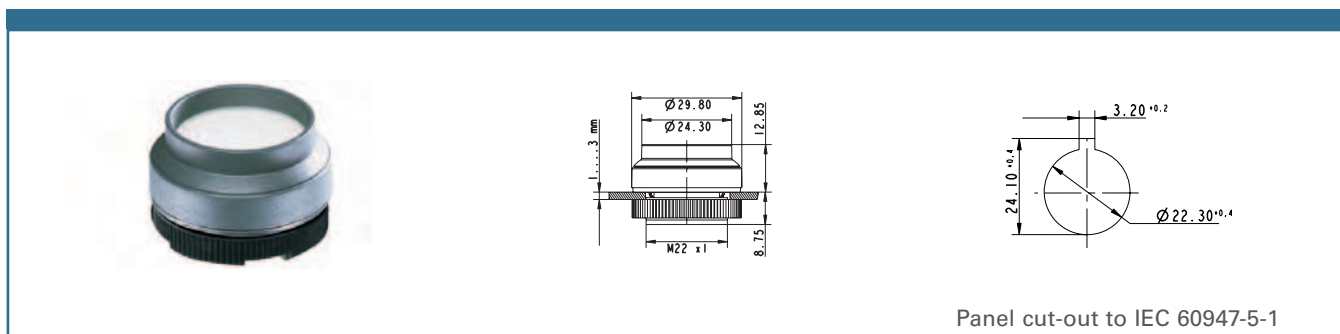
| Illuminability | Colour of lens | Order no. momentary | | Order no. latching | |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
| | | Plastic front ring | Metallized front ring | Plastic front ring | Metallized front ring |
| yes | translucent white | 1.30.270.201/22xx | 1.30.270.221/2200 | 1.30.270.211/22xx | 1.30.270.231/2200 |
| yes | translucent red | 1.30.270.201/23xx | 1.30.270.221/2300 | 1.30.270.211/23xx | 1.30.270.231/2300 |
| yes | translucent yellow | 1.30.270.201/24xx | 1.30.270.221/2400 | 1.30.270.211/24xx | 1.30.270.231/2400 |
| yes | translucent green | 1.30.270.201/25xx | 1.30.270.221/2500 | 1.30.270.211/25xx | 1.30.270.231/2500 |
| yes | translucent blue | 1.30.270.201/26xx | 1.30.270.221/2600 | 1.30.270.211/26xx | 1.30.270.231/2600 |
| no | opaque black | 1.30.270.201/01xx | 1.30.270.221/0100 | 1.30.270.211/01xx | 1.30.270.231/0100 |
| no | opaque slate-grey | 1.30.270.201/07xx | 1.30.270.221/0700 | 1.30.270.211/07xx | 1.30.270.231/0700 |

Technical data see page 13

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

Legending on request.

RAFIX 22 FS⁺ - Pushbutton, protruding front ring, round collar



Panel cut-out to IEC 60947-5-1

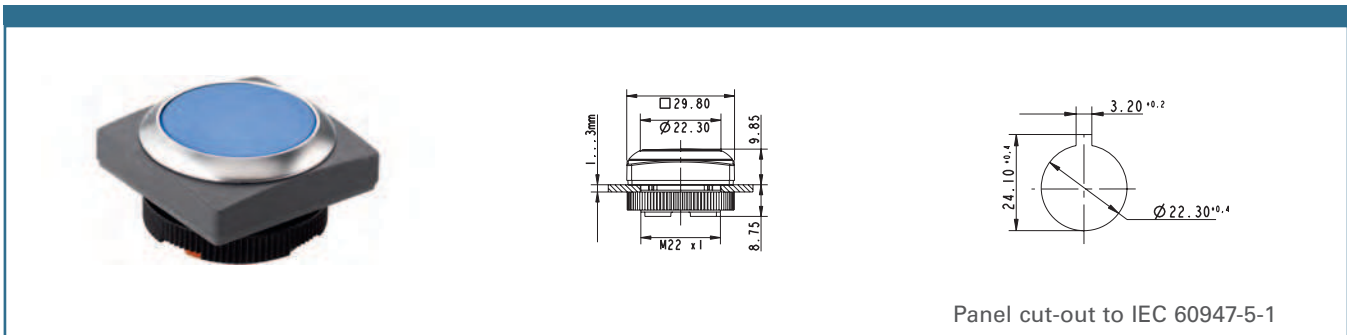
| Illuminability | Colour of lens | Order no. momentary | | Order no. latching | |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
| | | Plastic front ring | Metallized front ring | Plastic front ring | Metallized front ring |
| yes | translucent white | 1.30.270.401/22xx | 1.30.270.421/2200 | - | - |
| yes | translucent red | 1.30.270.401/23xx | 1.30.270.421/2300 | - | - |
| yes | translucent yellow | 1.30.270.401/24xx | 1.30.270.421/2400 | - | - |
| yes | translucent green | 1.30.270.401/25xx | 1.30.270.421/2500 | - | - |
| yes | translucent blue | 1.30.270.401/26xx | 1.30.270.421/2600 | - | - |
| no | opaque black | 1.30.270.401/01xx | 1.30.270.421/0100 | - | - |
| no | opaque slate-grey | 1.30.270.401/07xx | 1.30.270.421/0700 | - | - |

Technical data see page 13

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Legending on request.

RAFIX 22 FS⁺ - Pushbutton, flush lens, square collar



Panel cut-out to IEC 60947-5-1

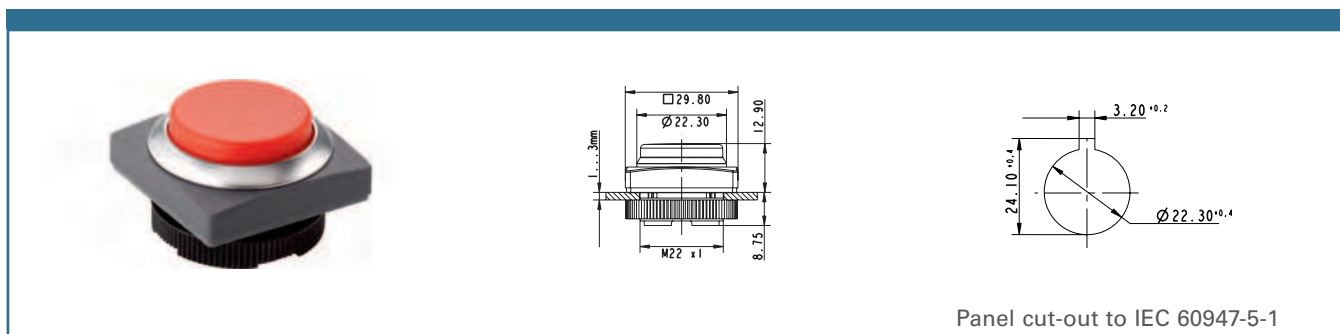
| Illuminability | Colour of lens | Order no. momentary | | Order no. latching | |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
| | | Plastic front ring | Metallized front ring | Plastic front ring | Metallized front ring |
| yes | translucent white | 1.30.270.051/22xx | 1.30.270.071/2200 | 1.30.270.061/22xx | 1.30.270.081/2200 |
| yes | translucent red | 1.30.270.051/23xx | 1.30.270.071/2300 | 1.30.270.061/23xx | 1.30.270.081/2300 |
| yes | translucent yellow | 1.30.270.051/24xx | 1.30.270.071/2400 | 1.30.270.061/24xx | 1.30.270.081/2400 |
| yes | translucent green | 1.30.270.051/25xx | 1.30.270.071/2500 | 1.30.270.061/25xx | 1.30.270.081/2500 |
| yes | translucent blue | 1.30.270.051/26xx | 1.30.270.071/2600 | 1.30.270.061/26xx | 1.30.270.081/2600 |
| no | opaque black | 1.30.270.051/01xx | 1.30.270.071/0100 | 1.30.270.061/01xx | 1.30.270.081/0100 |
| no | opaque slate-grey | 1.30.270.051/07xx | 1.30.270.071/0700 | 1.30.270.061/07xx | 1.30.270.081/0700 |

Technical data see page 13

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

Legending on request.

RAFIX 22 FS⁺ - Pushbutton, protruding lens, square collar



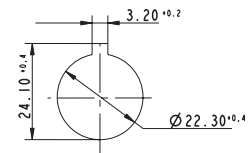
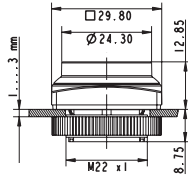
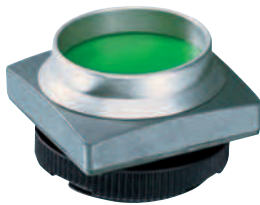
| Illuminability | Colour of lens | Order no. momentary | | Order no. latching | |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
| | | Plastic front ring | Metallized front ring | Plastic front ring | Metallized front ring |
| yes | translucent white | 1.30.270.251/22xx | 1.30.270.271/2200 | 1.30.270.261/22xx | 1.30.270.281/2200 |
| yes | translucent red | 1.30.270.251/23xx | 1.30.270.271/2300 | 1.30.270.261/23xx | 1.30.270.281/2300 |
| yes | translucent yellow | 1.30.270.251/24xx | 1.30.270.271/2400 | 1.30.270.261/24xx | 1.30.270.281/2400 |
| yes | translucent green | 1.30.270.251/25xx | 1.30.270.271/2500 | 1.30.270.261/25xx | 1.30.270.281/2500 |
| yes | translucent blue | 1.30.270.251/26xx | 1.30.270.271/2600 | 1.30.270.261/26xx | 1.30.270.281/2600 |
| no | opaque black | 1.30.270.251/01xx | 1.30.270.271/0100 | 1.30.270.261/01xx | 1.30.270.281/0100 |
| no | opaque slate-grey | 1.30.270.251/07xx | 1.30.270.271/0700 | 1.30.270.261/07xx | 1.30.270.281/0700 |

Technical data see page 13

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

Legending on request.

RAFIX 22 FS⁺ - Pushbutton, protruding front ring, square collar



Panel cut-out to IEC 60947-5-1

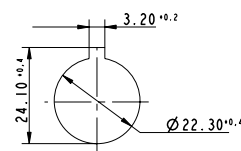
| Illuminability | Colour of lens | Order no. momentary | | Order no. latching | |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
| | | Plastic front ring | Metallized front ring | Plastic front ring | Metallized front ring |
| yes | translucent white | 1.30.270.451/22xx | 1.30.270.471/2200 | - | - |
| yes | translucent red | 1.30.270.451/23xx | 1.30.270.471/2300 | - | - |
| yes | translucent yellow | 1.30.270.451/24xx | 1.30.270.471/2400 | - | - |
| yes | translucent green | 1.30.270.451/25xx | 1.30.270.471/2500 | - | - |
| yes | translucent blue | 1.30.270.451/26xx | 1.30.270.471/2600 | - | - |
| no | opaque black | 1.30.270.451/01xx | 1.30.270.471/0100 | - | - |
| no | opaque slate-grey | 1.30.270.451/07xx | 1.30.270.471/0700 | - | - |

Technical data see page 13

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

Legending on request.

RAFIX 22 FS⁺ - Pushbuttons with protective cap



Panel cut-out to IEC 60947-5-1

Technical Data

General information

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

Dimensions

| | |
|----------------------|-----------------|
| Dimensions of collar | see order block |
| Overall height | see order block |
| Mounting depth | see order block |
| 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 |
| Torque for nut ring | 1.2 Nm |

Mechanical characteristics

| | |
|------------------|-------|
| Operating travel | 4 mm |
| Robustness min. | 100 N |

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 | 1,000,000 momentary / 500,000 latching |
| B10 | 1,300,000 momentary / 650,000 latching |
| Degree of protection from front side | IP65, IP69K |
| Environmental resistance | acc. to IEC 60068-2-14, -30, -33 and -78 |
| Salt spray | IEC 600 68-2-11 |

Approvals



IEC 60947-5-x,
60904, 60073



UL 508, C22.2 No.
14-M91

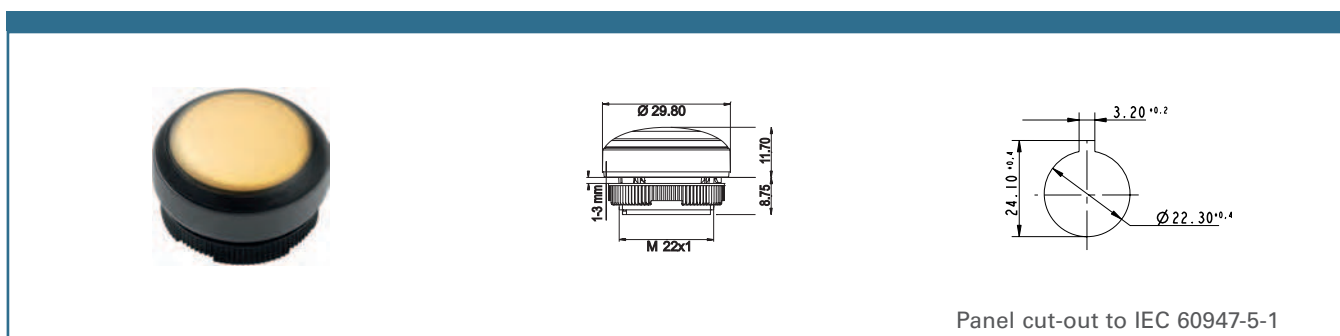


CCC in preparation

Accessories RAFIX 22 FS⁺ - Pushbuttons with protective cap

| Description | Photo | Order no. | Additional accessories see page |
|--|--|-------------------|---------------------------------|
| RAFIX 22 FS ⁺ - Contact block PCB gold, Universal |  | - | 59 |
| RAFIX 22 FS ⁺ - Contact block PCB gold, Universal, with light conductor |  | - | 58 |
| RAFIX 22 FS ⁺ - Contact block PCB silver, Universal |  | - | 63 |
| RAFIX 22 FS ⁺ - Contact block PCB silver, Universal, with light conductor |  | - | 63 |
| RAFIX 22 FS ⁺ - Contact block QC gold, Universal, with light conductor |  | - | 52 |
| RAFIX 22 FS ⁺ - Contact block QC silver, Universal, with light conductor |  | - | 55 |
| Fixing spanner for ring nut and front ring |  | 5.05.800.062/0000 | 65 |

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



Panel cut-out to IEC 60947-5-1

| Illuminability | Colour of lens | Order no. momentary | | Order no. latching | |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
| | | Plastic front ring | Metallized front ring | Plastic front ring | Metallized front ring |
| yes | translucent white | 1.30.270.005/22xx | - | - | - |
| 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 | - | - | - |
| no | opaque black | 1.30.270.005/01xx | - | - | - |
| no | opaque slate-grey | 1.30.270.005/07xx | - | - | - |

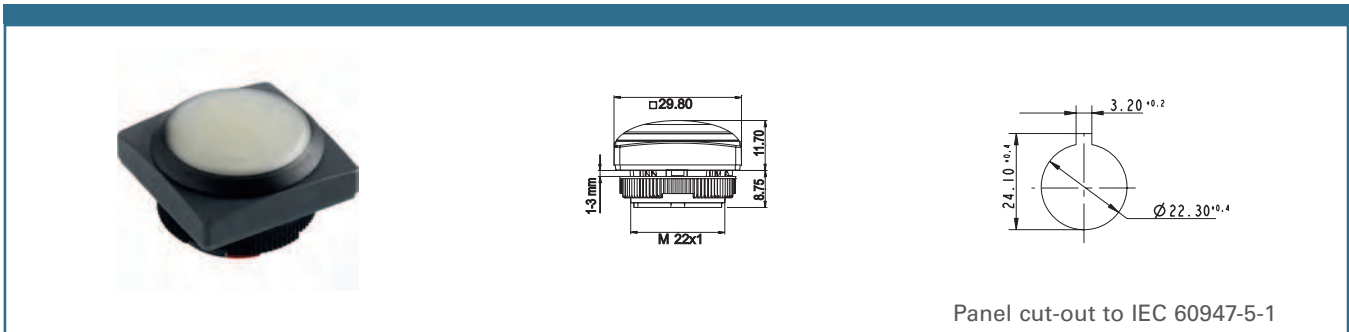
Technical data see page 21

Pushbutton with protective cap for use under rugged conditions.

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

Legending on request.

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



Panel cut-out to IEC 60947-5-1

| Illuminability | Colour of lens | Order no. momentary | | Order no. latching | |
|----------------|--------------------|---------------------|-----------------------|--------------------|-----------------------|
| | | Plastic front ring | Metallized front ring | Plastic front ring | Metallized front ring |
| yes | translucent white | 1.30.270.055/22xx | - | - | - |
| 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 | - | - | - |
| no | opaque black | 1.30.270.055/01xx | - | - | - |
| no | opaque slate-grey | 1.30.270.055/07xx | - | - | - |

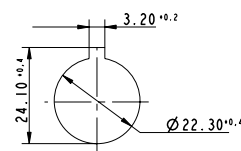
Technical data see page 21

Pushbutton with protective cap for use under rugged conditions.

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

Legending on request.

RAFIX 22 FS⁺ - Selector switches



Panel cut-out to IEC 60947-5-1

General Data

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 |
| Colour 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 | see order block |
| 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 |
|-------------|--------|

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 |
| 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 |

Approvals



IEC 60947-5-x,
60904, 60073



UL 508, C22.2 No.
14-M91



CCC in preparation