

RK 90

Keycaps

Keycaps for RACON, RF 15 / RF 19 and KN 19 tactile switches

- You can insert a legend insert between lens and pressure pad of the transparent keycaps.
 - All products are RoHS compliant.
-

PCB KEY SWITCHES

RK 90 - KEYCAPS

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Keycap system RK 90

Example with RF 15 key switches. Instead of RF 15 following key switches can be used:

- MICON 5
- RACON 8/12
- RF 15 tactile switches and signal indicators
- RF 19 tactile switches and signal indicators
- Short-travel main switch KN 19

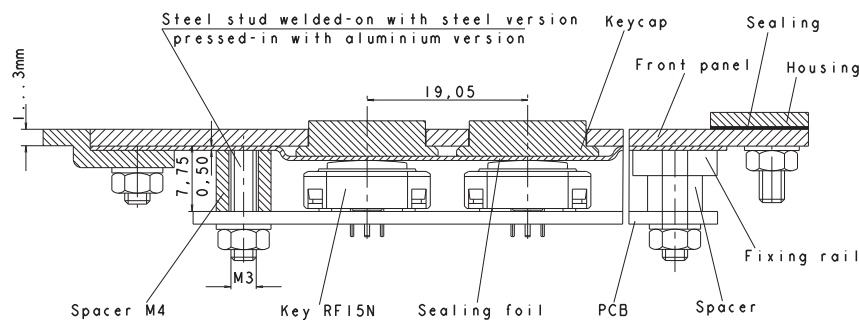
The RK 90 system was granted the prize of the Design Forum of the Hannover Fair.

Degree of protection: IP65 according to DIN in front of the panel, with silicone sealing.

Installation methods

Installation from front

Installation from rear



Mounting from front

Sealing foil between RK 90 keyboard and customer's front panel.

Mounting from rear

Sealing foil is screwed to RK 90 panel with fixing rails; sealing between keyboard and customer's front panel has to be provided.

Legending

- **Laser printing:** This labelling method is possible for opaque keycaps. The symbols are engraved in the keycaps with laser.
- When using transparent lenses, the pressure pad can be legended by printing.

As the legending is protected by the lens, it is friction-proof.

- **Engraving:** With this method the keycaps are engraved with the required symbol and then inlaid with ink.

PCB KEY SWITCHES

RK 90 - KEYCAP SYSTEM

Recommendations

- **Front panel thickness:**

- **Aluminum:** 2 mm (1.5 mm min, 3 mm max.)
(Fixing with M 3 pressed-in studs)
- **Steel:** 2 mm (3 mm max.); V2A: 1.25 mm
(Fixing with M 3 welded-on studs)
The keytop surface is flush with the keyboard at a panel thickness of 3.5 mm.

- **Silicone sealing:**

Material: Silicone transparent
Type: A-SY 40-79
Hardness: 30° shore +/- 5°
Thickness: 0.45 +/- 0.05 mm

- **Installation:** Ensure that the keyboard slopes slightly so that any liquid can drain away between front panel and silicone sealing; if necessary, provide additional drain holes in the front panel.
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Cleaning liquids

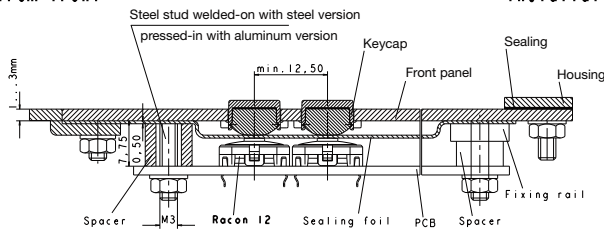
For the cleaning of the plastic keycaps please do not use cleaning liquids based on alcohol or acid.

RK 90 Keycaps, plastic, 9 x 9 mm



Installation from front

Installation for rear



→ You can design especially small input fields with the small keycap 9 x 9 mm. For example, controls for measurement and laboratory equipment which do not offer much space for input fields because of their small size. RK 90 keycaps 9 x 9 mm and RACON tactile switches can be used to implement key grids of only 12.5 mm. The keycaps can be legended by laser-printing, engraving or standard printing. This keycap is our first choice in a combination with the illuminated RACON 12 i tactile switch.

Please note: For the cleaning of the plastic keycaps please do not use cleaning liquids based on alcohol or acid.

Technical Data

→ General information

Color of lens	see order block
Size	1-module
Degree of protection (with silicon seal)	IP65 (DIN EN 60529)
Illuminability	see order block

→ Dimensions

Dimension keycap in front of front panel	8.85 x 8.85 mm
Dimension keycap behind front panel	11.5 x 11.5 mm
Dimension (c) hole patterns final size	9.00 x 9.00 mm
Dimension hole patterns punched size	9.20 x 9.20 mm

→ Other specifications

ROHS compliant	yes
REACH compliant	yes

Please order lens separately.

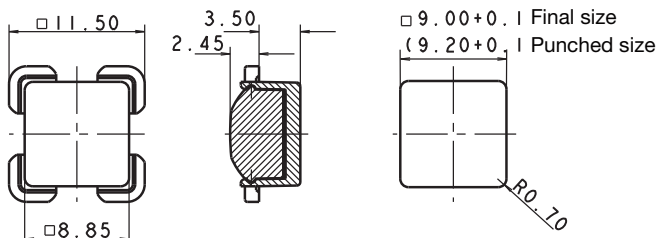
PCB KEY SWITCHES

RK 90 - KEYCAPS, PLASTIC, 9 X 9 MM

RK 90 Keycap body plastic, for lenses 9 x 9 mm



Technical data see page 4 - 109



→ Size	Illuminability	Dimension keycap behind front panel	Dimension keycap in front of front panel	Dimension (c) hole patterns final size	Order no.
1-module	yes	11.5 x 11.5 mm	8.85 x 8.85 mm	9.00 x 9.00 mm	5.55.103.265/1013

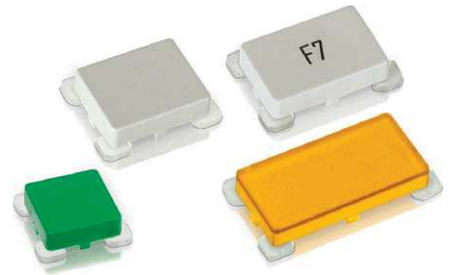
Laser printed opaque lenses and keycap sets on request.

Please order lenses separately.

Lenses:

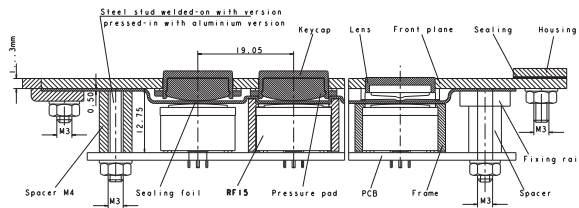
- RK 90 - Lens, 9 x 9 mm, opaque red: 5.46.651.015/0309
- RK 90 - Lens, 9 x 9 mm, opaque yellow: 5.46.651.015/0409
- RK 90 - Lens, 9 x 9 mm, opaque green: 5.46.651.015/0514
- RK 90 - Lens, 9 x 9 mm, opaque blue: 5.46.651.015/0611
- RK 90 - Lens, 9 x 9 mm, opaque light grey: 5.46.651.015/0700
- RK 90 - Lens, 9 x 9 mm, transparent colorless: 5.46.651.019/1002
- RK 90 - Lens, 9 x 9 mm, transparent red: 5.46.651.019/1307
- RK 90 - Lens, 9 x 9 mm, transparent yellow: 5.46.651.019/1403
- RK 90 - Lens, 9 x 9 mm, transparent green: 5.46.651.019/1510

RK 90 Keycaps, plastic, 14 mm



Installation from front

Installation from rear



→ Keycap system for 19.05 mm grid. The keycaps can be legended by laser-printing, engraving or standard printing. Keycaps / sets with legends and other keycap shapes / colors available on request.

Please note: For the cleaning of the plastic keycaps please do not use cleaning liquids based on alcohol or acid.

Technical Data

→ General information

Color of lens	see order block
Size	see order block
Degree of protection (with silicon seal)	IP65 (DIN EN 60529)
Illuminability	yes

→ Dimensions

Dimension (b) in front of front panel	see order block
Dimension (a) behind front panel	see order block
Dimension (c) hole patterns final size	see order block
Dimension hole patterns punched size	see order block

→ Other specifications

ROHS compliant	yes
REACH compliant	yes

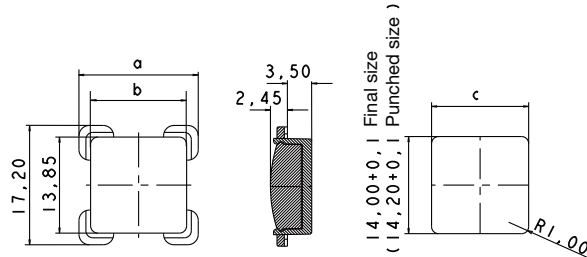
PCB KEY SWITCHES

RK 90 - KEYCAPS, PLASTIC 14 MM



RK 90 Keycap body plastic, for lenses 14 mm, 1-module

Technical data see page 4 - 111



→ Size	Illuminability	Dimension (a) behind front panel	Dimension (b) in front of front panel	Dimension (c) hole patterns final size	Order no.
1-module	yes	17.20 x 17.20 mm	13.85 x 13.85 mm	14.00 x 14.00 mm	5.55.103.030/1013

Lenses:

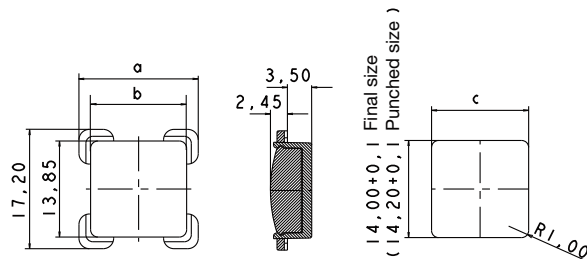
- RK 90 - Lens, 14 x 14 mm, 1-module, opaque red: 5.46.681.001/0309
- RK 90 - Lens, 14 x 14 mm, 1-module, opaque yellow: 5.46.681.001/0409
- RK 90 - Lens, 14 x 14 mm, 1-module, opaque green: 5.46.681.001/0514
- RK 90 - Lens, 14 x 14 mm, 1-module, opaque blue: 5.46.681.001/0611
- RK 90 - Lens, 14 x 14 mm, 1-module, opaque light grey: 5.46.681.001/0700
- RK 90 - Lens, 14 x 14 mm, 1-module, transparent colorless: 5.46.681.021/1002
- RK 90 - Lens, 14 x 14 mm, 1-module, transparent red: 5.46.681.021/1307
- RK 90 - Lens, 14 x 14 mm, 1-module, transparent yellow: 5.46.681.021/1403
- RK 90 - Lens, 14 x 14 mm, 1-module, transparent green: 5.46.681.021/1510

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RK 90 Keycap body plastic, for lenses 1 ¼-module

Technical data see page 4 - 111



→ Size	Illuminability	Dimension (a) behind front panel	Dimension (b) in front of front panel	Dimension (c) hole patterns final size	Order no.
1 ¼-module	yes	17.20 x 20.7 mm	13.85 x 17.35 mm	14,00 x 17,5 mm	5.55.103.031/1013

Lenses:

- RK 90 - Lens, 14 mm, 1.25-module, opaque red: 5.46.681.002/0309

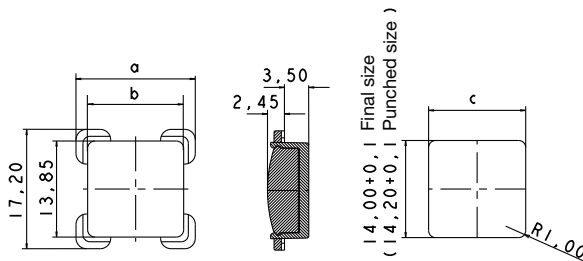
– Table (continued) –

RK 90 - Keycap body plastic, for lenses 1¼-module

- RK 90 - Lens, 14 mm, 1.25-module, opaque light grey: 5.46.681.002/0700
- RK 90 - Lens, 14 mm, 1.25-module, transparent colorless: 5.46.681.022/1002
- RK 90 - Lens, 14 mm, 1.25-module, transparent red: 5.46.681.022/1307
- RK 90 - Lens, 14 mm, 1.25-module, transparent yellow: 5.46.681.022/1403
- RK 90 - Lens, 14 mm, 1.25-module, transparent green: 5.46.681.022/1510

RK 90 Keycap body plastic, for lenses 14 mm, 1½-module

Technical data see page 4 - 111



→ Size	Illuminability	Dimension (a) behind front panel	Dimension (b) in front of front panel	Dimension (c) hole patterns final size	Order no.
1½-module	yes	17.20 x 24.20 mm	13.85 x 20.85 mm	14.00 x 21.00 mm	5.55.103.032/1013

Lenses:

- RK 90 - Lens, 14 mm, 1.5-module, opaque red: 5.46.681.003/0309
- RK 90 - Lens, 14 mm, 1.5-module, opaque yellow: 5.46.681.003/0409
- RK 90 - Lens, 14 mm, 1.5-module, opaque green: 5.46.681.003/0514
- RK 90 - Lens, 14 mm, 1.5-module, opaque blue: 5.46.681.003/0611
- RK 90 - Lens, 14 mm, 1.5-module, opaque light grey: 5.46.681.003/0700
- RK 90 - Lens, 14 mm, 1.5-module, transparent colorless: 5.46.681.023/1002
- RK 90 - Lens, 14 mm, 1.5-module, transparent red: 5.46.681.023/1307
- RK 90 - Lens, 14 mm, 1.5-module, transparent yellow: 5.46.681.023/1403
- RK 90 - Lens, 14 mm, 1.5-module, transparent green: 5.46.681.023/1510

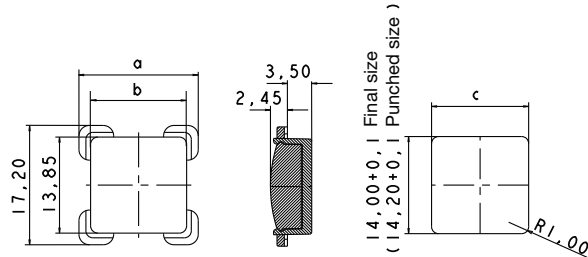
PCB KEY SWITCHES

RK 90 - KEYCAPS, PLASTIC 14 MM

RK 90 Keycap body plastic, for lenses 2-module



Technical data see page 4 - 111



→ Size	Illuminability	Dimension (a) behind front panel	Dimension (b) in front of front panel	Dimension (c) hole patterns final size	Order no.
2-module	yes	17.20 x 31.20 mm	13.85 x 27.85 mm	14.00 x 28.00 mm	5.55.103.077/1013

Lenses:

- RK 90 - Lens, 14 mm, 2-module, opaque red: 5.46.681.004/0309
- RK 90 - Lens, 14 mm, 2-module, opaque yellow: 5.46.681.004/0409
- RK 90 - Lens, 14 mm, 2-module, opaque green: 5.46.681.004/0514
- RK 90 - Lens, 14 mm, 2-module, opaque blue: 5.46.681.004/0611
- RK 90 - Lens, 14 mm, 2-module, opaque light grey: 5.46.681.004/0700
- RK 90 - Lens, 14 mm, 2-module, transparent colorless: 5.46.681.024/1002
- RK 90 - Lens, 14 mm, 2-module, transparent red: 5.46.681.024/1307
- RK 90 - Lens, 14 mm, 2-module, transparent yellow: 5.46.681.024/1403
- RK 90 - Lens, 14 mm, 2-module, transparent green: 5.46.681.024/1510

RK 90 Keycaps, aluminum, 14 mm

- The RK 90 system design with metal keycaps is fairly safe against mechanical, thermal or chemical effects. Combined with a metal front panel, this data entry system offers maximum protection against vandalism. Tried and tested MICON 5, RACON 8/12 or RF 15/19 PCB key switches are used underneath the metal keycaps.
- The keycaps can be provided with engraved, colored anodized or laser-printed legends. This means that the legend is durable and cannot be removed by mechanical or chemical means.



Technical Data

→ General information

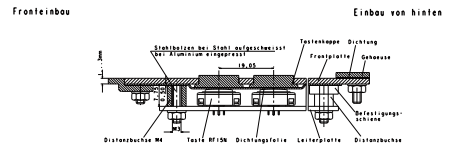
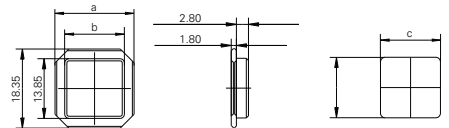
Color of lens	aluminum colorless anodized
Size	see order block
Degree of protection (with silicon seal)	IP65 (DIN EN 60529)

→ Dimensions

Dimension (b) in front of front panel	see order block
Dimension (a) behind front panel	see order block
Dimension (c) hole patterns final size	see order block
Dimension hole patterns punched size	see order block

→ Other specifications

ROHS compliant	yes
REACH compliant	yes



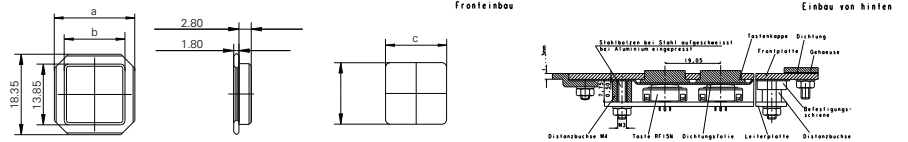
PCB KEY SWITCHES

RK 90 - KEYCAPS, ALUMINIUM, 14 MM

RK 90 Keycaps, aluminum, 14 mm, 1-module



Technical data see page 4 - 115

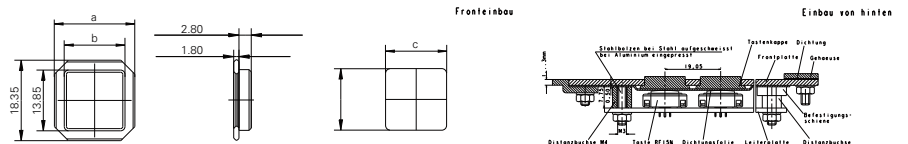


→ Size	Color of lens	Dimension (a) behind front panel	Dimension (b) in front of front panel	Dimension (c) hole patterns final size	Order no.
1-module	aluminum colorless anodized	18.35 x 18.35 mm	13.85 x 13.85 mm	14.00 x 14.00 mm	5.46.500.001/4010

RK 90 Keycaps, aluminum, 14 mm, 1½-module



Technical data see page 4 - 115



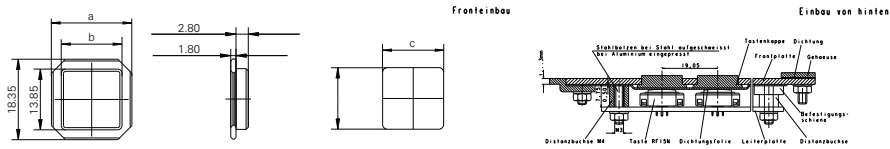
→ Size	Color of lens	Dimension (a) behind front panel	Dimension (b) in front of front panel	Dimension (c) hole patterns final size	Order no.
1½-module	aluminum colorless anodized	18.35 x 25.35 mm	13.85 x 20.85 mm	14.00 x 21.00 mm	5.46.500.003/4010

PCB KEY SWITCHES

RK 90 - KEYCAPS, ALUMINIUM, 14 MM

RK 90 Keycaps, aluminum, 14 mm, 2-module

Technical data see page 4 - 115



→ Size	Color of lens	Dimension (a) behind front panel	Dimension (b) in front of front panel	Dimension (c) hole patterns final size	Order no.
2-module	aluminum colorless anodized	18.35 x 32.35 mm	13.85 x 27.85 mm	14.00 x 28.00 mm	5.46.500.004/4010

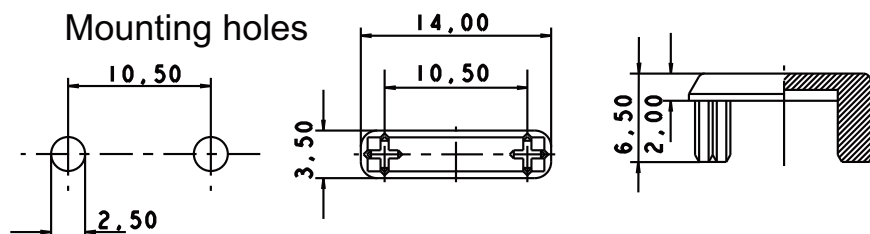
PCB KEY SWITCHES

RK 90 - SPECIAL ACCESSORIES



RK 90 Special accessories

RK 90 Fin, to avoid inadvertent operation



→ Description

Color

Order no.

RK 90 - Fin, to avoid inadvertent operation, light grey

opaque light grey

5.55.103.079/0700

RK 90 - Fin, to avoid inadvertent operation, charcoal grey

opaque light grey

5.55.103.079/0152

4

RK 90

RK 90 Spacer M 4



→ Length L	Color	Order no.
12.5 mm overall height for RF 15 mm	-	5.30.764.040/0000
9.25 mm overall height, for RF 15 mm	-	5.30.764.027/0000
5.5 mm overall height, for RF15 N mm	-	5.30.764.010/0000
7.5 mm overall height for RACON 8/12 mm	-	5.30.764.018/0000
4.25 mm overall height, for RACON 8/12 mm	-	5.30.764.005/0000

Mounting from front (1 pc. per stud)

RK 90 Silicone foil



→ Color	Dimensions	Order no.
transparent	600 x 590 x 0.45 mm	7.16.102.006/0000
