

General data

RAFIX 16 F control component range

- Extremely low profile
- 250 V/6 A max.
- Water-jet proof IP65
- Contact blocks: Gold and silver contacts with quick-connect terminals 2.8 x 0.8 mm; Option: PCB plug-in socket
- The lamps of the pushbuttons can be replaced from the front or rear.
- The contact blocks snap directly onto the actuators without a coupling element and can be removed by turning = cost reducing mounting.
- **For contact blocks and accessories, refer to RAFIX 16.**

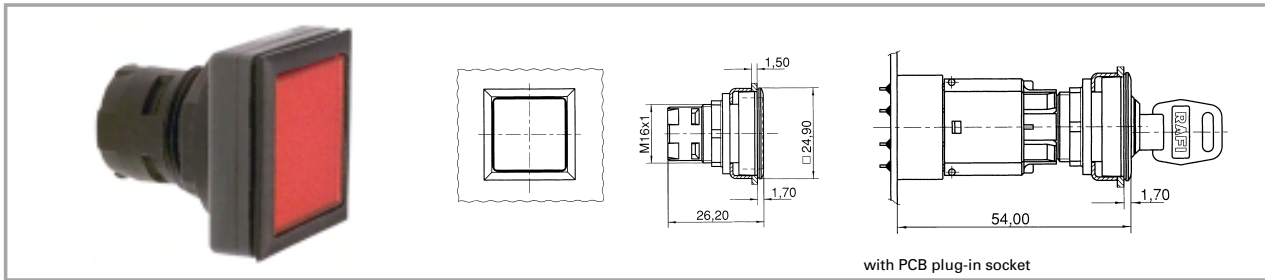
RAFIX
16 F

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

Content

RAFIX 16 F pushbutton	2 - 80
RAFIX 16 F pushbutton, flush lens	2 - 81
RAFIX 16 F pushbutton, protruding lens	2 - 82
RAFIX 16 F selector switch	2 - 84
RAFIX 16 F selector switch	2 - 85
RAFIX 16 F keylock switch MICROMECC	2 - 86
RAFIX 16 F keylock switch MICROMECC	2 - 87
RAFIX 16 F emergency stop pushbutton	2 - 88
RAFIX 16 F emergency stop pushbutton	2 - 89
RAFIX 16 F signal indicator	2 - 90
RAFIX 16 F signal indicator, flush lens	2 - 91
RAFIX 16 F signal indicator, protruding lens	2 - 91
RAFIX 16 F special accessories	2 - 92
RAFIX 16 F, blanking cap	2 - 92
RAFIX 16 F, insulating housing IP65	2 - 92

RAFIX 16 F pushbutton



2

Technical data

General information

Form of lens	see order block
Colour of lens	see order block
Form of collar	square

Dimensions

Length of collar	24.9 mm
Width of collar	24.9 mm
Overall height	see order block
Mounting depth	51.7 mm
Key grid	25 x 25 mm
Mounting hole	23.1 x 23.1 mm

Mechanical design

Mounting	ring nut
Contact function	according to contact block
Illuminability	see order block

Mechanical characteristics

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

Other specifications

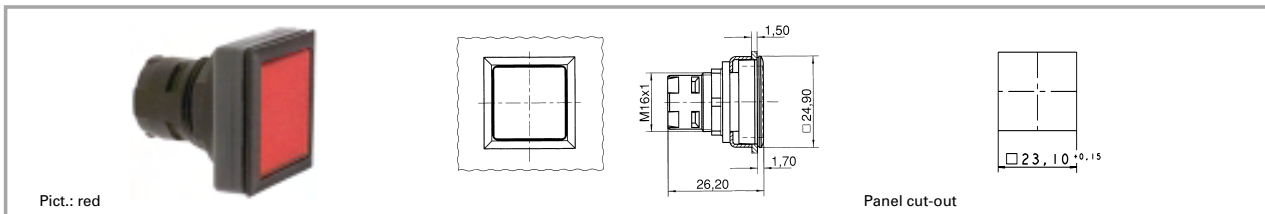
Operating life	2000000 momentary/ 100000 latching
Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating without lamp max.	+70 °C
Ambient temp. operating with lamp max.	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Resistance to constant environment	according to IEC 600 68-2-3 and 2-30
Resistance at variable environment	according to IEC 600 68-2-14 and 2-33

Accessories RAFIX 16 F pushbutton

Description	Photo	Order no.	Page
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, silver contacts, with lamp socket		1.20.122.001/0000	2 - 64
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, gold contacts, with lamp socket		1.20.122.011/0000	2 - 60
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, silver contacts, without lamp socket		1.20.122.021/0000	2 - 64
RAFIX 16 standard contact block, 1 NC + 1 NO, momentary, gold contacts, without lamp socket		1.20.122.031/0000	2 - 60
LED W 2 x 4.6d superbright, white, 24 V		1.90.690.365/0000	5 - 16
Disassembly tool for LUMOTAST 25, RAFIX 16		5.05.800.042/0000	2 - 74 5 - 26
Fixing spanner for hexagon nut		5.58.002.034/0000	2 - 75

For other contact blocks, refer to the chapter „RAFIX 16 contact blocks“; for additional accessories, refer to the chapter „RAFIX 16 special accessories“.

RAFIX 16 F pushbutton, flush lens



Form of lens	Illuminability	Colour of lens	Order no. complete	Order no. single parts	
				Housing	Lens
flat lens	no	opaque black	1.30.090.251/0100		
flat lens	no	opaque white	1.30.090.251/0200		
flat lens	no	opaque red	1.30.090.251/0300		
flat lens	no	opaque yellow	1.30.090.251/0400		
flat lens	no	opaque green	1.30.090.251/0500		
flat lens	no	opaque blue	1.30.090.251/0600		
flat lens	yes	transparent colourless	1.30.090.001/1000	1.30.090.501/0000	5.49.077.011/1002
flat lens	yes	transparent red	1.30.090.001/1300	1.30.090.501/0000	5.49.077.011/1306
flat lens	yes	transparent yellow	1.30.090.001/1400	1.30.090.501/0000	5.49.077.011/1403
flat lens	yes	transparent green	1.30.090.001/1500	1.30.090.501/0000	5.49.077.011/1505
flat lens	yes	transparent blue	1.30.090.001/1600	1.30.090.501/0000	5.49.077.011/1607

Technical data see page 2 - 80

Accessories:

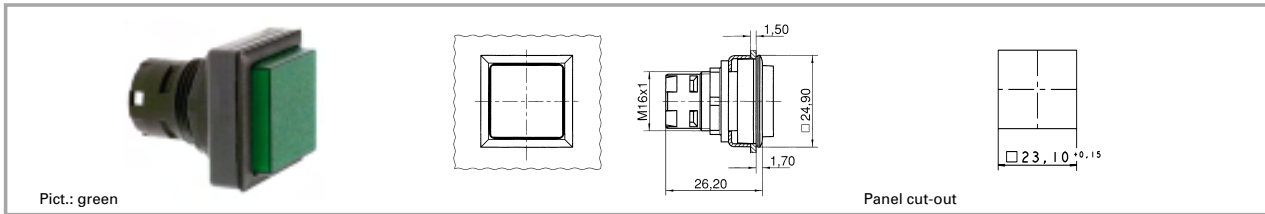
Legend insert, blank, use only for transparent lenses: 5.70.635.000/2000

For the "latching" function, please use the RAFX 16 standard contact block with "latching" function.

2

RAFIX 16 F

RAFIX 16 F pushbutton, protruding lens



Pict.: green

Panel cut-out

2

RAFIX
16 F

Form of lens	Illuminability	Colour of lens	Order no. complete	Order no. single parts	
				Housing	Lens
protruding lens	no	opaque black	1.30.090.301/0100		
protruding lens	no	opaque white	1.30.090.301/0200		
protruding lens	no	opaque red	1.30.090.301/0300		
protruding lens	no	opaque yellow	1.30.090.301/0400		
protruding lens	no	opaque green	1.30.090.301/0500		
protruding lens	no	opaque blue	1.30.090.301/0600		
protruding lens	yes	transparent colourless	1.30.090.051/1000	1.30.090.551/0000	5.49.077.012/1002
protruding lens	yes	transparent red	1.30.090.051/1300	1.30.090.551/0000	5.49.077.012/1306
protruding lens	yes	transparent yellow	1.30.090.051/1400	1.30.090.551/0000	5.49.077.012/1403
protruding lens	yes	transparent green	1.30.090.051/1500	1.30.090.551/0000	5.49.077.012/1505
protruding lens	yes	transparent blue	1.30.090.051/1600	1.30.090.551/0000	5.49.077.012/1607

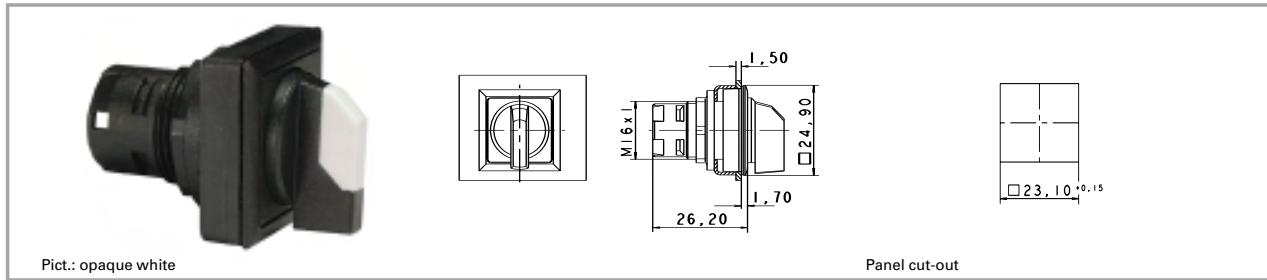
Technical data see page 2 - 80

Accessories:

Legend insert, blank, use only for transparent lenses: 5.70.635.000/2000

For the "latching" function, please use the RAFIX 16 standard contact block with "latching" function.

RAFIX 16 F selector switch



2

Technical data

General information

Form of lens	handle
Colour of handle marking	see order block
Form of collar	square

Dimensions

Length of collar	24.9 mm
Key grid	25 x 25 mm
Width of collar	24.9 mm
Overall height	23 mm
Mounting depth	51.7 mm
Mounting hole	23.1 x 23.1 mm

Mechanical design

Mounting	ring nut
Contact function	according to contact block
Illuminability	see order block
Rotating angle	see order block

Mechanical characteristics

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

Other specifications

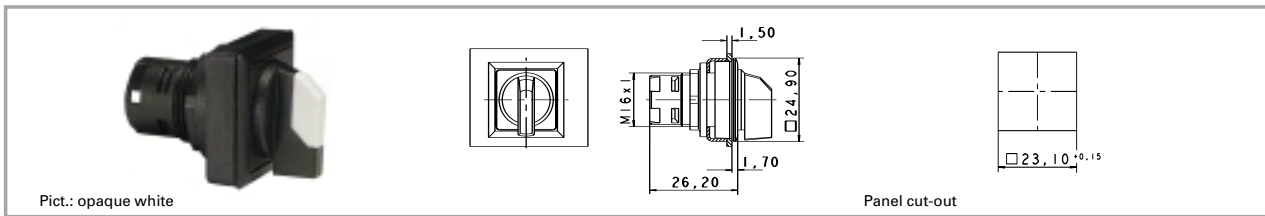
Operating life	30000
Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating without lamp max.	+70 °C
Ambient temp. operating with lamp max.	+55 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Resistance to constant environment	according to IEC 600 68-2-3 and 2-30
Resistance at variable environment	according to IEC 600 68-2-14 and 2-33

RAFIX
16 F

Accessories RAFIX 16 F selector switch

Description	Photo	Order no.	Page
RAFIX 16 universal contact block, 1 NC + 1 NO, momentary, silver contacts, with lamp socket		1.20.123.001/0000	2 - 65
RAFIX 16 universal contact block, 1 NC + 1 NO, momentary, gold contacts, with lamp socket		1.20.123.011/0000	2 - 61
Fixing spanner for hexagon nut		5.58.002.034/0000	2 - 75

RAFIX 16 F selector switch



Contact function	Illuminability	Rotating angle		Colour of handle marking	Order no. complete
momentary	yes	1 x 40°		translucent white	1.30.093.551/2000
momentary	yes	2 x 40°		translucent white	1.30.093.651/2000
latching	yes	L, 1 x 90°		translucent white	1.30.093.501/2000
latching	yes	V, 1 x 90°		translucent white	1.30.093.601/2000
latching	yes	2 x 60°		translucent white	1.30.093.701/2000
latching 1 x 90° and momentary 1 x 40°	yes	latching 90°/momentary 40°		translucent white	1.30.093.751/2000
momentary	no	1 x 40°		opaque white	1.30.093.550/0200
momentary	no	2 x 40°		opaque white	1.30.093.650/0200
latching	no	L, 1 x 90°		opaque white	1.30.093.500/0200
latching	no	V, 1 x 90°		opaque white	1.30.093.600/0200
latching	no	2 x 60°		opaque white	1.30.093.700/0200
latching 1 x 90° and momentary 1 x 40°	no	latching 90°/momentary 40°		opaque white	1.30.093.750/0200

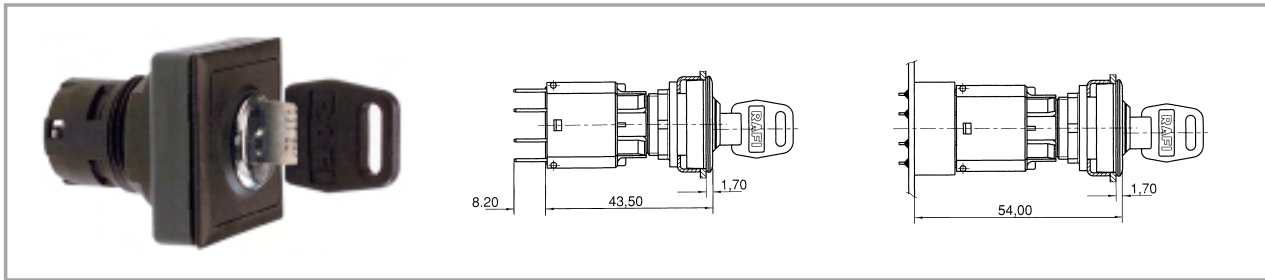
Technical data see page 2 - 84

Only use RAFIX 16 contact blocks with "momentary" contact function. For versions with clockwise and counterclockwise rotation, use universal contact blocks only. Other handle markings available on request.

2

RAFIX 16 F

RAFIX 16 F keylock switch MICROMECC



2

Technical data

General information

Form of lens	flat lens
Colour of lens	opaque black
Form of collar	square

Dimensions

Length of collar	24.9 mm
Key grid	25 x 25 mm
Width of collar	24.9 mm
Overall height	11 mm
Mounting depth	51.7 mm
Mounting hole	23.1 x 23.1 mm

Mechanical design

Mounting	ring nut
Contact function	according to contact block
Illuminability	no
Lock	Micromec
Wafers	5
Lock type	001
Number of locking positions	500
Main key	yes
Symmetric key	no
Rotating angle	see order block
Key removal position	see order block
Group key	yes
General key	yes

Mechanical characteristics

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

Electrical characteristics

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

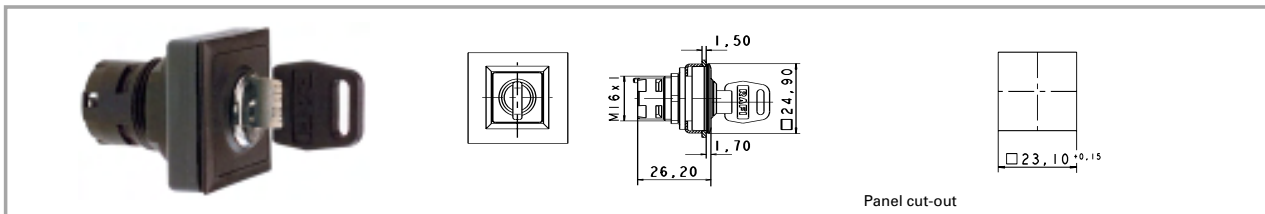
Other specifications

Operating life	65000
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.	+85 °C
Resistance to constant environment	according to IEC 600 68-2-3 and 2-30
Resistance at variable environment	according to IEC 600 68-2-14 and 2-33
ESD-strength lock / contact	15 kV
ESD-strength key/ front panel	4 kV

Accessories RAFIX 16 F keylock switch MICROMECC

Description	Photo	Order no.	Page
RAFIX 16 universal contact block, 1 NC + 1 NO, momentary, silver contacts, without lamp socket		1.20.123.021/0000	2 - 65
RAFIX 16 universal contact block, 1 NC + 1 NO, momentary, gold contacts, without lamp socket		1.20.123.031/0000	2 - 61
Fixing spanner for hexagon nut		5.58.002.034/0000	2 - 75
Spare key, black		5.58.007.001/0000	

RAFIX 16 F keylock switch MICROMECC



Contact function	Colour of lens	Rotating angle		Key removal position	Order no. complete
momentary	opaque black	1 x 40°		0	1.30.096.501/0000
momentary	opaque black	2 x 40°		0	1.30.096.701/0000
latching	opaque black	L, 1 x 90°		0+1	1.30.096.051/0000
latching	opaque black	V, 1 x 90°		0+1	1.30.096.151/0000
latching	opaque black	2 x 90°		0+1+2	1.30.096.401/0000

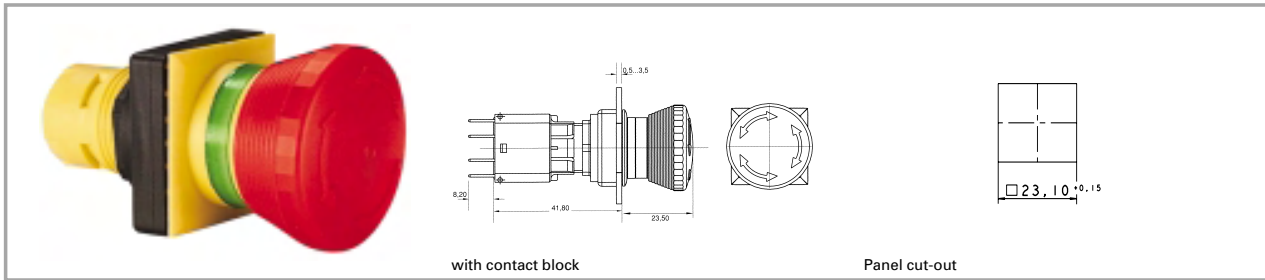
Technical data see page 2 - 86

Only use RAFX 16 contact blocks with "momentary" contact function. For versions with clockwise and counterclockwise rotation, use universal contact blocks only.

2

**RAFIX
16 F**

RAFIX 16 F emergency stop pushbutton



2

Technical data

General information

Form of lens	conical mushroom form
Colour of lens	red, collar yellow
Form of collar	square

Dimensions

Length of collar	24.9 mm
Key grid	25 x 25 mm
Width of collar	24.9 mm
Overall height	23.5 mm
Mounting depth	51.7 mm
Mounting hole	23.1 x 23.1 mm

Mechanical design

Mounting	ring nut
Contact function	latching
Illuminability	no

Mechanical characteristics

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

Other specifications

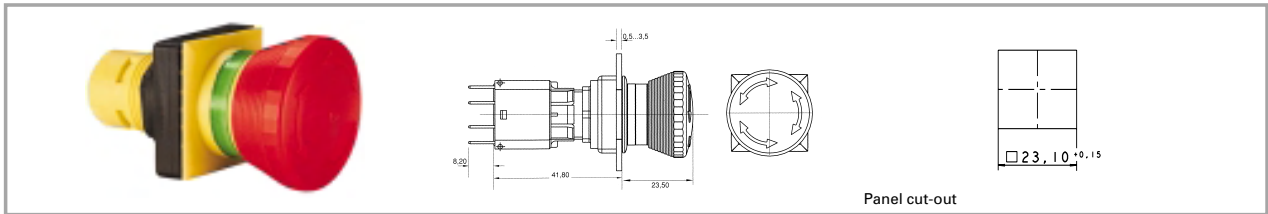
Operating life	10000
Degree of protection from front side	IP65
Ambient temp. operating min.	-25 °C
Ambient temp. operating without lamp max.	+70 °C
Storage temperature min.	-40 °C
Storage temperature max.	+85 °C
Resistance to constant environment	according to IEC 600 68-2-3 and 2-30
Resistance at variable environment	according to IEC 600 68-2-14 and 2-33
Approvals	IEC 60 947, EN 418

For other contact blocks, refer to the chapter „RAFIX 16 contact blocks“; for additional accessories, refer to the chapter „RAFIX 16 special accessories“.

Accessories RAFIX 16 F emergency stop pushbutton

Description	Photo	Order no.	Page
RAFIX 16 universal contact block, 1 NC, momentary, silver contacts, without lamp socket		1.20.123.022/0000	2 - 65
RAFIX 16 universal contact block, 1 NC, momentary, gold contacts, without lamp socket		1.20.123.032/0000	2 - 61
Fixing spanner for hexagon nut		5.58.002.034/0000	2 - 75

RAFIX 16 F emergency stop pushbutton



Contact function	Illuminability	Colour of lens	Mounting hole	Order no. complete
latching	no	red, collar yellow	23.1 x 23.1 mm	1.30.094.001/0300

Technical data see page 2 - 88

2

RAFIX
16 F

RAFIX 16 F signal indicator



panel cut-out

2

Technical data

General information

Form of lens see order block
 Colour of lens see order block
 Form of collar square

Dimensions

Length of collar 24.9 mm
 Key grid 25 x 25 mm
 Width of collar 24.9 mm
 Overall height see order block
 Mounting depth 51.7 (37,5) mm
 Mounting hole 23.1 x 23.1 mm

Mechanical design

Mounting ring nut
 Illuminability yes

Other specifications

Degree of protection from front side IP65
 Ambient temp. operating min. -25 °C
 Ambient temp. operating max. +55 °C
 Storage temperature min. -40 °C
 Storage temperature max. +85 °C
 Resistance to constant environment according to IEC 600 68-2-3 and 2-30
 Resistance at variable environment according to IEC 600 68-2-14 and 2-33

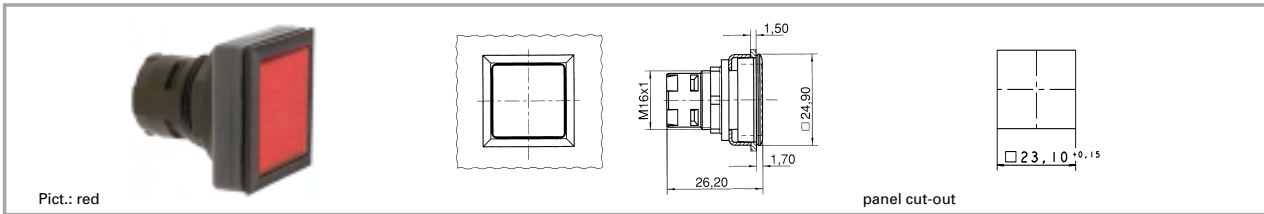
RAFIX
16 F

Accessories RAFIX 16 F signal indicator

Description	Photo	Order no.	Page
RAFIX 16 lamp socket W 2 x 4.6 d		1.71.212.001/0000	2 - 67
RAFIX 16 lamp socket W 2 x 4.6 d		1.71.212.011/0000	2 - 68
Fixing spanner for hexagon nut		5.58.002.034/0000	2 - 75
Legend insert, blank, use only for transparent lenses		5.70.635.000/2000	

For additional accessories, refer to the chapter „RAFIX 16 special accessories“.

RAFIX 16 F signal indicator, flush lens



Form of lens	Overall height	Colour of lens	Order no. complete	Order no. single parts	
				Housing	Lens
flat lens	1.7 mm	transparent colourless	1.65.126.301/1000	1.65.126.401/0000	5.49.077.011/1002
flat lens	1.7 mm	transparent red	1.65.126.301/1300	1.65.126.401/0000	5.49.077.011/1306
flat lens	1.7 mm	transparent yellow	1.65.126.301/1400	1.65.126.401/0000	5.49.077.011/1403
flat lens	1.7 mm	transparent green	1.65.126.301/1500	1.65.126.401/0000	5.49.077.011/1505
flat lens	1.7 mm	transparent blue	1.65.126.301/1600	1.65.126.401/0000	5.49.077.011/1607

Technical data see page 2 - 90

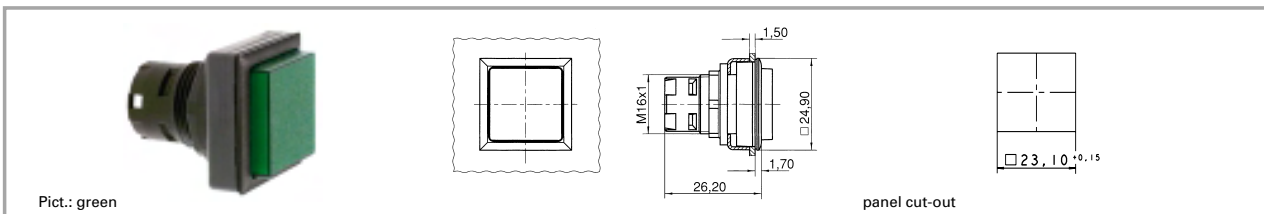
Accessories:

Legend insert, blank, use only for transparent lenses: 5.70.635.000/2000

2

RAFIX 16 F

RAFIX 16 F signal indicator, protruding lens



Form of lens	Overall height	Colour of lens	Order no. complete	Order no. single parts	
				Housing	Lens
protruding lens	4.5 mm	transparent colourless	1.65.126.351/1000	1.65.126.451/0000	5.49.077.012/1002
protruding lens	4.5 mm	transparent red	1.65.126.351/1300	1.65.126.451/0000	5.49.077.012/1306
protruding lens	4.5 mm	transparent yellow	1.65.126.351/1400	1.65.126.451/0000	5.49.077.012/1403
protruding lens	4.5 mm	transparent green	1.65.126.351/1500	1.65.126.451/0000	5.49.077.012/1505
protruding lens	4.5 mm	transparent blue	1.65.126.351/1600	1.65.126.451/0000	5.49.077.012/1607

Technical data see page 2 - 90

Accessories:

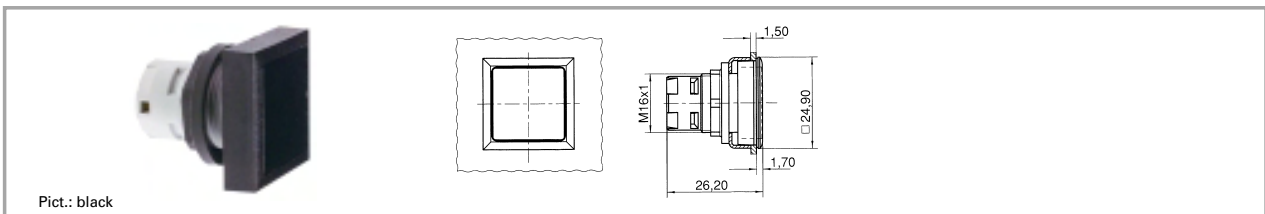
Legend insert, blank, use only for transparent lenses: 5.70.635.000/2000

RAFIX 16 F special accessories



2

RAFIX 16 F, blanking cap

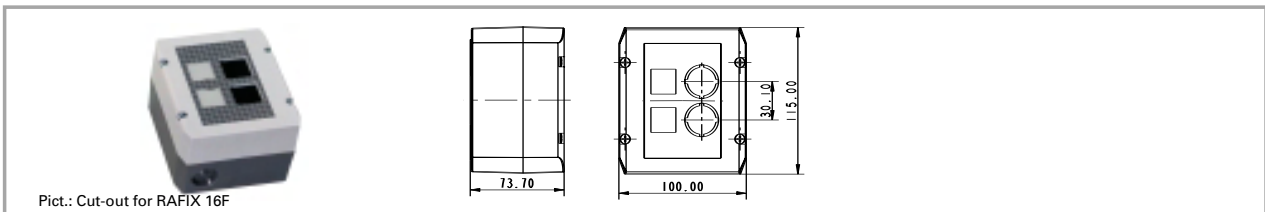


Pict.: black

RAFIX
16 F

Short text	Feature 1	Feature 2	Order no.
RAFIX 16 F, blanking cap, black	opaque black	23.1 x 23.1 mm	5.05.800.063/0000

RAFIX 16 F, insulating housing IP65



Pict.: Cut-out for RAFX 16F

Short text	Feature 1	Feature 2	Order no.
RAFIX 16 F, insulating housing IP65, 1-module, light grey/dark grey	light grey/dark grey	55 mm	1.20.810.101/0000
RAFIX 16 F, insulating housing IP65, 1-module, yellow/yellow	yellow/yellow	55 mm	1.20.810.102/0000
RAFIX 16 F, insulating housing IP65, 2-module, light grey/dark grey	light grey/dark grey	115 mm	1.20.820.101/0000
RAFIX 16 F, insulating housing IP65, 3-module, light grey/dark grey	light grey/dark grey	115 mm	1.20.830.101/0000
RAFIX 16 F, insulating housing IP65, 4-module, light grey/dark grey	light grey/dark grey	145 mm	1.20.840.101/0000
Label sheet for insulating housing, 50 labels on a DIN A4 sheet	white		5.40.451.284/0000

- Attractive plastic housing to accommodate up to 4 control components
- 2 cable entries prepared: 1-,2-,3-part: M20x1,5, 4-part: M25x1,5
- Degree of protection IP 65 to DIN
- All grey housings with overlay, legending possible with legend inserts
- Wall mounting with 2 screws through housing bottom prepared
- Dimensions (feature 2) x 100 mm x 74 mm
- Accessories: 50 pre-perforated legend inserts on a DIN A4 sheet for printing with a PC printer