

# BAKA<sup>®</sup> PROTECT 2000/4000

The adjustable hinge system for timber entrance doors

BAKA<sup>®</sup> PROTECT 2000/4000



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# BAKA® – THE HINGE SYSTEM FOR TIMBER ENTRANCE DOORS

The door hinge systems in the BAKA Protect 2000 product range (2D adjustable) and the BAKA Protect 4000 product range (3D adjustable) are optimally adapted to the requirements of the current rebate constructions and make it possible to follow the trend towards narrower door profiles. The increased load capacities up to 120 kg with 2D adjustment and up to 160 kg with 3D adjustment meet the current market demands. This hinge system is rounded off by the usual comprehensive range of finishes and the template technology that is required for functional and efficient installation.

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## FEATURES AT A GLANCE

- › 2D resp. 3D adjustment
  - › maintenance-free slide bearings
  - › different finials available
  - › matched to current profile constructions
  - › increased load capacities:  
2D up to 120 kg, 3D up to 160 kg
  - › comfortable adjustment
  - › internal hinge pin
  - › security pin (MSTS) option for outward opening doors
  - › Finishes: Satin Stainless Steel, Topzinc, RAL 9016 Traffic White, H9 Brown
- 



BAKA® Protect 2000



BAKA® Protect 4000

# INNOVATIVE HARDWARE FOR OUTSTANDING STABILITY AND SAFETY

In order to ensure an ideal fixing and achieve high stability, the BAKA Protect 2000 and BAKA Protect 4000 are optimally adapted to the respective rebate constructions. Alignment with the different overlap widths and gasket systems allow load capacities up to 160 kg with a hinge length up to 140 mm.

The BAKA Protect 4000 hinge system is designed to accommodate various routing depths in terms of routing recess, gasket dimensions and compression settings. From these reference dimensions, which can vary slightly in practice, the complete theoretical adjustment range can be achieved - see the following page.

The appropriate hinge design for the respective rebate and gasket system can be found by determining the overlap width, as well as the gasket finial of the overlap seal. The tables below and the overviews on pages 8, 9, 11 and 12 also help.

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## ALTERNATIVE HINGE SYSTEMS FOR TIMBER ENTRANCE DOORS

- ) concealed hinge solution TECTUS for timber entrance doors
  - ) proven hinge system VARIANT VX for timber/aluminium doors
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### BAKA Protect 2000

Hinge type	Overlap width	Gasket projection
2010 2D	15 or 18 mm	–
2010 2D FD	15 or 18 mm	15 or 18 mm
2030 2D FD	18 or 20 mm	10 mm
2030 2D-15 FD MSTS	18 or 20 mm	10 mm
2040 2D FD	18 or 20 mm	12 mm
2040 2D-15 FD MSTS	18 or 20 mm	12 mm

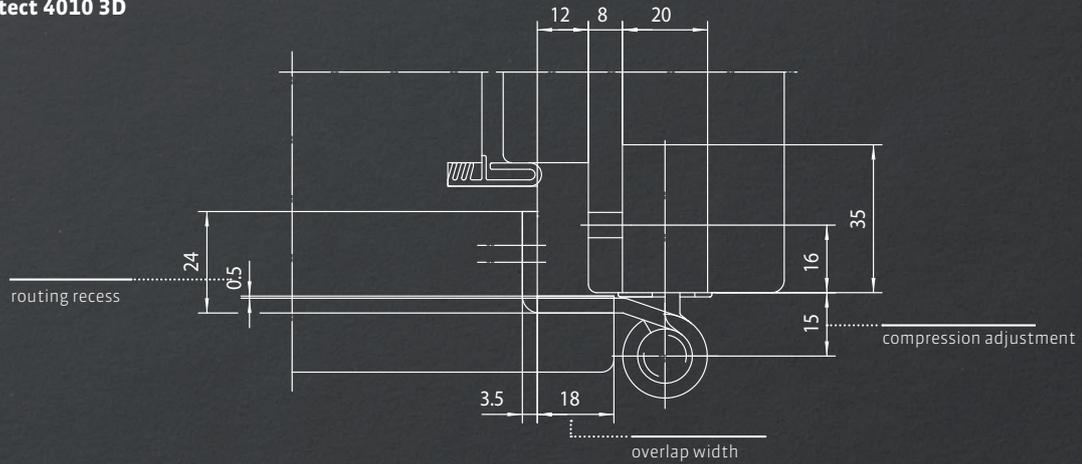
### BAKA Protect 4000

Hinge type	Overlap width	Gasket projection
4010 3D	15 or 18 mm	–
4010 3D FD	15 or 18 mm	15 or 18 mm
4020 3D	20 mm	–
4020 3D FD	20 mm	18 or 20 mm
4030 3D FD	18 or 20 mm	10 mm
4040 3D FD	18 or 20 mm	12 mm
4060 3D FD	18 or 20 mm	5 mm

# REFERENCE DIMENSIONS

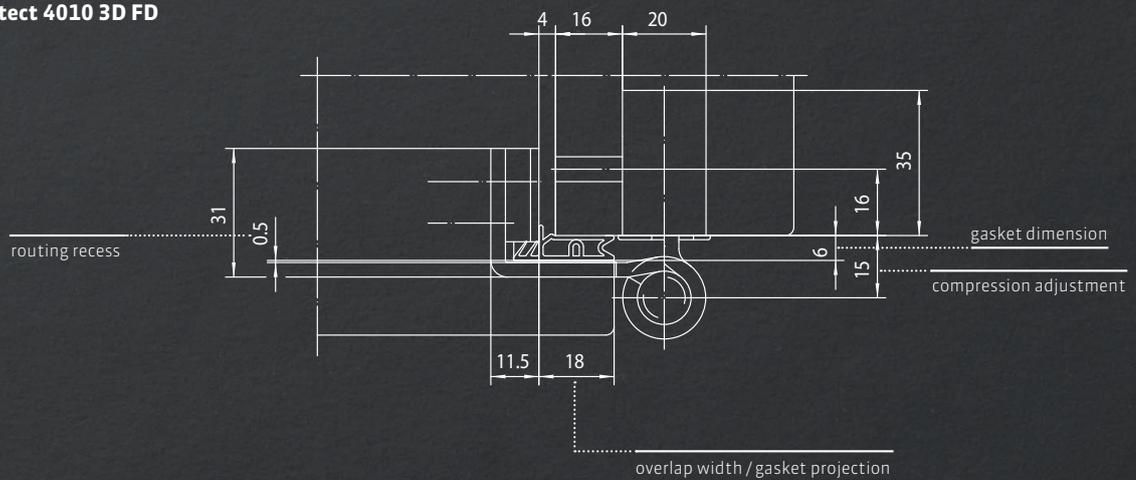
18 mm overlap without overlap seal

**BAKA® Protect 4010 3D**



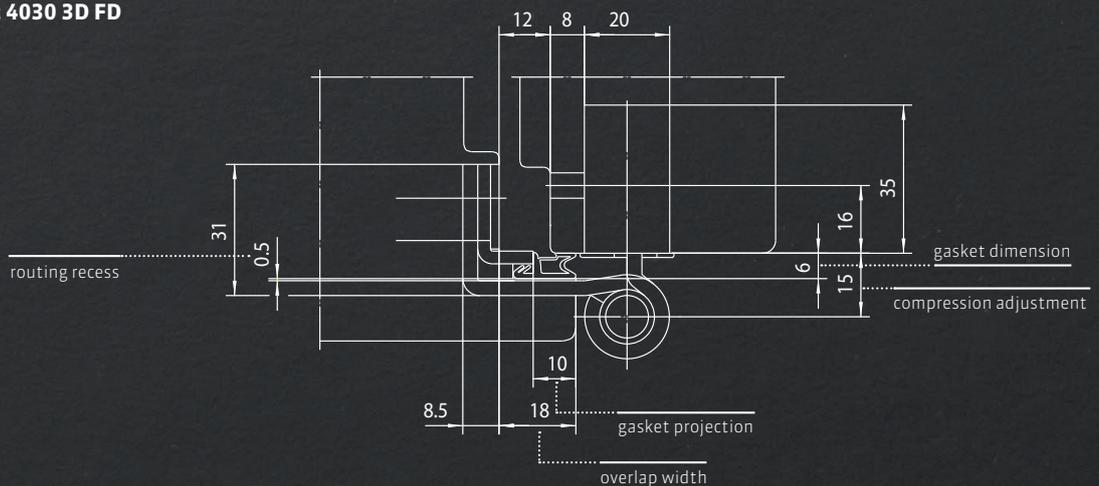
18 mm overlap with overlap seal (18 mm projection)

**BAKA® Protect 4010 3D FD**



18 mm overlap with overlap seal (10 mm projection)

**BAKA® Protect 4030 3D FD**



# BAKA®

## Series BAKA Protect 2000

Hinge system with 2D adjustment for timber entrance doors

entrance door hinge	2D adjustment	up to 120 kg
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### Product features

- for rebated timber entrance doors
- concealed receiver in the door leaf
- 2D adjustment (side +/- 3.0 mm, compression +/- 3.0 mm)
- minimized routing work
- maintenance-free slide bearings

### Technical details

load capacity	two hinges per door leaf (1x2m)	120.0 kg
knuckle length		120.0 mm
knuckle diameter		20.0 mm
pin diameter		10.0 mm
cutter diameter		20.0 mm

### Finishes

Topzinc (110), Satin Stainless Steel (040), other finishes available upon request

### Combination

accessories	Decorative sleeve No. 11
see page 15	

### Installation tools

jig	drilling jig BAKA Protect 2000 frame
	ball catch location routing jig BAKA Protect 2000 frame
	routing jig BAKA Protect 2000 door
	ball catch location routing jig BAKA Protect 2000 door

see page 20

### Functional areas

soundproof

### Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). Also available with security pin (MSTS).

### Classification key

2	7	3	0	1	*1	0	10*2
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\*1 depending on the finish

\*2 test cycles in continuous operation with 120 kg

### finial options



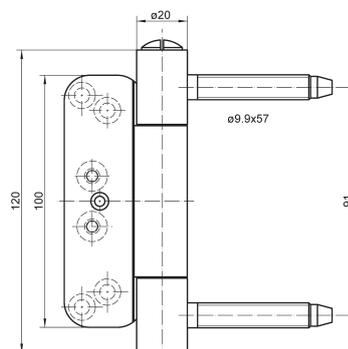
### Available options

BAKA Protect 2010 2D	load capacity up to 120 kg
BAKA Protect 2010 2D FD	load capacity up to 120 kg
BAKA Protect 2030 2D FD	load capacity up to 120 kg
BAKA Protect 2040 2D FD	load capacity up to 120 kg

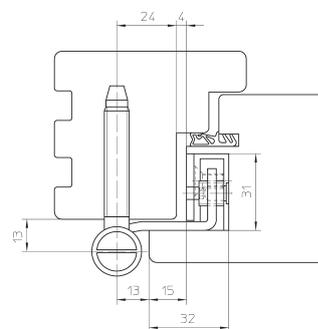
Detailed information in our PRODUCTSELECTOR at [www.simonswerk.com](http://www.simonswerk.com)



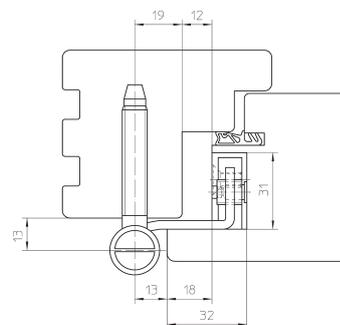
e.g. BAKA Protect 2010 2D



e.g. BAKA Protect 2010 2D

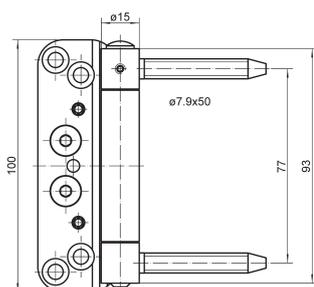


e.g. BAKA Protect 2010 2D  
15 mm overlap without overlap seal

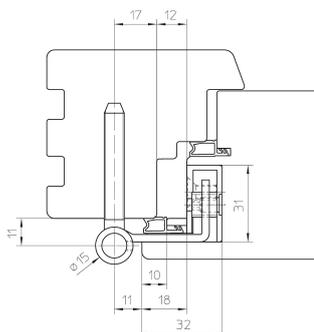




e.g. BAKA Protect 2030 2D-15 FD MSTs



e.g. BAKA Protect 2030 2D-15 FD MSTs



e.g. BAKA Protect 2030 2D-15 FD MSTs  
18 mm overlap with overlap seal

## BAKA Protect 2000-15

with 2D adjustment for timber entrance doors

entrance door hinge	2D adjustment	up to 80 kg
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### Product features

- for rebated timber entrance doors
- concealed receiver in the door leaf
- for doors with overlap seals
- with security pin
- 2D adjustment (side +/- 3.0 mm, compression +/- 3.0 mm)
- minimized routing work
- maintenance-free slide bearings

### Technical details

load capacity	<b>i</b> two hinges per door leaf (1x2m)	80.0 kg
knuckle length		93.0 mm
knuckle diameter		15.0 mm
pin diameter		8.0 mm
cutter diameter		20.0 mm

### Finishes

Topzinc (110), RAL 9016 Traffic White (070), other finishes available upon request

### Installation tools

jig	drilling jig BAKA Protect 2000-15 FD frame
	routing jig BAKA Protect 2000 door
	ball catch location routing jig BAKA Protect 2000 door

see page 20

### Functional areas

soundproof

### Note

**i** The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m).

### Available options

BAKA Protect 2030 2D-15 FD MSTs	load capacity up to 80 kg
BAKA Protect 2040 2D-15 FD MSTs	load capacity up to 80 kg

Detailed information in our PRODUCTSELECTOR at [www.simonswerk.com](http://www.simonswerk.com)

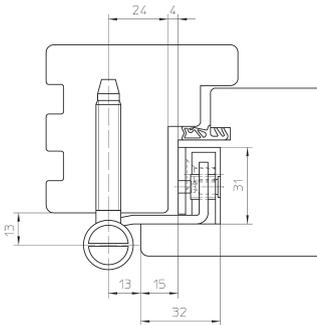


# OVERVIEW OF PROFILES

## BAKA Protect 2000

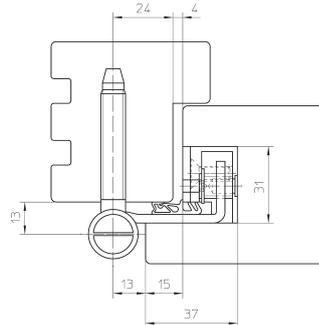
### 15 mm overlap without overlap seal

Version: BAKA Protect 2010 2D



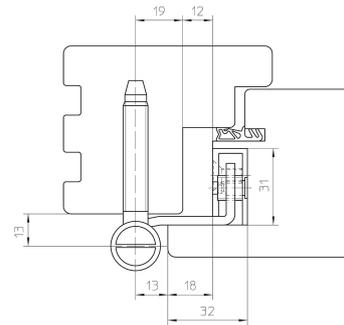
### 15 mm overlap with overlap seal

Version: BAKA Protect 2010 2D FD



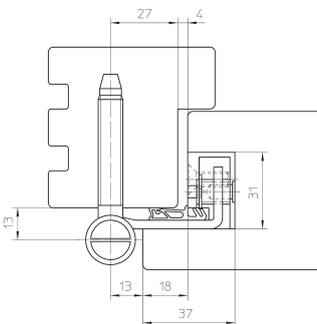
### 18 mm overlap without overlap seal

Version: BAKA Protect 2010 2D



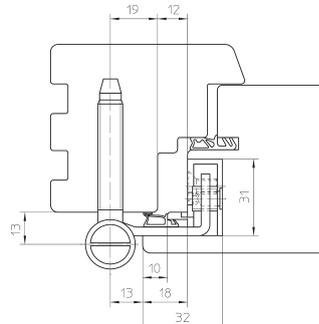
### 18 mm overlap with overlap seal

Version: BAKA Protect 2010 2D FD



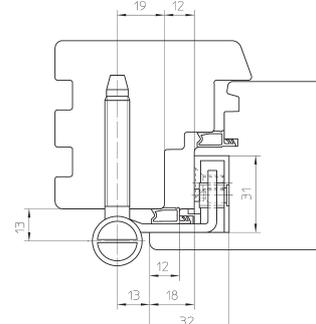
### 18 mm overlap with overlap seal (projection 10 mm)

Version: BAKA Protect 2030 2D FD



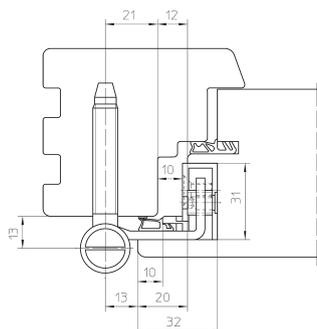
### 18 mm overlap with overlap seal (projection 12 mm)

Version: BAKA Protect 2040 2D FD



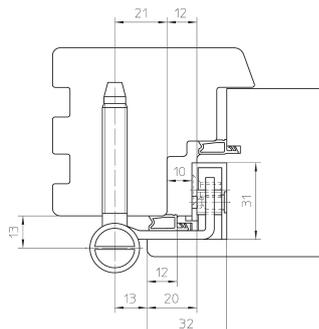
### 20 mm overlap with overlap seal (projection 10 mm)

Version: BAKA Protect 2030 2D FD



### 20 mm overlap with overlap seal (projection 12 mm)

Version: BAKA Protect 2040 2D FD

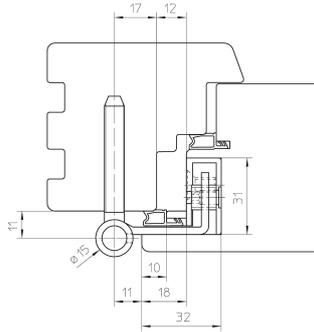


# OVERVIEW OF PROFILES

## BAKA Protect 2000-15

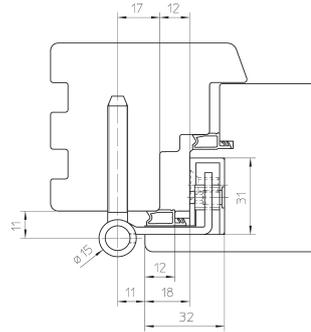
### 18 mm overlap with overlap seal

Version: BAKA Protect 2030 2D-15 FD MSTs



### 18 mm overlap with overlap seal

Version: BAKA Protect 2040 2D-15 FD MSTs



# BAKA®

## BAKA Protect 4000

with 3D comfortable eccentric adjustment

entrance door hinge	3D adjustable	up to 160 kg
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### Product features

- for rebated timber entrance doors
- concealed receiver in the door leaf and frame
- with comfortable eccentric adjustment
- 3D adjustment (side +/- 3,0 mm, height +/- 3,0 mm, compression +/- 3,0 mm)
- internal pin
- usable for system testing in accordance with DIN EN 1627 ff.
- maintenance-free slide bearings

### Technical details

load capacity	<b>i</b> two hinges per door leaf (1x2m)	160.0 kg
knuckle length		140.0 mm
knuckle diameter		20.0 mm
pin diameter		10.0 mm
cutter diameter		20.0 mm

### Finishes

Topzinc (110), polished gilded (032), Satin Nickel Look (F2), RAL 9016 Traffic White (070), H9 Brown (071), Satin Stainless Steel (040), other finishes available upon request

### Combination

accessories cover cap BAKA Protect 4000, decorative sleeve No. 12  
see page 15

### Installation tools

jig retrofit kit BAKA Protect 4000 frame  
drilling jig BAKA Protect 4000 frame  
drilling/routing jig BAKA Protect 4000 frame  
ball catch location routing jig BAKA Protect 4000 frame  
routing jig BAKA Protect 4000 door  
ball catch location routing jig BAKA Protect 4000 door

see page 20

### Functional areas

fire resistance, soundproof, burglar resistance

### Note

**i** The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). Set consists of 3 hinges (1 hinge = height and side adjustment, 2 hinges = compression and side adjustment). If necessary, a 4th hinge has to be ordered separately. Also available with security pin (MSTS).

### Classification key

2	7	3	1*2	1	_*1	0	10*2
---	---	---	-----	---	-----	---	------

\*1 Test evidence for functional doors to be achieved with full door sets and assemblies.

\*2 depending on the finish

\*3 test cycles in continuous operation with 160 kg

### Available options

BAKA Protect 4010 3D	load capacity up to 160 kg
BAKA Protect 4010 3D FD	load capacity up to 160 kg
BAKA Protect 4020 3D	load capacity up to 160 kg
BAKA Protect 4020 3D FD	load capacity up to 160 kg
BAKA Protect 4030 3D FD	load capacity up to 160 kg
BAKA Protect 4040 3D FD	load capacity up to 160 kg
BAKA Protect 4060 3D FD	load capacity up to 160 kg

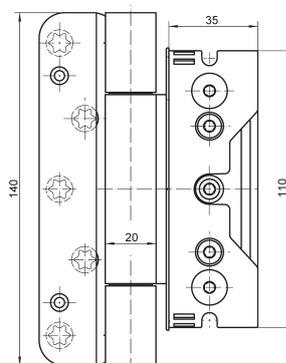
Detailed information in our PRODUCTSELECTOR at [www.simonswerk.com](http://www.simonswerk.com)

QUALITY MARKS

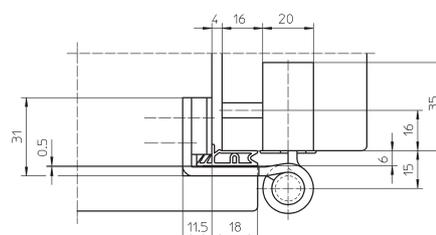
FUNCTIONAL AREAS



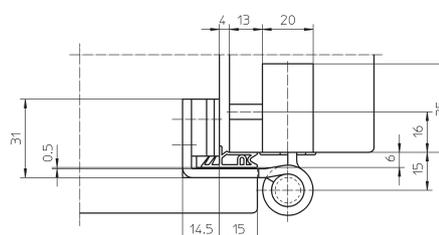
e.g. BAKA Protect 4010 3D FD



e.g. BAKA Protect 4010 3D FD



e.g. BAKA Protect 4010 3D FD  
18 mm overlap with overlap seal



e.g. BAKA Protect 4010 3D FD  
15 mm overlap with overlap seal

### finial options



BASIC



SOFT



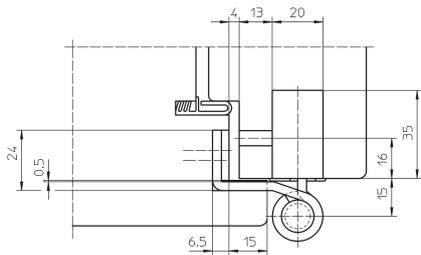
ZK

# OVERVIEW OF PROFILES

## BAKA Protect 4000

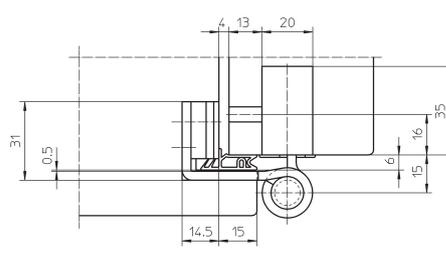
### 15 mm overlap without overlap seal

Version: BAKA Protect 4010 3D



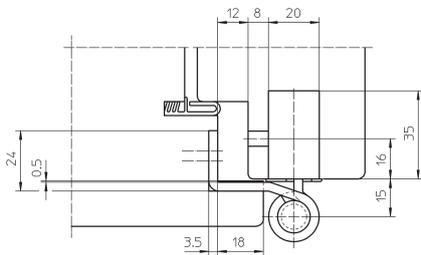
### 15 mm overlap with overlap seal

Version: BAKA Protect 4010 3D FD



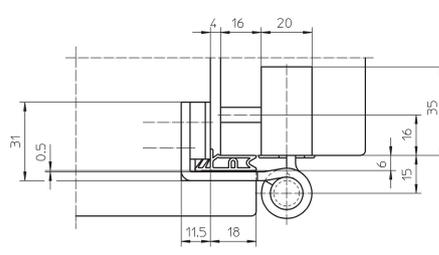
### 18 mm overlap without overlap seal

Version: BAKA Protect 4010 3D



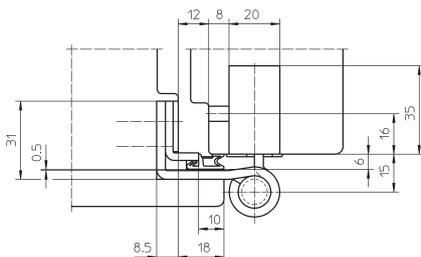
### 18 mm overlap with overlap seal

Version: BAKA Protect 4010 3D FD



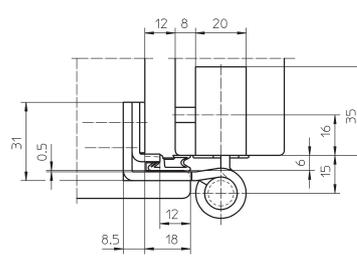
### 18 mm overlap with overlap seal (projection 10 mm)

Version: BAKA Protect 4030 3D FD



### 18 mm overlap with overlap seal (projection 12 mm)

Version: BAKA Protect 4040 3D FD

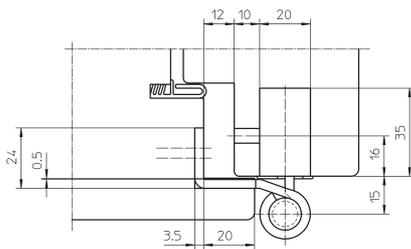


# OVERVIEW OF PROFILES

## BAKA Protect 4000

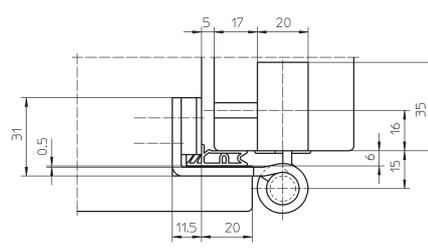
**20 mm overlap  
without overlap seal**

Version: BAKA Protect 4020 3D



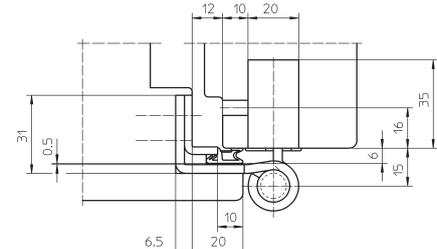
**20 mm overlap  
with overlap seal**

Version: BAKA Protect 4020 3D FD



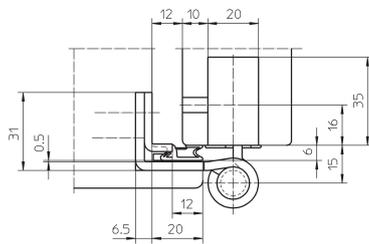
**20 mm overlap  
with overlap seal (projection 10 mm)**

Version: BAKA Protect 4030 3D FD



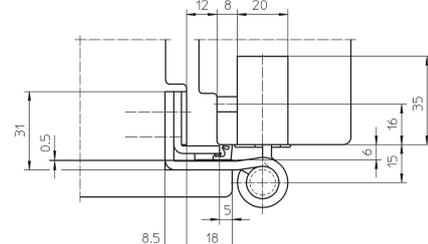
**20 mm overlap  
with overlap seal (projection 12 mm)**

Version: BAKA Protect 4040 3D FD



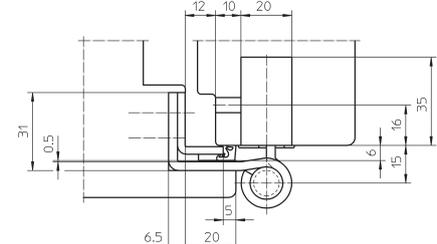
**18 mm overlap  
with overlap seal**

Version: BAKA Protect 4060 3D FD



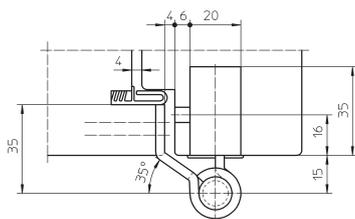
**20 mm overlap  
with overlap seal**

Version: BAKA Protect 4060 3D FD



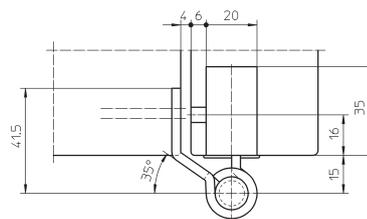
**rebated flush**

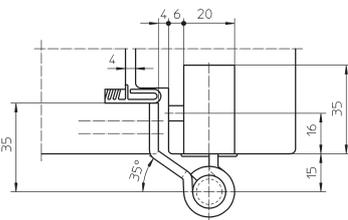
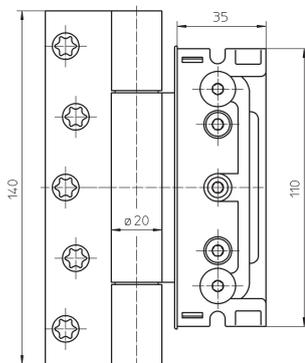
Version: BAKA Protect 4048 3D K



**unrebated flush**

Version: BAKA Protect 4049 3D





## BAKA Protect 4048 3D K

with 3D comfortable eccentric adjustment for rebated flush to close timber entrance doors

entrance door hinge	3D adjustable	up to 120 kg
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### Product features

- for rebated flush lying timber entrance doors
- concealed receiver in the frame
- with comfortable eccentric adjustment
- with comfortable 3D adjustment (side +/- 3,0 mm, height +/- 3,0 mm, compression +/- 3,0 mm)
- internal hinge-pin
- maintenance-free slide bearings

### Technical details

load capacity	<b>i</b> two hinges per door leaf (1x2m)	120.0 kg
knuckle length		140.0 mm
knuckle diameter		20.0 mm
pin diameter		10.0 mm
cutter diameter		20.0 mm

### Finishes

Topzinc (110), RAL 9016 Traffic White (070). Satin Stainless Steel (040), other finishes available upon request

### Combination

accessories	cover cap BAKA Protect 4000 decorative sleeve No. 12
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see page 15

### Installation tools

jig	routing jig BAKA Protect 4000 door installation set BAKA Protect 4048 3D K
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### Note

**i** The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). Set consists of 3 hinges (1 hinge = height and side adjustment, 2 hinges = compression and side adjustment).

If necessary, a 4th hinge has to be ordered separately.

Also available with security pin (MSTS).

# BAKA®

## BAKA Protect 4049 3D

with comfortable eccentric 3D adjustment for unrebated flush lying timber entrance doors

entrance door hinge	3D adjustable	up to 120 kg
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### Product features

- for unrebated timber entrance doors
- concealed receiver in the frame
- with comfortable eccentric adjustment
- with comfortable 3D adjustment (side +/- 3,0 mm, height +/- 3,0 mm, compression +/- 3,0 mm)
- internal hinge-pin
- maintenance-free slide bearings

### Technical details

load capacity	<b>i</b> two hinges per door leaf (1x2m)	120.0 kg
knuckle length		140.0 mm
knuckle diameter		20.0 mm
pin diameter		10.0 mm
cutter diameter		20.0 mm

### Finishes

Satin Stainless Steel (040), other finishes available upon request

### Combination

accessories	cover cap BAKA Protect 4000 decorative sleeve No. 12
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see page 15

### Note

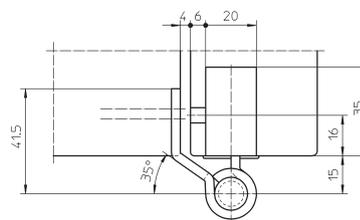
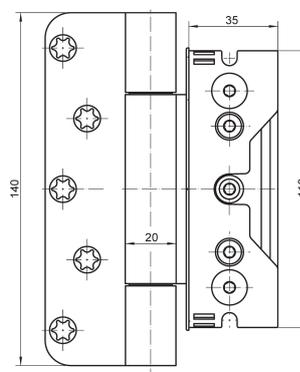
**i** The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). Set consists of 3 hinges (1 hinge = height and side adjustment, 2 hinges = compression and side adjustment). If necessary, a 4th hinge has to be ordered separately. Also available with security pin (MSTS).

### Classification key

2	7	3	1* <sup>1</sup>	1	-* <sup>2</sup>	0	10
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\*<sup>1</sup> Test evidence for functional doors to be achieved with full door sets and assemblies.

\*<sup>2</sup> depending on the finish





## Cover cap BAKA Protect 4000

accessory for timber entrance doors

accessories		cover cap
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### Finishes

RAL 9016 Traffic White (070), RAL 7038 Agate Grey (072), RAL 9005 Jet Black (073), RAL 1011 Brown Beige (083), RAL 8028 Terra Brown (086)

### Combination

hinge	BAKA Protect 4048 3D K	BAKA Protect 4049 3D
	BAKA Protect 4010 3D	BAKA Protect 4010 3D FD
	BAKA Protect 4020 3D	BAKA Protect 4020 3D FD
	BAKA Protect 4030 3D FD	BAKA Protect 4040 3D FD
		BAKA Protect 4060 3D FD

### Note

To cover the rebate openings in the frame, dimension 117.0 x 13.0 mm.



## Decorative sleeve No. 11

decorative accessories made of PVCu

accessories		decorative sleeve
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### Finishes

satin chromed/F1 (037, RAL 9016 Traffic White (070), H9 Brown (071), browned (021)

### Combination

hinge	BAKA Protect 2010 2D	BAKA Protect 2010 2D FD
		BAKA Protect 2030 2D FD
		BAKA Protect 2040 2D FD

### Note

Set consists of 2 outer parts and one middle part.



## Decorative sleeve No. 12

decorative accessories made of PVCu

accessories		decorative sleeve
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### Finishes

satin nickelled/F2 (018), browned (021), gilded (024), satin chromed/F1 (037, RAL 9016 Traffic White (070), H9 Brown (071)

### Combination

hinge	BAKA Protect 4048 3D K	BAKA Protect 4049 3D
	BAKA Protect 4010 3D	BAKA Protect 4010 3D FD
	BAKA Protect 4020 3D	BAKA Protect 4020 3D FD
	BAKA Protect 4030 3D FD	BAKA Protect 4040 3D FD
		BAKA Protect 4060 3D FD

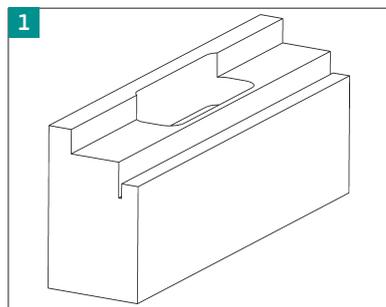
### Note

Set consists of 2 outer parts and one middle part.

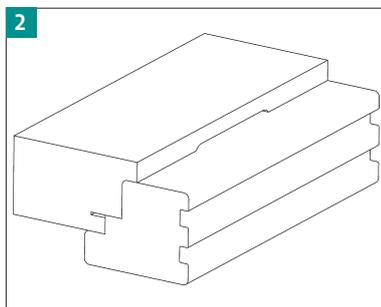
Delivery contains one full set of decorative sleeves for 3 complete hinges.

# ASSEMBLY

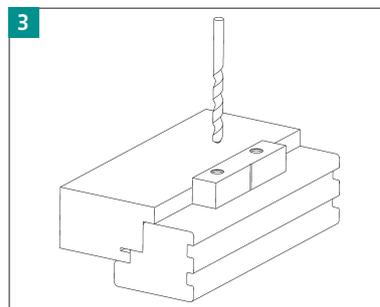
## BAKA Protect 2000 series



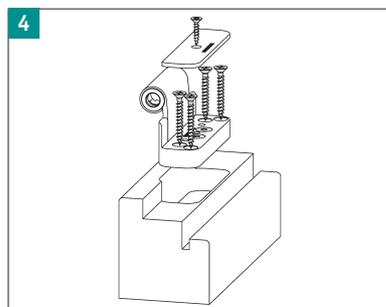
1 Determine the hinge position in the door and conduct the routing, cutter  $\varnothing$  according to data on the template.



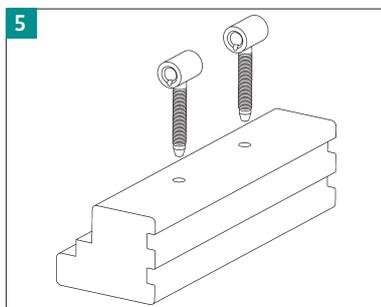
2 Insert the door into the frame and pull to the hinge side.



3 Insert the jig in the mortise (4 mm clearance on the hinge side is taken into account in the jig). Determine upper clearance by means of spacer blocks. Drill the holes using an 8.8 mm  $\varnothing$  bit. Remove the door from the frame.



4 Fasten the door part in the mortise with 4 wood screws 5 x 40 mm, if necessary mount the compensation plates.

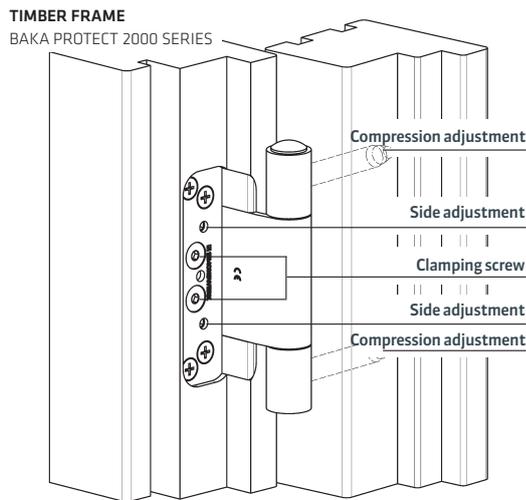


5 Screw the frame parts in, depending on the sealing compression and bring them in an upright position. Insert the door and drive the hinge pin in.

### Note

Avoid damaging the bearings when fitting the door!

# ADJUSTMENT



## BAKA Protect 2000 series

### Two-dimensionally, continuously adjustable

Side	+/- 3.0 mm
Compression	+/- 3.0 mm

### Side adjustment

- slightly loosen the clamping screws
- bring the door evenly into the correct position using adjusting spindles
- rotation right - to lock side (max. 3 mm)
- rotation left - to hinge side (max. 3 mm)
- retighten the clamping screws (6 nm)

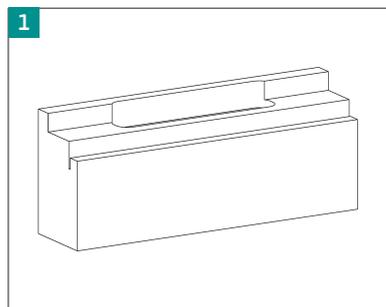
### Compression adjustment

- remove the door
- adjust by turning the frame pins in or out
- refit the door

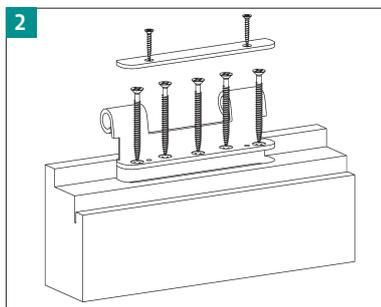
All adjustments to be conducted by means of a 4 mm Allen wrench.

# ASSEMBLY

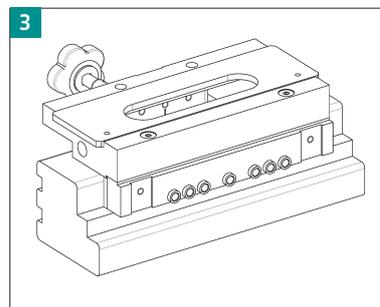
## BAKA Protect 4000 series



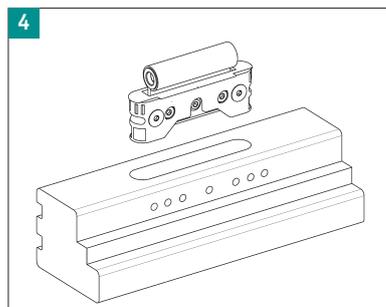
1 Determine the hinge position in the door. Conduct the routing work, cutter Ø according to data on the template.



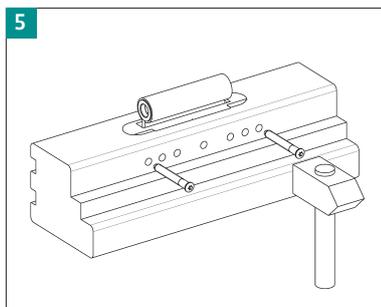
2 Fasten the door part in the mortise with 5 wood screws 5 x 40 mm.



3 Clamp on the drilling/routing jig. Drill the holes using a 6.0 mm Ø bit, cutter Ø: according to data on the template.



4 Insert the receivers and place the side with the adjustment screws to the drill holes. Caution: Hinges „A“ are inserted at the top and bottom, hinge „H“ is inserted in the middle.



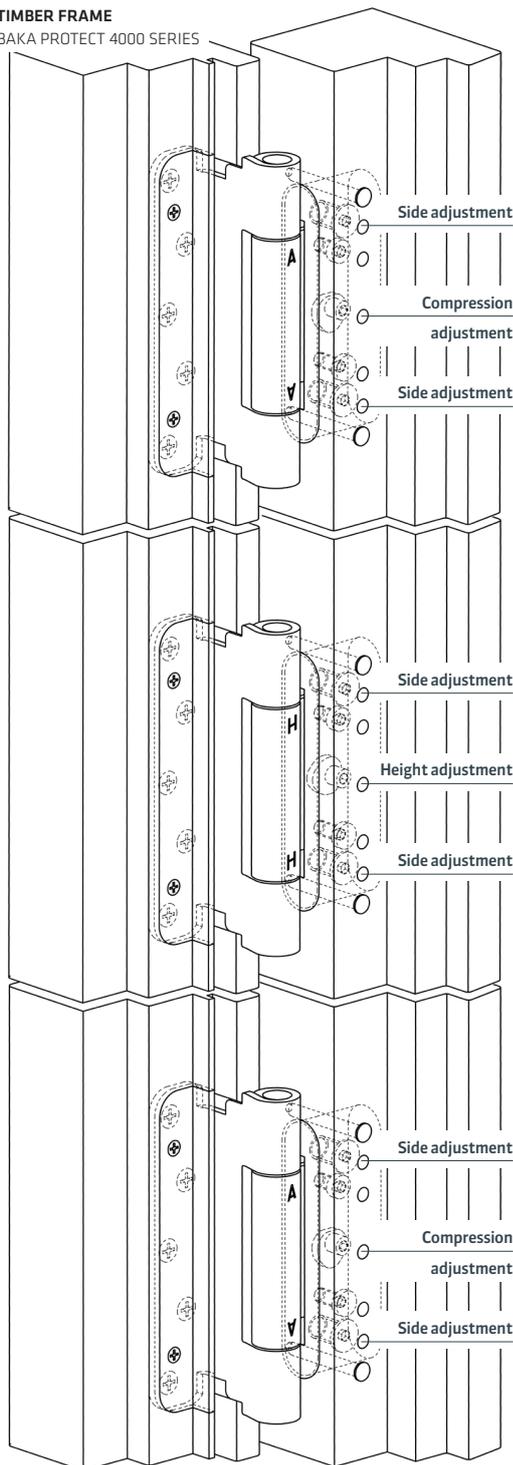
5 Drive fastening pins into the upper and lower drill hole, mount the door, insert the hinge pin.

### Note

Avoid damaging the bearings when fitting the door!

# ADJUSTMENT

**TIMBER FRAME**  
BAKA PROTECT 4000 SERIES



## BAKA Protect 4000 series

### Three-dimensionally, continuously adjustable

Side	+/- 3.0 mm
Height	+/- 3.0 mm
Compression	+/- 3.0 mm

### Side adjustment

- turn both adjustment screws equally (max. one turn) in relevant direction
- avoid tilt knuckles and tension on the axis

### Height adjustment

- slightly loosen the clamping screws in the frame part of all hinges
- adjust the height by turning the eccentric adjustments of the middle hinge in the desired direction
- retighten the clamping screws of the A-frame parts
- relieve the height adjustment of the H-hinge
- retighten the clamping screws of the H-frame part

### Compression adjustment

- slightly loosen the clamping screws in the frame part of all hinges
- adjust the compression by turning the eccentric adjustments of the upper and the lower hinge in the desired direction
- retighten the clamping screws of all frame parts

All adjustments to be conducted by means of a 4 mm Allen wrench.

**BAKA®****Routing jig BAKA Protect 2000 door**

for door part routing

routing jig		BAKA Protect
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**To be used for**

BAKA Protect 2010 2D

BAKA Protect 2010 2D FD

BAKA Protect 2030 2D FD

BAKA Protect 2030 2D-15 FD MSTS

BAKA Protect 2040 2D FD

BAKA Protect 2040 2D-15 FD MSTS

**Scope of supply**

1 x routing jig

1 x template BAKA Protect 2000 door 20/30

1 x fitting instruction

**Fitting instructions**

1. Clamp routing jig to workpiece, insert template and rout first slot with cutter  $\varnothing 20.0$  mm (collar ring  $\varnothing 30.0$  mm).
2. After routing, loosen quick-release clamp and remove routing jig.

**Note**

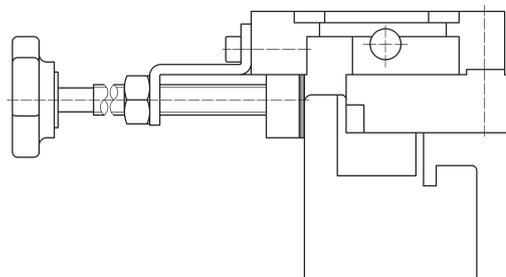
Templates for the following combinations (cutter/collar ring) are also available as accessories:

template BAKA Protect 2000 door 16/27

template BAKA Protect 2000 door 16/30

template BAKA Protect 2000 door 20/27

Also available as ball catch location routing jig BAKA Protect 2000 door.





## Drilling jig BAKA Protect 2000 frame

for frame part drilling BAKA Protect 2000

drilling jig		BAKA Protect
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### To be used for

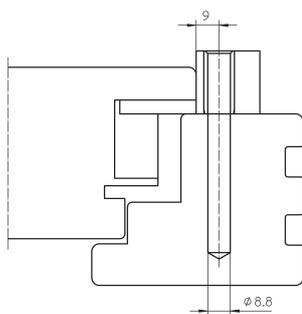
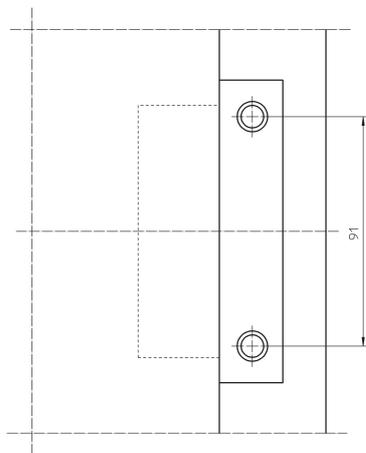
BAKA Protect 2010 2D
BAKA Protect 2010 2D FD
BAKA Protect 2030 2D FD
BAKA Protect 2040 2D FD

### Scope of supply

1 x drilling jig  
1 x spacer plate  
1 x drill bit Ø 8.8 mm  
1 x set ring  
1 x wind-in claw Ø 20.0 mm  
1 x fitting instruction

### Fitting instructions

1. Determine hinge position on door leaf. Rout the mortise in the door leaf with BAKA Protect 2000 routing jig.
2. Insert door leaf in frame. The 4 mm clearance on the hinge side is considered in the drilling jig.
3. If necessary, screw the compensation plate to the drilling jig BAKA Protect 2000 frame (see imprint).
4. Fix BAKA Protect 2000 frame jig in the mortise slot and drill holes.
5. Remove door leaf from frame, screw in frame parts according to seal pressure and align vertically.
6. Screw BAKA Protect 2000 door part into the mortise. Insert door leaf and drive the pin.



### Note

Also available as drilling jig BAKA Protect 2000-15 FD frame.

**BAKA®****Ball catch location routing jig 2000 door**

for the door routing BAKA Protect 2000

**ball catch location jig** BAKA Protect**To be used for**

BAKA Protect 2010 2D  
 BAKA Protect 2010 2D FD  
 BAKA Protect 2030 2D FD  
 BAKA Protect 2030 2D-15 FD MSTs  
 BAKA Protect 2040 2D FD  
 BAKA Protect 2040 2D-15 FD MSTs

**Scope of supply**

3 x routing jigs  
 3 x templates BAKA Protect 2000 door 20/30  
 1 x square connecting rod with ball catch location guide  
 2 x end stops  
 1 x fitting instruction

**Fitting instructions**

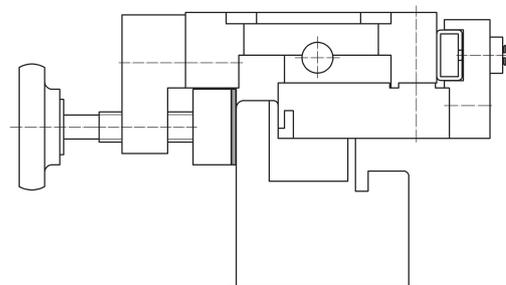
1. The length stops need to be individually adjusted for right- and left hand and mounted in the door rebate.
2. Align ball catch location routing jig with frame jig.
3. Clamp ball catch location routing jig to the workpiece, insert templates and rout slots with cutter Ø 20,0 mm (collar ring Ø 30,0 mm).
4. After routing, loosen quick-release clamp and remove ball catch location routing jig.

**Note**

Templates for the following combinations (cutter/collar ring) are also available as accessories:

template BAKA Protect 2000 door 16/27  
 template BAKA Protect 2000 door 16/30  
 template BAKA Protect 2000 door 20/27

Also available as routing jig BAKA Protect 2000 door.





## Ball catch location routing jig 2000 frame

for frame part drilling BAKA Protect 2000

ball catch location jig		BAKA Protect
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### To be used for

BAKA Protect 2010 2D
BAKA Protect 2010 2D FD
BAKA Protect 2030 2D FD
BAKA Protect 2040 2D FD

### Scope of supply

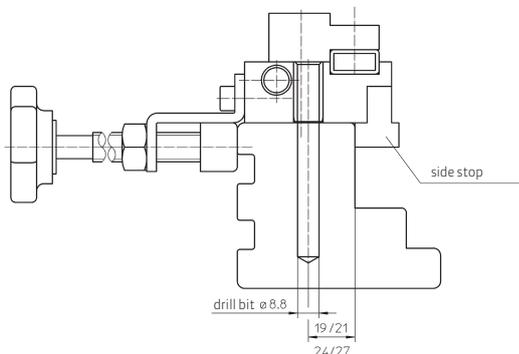
- 3 x drilling jig
- 1 x square connecting rod with catch location guide
- 2 x stops
- 1 x drill bit Ø 8.8 mm
- 1 x set ring
- 1 x wind-in claw Ø 20.0 mm
- 1 x fitting instruction

### Fitting instructions

1. The length stops need to be individually adjusted for right- and left hand and mounted in the frame rebate.
2. Align ball catch location drilling jig with the door jig.
3. Mount the side stops, depending on construction (see imprint).
4. Clamp ball-bearing location drilling jig to the work piece. The 4.0 mm clearance on the hinge side is considered in the drilling jig.
5. Drill holes with Ø 8.8 mm drill bit.
6. Screw in frame parts according to required depth position, and align vertically.
7. Insert door leaf and mount pin.

### Note

Additional drilling jigs for mounting further hinges are available on request.



# BAKA®

## Drilling /routing jig BAKA Protect 4000 frame

for frame part drilling and routing of BAKA Protect 4000

drilling /routing jig		BAKA Protect
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### To be used for

BAKA Protect 4010 3D
BAKA Protect 4010 3D FD
BAKA Protect 4020 3D
BAKA Protect 4020 3D FD
BAKA Protect 4030 3D FD
BAKA Protect 4040 3D FD
BAKA Protect 4060 3D FD

### Scope of supply

1 x drilling /routing jig  
 1 x template BAKA Protect 4000 frame 20/30  
 1 x drill bit Ø 6.0 mm  
 1 x set ring  
 1 x fitting instruction

### Fitting instructions

1. Determine hinge position.
2. Mount the side stops depending on the door construction (see imprint).
3. Clamp drilling-/routing jig onto the workpiece. The clearance on the hinge side is considered in the jig.
4. Drill frame holes (Ø 6.0 mm drill bit).
5. Rout slot with Ø 20.0 mm cutter (Ø 30.0 mm collar ring).
6. Insert receiver and lock in place with fastening pins.

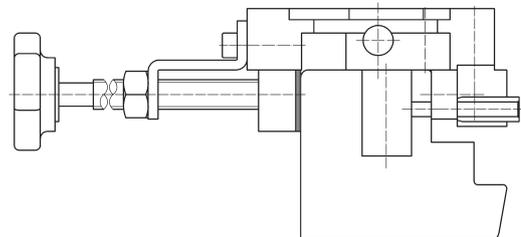
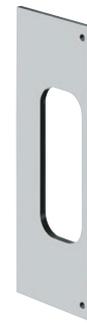
### Note

Templates for the following combinations (cutter/collar ring) are also available as accessories:

template BAKA Protect 4000 frame 16/27  
 template BAKA Protect 4000 frame 16/30  
 template BAKA Protect 4000 frame 20/27

Also available as ball catch location routing jig BAKA Protect 4000 frame.

A retrofit set is available to continue the use of existing drilling/routing jigs BAKA Protect 3D frame.





## Retrofit kit BAKA Protect 4000 frame

With this retrofit kit you can continue working with your already existing drilling/routing jigs BAKA Protect 3D frame. The only thing to do is to exchange the drilling rail on the used jig.

<b>drilling jig</b>		<b>BAKA Protect</b>
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### To be used for

BAKA Protect 4010 3D
BAKA Protect 4010 3D FD
BAKA Protect 4020 3D
BAKA Protect 4020 3D FD
BAKA Protect 4030 3D FD
BAKA Protect 4040 3D FD
BAKA Protect 4060 3D FD

### Scope of supply

- 1 x drilling rail
- 3 x side stops
- 1 x drill bit Ø 6.0 mm
- 1 x set ring
- 2 x fixing screws

### Fitting instructions

1. Exchange drilling rail on existing drilling/routing jig.
2. Adjust the side stops depending on the door construction (see imprint). Standard position is 18 mm overlap and 4 mm clearance.
3. Clamp drilling/routing jig on the workpiece. The clearance on the hinge side is considered in the jig.
4. Drill frame holes with Ø 6,0 mm drill bit..
5. Rout mortise with cutter Ø 20.0 mm (collar ring Ø 30.0 mm).
6. Insert receiver and lock in place with fastening pins.

**BAKA®****Routing jig BAKA Protect 4000 door**

for door part routing BAKA Protect 4000

routing jig BAKA Protect**To be used for**

BAKA Protect 4010 3D

BAKA Protect 4010 3D FD

BAKA Protect 4020 3D

BAKA Protect 4020 3D FD

BAKA Protect 4030 3D FD

BAKA Protect 4040 3D FD

BAKA Protect 4048 3D K

BAKA Protect 4060 3D FD

**Scope of supply**

1 x routing jig

1 x template BAKA Protect 4000 door 20/30

1 x template BAKA Protect 4000 FD door 20/30

1 x fitting instruction

**Fitting instructions**

1. Clamp routing jig to workpiece, insert template and rout first slot with cutter  $\varnothing 20.0$  mm (collar ring  $\varnothing 30.0$  mm).
2. After routing, loosen quick-release clamp and remove routing jig.

**Note**

Templates for the following combinations (cutter/collar ring) are also available as accessories:

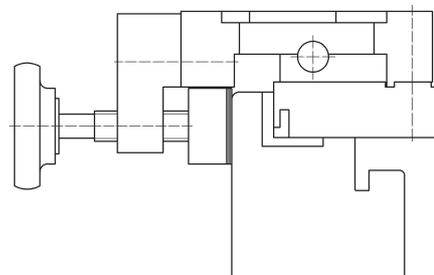
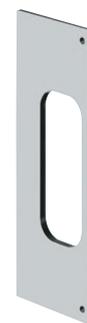
template BAKA Protect 4000 door 16/27

template BAKA Protect 4000 door 16/30

template BAKA Protect 4000 door 20/27

Also available as ball catch location routing jig BAKA Protect 4000 door.

The BAKA Protect expansion set is available separately as an additional option.



e.g. expansion set BAKA Protect 4048 3D K



## Drilling jig BAKA Protect 4000 frame

for frame part drilling BAKA Protect 4000

drilling jig		BAKA Protect
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### To be used for

BAKA Protect 4010 3D
BAKA Protect 4010 3D FD
BAKA Protect 4020 3D
BAKA Protect 4020 3D FD
BAKA Protect 4030 3D FD
BAKA Protect 4040 3D FD
BAKA Protect 4060 3D FD

### Scope of supply

1 x drilling jig  
1 x set ring  
1 x fitting instruction

### Fitting instructions

1. Conduct the routing on the frame side.
2. Fix drilling jig BAKA Protect 4000 frame with the barbs into milling slot and drill the holes using a Ø 6.0 mm drill-bit (if necessary, remove shavings).
3. Insert receiver and lock in place with fastening pins.

**BAKA®****Ball catch location jig BAKA Protect 4000 frame**

for frame part drilling and routing of BAKA Protect 4000

**ball catch location jig** **BAKA Protect****To be used for**

BAKA Protect 4010 3D  
 BAKA Protect 4010 3D FD  
 BAKA Protect 4020 3D  
 BAKA Protect 4020 3D FD  
 BAKA Protect 4030 3D FD  
 BAKA Protect 4040 3D FD  
 BAKA Protect 4048 3D K  
 BAKA Protect 4060 3D FD

**Scope of supply**

3 x drilling/routing jigs  
 3 x templates BAKA Protect 4000 frame 20/30  
 1 x square connecting rod with ball catch location guide  
 2 x end stops  
 1 x drill bit Ø 6.0 mm  
 1 x set ring  
 1 x fitting instruction

**Fitting instructions**

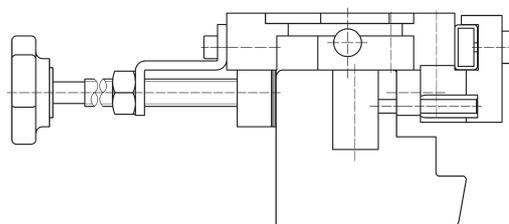
1. The length stops need to be individually adjusted for right- and left hand and mounted in the frame rebate.
2. Mount the side stops, depending on construction (see imprint).
3. Align ball catch location drilling/routing jig with door jig.
4. Clamp ball catch location drilling/routing jig to workpiece. The 4.0 mm clearance on the hinge side is considered in the jig.
5. Drill frame holes with Ø 6.0 mm drill bit.
6. Rout slots with with cutter Ø 20.0 mm (collar ring Ø 30.0 mm).
7. Insert receiver and lock in place with fastening pins.

**Note**

Templates for the following combinations (cutter/collar ring) are also available as accessories:

template BAKA Protect 4000 frame 16/27  
 template BAKA Protect 4000 frame 16/30  
 template BAKA Protect 4000 frame 20/27

Also available as drilling/routing jig BAKA Protect 4000 frame.





## Ball catch location jig BAKA Protect 4000 door

for door part routing BAKA Protect 4000

ball catch location jig

BAKA Protect

### To be used for

BAKA Protect 4010 3D  
BAKA Protect 4010 3D FD  
BAKA Protect 4020 3D  
BAKA Protect 4020 3D FD  
BAKA Protect 4030 3D FD  
BAKA Protect 4040 3D FD  
BAKA Protect 4060 3D FD

### Scope of supply

3 x routing jigs  
3 x templates BAKA Protect 4000 door 20/30  
1 x square connecting rod with ball catch location guide  
2 x end stops  
1 x fitting instruction

### Fitting instructions

1. The length stops need to be individually adjusted for right- and left hand and mounted in the door rebate.
2. Align ball catch location routing jig with frame jig.
3. Clamp ball catch location routing jig to the workpiece, insert templates and rout slots with cutter  $\varnothing 20.0$  mm (collar ring  $\varnothing 30.0$  mm).
4. After routing, loosen quick-release clamp and remove ball catch location routing jig.

### Note

Templates for the following combinations (cutter/collar ring) are also available as accessories:

template BAKA Protect 4000 door 16/27

template BAKA Protect 4000 door 16/30

template BAKA Protect 4000 door 20/27

Also available as routing jig BAKA Protect 4000 door.

# SERVICE - COMPREHENSIVE EXPERTISE FOR YOUR DAILY WORK

We are happy to provide you with all the documentation you need to calculate which is the most suitable hinge system for your requirements. Please contact us: we would be delighted to work with you to choose the best solution – from high quality solutions from basic to the most complex applications.

Please visit our home page for any information not included in this brochure. You will find it easy to navigate through our user-friendly website to arrive at the detailed, comprehensive solutions

All our brochures and data sheets can be requested in a printed version, or you can simply download them on the spot – and the same applies to our fitting instructions and milling data.

**[www.simonswerk.com](http://www.simonswerk.com)**



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Whether you are a manufacturer, trade partner or designer, at [www.simonswerk.com](http://www.simonswerk.com) you can find precise, detailed product descriptions that will help you to choose the most suitable hinge systems.

## CONTAINS

BAKA Protect 2000  
BAKA Protect 2000-15  
BAKA Protect 4000  
BAKA Protect 4048 3D K  
BAKA Protect 4049 3D

PLEASE VISIT THE PRODUCTSELECTOR AT  
[www.simonswerk.com](http://www.simonswerk.com)

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