



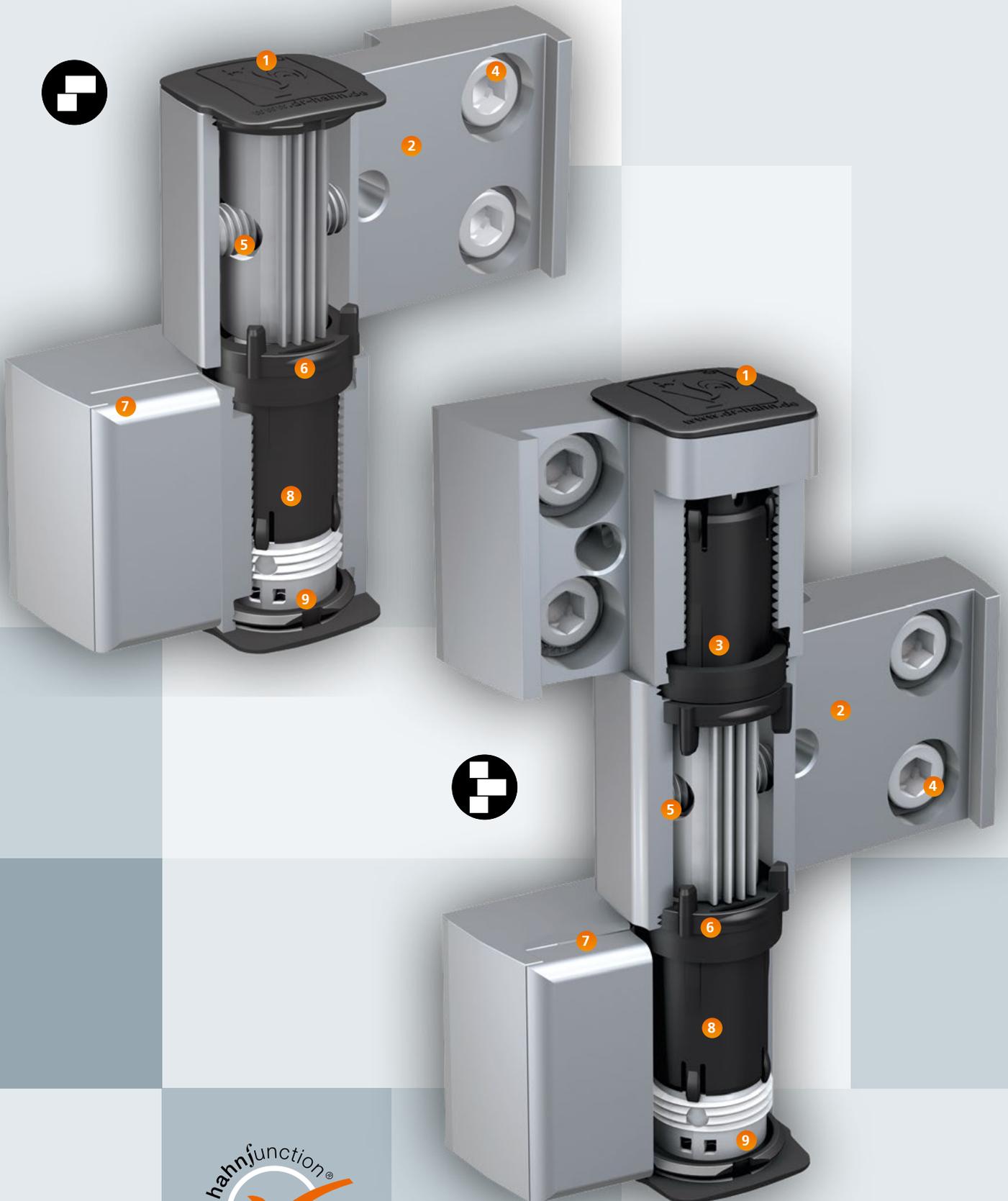
Hahn Serie 60 AT



Universal hinge for versatile application



More modern look
Improved technology





Hahn Serie 60 AT

For all doors
made from metal
profile sections

- 1 **Uniform caps**
– now with long-term hold
- 2 **Screw-on hinge of extruded aluminium** – withstands significant pressure and tensile forces
- 3 **Split stainless steel pins**
– for easier disassembly
- 4 **Choose freely between Hahn fastening elements**
– suits every profile situation

Larger setting range

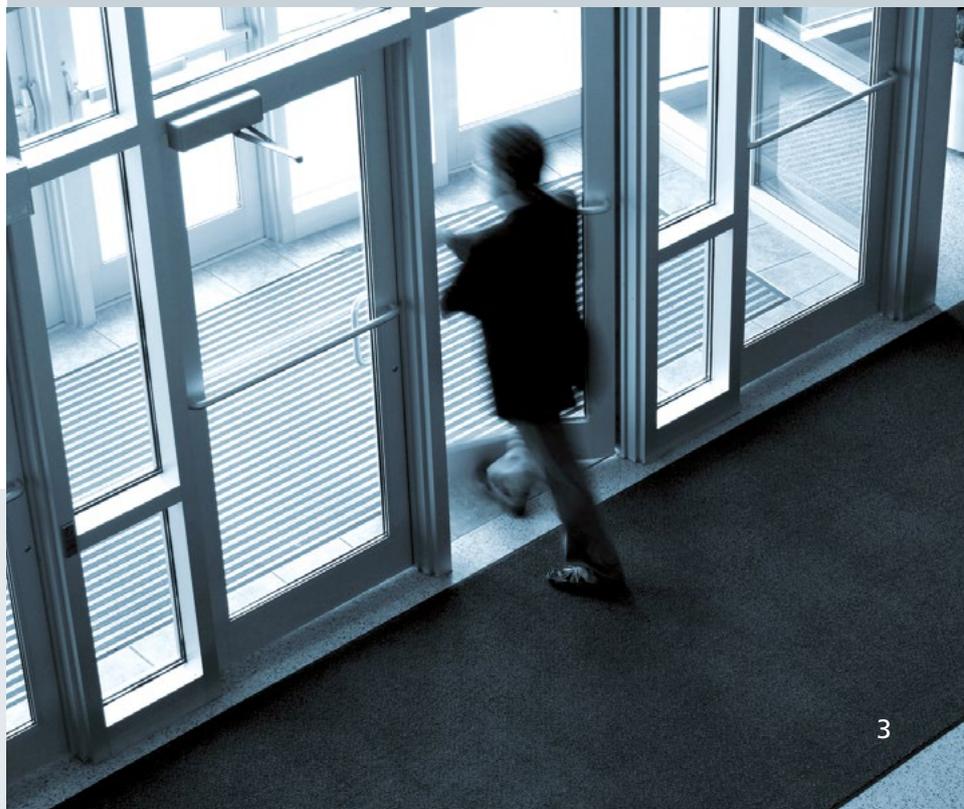
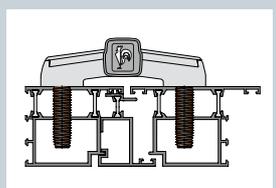
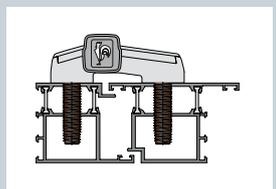
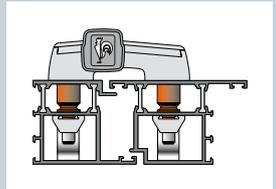
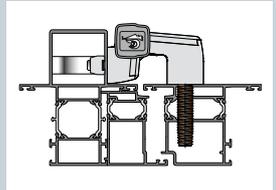
- 5 **Horizontal adjustment**
 ± 2.5 mm on installed doors
– ensuring an optimum fit
- 6 **Both parts of the hinges are equipped with a synthetic sleeve offering** – improved antifriction property
- 7 **Cover strip secured**
– for improved protection against break-ins

Adjustable with door leaf installed

- 8 **Adjust sealing pressure**
 ± 0.5 mm (necessary to remove the door leaf for some variations)
- 9 **Height adjustment using integrated lifting and lowering spindle** – continually variable $+ 3$ mm/ -2 mm and easy adjustment

Other advantages:

- Adjustable in six directions while door leaf is mounted
- Capable of supporting up to 220 kg (3-piece) or 140 kg (2-piece) depending on the design of the profile sections
- Available for all common aluminium and steel profile sections
- The standard version comes with high corrosion resistance
- The hinge system offers a variety of possible combinations and mounting options for inward and outward opening doors with alternating profile and corner post construction
- Can be used on left or right
- Special designs for folding doors and intrusion-resistant doors
- Hinges available in anodised and RAL colours
- Bearing point maintenance-free
– no lubrication necessary



Hahn Serie 60 AT ...



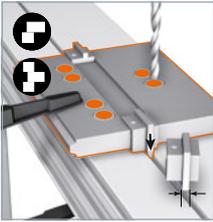
... more convenience for door makers

A hinge for (almost) every application: Hahn Serie 60 AT hinges are universally usable for almost all system profiles. They are durable and always remain stable even when subject to intensive use. Both parts of the hinge are equipped with a low-maintenance bearing bushing. That improves the antifriction properties for several hundred thousand cycles.

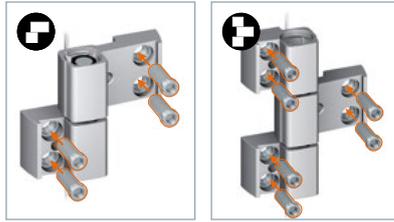
Moreover, it can be adjusted in six directions – by one person and without having to loosen the fastening screws, and now even when the door leaf is already installed.



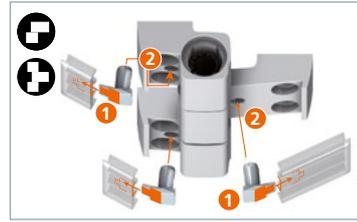
Installation instructions Fastening method anchor screw



Drill 11 mm diameter holes.



Tighten screws of the hinge body (20–25 Nm).



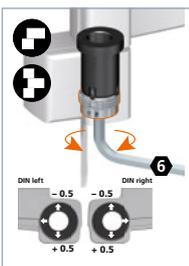
Slide tension bolt into cover strip. Snap-on cover strip. Snap caps in place.



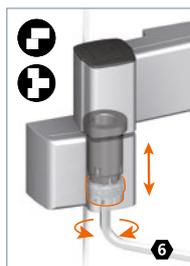
Convenient and reliable

The cover strips are equipped with a tension bolt, which is fixed from behind and which prevents access to the fastening screws. To contribute to protection against break-ins, Hahn offers security sets as an accessory for doors that open outward. The hinge system offers a variety of possible combinations and mounting options for inward and outward opening doors with reversible profile and corner post construction.

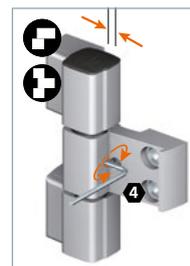
Adjustment instructions



Adjusting the sealing pressure
 Increase sealing pressure: + 0.5 mm, mark points towards the door. Decrease sealing pressure: - 0.5 mm, mark points away from the door.



Adjusting the height
 + 3/- 2 mm



Horizontal adjustment
 ± 2.5 mm



For all doors made from metal profile sections

Be it main doors, side doors or functional doors, interior, exterior or entry doors, the Hahn Serie 60 AT is a door hinge that performs as expected for the long term. Before a Hahn hinge can be rolled out, the ready-for-production hinge is subjected to testing with over 200,000 opening cycles. In doing so, the hinge must also prove itself under unfavourable conditions. It is only after these tests have been completed successfully that the hinge can be released. This guarantees that a Hahn hinge is reliable over the long term, a benefit that is much appreciated by architects, system suppliers, door makers and building owners.





Including CE certificate

Both hinge versions of the Series 60 AT were tested by a testing laboratory with regard to a high load capacity. The 2-piece and 3-piece version have attained hinge class 14 – the currently highest rating available for single-axis door hinges. The 3-piece version with a borehole gauge of 125 mm has earned the hinge class 11 rating based on special testing criteria, whereby its high load capacity was also certified by the testing laboratory. The standard version of the Series 60 AT hinges is suited for their usability on smoke-resistant and fire safety doors within the framework of component testing.

								
	Service class	Durability	Weight of test door	Fire resistance	Security	Corrosion resistance	Intrusion protection	Hinge class
SERIE 60 AT 	4	7	7	0	1	4 (5)*	1	14
SERIE 60 AT 	4	7	7	1	1	4 (5)*	1	14
SERIE 60 AT  Product: M781_	3	7	4	0	1	4 (5)*	0	11

Suited for use on doors installed along emergency escape routes. *Corrosion class 5 according to DIN EN 1670:2007

SERIE 60 AT EC certificate number 1309-CPR-0256

The classification **4 7 7 0 1 5 1 14** means:

A door hinge for (4) very heavy usage, which has undergone endurance testing of (7) 200,000 cycles, for a door weighing up to (7) 160 kg, not suited for (0) fire and smoke protection, fulfils (1) the general requirements on operational safety, possesses a (5) corrosion resistance of 480 h and can be used on (1) anti-burglar doors and thus has achieved hinge class (14).

In addition to that, testing was conducted based on 20 cycles with 320 kg and 5 cycles with 480 kg and successfully completed in accordance with EN 1935.

SERIE 60 AT EC certificate number 1309-CPR-0257

The classification **4 7 7 1 1 5 1 14** means:

A door hinge for (4) very heavy usage, which has undergone endurance testing of (7) 200,000 cycles, for a door weighing up to (7) 160 kg, suited for (1) fire and smoke protection, fulfils (1) the general requirements on operational safety, possesses a (5) corrosion resistance of 480 h and can be used on (1) anti-burglar doors and thus has achieved hinge class (14).

In addition to that, testing was conducted based on 20 cycles with 320 kg and 5 cycles with 480 kg and successfully completed in accordance with EN 1935.

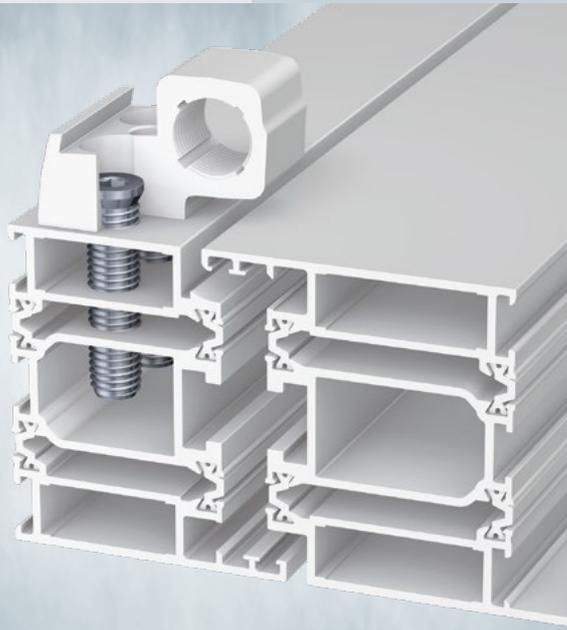
SERIE 60 AT EC certificate number 1309-CPR-0257 for the product: M781_

The classification **3 7 4 0 1 5 0 11** means:

A door hinge for (3) heavy usage, which has undergone endurance testing of (7) 200,000 cycles, for a door weighing (4) up to 80 kg, is not suited for (0) fire and smoke protection, fulfils (1) the general requirements on operational safety, possesses a (5) corrosion resistance of 480 h and cannot be used on (0) anti-burglar doors and thus has achieved hinge class (11).

Hardly possible to be more universal

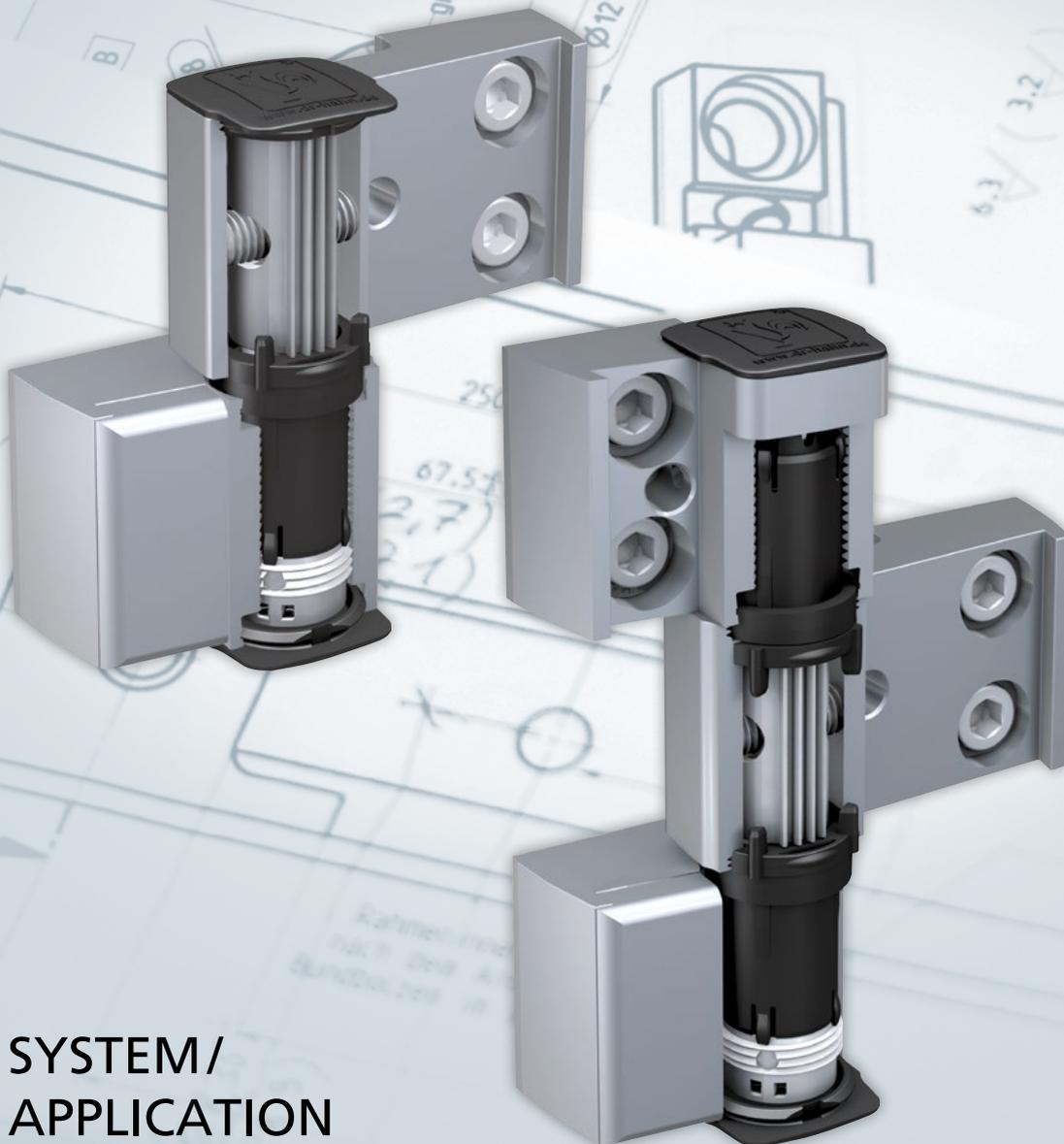
The requirements placed on hinge mounting are just as diverse as the system landscapes that hinges have to serve. For this reason, Dr. Hahn developed the Hahn screw anchor revolutionising hinge mounting in 2003. The Hahn anchor screw followed in 2007. Both fastening methods have now become permanent fixtures in the workshops of door installation firms world-wide. For the first time ever, a Hahn hinge can now utilise the entire range with the new Hahn Serie 60 AT. Of course, it depends on the door situation that the installer has to deal with. For hinges with a pivoting point of 20 mm, installers can decide on their own which mounting method they would like to order additionally for the hinge. Delivery of hinges with pivoting points other than 20 mm or 36 mm always take place completely in a box incl. fastening elements. As a result, the Hahn Serie 60 AT is able to satisfy a wide variety of situations and offers door installers maximum flexibility.





Hahn Serie 60 AT

Universal hinge
for metal doors

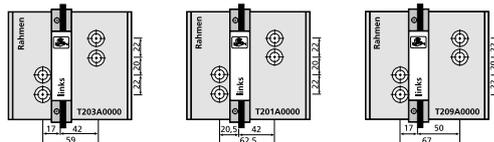


SYSTEM/ APPLICATION

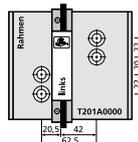
- **Material**
Made of extruded aluminium
- **Fastening methods**
Fastening using anchor screw, screw anchor or section reinforcement plates 15 and 21 mm
- **Versions**
Two pivoting points: 20 mm and 36 mm
- **Load capacity**
Depending on profile section design, max. 140 kg (2-piece), max. 220 kg (3-piece)
- **Adjustability**
Door leaf adjustable in six directions:
 - Horizontal adjustment, variable up to ± 2.5 mm
 - Vertical adjustment using integrated lifting and lowering spindle, raising + 3 mm, lowering - 2 mm
 - Sealing pressure ± 0.5 mm
- **Colours**
Hinges available in anodised and RAL colours
- **Doors open up to > 180°**
- **Bearing point maintenance-free**



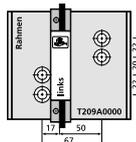
Drilling jigs



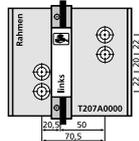
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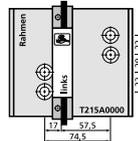
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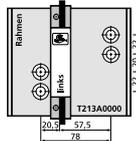
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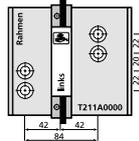
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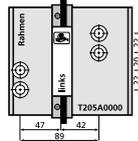
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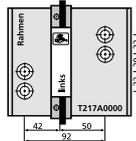
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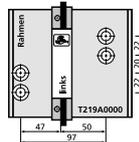
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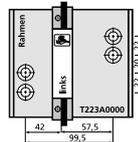
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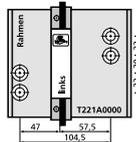
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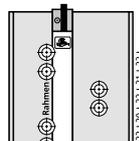
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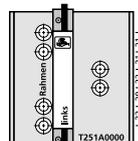
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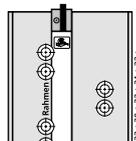
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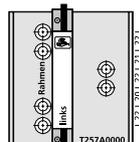
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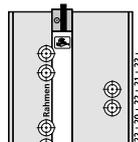
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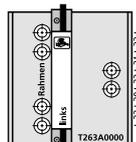
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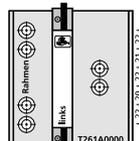
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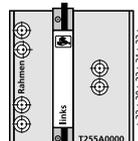
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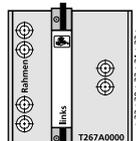
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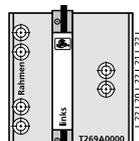
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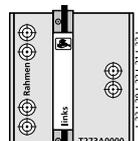
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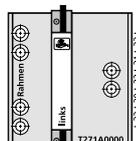
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General suggestions for hinge placement

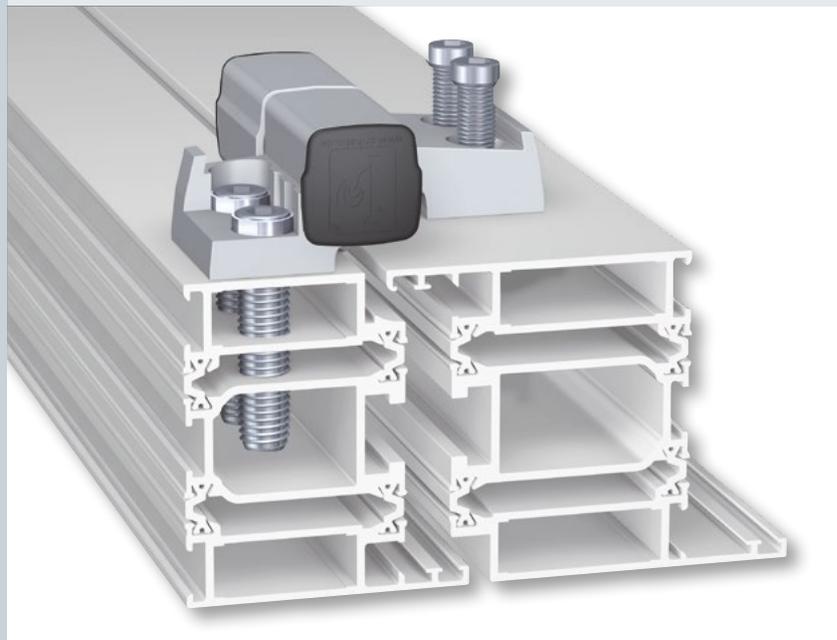
The following design fundamentals are authoritative for hinge placement: size and weight of door, wall thickness of section, frame design, how the door opens, type of loading, hinge mounting. This information is essential for a precise design calculation.

	Object	Max. door size [mm]	Max. door weight [kg]	Upper door closer	Swing door drive mechanism
Normal usage	Detached house	1,250 x 2,000	120		
	Detached house	1,250 x 2,000	140		
	Building with multiple dwellings	1,250 x 2,000	120		
	Building with multiple dwellings	1,250 x 2,000	140		
	Building with multiple dwellings	1,250 x 2,000	120	■	
	Building with multiple dwellings	1,250 x 2,000	140	■	
Heavy usage	Hospital, school, ...	1,250 x 2,000	120	■	
	Hospital, school, ...	1,250 x 2,000	140		
	Hospital, school, ...	1,250 x 2,000	120		■
	Hospital, school, ...	1,250 x 2,000	140		■
	Hospital, school, ...	1,250 x 2,000	120		
	Hospital, school, ...	1,250 x 2,000	140		

These general hinge placement suggestions take into account frame sections of normal width (approx. 45 mm) with wall thicknesses of approx. 2 mm. Since the individual door frame systems vary significantly in terms of projected widths and wall thicknesses and the mounting of hinges to the frame play a major role, we recommend that you make use of our free design calculation service, should you have any doubts. To determine the necessary placement of hinges, various information is required. Please request our questionnaire on hinge placement.

Please note: All statements and calculations relate exclusively to Original Hahn hinges in conjunction with original Hahn fastening elements and take into account their specific characteristics.

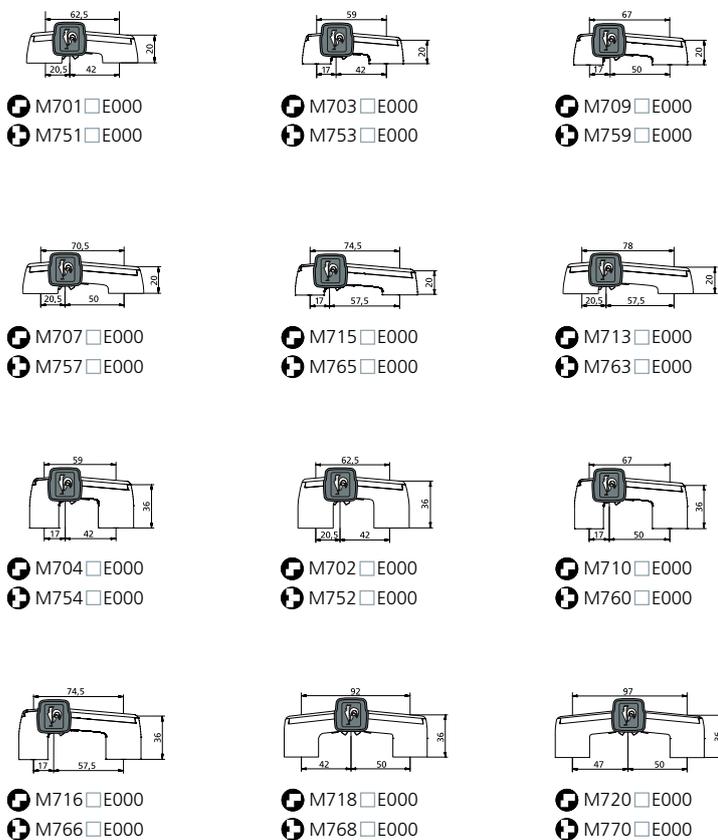
Closing sequence controller	Recommended hinge placement	Arrangement
		Distance from door edge approx. 150 mm
		Third hinge approx. 150 mm below the top hinge
		Distance from door edge approx. 150 mm
		Third hinge approx. 150 mm below the top hinge
		Third hinge approx. 150 mm below the top hinge
		Third hinge approx. 150 mm below the top hinge, fourth in middle
		Third hinge approx. 150 mm below the top hinge
		Third hinge approx. 150 mm below the top hinge, fourth in middle
		Third hinge approx. 150 mm below the top hinge
		Third hinge approx. 150 mm below the top hinge, fourth in middle
		Third hinge approx. 150 mm below the top hinge
		Third hinge approx. 150 mm below the top hinge, fourth in middle



Now with Hahn anchor screw for especially fast processing

Versions

for installation with all Hahn fastening elements

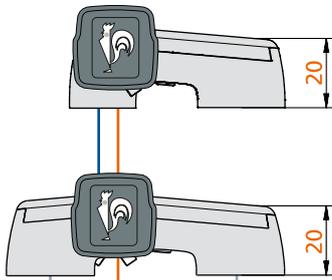


Bearing points made of maintenance-free plastic containing Teflon – do not lubricate!

Many other applications available on request.

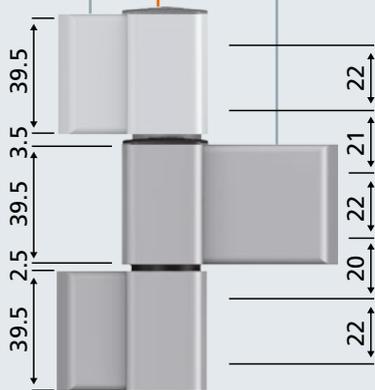
Separate order of hinge and fastening elements

Pivoting point 20 mm



17	42 mm
17	50 mm
20.5	42 mm
20.5	50 mm
17	57.5 mm
20.5	57.5 mm
42	42 mm
42	50 mm
42	57.5 mm
47	42 mm
47	50 mm
47	57.5 mm
5	42 mm
5	50 mm
5	67.5 mm
5	57.5 mm

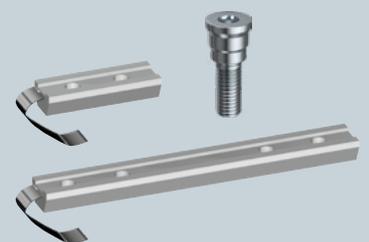
Bore hole gauge	Profile combination for inward opening doors (example)		Profile combination for outward opening doors (example)	
	⊖	⊕	⊖	⊕
59 mm	M703	M753	M703	M753
67 mm	M709	M759	M709	M759
62.5 mm	M701	M751	M701	M751
70.5 mm	M707	M757	M707	M757
74.5 mm				
78 mm				
84 mm				
92 mm				
99.5 mm				
89 mm				
97 mm				
104.5 mm				
47 mm	M735**)	M785**)	M735**)	M785**)
55 mm	M736**)	M786**)	M736**)	M786**)
72.5 mm	M737**)	M787**)	M737**)	M787**)
62.5 mm	M738**)	M788**)	M738**)	M788**)



Anchor screws

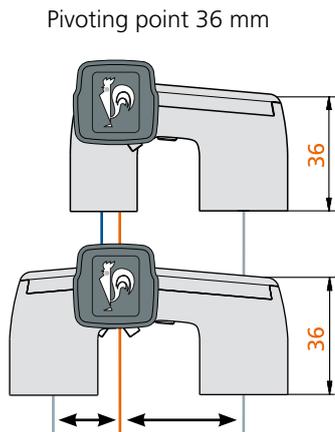


Mounting plates



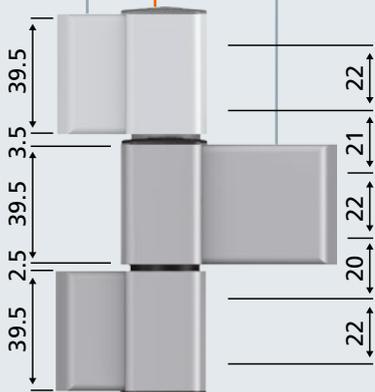
For item numbers of fastening elements, see page 16

Separate order of hinge and fastening elements



		Bore hole gauge	Profile combination for inward opening doors (example)		Profile combination for outward opening doors (example)		Profile combination for inward opening doors with alternating section (example)	
			⊕	⊕	⊕	⊕	⊕	⊕
17	42 mm	59 mm	M704	M754	M704	M754		
17	50 mm	67 mm	M710	M760	M710	M760		
20.5	42 mm	62.5 mm	M702	M752	M702	M752		
20.5	50 mm	70.5 mm	M708	M758	M708	M758		
17	57.5 mm	74.5 mm					M716	M766
20.5	57.5 mm	78 mm					M714	M764
42	42 mm	84 mm						
42	50 mm	92 mm						
42	57.5 mm	99.5 mm						
47	42 mm	89 mm						
47	50 mm	97 mm						
47	57.5 mm	104.5 mm						
20.5	42 mm							
20.5	57.5 mm							
5	42 mm	47 mm	M739***)	M789***)	M739***)	M789***)		
5	50 mm	55 mm	M740***)	M790***)	M740	M790***)		
5	57.5 mm	62.5 mm	M742***)	M792***)	M742***)	M792***)		

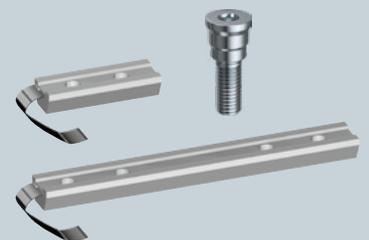
*) Item number on request **) When ordering corner post constructions, please indicate the profile section system and profile combination.



Anchor screws



Mounting plates



For item numbers of fastening elements, see page 16



Anchor screw

Variation	Item number	PU for*
 37.5 mm 19.5 mm Steel Effective length	VP02A0012	1
	VP03A0012	1
	VP02B0012	24
	VP03C0012	18
 48 mm 30 mm Steel Effective length	VP02A0014	1
	VP03A0014	1
	VP02B0014	24
	VP03C0014	18
 58 mm 40 mm Steel Effective length	VP02A0016	1
	VP03A0016	1
	VP02B0016	24
	VP03C0016	18
 74 mm 56 mm Steel Effective length	VP02A0019	1
	VP03A0019	1
	VP02B0019	24
	VP03C0019	18
 58 mm For steel profiles 40 mm Effective length	VP02A0018	1
	VP03A0018	1
	VP02B0018	24
	VP03C0018	18

Variation	Item number	PU for*
 37.5 mm 19.5 mm Stainless steel Effective length	VP02A0013	1
	VP03A0013	1
	VP02B0013	24
	VP03C0013	18
 48 mm 30 mm Stainless steel Effective length	VP02A0015	1
	VP03A0015	1
	VP02B0015	24
	VP03C0015	18
 58 mm 40 mm Stainless steel Effective length	VP02A0017	1
	VP03A0017	1
	VP02B0017	24
	VP03C0017	18
 74 mm 56 mm Stainless steel Effective length	VP02A0020	1
	VP03A0020	1
	VP02B0020	24
	VP03C0020	18

Screw anchor

 36 mm 27 mm Steel Effective length	VP02A0003	1
	VP03A0003	1
	VP02B0003	24
	VP03C0003	18
 41 mm 32 mm Steel Effective length	VP02A0005	1
	VP03A0005	1
	VP02B0005	24
	VP03C0005	18
 51 mm 42 mm Steel Effective length	VP02A0007	1
	VP03A0007	1
	VP02B0007	24
	VP03C0007	18
 55 mm 46 mm Steel Effective length	VP02A0010	1
	VP03A0010	1
	VP02B0010	24
	VP03C0010	18
 51 mm For steel profiles 42 mm Effective length	VP02A0009	1
	VP03A0009	1
	VP02B0009	24
	VP03C0009	18

 36 mm 27 mm Stainless steel Effective length	VP02A0004	1
	VP03A0004	1
	VP02B0004	24
	VP03C0004	18
 41 mm 32 mm Stainless steel Effective length	VP02A0006	1
	VP03A0006	1
	VP02B0006	24
	VP03C0006	18
 51 mm 42 mm Stainless steel Effective length	VP02A0008	1
	VP03A0008	1
	VP02B0008	24
	VP03C0008	18
 55 mm 46 mm Stainless steel Effective length	VP02A0011	1
	VP03A0011	1
	VP02B0011	24
	VP03C0011	18

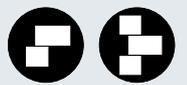
Mounting plate

 15 15 mm	VP02A0000	1
	VP03A0000	1
	VP02B0000	24
	VP03C0000	18

 21 21 mm	VP02A0001	1
	VP03A0001	1
	VP02B0001	24
	VP03C0001	18

* PU for = Packing unit for indicated number of hinges

Parts



1 Item number on request



2 Item number on request



3 Item number on request



4 Item number on request



5 M700G0002



7 M700K0000



6 M700B0001 for bearing pin assembly
M700B0002 for bearing pin assembly



8 M700K0020



9 M700G0000



10 M700K0141

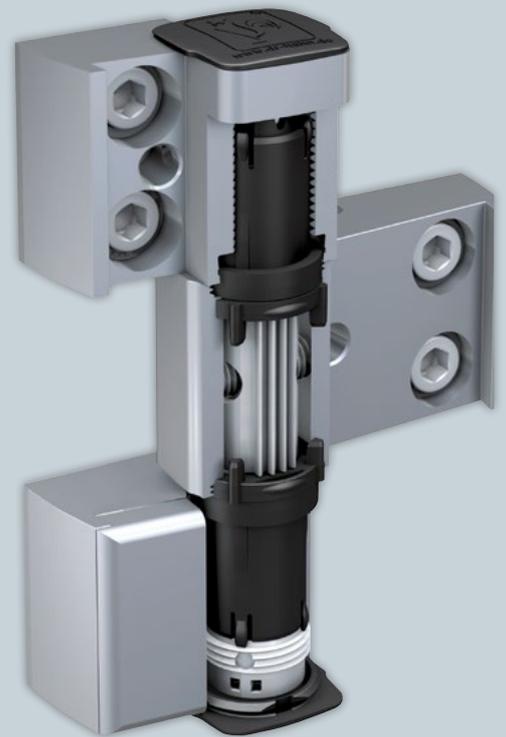


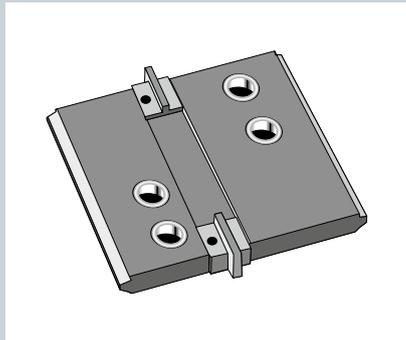
11 M700E0011



12 D914M6X6

- 1 Frame hinge blade
- 2 Door hinge blade
- 3 Cover strip for frame hinge blade
- 4 Cover strip for door hinge blade
- 5 Tension bolt
- 6 Bearing pin
- 7 Bearing bushing
- 8 Upthrust washer
- 9 Lifting and lowering spindle
- 10 Cap
- 11 Screw M4x14
- 12 Set-screw M6x6



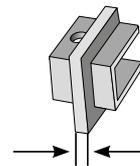


Drilling jig consisting of:

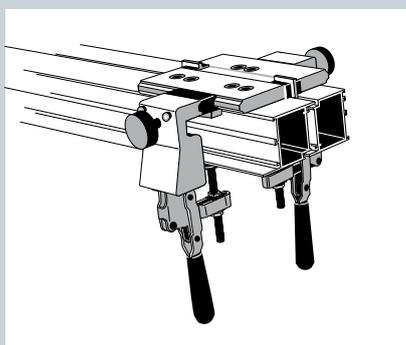
- 1 drill plate
- 3 pairs of spacers for shadow groove (4, 5 and 6 mm)
- 2 grooved pins Ø 5 mm for self-installation

Item numbers see page 10

Spacers



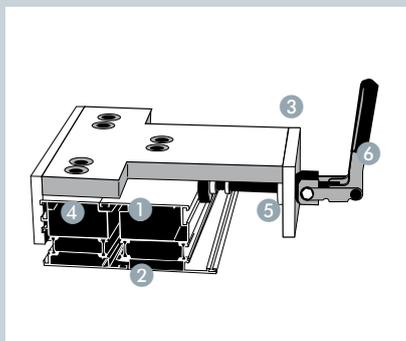
4 mm, 5 mm or 6 mm



Add-on set for setting up a quick-clamping drilling jig consisting of:

- 2 clamping units
- 2 large spacers with 4 screws M6 x 75
- 1 small spacer with 2 screws M6 x 60
- 4 screws M6 x 40 (for installation without spacers)

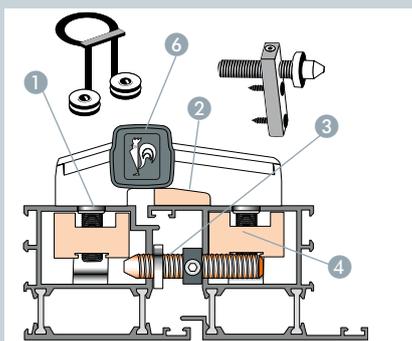
The add-on set is mounted on the existing drilling jig.
The quick-clamping drilling jig is suited for projected widths up to approx. 90 mm (frame) or approx. 110 mm (leaf).



Quick-clamping drilling jig

- 1 Omission of spacers on the hinge side
- 2 No longer necessary to twist sections
- 3 Less clamping tools – no complicated fastening of drilling jig with screw clamps
- 4 Section-fitted mounting
- 5 Plastic pressure disk to prevent damage to section
- 6 Pretension adjustable to section tolerances

Please contact us if you would like to order a quick-clamping drilling jig.

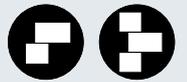


Special accessories for intrusion protection

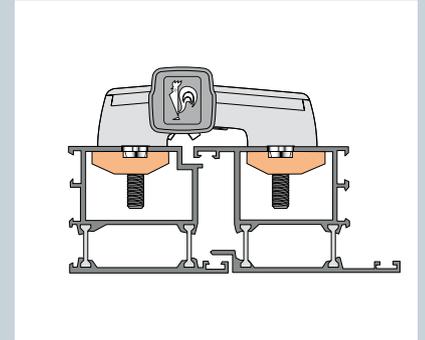
(Special design for intrusion-resistant doors)

- 1 Set of balls for securing the hexagon sockets of fastening screws for doors that open outwards
- 2 Plate to support the hinge blade on the section
- 3 Collared safety mandrel to prevent the door from being forced open
- 4 Section-based mounting plates
- 5 Snap-off screw 
- 6 Saw-resistant bearing pin

Special versions



Wide mounting plates for thin-walled steel sections



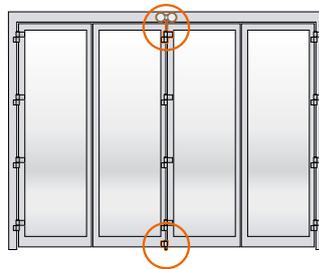
Special rust-proof version

Mounting plate



Folding door hinges

Hinge for roller unit,
suitable for folding door hinges
M12 and M16



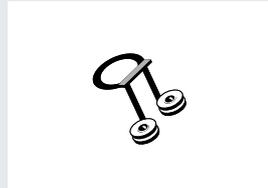
Item numbers Accessories

Slip-type drill bush



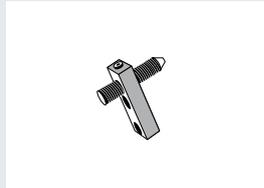
A650A0056 5 mm/11 mm
A650A0040 5 mm/15 mm

Ball set
PU=40 balls,
2 each in special holder



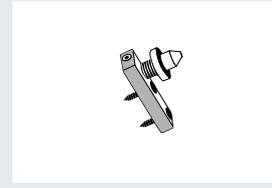
A850A0011

Safety mandrel



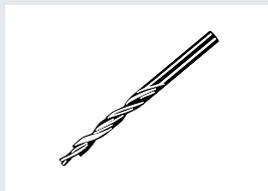
A650A0017

Safety mandrel
with collar



A850A0000

Step drill
11 mm diameter



A650A0035

Drawing tool
(for 3-piece hinges)



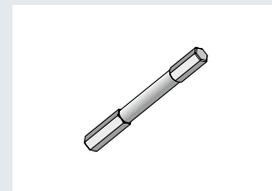
A850A0015

Security kit (for 3-piece
hinges), PU=4 balls,
2 each in special holder



A650A0107

Special bit for screw anchors
and fastening screws



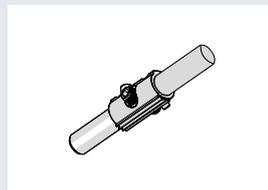
A750A0027

Saw-resistant bearing pin
(for 2-piece hinges)
PU=24 pieces



M750A0023

Saw-resistant bearing pin
(for 3-piece hinges)
PU=24 pieces



M750A0024

In the standard delivery condition, Hahn Serie 60 AT is always delivered without fastening elements. Hahn hinge and Hahn fastening elements are ideally geared to each other. Please note that due to this, product warranty for the proper functionality of the products is subject to the use of both original products. Dr. Hahn does not assume liability if third-party products are used.

Please note: Hahn Serie 60 AT is offered with pivoting points up to 36 mm. If through any further processing higher pivoting points are achieved the producer's liability becomes void.

