



Roto Solid

Comprehensive range of door hinges

german made

What does that mean?





The company Roto with headquarters in Leinfelden-Echterdingen near Stuttgart is a German group of companies. Roto has grown robustly – organically and consistently.

Our common values represent an identity that has enabled Roto, as a German company, to become a service leader. The value structure of our company is based on three pillars:

- Continuity, consistency and reliability
- Experience, ambition to succeed and vision
- Knowledge, ability and German engineering skills

As a technological pioneer, Roto develops intelligent product solutions that feature impressively precise technology and long service life.

Production and environmental management as well as logistics, irrespective of the manufacturing country, are based on German values such as reliability, thoroughness and vision.

German precision in design and development as well as quality and process management guarantee that we can provide outstanding performance and high-quality services – worldwide.

The consistent implementation of German values in quality specifications and standards ensures that our partners and customers can place their trust in us. This is "german made".

Company



The company Roto, based in Leinfelden-Echterdingen near Stuttgart, is a German group of companies that is wholly owned by families descended from the company's founder, Wilhelm Frank.

The group comprises three independent divisions which develop and produce hardware systems, roof windows and stairs for the construction industry and offer sophisticated services relating to windows and doors.

The Roto name has represented an inventive spirit and technological progress in compatible components for the construction industry since 1935.

The Roto Group is active all over the world with an extensive business portfolio and around 5000 employees.

Roto works on the basis of clear management and conduct principles to secure the position of the group as a success story and to ensure continued success.

Roto is inspired by the needs and expectations of customers, whether you are a builder, planner, architect, manufacturer or retailer of windows and doors, or manufacturer or specialist retailer for roofing.

Roto | Window and Door Technology

Worldwide



Europe



Roto Frank Austria GmbH

Kalsdorf (AT)





Roto Frank Fenster- und Türtechnologie GmbH

Leinfelden / Velbert (DE)





Roto Elzett Certa Kft.

Lövő / Sopron (HU)





Roto Frank Belarus

Minsk (BY)

-:-



Roto Frank Estonia

Tallinn (EE)

+



Roto Frank Italia

San Donà di Piave (IT)

+



Roto Frank S.A.

Zaventem (BE)





Roto Frank S.A.

Lliçà de Vall (ES)

+



Roto Frank Lithuania

Vilnius (LT)

+



Roto Frank GmbH

Dietikon (CH)



Roto Frank Ferrures S.A.S.

Saint-Avold (FR)

--



Roto Frank Latvijā

Jūrmala (LV)

--



Roto Frank

Warsaw (PL)





Roto Romania S.R.L.

Bucharest (RO)





000 Roto Frank

Noginsk (RU)





Roto Frank Ltd. Sti.

Istanbul (TR)



Roto Frank Okucia Budowlane Sp. z o.o.

Kiev (UA)



Asia



Roto Frank Building Materials Co. Ltd.

Beijing (CN)





Roto Frank Asia-Pacific Pte. Ltd.

Hanoi (VN)





Roto Frank Indonesia

Jakarta (ID)





Roto Frank Asia - Pacific Liaison Office India

Mumbai (IN)

+



Roto Frank Asia-Pacific Pte.

Singapore (SG)

-

America



Roto Frank Latina SA

Buenos Aires (ARG)





Roto Frank Chile

Santiago (CL)





Roto Frank Brasil Ltd.

São José (BR)





Roto Frank of America Inc.

Chester (US)





Fermax Componentes Ltd.

Colombo (BR)





Roto Fasco Canada Inc.

Mississauga, Ontario (CA)











= Production / sales

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1 Information

1.1 General



INFO

All dimensions stated in millimetres. Other values are specified.

The following markings are used in this document.

1.1.1 Product features

Symbol	Meaning
	Description
	Width
	DIN left / right
3	Colour code, standard
Roto	Colour code, Roto
P.	Colour
l ←→ l	Sash width
<u>‡</u>	Sash height
1	Height
	Information
←	Length
Nο	Material number
=	Surface
#	Number of screws
	Type of screws

Symbol	Meaning
(H)	Distance from centre of shadow groove or pivot point to frame fixing
(+)	Distance from centre of shadow groove or pivot point to leaf fixing
20	Security class
(H)	Flatness deviation
	Depth
<u> </u>	Overlap height
	Packaging unit
()	Presetting

1.1.2 Abbreviations

Abbreviation	Meaning
CTL	Catalogue
Α	Aluminium
BRN	Blind rivet nut
anod.	Anodising method
SW	Sash width
SH	Sash height
Т	Timber
T/A	Timber-aluminium
P	PVC
IMO	Installation instructions
Max.	Maximum
met p	Metal-plating
Not sh.	Not shown
powd-c	Powder coating

1.1.3 Material

Symbol	Meaning
Material	
	Timber
	PVC
	Aluminium
	Timber and aluminium



Symbol	Meaning
	Timber and PVC
	Timber, PVC and aluminium
	Timber, timber-aluminium

1.1.4 Colours



INFO

The surface is powder-coated unless specified otherwise. For more information, see the chapter entitled "Surfaces" → from page 13.

Colour code, standard	Colour code, Roto	Colour
-	R01.1	Natural silver
-	R01.3	Titanium
-	R01.5	Silver
RAL 9007	R01.7	Grey aluminium
RAL 9006	R01.11	White aluminium
-	R01.23	Stainless-steel appearance
RAL 7016	R02.2	Anthracite grey
RAL 7016M	R02.2M	Anthracite grey, matt
RAL 7021	R02.3	Black grey
RAL 9022	R02.14	Pearl light grey
_	R03.2	Brass, polished
_	R03.4	Stainless-steel design
RAL 1036	R03.5	Pearl gold
RAL 8019	R04.1	Grey brown
RAL 8022	R04.4	Black brown
RAL 8077	R04.6	Dark brown
RAL 8017	R04.8	Chocolate brown
RAL 8003	R04.9	Clay brown
-	R05.3	Medium bronze
_	R05.5	Bronze
RAL 9005	R06.2	Jet black
RAL 9016	R07.2	Traffic white
RAL 9001	R07.3	Cream
RAL 1015	R07.5	Light ivory
R00.0	Untreated	Uncoated
SP. COL.	SP. COL.	Special colour

Other RAL colours are available upon request.

Colour examples





INFO

Colours may deviate in the illustration.

1.1.5 Surfaces

Anodising method (anod.)

A surface technology process for creating an oxidic protective layer on aluminium through anodic oxidation. Through conversion of the top metal layer, this produces a thin oxide layer of 5 to 25 micrometers which protects deeper layers from corrosion as long as there are no gaps in this layer, for example due to mechanical damage.

Powder coating (powd-c)

With the powder coating, an electrically charged powder cloud is firstly created. The charged particles are transported to the workpiece surface. This is where they accumulate, electrostatically adhere and form the powder coating layer. When the workpiece is then heated, the paint particles of the powder coating melt to form a homogeneous surface.

The powder coating is made up of polyester resin powder with a quality suitable for facades. Steel components are galvanised and blue passivated before coating. The coating thickness is 70 to 120 µm on the visible surfaces. Before the coating procedure, all components are additionally degreased and pickled in a multi-metal pretreatment system, where a conversion layer is also applied. This greatly improves the corrosion resistance.

Metal-plating (met p)

Electroplated metallic top layer for an especially decorative appearance and corrosion protection. Only use components with this surface in indoor areas.

1.1.6 Copyright protection

The contents of this document are copyright-protected. This content can be used when working with the hardware. Any other use is not permitted without written permission of the manufacturer.

1.2 Roto Solid

Comprehensive range of door hinges

With Roto Solid, Roto offers a wide variety of door hinges – from an affordable hinge for back doors and lightweight main doors to a dynamic hinge for extremely heavy, frequently used main entrance doors. Tailored to specific applications and made from high-quality materials, Roto Solid door hinges offer outstanding performance characteristics and high durability. Country-specific solutions complete the product range.

Combination of design, comfort and security

When it comes to appearance, with the Roto Solid range, Roto offers a wide selection for fulfilling individual design requirements. From a small screw-on hinge and a three-part butt hinge to a concealed hinge, many different versions are available.









Roto Solid BButt hinges for doors

Screw-on hinges for doors

Roto Solid C

Concealed hinges for doors

1.2.1 Product overview

Product	ct Max. sash weight		or n	naterial		Door opening		Certifica	tion		
			Н	H/A		Inward opening	Outward opening	CE class	SKG **	RC	
Roto Solid	B – Butt hinges										
218 P	80 kg		-	-				11	_	-	→ from page 63
318 P	120 kg							11	_	-	→ from page 71
222 P	120 kg		-	-				13		RC 2	→ from page 81
322 P	160 kg							12		RC 2	→ from page 90
224 A	120 kg	-	-	-				12	_	-	→ from page 100
324 A	160 kg	-	-	-				12	-	-	→ from page 103
130 R	120 kg	-	-	-				13	_	-	→ from page 106
Roto Solid	S - Screw-on hinges					'	<u> </u>				
PS 23	80 kg			_	-			13	_	-	→ from page 130
89 NN	80 kg			-	-			11	_	-	→ from page 150
89 NN-SR	80 kg			_	-			11	_	-	→ from page 155
80 ATB	100 kg	-	-	-				12	_	-	→ from page 194
150 P	110 kg			-	-			11	_	-	→ from page 143
PS 27	120 kg			-	-			13		-	→ from page 135
105 NN	120 kg			-	-			13		-	→ from page 160
105 NN-SR	120 kg			-	-			13		-	→ from page 167
118 D	150 kg			_	-			13		-	→ from page 189
117 NN	160 kg			-	-			14		-	→ from page 172
117 H	160 kg		-	-	-	_		14		-	→ from page 177
118 Z	160 kg			-	-	-		14		-	→ from page 184
120 ATB	160 kg	-						14	_	_	→ from page 204
Roto Solid	C - Concealed hinges						'				
C7.140	140 kg	-	-	_				10	_	RC 2	→ from page 225

■ = applicable

1.2.2 Ten-year warranty

The toughest testing requirements that Roto places on its products have a significant impact on the durability of the hardware. The systematic quality checks with the most stringent testing requirements ensure that each individual Roto Solid component meets our quality standards. Only this exemplary quality management allows us to set a pioneering standard: the ten-year performance warranty for our partners – that's our benchmark.



1.2.3 Limitation of liability

All information and instructions contained in this document have been compiled in consideration of the applicable standards and regulations, the latest developments in technology and many years of knowledge and experience.

The hardware manufacturer assumes no liability for damage caused by:

- Failure to comply with this document and all product-specific documents and other applicable directives (see the chapters entitled "Security" and "Stipulated use").
- Improper use / misuse (see the chapters entitled "Security" and "Stipulated use").
- Insufficient invitation to tender, non-compliance with installation specifications and non-compliance with the application diagrams (where available).
- Increased contamination.

Claims made by third parties against the hardware manufacturer on account of damage resulting from misuse or failure to comply with the obligation to give instructions on the part of hardware dealers, window, door and balcony door manufacturers and building element dealers or the builder are passed on accordingly.

The obligations agreed in the delivery contract, the general terms and conditions, the hardware manufacturer's terms and conditions of delivery and the legal provisions applicable when the contract was concluded shall apply.

The warranty only covers original Roto components.

We reserve the right to make technical changes as part of improvement to performance characteristics and further development.

1.2.4 Product liability guidelines

In accordance with the German Product Liability Act (Produkthaftungsgesetz), Roto as a manufacturer is liable for ensuring that its products offer the expected level of safety and security after being presented. In this regard, the following specifications, as well as the content and information in the additional referenced documents, must be observed. Failure to observe these discharges Roto from its liability.

Product information

Roto main door hinges are hardware components for vertically installed doors made from timber, PVC or aluminium and their associated combinations of materials. They are used to carry out opening and closing movements and/or locking processes on doors. The mounting material supplied must strictly be used.

When installing hardware components in aluminium profiles, Roto recommends using mounting material which is made from stainless steel or has a zinc flake coating. Contact corrosion may occur if different mounting material is used.

Products used in harsh, corrosive environments are special hardware components; they may only be used after prior consultation with Roto.

Stipulated use

A locking system is only used as stipulated if

- The locking system is put together correctly by experts and consists of permissible hardware, locking components (e.g. key, cylinder) and accessories (e.g. packing plates),
- The information, instructions and notes contained in these guidelines, this catalogue and other technical documents are observed,
- The applicable mandatory legal provisions and standards are complied with,
- The locking system is installed by experts, taking into account the information, instructions and notes provided by Roto for this purpose, and
- The maintenance and care instructions are followed.

The length of time for which a product remains fit for use depends on

- How often it is used.
- The way in which it is used,
- Environment and care.

A hinge must be replaced if, despite maintenance and care work being carried out, the function can no longer be guaranteed or if the surface poses a risk of injury.

The hinges are not suitable for adapting to shape changes and changes to the sealing closure as a result of temperature differences or changes to the building.

The specific hardware as a whole (locking system) must be put together from genuine Roto parts by experts. If third-party parts are also used, Roto assumes no liability for any resultant malfunctions or damage.

Doors for wet rooms and for use in environments with aggressive, corrosive constituents in the air require special hardware.

Misuse (incorrect handling or handling contrary to the stipulated use)

If the stipulated use is not complied with, this constitutes misuse or incorrect use of the product, which discharges Roto from its liability.

This applies to the following cases in particular:

- The introduction of external and/or unsuitable objects into the locking area prevents the product from operating properly,
- Obstacles are introduced into the opening area,
- The surface is damaged by sharp objects,
- A reaction with foreign substances (e.g. adhesive, acids, etc.) causes damage to the surface,
- Hinges have been installed or after-treated (e.g. painted over) in such a way that they no longer work properly,
- Loads which are not suitable for the product and exceed normal loading owing to the door's own weight are exerted on the hinges, e.g. resting the leaf on installed hinges,
- The required door gap is increased or reduced when readjusting the hinges or lowering the door,
- Tools or aids which act as a jemmy are used to actuate the door,
- The operating range of the hinges is exceeded,
- Anyone grips between the door leaf and door frame when closing doors,

Roto Solid

Product liability guidelines



- Incidents occur which affect functionality (e.g. attempts to break in or out using tools),
- External objects and/or objects not suitable for the door are introduced (e.g. pins from third-party manufacturers or a combination of product parts from third-party manufacturers with those from Roto),
- Work is performed on the hinge or it is otherwise impaired in such a way that the structure, mode of operation or correct functioning is impacted.

Please refer to the product-specific documents for more information on misuse.

Product maintenance

Ensure that the hardware components and mounting material are fitted correctly so that they function properly.

Maintenance must be performed on all movable parts at least once per year - or more often depending on use.

Hardware systems must be treated with care products recommended by Roto depending on use.

As a general rule, they must never be treated with strong acids or alkalis. Contamination with mortar and similar materials must always be avoided. Only cleaning agents which do not contain any corrosive substances should be used.

Duty to provide information and issue instructions

The following documents are available to provide information to dealers, planning engineers, architects, advisory institutes, fabricators, builders and users:

- Catalogues and brochures,
- Texts for invitation of tenders,
- Purchasing information,
- Quotation documents,
- Installation, operation and care instructions.

Roto is also on hand to give advice if required.

For selecting Roto hardware systems and for installation, operation and care,

- architects, planning engineers and advisory institutes are obligated to request all of the necessary product information from Roto and to observe this information;
- specialist dealers are obligated to observe the product information and instructions in the documents and, in particular, to request all of the necessary instructions from Roto and to pass these on to the fabricators;
- fabricators are obligated to observe all production information and, in particular, to request operation and care instructions from Roto and to pass these on to the customers and users.

1.3 Storage conditions



Protecting components against dirt and dust

Always keep the containers closed, and always cover open hardware containers or goods stored open (i.e. with a layer of cardboard).

Protecting components against mechanical damage

Only transport and handle the containers using suitable means of transport or conveyance (forklifts, lifting devices and roller belts, etc.). Only stack pallets and cardboard boxes (during transport) to the maximum height specified in the printed instructions on the packaging.

Protecting components against direct moisture and wet

The packaging must remain dry and the components must not get wet. This applies to storage and transport, as well as for unloading and loading procedures. Where appropriate, plastic protective sheets or similar are to be used during outdoor transport (i.e. on-site transport) when raining.

Only store components in suitable closed rooms and not outdoors. Condensation must absolutely be avoided during the entire duration of transport and storage.

If containers nevertheless get wet...

Immediately unpack the components from the wet containers, dry the components and check for damage (signs of corrosion). In any case, repack the usable components when dry with new packaging material

1.4 Environment



Environmental compatibility of the hardware components

Our objective is to succeed in manufacturing our hardware components with the lowest possible consumption of energy and operating resources, and we strive to produce extremely durable hardware components. To achieve this, we conserve natural resources, minimise energy consumption and use raw materials in an environmentally friendly manner.

Environmental impact resulting from the hardware

The surface quality of our treated surfaces is abrasion-resistant. No environmental pollution is caused by hardware components when the stipulated use is complied with.

Environmental compatibility of the packaging

We use recyclable disposable packaging made of reinforced cardboard, steel strapping, PVC packaging tape, PE sheeting, timber frames, single-use wooden pallets, cable ties, elastomer cord as well as reusable packaging, reusable boxes from Schäfer, pallet crates and EURO wooden pallets.

Environmental compatibility of disposal

Our hardware is made of materials which enable environmentally friendly material utilisation and can be disposed of as mixed scrap.

Returning packaging material

Our packaging with the INTERSEROH logo is accepted free of charge by every INTERSEROH disposal partner. The directory of your local disposal partners can be requested nationwide from the telephone exchange of ISD INTERSEROH GmbH in Cologne using the following telephone number: +49 2203 9147-322. The Roto INTERSEROH number is 25582.

1.5 Certifications

1.5.1 Constancy of performance

in accordance with EN 1935:2002

1.5.1.1 PIV

CEP_305 | 130 R



PIV Prüfinstitut Schlösser und Beschläge Velbert Wallstraße 41 – D 42551 Velbert Institutsleitung: Andrea Horsthemke (B.Eng.) Tel 0049-(0)/2051-9506 5 Fax 0049-(0)/2051-9506 69 Mail: info@piv-velbert.de



Zertifikat der Leistungsbeständigkeit

1309 - CPR - 0349

(Version: 01)

In Übereinstimmung mit der EU-Verordnung Nr. 305/2011 des Europäischen Parlaments und des Rates vom 9. März 2011 (Bauproduktenverordnung oder CPR) gilt dieses Zertifikat für das Bauprodukt

Roto Solid B 130 R Artikelnummer: 778093 und 816000

Ausführung: 2-teiliges Klemmband

auf den Markt gebracht unter dem Namen oder der Handelsmarke von

Roto Frank Fenster- und Türtechnologie GmbH Wilhelm-Frank-Platz 1 D-70771 Leinfelden-Echterdingen

und produziert in der Produktionsstätte

D-42551 Velbert Eintrachtstraße 95

Dieses Zertifikat bescheinigt, dass alle Bestimmungen zur Bewertung und Überprüfung der Leistungsbeständigkeit laut der Beschreibung in Anhang ZA der Norm

EN 1935:2002/AC:2003

im Rahmen des Systems 1 für die Leistung laut den Angaben in diesem Zertifikat angewendet werden, und dass

die Leistung des Bauprodukts als beständig bleibend bewertet wird.

Produkt Klassifizierungsschlüssel

4	7	6	0	1	4 (5*)	1	13
		ın Türen in Rettu					
* Klasse 5 nac	h DIN EN 1670.	:2007 für Oberf	läche RAL 9016				

Dieses Zertifikat wurde erstmals am 29. November 2016 ausgestellt und bleibt gültig, bis entweder die harmonisierte Norm, das Bauprodukt, das System zur Bewertung und Überprüfung der Leistungsbeständigkeit oder die Produktionsbedingungen im Werk wesentlich verändert werden, oder bis das Zertifikat von der benannten Zertifizierungsstelle ausgesetzt oder zurückgenommen wird.

D-Velbert, 25. Oktober 2019

Dieses Zertifikat hat insgesamt 2 Seiten und ersetzt das Zertifikat Nr. 1309-CPR-0349, Version 00 vom 29.11.2016.



Horshberke Andrea Horsthemke (B.Eng.) Leiterin der Zertifizierungsstelle

BUILTURE I

CEP_166 | 117 H, 117 NN





Zertifikat der Leistungsbeständigkeit

Certificate of constancy of performance

1309 - CPR - 0147

Gemöß der Verordnung (EU) Nr. 305/2011 des Europäischen Parlaments und des Rates vom 09. März 2011 (Bauproduktenverordnung – CPR), gilt dieses Zertifikat für das Bauprodukt

Einachsiges Türband 117 H / 117 NN Artikelnummer: 604642 Weitere Artikel-Nrn.: siehe Produktmatrix

Ausführung: 2-teiliges Aufschraubband für Türen

hergestellt durch oder für

ROTO FRANK AG Wilhelm-Frank-Platz 1 70771 Leinfelden-Echterdingen

und erzeugt im Herstellwerk

Eintrachtstr. 95 42551 Velbert

Dieses Zertifikat bescheinigt, dass alle Vorschriften über die Bewertung und Überprüfung der Leistungsbeständigkeit und die Leistungen beschrieben im Anhang ZA der harmonisierten Norm

EN 1935:2002

entsprechend System 1 angewendet werden und dass das Bauprodukt alle darin vorgeschriebenen Anforderungen erfüllt.

Produkt Klassifizierungsschlüssel

4	7	7	0	1	4(5*)	1	14
	r die Verwendur	g an Fluchttürer	1				

Dieses Zertifikat wurde erstmals am 20.05.2011 ausgestellt und bleibt gültig, solange sich die in der harmonisierten Norm genannten Prüfverfahren und/oder Anforderungen der werkseigenen Produktionskontrolle zur Bewertung der Leistung der Merkmale nicht ändern und das Produkt und die Herstellbedingungen im Werk nicht wesentlich geändert werden.

Velbert, 10.04.2014

Stempel Zertifizierungsstelle Dieses Zertifikat hat insgesamt 2 Seiten.

Rainer Ehle, Dipl.-Ing. Leiter der Zertifizierungsstelle

CEP_173 | 118 Z



The sales employee responsible for your region can provide you with up-to-date certificates.

Dieses Zertifikat hat insgesamt 2 Sei

Rainer Ehle, Dipl.-Ing. Leiter der Zertifizierungsstelle

CEP_170 | 118 D





Zertifikat der Leistungsbeständigkeit

Certificate of constancy of performance

1309 - CPR - 0168
Gemäß der Verordnung (EU) Nr. 305/2011 des Europäischen Parlaments und des Rates vom 09. März 2011 (Bauproduktenverordnung – CPR), gilt dieses Zertifikat für das Bauprodukt

Einachsiges Türband 118 D Artikelnummer: 544312 Weitere Artikel-Nrn.: siehe Produktmatrix

Ausführung: 3-teiliges Aufschraubband für Türen hergestellt durch oder für

> **ROTO FRANK AG** Wilhelm-Frank-Platz 1 70771 Leinfelden-Echterdingen

> > und erzeugt im Herstellwerk Eintrachtstr. 95 42551 Velbert

Dieses Zertifikat bescheinigt, dass alle Vorschriften über die Bewertung und Überprüfung der Leistungsbeständigkeit und die Leistungen beschrieben im Anhang ZA der harmanisierten Norm

EN 1935:2002

entsprechend System 1 angewendet werden und dass das Bauprodukt alle darin vorgeschriebenen Anforderungen erfüllt.

rodukt Kla	ssifizierungssc	hlüssel					
4	7	6	0	1	4(5*)	1	13
- Eignung fü	ir die Verwendung	an Fluchttüren	Position 6*- Kla	sso 5 anmäß l	FN 1670-2007		-

Dieses Zertifikat wurde erstmals am 09.01.2012 ausgestellt und bleibt gülfig, solange sich die in der harmonisierten Norm genannten Prüfverfahren und/oder Anforderungen der werkseigenen Produktionskontrolle zur Bewertung der Leistung der Merkmale nicht ändern und das Produkt und die Herstellbedingungen im Werk nicht wesentlich geändert werden.

Velbert, 24.02.2014

Dieses Zertifikat hat insgesamt 2 Seiten.



Leiter der Zertifizierungsstelle

CEP_150 | 80 ATB





Zertifikat der Leistungsbeständigkeit

Certificate of constancy of performance

1309 - CPR - 0107

Gemäß der Verordnung (EU) Nr. 305/2011 des Europäischen Parlaments und des Rates vom 09. März 2011 (Bauproduktenverordnung – CPR), gilt dieses Zertifikat für das Bauprodukt

Einachsiges Türband 80 ATB Artikelnummer: 548314 Weitere Artikel-Nrn.: siehe Produktmatrix

Ausführung: 2-teiliges Aufschraubband für Türen

hergestellt durch oder für

ROTO FRANK AG Wilhelm-Frank-Platz 1 70771 Leinfelden-Echterdingen

> und erzeugt im Herstellwerk Eintrachtstr. 95 42551 Velbert

Dieses Zertifikat bescheinigt, dass alle Vorschriften über die Bewertung und Überprüfung der Leistungsbeständigkeit und die Leistungen beschrieben im Anhang ZA der harmonisierten Norm

EN 1935:2002

entsprechend System 1 angewendet werden und dass das Bauprodukt alle darin vorgeschriebenen Anforderungen erfüllt.

A 7 5 0 1 A(5*) 1	dukt Klassifizierungss	Liliussei					
4 / 3 0 1 4(3) 1	4 7	5	0	1	4(5*)	1	12

Dieses Zertifikat wurde erstmals am 14.04.2009 ausgestellt und bleibt gültig, solange sich die in der harmonisierten Norm genannten Prüfverfahren und/oder Anforderungen der werkseigenen Produktionskontrolle zur Bewertung der Leistung der Merkmale nicht ändern und das Produkt und die Herstellbedingungen im Werk nicht wesentlich geändert werden.

Velbert, 14.04.2014

Dieses Zertifikat hat insgesamt 2 Seiten.

Stempel Zertifizierungsstelle

Rainer Ehle, Dipl.-Ing. Leiter der Zertifizierungsstelle

CEP_154 | 120 ATB





Zertifikat der Leistungsbeständigkeit

Certificate of constancy of performance

1309 - CPR - 0077

Gemäß der Verordnung (EU) Nr. 305/2011 des Europäischen Parlaments und des Rates vom 09. März 2011 (Bauprodukterwerordnung – CPR), gilt dieses Zertifikat für das Bauprodukt

Einachsiges Türband 120 ATB

Artikelnummer: 548410 Weitere Artikel-Nrn.: siehe Produktmatrix

Ausführung: 3-teiliges Aufschraubband für Türen

hergestellt durch oder für

ROTO FRANK AG Wilhelm-Frank-Platz 1 70771 Leinfelden-Echterdingen

> und erzeugt im Herstellwerk Eintrachtstr. 95 42551 Velbert

Dieses Zertifikat bescheinigt, dass alle Vorschriften über die Bewertung und Überprüfung der Leistungsbeständigkeit und die Leistungen beschrieben im Anhang ZA der harmonisierten Norm

EN 1935:2002

entsprechend System 1 angewendet werden und dass das Bauprodukt alle darin vorgeschriebenen Anforderungen erfüllt.

4	7	7	0	1	4(5*)	1	14
---	---	---	---	---	-------	---	----

Dieses Zertifikat wurde erstmals am 11.10.2007 ausgestellt und bleibt gültig, solange sich die in der harmonisierten Norm genannten Prüfverfahren und/oder Anforderungen der werkseigenen Produktionskontrolle zur Bewertung der Leistung der Merkmale nicht ändern und das Produkt und die Herstellbedingungen im Werk nicht wesentlich geändert werden.

Stempel Zertifizierungsstelle

Velbert, 14.04.2014

Dieses Zertifikat hat insgesamt 2 Seiter

Rainer Elile, Dipl.-Ing. Leiter der Zertifizierungsstelle

1.5.1.2 ift

CEP_256 | PS 27, PS 23, 150 P, 89 NN, 89 NN-SR, 105 NN, 105 NN-SR



CEP_357 | 218 P, 318 P, 222 P, 322 P, 224 A, 324 A



CEP_317 | C7.140





1.5.1.3 UKCA

CEP_406 | Solid B







UKCA Certificate of Constancy of Performance

This is to certify that: Roto Frank Austria GmbH

Lapp-Finze-Straße 21 Kalsdorf 8401 Austria

Holds Certificate Number: 0086 CPR 781163

BS EN 1935:2002/AC:2003 - Building Hardware - Single-Axis Hinges

Door Hinges intended for use on doors in escape routs without requirements for fire resistance and smoke control

In compliance with the Regulation (UK) Statutory Instrument 2019 No 465 of the United Kingdom Parliament (Construction Products (Amendment etc.) (EU Exit) Regulations or CPR), this certificate applies to the above construction product. This certificate attests that all the provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the above standard(s) under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product. This certificate was first issued on the date below and will remain valid as long as neither the designated standard, the construction product, the AVCP methods, nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the approved product certification body.

For and on behalf of BSI, an Approved Body for the above Regulation (Approved Body Number 0086):

Shahm Barhom, Group Product Certification Director

First Issued: 2023-04-18 Effective Date: 2023-04-18

Latest Issue: 2023-04-18

Page: 1 of 4

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MKS 8PP, United Kngdom and should be returned immediately upon request. To check the solidity telephone 4-M (0) 345 USB 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiawick High Road, London W4 4AL, UK. A member of BSI Group of Companies.

CEP_405 | Solid S







UKCA Certificate of Constancy of Performance

This is to certify that:

Roto Frank Austria GmbH Lapp-Finze-Straße 21 Kalsdorf 8401

Holds Certificate Number: 0086 CPR 781166

BS EN 1935:2002/AC:2003 - Building Hardware - Single-Axis Hinges

Door Hinges intended for use on doors in escape routs without requirements for fire resistance and smoke control

In compliance with the Regulation (UK) Statutory Instrument 2019 No 465 of the United Kingdom Parliament (Construction Products (Amendment etc.) (EU Exit) Regulations or CPR), this certificate applies to the above construction product. This certificate attests that all the provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the above standard(s) under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product. This certificate was first issued on the date below and will remain valid as long as neither the designated standard, the construction product, the AVCP methods, nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the approved product certification body.

For and on behalf of BSI, an Approved Body for the above Regulation (Approved Body Number 0086):

Shahm Barhom, Group Product Certification Director

First Issued: 2023-04-18 Latest Issue: 2023-04-18

Effective Date: 2023-04-18

Page: 1 of 4



This certificate has been issued by and remains the property of BSI Assurance UK Ltd., Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MKS 8PP, United Kngdom and should be returned immediately upon required. To check the validity telepione –4 (6) 345 089 9000, An electronic certificate can be authenticated coline.

BST Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK, A member of BST Group of Companies.

CEP_404 | Solid C







Certificate of Constancy of Performance

This is to certify that: Roto Frank Austria GmbH

Lapp-Finze-Straße 21 Kalsdorf 8401

Holds Certificate Number: CPR 781167

BS EN 1935:2002/AC:2003 - Building Hardware - Single-Axis Hinges

Door Hinges intended for use on doors in escape routs without requirements for fire resistance and smoke control

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the above construction product. This certificate attests that all the provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the above standard(s) under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product(s). This certificate was first issued on the date below and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods, nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

For and on behalf of BSI, a Notified Body for the above Regulation (Notified Body Number 0086):

Frank Lee, Product Certification Technical and Compliance Director

First Issued: 2023-04-19 Latest Issue: 2023-04-19

Page: 1 of 4

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BSI Assurance UK Limited, registered in England under number 7805321 at 399 Chiswick High Road, London W4 4AL, UK. A member of BSI Group of Companies.

1.5.1.4 Environmental product declaration



Conformity (QM 343)

1.5.2 Conformity (QM 343)

1.5.2.1 ift

CEP_378 | 218 P, 318 P, 222 P, 322 P, 224 A, 324 A



CEP_61 | PS 27, PS 23, 150 P, 89 NN, 89 NN-SR, 105 NN, 105 NN-SR



CEP_299 | C7.140



1.5.3 SKG

PS 27



105 NN



117 NN, 117 H



118 Z



118 D



1.5.4 Quality management

The certification in accordance with the international standard DIN EN ISO 9001 certifies that Roto plans, documents and appropriately implements the entire development, production and sales process systematically. Starting with development and design through to quality planning, production and assembly right through to sales and customer service.

The certification is an external indication of the quality awareness practised at Roto:

- Roto's objective is to ensure continuous product and service improvements for the benefit of its customers.
- Roto offers its customers innovative, environmentally friendly and technically sophisticated architectural hardware technology.
- Roto products are supplied punctually worldwide with constant guaranteed quality.
- Roto's comprehensive view regards all business activities including all the activities within the company to be the key to achieving long-term corporate success.
- Roto employees are supported in their personal development and fulfil Roto's high quality requirements in their day-to-day work. Their work is performance and goal-oriented.



1.5.5 International Technology Centre (ITC)

Roto has owned a modern International Technology Centre (ITC) at its Leinfelden headquarters since October 1996. This facility is available for both our own material and product testing as well as for inspecting finished products made by Roto market partners.



The ITC is accredited in accordance with DIN EN ISO / IEC 17025 and has the expertise required to perform tests in areas including mechanical technological testing of facade elements such as windows, doors and hardware, as well as metallic materials.

Achieving accreditation in accordance with DIN EN ISO / IEC 17025 represents the highest distinction for a test institute in the private sector. The requirements for this are an extensive quality management system, trained personnel, high-quality test rigs and measuring instruments, as well as continuous external monitoring by the accreditation authorities.

1.6 Roto Con Orders

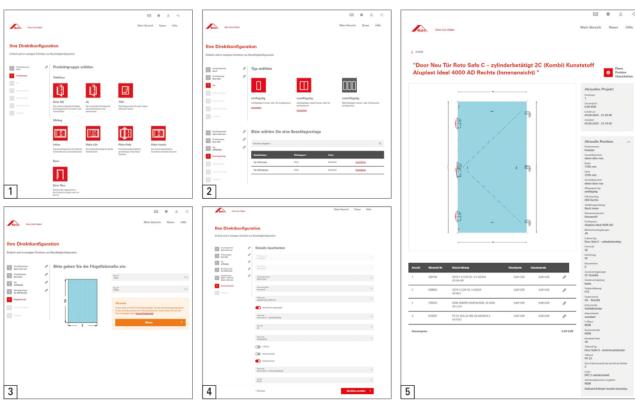


Just four steps for a finished parts list

Roto Con Orders is the perfect solution for window and door manufacturers, and for dealers. This is because with the high-performance online hardware configurator, an individual configuration of window and door hardware can be generated very easily and in an extremely short time – for all common shapes and opening types. Just a few mouse clicks and a couple of numeric entries, and the individual parts list including a technical illustration of the hardware itemising is finished. The list can be changed, adapted or personalised as desired. It can be exported in various data formats, enabling it to be used for individual offers or orders. Benefit from this efficient Roto online tool, save time during configuration, management and ordering – with Roto Con Orders.

Hardware configuration has never been this easy

With intuitive menu guidance, you generate an optimum parts list in just four steps:



- 1. Selection of the product group
- 2. Selection of the design template
- 3. Entry of sizes
- 4. Individual detailed settings and adaptations

5. **Result:** output of a detailed data sheet with a technical illustration and a complete parts list with editable order numbers, descriptions and individual and total prices.

Intelligent additional functions simplify your processes





Roto Con Orders makes it easy for you to simplify and accelerate your processes. A large number of useful functions are available to help you do this:

- Store your own company addresses and logos in the header of your offers
- Create and manage customer-specific projects
- Generate individual customer hardware templates
- Integrate a discount structure system
- Material master management
- Due to its responsive design, it can be used on all devices such as PCs, tablets, and smartphones

Get started straight away thanks to web-based solution

Roto Con Orders is a web-based solution that you can access around the world and around the clock. You only require a computer with a web browser and Internet access for this purpose. To work with the online hardware configurator, please register once with your e-mail address in the portal for dealers and manufacturers at:



www.roto-frank.com

1.7 Roto media portal



Simple and quick

The Roto media portal is where all media is available, such as catalogues, installation instructions, brochures and interactive installation videos. Access to this portal is optimised for PCs, laptops and mobile devices.

The clear user interface and the numerous search options ensure that all available media can be found simply and quickly. Content can be read directly in the Roto media portal or downloaded for later.

The Roto media portal can be accessed via the "Downloads" link in the "Service" main menu item on the Roto website or directly using the links below.



www.roto-frank.com

Media for Roto Solid

This catalogue offers an overview of the Roto Solid product range. All other media relating to Roto Solid can be accessed via the Roto media portal. The links below provide direct access.



www.roto-frank.com | Roto Solid

1.8 Further Roto products

1.8.1 Roto Window

Tilt&Turn – Tilt&Turn hardware systems for windows and balcony doors

Timber, PVC and aluminium for a 16 mm hardware groove





Roto NX

The Tilt&Turn hardware system for windows and balcony doors shaping the industry once again

Roto NT

The world's biggest selling Tilt&Turn hardware system for windows and balcony doors

Aluminium





Roto AL

Universal hardware for aluminium windows and balcony doors

Roto AL Designo

Concealed hardware for aesthetic aluminium windows and balcony doors

Outward Opening – Hardware systems for outward opening windows







Roto FS Kempton

Stainless-steel friction stays for outward opening windows

Roto PS Aintree

Parallel stainless-steel friction stays for outward opening windows

Roto FRH Uni

Fully reversible hinges for outward opening windows

1.8.2 Roto Sliding

Roto Patio – High-quality sliding windows and doors



Roto Patio Fold

Premium hardware for Fold&Slide systems with a large surface



Roto Patio Life

Comfort hardware for large sliding doors



Roto Patio Lift

Hardware for versatile use in Lift&Slide systems



Roto Patio Alversa

Universal hardware for minimum effort in Parallel Sliding and Tilt&Slide systems



Roto Patio Inowa

Intelligent hardware for tightly sealed sliding systems

Roto Inline - Basic sliding windows and doors



Roto Inline

The hardware system for basic sliding windows and sliding doors

1.8.3 Roto Door

Roto Safe – The modular multipoint locking system for doors



Roto Safe H

Mechanical multipoint lockings for lever-handle-operated doors



Roto Safe C

Mechanical multipoint lockings for cylinder-operated doors



Roto Safe A

Mechanical-automatic multipoint lockings for



Roto Safe E

Electromechanical multipoint lockings for doors



Roto Safe P

Mechanical multipoint lockings for escape and panic doors





 $\textbf{Roto Solid} \; \mathbb{S}$

Screw-on hinges for doors



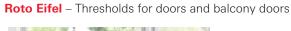
 $\textbf{Roto Solid} \; \mathsf{B}$

Butt hinges for doors



Roto Solid C

Concealed hinges for doors





Roto Eifel

Tailor-made range of thresholds for tightly sealed accessible doors and balcony doors

1.8.4 Roto Equipment

Drive&Control – Electronic components for windows and doors



Roto E-Tec Drive

The concealed drive for windows



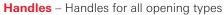
Roto E-Tec Control

Wired sensors for security technology and room climate



Roto Com-Tec Sensor

Wireless sensors integrated in hardware for home security





Roto Swing

The modern handle line



Roto Line

The classic handle line



Roto Samba

The classic yet modern handle line



Roto Freestyle

Solutions for all opening types

Fix&Glazing – Installation and glazing solutions for windows and doors



Roto Glas-Tec

Customised solutions for safe glazing



1.9 Contact

Roto Frank

Fenster- und Türtechnologie GmbH

Wilhelm-Frank-Platz 1 70771 Leinfelden-Echterdingen Germany Phone +49 711 7598 0 Fax +49 711 7598 253 info@roto-frank.com www.roto-frank.com **General information**

Door closers

See page

Positioning door hinges See page 53

Load-bearing capacity table See page 54

55

2 Application diagrams



2.1 General information

Functional safety of the door hinges

The following points must be noted in order to ensure the functional safety of the door hinges at all times:

- 1. Correct installation of hardware components in accordance with the installation instructions.
- 2. Correct installation of elements during door installation.
- 3. The door manufacturer must pass the maintenance and operation instructions and the product liability guidelines (if applicable) on to the user.

Profile classification - application ranges

The individual application diagrams must strictly be complied with.

When determining the maximum permitted sash formats and sash weights, the values specified by the profile manufacturers and system owners must not be exceeded either.



2.2 Positioning door hinges

Roto recommends using at least three hinges, depending on the height of the door leaf. This way, the necessary stability, even weight distribution and smooth movements can be ensured.

Every hinge fulfils a specific role:

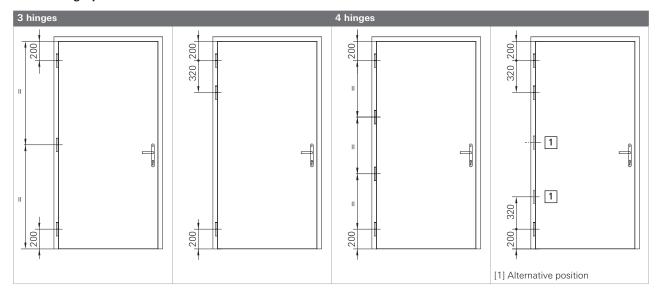
- ▶ the top hinge, as the leading hinge, ensures that the door leaf is aligned correctly, assisting with smooth opening and closing.
- ▶ The central hinge offers stability, counteracts door warping and ensures consistent gasket compression in this area
- ▶ The bottom hinge is the load-bearing hinge. It supports most of the sash weight.

If the hinges are exposed to increased loading, a third hinge should be positioned in the top third, around 320 mm beneath the upper hinge. This supports the top hinge, where the main tensile forces occur, and has a positive impact on the load value.

Increased loads occur, for example, in the following cases:

- ▶ When a door closer is used → from page 55
- ▶ In the case of frequently used main entrance doors, e.g. in public spaces such as office buildings, schools, nurseries etc
- ▶ In the case of unusually wide doors → from page 54

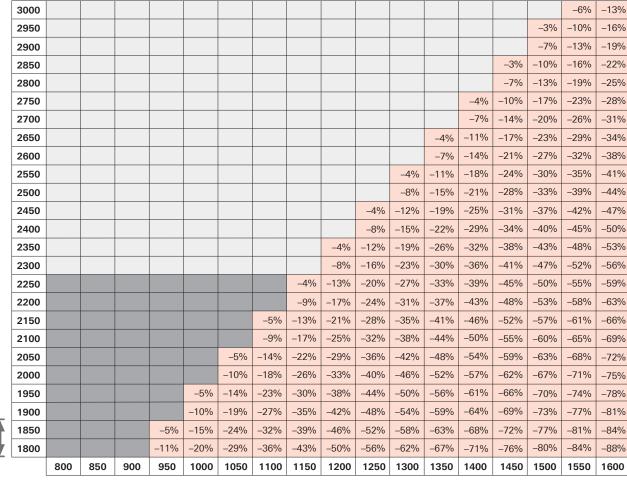
Positioning options





2.3 Load-bearing capacity table

In the case of unusually wide doors, an increased bending moment impacts the hinges. This is offset by reducing the maximum permitted sash weight by the deductible dimensions specified in the table.





= min. 4 hinges

= min. 3 hinges

= deductible dimension for unusually wide doors in accordance with DIN EN 1935:2002

Example of use to determine the maximum permitted sash weight

Max. load-bearing capacity of door hinge - deductible dimension based on SH x SW = max. sash weight

Example: 120 ATB; load-bearing capacity of door hinge_{max.} 160 kg; SH = 2100 mm; SW = 1100 mm

160 kg - 9% = max. S.kg 145.6 kg





2.4 Door closers

Door closers place an additional load on the door hinges. This is why the following points must be noted when using a door closer.

- 1. Use three or more hinges.
- 2. Position a central band in the top third, around 320 mm beneath the upper hinge.
- 3. Increase the effective door mass depending on the type of door closer:
 - ▶ Door closer without opening damping: +20% effective door mass
 - ▶ Door closer with opening damping or restrictor device: +75% effective door mass



INFO

Only use the door closer with opening damping or restrictor device in conjunction with door hinges from class 12, 13 or 14.

Note DIN EN 1935:2022 Annex E.

4. We recommend performing test of long-term functional performance according to DIN EN 1191 with the chosen door hinge and the door closer to be used.



Roto Solid B





Profile overview For 218 P, 222 P, 318 P, 322 P 60 218 P 66 Spare parts Accessories 67 69 Drawings 318 P Spare parts 74 Accessories 75 Drawings 78 222 P Spare parts 84 85 Accessories Drawings 88 322 P 93 Spare parts Accessories 94 97 Drawings 224 A Spare parts 101 102 Drawings 324 A Spare parts 104 Drawings 105 130 R 107 Drawings

3 Roto Solid B – Butt hinges

3.1 Profile overview

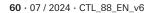


INFO

The profile combinations shown in the overview are a selection of the possible combinations. Other profile combinations are available upon request.

3.1.1 For 218 P, 222 P, 318 P, 322 P

Profile system Frame number Leaf numbe		Leaf number	nber Version		
			Overlap-screwed	Rebate-screwed	
Aluplast IDEAL 4000 AD	140×00	140x30	1	1	
	140x03	140x31			
	140×07	140x32			
		140x33			
		140x35			
	140×08	140x34			
		140x38			
Aluplast IDEAL 7000 AD	170×02	170x33	1	I	
	170×03	170x35			
		170x39			
Aluplast IDEAL 8000 MD	180×05	170x30	I	I	
		170x31			
aluplast energeto neo AD	160×01	160x33	1	I	
		160x35			
		170x39			
	160×02	160x30			
		160x31			
		160x33			
		160x35			
		170x39			
aluplast energeto neo MD	060×05	160x33	1	1	
		160x35			
Deceuninck Elegant MD	5101	5712	1	1	
		5713			
	5111	5115			
		5116			
		5712			
		5713			
	5140	5115			
	5145	5712			
Deceuninck zendow#neo AD	3104	5209	I	I	
	3118	5049			
	5001	5202			
	5002	5205			
		5049			
		5069			





Profile system	Frame number	Leaf number	Version	
OF ALANI C COOR MAD	0000	0005	Overlap-screwed	Rebate-screwed
GEALAN S 9000 MD	6002	6025	I	
	6015	6017 6065		
	6016	6025		
	6045	6033		
	0043	6067		
GEALAN-LINEAR MD	5020	5029	1	
	5021	5031		
		5031		
	5022			
	5036			
	5037			
KBE 76 AD	76101	76204	1	I
Kömmerling 76 AD	76102	76205		
Trocal 76 AD	76103	76206	I	II
		76207		
KBE 88 MD	88172	88274	1	I
Kömmerling 88 MD		882765		
Trocal 88 MD		88276	1	II
Trocal 66 IVID		88277		
Rehau S 799 Brilliant Design	550713	550160		III
Tionad 6 700 Emmant Boolgin	000710	550170	,	
Rehau S 969 Synego AD	1537105	1537235	1	1
heriau 5 969 Syriego AD			I	I
	1539140	1537305		
		1537315		
		1537295		
Rehau S 969 Synego MD	537105	537295	I	I
		537305		
Rehau S 980 Geneo MD	532015	532136	1	I
		532166	I	III
		532176		
	532305	532166	1	III
		532176		
Salamander bluEvolution 82 AD	HO8020	HO8530	1	1
	HO8030	HO8540		
	HO8020	HP8550		II
	HO8030	HP8560		
Salamander bluEvolution 82 MD	HO9020	HP8550		II
Salamanasi Siazvoiation 62 IVID	1100020	HP8560	i i	"
	HO9030	HP8560		
Salamander bluEvolution 92 MD	170420	171030	1	1
Salamandor BidEvolution 32 MiD	170-20	171040		II
	170430	171030	1	
	1	171040	I	· II
Salamander greenEvolution 76 AD	760003	761008	1	ı.
		761009		
	760011	761014	1	II
		761015	·	<u>"</u>
Salamander greenEvolution 76 MD	760003	761015	1	
Salamandor greenzvoidtion 70 WiD	760003	761008		
	. 5555			
		761009		
	70005	761010		
	760008	761014	1	II
	760012	761015		



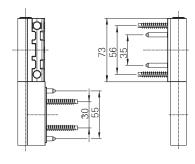
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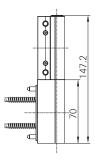
Profile system	Frame number	Leaf number	Version	
			Overlap-screwed	Rebate-screwed
Schüco LivIng 82 AD	19421	19432	I	I
		19433		
		19452		
		19425		
VEKA Softline 76 AD	101.351	105.400	I	III
	101.354			
VEKA Softline 82 MD	101.290	103.345	I	I
	101.291	103.346		
	101.290	105.380	I	III
	101.291	105.381		

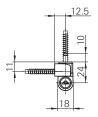
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3.2 218 P











Product description

The Roto Solid B | 218 P two-part butt hinge is suitable for PVC entrance doors up to a sash weight of 80 kg.

Butt hinges are very popular thanks to their slim hinge design. This means that they blend harmoniously into any door. A wide range of colours and different coating methods offer a lot of freedom for an individual design.

A particular highlight is the adjustment mechanism integrated in the hinge roller. It ensures a consistently attractive appearance regardless of the setting, as it prevents gaps and offset outlines.

The rebate-screwed butt hinge is especially suited to doors with panels filling the leaf on both sides and is compatible with hardware grooves of 16, 20 and 24 mm

The overlap-screwed version ensures ultimate sealing.



Advantages at a glance

- For entrance doors up to 80 kg
- Adjustment mechanism integrated in the hinge roller for continuous height, lateral and gasket compression adjustment
- Appearance stays the same regardless of the hinge setting – no offset outlines and no gap formation between the frame and leaf components
- Simple and fast adjustment without unhinging the door
- Installation either in the rebate or overlap
- Consistent, slim butt hinge design with a diameter of 18 mm

Adjustment range

- Laterally adjustable: ±3 mm
- Height adjustable: +4 / -2 mm
- Gasket compression adjustable: ±1.5 mm

Product characteristics



Desian

- Consistent, slim butt hinge design with a diameter of 18 mm
- Appearance stays the same regardless of the hinge setting
- Available in various RAL colours and metallic surfaces



Security

- Maximum long-term functional performance class tested in accordance with DIN EN 1935 and DIN EN 1191 with 200,000 opening cycles
- Corrosion resistance class 5 in accordance with DIN EN 1670





Efficiency

- Rapid and simple installation in just a few operation steps
- Less work because the hinges are largely preassemhled
- Drilling jigs simplify installation
- Door leaf is easy to hinge and unhinge even with a low door lintel



Adjustment

- Adjustment mechanism integrated in the hinge roller for continuous lateral, height and gasket compression adjustment
- Large adjustment ranges for high tolerance compensation on the installed door
- Simple and fast adjustment without unhinging the door



Overlap-screwed (screws per hinge: 4x 6.3 x 40)

~		Roto	3				Nο
Version I	Natural silver	R01.1	-	powd-c	Left	1 Piece(s)	2006803
			-	powd-c	Right	1 Piece(s)	2006804
	Stainless steel appearance	R01.23	-	powd-c	Left	1 Piece(s)	2006801
			-	powd-c	Right	1 Piece(s)	2006802
	Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027774
			RAL 7016M	powd-c	Right	1 Piece(s)	2027775
	Brass, polished	R03.2	-	met p	Left	1 Piece(s)	2006805
			_	met p	Right	1 Piece(s)	2006806
	Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006796
			RAL 8077	powd-c	Right	1 Piece(s)	2006797
	Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006798
			RAL 9005	powd-c	Right	1 Piece(s)	2006800
	Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006794
			RAL 9016	powd-c	Right	1 Piece(s)	2006795
			RAL 9016	powd-c	Left	24 Piece(s)	2008003
			RAL 9016	powd-c	Right	24 Piece(s)	2008009
	Special colour	SF	SF	_	Left	1 Piece(s)	2006807
			SF	_	Right	1 Piece(s)	2006808
	Uncoated	R00.0	Roh	_	-	1 Piece(s)	2008016

Rebate-screwed (screws per hinge: 4x 6.3 x 40)

	\leftarrow		Roto		+			No
Version I	16	Natural silver	R01.1	_	powd-c	Left	1 Piece(s)	2006799
			-	-	powd-c	Right	1 Piece(s)	2006587
		Stainless steel appearance	R01.23	_	powd-c	Left	1 Piece(s)	2006777
				_	powd-c	Right	1 Piece(s)	2006788
		Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027776
			-	RAL 7016M	powd-c	Right	1 Piece(s)	2027777
		Brass, polished	R03.2	_	met p	Left	1 Piece(s)	2006598
				_	met p	Right	1 Piece(s)	2006609
		Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006733
			-	RAL 8077	powd-c	Right	1 Piece(s)	2006744
		Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006755
				RAL 9005	powd-c	Right	1 Piece(s)	2006766
		Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006585
			-	RAL 9016	powd-c	Right	1 Piece(s)	2006697
			-	RAL 9016	powd-c	Left	24 Piece(s)	2008010
				RAL 9016	powd-c	Right	24 Piece(s)	2008011
		Special colour	SF	SF	-	Left	1 Piece(s)	2006620
				SF	_	Right	1 Piece(s)	2006631
		Uncoated	R00.0	Roh	Uncoated	_	1 Piece(s)	2008017

Version II 20	Natural silver	R01.1	-	powd-c	Left	1 Piece(s)	2006741
			_	powd-c	Right	1 Piece(s)	2006742
	Stainless steel appearance	R01.23	_	powd-c	Left	1 Piece(s)	2006739
			_	powd-c	Right	1 Piece(s)	2006740
	Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027778
			RAL 7016M	powd-c	Right	1 Piece(s)	2027779
	Brass, polished	R03.2	_	met p	Left	1 Piece(s)	2006743
			_	met p	Right	1 Piece(s)	2006745
	Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006735
			RAL 8077	powd-c	Right	1 Piece(s)	2006736
	Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006737
		RAL 9005	powd-c	Right	1 Piece(s)	2006738	
	Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006732
			RAL 9016	powd-c	Right	1 Piece(s)	2006734
	Special colour	SF	SF	_	Left	1 Piece(s)	2006746
			SF	-	Right	1 Piece(s)	2006747
24	Natural silver	R01.1	_	powd-c	Left	1 Piece(s)	2006772
			-	powd-c	Right	1 Piece(s)	2006773
	Stainless steel appearance	R01.23	_	powd-c	Left	1 Piece(s)	2006770
			_	powd-c	Right	1 Piece(s)	2006771
	Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027780
			RAL 7016M	powd-c	Right	1 Piece(s)	2027781
	24	Stainless steel appearance Anthracite grey, matt Brass, polished Dark brown Jet black Traffic white Special colour 24 Natural silver Stainless steel appearance	Stainless steel appearance R01.23 Anthracite grey, matt R02.2M Brass, polished R03.2 Dark brown R04.6 Jet black R06.2 Traffic white R07.2 Special colour SF 24 Natural silver R01.1 Stainless steel appearance R01.23	Stainless steel appearance	Stainless steel appearance	Stainless steel appearance	Stainless steel appearance

R03.2

R04.6

R06.2

R07.2

SF

RAL 8077

RAL 8077

RAL 9005

RAL 9005

RAL 9016

RAL 9016

SF

SF

Left

Right

Left

Right

Left

Right

Left

Right

Left

Right

met p

met p

powd-c

powd-c

powd-c

powd-c

powd-c

powd-c

-

1 Piece(s)

2006774

2006775

2006765

2006767

2006768

2006769

2006763

2006764

2006776

2006778

Brass, polished

Dark brown

Jet black

Traffic white

Special colour

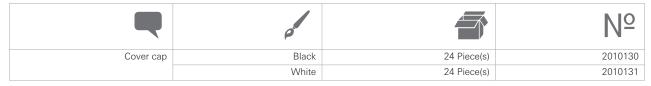


Spare parts

3.2.1 Spare parts

Cover cap





Fixing screw





INFO

Screw lengths are profile-related.

			No
Fixing screw	6,3x40	48 Piece(s)	2010148
	6,3x50	48 Piece(s)	2010149
	6,3x60	48 Piece(s)	2010150

Screw cover

for overlap-screwed hinges



			NΘ
Screw cover	Black	48 Piece(s)	2028877
	White	48 Piece(s)	2028878

Threaded pin

0

	Anna		Nº
Threaded pin	M6x5	48 Piece(s)	2010151



3.2.2 Accessories

3.2.2.1 Jigs

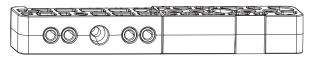
Single jigs

Single jigs for joint drilling or to be modularly combined for drilling the frame and leaf separately.

	Drilling jig for butt hinge	Drilling jig set	Frame stop	Stop set, overlap-screwed
Overlap-screwed butt hinge, drilled jointly	1	-	-	_
Rebate-screwed butt hinge, drilled jointly	1	1	_	_
Overlap-screwed butt hinge, drilled separately	1	_	1	1
Rebate-screwed butt hinge, drilled separately	1	1	1	-

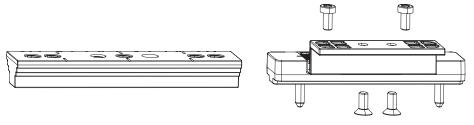
|

Drilling jig for butt hinge



		No
Drilling jig for 218P butt hinge	1 Piece(s)	2027667

Drilling jig set for rebate-screwed hinges

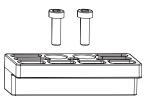


Drilling jig set, consisting of: 1 leaf jig (rebate-screwed), 1 adapter (cpl.), 2 countersunk screws, 2 cylinder screws Can only be used in conjunction with drilling jig for butt hinge.

	i		No
Drilling jig set	Incl. adapter for rebate-screwed version for 16-24 mm groove	1 Piece(s)	2027671

Frame stop

Can only be used in conjunction with drilling jig for butt hinge and overlap width of 20 mm.



	Nº
Frame stop	2027673

Stop set for overlap-screwed hinges



Stop set, consisting of: 1 stop, 2 cylinder screws, 4 spacer plates (2 mm), 2 spacer plates (1 mm), 1 spacer plate (0.5 mm)

Can only be used in conjunction with drilling jig for butt hinge.



Telescopic rod set for overlap-screwed hinges

Can only be used in conjunction with drilling jig for butt hinge.



Telescopic rod set (overlap-screwed), consisting of: 1 telescopic rod incl. stop, 3 cylinder screws, 12 spacer plates (2 mm), 6 spacer plates (1 mm), 3 spacer plates (0.5 mm), 1 installation instructions

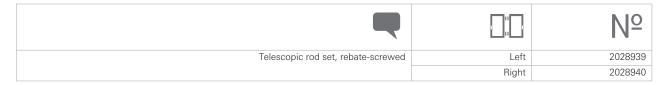


Telescopic rod set for rebate-screwed hinges

Can only be used in conjunction with drilling jig for butt hinge.



Telescopic rod set (rebate-screwed), consisting of: 1 telescopic rod incl. stop and leaf jigs (rebate-screwed), 3 adapters 1 installation instructions





3.2.3 Drawings

3.2.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).

Overlap-screwed

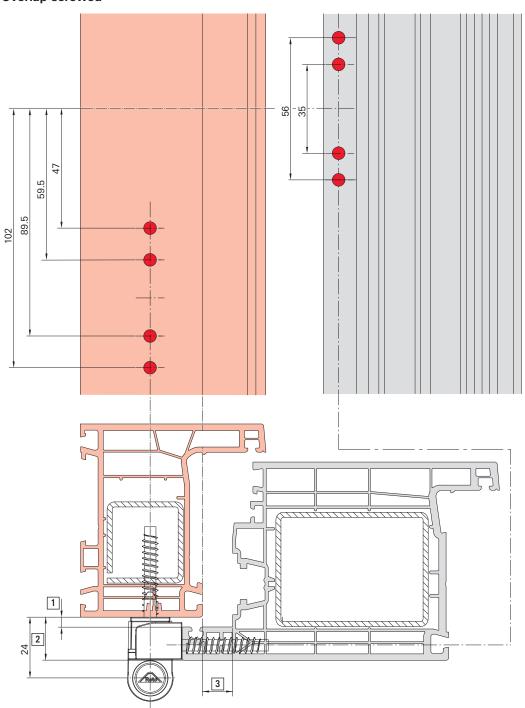


Fig. 3.1: [1] Hinge passage, [2] overlap height \geq 16.5 mm, [3] rebate clearance



Rebate-screwed

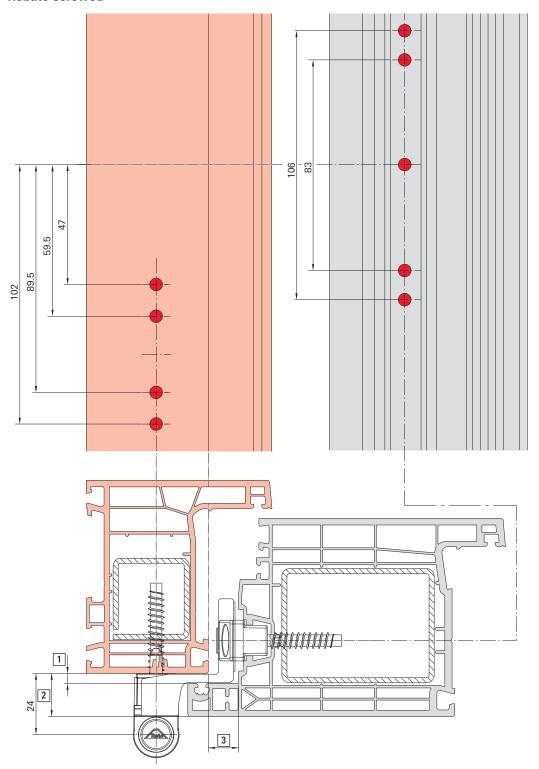


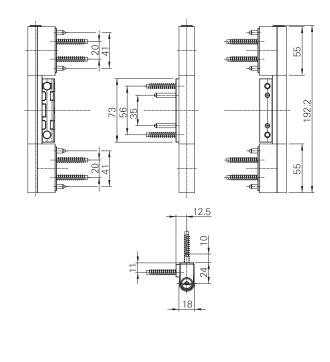
Fig. 3.2: [1] Hinge passage \geq 3.5 mm, [2] overlap height, [3] rebate clearance



[ŧ]

3.3 318 P







Product description

The Roto Solid B | 318 P three-part butt hinge is suitable for PVC entrance doors up to a sash weight of 120 kg.

Butt hinges are very popular thanks to their slim hinge design. This means that they blend harmoniously into any door. A wide range of colours and different coating methods offer a lot of freedom for an individual design.

Alongside the visual advantages, Roto Solid B | 318 P also impresses during installation and adjustment.

A particular highlight is the adjustment mechanism integrated in the hinge roller. It ensures a consistently attractive appearance regardless of the setting, as it prevents gaps and offset outlines.

The rebate-screwed butt hinge is especially suited to doors with panels overlapping the leaf on both sides and is compatible with hardware grooves of 16, 20 and 24 mm. The overlap-screwed version offers ultimate sealing.



Advantages at a glance

- For entrance doors up to max. 120 kg
- Adjustment mechanism integrated in the hinge roller for continuous height, lateral and gasket compression adjustment
- Appearance stays the same regardless of the hinge setting – no offset outlines and no gap formation between the frame and leaf components
- Simple and fast adjustment without unhinging the door
- Installation either in the rebate or overlap
- Consistent, slim butt hinge design with a diameter of 18 mm

Adjustment range

- Laterally adjustable: ±3 mm
- Height adjustable: +4 / -2 mm
- Gasket compression adjustable: ±1.5 mm



Product characteristics



Design

- Consistent, slim butt hinge design with a diameter of 18 mm
- Appearance stays the same regardless of the hinge setting
- Available in various RAL colours and metallic surfaces



Security

- Maximum long-term functional performance class tested in accordance with DIN EN 1935 with 200,000 opening cycles
- Corrosion resistance class 5 in accordance with DIN EN 1670



Efficiency

- Rapid and simple installation in just a few operation steps
- Less work because the hinges are largely preassembled
- Drilling jigs simplify installation
- Door leaf is easy to hinge and unhinge even with a low door lintel



Adjustment

- Adjustment mechanism integrated in the hinge roller for continuous lateral, height and gasket compression adjustment
- Large adjustment ranges for high tolerance compensation on the installed door
- Simple and fast adjustment without unhinging the door

Overlap-screwed (screws per hinge: 6x 6.3 x 40)

		Roto		<u>+</u>			No
Version I	Natural silver	R01.1	_	powd-c	Left	1 Piece(s)	2006595
			_	powd-c	Right	1 Piece(s)	2006596
	Stainless steel appearance	R01.23	_	powd-c	Left	1 Piece(s)	2006593
			_	powd-c	Right	1 Piece(s)	2006594
	Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027782
			RAL 7016M	powd-c	Right	1 Piece(s)	2027783
	Brass, polished	R03.2	_	met p	Left	1 Piece(s)	2006597
			_	met p	Right	1 Piece(s)	2006599
	Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006589
			RAL 8077	powd-c	Right	1 Piece(s)	2006590
	Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006591
			RAL 9005	powd-c	Right	1 Piece(s)	2006592
	Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006809
			RAL 9016	powd-c	Right	1 Piece(s)	2006588
			RAL 9016	powd-c	Left	24 Piece(s)	2008012
			RAL 9016	powd-c	Right	24 Piece(s)	2008013
	Special colour	SF	SF	-	Left	1 Piece(s)	2006600
			SF	-	Right	1 Piece(s)	2006601
	Uncoated	R00.0	Roh	powd-c	-	1 Piece(s)	2008018





Rebate-screwed (screws per hinge: 6x 6.3 x 40)

	\vdash			3	+			Nο
Version I	16	Natural silver	R01.1	_	powd-c	Left	1 Piece(s)	2006726
			R01.1	-	powd-c	Right	1 Piece(s)	2006727
		Stainless steel appearance	R01.23	-	powd-c	Left	1 Piece(s)	2006709
			R01.23	_	powd-c	Right	1 Piece(s)	2006720
		Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027784
			R02.2M	RAL 7016M	powd-c	Right	1 Piece(s)	2027785
		Brass, polished	R03.2	-	met p	Left	1 Piece(s)	2006728
			R03.2	_	met p	Right	1 Piece(s)	2006729
		Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006664
			R04.6	RAL 8077	powd-c	Right	1 Piece(s)	2006675
		Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006686
			R06.2	RAL 9005	powd-c	Right	1 Piece(s)	2006698
		Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006642
			R07.2	RAL 9016	powd-c	Right	1 Piece(s)	2006653
			R07.2	RAL 9016	powd-c	Left	24 Piece(s)	2008014
			R07.2	RAL 9016	powd-c	Right	24 Piece(s)	2008015
		Special colour	SF	SF	_	Left	1 Piece(s)	2006730
			SF	SF	_	Right	1 Piece(s)	2006731
		Uncoated	R00.0	Roh	-	_	1 Piece(s)	2008019
Version II	20	Natural silver	R01.1	_	powd-c	Left	1 Piece(s)	2006757
			R01.1	_	powd-c	Right	1 Piece(s)	2006758
		Stainless steel appearance	R01.23	_	powd-c	Left	1 Piece(s)	2006754
			R01.23	_	powd-c	Right	1 Piece(s)	2006756
		Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027786
			R02.2M	RAL 7016M	powd-c	Right	1 Piece(s)	2027787
		Brass, polished	R03.2	_	met p	Left	1 Piece(s)	2006759
			R03.2	_	met p	Right	1 Piece(s)	2006760
		Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006750
		Bank Brown	R04.6	RAL 8077	powd-c	Right	1 Piece(s)	2006751
		Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006751
		oct black	R06.2	RAL 9005	powd-c	Right	1 Piece(s)	2006753
		Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006748
		Traine write	R07.2	RAL 9016	powd-c	Right	1 Piece(s)	2006749
		Special colour	SF	SF	powa c	Left	1 Piece(s)	2006761
		Special colour	SF	SF	_	Right	1 Piece(s)	2006762
Version III	24	Natural silver	R01.1	- 31	powd-c	Left	1 Piece(s)	2006787
version in	24	Natural Silver	R01.1	_	powd-c	Right	1 Piece(s)	2006789
		Stainless steel appearance	R01.23	_	powd-c	Left	1 Piece(s)	2006785
		Stairliess steel appearance	R01.23	_			1 Piece(s)	2006786
		Anthracite grey, matt		RAL 7016M	powd-c	Right Left	1 Piece(s)	2000788
		Antinacite grey, matt	R02.2M		powd-c			
		Duran undialand	R02.2M	RAL 7016M	powd-c	Right	1 Piece(s)	2027789
		Brass, polished	R03.2	_	met p	Left	1 Piece(s)	2006790
		5 11	R03.2	-	met p	Right	1 Piece(s)	2006791
		Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006781
			R04.6	RAL 8077	powd-c	Right	1 Piece(s)	2006782
		Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006783
			R06.2	RAL 9005	powd-c	Right	1 Piece(s)	2006784
		Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006779
			R07.2	RAL 9016	powd-c	Right	1 Piece(s)	2006780
		Special colour	SF	SF	-	Left	1 Piece(s)	2006792
			SF	SF	-	Right	1 Piece(s)	2006793
Version IV	16	Natural silver	R01.1	-	powd-c	Left	1 Piece(s)	2028879
			R01.1	_	powd-c	Right	1 Piece(s)	2028880
		Stainless steel appearance	R01.23	_	powd-c	Left	1 Piece(s)	2028883
			R01.23	_	powd-c	Right	1 Piece(s)	2028884



3.3.1 Spare parts

Cover cap





Fixing screw





INFO

Screw lengths are profile-related.

			NΘ
Fixing screw	6,3x40	48 Piece(s)	2010148
	6,3x50	48 Piece(s)	2010149
	6,3x60	48 Piece(s)	2010150

Screw cover

for overlap-screwed hinges



			No
Screw cover	Black	48 Piece(s)	2028877
	White	48 Piece(s)	2028878

Threaded pin

0

	Anna		Nº
Threaded pin	M6x5	48 Piece(s)	2010151



3.3.2 Accessories

3.3.2.1 Cover sleeve (cropped on one side)

The extended side completely covers the mechanics but reduces the lateral adjustment by 1 mm (laterally adjustable: +3 /-2 mm).







		Roto	3	<u></u>		No
Cover sleeve	Natural silver	R01.1	_	powd-c	6 Piece(s)	2027216
	Stainless steel appearance	R01.23	_	powd-c	6 Piece(s)	2027217
	Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	6 Piece(s)	2027220
	Brass, polished	R03.2	_	met p	6 Piece(s)	2027218
	Dark brown	R04.6	RAL 8077	powd-c	6 Piece(s)	2027214
	Jet black	R06.2	RAL 9005	powd-c	6 Piece(s)	2027215
	Traffic white	R07.2	RAL 9016	powd-c	6 Piece(s)	2027173
	Special colour	SF	SF	_	6 Piece(s)	2027219

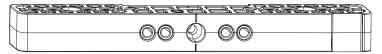
3.3.2.2 Jigs

Single jigs

Single jigs for joint drilling or to be modularly combined for drilling the frame and leaf separately.

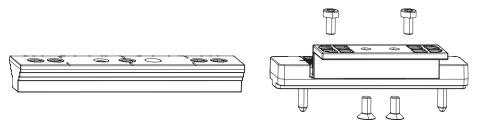
	Drilling jig for butt hinge	Drilling jig set	Frame stop	Stop set, overlap-screwed
Overlap-screwed butt hinge, drilled jointly	1	_	_	_
Rebate-screwed butt hinge, drilled jointly	1	1	_	_
Overlap-screwed butt hinge, drilled separately	1	_	1	1
Rebate-screwed butt hinge, drilled separately	1	1	1	_

Drilling jig for butt hinge





Drilling jig set for rebate-screwed hinges

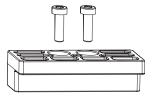


Drilling jig set, consisting of: 1 leaf jig (rebate-screwed), 1 adapter (cpl.), 2 countersunk screws, 2 cylinder screws Can only be used in conjunction with drilling jig for butt hinge.



Frame stop

Can only be used in conjunction with drilling jig for butt hinge and overlap width of 20 mm.







Stop set for overlap-screwed hinges



Stop set, consisting of: 1 stop, 2 cylinder screws, 4 spacer plates (2 mm), 2 spacer plates (1 mm), 1 spacer plate (0.5 mm)

Can only be used in conjunction with drilling jig for butt hinge.



Telescopic rod set for overlap-screwed hinges

Can only be used in conjunction with drilling jig for butt hinge.

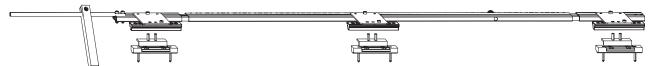


Telescopic rod set (overlap-screwed), consisting of: 1 telescopic rod incl. stop, 3 cylinder screws, 12 spacer plates (2 mm), 6 spacer plates (1 mm), 3 spacer plates (0.5 mm), 1 installation instructions



Telescopic rod set for rebate-screwed hinges

Can only be used in conjunction with drilling jig for butt hinge.



Telescopic rod set (rebate-screwed), consisting of: 1 telescopic rod incl. stop and leaf jigs (rebate-screwed), 3 adapters 1 installation instructions

		No
Telescopic rod set, rebate-screwed	Left	2028939
	Right	2028940

3.3.3 Drawings

3.3.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).



Overlap-screwed

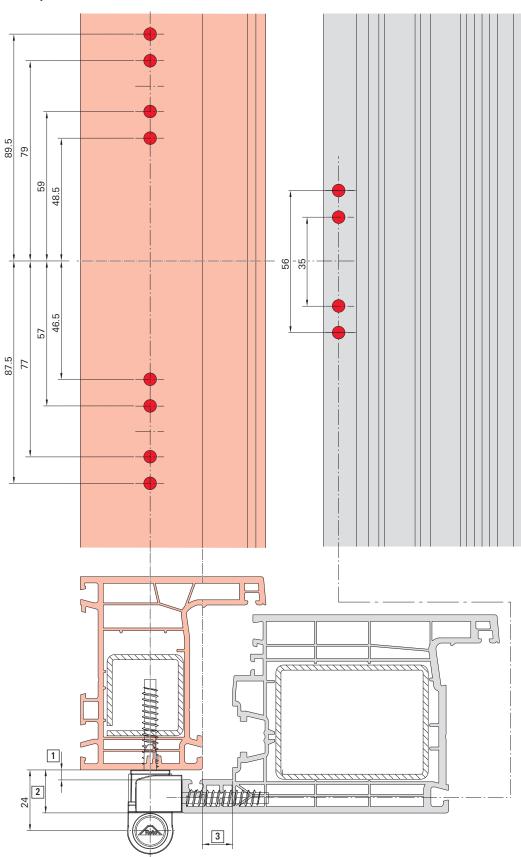


Fig. 3.3: [1] Hinge passage, [2] overlap height \geq 16.5 mm, [3] rebate clearance



Rebate-screwed

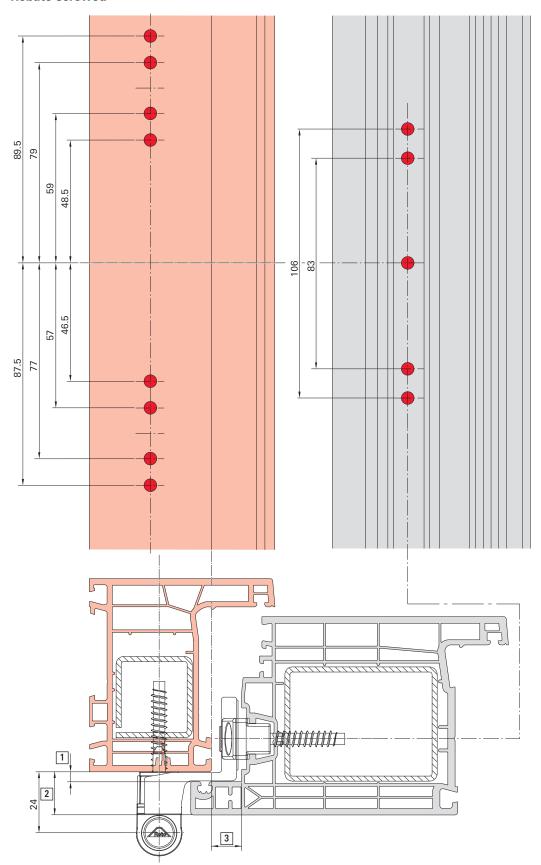


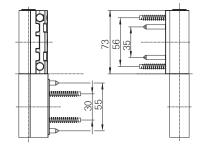
Fig. 3.4: [1] Hinge passage \geq 3.5 mm, [2] overlap height, [3] rebate clearance

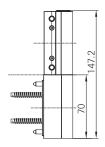


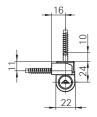


3.4 222 P











Product description

The Roto Solid B | 222 P two-part butt hinge is suitable for PVC entrance doors up to a sash weight of 120 kg.

Butt hinges are very popular thanks to their slim hinge design. This means that they blend harmoniously into any door. A wide range of colours and different coating methods offer a lot of freedom for an individual design.

Alongside the visual advantages, Roto Solid B | 222 P also impresses during installation and adjustment.

A particular highlight is the adjustment mechanism integrated in the hinge roller. It ensures a consistently attractive appearance regardless of the setting, as it prevents gaps and offset outlines.

The rebate-screwed butt hinge is especially suited to doors with panels overlapping the leaf on both sides and is compatible with hardware grooves of 16, 20 and 24 mm. The overlap-screwed version offers ultimate sealing.



Advantages at a glance

- For entrance doors up to 120 kg
- Adjustment mechanism integrated in the hinge roller for continuous height, lateral and gasket compression adjustment
- Appearance stays the same regardless of the hinge setting – no offset outlines and no gap formation between the frame and leaf components
- Simple and fast adjustment without unhinging the door
- Installation either in the rebate or overlap
- Consistent, slim butt hinge design with a diameter of 22 mm

Adjustment range

- Laterally adjustable: ±3 mm
- Height adjustable: +4 / -2 mm
- Gasket compression adjustable: ±1.5 mm

Product characteristics



Design

- Consistent, slim butt hinge design with a diameter of 22 mm
- Appearance stays the same regardless of the hinge setting
- Available in various RAL colours and metallic surfaces



Security

- Can be used in burglar inhibiting doors in accordance with RC 2
- Maximum long-term functional performance class tested in accordance with DIN EN 1935 with 200,000 opening cycles
- Corrosion resistance class 5 in accordance with DIN EN 1670
- SKG**-compatible with hinge retaining mechanism





Efficiency

- Rapid and simple installation in just a few operation steps
- Less work because the hinges are largely preassembled
- Drilling jigs simplify installation
- Door leaf is easy to hinge and unhinge even with a low door lintel



Adjustment

- Adjustment mechanism integrated in the hinge roller for continuous lateral, height and gasket compression adjustment
- Large adjustment ranges for high tolerance compensation on the installed door
- Simple and fast adjustment without unhinging the door

Overlap-screwed (screws per hinge: 4x 6.3 x 40)

	0	Roto			11		Nο
Version I	Natural silver	R01.1	_	powd-c	Left	1 Piece(s)	2006704
			_	powd-c	Right	1 Piece(s)	2006705
			_	powd-c	Left	24 Piece(s)	2028869
			_	powd-c	Right	24 Piece(s)	2028870
	Stainless steel appearance	R01.23	_	powd-c	Left	1 Piece(s)	2006702
			_	powd-c	Right	1 Piece(s)	2006703
			_	powd-c	Left	24 Piece(s)	2028836
			_	powd-c	Right	24 Piece(s)	2028837
	Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027790
			RAL 7016M	powd-c	Right	1 Piece(s)	2027791
	Brass, polished	R03.2	_	met p	Left	1 Piece(s)	2006706
			_	met p	Right	1 Piece(s)	2006707
	Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006696
			RAL 8077	powd-c	Right	1 Piece(s)	2006699
			RAL 8077	powd-c	Left	24 Piece(s)	2028908
			RAL 8077	powd-c	Right	24 Piece(s)	2028909
	Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006700
			RAL 9005	powd-c	Right	1 Piece(s)	2006701
	Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006694
			RAL 9016	powd-c	Right	1 Piece(s)	2006695
			RAL 9016	powd-c	Left	24 Piece(s)	2020973
			RAL 9016	powd-c	Right	24 Piece(s)	2020974
	Special colour	SF	SF	-	Left	1 Piece(s)	2006708
			SF	-	Right	1 Piece(s)	2006710
	Uncoated	R00.0	Roh	-	-	1 Piece(s)	2021181



Rebate-screwed (screws per hinge: 4x 6.3 x 40)

	\leftarrow		Roto	3	+	"		Nο
Version I	16	Natural silver	R01.1	_	powd-c	Left	1 Piece(s)	2006611
				-	powd-c	Right	1 Piece(s)	2006612
		Stainless steel appearance	R01.23	-	powd-c	Left	1 Piece(s)	2006608
				_	powd-c	Right	1 Piece(s)	2006610
		Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027792
				RAL 7016M	powd-c	Right	1 Piece(s)	2027793
		Brass, polished	R03.2	-	met p	Left	1 Piece(s)	2006613
				_	met p	Right	1 Piece(s)	2006614
		Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006604
				RAL 8077	powd-c	Right	1 Piece(s)	2006605
		Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006606
				RAL 9005	powd-c	Right	1 Piece(s)	2006607
		Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006602
				RAL 9016	powd-c	Right	1 Piece(s)	2006603
				RAL 9016	powd-c	Left	24 Piece(s)	2020975
				RAL 9016	powd-c	Right	24 Piece(s)	2020976
		Special colour	SF	SF	-	Left	1 Piece(s)	2006615
			-	SF	_	Right	1 Piece(s)	2006616
		Uncoated	R00.0	Roh	_	_	1 Piece(s)	2021182
Version II	20	Natural silver	R01.1	_	powd-c	Left	1 Piece(s)	2006641
				-	powd-c	Right	1 Piece(s)	2006643
		Stainless steel appearance	R01.23	-	powd-c	Left	1 Piece(s)	2006639
				_	powd-c	Right	1 Piece(s)	2006640
		Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027794
				RAL 7016M	powd-c	Right	1 Piece(s)	2027795
		Brass, polished	R03.2		met p	Left	1 Piece(s)	2006644
			-	_	met p	Right	1 Piece(s)	2006645
		Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006635
				RAL 8077	powd-c	Right	1 Piece(s)	2006636
		Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006637
			-	RAL 9005	powd-c	Right	1 Piece(s)	2006638
		Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006633
			-	RAL 9016	powd-c	Right	1 Piece(s)	2006634
		Special colour	SF	SF	-	Left	1 Piece(s)	2006646
				SF	-	Right	1 Piece(s)	2006647
Version III	24	Natural silver	R01.1	_	powd-c	Left	1 Piece(s)	2006672
				-	powd-c	Right	1 Piece(s)	2006673
		Stainless steel appearance	R01.23	_	powd-c	Left	1 Piece(s)	2006670
				-	powd-c	Right	1 Piece(s)	2006671
		Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027796
				RAL 7016M	powd-c	Right	1 Piece(s)	2027797
		Brass, polished	R03.2	_	met p	Left	1 Piece(s)	2006674
				-	met p	Right	1 Piece(s)	2006676
		Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006666
				RAL 8077	powd-c	Right	1 Piece(s)	2006667
		Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006668
				RAL 9005	powd-c	Right	1 Piece(s)	2006669
		Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006663
				RAL 9016	powd-c	Right	1 Piece(s)	2006665
		Special colour	SF	SF	_	Left	1 Piece(s)	2006677
				SF	-	Right	1 Piece(s)	2006678

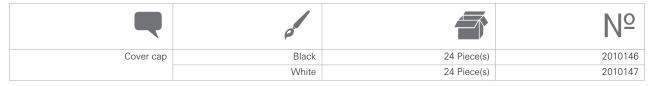


Spare parts

3.4.1 Spare parts

Cover cap





Fixing screw





INFO

Screw lengths are profile-related.

	Taring .		NΘ
Fixing screw	6,3x40	48 Piece(s)	2010148
	6,3x50	48 Piece(s)	2010149
	6,3×60	48 Piece(s)	2010150

Screw cover

for overlap-screwed hinges



			NΘ
Screw cover	Black	48 Piece(s)	2028877
	White	48 Piece(s)	2028878

Threaded pin

Ø

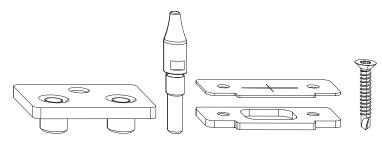
	Anna		Nº
Threaded pin	M6x5	48 Piece(s)	2010151



3.4.2 Accessories

3.4.2.1 Hinge retaining mechanism set

for use with RC 2 and SKG** doors



Hinge retaining mechanism set, consisting of: 1 leaf mounting plate, 1 safety pin, 1 frame counter plate, 1 frame cover plate, 4 countersunk self-tapping screws



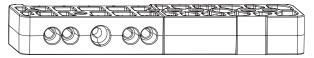


Single jigs

Single jigs for joint drilling or to be modularly combined for drilling the frame and leaf separately.

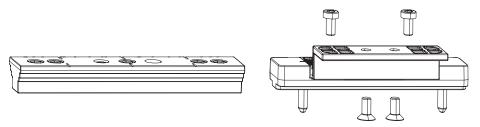
	Drilling jig for butt hinge	Drilling jig set	Frame stop	Stop set, overlap-screwed
Overlap-screwed butt hinge, drilled jointly	1	_	_	_
Rebate-screwed butt hinge, drilled jointly	1	1	_	_
Overlap-screwed butt hinge, drilled separately	1	_	1	1
Rebate-screwed butt hinge, drilled separately	1	1	1	_

Drilling jig for butt hinge



		No
Drilling jig for 222P butt hinge	1 Piece(s)	2027668

Drilling jig set for rebate-screwed hinges

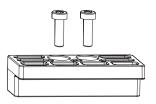


Drilling jig set, consisting of: 1 leaf jig (rebate-screwed), 1 adapter (cpl.), 2 countersunk screws, 2 cylinder screws Can only be used in conjunction with drilling jig for butt hinge.



Frame stop

Can only be used in conjunction with drilling jig for butt hinge and overlap width of 20 mm.







Stop set for overlap-screwed hinges



Stop set, consisting of: 1 stop, 2 cylinder screws, 4 spacer plates (2 mm), 2 spacer plates (1 mm), 1 spacer plate (0.5 mm)

Can only be used in conjunction with drilling jig for butt hinge.



Telescopic rod set for overlap-screwed hinges

Can only be used in conjunction with drilling jig for butt hinge.

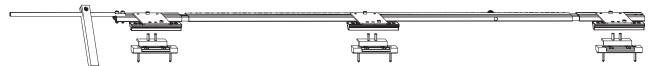


Telescopic rod set (overlap-screwed), consisting of: 1 telescopic rod incl. stop, 3 cylinder screws, 12 spacer plates (2 mm), 6 spacer plates (1 mm), 3 spacer plates (0.5 mm), 1 installation instructions



Telescopic rod set for rebate-screwed hinges

Can only be used in conjunction with drilling jig for butt hinge.



Telescopic rod set (rebate-screwed), consisting of: 1 telescopic rod incl. stop and leaf jigs (rebate-screwed), 3 adapters 1 installation instructions

		No
Telescopic rod set, rebate-screwed	Left	2028939
	Right	2028940

3.4.3 Drawings

3.4.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).



Overlap-screwed

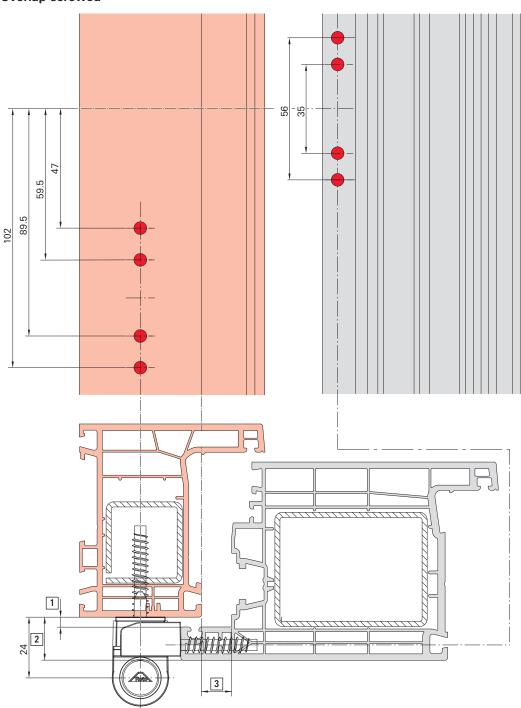


Fig. 3.5: [1] Hinge passage, [2] overlap height \geq 16.5 mm, [3] rebate clearance

H

Rebate-screwed

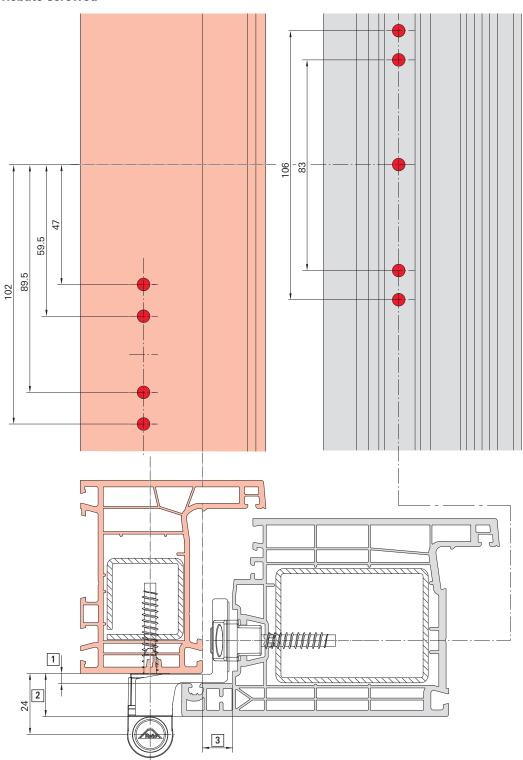


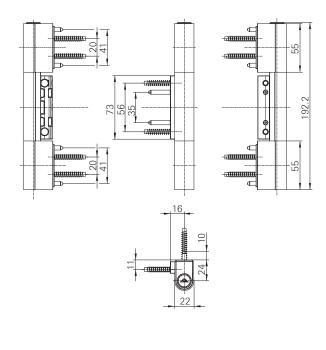
Fig. 3.6: [1] Hinge passage \geq 3.5 mm, [2] overlap height, [3] rebate clearance



3.5 322 P









Product description

The Roto Solid B | 322 P three-part butt hinge is suitable for PVC entrance doors up to a sash weight of 160 kg.

Butt hinges are very popular thanks to their slim hinge design. This means that they blend harmoniously into any door. A wide range of colours and different coating methods offer a lot of freedom for an individual design.

Alongside the visual advantages, Roto Solid B | 322 P also impresses during installation and adjustment.

A particular highlight is the adjustment mechanism integrated in the hinge roller. It ensures a consistently attractive appearance regardless of the setting, as it prevents gaps and offset outlines.

The rebate-screwed butt hinge is especially suited to doors with panels overlapping the leaf on both sides and is compatible with hardware grooves of 16, 20 and 24 mm. The overlap-screwed version offers ultimate sealing.



Advantages at a glance

- For entrance doors up to max. 160 kg
- Adjustment mechanism integrated in the hinge roller for continuous height, lateral and gasket compression adjustment
- Appearance stays the same regardless of the hinge setting – no offset outlines and no gap formation between the frame and leaf components
- Simple and fast adjustment without unhinging the door
- Installation either in the rebate or overlap
- Consistent, slim butt hinge design with a diameter of 22 mm

Adjustment range

- Laterally adjustable: ±3 mm
- Height adjustable: +4 / -2 mm
- Gasket compression adjustable: ±1.5 mm



Product characteristics



Design

- Consistent, slim butt hinge design with a diameter of 22 mm
- Appearance stays the same regardless of the hinge setting
- Available in various RAL colours and metallic surfaces



Security

- Can be used in burglar inhibiting doors in accordance with RC 2
- Maximum long-term functional performance class tested in accordance with DIN EN 1935 with 200,000 opening cycles
- Corrosion resistance class 5 in accordance with DIN EN 1670
- SKG**-compatible with hinge retaining mechanism



Efficiency

- Rapid and simple installation in just a few operation steps
- Less work because the hinges are largely preassembled
- Drilling jigs simplify installation
- Door leaf is easy to hinge and unhinge even with a low door lintel



Adjustment

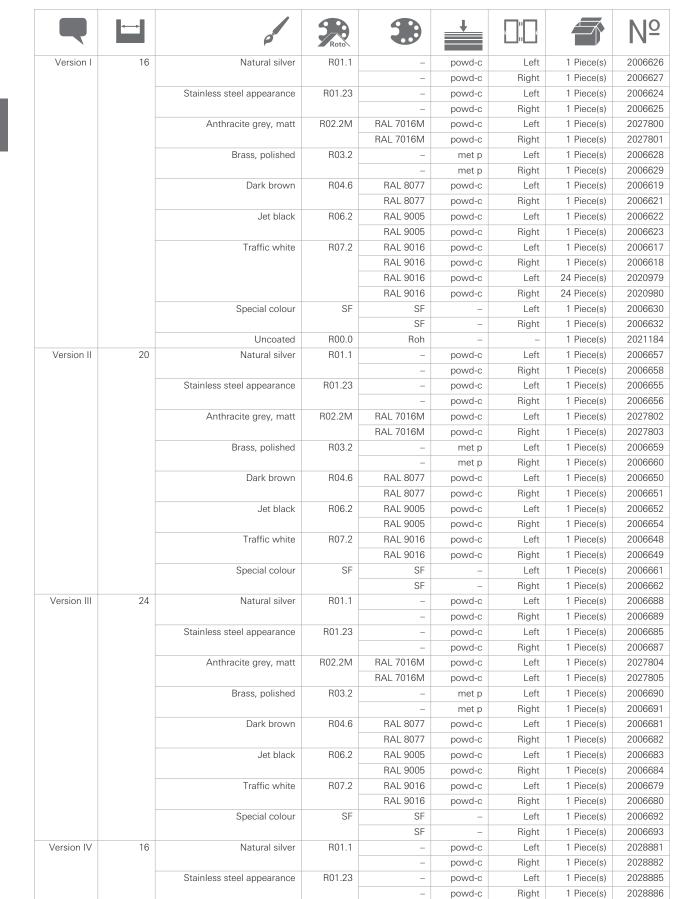
- Adjustment mechanism integrated in the hinge roller for continuous lateral, height and gasket compression adjustment
- Large adjustment ranges for high tolerance compensation on the installed door
- Simple and fast adjustment without unhinging the door

Overlap-screwed (screws per hinge: 6x 6.3 x 40)

		Roto					Nο
Version I	Natural silver	R01.1	_	powd-c	Left	1 Piece(s)	2006719
			_	powd-c	Right	1 Piece(s)	2006721
	Stainless steel appearance	R01.23	-	powd-c	Left	1 Piece(s)	2006717
			_	powd-c	Right	1 Piece(s)	2006718
			_	powd-c	Left	24 Piece(s)	2028874
			_	powd-c	Right	24 Piece(s)	2028875
	Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	Left	1 Piece(s)	2027798
			RAL 7016M	powd-c	Right	1 Piece(s)	2027799
	Brass, polished	R03.2	_	met p	Left	1 Piece(s)	2006722
			_	met p	Right	1 Piece(s)	2006723
	Dark brown	R04.6	RAL 8077	powd-c	Left	1 Piece(s)	2006713
			RAL 8077	powd-c	Right	1 Piece(s)	2006714
	Jet black	R06.2	RAL 9005	powd-c	Left	1 Piece(s)	2006715
			RAL 9005	powd-c	Right	1 Piece(s)	2006716
	Traffic white	R07.2	RAL 9016	powd-c	Left	1 Piece(s)	2006711
			RAL 9016	powd-c	Right	1 Piece(s)	2006712
			RAL 9016	powd-c	Left	24 Piece(s)	2020977
			RAL 9016	powd-c	Right	24 Piece(s)	2020978
	Special colour	SF	SF	-	Left	1 Piece(s)	2006724
			SF	_	Right	1 Piece(s)	2006725
	Uncoated	R00.0	Roh	-	-	1 Piece(s)	2021183



Rebate-screwed (screws per hinge: 6x 6.3 x 40)







3.5.1 Spare parts

Cover cap



	0		No
Cover cap	Black	24 Piece(s)	2010146
	White	24 Piece(s)	2010147

ŀ

Fixing screw





INFO

Screw lengths are profile-related.

	The state of the s		No
Fixing screw	6,3x40	48 Piece(s)	2010148
	6,3x50	48 Piece(s)	2010149
	6,3x60	48 Piece(s)	2010150

Screw cover

for overlap-screwed hinges



			NΘ
Screw cover	Black	48 Piece(s)	2028877
	White	48 Piece(s)	2028878

Threaded pin

@

	Taring .		No
Threaded pin	M6x5	48 Piece(s)	2010151

3.5.2 Accessories

3.5.2.1 Cover sleeve (cropped on one side)

The extended side completely covers the mechanics but reduces the lateral adjustment by 1 mm (laterally adjustable: +3 /-2 mm).



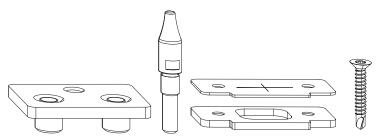




		Roto	3	+		Nο
Cover sleeve	Natural silver	R01.1	_	powd-c	6 Piece(s)	2027224
	Stainless steel appearance	R01.23	_	powd-c	6 Piece(s)	2027225
	Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	6 Piece(s)	2027228
	Brass, polished	R03.2	_	met p	6 Piece(s)	2027226
	Dark brown	R04.6	RAL 8077	powd-c	6 Piece(s)	2027222
	Jet black	R06.2	RAL 9005	powd-c	6 Piece(s)	2027223
	Traffic white	R07.2	RAL 9016	powd-c	6 Piece(s)	2027221
	Special colour	SF	SF	_	6 Piece(s)	2027227

3.5.2.2 Hinge retaining mechanism set

for use with RC 2 and SKG** doors



Hinge retaining mechanism set, consisting of: 1 leaf mounting plate, 1 safety pin, 1 frame counter plate, 1 frame cover plate, 4 countersunk self-tapping screws

	i		No
Hinge retaining mechanism set	For 16 and 20 leaf grooves	1 Piece(s)	2029102
	For 24 leaf groove	1 Piece(s)	2030512



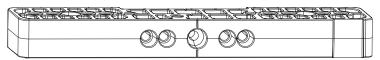
3.5.2.3 Jigs

Single jigs

Single jigs for joint drilling or to be modularly combined for drilling the frame and leaf separately.

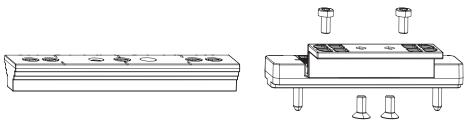
	Drilling jig for butt hinge	Drilling jig set	Frame stop	Stop set, overlap-screwed
Overlap-screwed butt hinge, drilled jointly	1	_	_	_
Rebate-screwed butt hinge, drilled jointly	1	1	-	_
Overlap-screwed butt hinge, drilled separately	1	_	1	1
Rebate-screwed butt hinge, drilled separately	1	1	1	_

Drilling jig for butt hinge



			No
Drilling jig for 322	P butt hinge	1 Piece(s)	2027670

Drilling jig set for rebate-screwed hinges

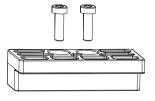


Drilling jig set, consisting of: 1 leaf jig (rebate-screwed), 1 adapter (cpl.), 2 countersunk screws, 2 cylinder screws Can only be used in conjunction with drilling jig for butt hinge.



Frame stop

Can only be used in conjunction with drilling jig for butt hinge and overlap width of 20 mm.



	No	
Frame stop	2027673	

Stop set for overlap-screwed hinges



Stop set, consisting of: 1 stop, 2 cylinder screws, 4 spacer plates (2 mm), 2 spacer plates (1 mm), 1 spacer plate (0.5 mm)

Can only be used in conjunction with drilling jig for butt hinge.



Telescopic rod set for overlap-screwed hinges

Can only be used in conjunction with drilling jig for butt hinge.



Telescopic rod set (overlap-screwed), consisting of: 1 telescopic rod incl. stop, 3 cylinder screws, 12 spacer plates (2 mm), 6 spacer plates (1 mm), 3 spacer plates (0.5 mm), 1 installation instructions



Telescopic rod set for rebate-screwed hinges

Can only be used in conjunction with drilling jig for butt hinge.



Telescopic rod set (rebate-screwed), consisting of: 1 telescopic rod incl. stop and leaf jigs (rebate-screwed), 3 adapters 1 installation instructions

		No
Telescopic rod set, rebate-screwed	Left	2028939
	Right	2028940



3.5.3 Drawings

3.5.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).



Overlap-screwed

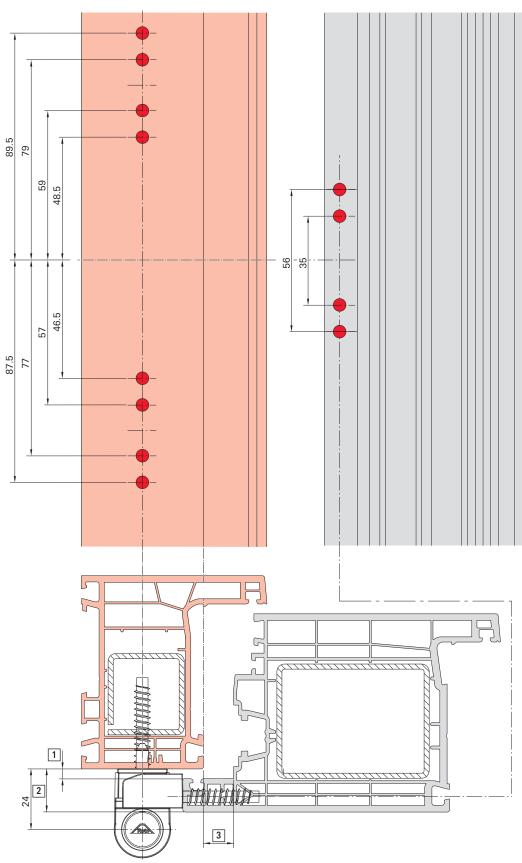


Fig. 3.7: [1] Hinge passage, [2] overlap height \geq 16.5 mm, [3] rebate clearance



Rebate-screwed

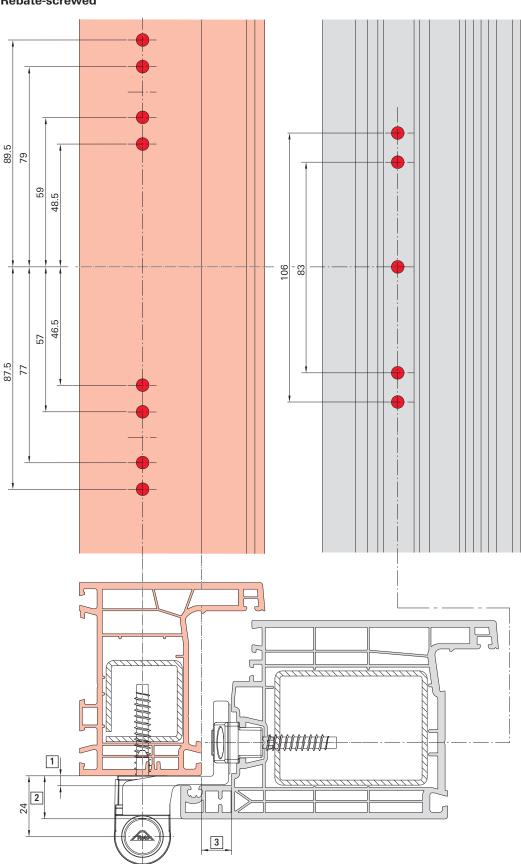
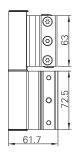


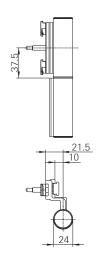
Fig. 3.8: [1] Hinge passage \geq 3.5 mm, [2] overlap height, [3] rebate clearance

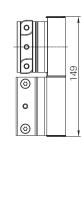


3.6 224 A











Product description

The Roto Solid B | 224 A two-part, clampable butt hinge is suitable for aluminium main doors, back doors and balcony doors up to a sash weight of 120 kg.

Butt hinges are very popular thanks to their slim hinge design. This means that they blend harmoniously into any door. A wide range of colours and different coating methods offer a lot of freedom for an individual design.

Alongside the visual advantages, Roto Solid B | 224 A also impresses during installation and adjustment.

A particular highlight is the adjustment mechanism integrated in the hinge roller. It ensures a consistently attractive appearance regardless of the setting, as it prevents gaps and axis offset.

The preassembled clamping block enables very rapid and simple installation. It is tailored to the system-specific clamping groove of the aluminium profile and does away with the need for additional profile machining. This enables system-adapted versions to be produced for any door upon request.



Advantages at a glance

- For main doors, back doors and balcony doors up to 120 kg
- Appearance stays the same regardless of the hinge setting thanks to internal adjustment mechanism
- Rapid and simple installation thanks to preassembled clamping blocks
- Slim butt hinge design with a diameter of 24 mm

Adjustment range

- Laterally adjustable: ±2.2 mm
- Height adjustable: +5 / -1 mm
- Gasket compression adjustable: -1 mm

Product characteristics



Design

- Slim butt hinge design with a diameter of 24 mm
- Appearance stays the same regardless of the hinge setting
- Available in various RAL colours and electrolytically anodised surfaces
- Custom coating of unpainted hinges possible at the window and door manufacturer



Security

- Can be used in burglar inhibiting doors
- Maximum long-term functional performance class certified in accordance with DIN EN 1935
- Corrosion resistance class 5 in accordance with DIN EN 1670
- Load-bearing components made from extruded aluminium for greater stability and reliability





Efficiency

- Simple and rapid installation thanks to preassembled clamping blocks
- Installation without additional machining of the aluminium profile
- Pin module and cylindrical pin made from galvanised steel ensure added durability
- Requires no maintenance thanks to high-quality self-lubricating synthetic bush



Adjustment

- Adjustment mechanism integrated in the hinge roller
- Adjustment when fully assembled without undoing the fixing screws
- Continuous height and lateral adjustment possible when the door is closed



Clamp hinge for profiles with 15 / 20 leaf groove

	ŢĽ		Roto	3	<u></u>		Nο
Version I	V.01	Natural silver	R01.1	_	anod.	1 Piece(s)	2009924
		Grey brown	R04.1	RAL 8019	powd-c	1 Piece(s)	2009927
		Jet black	R06.2	RAL 9005	powd-c	1 Piece(s)	2009926
		Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	2009925
		Special colour	SF	SF	_	1 Piece(s)	2009929
		Uncoated	R00.0	Roh	_	1 Piece(s)	2009928



INFO

Our butt hinges for aluminium are individually adapted to the system-specific groove on an aluminium profile. This enables system-specific versions to be produced in close collaboration with profile manufacturers upon request.

3.6.1 Spare parts

3.6.1.1 Cover cap set





Cover cap set, consisting of: 1 top cover cap with logo, 1 bottom cover cap with hole

	0		No
Cover cap set	White	24 Piece(s)	2010133
	Black	24 Piece(s)	2010132

3.6.1.2 Spacer ring



			NΘ
Spacer ring	Black	24 Piece(s)	2010144
	White	24 Piece(s)	2010145

3.6.2 Drawings

3.6.2.1 Installation drawings



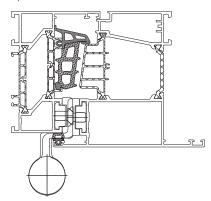
INFO

Installation examples for the aforementioned versions are shown here.

Installation examples for specific profile systems are available upon request.

Version I

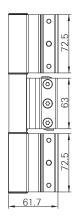
Aluprof MB-86

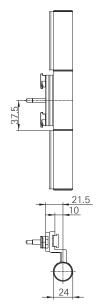


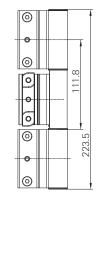


3.7 324 A











Product description

The Roto Solid B | 324 A three-part, clampable butt hinge is suitable for aluminium main doors, back doors and balcony doors up to a sash weight of 160 kg.

Butt hinges are very popular thanks to their slim hinge design. This means that they blend harmoniously into any door. A wide range of colours and different coating methods offer a lot of freedom for an individual design.

Alongside the visual advantages, Roto Solid B | 324 A also impresses during installation and adjustment.

A particular highlight is the adjustment mechanism integrated in the hinge roller. It ensures a consistently attractive appearance regardless of the setting, as it prevents gaps and axis offset.

The preassembled clamping block enables very rapid and simple installation. It is tailored to the system-specific clamping groove of the aluminium profile and does away with the need for additional profile machining. This enables system-adapted versions to be produced for any door upon request.



Advantages at a glance

- For main doors, back doors and balcony doors up to 160 kg
- Appearance stays the same regardless of the hinge setting thanks to internal adjustment mechanism
- Rapid and simple installation thanks to preassembled clamping blocks
- Slim butt hinge design with a diameter of 24 mm

Adjustment range

- Laterally adjustable: ±2.2 mm
- Height adjustable: +5 / -1 mm
- Gasket compression adjustable: -1 mm



Product characteristics



Design

- Slim butt hinge design with a diameter of 24 mm
- Appearance stays the same regardless of the hinge setting
- Available in various RAL colours and electrolytically anodised surfaces
- Custom coating of unpainted hinges possible at the window and door manufacturer



Security

- Can be used in burglar inhibiting doors
- Maximum long-term functional performance class certified in accordance with DIN EN 1935
- Corrosion resistance class 5 in accordance with DIN EN 1670
- Load-bearing components made from extruded aluminium for greater stability and reliability



Efficiency

- Simple and rapid installation thanks to preassembled clamping blocks
- Installation without additional machining of the aluminium profile
- Pin module and cylindrical pin made from galvanised steel ensure added durability
- Requires no maintenance thanks to high-quality self-lubricating synthetic bush



Adjustment

- Adjustment mechanism integrated in the hinge roller
- Adjustment when fully assembled without undoing the fixing screws
- Continuous height and lateral adjustment possible when the door is closed

Clamp hinge for profiles with 15 / 20 leaf groove

		Roto				No
Version I	Natural silver	R01.1	_	anod.	1 Piece(s)	2009930
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	2009931
	Jet black	R06.2	RAL 9005	powd-c	1 Piece(s)	2009932
	Grey brown	R04.1	RAL 8019	powd-c	1 Piece(s)	2009933
	Special colour	SF	SF	_	1 Piece(s)	2009935
	Uncoated	R00.0	Roh	_	1 Piece(s)	2009934



INFO

Our butt hinges for aluminium are individually adapted to the system-specific groove on an aluminium profile. This enables system-specific versions to be produced in close collaboration with profile manufacturers upon request.

3.7.1 Spare parts

3.7.1.1 Cover cap set





Cover cap set, consisting of: 1 top cover cap with logo, 1 bottom cover cap with hole

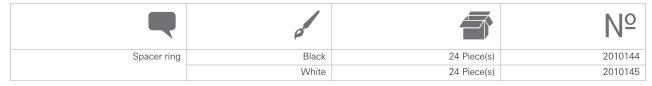
			NΘ
Cover cap set	Black	24 Piece(s)	2010152
	White	24 Piece(s)	2010153





3.7.1.2 Spacer ring





3.7.2 Drawings

3.7.2.1 Installation drawings



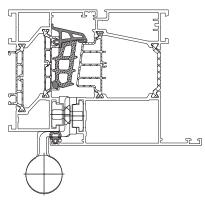
INFO

Installation examples for the aforementioned versions are shown here.

Installation examples for specific profile systems are available upon request.

Version I

Aluprof MB-86

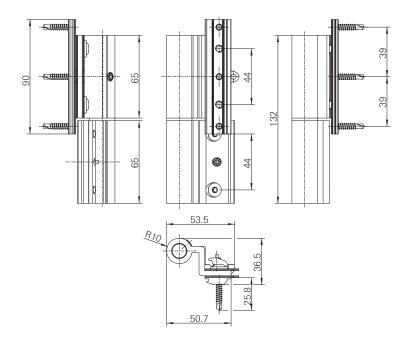




3.8 130 R









Product description

The Roto Solid B | 130 R two-part, clampable butt hinge is suitable for aluminium main doors, back doors and balcony doors up to a sash weight of 120 kg.

Butt hinges are in demand in door construction and are enjoying increasing popularity. Not only the appearance is crucial, but the functionality and stability too.

Roto Solid B | 130 R combines the visual advantages of a butt hinge with the benefits of a clamp hinge.



Advantages at a glance

- For aluminium main doors, back doors and balcony doors up to 120 kg
- Can be used in various recessed profiles with 15/20 Euro-groove and V.01 frame groove
- Suitable for inward and outward opening doors

Adjustment range

■ Laterally adjustable: ±1.5 mm

Product characteristics



Design

- Slimline butt hinge design
- Available in various RAL colours and electrolytically anodised surfaces
- Custom coating of unpainted hinges possible at the window and door manufacturer



- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Simple and rapid installation thanks to clampable frame component and screw-on leaf component
- Standardised drilling diameter additionally streamlines production



Comfort

- Certified service life of 200,000 opening cycles in accordance with DIN EN 1935
- Axis pin made of stainless steel supports durability
- Maintenance-free thanks to high-quality self-lubricating bearing bush



Adjustment

Simple alignment of the shadow groove using packing plates



	8	Roto	3	=		No
Version II	Natural silver	R01.1	_	anod.	1 Piece(s)	816570
	Silver	R01.5	_	anod.	1 Piece(s)	834669
	Grey brown	R04.1	RAL 8019	powd-c	1 Piece(s)	816569
	Jet black	R06.2	RAL 9005	powd-c	1 Piece(s)	816568
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	816000
	Uncoated	R00.0	Roh	_	1 Piece(s)	834113



3.8.1 Drawings

3.8.1.1 Installation drawings



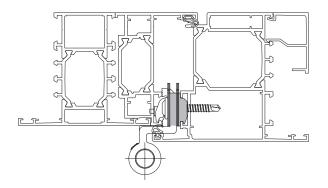
INFO

Installation examples for the aforementioned versions are shown here.

Installation examples for specific profile systems are available upon request.

Version II

Sapa Avantis 70



Roto Solid S





Profile overview		Accessories	170
For PS 23, PS 27, 150 P	112	Drawings	17
For 89 NN, 89 NN-SR, 105 NN, 105 NN-SR, 117 NN, 117 H, 118 Z, 118 D	116		
For 80 ATB, 120 ATB	124	117 NN	
		Spare parts	174
PS 23		Accessories	174
Spare parts	132	Drawings	179
Accessories	133		
Drawings	134	117 H	
		Spare parts	179
PS 27		Accessories	180
Spare parts / individual parts	139	Drawings	182
Accessories	140		
Drawings	142	118 Z	
		Spare parts	186
150 P		Accessories	186
Individual components	145	Drawings	188
Accessories	147		
Drawings	149	118 D	
		Spare parts	19
89 NN		Accessories	19
Spare parts	152	Drawings	193
Accessories	153		
Drawings	154	80 ATB	
		Spare parts	197
89 NN-SR		Accessories	197
Spare parts	157	Drawings	202
Accessories	157		
Drawings	159	120 ATB	
		Spare parts	207
105 NN		Accessories	207
Spare parts	164	Drawings	213
Accessories	164		
Drawings	166		
105 NN-SR			
Spare parts	169		

4 Roto Solid S – Screw-on hinges

4.1 Profile overview



INFO

The profile combinations shown in the overview are a selection of the possible combinations. Other profile combinations are available upon request.

4.1.1 For PS 23, PS 27, 150 P



Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
luplast energeto neo AD	060×05	160x33	34	17 – 20.5	PS 23
		160x35	42	17 – 20.5	PS 27
					150 P
	160×01	160x33	34	17 – 20.5	PS 23
	160×02	160x35	42	17 – 20.5	PS 27
	160x45				150 P
	160x46				
	160×01	170x39	42	20 – 23.5	PS 27
	160×02				150 P
luplast IDEAL 4000	140×00	140x30	42	17 – 20.5	PS 27
		140x31			
		140×32			
		140x33			
	110.01	140x35			1505
	140×01	140x33	39	17 - 20.5	150 P
	140×02	140x30 140x30	31	17 – 20.5 17 – 20.5	PS 23 150 P
			39	17 – 20.5	1501
		140x33 140x33	42	17 – 20.5	PS 27
			42	17 – 20.5	F3 27
	1.4000	140x35	24	17 20 5	DC 22
	140×03	140x32 140x32	34	17 – 20.5 17 – 20.5	PS 23 150 P
			39	17 – 20.5	1501
		140x33 140x30	42	17 – 20.5	PS 27
			42	17 – 20.5	F3 27
		140x31			
		140x32			
		140x33			
		140x35			
	140×07	140x28	42	17 – 20.5	PS 27
		140x29			
		140x30			
		140x31			
		140x32			
		140x33			
		140x35			
	140.00	140x38	10	17 00 5	B0.07
	140×08	140×34	42	17 – 20.5	PS 27
		140x38			
	140×47	140x33	42	17 – 20.5	PS 27



Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
Aluplast IDEAL 7000	170×03	170x33	39	20 – 23.5	150 P
	170×02	170x30	42	23 – 26.5	PS 27
	170×03	170x33			
		170x35			
		170x39			
Aluplast IDEAL 8000	180×05	180x30	42	23 – 26.5	PS 27
	1.55.052	180x31			
Deceuninck Arcade AD	LA 710	TSA 720	34	20 – 23.5	PS 23
2 cccac.x, 1. caac 7 t.2	21710	10/1/20	42	20 – 23.5	PS 27
	LA 7160	HA 7130	34	20 – 23.5	PS 23
		HA 7140			
		HA 7130	42	20 – 23.5	PS 27
		HA 7140	42	20 – 23.5	PS 27
					150 P
Deceuninck Eforte AD	LLE 184	TSLE 284	34	20 – 23.5	PS 23
			42	20 – 23.5	PS 27
	LLE 684	TSLE 384	34	20 – 23.5	PS 23
		TSLE 484	41	20 – 23.5	150 P
		TSLE 384	42	20 – 23.5	PS 27
		TSLE 484			
		TSLE 584			
Deceuninck Elegant MD	5102	5115	34	17 – 20.5	PS 23
		5116			
		5151			
		5152			
		5152	42	17 – 20.5	PS 27
		5116	72	17 20.0	1027
		5151			
		5152			
		5115	42	17 – 20.5	150 P
		5116			
		5151			
	5103	5151	34	17 – 20.5	PS 23
			42	17 – 20.5	PS 27
					150 P
Deceuninck Zendow 3000	3001	3049	39	17 – 20.5	150 P
		3049	39	20 – 23.5	PS 27
		3052			
		3069			
Deceuninck zendow#neo	5001	5511	42	17 – 20.5	PS 27
	5002	5512			
GEALAN-LINEAR MD	7001	7082	34	14 – 17.5	PS 23
	7005	7084	41	14 – 17.5	150 P
		7088	42	14 – 17.5	PS 27
		7090			
GEALAN S 8000 IQ AD	8008	8078	39	14 – 17.5	PS 27
		8081			150 P
		8076	40	14 – 17.5	150 P
	8011	8076	39	14 – 17.5	PS 27
					150 P
	8013	8042	39	14 – 17.5	150 P
			42	14 – 17.5	PS 27





Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
GEALAN S 9000 IQ AD	6016	6025	42	17 – 20.5	PS 27
	6802	6025	42	17 – 20.5	PS 27
		6039			
		6065			
KBE 76 AD	76101	76206	42	17 – 20.5	PS 27
Kömmerling 76 AD	76102				150 P
Trocal 76 AD	76103				
	76102	76204	42	17 – 20.5	PS 27
		76205			
		76207			
	76106	76204			
		76206			
KBE 76 MD	76171	76206	42	17 – 20.5	PS 27
Kömmerling 76 MD	76172	76205			
Trocal 76 MD		76206			
Trocal 70 MD		76207			
		76272			
KBE 88 MD	88172	88274	41	20 – 23.5	150 P
	00172	88276	42	20 – 23.5	PS 27
Kömmerling 88 MD		002/0			
Trocal 88 MD	1537015	1537235	42	20 – 23.5	PS 27
Rehau S 969 Synego AD	1537015		42	20 – 23.5	PS 27
		1537305			
		1537315			
	1537635	1537305	39	20 – 23.5	PS 27
		1537535			
		1537545			
	1539005	1537295	42	20 – 23.5	PS 27
	1539025	1537235	42	20 – 23.5	PS 27
		1537295			
Rehau S 969 Synego MD	1539140	1537235	42	20 – 23.5	PS 27
		1537295			
		1537305			
		1537315			
Rehau S 980 Geneo MD	1532146	1532015	42	23 – 26.5	PS 27
	1532305	1562055			
Rehau S 799 Brilliant Design	550000	550170	40	17 – 20.5	150 P
			42	17 – 20.5	PS 27
	550004	550160	40	17 – 20.5	150 P
	550008		42	17 – 20.5	PS 27
	550010	550160	41	17 – 20.5	150 P
		550160	42	17 – 20.5	PS 27
		550170			
	550420	550160	42	17 – 20.5	PS 27
	550710				
Salamander bluEvolution 73 AD	HP1220	HP1540	39	14 – 17.5	150 P
		HP1550			
		HP1560			
		HP1730			
		HP1550	39	14 – 17.5	PS 27
		HP1560			



Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
Salamander bluEvolution 82 MD	HO9020	HP8580	42	20 – 23.5	PS 27
	HO9030	HP8530	34	20 – 23.5	PS 23
		HP8540			
		HP8550	41	20 – 23.5	150 P
		HP8530	42	20 – 23.5	PS 27
		HP8540			
		HP8550			
Salamander bluEvolution 92 MD	170420	171040	41	20 – 23.5	150 P
	1.5.25	371040			
	170420	171040	42	20 – 23.5	PS 27
		171040	42	20 – 23.5	1327
	170423	074040			
5 1 7 70 4 8	170420	371040	0.4	17 00 5	DO 00
Salamander greenEvolution 76 AD	760003	761008	34	17 – 20.5	PS 23
			42	17 – 20.5	PS 27
					150P
	760011	761008	34	17 – 20.5	PS 23
		761010	42	17 – 20.5	PS 27
		761014			150P
		761015			
Salamander greenEvolution 76 MD	760004	761014	34	17 – 20.5	PS 23
Salamander greenzvolution 70 MD	700004	701014	42	17 – 20.5	PS 27
			72	17 20.0	
	700010	701000	24	17 20 5	150P
	760012	761008	34	17 - 20.5	PS 23
		761010	42	17 – 20.5	PS 27
		761014			150P
		761015			
Schüco Corona CT 70 AD	8564	8577	39	20 – 23.5	PS 27
	8597	8583			150 P
Schüco LivIng 82 AD	9421	9432	34	17 – 20.5	PS 23
3 .		9433			
		9452			
		9553			
		9432	42	17 – 20.5	150 P
		9433			
		9452			
		9543			
		9432	42	20 – 23.5	PS 27
		9433	-		1.22.
		9452			
		9453			
Schüco LivIng 82 NL AD	9490	9433	34	17 – 20.5	PS 23
			42	17 – 20.5	150 P
			42	20 – 23.5	PS 27
VEKA Softline 70 AD	101.201	103.202	39	18.5 – 22	PS 27
	101.208	103.241	34	18.5 – 22	PS 23
			39	17 – 20.5	150 P
				18.5 – 22	PS 27
		103.242	42	18.5 – 22	PS 27
		105.232			
	101.214	103.242	39	18.5 – 22	PS 27
		103.241	42	18.5 – 22	PS 27
		105.232			
VEKA Softline 70 MD	101.280	103.279	42	18.5 – 22	PS 27



Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
VEKA Softline 76 AD	101.351	103.385	39	17 – 20.5	PS 27
	101.354	105.400	39	17 – 20.5	PS 27
					150 P
VEKA Softline 76 MD	101.351	103.385	39	17 – 20.5	150 P
VEKA Softline 82 MD	101.291	103.345	42	17 – 20.5	PS 27
		105.380			
		105.381			
VEKA Softline 82 NL AD	101.331	103.345	42	17 – 20.5	PS 27
		105.380			
	101.332	103.345	39	17 – 20.5	PS 27
		105.380			

4.1.2 For 89 NN, 89 NN-SR, 105 NN, 105 NN-SR, 117 NN, 117 H, 118 Z, 118 D

Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
aluplast energeto neo AD	060x05	160x33	32	16.5 – 19	89 NN
	160×01	160×35	37	16.5 – 19	105 NN
	160×02		42	16.5 – 19	117 NN
	160×45				
	160×46				
	160×01	170×39	34	23 – 25.5	89 NN
	160×02		37	23 – 25.5	105 NN
			42	23 – 25.5	117 NN



Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
Aluplast IDEAL 4000	140x00	140×30	37	19 – 21.5	105 NN
		140x31	42	18 – 20.5	117 NN
		140×32			
		140x33			
		140×35			
	140x02	140x31	32	19 – 21.5	89 NN
		140×32			
		140×30	37	19 – 21.5	105 NN
		140×32			
		140×33			
		140×35			
	140x03	140×30	32	19 – 21.5	89 NN-SR
			34	19 – 21.5	89 NN
		140x33	30.5	17.5 – 20	118 Z
		140x38			118 D
		140x33	32	19 – 21.5	105 NN-SR
		140×28	37	19 – 21.5	105 NN
		140x30			
		140×31			
		140×32			
		140×33			
		140×35			
		140x38			
		140x30	42	18 – 20.5	117 NN
		140x31	42	10 - 20.0	117 1111
		140×32			
		140×33			
		140x35			105.111
	140x07	140×28	37	19 – 21.5	105 NN
		140×30			
		140x31			
		140x32			
		140x33			
		140x30	37	19 – 21.5	105 NN-SR
		140x30	42	18 – 20.5	117 NN
		140x31			
		140x32			
		140x33			
		140x35			
	140x08	140×34	37	19 – 21.5	105 NN
		140×38	42	18 – 20.5	117 NN
	140x10	140×30	29	19 – 21.5	89 NN-SR
		140×33			
		140x33	37	19 – 21.5	105 NN
	140x55	140×35	45	-7.75 – -9.25	117 H
luplast IDEAL 7000	170x55	170×31	40	-2.75 – -4.25	117 H
eceuninck Eforte AD	LLE 684	HLE 384	30.5	20 – 22.5	118 Z
		HLE 484			118 D
		HLE 585	37	21.5 – 24	105 NN
		HLE 484	32	21.5 – 24	89 NN
			42	21 – 23.5	117 NN





Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
Deceuninck Elegant MD	5102	5115	32	17.5 – 20	89 NN
		5116	37	17.5 – 20	105 NN
		5151			
		5151	30.5	17.5 – 20	118 Z
					118 D
			42	16.5 – 19	117 NN
	5103	5151	30.5	17.5 – 20	118 Z
					118 D
			32	17.5 – 20	89 NN
			37	17.5 – 20	105 NN
			42	16.5 – 19	117 NN
	5136	5116	45	-9.75 – -11.25	117 H
Deceuninck Elegant 115 AD	5136	5116	45	-9.75 – -11.25	117 H
	5138	5713	45	-6.25 – -7.75	117 H
	5139				
	5140				
	5145				
Deceuninck Zendow 3000	3000	3048	27	19 – 21.5	89 NN-SR
	3001	3042	32	19 – 21.5	89 NN
		3049			
		3069			
		3048	37	19 – 21.5	105 NN
		3049			
		3068			
		3069			
	3008	3048	32	19 – 21.5	105 NN-SR
	3009	3048	27	19 – 21.5	89 NN-SR
		3052			
		3048	32	19 – 21.5	105 NN-SR
	3014	3052	32	19 – 21.5	89 NN
	3016	3048	32	19 – 21.5	89 NN
		3052			
		3048	37	19 – 21.5	105 NN
	3017	3048	37	19 – 21.5	105 NN
	3018				
	3019 – 21.5				
Deceuninck zendow#neo	5001	5511	29	19 – 21.5	89 NN
		5512			
		5513			
		5202	37	19 – 21.5	105 NN-SR
	5002	5511	29	19 – 21.5	89 NN
		5512			
	5005	5513 5049	37	19 – 21.5	105 NN-SR
	3003		37	19 – 21.5	105 1414-511
	E000	5069 5512	27	10 21 5	OO NINI CD
	5009		21	19 – 21.5	89 NN-SR
		5048	27	10 01 5	10E NN CD
		5512	37	19 – 21.5	105 NN-SR
OF ALANI LINISADA D	7001	5048	00	45.5.40	00 8121
GEALAN-LINEAR MD	7001	7082	32	15.5 – 18	89 NN
	7005	7084			105 NN
		7088	42	15.5 – 18	117 NN
		7090			



Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
GEALAN S 8000 IQ AD	5504	8076	32	16.5 – 19	105 NN-SR
		8081	37	15.5 – 18	105 NN
	5507	8081	32	16.5 – 19	89 NN-SR
	8001	8076	32	16.5 – 19	105 NN-SR
		8081	37	15.5 – 18	105 NN
	8003	8094	34	16.5 – 19	89 NN
		8078	37	16.5 – 19	105 NN
		8081			
		8084			
	8008	8076	32	16.5 – 19	105 NN
		8081	37	15.5 – 18	89 NN
	8011	8076	30.5	15 – 17.5	118 Z
	0011	0070	00.0	10 17.0	118 D
		8042	32	15.5 – 18	89 NN
			02	10.0 10	03 1414
		8076 8078	34	15.5 – 18	89 NN
			34	15.5 – 16	09 1414
		8081	0.7	10.5 10	105 NINI
		8042	37	16.5 – 19	105 NN
		8076			
		8081			
	8012	8042	30.5	15 – 17.5	118 Z
		8076			118 D
			37	16.5 – 19	105 NN
	8016	8042	45	-6.25 – -7.75	117 H
	8018	8042	42	15.5 – 18	117 NN
		8076			
		8078	45	-6.25 – -7.75	117 H
	8021	8042	45	-6.25 – -7.75	117 H
	8023				
	8307				
	8055	8775	30.5	15 – 17.5	118 Z
					118 D
	8016	8076	32	16.5 – 19	105 NN
	8057				
	8058				
	8059 8017	8042	32	16.5 – 19	105 NN
		OU42	32	10.5 – 19	NINI CUT
	8018				
	8019				
	8018	8042	37	16.5 – 19	105 NN
	8043				



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Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
GEALAN S 9000 MD	6002	6003	29	17.5 – 20	89 NN
	6016	6025	30.5	17.5 – 20	118 Z
					118 D
			32	17.5 – 20	89 NN
			42	18 – 20.5	117 NN
		6025	37	17.5 – 20	105 NN
		6027			
	6027	6806	45	-7.75 – -9.25	117 H
	6802	6025	37	17.5 – 20	105 NN
		6065			
		6025	42	18 – 20.5	117 NN
		6039			
		6065			
		6027	45	-7.75 – -9.25	117 H
	6804	6067	45	-7.75 – -9.25	117 H
	6807	6033		7.75 -0.25	
	6809 6808	6027			
	6806	6025	37	17.5 – 20	105 NN
	0000	0020	42	18 – 20.5	117 NN
	6820	6027	45	-7.75 – -9.25	117 NN
		0027	70	7.750.20	11711
	6842 6842	6806			
	6844	6067			
KBE 76 AD	76101	76204	37	17.5 – 20	105 NN-SR
	70101		37	17.5 - 20	103 1111-311
Kömmerling 76 AD		76206			
Trocal 76 AD		76207			
		76204	37	17.5 – 20	105 NN
	76101	76206	30.5	17.5 – 20	118 Z
	76102	76207			118 D
	76103	76204	32	17.5 – 20	89 NN
		76205			
		76206	37	17.5 – 20	105 NN
		76207			
		76206	42	16.5 – 19	117 NN
		76207			
	76102	76205	37	17.5 – 20	105 NN
	76106	76204	37	17.5 – 20	105 NN
		76206	42	16.5 – 19	117 NN
	76108	76205	45	-6.25 – -7.75	117 H
	76109				
KBE 76 MD	76171	76206	37	17.5 – 20	105 NN
Kömmerling 76 MD	, 51, 1		,	17.5 20	
_		76272 76272	42	16.5 – 19	105 NN-SR 117 NN
Trocal 76 MD	76172	76272	37	17.5 – 20	105 NN
KBE 88 MD	88172	88274	30.5	20 – 22.5	118 Z
	00172		50.0	20 = 22.0	
Kömmerling 88 MD		88275			118 D
Trocal 88 MD		88276			
		88277			
		88274	32	21.5 – 24	89 NN
		88276	37	21.5 – 24	105 NN
		88274	42	21 – 23.5	117 NN
		88275			
		88276			
		88277			



Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
Rehau S 969 Synego	1537015	1537315	30.5	20 – 22.5	118 Z
					118 D
		1537235	32	19 – 21.5	89 NN
		1537315			
		1537235	37	19 – 21.5	105 NN
		1537295	42	21 – 23.5	117 NN
		1537305			
	1520005	1537315	07	10 01 5	10F NINI
	1539005	1537295	37 42	19 – 21.5 19 – 21.5	105 NN 117 NN
	1539025	1537235	32	19 – 21.5	89 NN
	1333023		02	13 – 21.5	03 1111
		1537295	07	10 01 5	10F NINI
		1537235	37	19 – 21.5	105 NN
		1537295			
	150005	1537295	42	19 – 21.5	117 NN
	1539035 1539045	1537295 1537305	37 45	19 – 21.5 -2.75 – -4.25	105 NN
Rehau S 980 Synego MD	532305	532165	45	-2.754.25 24 - 26.5	117 H 117 NN
neriau 3 900 Syriego iviD	552505		42	24 – 20.5	117 ININ
D. L 0.700 D. W D	550000	532175	00	10 01 5	00 NINI
Rehau S 799 Brilliant Design	550000	550390	32	19 – 21.5	89 NN
		550400			
		550510			
		550400	32	19 – 21.5	105 NN
		550510			
		550160	37	19 – 21.5	105 NN
		550170			
	550010	550160	30.5	17.5 – 20	118 Z
		550170			118 D
		550160	37	19 – 21.5	105 NN
	550420	550160	37	19 – 21.5	105 NN
		550170	42	18 – 20.5	117 NN
	550570	550160	32	17.5 – 20	105 NN-SR
	550680	550510	32	19 – 21.5	89 NN
		550160	32	17.5 – 20	105 NN-SR
			37	19 – 21.5	105 NN
	550730	550160	37	19 – 21.5	105 NN
	550733	550160	37	19 – 21.5	105 NN
		550170			
Salamander bluEvolution 73 AD	HP1220	HP1540	37	16.5 – 19	105 NN
		HP1550			
		HP1560			
		HP1730	42	16.5 – 19	117 NINI
		HP1550	44	10.0 – 18	117 NN
2-1	1100000	HP1560	27	10 01 5	105 NIN
Salamander bluEvolution 82 AD	HO8020	HP8550	37	19 – 21.5	105 NN
	HO8030	HP8540	30.5	19 – 21.5	118 Z
		HP8550			118 D
		HP8560			
		HP8550	37	19 – 21.5	105 NN
		HP8550	42	19 – 21.5	117 NN



Profile system

Salamander bluEvolution 82 MD	HO9020	HP8540	30.5	19 – 21.5	118 Z
		HP8550			118 D
		HP8560			
		HP8550	37	19 – 21.5	105 NN
	HO9030	HP8550	30.5	19 – 21.5	118 Z
					118 D
			37	19 – 21.5	105 NN
Salamander bluEvolution 92 MD	170420	171030	30.5	20 – 22.5	118 Z
					118 D
		171020	32	21.5 – 24	89 NN
		171030	37	21.5 – 24	105 NN
		171040			
		371040			
		171030	42	21 – 23.5	117 NN
		371040			
Salamander greenEvolution 76 AD	760003	761008	32	16.5 – 19	89 NN
			37		105 NN
			_	17 – 20.5	105 P
	760011	761008	32	16.5 – 19	89 NN
		761010	37		105 NN
		761014	42		117 NN
		761015	-	17 – 20.5	105 P
		701015	30.5	17 – 20.5	118 Z
					118 D
Salamander greenEvolution 76 MD	760004	761014	32	16.5 – 19	89 NN
			37		105 NN
			_	17 – 20.5	105 P
	760012	761008	32	16.5 – 19	89 NN
		761010	37		105 NN
		761014	42		117 NN
		761015	_	17 – 20.5	105 P
		701015	30.5	17 – 20	118 Z
					118 D
Schüco Corona CT 70 AD	8558	8577	32	19 – 21.5	105 NN
	8564	8563	30.5	20 – 22.5	118 Z
					118 D
	8595	8577	29	19 – 21.5	89 NN
	8596	8509	32	19 – 21.5	89 NN
		8563			
		8577	37	19 – 21.5	105 NN
		8583			
	8597	8577	32	19 – 21.5	105 NN
		8577	42	19 – 21.5	117 NN
		8583			
	8852	8583	37	19 – 21.5	105 NN
		8577			
Schüco Corona CT 70 MD	9956	9108	30.5	19 – 21.5	118 Z
					118 D
	9038	8508	32	19 – 21.5	105 NN-SR
	9950	9108			

Frame number Leaf number Presetting

Overlap area





Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
Schüco Livlng 82 AD	942	9432	30.5	19 – 21.5	118 Z
		9433			118 D
		9452	32	19 – 21.5	89 NN
			42	19 – 21.5	117 NN
		9453	0.7	10 01 5	10F NINI
		9433	37	19 – 21.5	105 NN
		9452			
		9453			
	9950	9108	28	19 – 21.5	89 NN-SR
	9956				
VEKA Softline 70 AD	101.208	103.241	27	19 – 21.5	89 NN
		103.242			
		102.232	37	19 – 21.5	105 NN
		102.233			
	101.000	103.241	0.7	10 01 5	405 NN
	101.209	103.242	37	19 – 21.5	105 NN
	101.214	103.241	27	19 – 21.5	89 NN
		103.242			
		105.232	30.5	19 – 21.5	118 Z
		105.233			118 D
		103.232	32	19 – 21.5	89 NN
		103.241	37	19 – 21.5	105 NN
		103.242			
		105.232			
		105.233			
	101.219	105.232	37	19 – 21.5	105 NN-SR
	101.238	105.232	37	19 – 21.5	105 NN-SR
	101.247	103.242	32	19 – 21.5	89 NN-SR
	101.277	103.279	37	19 – 21.5	105 NN
	111.240	105.232	37	19 – 21.5	105 NN-SR
		105.233			
VEKA Softline 70 MD	101.277	103.279	37	19 – 21.5	105 NN
/EKA Softline 76 AD	101.354	105.400	37	17 – 20.5	105 NN
VEKA Softline 76 MD	101.351	103.385	30.5	17.5 – 20	118 Z
	13.132.				118 D
			37	17 – 20.5	105 NN
			42	18 – 20.5	117 NN
/eka Softline 82 AD	101.293	103.345	32	19 – 21.5	89 NN
OLG COLUMN OF UP	101.200	103.345	30.5	17.5 – 20	118 Z
					118 D
		103.380	32	19 – 21.5	105 NN
	101.294	103.345	32	19 – 21.5	89 NN
	101.234	103.345	32	19 – 21.5	105 NN
			02	10 21.0	100 1414
		103.380			
		103.383			
	102.213	105.380	30.5	17.5 – 20	118 Z
					118 D
			32	19 – 21.5	105 NN



Profile system	Frame number	Leaf number	Presetting	Overlap area	Door hinge
VEKA Softline 82 MD	101.290	103.345	30.5	17.5 – 20	118 Z
	101.291				118 D
	102.310		32	19 – 21.5	89 NN
	102.311				
	101.290	103.345	32	19 – 21.5	105 NN
	102.310				
	102.311				
	101.291	103.345	37	19 – 21.5	105 NN
		105.380			
		103.345	42	18 – 20.5	117 NN
VEKA Softline 82 NL AD	101.332	105.381	45	-6.25 – -7.75	117 H
	101.333	103.346	45	-6.25 – -7.75	117 H
	102.336	105.381			
	102.331				



4.1.3 For 80 ATB, 120 ATB

Flush profiles

Profile system	Frame number	Leaf number	Flatness deviation	Screw for	Backing plate
				direct mounting	
Akotherm AT 600	2802	2878	89	_	23.4 8.25
	2879				
	2875	2878	62.5	_	23.4 8.25
Akotherm AT 730 HI-S	2426	2428	62.5	8 x 63	23.4 8.25
	2427	2427	62.5	8 x 63	_
	2501	2427	62.5	8 x 63	23.4 8.25
	2534				
	2502	2577	62.5	8 x 63	_
		2577	62.5	_	23.4 8.25
	2575	2577	62.5	_	23.4 8.25
	2576	2578	62.5	_	23.4 8.25
	2700	2577	62.5	8 x 63	23.4 8.25
Akotherm AT 740 SI	1418	1426	62.5	8 x 63	_
		1437			
	1422	1427	62.5	8 x 63	23.4 8.25
	1425	1420	62.5	8 x 63	-
	1120	1427	62.5	8 x 63	
	1426	1428	62.5	8 x 68	23.4 8.25
	1429	2502	89	-	23.4 8.25
	1430	1437	84	8 x 63	-
	1437				
	1502	1417	62.5		23.4 8.25
	1502		02.5	_	23.4 8.25
		1427			
		1436	62.5	8 x 63	_
		2502	89	_	23.4 8.25
Aliplast Ecofutural	EF414	EF425	62.5	8 x 63	_
Aliplast Econoline	EL014X	EL024X	62.5	_	23.4 8.25
Aliplast Futural	FT015	FT024	62.5	_	23.4 8.25
Aliplast Green Star	GT414	GT425	62.5	8 x 63	_
	GT415	GT424	62.5	8 x 63	_
Aliplast Imperial	IP014	IP025	62.5	8 x 63	23.4 8.25
	IP015	IP024	62.5	_	23.4 8.25
	IP218	IP220	62.5	_	23.4 8.25
	IP814	IP825	62.5	_	_
Aliplast Superial	SP014	SP025	62.5	8 x 63	23.4 8.25



Profile system	Frame number	Leaf number	Flatness deviation	Screw for	Backing plate
				direct mounting	
Aliplast Triline	TL214	TL224	62.5	-	23.4 8.25
	TL216				
	TL214	TL225	62.5	_	23.4 8.25
luK b-Quick	P-19-A442	P-19-A242	67.5	_	_
luK So Easy	P-B88-A101	P-B88-A2020	62.5	8 x 63	_
ΔluK Triton	P-B88-A1070	P-B88-A2070	62.5	8 x 63	_
	P-B88-A1071	P-B88-A2070	62.5	8 x 63	23.4 8.25
JuK Triton	P-03-124	P-03-224	62.5	_	23.4 8.25
	P-03-125	P-03-225	62.5	_	23.4 8.25
	P-03-224				
	P-04-A101	P-03-A213	62.5	8 x 63	_
	P-03-A010	P-03-A214	62.5	8 x 63	_
lumil M11000	M11010	M11438	62.5	_	_
	M11014	M11082	62.5	_	-
	M11066				
	M11086	M11082	62.5	_	23.4 8.25
		M11134			
		M11084	62.5	_	_
	M11088	M11082	62.5	_	_
		M11084			
		M11454			
	N444500	M11464	00.5	0.00	00.4.0.05
	M11586	M11582	62.5	8 x 63	23.4 8.25
		M11636			
	M15078	M15182	62.5	_	23.4 8.25
	M62514	M11082	62.5	_	23.4 8.25
L I MDC7	M62518	M11134	62.5		23.4 8.25
lumil MD67	S67586	S67032	62.5	_	_
		S67582			
		S67584			
lumil SD 95	S95002	S95004	62.5	_	23.4 8.25
		S95006			
luprof MB-45	K413914X	K413916X	62.5	8 x 25	21.5 x 15.5
		K415225X	62.5	8 x 25	21.5 x 15.5
		K415226X			
	K415219X	K413915X	62.5	8 x 25	21.5 x 15.5
		K4139156			
	K430034X	K430035X	62.5	8 x 25	21.5 x 15.5
		K430036X			
luprof MB-59S	K58154X	K518168X	67.5	_	23.4 8.25
Juprof MB-60	008052d	008083d	62.5	_	23.4 8.25
•	008055d				
	008052d	008084d	89	_	
	008085d	5555514			
	008056d	008084d	62.5	_	
	K518055X	K518083X	62.5		
	K910099V		02.0		_
	VE40050\(\alpha\)	K518337X	CO F		
	K518056X	K518084X	62.5	_	_
		K518338X			
	K518387X	K518390X	62.5	8 x 63	23.4 8.25

Roto Solid



Profile system	Frame number	Leaf number	Flatness deviation	Screw for	Backing plate
				direct mounting	
Aluprof MB-70	9379	9382	62.5	_	-
	K520012X	K520140X	62.5	_	_
		K520158X			
		K520162X			
		K520142X	84	_	_
		K520156X			
		K520160X			
	KE20120V	K520162X	00 F		
	K520130X	K520158X	62.5	_	_
		K520162X			
	K520131X	K520156X	62.5	-	_
		K520160X			
		K520162X			
Aluprof MB-86	K518055X	K518083X	62.5	8 x 63	_
	K518056X	K518084X			
	K518105X	K518114X			
	K518106X	K518115X			
	K518612X	K518740X			
	K518612X	K518742X	89	_	_
	K518739X	K518746X			
		K518750X			
	K518730X	K518740X	62.5	8 x 63	_
		K518744X	62.5	8 x 63	23.4 8.25
		K518748X			
		K518758X			
		K518762X	62.5	8 x 63	
	K518731X	K518762X	62.5	-	_
Aluron ACS 50	k2402XX	k2501XX	62.5	_	15 x 21.5
	p2401XX	p2403XX	62.5	8 x 63	_
	p2411XX	p2415XX			
Aluron AS 52	p1401XX	p1403XX	62.5	_	23.4 8.25
	p14052XX	p1404XX			
GUTMANN GWD 050n	252102	250280	62.5	_	23.4 8.25
	252112				
	252180				
	462805				
	462806	252102	0.4		22.4.0.25
	252102	252102	84	_	23.4 8.25
	252112				
	462807				
	050000	050000	00 5		00 4 0 0 5



62.5

84

252280

252281

252281

252302

252302 252382 23.4 8.25

23.4 8.25



Profile system	Frame number	Leaf number	Flatness deviation	Screw for	Backing plate	
				direct mounting		
GUTMANN GWD 070n	270102	270280	62.5	-	23.4 8.25	
	270180					
	460805					
	270180	270280	62.5	8 x 63		
	270302	270280	62.5	8 x 63	23.4 8.25	
	270181	270181	62.5	_	_	
	270102	270181	89	8 x 63	_	
	270302					
	270382					
	270180	270282	62.5	_	23.4 8.25	
	270281	270282	62.5	_	-	
GUTMANN GWD 080n	280180	280281	62.5	8 x 63	23.4 8.25	
eroal D65	9358	9381	62.5	-	23.4 8.25	
10.00.1 D 00	9380		02.0		20.1 0.20	
	9383		89		23.4 8.25	
	9333	9491	62.5	8 x 68	25.4 6.25	
		3431	02.5	0 x 00		
	9380	0.400	00.5	0.00		
	9379	9493	62.5	8 x 68	_	
	14023	9491	62.5	8 x 68	_	
	14059					
eroal D72	21680	21681	62.5	8 x 63	_	
	21780	21765				
	21080	19541				
		21081				
	21079	21604	62.5	8 x 68		
	21680	21601				
	22023					
	22039					
	22040					
neroal D92	23060-02	23089	62.5	_	23.4 8.25	
HUECK A72	572160	572260	62.5	_	23.4 8.25	
	572161	572261				
	76410	76402				
IUECK Lambda DS 090	B840002	B842200	62.5	8 x 63	_	
	B842000	B842201				
		B842205				
		B842206				
Ponzio PE68	6762	6765	62.5	8 x 63	_	
Ponzio PE78N	7848	7865	62.5	8 x 73	_	
	7562	7564	62.5	8 x 63	_	
Reynaers CS 68	50869	51014	62.5	_	23.4 8.25	
			78	_	_	
	50028		89	_	21.5 x 15.5	
	50114					
	50120					
	50028					
	50125					
	50898	51026	62.5	_	21.5 x 15.5	
	005.0454	005.3026	89	_	21.5 x 15.5	
	005.2027					



Profile system

Trome system	Tranic namber	Loui Hullibei	i latiless actiation	00.000 101	Backing plate
				direct mounting	
Reynaers CS 77	008.0469.XX	008.2014.XX	62.5	-	-
	008.0569.XX				
	008.0428.XX		89	_	_
	008.3183.XX		89	_	_
	008.0589.XX	008.2026.XX	62.5	_	21.5 x 15.5
	008.1029.XX				
	008.1898.XX				
	008.3183.XX	100.0014	00.5		
	108.0869	108.0014	62.5	_	
	108.0028		89	_	_
	108.0125				
	108.0898	108.0026	62.5	_	_
	108.0869	108.1014	62.5	-	
Schüco ADS 50	395010	395090	62.5	-	23.4 x 8.25
Schüco ADS 60	396010	396090	62.5	_	23.4 x 8.25
	396020	396110	62.5	_	_
	396040				
	396150				
Schüco ADS 65	362080	362170	62.5	_	21.5 x 15.5
	361000	362200	62.5	_	21.5 x 15.5
	362100		62.5	_	21.5 x 15.5
	362100		67.5	-	_
	364010		67.5	_	21.5 x 15.5
Schüco ADS 70	358170	395530	62.5	8 x 63	23.4 8.25
		395540			
	372200	372310	62.5	8 x 63	23.4 8.25
	372220	372310	62.5	8 x 63	21.5 x 15.5
		372410	62.5	_	23.4 x 8.25
		395440	62.5	8 x 63	_
		395540	62.5	_	21.5 x 15.5
	372240	372340	62.5	-	_
		372370			
		395650			
	372280	372370	89	_	_
		395600			
		395650			
	372540	372610	62.5	8 x 63	21.5 x 15.5
	398670	395530	62.5	-	21.5 x 15.5
Schüco ADS 75.SI	371190	371280	62.5	8 x 63	21.5 x 15.5
0011400712070.01	371210	371280	62.5	-	21.5 x 15.5
	381870	395700	62.5	8 x 63	-
		381960	62.5	8 x 63	21.5 x 15.5
		381980	62.5	8 x 63	21.5 x 15.5
	381890	395760	62.5	8 x 63	_
		395720	67.5	-	_
Schüco ADS 70	372220	372310	62.5	8 x 63	21.5 x 15.5
		395530	67.5	_	21.5 x 15.5
	372240	372340	62.5	_	_
		395590	67.5	_	_
Yawal PBI 50N	01.11066	01.21071	62.5	_	23.4 8.25
Yawal TM 62HI	04.14067	0.424078	62.5	_	23.4 8.25
	04.14053	04.24092	62.5	_	23.4 8.25
	04.14007	04.04070			

Frame number Leaf number Flatness deviation Screw for



04.14067

04.24078

Backing plate



Profile system	Frame number	Leaf number	Flatness deviation	Screw for	Backing plate
				direct mounting	
Yawal TM 77HI	1.814.053	1.824.089	62.5	-	-
		1.824.092			
	1.814.067	1.824.078	62.5	_	23.4 8.25
		1.824.084			
Yawal TM 77HI Prestige	14.14067.x	14.24080.x	78	_	23.4 8.25

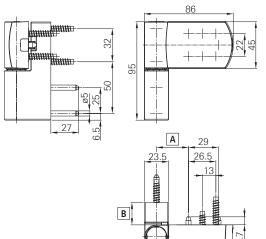
Recessed profiles

Profile system	Frame number	Leaf number	Flatness deviation	Packing plate	Screw for	Linkdrill II	Backing plate
					direct mounting		
Aliplast Imperial	IP011	IP023	62.5	9	_	-	23.4 8.25
Aliplast Superial	SP036	SP624					
GUTMANN CORA	CF62.25	CF77.25	78	17	_	-	_
Schüco ADS 70	372540	372700	62.5	10	-	-	23.4 8.25
Schüco ADS 75.SI	381870	382760	62.5	10	_	-	21.5 x 15.5
	371190	371370	62.5	10	_	-	21.5 x 15.5
	371210	371370	62.5	10	_	-	21.5 x 15.5
Yawal TM 62HI	04.11077	04.21093	62.5	9.4	_	-	23.4 8.25
Yawal TM 77HI	1.814.053	1.824.098	62.5	10	_	-	_



4.2 PS 23







[B] Overlap height



Product description

The Roto Solid S | PS 23 two-part screw-on hinge is suitable for timber and PVC entrance doors up to a sash weight of 80 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For timber and PVC entrance doors up to 80 kg
- With proven anti-lifting device to prevent unauthorised unhinging and jemmying
- Rapid and simple installation thanks to a high level of preassembly

32

20

■ Wide selection of colours

Adjustment range

- Laterally adjustable:
 - □ Presetting 31: +10 / -5 mm
 - \square Presetting 34: +2 / -5 mm
- Height adjustable: +5 / -1 mm
- Gasket compression adjustable: ±1 mm
- Additional gasket compression adjustment of ±0.75 mm by turning the eccentric frame hinge bush



Product characteristics



Design

- Wide selection of colours
- Powder-coated surface



Efficiency

- Rapid and simple installation thanks to a high level of preassembly
- Standardised drilling diameter reduces the installation effort
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durability



Security

- With proven anti-lifting device to prevent unauthorised unhinging and jemmying
- Sash hinge cover specially secured to prevent removal



Comfort

- Low-maintenance powder-coated surface
- Maintenance-free thanks to high-quality self-lubricating PVC bush



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment when fully assembled without undoing the fixing
- Readjustment is simple and can be carried out by just one person
- With additional gasket compression adjustment



Presetting 31 (screws per hinge with overlap height 14 - 17.5: $2x 6.3 \times 26$ and $4x 6.3 \times 40$; screws per hinge with overlap height ≥ 17 : $2x 6.3 \times 26$ and $4x 6.3 \times 50$)

 ⊕		Roto			1
14 – 17.5	Natural silver	R01.1	_	1 Piece(s)	202
	Stainless steel appearance	R01.23	-	1 Piece(s)	200
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	49
	Dark brown	R04.6	RAL 8077	1 Piece(s)	49
	Jet black	R06.2	RAL 9005	1 Piece(s)	78
	Traffic white	R07.2	RAL 9016	1 Piece(s)	49
	Special colour	SF	SF	1 Piece(s)	49
17 – 20.5	Natural silver	R01.1	_	1 Piece(s)	202
	Titanium	R01.3	_	1 Piece(s)	62
	Stainless steel appearance	R01.23	-	1 Piece(s)	200
	Anthracite grey, matt	R02.2M	RAL 7016M	1 Piece(s)	202
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	49
	Black brown	R04.4	RAL 8022	1 Piece(s)	83
	Dark brown	R04.6	RAL 8077	1 Piece(s)	49
	Jet black, matt	R06.2M	RAL 9005M	1 Piece(s)	200
	Traffic white	R07.2	RAL 9016	1 Piece(s)	49
			RAL 9016	24 Piece(s)	49
	Special colour	SF	SF	1 Piece(s)	49
18.5 – 22	Stainless steel appearance	R01.23	_	1 Piece(s)	200
	Dark brown	R04.6	RAL 8077	1 Piece(s)	79
	Traffic white	R07.2	RAL 9016	1 Piece(s)	79
	Special colour	SF	SF	1 Piece(s)	200
20 – 23.5	Natural silver	R01.1	-	1 Piece(s)	202
	Stainless steel appearance	R01.23	_	1 Piece(s)	200
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	49
	Dark brown	R04.6	RAL 8077	1 Piece(s)	49
	Traffic white	R07.2	RAL 9016	1 Piece(s)	49
	Special colour	SF	SF	1 Piece(s)	49

Presetting 34 (screws per hinge with overlap height 14 – 17.5: 2x 6.3 x 26 and 4x 6.3 x 40; screws per hinge with overlap height \geq 17.5: 2x 6.3 x 26 and 4x 6.3 x 50)

<u></u> ⊕		Roto			Nο
14 – 17.5	Stainless steel appearance	R01.23	_	1 Piece(s)	2009370
	Dark brown	R04.6	RAL 8077	1 Piece(s)	492521
	Traffic white	R07.2	RAL 9016	1 Piece(s)	492522
	Special colour	SF	SF	1 Piece(s)	494619
17 – 20.5	Titanium	R01.3	_	1 Piece(s)	619180
	Stainless steel appearance	R01.23	-	1 Piece(s)	2009372
	Dark brown	R04.6	RAL 8077	1 Piece(s)	492563
	Traffic white	R07.2	RAL 9016	1 Piece(s)	492564
			RAL 9016	24 Piece(s)	535327
	Special colour	SF	SF	1 Piece(s)	494622
18.5 – 22	Stainless steel appearance	R01.23	-	1 Piece(s)	2009374
	Dark brown	R04.6	RAL 8077	1 Piece(s)	810936
	Traffic white	R07.2	RAL 9016	1 Piece(s)	810937
	Special colour	SF	SF	1 Piece(s)	2004694
20 – 23.5	Natural silver	R01.1	-	1 Piece(s)	2028259
	Titanium	R01.3	-	1 Piece(s)	824835
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009376
	Dark brown	R04.6	RAL 8077	1 Piece(s)	836591
	Jet black	R06.2	RAL 9005	1 Piece(s)	824836
	Traffic white	R07.2	RAL 9016	1 Piece(s)	836590
	Special colour	SF	SF	1 Piece(s)	494625

4.2.1 Spare parts

Cover cap set





Cover cap set, consisting of: 1 side cover, 1 cover cap

			No
Cover cap set	Black	24 Piece(s)	450378
	White	24 Piece(s)	450377

Fixing screw





Screw lengths are profile-related.

			No
Fixing screw	6,3x26	48 Piece(s)	450380
	6,3x40	48 Piece(s)	450381
		1000 Piece(s)	628901
	6,3x50	48 Piece(s)	450382
		1000 Piece(s)	628902
	6,3x60	1000 Piece(s)	821342



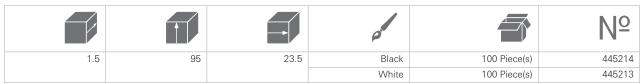
4.2.2 Accessories

4.2.2.1 Retaining screw

	i			Nο
Retaining screw	DIN 7500 M	M3x12	1000 Piece(s)	628899

4.2.2.2 Packing plates





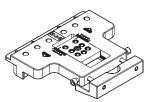


INFO

Use a maximum of 1 packing plate per hinge.

4.2.2.3 Jigs

Drilling jig



		No
Drilling jig	1 Piece(s)	447048

Telescopic jig

Consisting of: 3 drilling jigs, 1 telescopic holder for drilling jigs

		No
Telescopic jig	1 Set(s)	447051



4.2.2.4 Adjustment key





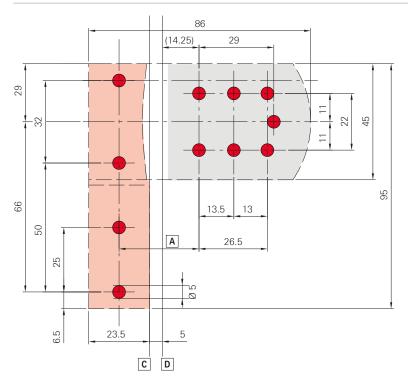
4.2.3 Drawings

4.2.3.1 Drilling pattern



INFO

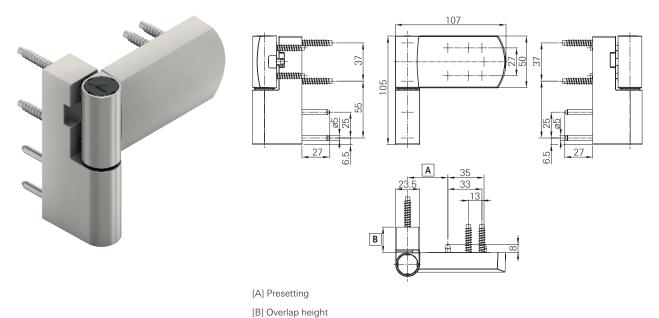
Example diagram. Drilling patterns are profile-related (available upon request).



- [A] Presetting
- [C] Edge of frame hinge body
- [D] Edge of sash profile body



4.3 PS 27





Product description

The Roto Solid S | PS 27 two-part screw-on hinge is suitable for timber and PVC entrance doors up to a sash weight of 120 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.





Advantages at a glance

- For timber and PVC entrance doors up to 120 kg
- With proven anti-lifting device to prevent unauthorised unhinging and jemmying
- Rapid and simple installation thanks to a high level of preassembly
- Wide selection of colours

Adjustment range

- Laterally adjustable:
 - □ Presetting 39: +10 / -5 mm
 - □ Presetting 42: +7 / -5 mm
- Height adjustable: +5 / -1 mm
- Gasket compression adjustable: ±1 mm
- Additional gasket compression adjustment of ±0.75 mm by turning the eccentric frame hinge bush



Product characteristics



Design

- Wide selection of colours
- Powder-coated surface



Comfort

- Low-maintenance powder-coated surface
- Maintenance-free thanks to high-quality self-lubricating PVC bush



Efficiency

- Rapid and simple installation thanks to a high level of preassembly
- Standardised drilling diameter reduces the installation effort
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durability



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment when fully assembled without undoing the fixing
- Readjustment is simple and can be carried out by just one person
- With additional gasket compression adjustment



Security

- With proven anti-lifting device to prevent unauthorised unhinging and jemmying
- SKG**-compatible with retrofit set
- Sash hinge cover specially secured to prevent removal



1 ⊕		Roto			Nο
14 – 17.5	Titanium	R01.3	-	1 Piece(s)	641937
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009377
	Anthracite grey	R02.2	RAL 7016	1 Piece(s)	897672
	Dark brown	R04.6	RAL 8077	1 Piece(s)	492574
	Bronze	R05.5	_	1 Piece(s)	896509
	Jet black	R06.2	RAL 9005	1 Piece(s)	784711
	Traffic white	R07.2	RAL 9016	1 Piece(s)	492575
	Special colour	SF	SF	1 Piece(s)	494626
17 – 20.5	Natural silver	R01.1	_	1 Piece(s)	2028265
	Stainless steel appearance	R01.23	-	1 Piece(s)	2009379
	Anthracite grey	R02.2	RAL 7016	1 Piece(s)	896412
	Dark brown	R04.6	RAL 8077	1 Piece(s)	492582
	Jet black	R06.2	RAL 9005	1 Piece(s)	782926
	Traffic white	R07.2	RAL 9016	1 Piece(s)	492584
	Cream	R07.3	RAL 9001	1 Piece(s)	492583
	Special colour	SF	SF	1 Piece(s)	494628
20 - 23.5	Natural silver	R01.1	_	1 Piece(s)	2028263
	Titanium	R01.3	_	1 Piece(s)	641884
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009387
	Anthracite grey	R02.2	RAL 7016	1 Piece(s)	896413
	Medium bronze	R05.3	_	1 Piece(s)	641905
	Dark brown	R04.6	RAL 8077	1 Piece(s)	492594
	Traffic white	R07.2	RAL 9016	1 Piece(s)	492596
	Special colour	SF	SF	1 Piece(s)	494630
23 – 26.5	Stainless steel appearance	R01.23	-	1 Piece(s)	2009389
	Dark brown	R04.6	RAL 8077	1 Piece(s)	492607
	Traffic white	R07.2	RAL 9016	1 Piece(s)	492608
	Special colour	SF	SF	1 Piece(s)	494632





Presetting 39 (screws per hinge: 6x 6.3 x 50)

<u> </u>	0	Roto	3		Nο
18.5 – 22	Stainless steel appearance	R01.23	_	1 Piece(s)	2009382
	Dark brown	R04.6	RAL 8077	1 Piece(s)	810941
	Traffic white	R07.2	RAL 9016	1 Piece(s)	810940
	Special colour	SF	SF	1 Piece(s)	2004695

Presetting 42 (screws per hinge with overlap height 14 – 17.5: $6x 6.3 \times 40$; screw per hinge with overlap height 17 – 23.5: $4x 6.3 \times 40$ and $2x 6.3 \times 50$; screws per hinge with overlap height \geq 23: $6x 6.3 \times 50$)

1 ⊕		Roto			N ^s
14 – 17.5	Natural silver	R01.1	_	1 Piece(s)	2028
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	492
	Dark brown	R04.6	RAL 8077	1 Piece(s)	492
	Medium bronze	R05.3	_	1 Piece(s)	572
	Traffic white	R07.2	RAL 9016	1 Piece(s)	492
	Special colour	SF	SF	1 Piece(s)	494
17 – 20.5	Natural silver	R01.1	-	1 Piece(s)	2028
	Titanium	R01.3	_	1 Piece(s)	619
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009
			-	24 Piece(s)	2009
	Anthracite grey	R02.2	RAL 7016	1 Piece(s)	819
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	492
	Dark brown	R04.6	RAL 8077	1 Piece(s)	492
	Medium bronze	R05.3	_	1 Piece(s)	572
	Bronze	R05.5	_	1 Piece(s)	896
	Jet black	R06.2	RAL 9005	1 Piece(s)	493
	Traffic white	R07.2	RAL 9016	1 Piece(s)	492
			RAL 9016	24 Piece(s)	492
	Special colour	SF	SF	1 Piece(s)	494
20 – 23.5	Natural silver	R01.1	_	1 Piece(s)	2028
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009
	Anthracite grey	R02.2	RAL 7016	1 Piece(s)	2004
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	492
	Dark brown	R04.6	RAL 8077	1 Piece(s)	492
	Medium bronze	R05.3	_	1 Piece(s)	572
	Bronze	R05.5	_	1 Piece(s)	896
	Traffic white	R07.2	RAL 9016	1 Piece(s)	492
			RAL 9016	24 Piece(s)	492
	Cream	R07.3	RAL 9001	1 Piece(s)	492
	Special colour	SF	SF	1 Piece(s)	494
23 – 26.5	Natural silver	R01.1	_	1 Piece(s)	2028:
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009
	Anthracite grey	R02.2	RAL 7016	1 Piece(s)	2008
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	492
	Dark brown	R04.6	RAL 8077	1 Piece(s)	492
	Bronze	R05.5	_	1 Piece(s)	896
	Jet black	R06.2	RAL 9005	1 Piece(s)	796
	Traffic white	R07.2	RAL 9016	1 Piece(s)	492
			RAL 9016	24 Piece(s)	620
	Special colour	SF	SF	1 Piece(s)	494



Presetting 42 (screws per hinge: 6x 6.3 x 50)

<u>∓</u>	0	Roto	3		No
17 – 20.5	Natural silver	R01.1	_	1 Piece(s)	2028268
	Dark brown	R04.6	RAL 8077	24 Piece(s)	567319
	Traffic white	R07.2	RAL 9016	24 Piece(s)	567190
18.5 – 22	Natural silver	R01.1	_	1 Piece(s)	2028871
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009385
			_	24 Piece(s)	2009386
	Dark brown	R04.6	RAL 8077	1 Piece(s)	796373
	Traffic white	R07.2	RAL 9016	1 Piece(s)	796374
			RAL 9016	24 Piece(s)	810944
	Special colour	SF	SF	1 Piece(s)	2004696
20 – 23.5	Dark brown	R04.6	RAL 8077	1 Piece(s)	806920
	Traffic white	R07.2	RAL 9016	1 Piece(s)	806923
			RAL 8016	24 Piece(s)	806924
	Special colour	SF	SF	1 Piece(s)	806919

SKG** retrofit set







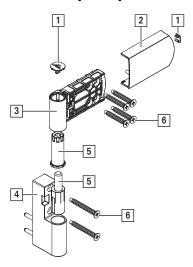
SKG** retrofit set, consisting of: 1 black cover cap, 1 white cover cap, 1 tapered bush, 2 locking pins, 1 installation instructions

		No
SKG** retrofit set PS 27	1 Piece(s)	862477





4.3.1 Spare parts / individual parts



- [1] Cover cap set
- [2] Sash hinge cover
- [3] Sash hinge
- [4] Frame hinge
- [5] Pin module set
- [6] Fixing screw

[1] Cover cap set





Cover cap set, consisting of: 1 side cover, 1 cover cap

			No
Cover cap set	Black	24 Piece(s)	450378
	White	24 Piece(s)	450377

[2] Sash hinge cover



-	3	Roto			Nο
Sash hinge cover	RAL 8077	R04.6	Dark brown	12 Piece(s)	601425
	RAL 9016	R07.2	Traffic white	12 Piece(s)	601424

[3] Sash hinge



	0	Roto			No
Sash hinge	Traffic white	R07.2	RAL 9016	6 Piece(s)	601434

[4] Frame hinge





[5] Pin module set



Pin module set, consisting of: 1 pin module, 1 sash hinge bush

				No
Pir	n module set	Black	24 Piece(s)	492613
		White	24 Piece(s)	492612

[6] Fixing screw



i

INFO

Screw lengths are profile-related.

	Tanana Tanana		Nº
Fixing screw	6,3x26	48 Piece(s)	450380
	6,3x40	48 Piece(s)	450381
		1000 Piece(s)	628901
	6,3x50	48 Piece(s)	450382
		1000 Piece(s)	628902
	6,3x60	1000 Piece(s)	821342

4.3.2 Accessories

4.3.2.1 Retaining screw

	i	Y		No
Retaining screw	DIN 7500 M	M3x12	1000 Piece(s)	628899



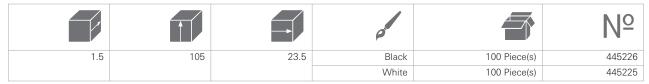
4.3.2.2 Locking pin



	40		No
Locking pin	SKG **	100 Piece(s)	224749

4.3.2.3 Packing plates





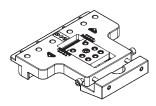
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INFO

Use a maximum of 1 packing plate per hinge.

4.3.2.4 Jigs

Drilling jig



		NΘ
Drilling jig	1 Piece(s)	447050

Telescopic jig

consisting of: 3 drilling jigs, 1 telescopic holder for drilling jigs

	9		No
Telescopic jig	_	1 Set(s)	447052



4.3.2.5 Adjustment key





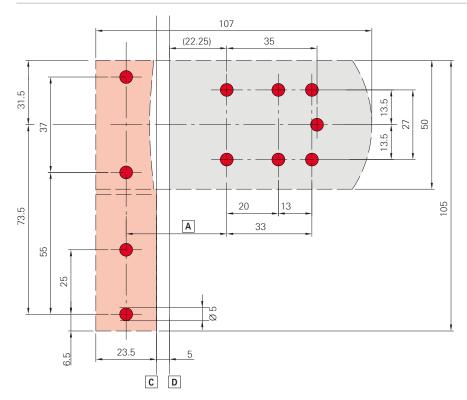
4.3.3 Drawings

4.3.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).

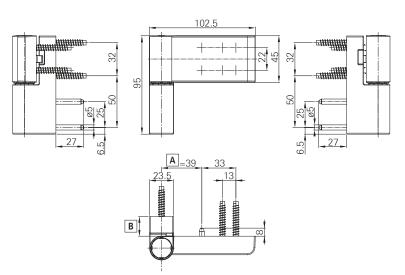


- [A] Presetting
- [C] Edge of frame hinge body
- [D] Edge of sash profile body



4.4 150 P





[A] Presetting

[B] Overlap height



Product description

The Roto Solid S | 150 P two-part screw-on hinge is suitable for timber and PVC entrance doors up to a sash weight of 110 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For timber and PVC entrance doors up to 110 kg
- With proven anti-lifting device to prevent unauthorised unhinging and jemmying
- Simple installation in just a few operation steps
- Wide selection of colours

Adjustment range

- Laterally adjustable: ±5 mm
- Height adjustable: +5 / -1 mm
- Gasket compression adjustable: ±1 mm
- Additional gasket compression adjustment of ±0.75 mm by turning the eccentric frame hinge bush

Product characteristics



Design

- Wide selection of colours
- Powder-coated surface



Comfort

- Low-maintenance powder-coated surface
- Maintenance-free thanks to high-quality self-lubricating PVC bush



Efficiency

- Simple installation in just a few operation steps
- Standardised drilling diameter reduces the installation
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durabili-



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment when fully assembled without undoing the
- Readjustment is simple and can be carried out by just one person
- With additional gasket compression adjustment



Security

- With proven anti-lifting device to prevent unauthorised unhinging and jemmying
- Sash hinge cover specially secured to prevent removal



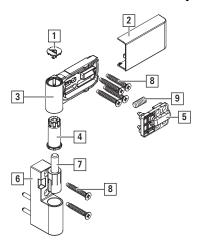
Presetting 39 (screws per hinge with overlap height 14 - 17.5: 6x 6.3 x 40; screw per hinge with overlap height \ge 17: 4x 6.3 x 40 and 2x 6.3 x 50)

		Roto			Nō
14 – 17.5	Natural silver	R01.1	_	1 Piece(s)	2028271
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009354
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	738103
	Dark brown	R04.6	RAL 8077	1 Piece(s)	738097
	Jet black	R06.2	RAL 9005	1 Piece(s)	799873
	Traffic white	R07.2	RAL 9016	1 Piece(s)	738083
	Special colour	SF	SF	1 Piece(s)	2006556
17 – 20.5	Natural silver	R01.1	_	1 Piece(s)	2028269
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009355
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	738099
	Black brown	R04.4	RAL 8022	1 Piece(s)	738123
	Dark brown	R04.6	RAL 8077	1 Piece(s)	738096
	Chocolate brown	R04.8	RAL 8017	1 Piece(s)	738114
	Clay brown	R04.9	RAL 8003	1 Piece(s)	738116
	Bronze	R05.5	_	1 Piece(s)	771408
	Jet black	R06.2	RAL 9005	1 Piece(s)	861941
	Traffic white	R07.2	RAL 9016	1 Piece(s)	738084
	Cream	R07.3	RAL 9001	1 Piece(s)	738109
	Special colour	SF	SF	1 Piece(s)	2006557
20 – 23.5	Natural silver	R01.1	_	1 Piece(s)	2028270
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009356
	Anthracite grey	R02.2	RAL 7016	1 Piece(s)	738121
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	738104
	Black brown	R04.4	RAL 8022	1 Piece(s)	738118
	Dark brown	R04.6	RAL 8077	1 Piece(s)	738098
	Chocolate brown	R04.8	RAL 8017	1 Piece(s)	738102
	Clay brown	R04.9	RAL 8003	1 Piece(s)	738117
	Bronze	R05.5	_	1 Piece(s)	771409
	Jet black	R06.2	RAL 9005	1 Piece(s)	861942
	Traffic white	R07.2	RAL 9016	1 Piece(s)	738095
	Cream	R07.3	RAL 9001	1 Piece(s)	738110
	Special colour	SF	SF	1 Piece(s)	2006558





4.4.1 Individual components



- [1] Cover cap
- [2] Sash hinge cover
- [3] Sash hinge
- [4] Sash hinge bush
- [5] Adjusting carriage
- [6] Frame hinge
- [7] Pin module
- [8] Fixing screw
- [9] Threaded pin

[1] Cover cap



	0		No
Cover cap	Black	1000 Piece(s)	633002
	White	1000 Piece(s)	628900

[2] Sash hinge cover



-		Roto	3		Nο
Sash hinge cover	Traffic white	R07.2	RAL 9016	50 Piece(s)	738107
	Uncoated	R00.0	Roh	50 Piece(s)	738112



[3] Sash hinge



		Roto	3		Nο
Sash hinge	Traffic white	R07.2	RAL 9016	50 Piece(s)	738106
	Uncoated	R00.0	Roh	50 Piece(s)	738111

[4] Sash hinge bush



			No
Sash hinge bush	Black	250 Piece(s)	633001
	White	250 Piece(s)	628897

[5] Adjusting carriage



		No
Adjusting carriage	250 Piece(s)	628895

[6] Frame hinge



	⊕		Roto	3		Nο
Frame hinge	14 – 17.5	Traffic white	R07.2	RAL 9016	50 Piece(s)	628880
		Uncoated	R00.0	Roh	50 Piece(s)	632995
	17 – 20.5	Traffic white	R07.2	RAL 9016	50 Piece(s)	628881
		Uncoated	R00.0	Roh	50 Piece(s)	632996
	20 – 23.5	Traffic white	R07.2	RAL 9016	50 Piece(s)	628882
		Uncoated	R00.0	Roh	50 Piece(s)	632997

[7] Pin module



			No
Pin module	Black	250 Piece(s)	633000
	White	250 Piece(s)	628896



[8] Fixing screw



			No
Fixing screw	6,3x40	48 Piece(s)	450381
		1000 Piece(s)	628901
	6,3x50	48 Piece(s)	450382
		1000 Piece(s)	628902

[9] Threaded pin



		No
Threaded pin	1000 Piece(s)	628898

Slide lock



		NΘ
slide lock	50 Piece(s)	741268

4.4.2 Accessories

4.4.2.1 Packing plates



					Nο
1.5	95	23.5	Black	100 Piece(s)	445214
			White	100 Piece(s)	445213

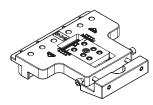


INFO

Use a maximum of 1 packing plate per hinge.

4.4.2.2 Jigs

Drilling jig





		NΘ
Drilling jig	1 Piece(s)	628066

Drilling jig conversion kit



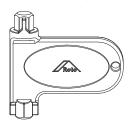
		No
Drilling jig conversion kit	1 Piece(s)	628878



INFO

This can be used to convert a drilling jig for PS 23 / PS 27 to a drilling jig for 150 P.

4.4.2.3 Adjustment key



		No
Gasket compression adjustment key	1 Piece(s)	535285



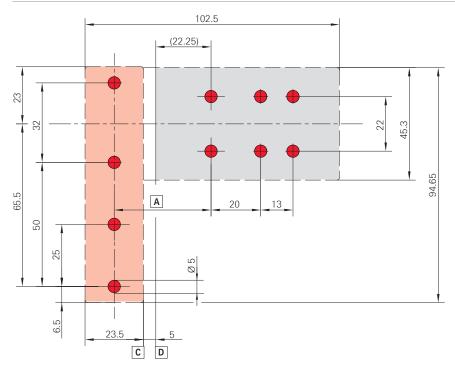
4.4.3 Drawings

4.4.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).

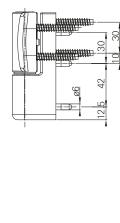


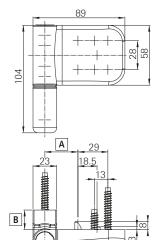
- [A] Presetting
- [C] Edge of frame hinge body
- [D] Edge of leaf profile body

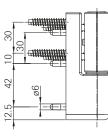


4.5 89 NN











[B] Overlap height



Product description

The Roto Solid S | 89 NN two-part screw-on hinge is suitable for timber and PVC entrance doors up to a sash weight of 80 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For timber and PVC entrance doors up to 80 kg
- Rapid and simple installation thanks to a high level of preassembly
- Wide selection of colours
- Additional version available for renovation profiles and profiles with narrow visible widths

Adjustment range

- Laterally adjustable: +10 / -5 mm
- Height adjustable: +5 mm
- Gasket compression adjustable: ±0.75 mm
- Additional gasket compression adjustment of ±0.5 mm by turning the eccentric frame hinge bush



Product characteristics



Design

- Wide selection of colours
- Powder-coated surface



Efficiency

- Rapid and simple installation thanks to a high level of preassembly
- Standardised drilling diameter reduces the installation effort
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durability



Security

Sash hinge bush specially secured to prevent removal



Comfort

- Low-maintenance powder-coated surface
- Maintenance-free thanks to high-quality self-lubricating PVC bush



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment when fully assembled without undoing the fixing
- Readjustment is simple and can be carried out by just one person
- With additional gasket compression adjustment



Presetting 32 (screws per hinge: 2x 7.3 x 30 and 4x 7.3 x 50)

<u> </u>		Roto			No
14 – 16.5	Stainless steel appearance	R01.23	_	1 Piece(s)	200935
	Dark brown	R04.6	RAL 8077	1 Piece(s)	54468
	Traffic white	R07.2	RAL 9016	1 Piece(s)	55117
	Special colour	SF	SF	1 Piece(s)	62249
16.5 – 19	White aluminium	R01.11	RAL 9006	1 Piece(s)	54598
	Stainless steel appearance	R01.23	_	1 Piece(s)	200935
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	54540
	Black brown	R04.4	RAL 8022	1 Piece(s)	89094
	Dark brown	R04.6	RAL 8077	1 Piece(s)	54461
			RAL 8077	24 Piece(s)	54471
	Chocolate brown	R04.8	RAL 8017	1 Piece(s)	89087
	Clay brown	R04.9	RAL 8003	1 Piece(s)	89094
	Traffic white	R07.2	RAL 9016	1 Piece(s)	54461
			RAL 9016	24 Piece(s)	54471
	Special colour	SF	SF	1 Piece(s)	62249
17.5 – 20	Stainless steel appearance	R01.23	_	1 Piece(s)	200936
	Dark brown	R04.6	RAL 8077	1 Piece(s)	54636
	Traffic white	R07.2	RAL 9016	1 Piece(s)	54636
	Special colour	SF	SF	1 Piece(s)	62249
19 – 21.5	Natural silver	R01.1	_	1 Piece(s)	202827
	White aluminium	R01.11	RAL 9006	1 Piece(s)	54563
	Grey aluminium	R01.7	RAL 9007	1 Piece(s)	54577
	Stainless steel appearance	R01.23	_	1 Piece(s)	200936
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	54501
	Grey brown	R04.1	RAL 8019	1 Piece(s)	54518
	Dark brown	R04.6	RAL 8077	1 Piece(s)	54468
			RAL 8077	24 Piece(s)	54602
	Clay brown	R04.9	RAL 8003	1 Piece(s)	54603
	Traffic white	R07.2	RAL 9016	1 Piece(s)	54468
			RAL 9016	24 Piece(s)	54602
	Special colour	SF	SF	1 Piece(s)	62249
			SF	24 Piece(s)	63869

1		Roto	3		No
21.5 – 24	White aluminium	R01.11	RAL 9006	1 Piece(s)	546928
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009362
	Dark brown	R04.6	RAL 8077	1 Piece(s)	544675
	Traffic white	R07.2	RAL 9016	1 Piece(s)	544674
	Special colour	SF	SF	1 Piece(s)	622496
23 – 25.5	Stainless steel appearance	R01.23	_	1 Piece(s)	2009363
	Dark brown	R04.6	RAL 8077	1 Piece(s)	545132
	Traffic white	R07.2	RAL 9016	1 Piece(s)	546930

SF

SF

1 Piece(s)

622497

Special colour



4.5.1 Spare parts

Cover cap



	0		NΘ
Cover cap	Black	24 Piece(s)	736467
	White	24 Piece(s)	764520

Sash hinge cover fixing



			No
Sash hinge cover fixing	M6x10	100 Piece(s)	823911

Fixing screws



	i			No
Fixing screw	T30 hexalobular socket	7,3x30	48 Piece(s)	825063
		7,3x50	48 Piece(s)	823912

Sash hinge cover



		Roto	3		No
Sash hinge cover	Dark brown	R04.6	RAL 8077	1 Piece(s)	764515
	Traffic white	R07.2	RAL 9016	1 Piece(s)	764518



243408

1 Piece(s)

4.5.2 Accessories

4.5.2.1 Locking pin



	i		No
Locking pin	T30 hexalobular socket	100 Piece(s)	825049

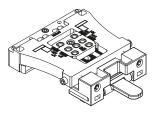
4.5.2.2 Packing plates



			0		No
1.5	103.5	23	Black	24 Piece(s)	546045
			White	24 Piece(s)	546044

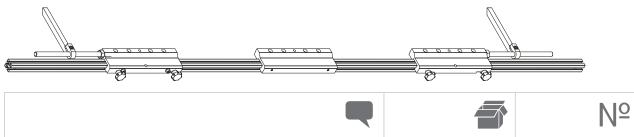
4.5.2.3 Jigs

Drilling jig



			No
Drilling jig	32 mm	1 Piece(s)	544283

Telescopic holder for drilling jigs



Telescopic holder for drilling jigs

4.5.3 Drawings

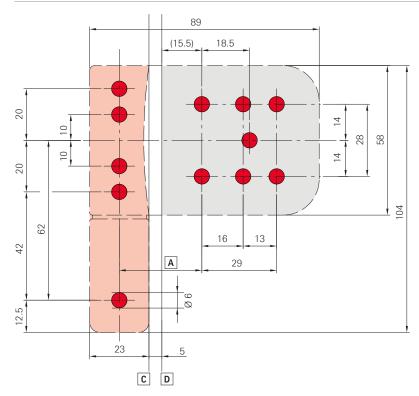
4.5.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).

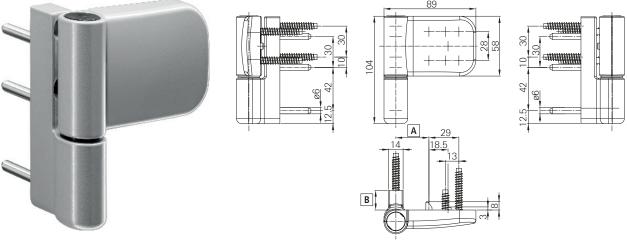




- [A] Presetting
- [C] Edge of frame hinge body
- [D] Edge of sash profile body



4.6 89 NN-SR







[B] Overlap height



Product description

The Roto Solid S | 89 NN-SR two-part screw-on hinge is suitable for timber and PVC entrance doors up to a sash weight of 80 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For timber and PVC entrance doors up to 80 kg
- Rapid and simple installation thanks to a high level of preassembly
- Wide selection of colours
- Especially suited to profiles with narrow visible widths / renovation profiles

Adjustment range

- Laterally adjustable: +10 / -5 mm
- Height adjustable: +5 mm
- Gasket compression adjustable: ±0.75 mm
- Additional gasket compression adjustment of ±0.5 mm by turning the eccentric frame hinge bush

Product characteristics



Design

- Wide selection of colours
- Powder-coated surface



Comfort

- Low-maintenance powder-coated surface
- Maintenance-free thanks to high-quality self-lubricating PVC bush



Efficiency

- Rapid and simple installation thanks to a high level of preassembly
- Standardised drilling diameter reduces the installation effort
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durability



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment when fully assembled without undoing the fixing
- Readjustment is simple and can be carried out by just one person
- With additional gasket compression adjustment



Security

Sash hinge bush specially secured to prevent removal

Presetting 32 (screws per hinge: 2x 7.3 x 30 and 4x 7.3 x 50)

<u> </u>		Roto			Nο
14 – 16.5	Stainless steel appearance	R01.23	_	1 Piece(s)	2009364
	Traffic white	R07.2	RAL 9016	1 Piece(s)	546310
	Special colour	SF	SF	1 Piece(s)	622487
15.5 – 18	Stainless steel appearance	R01.23	_	1 Piece(s)	2009365
	Traffic white	R07.2	RAL 9016	24 Piece(s)	547684
	Special colour	SF	SF	1 Piece(s)	631018
16.5 – 19	Dark brown	R04.6	RAL 8077	1 Piece(s)	546999
	Clay brown	R04.9	RAL 8003	1 Piece(s)	546500
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009366
	Traffic white	R07.2	RAL 9016	1 Piece(s)	547001
	Special colour	SF	SF	1 Piece(s)	622488
17.5 – 20	Stainless steel appearance	R01.23	_	1 Piece(s)	2009367
	Traffic white	R07.2	RAL 9016	1 Piece(s)	570568
	Special colour	SF	SF	1 Piece(s)	631019
19 – 21.5	Stainless steel appearance	R01.23	_	1 Piece(s)	2009368
	Anthracite grey	R02.2	RAL 7016	1 Piece(s)	622669
	Dark brown	R04.6	RAL 8077	1 Piece(s)	546975
	Clay brown	R04.9	RAL 8003	1 Piece(s)	546699
	Traffic white	R07.2	RAL 9016	1 Piece(s)	546415
	Special colour	SF	SF	1 Piece(s)	622489



4.6.1 Spare parts

Cover cap



	0		No
Cover cap	Black	24 Piece(s)	736467
	White	24 Piece(s)	764520

Sash hinge cover fixing



			No
Sash hinge cover fixing	M6x10	100 Piece(s)	823911

Fixing screws



	i			No
Fixing screw	T30 hexalobular socket	7,3x30	48 Piece(s)	825063
		7,3x50	48 Piece(s)	823912

Sash hinge cover



		Roto	3		No
Sash hinge cover	Dark brown	R04.6	RAL 8077	1 Piece(s)	764515
	Traffic white	R07.2	RAL 9016	1 Piece(s)	764518

4.6.2 Accessories

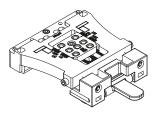
4.6.2.1 Locking pin



	i		No
Locking pin	T30 hexalobular socket	100 Piece(s)	825049

4.6.2.2 Jigs

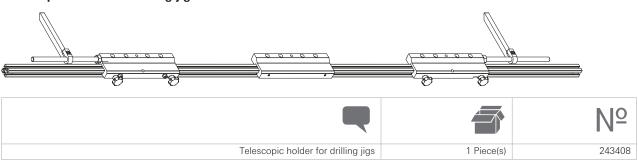
Drilling jig





			No
Drilling jig	32	1 Piece(s)	547532

Telescopic holder for drilling jigs





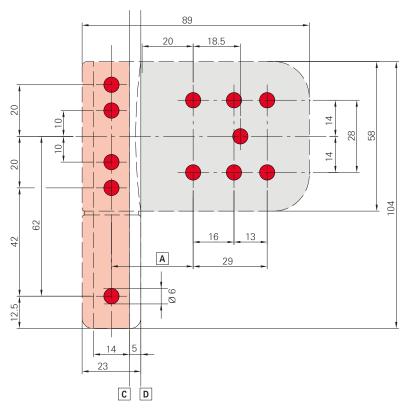
4.6.3 Drawings

4.6.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).

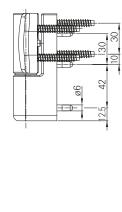


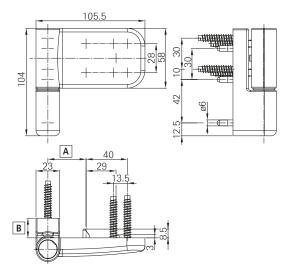
- [A] Presetting
- [C] Edge of frame hinge body
- [D] Edge of sash profile body



4.7 105 NN







[A] Presetting

[B] Overlap height



Product description

The Roto Solid S | 105 NN two-part screw-on hinge is suitable for timber and PVC entrance doors up to a sash weight of 120 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.





Advantages at a glance

- For timber and PVC entrance doors up to 120 kg
- Rapid and simple installation thanks to a high level of preassembly
- Wide selection of colours
- Additional version available for renovation profiles and profiles with narrow visible widths

Adjustment range

- Laterally adjustable: +10 / -5 mm
- Height adjustable: +5 mm
- Gasket compression adjustable: ±0.75 mm
- Additional gasket compression adjustment of ±0.75 mm by turning the eccentric frame hinge bush



Product characteristics



Design

- Wide selection of colours
- Powder-coated surface



Efficiency

- Rapid and simple installation thanks to a high level of
- Standardised drilling diameter reduces the installation
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durability



Comfort

- Low-maintenance powder-coated surface
- Maintenance-free thanks to high-quality self-lubricating PVC bush



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment when fully assembled without undoing the
- Readjustment is simple and can be carried out by just one person
- With additional gasket compression adjustment



Security

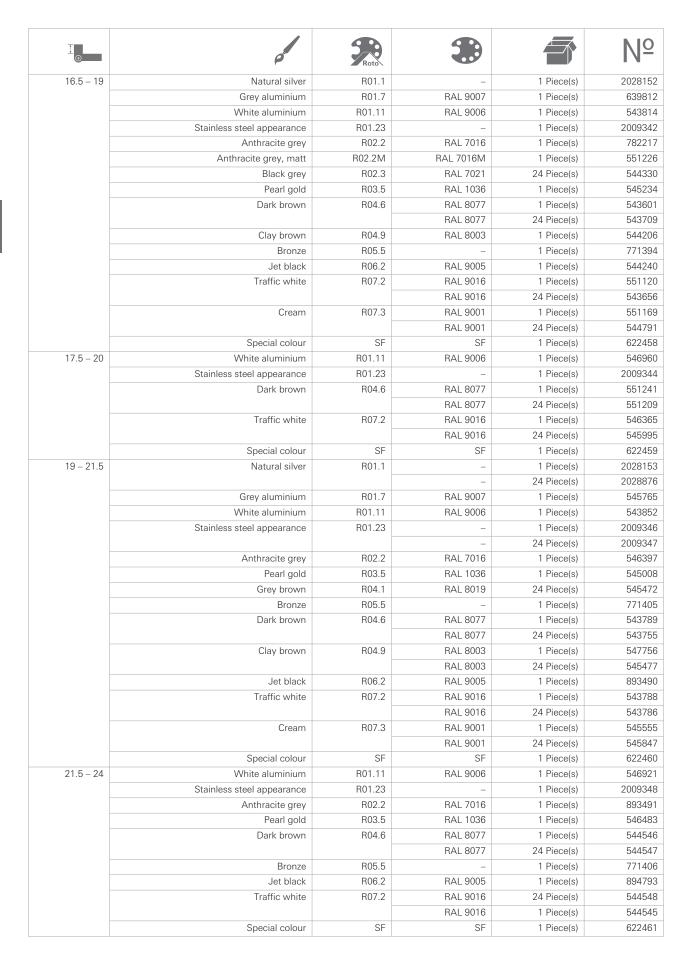
- SKG**-compatible with retrofit set
- Sash hinge bush specially secured to prevent removal

Presetting 32 (screws per hinge: 6x 7.3 x 50)

<u> </u>		Roto	3		Nō
16.5 – 19	White aluminium	R01.11	RAL 9006	1 Piece(s)	543684
	Stainless steel appearance	R01.23		1 Piece(s)	2009341
	Dark brown	R04.6	RAL 8077	1 Piece(s)	543739
	Traffic white	R07.2	RAL 9016	1 Piece(s)	542591
19 – 21.5	White aluminium	R01.11	RAL 9006	1 Piece(s)	543685
			RAL 9006	24 Piece(s)	547730
	Stainless steel appearance	R01.23		1 Piece(s)	2009345
	Dark brown	R04.6	RAL 8077	1 Piece(s)	543746
	Traffic white	R07.2	RAL 9016	1 Piece(s)	543701
			RAL 9016	24 Piece(s)	543804

Presetting 37 (screws per hinge: 6x 7.3 x 50)

₹	0	Roto	3		Nο
14 – 16.5	White aluminium	R01.11	RAL 9006	1 Piece(s)	546919
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009339
	Dark brown	R04.6	RAL 8077	1 Piece(s)	543991
	Traffic white	R07.2	RAL 9016	1 Piece(s)	551129
	Special colour	SF	SF	1 Piece(s)	622456







<u> </u>		Roto	3		Nο
23 – 25.5	Natural silver	R01.1	_	1 Piece(s)	2028254
	White aluminium	R01.11	RAL 9006	1 Piece(s)	545164
	Stainless steel appearance	R01.23	-	1 Piece(s)	2009349
	Anthracite grey	R02.2	RAL 7016	1 Piece(s)	861441
	Dark brown	R04.6	RAL 8077	1 Piece(s)	545161
	Jet black	R06.2	RAL 9005	1 Piece(s)	899185
	Traffic white	R07.2	RAL 9016	1 Piece(s)	545160
			RAL 9016	24 Piece(s)	545166
	Special colour	SF	SF	1 Piece(s)	622462

SKG** retrofit set



SKG** retrofit set, consisting of: 1 black cover cap, 1 white cover cap, 1 hardened axis module, 2 locking pins, 1 installation instructions

		No
SKG** retrofit set 105 NN	1 Piece(s)	2028893



4.7.1 Spare parts

Cover cap



	0		No
Cover cap	Black	24 Piece(s)	736467
	White	24 Piece(s)	764520

Sash hinge cover fixing

6

			No
Sash hinge cover fixing	M6x10	100 Piece(s)	823911

Fixing screw



	i			No
Fixing screw	T30 hexalobular socket	7,3x30	48 Piece(s)	825063
		7,3x50	48 Piece(s)	823912

Sash hinge cover



		Roto	3		Nο
Sash hinge cover	Dark brown	R04.6	RAL 8077	1 Piece(s)	764515
	Traffic white	R07.2	RAL 9016	1 Piece(s)	764518

4.7.2 Accessories

4.7.2.1 Locking pin



	i		No
Locking pin	T30 hexalobular socket	100 Piece(s)	825049



4.7.2.2 Packing plates

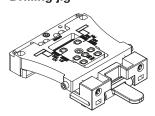


~					
					Nο
1.5	103.5	23	Black	24 Piece(s)	546045
			White	24 Piece(s)	546044



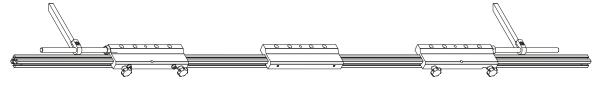
4.7.2.3 Jigs

Drilling jig



	—————————————————————————————————————		No
Drilling jig	32	1 Piece(s)	541189
	37	1 Piece(s)	544518

Telescopic holder for drilling jigs



		No
Telescopic holder for drilling jigs	1 Piece(s)	243408

4.7.3 Drawings

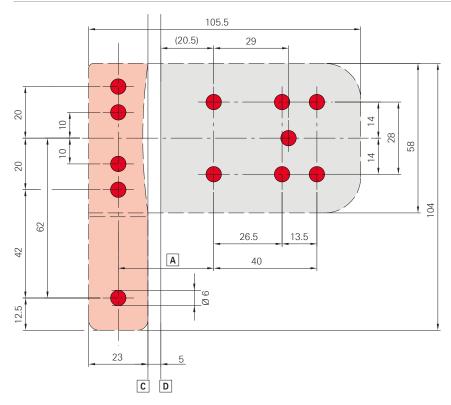
4.7.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).

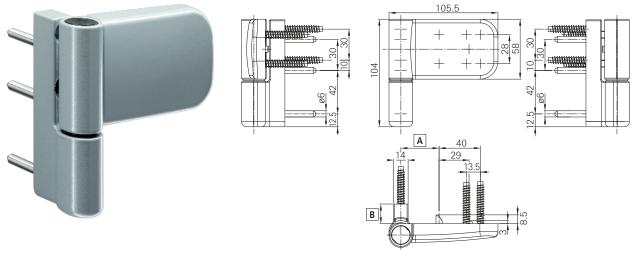




- [A] Presetting
- [C] Edge of frame hinge body
- [D] Edge of sash profile body



4.8 105 NN-SR





[A] Presetting

[B] Overlap height



Product description

The Roto Solid S | 105 NN-SR two-part screw-on hinge is suitable for timber and PVC entrance doors up to a sash weight of 120 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated surfaces makes an individual colour design possible – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For timber and PVC entrance doors up to 120 kg
- Rapid and simple installation thanks to a high level of preassembly
- Wide selection of colours
- Especially suited to profiles with narrow visible widths / renovation profiles

Adjustment range

- Laterally adjustable: +10 / -5 mm
- Height adjustable: +5 mm
- Gasket compression adjustable: ±0.75 mm
- Additional gasket compression adjustment of ±0.75 mm by turning the eccentric frame hinge bush

Product characteristics



Design

- Wide selection of colours
- Powder-coated surface



Comfort

- Low-maintenance powder-coated surface
- Maintenance-free thanks to high-quality self-lubricating PVC bush



Efficiency

- Rapid and simple installation thanks to a high level of preassembly
- Standardised drilling diameter reduces the installation effort
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durability



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment when fully assembled without undoing the fixing
- Readjustment is simple and can be carried out by just one person



Security

Sash hinge bush specially secured to prevent removal

Presetting 32 (screws per hinge: 6x 7.3 x 50)

<u> </u>		Roto	3		No
17.5 – 20	Stainless steel appearance	R01.23	_	1 Piece(s)	2009351
	Grey brown	R04.1	RAL 8019	24 Piece(s)	729191
	Traffic white	R07.2	RAL 9016	1 Piece(s)	549647
			RAL 9016	24 Piece(s)	729190
	Special colour	SF	SF	1 Piece(s)	637183
19 – 21.5	Traffic white	R07.2	RAL 9016	1 Piece(s)	2032095
	Special colour	SF	SF	1 Piece(s)	2032096

Presetting 37 (screws per hinge: 6x 7.3 x 50)

<u> </u>		Roto	3		Nο
14 – 16.5	Stainless steel appearance	R01.23	_	1 Piece(s)	2009350
	Traffic white	R07.2	RAL 9016	1 Piece(s)	547058
	Special colour	SF	SF	1 Piece(s)	622463
16.5 – 19	Natural silver	R01.1	-	1 Piece(s)	2028256
	Stainless steel appearance	R01.23	_	1 Piece(s)	897115
	Anthracite grey	R02.2	RAL 7016	1 Piece(s)	2005916
	Pearl gold	R03.5	RAL 1036	1 Piece(s)	840194
	Dark brown	R04.6	RAL 8077	1 Piece(s)	546424
	Clay brown	R04.9	RAL 8003	1 Piece(s)	810461
	Jet black	R06.2	RAL 9005	1 Piece(s)	2005917
	Traffic white	R07.2	RAL 9016	1 Piece(s)	546311
	Cream	R07.3	RAL 9001	1 Piece(s)	2005915
	Special colour	SF	SF	1 Piece(s)	622464
17.5 – 20	Stainless steel appearance	R01.23	_	1 Piece(s)	2009352
	Special colour	SF	SF	1 Piece(s)	631032





<u>↑</u> •		Roto			Nο
19 – 21.5	Natural silver	R01.1	_	1 Piece(s)	2027115
	White aluminium	R01.11	RAL 9006	1 Piece(s)	546974
	Stainless steel appearance	R01.23	_	1 Piece(s)	2009353
	Dark brown	R04.6	RAL 8077	1 Piece(s)	546538
	Traffic white	R07.2	RAL 9016	1 Piece(s)	546402
	Cream	R07.3	RAL 9001	1 Piece(s)	549191
	Special colour	SF	SF	1 Piece(s)	622486

4.8.1 Spare parts

Cover cap



	0		Nº
Cover cap	Black	24 Piece(s)	736467
	White	24 Piece(s)	764520

Sash hinge cover fixing



			No
Sash hinge cover fixing	M6x10	100 Piece(s)	823911

Fixing screw



	i			No
Fixing screw	T30 hexalobular socket	7,3x30	48 Piece(s)	825063
		7,3x50	48 Piece(s)	823912

Sash hinge cover



		Roto	3		No
Sash hinge cover	Dark brown	R04.6	RAL 8077	1 Piece(s)	764515
	Traffic white	R07.2	RAL 9016	1 Piece(s)	764518

4.8.2 Accessories

4.8.2.1 Locking pin

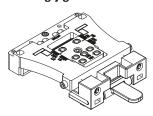




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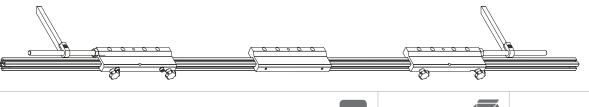
4.8.2.2 Jigs

Drilling jig



	(i)		No
Drilling jig	37	1 Piece(s)	547530

Telescopic holder for drilling jigs



		Nο
Telescopic holder for drilling jigs	1 Piece(s)	243408



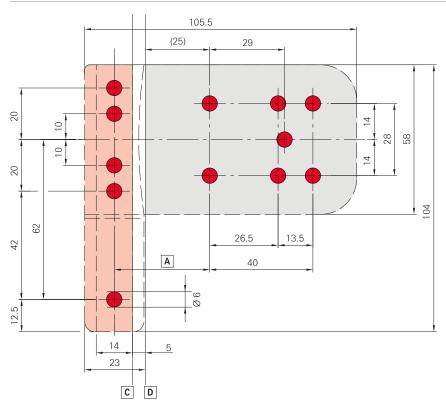
4.8.3 Drawings

4.8.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).

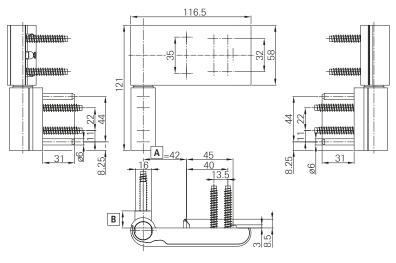


- [A] Presetting
- [C] Edge of frame hinge body
- [D] Edge of sash profile body



4.9 117 NN





[A] Presetting

[B] Overlap height



Product description

The Roto Solid S | 117 NN two-part screw-on hinge is suitable for heavy timber and PVC entrance doors up to a sash weight of 160 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated and anodised surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For timber and PVC entrance doors up to 160 kg
- Axis pin can be removed in an upward direction for fast and simple installation and removal of the door
- Wide selection of colours thanks to powder-coated and anodised surfaces

Adjustment range

- Laterally adjustable: ±5 mm
- Height adjustable: +4 / -1 mm
- Gasket compression adjustable: ±0.75 mm
- Additional gasket compression adjustment of ±0.75 mm by turning the eccentric sash hinge bush



Product characteristics



Design

- Wide selection of colours
- Powder-coated or anodised surface



Comfort

- Maintenance-free thanks to high-quality self-lubricating PVC bush
- Axis pin can be removed in an upward direction for fast and simple installation and removal of the door



Efficiency

- Simple installation in just a few operation steps
- Standardised drilling diameter reduces the installation effort
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durability



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment can be carried out when fully assembled and by just one person
- Without lateral offset of hinge bodies
- With additional gasket compression adjustment



â

Security

- SKG**-certified
- Sash hinge cover specially secured to prevent removal

Presetting 42 (screws per hinge: 6x 7.3 x 50)

1	0	Roto	3	<u></u>		Nο
16.5 – 19	Natural silver	R01.1	_	anod.	1 Piece(s)	632532
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	632529
19 – 21.5	Natural silver	R01.1	-	anod.	1 Piece(s)	729807
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	640149
21 – 23.5	Natural silver	R01.1	_	anod.	1 Piece(s)	729809
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	729808

4.9.1 Spare parts

Top cover cap





Bottom cover cap





	0		Nº
Cover cap	Black	24 Piece(s)	736467

Axis pin fixing



			Nο
Axis pin fixing	M6x8	100 Piece(s)	825047

Sash hinge cover fixing



		No
Sash hinge cover fixing	1 Piece(s)	825055

Fixing screw



	i			No
Fixing screw	T30 hexalobular socket	7,3x30	48 Piece(s)	825063
		7,3x50	48 Piece(s)	823912

4.9.2 Accessories

4.9.2.1 Locking pin

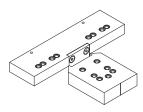


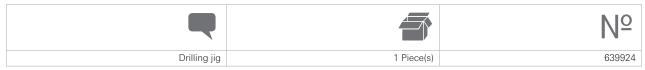
	i		No
Locking pin	T30 hexalobular socket	100 Piece(s)	825049



4.9.2.2 Jigs

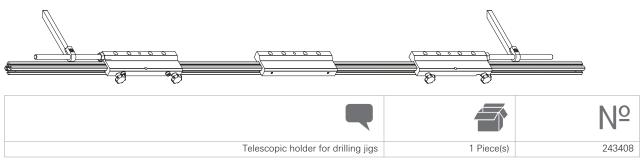
Drilling jig





P

Telescopic holder for drilling jigs



4.9.3 Drawings

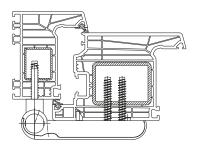
4.9.3.1 Installation drawings



INFO

Installation examples for the aforementioned versions are shown here.

Installation examples for specific profile systems are available upon request.

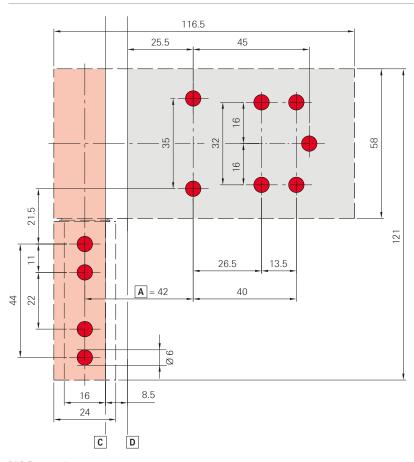


4.9.3.2 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).

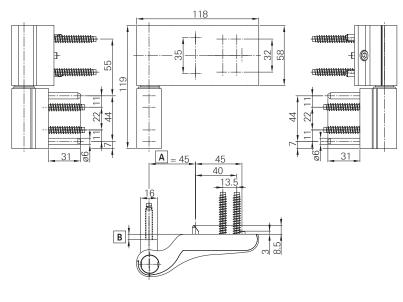


- [A] Presetting
- [C] Edge of frame hinge body
- [D] Edge of sash profile body



4.10 117 H





[A] Presetting

[B] Overlap height



Product description

The Roto Solid S | 117 H two-part screw-on hinge is ideal for heavy PVC entrance doors up to a sash weight of 160 kg and is specially designed for use in block profiles with negative overlap.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated and anodised surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For PVC outward opening entrance doors up to 160 kg
- Specially for block profiles with negative overlap
- Axis pin can be removed in an upward direction for fast and simple installation and removal of the door
- Wide selection of colours thanks to powder-coated and anodised surfaces

Adjustment range

- Laterally adjustable: ±5 mm
- Height adjustable: +4 / -1 mm
- Gasket compression adjustable: ±0.75 mm



Product characteristics



Design

- Wide selection of colours
- Powder-coated or anodised surface



Comfort

- Maintenance-free thanks to high-quality self-lubricating PVC bush
- Axis pin can be removed in an upward direction for fast and simple installation and removal of the door



Efficiency

- Simple installation in just a few operation steps
- Standardised drilling diameter reduces the installation effort
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durability



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment when fully assembled
- Readjustment is simple and can be carried out by just one person
- With additional gasket compression adjustment



Security

- SKG**-certified
- Sash hinge cover specially secured to prevent removal

Presetting 45 (screws per hinge: 6x 7.3 x 50)

<u> </u>		Roto	3	+		Nō
-4.5 – -6	Natural silver	R01.1	_	anod.	1 Piece(s)	616484
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	616482
	Cream	R07.3	RAL 9001	powd-c	1 Piece(s)	604642
-6.25 – -7.75	Natural silver	R01.1	_	anod.	1 Piece(s)	619757
	Dark brown	R04.6	RAL 8077	powd-c	1 Piece(s)	619756
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	619755
	Cream	R07.3	RAL 9001	powd-c	1 Piece(s)	619704
	Special colour	SF	SF	_	1 Piece(s)	2003326
-7.75 – -9.25	Natural silver	R01.1	-	anod.	1 Piece(s)	619703
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	619701
	Cream	R07.3	RAL 9001	powd-c	1 Piece(s)	619700
-9.75 – -11.25	Natural silver	R01.1	_	anod.	1 Piece(s)	899407
	Anthracite grey	R02.2	RAL 7016	powd-c	1 Piece(s)	2026838
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	899389
	Cream	R07.3	RAL 9001	powd-c	1 Piece(s)	899405
	Special colour	SF	SF	_	1 Piece(s)	899408

Presetting 45 (screws per hinge: 2x 7.5 x 72 and 4x 7.3 x 50)

<u> </u>		Roto	3	+		Nο
-2.75 – -4.25	Natural silver	R01.1	_	anod.	1 Piece(s)	828441
	Anthracite grey, matt	R02.2M	RAL 7016M	powd-c	1 Piece(s)	2032155
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	828440
	Cream	R07.3	RAL 9001	powd-c	1 Piece(s)	828434
	Special colour	SF	SF	_	1 Piece(s)	862511





4.10.1 Spare parts

Top cover cap



	0		No
Cover cap	Black	24 Piece(s)	736468

Bottom cover cap





Gap cover



•	0		No
Gap cover	Black	10 Piece(s)	809568

Axis pin fixing



	Tamas .		No
Axis pin fixing	M6x8	100 Piece(s)	825047

Sash hinge cover fixing



		No
Sash hinge cover fixing	1 Piece(s)	825055

Fixing screw



	i			No
Fixing screw	T30 hexalobular socket	7,3x30	48 Piece(s)	825063
		7,3x50	48 Piece(s)	823912

4.10.2 Accessories

4.10.2.1 Locking pin





-

4.10.2.2 Jigs



INFO

Order drilling jigs depending on the profile used (available upon request).

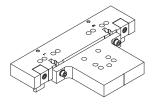
Jigs can be modularly configured for different frame and leaf profile combinations.

	Nº	Nº	Drilling jig	Accessory set
Aluplast IDEAL 7000	170x55	170x35	893685	-
Deceuninck Elegant 115 AD	5135 5143	5713	893624	-
	5138	5116	899409	2003353
	5139	5713		
	5140			
	5145			
GEALAN S 8000 IQ AD	8021	8042	617280	_
	8016	8042	617281	_
	8307			
GEALAN S 9000 MD	6802	6842	838970	-
	6804	6027	838969	_
	6808	6844	838971	_
Rehau S 969 Synego	1539045	1537305	893686	_
		1537315		



	Nº	Nº Nº	Drilling jig	Accessory set
VEKA Softline 82 NL AD	101.333	103.346	620010	_
	102.331	105.381		

Single jig body





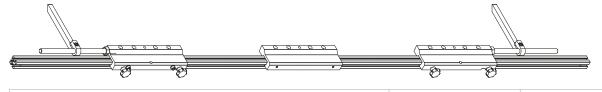
Accessory set



Accessory set, consisting of: 2 spacers, 4 discs

			No
Drilling jig accessory set	Deceuninck Elegant	1 Piece(s)	2003353

Telescopic holder for drilling jigs



		No
Telescopic holder for drilling jigs	1 Piece(s)	243408



4.10.3 Drawings

4.10.3.1 Installation drawings

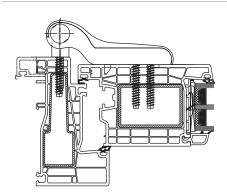


INFO

Installation examples for the aforementioned versions are shown here.

Installation examples for specific profile systems are available upon request.







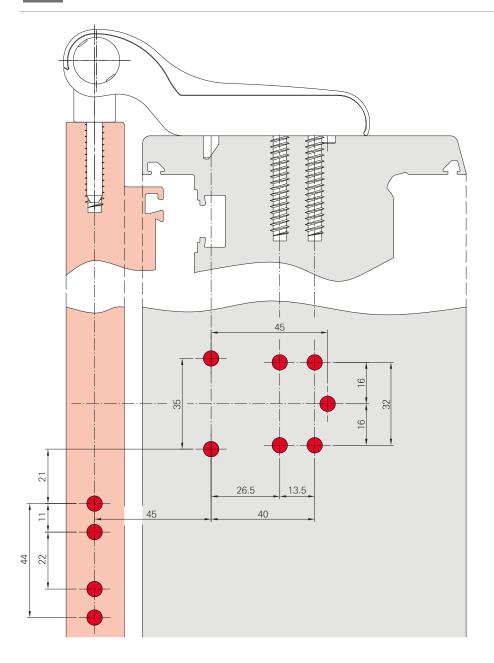


4.10.3.2 Drilling pattern



INFO

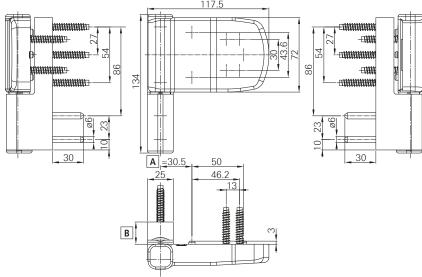
Example diagram. Drilling patterns are profile-related (available upon request).





4.11 118 Z





- [A] Presetting
- [B] Overlap height



Product description

The Roto Solid S | 118 Z two-part screw-on hinge is suitable for heavy timber and PVC entrance doors up to a sash weight of 160 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated and anodised surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For timber and PVC entrance doors up to 160 kg
- Axis pin can be installed and removed in an upward and downward direction, making it ideal when space for installation and removal is limited between leaf and lintel
- Wide selection of colours thanks to powder-coated and anodised surfaces

Adjustment range

- Laterally adjustable: +10 / -5 mm
- Height adjustable: ±4 mm
- Gasket compression adjustable: ±0.75 mm
- Additional gasket compression adjustment of ±0.5 mm by turning the eccentric sash hinge bush



Product characteristics



Design

- Wide selection of colours
- Powder-coated or anodised surface



Comfort

- Maintenance-free thanks to high-quality self-lubricating PVC bush
- Axis pin can be installed and removed in an upward and downward direction, making it ideal when space for installation and removal is limited between leaf and lintel



Efficiency

- Simple installation in just a few operation steps
- Standardised drilling diameter reduces the installation effort
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durability



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment can be carried out when fully assembled and by just one person
- Without lateral offset of hinge bodies
- With additional gasket compression adjustment



Security

- SKG**-certified
- Sash hinge cover specially secured to prevent removal

Presetting 30.5 (screws per hinge: 7x 7.3 x 50)

<u> </u>	0	Roto				No
15 – 17.5	Natural silver	R01.1	_	anod.	1 Piece(s)	541959
	Dark brown	R04.6	RAL 8077	powd-c	1 Piece(s)	541961
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	541962
17.5 – 20	Dark brown	R04.6	RAL 8077	powd-c	1 Piece(s)	541978
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	541979
19 – 21.5	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	547502
20 – 22.5	Stainless-steel design	R03.4	-	anod.	1 Piece(s)	546914
	Dark brown	R04.6	RAL 8077	powd-c	1 Piece(s)	551125
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	543842
23 – 25.5	Stainless-steel design	R03.4	_	anod.	1 Piece(s)	546969
-	Dark brown	R04.6	RAL 8077	powd-c	1 Piece(s)	544539
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	544538



4.11.1 Spare parts

Top cover cap



			No
Cover cap	Black	10 Piece(s)	809946
	White	10 Piece(s)	809947

Bottom cover cap



	0		NΘ
Cover cap	Black	10 Piece(s)	809914
	White	10 Piece(s)	809945

Axis pin fixing



			No
Axis pin fixing	M6x8	100 Piece(s)	825047

Fixing screws



	i			Иō
Fixing screw	T30 hexalobular socket	7,3x30	48 Piece(s)	825063
		7,3x50	48 Piece(s)	823912

4.11.2 Accessories

4.11.2.1 Locking pin



	i		No
Locking pin	T30 hexalobular socket	100 Piece(s)	825049



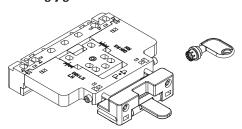
4.11.2.2 Packing plates



					No
2	128	25	Black	10 Piece(s)	809334
			White	10 Piece(s)	809333

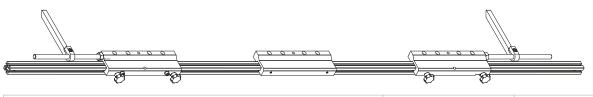
4.11.2.3 Jig

Drilling jig



	i		Nº
Drilling jig	incl. adjustment key	1 Piece(s)	540603

Telescopic holder for drilling jigs



		No
Telescopic holder for drilling jigs	1 Piece(s)	243408

4.11.2.4 Adjustment key



		No
Gasket compression adjustment key	1 Piece(s)	540621

4.11.3 Drawings

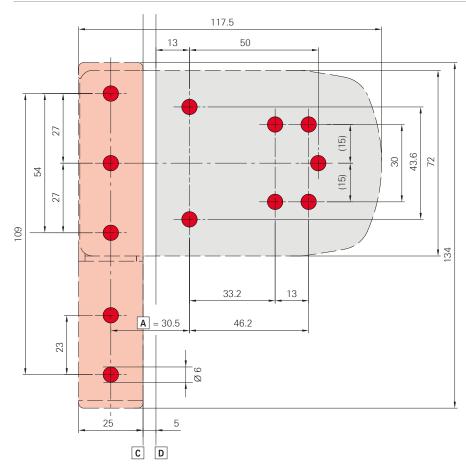
4.11.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).

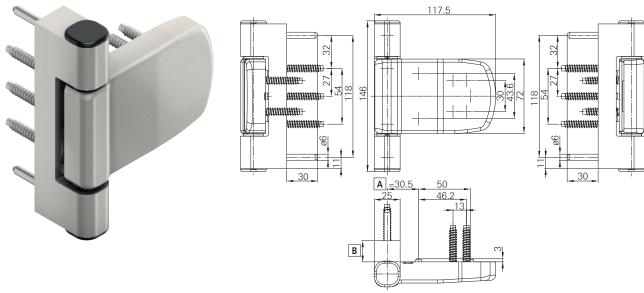




- [A] Presetting
- [C] Edge of frame hinge body
- [D] Edge of sash profile body



4.12 118 D





- [A] Presetting
- [B] Overlap height



Product description

The Roto Solid S | 118 D three-part screw-on hinge is suitable for especially large and frequently used timber and PVC entrance doors up to a sash weight of 150 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated and anodised surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For timber and PVC entrance doors up to 150 kg
- Axis pin can be installed and removed in an upward and downward direction, making it ideal when space for installation and removal is limited between leaf and lintel
- Wide selection of colours thanks to powder-coated and anodised surfaces

Adjustment range

- Laterally adjustable: +10 / -5 mm
- Height adjustable: ±4 mm
- Gasket compression adjustable: ±0.75 mm
- Additional gasket compression adjustment of ±0.5 mm by turning the eccentric sash hinge bushes

Product characteristics



Design

- Wide selection of colours
- Powder-coated or anodised surface



Comfort

- Maintenance-free thanks to high-quality self-lubricating PVC bush
- Axis pin can be installed and removed in an upward and downward direction, making it ideal when space for installation and removal is limited between leaf and lintel





Efficiency

- Simple installation in just a few operation steps
- Standardised drilling diameter reduces the installation effort
- Can be used on DIN left / DIN right for reduced logistics and administrative outlay
- Corrosion-resistant pin module ensures added durability



Adjustment

- Large adjustment distances ensure that the door works properly over a long time period
- Adjustment can be carried out when fully assembled and by just one person
- Without lateral offset of hinge bodies
- With additional gasket compression adjustment



Security

- SKG**-certified
- Sash hinge cover specially secured to prevent removal

Presetting 30.5 (screws per hinge: 7x 7.3 x 50)

 ⊕		Roto				N
12.5 – 15	Natural silver	R01.1	_	anod.	1 Piece(s)	54
	Stainless-steel design	R03.4	-	anod.	1 Piece(s)	54
	Dark brown	R04.6	RAL 8077	powd-c	1 Piece(s)	54
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	54
15 – 17.5	Natural silver	R01.1		anod.	1 Piece(s)	54
	Stainless-steel design	R03.4		anod.	1 Piece(s)	54
	Dark brown	R04.6	RAL 8077	powd-c	1 Piece(s)	54
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	54
17.5 – 20	Natural silver	R01.1		anod.	1 Piece(s)	54
	Stainless-steel design	R03.4		anod.	1 Piece(s)	54
	Dark brown	R04.6	RAL 8077	powd-c	1 Piece(s)	54
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	54
19 – 21.5	Natural silver	R01.1		anod.	1 Piece(s)	54
	Stainless-steel design	R03.4		anod.	1 Piece(s)	54
	Dark brown	R04.6	RAL 8077	powd-c	1 Piece(s)	54
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	54
20 – 22.5	Natural silver	R01.1		anod.	1 Piece(s)	54
	Stainless-steel design	R03.4		anod.	1 Piece(s)	54
	Dark brown	R04.6	RAL 8077	powd-c	1 Piece(s)	54
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	54
23 – 25.5	Natural silver	R01.1		anod.	1 Piece(s)	54
	Stainless-steel design	R03.4		anod.	1 Piece(s)	54
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	54
25 – 27.5	Natural silver	R01.1		anod.	1 Piece(s)	62
	Stainless-steel design	R03.4		anod.	1 Piece(s)	62
	Traffic white	R07.2	RAL 9016	powd-c	1 Piece(s)	62





4.12.1 Spare parts

Cover cap



	0		No
Cover cap	Black	10 Piece(s)	809914
	White	10 Piece(s)	809945

Axis pin fixing





Fixing screw



	i			No
Fixing screw	T30 hexalobular socket	7,3x30	48 Piece(s)	825063
		7,3x50	48 Piece(s)	823912

4.12.2 Accessories

4.12.2.1 Locking pin



	i		No
Locking pin	T30 hexalobular socket	100 Piece(s)	825049



4.12.2.2 Packing plates



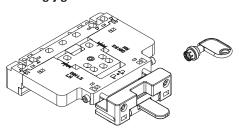




					No
1	140	25	Black	10 Piece(s)	809559
			White	10 Piece(s)	809558

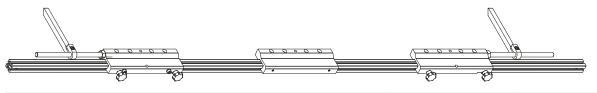
4.12.2.3 Jig

Drilling jig



	i		No
Drilling jig	incl. adjustment key	1 Piece(s)	540603

Telescopic holder for drilling jigs



		No
Telescopic holder for drilling jigs	1 Piece(s)	243408

4.12.2.4 Adjustment key



		No
Gasket compression adjustment key	1 Piece(s)	540621



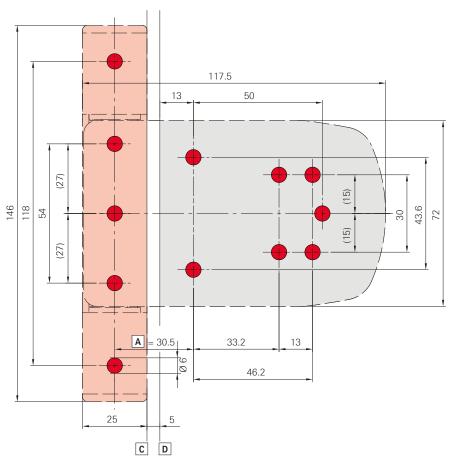
4.12.3 Drawings

4.12.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).

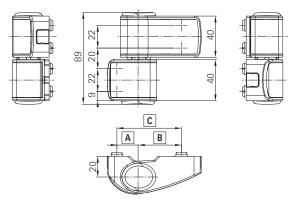


- [A] Presetting
- [C] Edge of frame hinge body
- [D] Edge of sash profile body



4.13 **80 ATB**





- [A] Distance from centre of shadow groove or pivot point to frame fixing
- [B] Distance from centre of shadow groove or pivot point to leaf fixing
- [C] Flatness deviation



Product description

The Roto Solid S | 80 ATB two-part screw-on hinge is suitable for aluminium entrance doors up to a sash weight of 100 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated surfaces enables an individual colour design - for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For aluminium entrance doors up to 100 kg
- Suitable for flush and recessed doors
- Three mounting types for all installation situations depending on the profile: direct mounting, backing plates or Linkdrill

Adjustment range

- Laterally adjustable: ±3 mm
- Height adjustable: +3 mm
- Gasket compression adjustable: ±0.75 mm



Product characteristics



Design

- Hinge casing made from die-cast zinc and covers made from extruded aluminium
- Wide selection of colours
- Powder-coated surface



Comfort

- Low-maintenance powder-coated surface
- Maintenance-free thanks to high-quality self-lubricating
- Suitable for flush and recessed doors



Efficiency

- Preassembled on DIN left / DIN right for rapid and simple installation
- Corrosion-resistant pin module ensures added durability



Adjustment

- With integrated adjusting scale
- Adjustment when fully assembled without undoing the fixing and without removing the covers
- Without lateral offset of hinge bodies



Security

Sash hinge cover specially secured to prevent removal



Mounting types

Profile material	Backing plate → from page 198	Linkdrill II	Direct mounting → from page 198
Aluminium		-	
Timber	_	_	_
Timber – aluminium	-	_	-

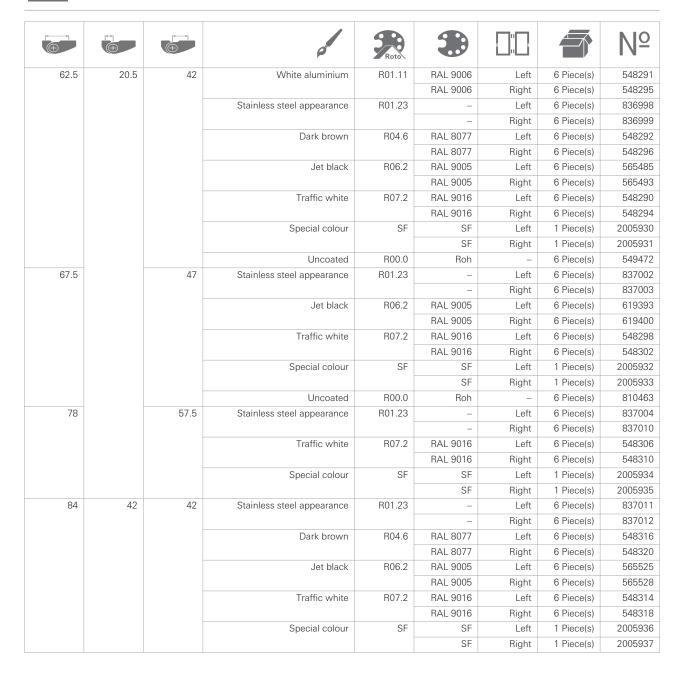
■ = possible, - = not possible

Mounting with a backing plate



INFO

Mounting material is not included in the scope of delivery → from page 198.





			0	Roto				No																						
94	47	47	Stainless steel appearance	R01.23	_	Left	6 Piece(s)	837026																						
					-	Right	6 Piece(s)	837027																						
			Jet black	R06.2	RAL 9005	Left	6 Piece(s)	619404																						
														RAL 9005	Right	6 Piece(s)	619409													
						RAL 9016	Right	6 Piece(s)	548350																					
			Special colour	SF	SF	Left	1 Piece(s)	2005938																						
					SF	Right	1 Piece(s)	2005939																						



Direct mounting



INFO

For special colours, mounting material is not included in the scope of delivery > from page 198.

	[**]	(+)	#	1		Roto	3			Nο
62.5	20.5	42	4	8x63	Stainless steel appearance	R01.23	_	Left	6 Piece(s)	837000
			4	8x63	Stainless steel appearance	R01.23	_	Right	6 Piece(s)	837001
			4	8x68	Stainless steel appearance	R01.23	_	Left	24 Piece(s)	828124
			4	8x68	Stainless steel appearance	R01.23	_	Right	24 Piece(s)	828130
			4	8x73	Stainless steel appearance	R01.23	_	Left	24 Piece(s)	828131
			4	8x73	Stainless steel appearance	R01.23	_	Right	24 Piece(s)	828132
			4	8x63	Dark brown	R04.6	RAL 8077	Left	6 Piece(s)	736014
			4	8x63	Dark brown	R04.6	RAL 8077	Right	6 Piece(s)	736028
			4	8x63	Traffic white	R07.2	RAL 9016	Left	6 Piece(s)	736026
			4	8x63	Traffic white	R07.2	RAL 9016	Right	6 Piece(s)	736030
			6	8x73	Traffic white	R07.2	RAL 9016	Left	24 Piece(s)	776239
			6	8x73	Traffic white	R07.2	RAL 9016	Right	24 Piece(s)	776240
			-	_	Special colour	SF	SF	Left	1 Piece(s)	2005940
			-	_	Special colour	SF	SF	Right	1 Piece(s)	2005941
			4	8x68	Uncoated	R00.0	Roh	Left	24 Piece(s)	825058
			4	8x68	Uncoated	R00.0	Roh	Right	24 Piece(s)	825059
			4	8x73	Uncoated	R00.0	Roh	Left	24 Piece(s)	825065
			4	8x73	Uncoated	R00.0	Roh	Right	24 Piece(s)	825066
84	42		4	8x73	Stainless steel appearance	R01.23	_	Left	24 Piece(s)	837013
			4	8x73	Stainless steel appearance	R01.23	_	Right	24 Piece(s)	837014
			4	8x73	Traffic white	R07.2	RAL 9016	Left	24 Piece(s)	775771
			4	8x73	Traffic white	R07.2	RAL 9016	Right	24 Piece(s)	775772
			_	_	Special colour	SF	SF	Left	1 Piece(s)	2005942
			-	_	Special colour	SF	SF	Right	1 Piece(s)	2005943



4.13.1 Spare parts

Top / bottom cover cap



	0		No
Cover cap	Black	10 Piece(s)	809562
	White	10 Piece(s)	809565

Side cover cap





Axis pin fixing



			No
Axis pin fixing	M6x8	100 Piece(s)	825047

4.13.2 Accessories

4.13.2.1 Locking pin



		No
Locking pin	100 Piece(s)	825056



4.13.2.2 Mounting

4.13.2.2.1 Backing plate set









		J ames		No
15.5	21.5	M8x25	1 Set(s)	548484
21.5	15.5	M8x25	1 Set(s)	548945
23.4	8.25	M8x25	1 Set(s)	551296

Contents

Figure	Quantity	Description
	48	Frame and sash hinge backing plate
	96	Fixing screws for backing plates



INFO

For additional fixing screw lengths, see "Screw fixing" → from page 199.

Stainless-steel spring



	Nο
Stainless steel spring for use with backing plates 200 Piece(s	894093

4.13.2.2.2 Direct mounting (optional)



			Nº
63	Silver	48 Piece(s)	771087
68	Black	48 Piece(s)	771088
73	Green	48 Piece(s)	771089



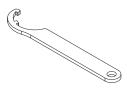
4.13.2.2.3 Screw fixing

Fixing screws for backing plates and Linkdrill II



		No
M8x25	48 Piece(s)	547947
M8x40	48 Piece(s)	548512
M8x50	48 Piece(s)	548513

4.13.2.3 Adjustment key



		Nο
Gasket compression adjustment key for 80 ATB, 120 A	ATB 1 Piece(s)	825046



4.13.2.4 Packing plates



INFO

To support the frame in the case of offset profile combinations.

Packing plates for mounting with backing plates





		Roto			Nο
7	Stainless steel appearance	R01.23	_	6 Piece(s)	858503
	Dark brown	R04.6	RAL 8077	6 Piece(s)	548490
	Jet black	R06.2	RAL 9005	6 Piece(s)	568360
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548488
	Special colour	SF	SF	1 Piece(s)	2005960
10	Stainless steel appearance	R01.23	_	6 Piece(s)	858504
	Dark brown	R04.6	RAL 8077	6 Piece(s)	548494
	Jet black	R06.2	RAL 9005	6 Piece(s)	568361
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548492
	Special colour	SF	SF	1 Piece(s)	2005961
12	Stainless steel appearance	R01.23	_	6 Piece(s)	858530
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548496
	Special colour	SF	SF	1 Piece(s)	2005962
14	Stainless steel appearance	R01.23		6 Piece(s)	858531
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548500
	Special colour	SF	SF	1 Piece(s)	2005963
16	Special colour	SF	SF	1 Piece(s)	2005964
18	Stainless steel appearance	R01.23		6 Piece(s)	858532
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548504
	Special colour	SF	SF	1 Piece(s)	2005965
19	Stainless steel appearance	R01.23		6 Piece(s)	858533
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548508
	Special colour	SF	SF	1 Piece(s)	2005966



Packing plates for direct mounting

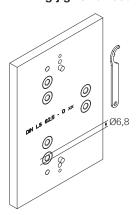


		Roto			Nο
5.7	Stainless steel appearance	R01.23	_	24 Piece(s)	825071
7	White aluminium	R01.11	RAL 9006	6 Piece(s)	764321
	Traffic white	R07.2	RAL 9016	6 Piece(s)	764322
	Special colour	SF	SF	1 Piece(s)	2005967
10	White aluminium	R01.11	RAL 9006	6 Piece(s)	764272
	Stainless steel appearance	R01.23	_	24 Piece(s)	828137
	Traffic white	R07.2	RAL 9016	6 Piece(s)	764273
	Special colour	SF	SF	1 Piece(s)	2005968
14	Stainless steel appearance	R01.23	-	24 Piece(s)	828138

P

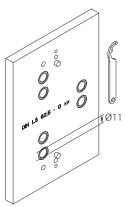
4.13.2.5 Jigs

Drilling jig for direct mounting



-	i		(+)	(H)		No
Drilling jig direct mounting	incl. adjustment key	62.5	20.5	42	1 Piece(s)	737661

Drilling jig for backing plate



	i		(H)			Nο
Drilling jig for backing plate	incl. adjustment key	62.5	20.5	42	1 Piece(s)	547218
		67.5	20.5	47	1 Piece(s)	547223
		78	20.5	57.5	1 Piece(s)	547225
		84	42	42	1 Piece(s)	547227
		94	47	47	1 Piece(s)	547235



INFO

The following is required for direct screw fixing:

Drilling jig for direct screw fixing, Ø 6.8 mm drill

The following is required for working with **backing plates**:

Drilling jig for backing plate, Ø 11 mm drill

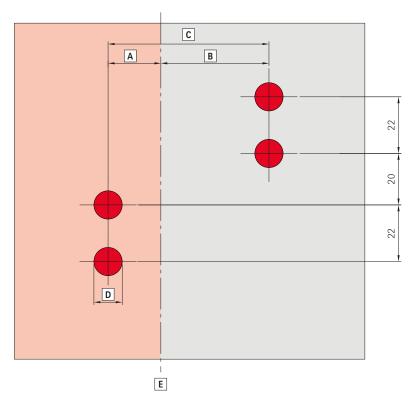
4.13.3 Drawings

4.13.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).



- [A] Distance from centre of shadow groove or pivot point to frame fixing
- [B] Distance from centre of shadow groove or pivot point to leaf fixing
- [C] Flatness deviation
- [D] Diameter (direct mounting = \emptyset 6.8; backing plate = \emptyset 11)
- [E] Centre of shadow groove or pivot point



4.13.3.2 Installation drawings

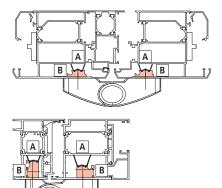


INFO

Installation examples for the aforementioned versions are shown here.

Installation examples for specific profile systems are available upon request.

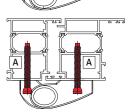
Backing plates



- [A] Stainless-steel spring
- [B] Backing plates → from page 208
- [C] Packing plates, optional → from page 210



Direct mounting

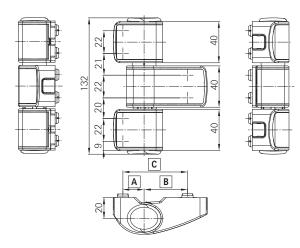


[A] Fixing screw for direct mounting → from page 209

Packing plates, optional (not sh.)

4.14 120 ATB





- [A] Distance from centre of shadow groove or pivot point to frame fixing
- [B] Distance from centre of shadow groove or pivot point to leaf fixing
- [C] Flatness deviation



Product description

The Roto Solid S | 120 ATB three-part screw-on hinge is suitable for frequently used aluminium entrance doors up to a sash weight of 160 kg.

Roto Solid S screw-on hinges offer solutions in various different performance categories and design lines.

A wide range of powder-coated surfaces enables an individual colour design – for door hinges which seamlessly blend into the overall appearance of the door.

Large adjustment distances enable custom adaptations on the hinge side that contribute towards the functionality and durability of the door as a whole.



Advantages at a glance

- For aluminium entrance doors up to 160 kg
- Suitable for flush and recessed doors
- Three mounting types for all installation situations depending on the profile: direct mounting, backing plates or Linkdrill
- Ideal for frequently used doors in public buildings

Adjustment range

- Laterally adjustable: ±3 mm
- Height adjustable: +3 mm
- Gasket compression adjustable: ±0.75 mm



Design

Product characteristics

- Hinge casing made from die-cast zinc and covers made from extruded aluminium
- Wide selection of colours
- Powder-coated surface



Comfort

- Low-maintenance powder-coated surface
- Maintenance-free thanks to high-quality self-lubricating PVC bush
- Suitable for flush and recessed doors



Efficiency

- Preassembled on DIN left / DIN right for rapid and simple installation
- Corrosion-resistant pin module ensures added durability



Adjustment

- With integrated adjusting scale
- Adjustment when fully assembled without undoing the fixing and without removing the covers
- Without lateral offset of hinge bodies



Security

Sash hinge cover specially secured to prevent removal



Mounting types

Profile material	Backing plate → from page 208	Linkdrill II	Direct mounting → from page 209
Aluminium		-	
Timber	_		-
Timber – aluminium	-		-

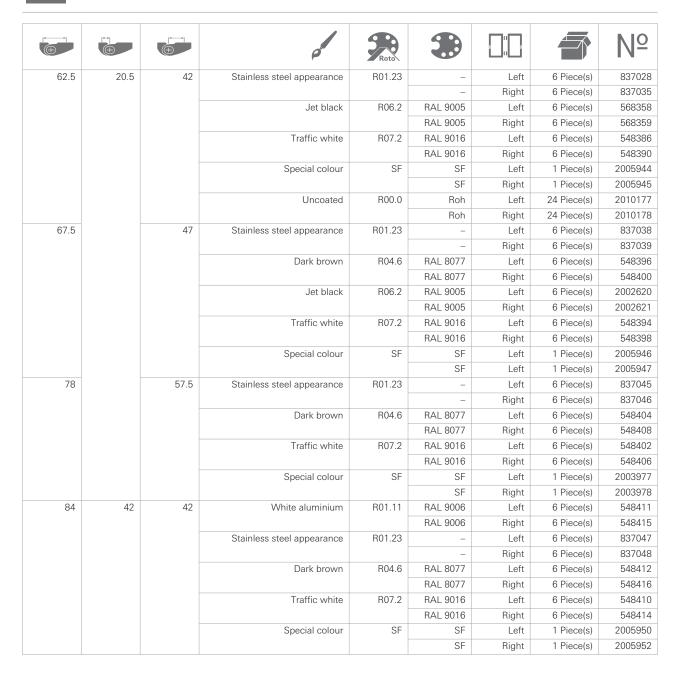
■ = possible, - = not possible

Mounting with backing plate or Linkdrill II



INFO

Mounting material is not included in the scope of delivery → from page 198.





				Roto				No
94	47	47	Stainless steel appearance	R01.23	-	Left	6 Piece(s)	837056
					_	Right	6 Piece(s)	837057
			Dark brown	R04.6	RAL 8077	Left	6 Piece(s)	548444
					RAL 8077	Right	6 Piece(s)	548448
			Traffic white	R07.2	RAL 9016	Left	6 Piece(s)	548442
					RAL 9016	Right	6 Piece(s)	548446
			Special colour	SF	SF	Left	1 Piece(s)	2005954
					SF	Right	1 Piece(s)	2005955



Direct mounting



INFO

For special colours, mounting material is not included in the scope of delivery > from page 209.

	 	(H)	#)		Roto	3			No
62.5	20.5	42	6	8x63	Stainless steel appearance	R01.23	-	Left	24 Piece(s)	837036
					Stainless steel appearance	R01.23	-	Right	24 Piece(s)	837037
				8x68	Stainless steel appearance	R01.23	-	Left	24 Piece(s)	828133
					Stainless steel appearance	R01.23	-	Right	24 Piece(s)	828134
				8x73	Stainless steel appearance	R01.23	_	Left	24 Piece(s)	828135
					Stainless steel appearance	R01.23	-	Right	24 Piece(s)	828136
				8x63	Traffic white	R07.2	RAL 9016	Left	6 Piece(s)	736008
					Traffic white	R07.2	RAL 9016	Right	6 Piece(s)	736012
			_	_	Special colour	SF	SF	Left	1 Piece(s)	2005956
					Special colour	SF	SF	Right	1 Piece(s)	2005957
84	42		6	8x73	Stainless steel appearance	R01.23	_	Left	24 Piece(s)	837049
					Stainless steel appearance	R01.23	_	Right	24 Piece(s)	837055
					Traffic white	R07.2	RAL 9016	Left	24 Piece(s)	775763
					Traffic white	R07.2	RAL 9016	Right	24 Piece(s)	775764
			_	_	Special colour	SF	SF	Left	1 Piece(s)	2005958
					Special colour	SF	SF	Right	1 Piece(s)	2005959



4.14.1 Spare parts

Top / bottom cover cap



	0		No
Cover cap	Black	10 Piece(s)	809562
	White	10 Piece(s)	809565

Side cover cap





Axis pin fixing



			No
Axis pin fixing	M6x8	100 Piece(s)	825047

4.14.2 Accessories

4.14.2.1 Locking pin

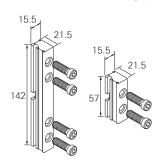


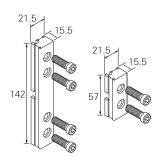
		Nο
Locking pin	100 Piece(s)	825056

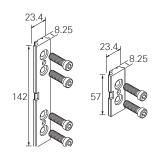


4.14.2.2 Mounting

4.14.2.2.1 Backing plate set







				No
15.5	21.5	M8x25	1 Set(s)	548486
21.5	15.5	M8x25	1 Set(s)	548946
23.4	8.25	M8x25	1 Set(s)	548485

Contents

Description	Quantity	Figure
Frame hinge backing plate	24	
Sash hinge backing plate	24	
Fixing screws for backing plates	144	



INFO

For additional fixing screw lengths, see "Screw fixing" → from page 199.

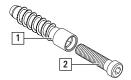
Stainless-steel spring



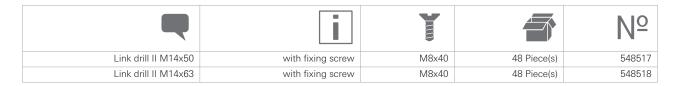
		No
Stainless steel spring for use with backing plates	200 Piece(s)	894093



4.14.2.2.2 Linkdrill II



- [1] Linkdrill II
- [2] Fixing screw





4.14.2.2.3 Direct mounting (optional)



	0		No
63	Silver	48 Piece(s)	771087
68	Black	48 Piece(s)	771088
73	Green	48 Piece(s)	771089

4.14.2.2.4 Screw fixing

Fixing screws for backing plates and Linkdrill II



James		No
M8x25	48 Piece(s)	547947
M8x40	48 Piece(s)	548512
M8x50	48 Piece(s)	548513

4.14.2.3 Adjustment key



		No
Gasket compression adjustment key for 80 ATB, 120 ATB	1 Piece(s)	825046

4.14.2.4 Packing plates



INFO

To support the frame in the case of offset profile combinations.

Packing plates for mounting with backing plates or Linkdrill II





		Roto			Nο
7	Stainless steel appearance	R01.23	_	6 Piece(s)	858503
	Dark brown	R04.6	RAL 8077	6 Piece(s)	548490
	Jet black	R06.2	RAL 9005	6 Piece(s)	568360
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548488
	Special colour	SF	SF	1 Piece(s)	2005960
10	Stainless steel appearance	R01.23	_	6 Piece(s)	858504
	Dark brown	R04.6	RAL 8077	6 Piece(s)	548494
	Jet black	R06.2	RAL 9005	6 Piece(s)	568361
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548492
	Special colour	SF	SF	1 Piece(s)	2005961
12	Stainless steel appearance	R01.23		6 Piece(s)	858530
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548496
	Special colour	SF	SF	1 Piece(s)	2005962
14	Stainless steel appearance	R01.23	_	6 Piece(s)	858531
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548500
	Special colour	SF	SF	1 Piece(s)	2005963
16	Special colour	SF	SF	1 Piece(s)	2005964
18	Stainless steel appearance	R01.23	_	6 Piece(s)	858532
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548504
	Special colour	SF	SF	1 Piece(s)	2005965
19	Stainless steel appearance	R01.23		6 Piece(s)	858533
	Traffic white	R07.2	RAL 9016	6 Piece(s)	548508
	Special colour	SF	SF	1 Piece(s)	2005966



Packing plates for direct mounting

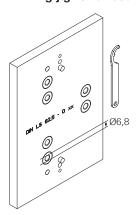


		Roto			Nο
5.7	Stainless steel appearance	R01.23	_	24 Piece(s)	825071
7	White aluminium	R01.11	RAL 9006	6 Piece(s)	764321
	Traffic white	R07.2	RAL 9016	6 Piece(s)	764322
	Special colour	SF	SF	1 Piece(s)	2005967
10	White aluminium	R01.11	RAL 9006	6 Piece(s)	764272
	Stainless steel appearance	R01.23	_	24 Piece(s)	828137
	Traffic white	R07.2	RAL 9016	6 Piece(s)	764273
	Special colour	SF	SF	1 Piece(s)	2005968
14	Stainless steel appearance	R01.23	-	24 Piece(s)	828138

[P

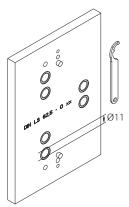
4.14.2.5 Jigs

Drilling jig for direct mounting



	i					No
Drilling jig direct mounting	incl. adjustment key	62.5	20.5	42	1 Piece(s)	737661

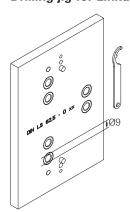
Drilling jig for backing plate



	i		(+)			Nο
Drilling jig for backing pla	incl. adjustment key	62.5	20.5	42	1 Piece(s)	547218
		67.5	20.5	47	1 Piece(s)	547223
		78	20.5	57.5	1 Piece(s)	547225
		84	42	42	1 Piece(s)	547227
		94	47	47	1 Piece(s)	547235

Drilling jig for Linkdrill II





	i	*		(+)		No
Drilling jig for link drill II	incl. adjustment key	62.5	20.5	42	1 Piece(s)	548751
		67.5	20.5	47	1 Piece(s)	548753
		78	20.5	57.5	1 Piece(s)	548755
		84	42	42	1 Piece(s)	548757
		94	47	47	1 Piece(s)	548765

Step drill







INFO

The following is required for **direct screw fixing**:

Drilling jig for direct screw fixing, Ø 6.8 mm drill

The following is required for working with **backing plates**:

Drilling jig for backing plate, \emptyset 11 mm drill

The following is required for working with Linkdrill II:

Drilling jig for Linkdrill II, Ø 9 mm drill, Ø 9 to Ø 15 mm step drill



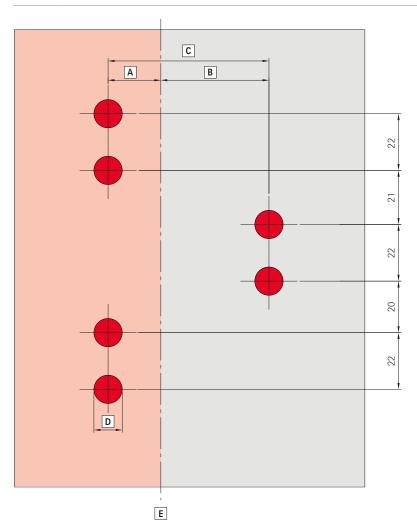
4.14.3 Drawings

4.14.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).



- [A] Distance from centre of shadow groove or pivot point to frame fixing
- [B] Distance from centre of shadow groove or pivot point to leaf fixing
- [C] Flatness deviation
- [D] Diameter (direct mounting = \emptyset 6.8; backing plate = \emptyset 11; Linkdrill II = \emptyset 9)
- [E] Centre of shadow groove or pivot point



4.14.3.2 Installation drawings



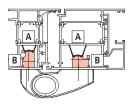
INFO

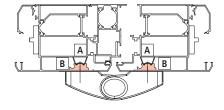
Installation examples for the aforementioned versions are shown here.

Installation examples for specific profile systems are available upon request.



Backing plates





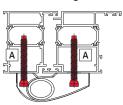
[A] Stainless-steel spring

[B] Backing plates → from page 208

Packing plates, optional (not sh.) → from page 210



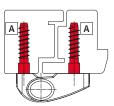
Direct mounting



[A] Fixing screw for direct mounting → from page 209
Packing plates, optional (not sh.)



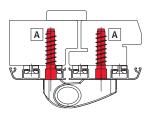
Linkdrill II



[A] Linkdrill II → from page 209
Packing plates, optional (not sh.)



Linkdrill II



[A] Linkdrill II → from page 209
Packing plates, optional (not sh.)

Roto Solid C





Profile overview

For C7.140 Inward opening doors	220
For C7.140 outward opening doors	223
C7.140	
Individual components	229
Accessories	230
Drawings	234

5 Roto Solid C – Concealed hinges

5.1 Profile overview



INFO

The profile combinations shown in the overview are a selection of the possible combinations. Other profile combinations are available upon request.

5.1.1 For C7.140 | Inward opening doors

Marking	Translation
RA-BD	Frame hinge
FL-BD	Sash hinge
BLT	Hinge tab casing
BFP	Mounting plate
HVM	Height adjustment module
ULP	With 1.5 mm packing plate
КОА	With 2 mm bracket adapter

Aliplast Greenstar	GT415				BLT	BFP	HVM	ULP	KOA
	G1410	GT1626	IV	IV	Ш	-	VII	-	-
		GT424							
Aliplast Imperial 800	IP815	IP824	IV	IV	_		VII	_	
Aliplast Superial	SP815	SP824	IV	IV	_	_	VII	-	
		SP1826							
Aliplast Star 75	RS415	RS424	IV	IV	Ш	_	VII	_	_
		RS1626							
Aliplast Genesis	GN415	GN424	IV	IV	Ш	_	VII	_	_
		GN1624							
		GN1626							
	GN032	GN424	IV	IV	III	44 - 55	VII	-	_
	+	GN1624							
	GN455	GN1626							
AluK Triton	P-03-124R2	P-03-224R2	IV	IV	Ш	_	VII	_	_
Alumil SD77	S77586	S77582	IV	IV	_	_	VII	_	_
		S77584							
Alumil SD95	S95016	S95028	IV	IV	_	44 - 55	VII	_	_
Aluprof MB 70	K518105X	K518355X	IV	IV	Ш	_	VII	_	_
Aluprof MB 86	K518730X	K518740X	IV	IV	Ш	_	VII	-	_
	K718730X	K718745X							
		K718759X							
Aluprof MB 104	K519141X	K519161X	IV	IV	Ш	_	VII	_	_
		K519164X							
		K519175X							
Aluron AS 75P	P2401	P2441	IV	IV	_	_	VII	_	_
		P2451							
		P2453							
	P2405	P2441	IV	IV	_	44 - 55	VII	_	_
		P2451							
		P2453							
Blyweert Olympia	P-09-124	P-09-B224	IV	IV	III	_	VII		_
Diy Woolt Olympia	FT-0257	FT-0250	IV	IV	III	-	VII		- -





Profile system	Frame no.	Leaf no.	RA-BD	FL-BD	BLT	BFP	HVM	ULP	KOA
Feal Termo 85 VS	FT-0513F	FT-0561F	IV	IV	-	44 - 55	VII	-	_
	FT-0551F	FT-0563F	IV	IV	-	_	VII	-	_
	FT-0575F	FT-0561F	IV	IV	_	44 - 55	VII	-	_
Heroal D72	21080	19541	IV	IV	Ш	-	VII	-	-
		21081							
		21691							
	21252	21651	IV	IV	III	_	VII	_	_
	21623	21641	IV	IV	III	44 - 55	VII	_	_
	21624	21081	IV	IV	Ш	55 - 66	VII	_	_
		21645							
	21660	21681 21643	IV	IV	III	_	VII	_	
	21000		IV	IV	1111	_	VII	_	_
		21645							
		21645 - H							
		21651							
		21655							
		21681							
	21680	21601	IV	IV	III	_	VII	-	_
	2.000	21645 - H	''	' '			*		
		21651							
		21655							
		21681							
	21780	21665	IV	IV	Ш	_	VII	-	_
		21755							
		21765							
	21820	21645	IV	IV	III	_	VII	_	_
		21841							
		21843							
	21823	21645	IV	IV	III	44 - 55	VII		
	21020		"	10	""	77 00	VIII		
		21841							
		21843							
	21824	21645	IV	IV	III	55 - 66	VII	_	_
		21841							
		21843							
	21840	21645	IV	IV	Ш	-	VII	-	_
		21841							
		21843							
	21860	21643	IV	IV	III	_	VII	_	_
		21645							
	21062	21881	IV	IV	III	44 - 55	VII		
	21863	21645	IV	IV	111	44 - 55	VII	-	_
		21851							
		21881							
	21864	21645	IV	IV	III	55 - 66	VII	_	_
		21851							
		21881							



Profile system	Frame no.	Leaf no.	RA-BD	FL-BD	BLT	BFP	HVM	ULP	KOA
Heroal D72	21880	21645	IV	IV	III	_	VII	_	_
1.0.001.272	2.000	21851							
		21881							
	22023	21641	IV	IV	III	-	VII	-	_
		21651							
		21665	IV	IV	Ш	44 - 55	VII	_	_
		21681							
		21645	IV	IV	III	44 - 55	VII	_	_
	22033	21601	IV	IV	_	_	VII	_	_
	22040								
	22024	21681	IV	IV	III	66 - 77	VII		
	22533	21881	IV	IV	III	-	VII	-	- -
	22543	21881	IV	IV	III	-	VII	-	
	29460	29461	IV	IV	III	-	VII		-
	29680	19241	IV	IV	III		VII		-
	29000		IV	IV	1111	_	VII	_	_
		29681							
Metra NC65	nc15662	nc15855	IV	IV	III	-	VII	-	-
		nc15879							
	nc15667	nc15855	IV	IV	Ш	_	VII	-	_
Metra NC75	nc17662	nc17855	IV	IV	Ш	_	VII	_	_
		nc17879	IV	IV	Ш	_	VII	_	_
	nc17667	nc17855	IV	IV	Ш	-	VII	-	_
Metra NC90	nc13662	nc13855	IV	IV	Ш	-	VII	_	_
		nc13879							
	nc13667	nc13855	IV	IV	III	_	VII	_	_
Ponzio PE68	6762	6764	IV	IV	III	_	VII		_
Ponzio PE78N	7862	7864	IV	IV	III	_	VII		_
1 011210 1 27014	7862T	78PR66B	IV	IV	III	_	VII		_
	7.552.						1		
	7040	78PR68B	1) /	I) /		FF 00	\ \/!!	_	
	7848	78PR66B	IV	IV	III	55 - 66	VII		-
		78PR68B							
Reynaers CS77	82014	82026	IV	IV	Ш	-	VII	-	_
Reynaers MasterLine 8	4080898	4080026	IV	IV	Ш	-	VII	-	_
Schüco ADS 70.HI	358170	395540	IV	IV	III	44 - 55	VII	-	_
		396660							
	372220-HD	395540	IV	IV	Ш	44 - 55	VII	-	_
		396660							
		396670							
Schüco ADS 75.SI	381910	395700	IV	IV	V		VII		
SCHUCO ADS 75.51	381910	395700	IV	IV		44 - 55	VII	-	
	362150	396870	IV	IV	III	44 - 55			_
	201070 LID	396870	IV	IV	III V	44 - 55	VII		_
	381870-HD		IV	IV	V	44 - 55	VII	_	_
		396870							
		396910	IV	IV	V	-	VII	-	_
		476440							
Schüco ADS 90.SI	356990	439070	IV	IV	V	-	VII	_	-
	441090	439070	IV	IV	V	44 - 55	VII	_	-
Sapa Avantis 70	A7K803	A7V826	X	IV	VI	_	VII	_	_
Yawal TM 62 HI	04.14067	04.24078	IV	IV	Ш	-	VII	_	-
Yawal TM 74 HI	28.14067	28.24078	IV	IV	Ш	_	VII	_	_
Yawal TM 77 HI	18.14067	18.24078	IV	IV	Ш	_	VII	_	_
	38.14067	38.24554	IV	IV	Ш	_	VII	_	_
		38.24555							
Yawal TM 102 HI	07.14067	07.24054	IV	IV	III	_	VII		_
	37.1.1007								
		07.24055							





5.1.2 For C7.140 | outward opening doors

Marking	Translation
RA-BD	Frame hinge
FL-BD	Sash hinge
BLT	Hinge tab casing
BF-Set RA	Frame mounting set
BF-Set FL	Leaf mounting set
HVM	Height adjustment module
ADP HVM	Adapter for height adjustment module

Profile system	Frame no.	Leaf no.	RA-BD	FL-BD	BLT	BF-Set RA	BF-Set FL	HVM	ADP HVM
Aliplast Genesis	GN414	GN425	IV	IV	Ш	III	1	III	-
		GN428							
		GN1625							
		GN1627							
	GN456	GN425	IV	IV	Ш	VIII	1	III	_
	+	GN428							
	GN010	GN1625							
	0.1010	GN1627							
	GN456	GN425	IV	IV	III	II	1	III	_
	+	GN428		'					
	GN011	GN1625							
Alialast Canasia	GN456	GN1627	IV	IV	III	IX		III	
Aliplast Genesis		GN425	IV	IV		IX	I	111	_
	+	GN428							
	GN012	GN1625							
		GN1627							
	GN456	GN425	IV	IV	Ш	VIII	1	III	-
	+	GN1625							
	GN030								
	GN456	GN425	IV	IV	III	II	1	III	-
	+	GN1625							
	GN031								
	GN456	GN425	IV	IV	Ш	IX	I	III	_
	+	GN1625							
	GN032								
AluK Triton	P-03-125R2	P-03-225R2	IV	IV	Ш	III	II	Ш	_
Aluprof MB-70	K518106X	K518115X	IV	IV	Ш	III	II	Ш	-
Aluprof MB-86	K518612X	K518742X	IV	IV	Ш	V	1	Ш	-
		K518746X							
	K518731X	K518742X	IV	IV	Ш	III	I	Ш	-
		K518746X							
	K518739X	K518742X	IV	IV	Ш	V	I	Ш	-
		K518746X							
heroal D72	21079	21682	IV	IV	Ш	IV	IV	III	-
	21079	21652	IV	IV	Ш	VII	VI	III	_
	21251	21654							
		21656							
		21666							
	21251	21682	IV	IV	Ш	VII	III	II	_



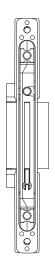
Profile system	Frame no.	Leaf no.	RA-BD	FL-BD	BLT	BF-Set RA	BF-Set FL	HVM	ADP HVM
Ponzio PE78N	7832	7867	IV	IV	III	П	IV	III	_
	+	7869							
	7848	7865P							
	7832	- 70001							
	+								
Reynaers CS 77	7856 008.0569	008.0414	IV	IV	III	III	XII	III	
Sapa Avantis 95	A9K083	A9B12	IV	IV	111	VI	III	V	_
Yawal TM 74 HI	28.82050.x	28.24098.x	IV	IV	III	VI	1	III	_
Tawai Tivi 74 Tii		20.24000.X	10	10	""	V 1		""	
	+								
	08.11052.x	00.04000	D /	10.7				ļ	
	28.82050.x	28.24098.x	IV	IV	Ш	II	1	III	_
	+								
	08.11065.x								
	28.82050.x	28.24098.x	IV	IV	III	IX	1	III	_
	+								
	08.11077.x								
Yawal TM 77 HI	18.82021.x	18.24098.x	IV	IV	Ш	X	IV	III	_
	+								
	18.11052.x								
	18.82021.x	18.24098.x	IV	IV	Ш	IV	IV	III	_
	+								
	18.11077.x								
	18.14053.x	18.24098.x	IV	IV	III	III	IV	III	_
Yawal TM 77 HI Prestige	38.82021.x	38.24568.x	IV	IV	III	X	IV	III	
	+	38.24569.x							
	18.11052.x	00.2 1000.X							
	38.82021.x	38.24568.x	IV	IV	III	V	IV	III	_
			IV	IV		V	IV	111	_
	+	38.24569.x							
	18.11065.x					n.,			
	38.82021.x	38.24568.x	IV	IV	Ш	IV	IV	III	_
	+	38.24569.x							
	18.11077.x								
Yawal TM 102 HI	07.82021.x	07.24108.x	IV	IV	III	XII	V	V	•
	+								
	07.11072.x								
	07.14053.x								
	+								
	07.11059.x								
	07.14053.x	07.24108.x	IV	IV	III	XI	V	V	
Yawal TM 102 HI Prestige	07.82021.x	07.24068.x	IV	IV	Ш	XII	V	V	•
	+								
	07.11072.x								
	07.14053.x	07.24068.x	IV	IV	III	XI	V	V	
	07.14053.x	07.24069.x	IV	IV	III	XI	V	V	-
		1							_

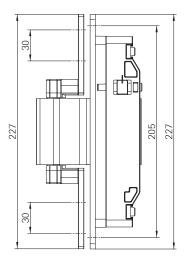




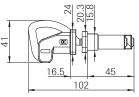
5.2 C7.140



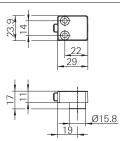
















Product description

The Roto Solid C \mid C7.140 concealed hinge is suitable for aluminium entrance doors up to a sash weight of 140 kg.

An increasing number of homeowners are opting for large aluminium doors thanks to their modern look, sophisticated appearance and durability.

With Roto Solid C, all of these properties can be achieved – it is concealed in the door and ensures that even heavy doors can be moved simply and effortlessly.



Advantages at a glance

- For aluminium entrance doors up to 140 kg
- FixClick function developed in-house for mounting the leaf quickly and securely
- Height is adjusted quickly and centrally via a single adjustment point
- Suitable for burglar inhibiting door equipment as per RC 2

Adjustment range

- Laterally adjustable: ±3 mm
- Height adjustable: +4 / -2 mm
- Gasket compression adjustable: ±1 mm

Product characteristics



Design

- Concealed position accentuates door design and facade
- Neutral colours of black and silver suit all main door colours
- Robust appearance with clear, sleek outlines



Efficiency

- FixClick function minimises the work required when mounting the leaf
- Fast and simple height adjustment using a central adjusting screw
- Fewer parts required because the left and right sides are symmetrical, resulting in reduced logistics and administrative outlay
- Sash hinge and frame hinge are packaged separately, reducing the installation time



Security

- Long service life tested over 400,000 opening cycles based on DIN EN 1191
- Maximum long-term functional performance class certified in accordance with DIN EN 1935
- Corrosion resistance class 5 in accordance with DIN EN 1670
- Can be used in burglar inhibiting doors in accordance with RC 2



Comfort

- Requires no maintenance thanks to self-lubricating bush
- Easy to clean because the mechanics are concealed
- An uninterrupted gasket level prevents heat loss



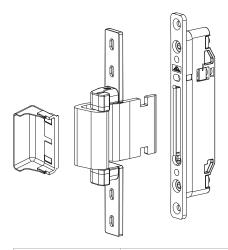
Adjustment

- Height is adjusted centrally via a single adjustment point
- With hex key





C7.140 set



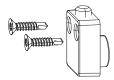
		Roto	3		Nο
Version IV	Natural silver	R01.1	-	1 Set(s)	2005170
	Jet black	R06.2	RAL 9005	1 Set(s)	823273

Contents

Figure	Quantity	Description
	1	Frame hinge
	1	Sash hinge
	1	Hinge tab casing
	6	Screws M6 x 25
6	6	Blind rivet nuts M6



Height adjustment module for inward opening doors



	0	Roto	3		No
Version VII	Natural silver	R01.1	-	1 Piece(s)	2005169
	Jet black	R06.2	RAL 9005	1 Piece(s)	2002642



INFO

One height adjustment module is required per door.

Height adjustment module for outward opening doors



	0	Roto	3		No
Version III	Natural silver	R01.1	_	1 Piece(s)	2006146
	Jet black	R06.2	RAL 9005	1 Piece(s)	833603
Version V	Natural silver	R01.1	_	1 Piece(s)	2006147
	Jet black	R06.2	RAL 9005	1 Piece(s)	837772



INFO

One height adjustment module is required per door.

Height adjustment module adapter for outward opening doors

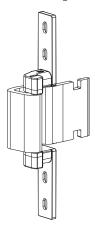


		No
Adapter for height adjustment module	1 Piece(s)	861242



5.2.1 Individual components

Frame hinge



	0	Roto			Nο
Version IV	Natural silver	R01.1	_	12 Piece(s)	2005153
	Jet black	R06.2	RAL 9005	12 Piece(s)	828097
Version X	Jet black	R06.2	RAL 9005	12 Piece(s)	836735

Sash hinge



		Roto			No
Version IV	Natural silver	R01.1	_	12 Piece(s)	899556
	Jet black	R06.2	RAL 9005	12 Piece(s)	811094

Hinge tab casing



		Roto	3		Nο
Version III	Jet black	R06.2	RAL 9005	12 Piece(s)	811102
Version V	Jet black	R06.2	RAL 9005	12 Piece(s)	835434

5.2.2 Accessories

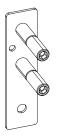
5.2.2.1 For inward opening elements

5.2.2.1.1 Sash hinge packing plate





5.2.2.1.2 Mounting plate



		Nº
44 – 55	1 Piece(s)	834249
55 – 66	1 Piece(s)	834260
66 – 77	1 Piece(s)	834261

5.2.2.1.3 Bracket adapter

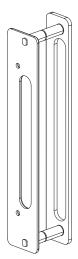


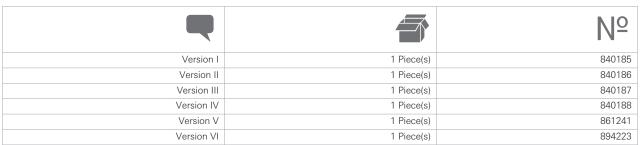
		Nº
2	24 Piece(s)	818534



5.2.2.2 For outward opening elements

5.2.2.2.1 Attachment of sash hinge





5.2.2.2 Attachment of frame hinge



		No
Version II	1 Piece(s)	840164
Version III	1 Piece(s)	840180
Version IV	1 Piece(s)	840181
Version V	1 Piece(s)	840182
Version VI	1 Piece(s)	840183
Version VII	1 Piece(s)	840184
Version VIII	1 Piece(s)	858289
Version IX	1 Piece(s)	858330

		No
Version X	1 Piece(s)	861218
Version XI	1 Piece(s)	861219
Version XII	1 Piece(s)	861240

5.2.2.2.3 Screw fixing



				No
Fixing screw 6.3x26	M6x25	Silver	500 Piece(s)	821604
C7.140 screw		Black	500 Piece(s)	821605

5.2.2.2.4 Blind rivet nut









5.2.2.3 Installation

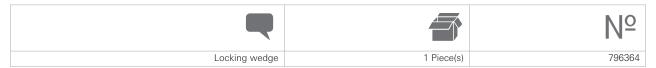
Installation set

Installation set consisting of: 3 locking wedges, 3 anti-lifting devices, 1 combination tool, 1 hex key, 1 installation instructions

		No
Installation set	1 Set(s)	813631

Locking wedge





Anti-lifting device



		No
Anti-jemmy device	50 Piece(s)	816922

Combination tool



		No
Combination tool	1 Piece(s)	796363



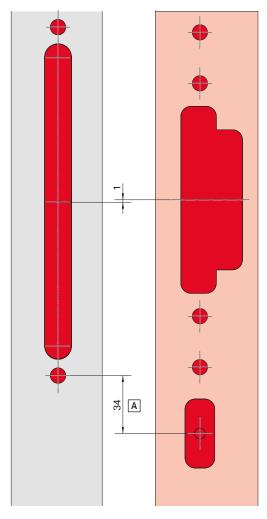
5.2.3 Drawings

5.2.3.1 Drilling pattern



INFO

Example diagram. Drilling patterns are profile-related (available upon request).



[A] Position of sash hinge relative to height adjustment module







From a single source.	
Optimum hardware systems to meet all challenges	.

Window

Hardware systems for windows and balcony doors

Sliding

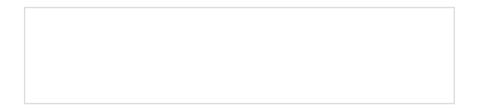
Hardware systems for large sliding windows and doors

Door

Matching hardware technology everything about doors

Equipment

Additional technology for windows and doors



Contact



