SIMONSWERK
HINGE SYSTEMS

VARIANT® FINGER PROTECTION

The hinge system for doors with finger protection function

TO PROTECT FINGERS

In public buildings, there is always a risk of children's hands getting caught in the main or secondary closing edges of doors in the heat of the moment, which can sometimes cause serious injuries. To sufficiently counteract dangers with safety-related measures and in accordance with building law, it is essential to take into account the provisions of the “German workplace law” as well as the “German accident prevention regulation for child daycare centres”. According to German Social Accident Insurance (DGUV), **“shearing points on the secondary closing edges of doors must be prevented”** (BG/GUV-SR S2 § 13, 3). The possible hazards on the closing edges and secondary closing edges of doors must be counteracted with special safety measures. Accordingly, SIMONSWERK has reacted to market requirements and developed hinge systems for doors with finger protection function for subsequent renovation as well as for new buildings.

“Regiswind” Child Daycare Centre, Gerolzhofen
ARCHITECTURE: Brückner & Brückner Architekten, Wuerzburg
SIMONSWERK: VARIANT® VX 7099 Finger Protection

“Uppenberg” Child Daycare Centre, Muenster
ARCHITECTURE: Burhoff und Burhoff Architekten BDA, Muenster
SIMONSWERK: VARIANT® V 1999 Finger Protection Set

“dSPACE” Child Daycare Centre, Paderborn
ARCHITECTURE: architektur-werk-stadt Balhorn Wewer Karhoff, Paderborn
SIMONSWERK: VARIANT® VX 7099 Finger Protection

FINGER PROTECTION SOLUTIONS FOR NEW BUILDINGS AND RETROFITTING

When designing new child daycare centres or nurseries, it is a good idea to incorporate finger protection functions for doors directly in the respective plans. SIMONSWERK offers a hinge system with finger protection function on the hinge side for all frame types in new buildings.

Especially for retrofitting applications, SIMONSWERK has developed a solution to ensure finger protection functions in existing buildings. This robust and thus very durable system can easily be assembled on site, enabling doors to smoothly open and close without any limitations and which can also be used in new buildings as well.

FINGER PROTECTION SOLUTIONS FOR RETROFITTING

VARIANT® V 1999 Finger Protection Set

For subsequent use on timber, steel and aluminium frames.

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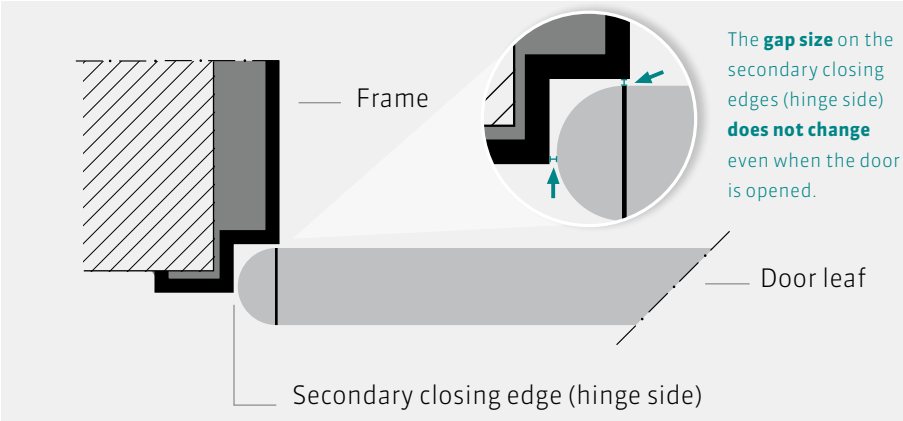

FINGER PROTECTION SOLUTIONS FOR NEW BUILDINGS – TIMBER BLOCK FRAME

VARIANT® VX 7099 Finger Protection

For use on timber block frames.

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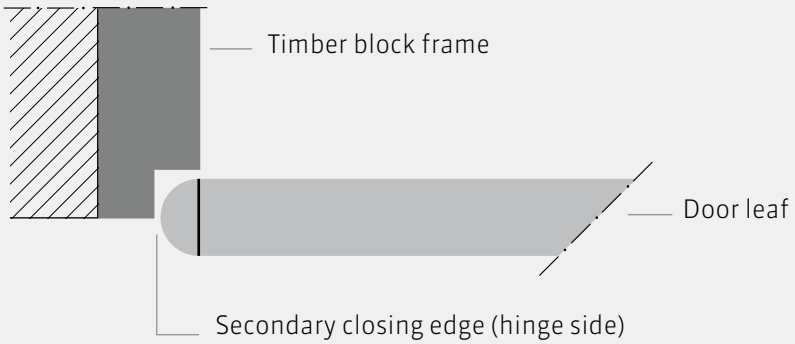

FINGER PROTECTION SOLUTIONS FOR NEW BUILDINGS – STEEL AND ALUMINIUM FRAME

VARIANT® VN 7199 Finger Protection

For use on steel and aluminium frames.

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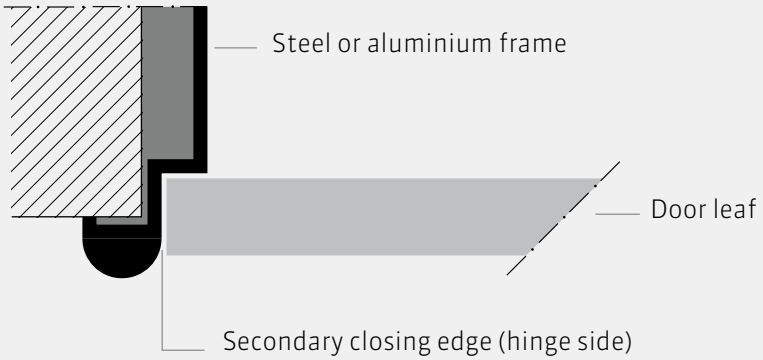


FINGER PROTECTION FOR RETROFITTING

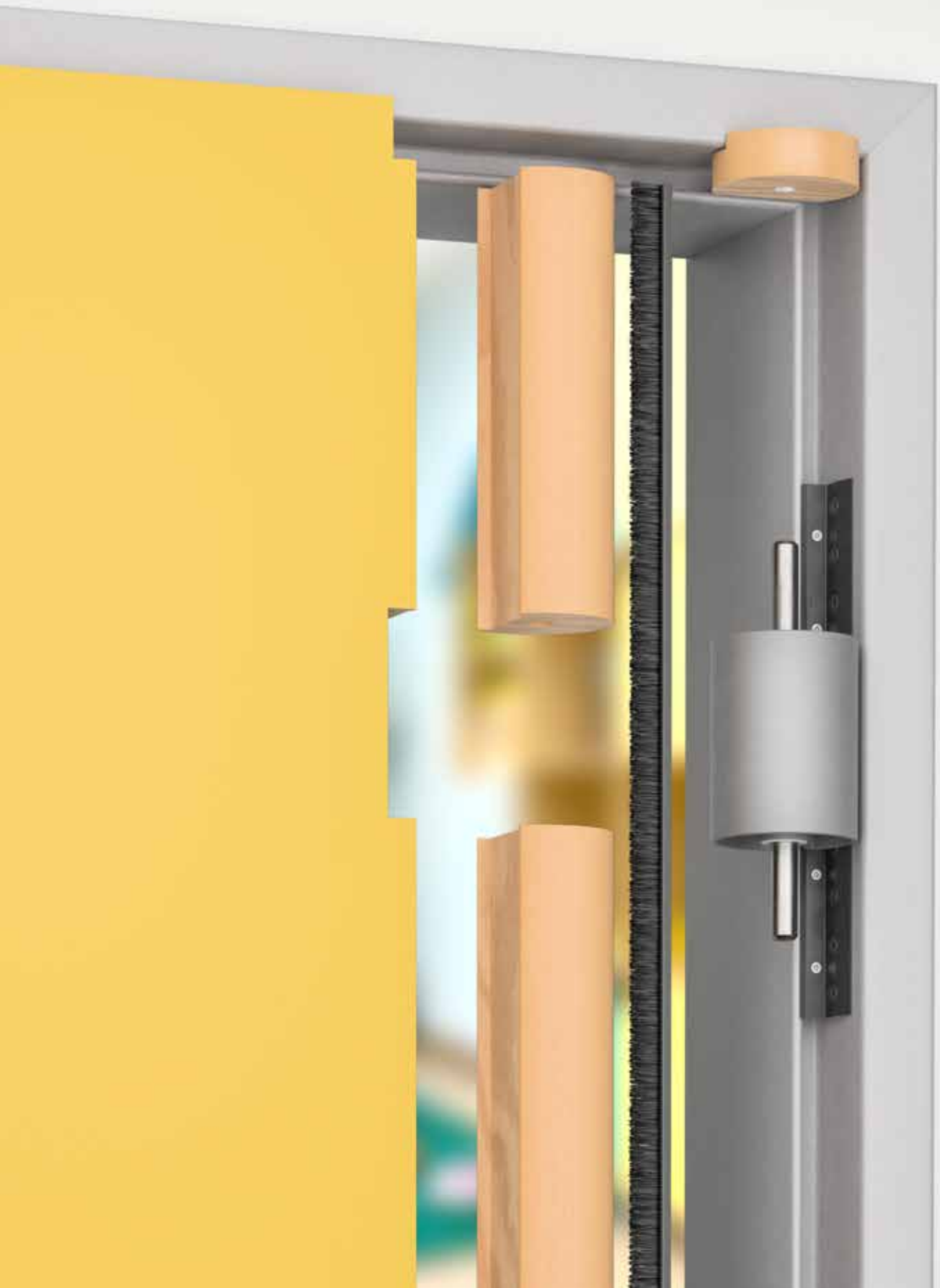
As, in some cases, renovations in public facilities for children are only partially carried out for financial or organisational reasons, the VARIANT V 1999 hinge system for finger protection is the perfect solution. In just a few steps, an installer can prepare the old door leaf for installation of the new hinge system and connect it to the existing frame. This hinge innovation from SIMONSWERK enables retrofitting in all frame situations to ensure protection of children's hands. The system can also be installed in new buildings.

BENEFITS AT A GLANCE

- for timber, steel and aluminium frames
- universal system as part of retrofitting measures as well as in new buildings
- continuous finger protection on secondary closing edges
- robust, durable system
- doors open and close without any limitations
- homogeneous, attractive appearance
- quick and easy on-site installation
- maintenance-free slide bearing technology

“Uppenberg” Child Daycare Centre, Muenster
ARCHITECTURE: Burhoff und Burhoff Architekten BDA, Muenster
SIMONSWERK: VARIANT® V 1999 Finger Protection Set

QUICK AND EASY ON-SITE INSTALLATION – V 1999 FINGER PROTECTION SET



VARIANT® V

NEW

V 1999 Finger Protection Set

for doors with finger protection function on the hinge side for retrofitting on timber, steel and aluminium frames

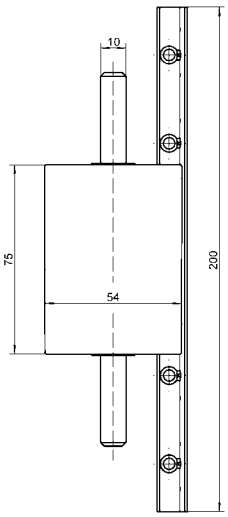
Retrofit system		up to 60 kg

Product features

- for rebated and unrebated doors
- for timber, steel and aluminium frames
- quick and easy installation
- door height up to 2110 mm
- door thickness from 39 - 45 mm
- maintenance-free slide bearing technology

Technical details

load capacity	i 2 hinges per door (1x2m)	60.0 kg
router diameter		24.0 mm
opening angle		rebated max. 135°
		unrebated max. 90°



Finish

round profile, pure white – RAL 9010, beech natural (décor),
other finishes available upon request

Installation tools

jig	serial drilling jig for V 1999 frame
	serial routing jig for V 1999 door

Detailed information in our PRODUCTSELECTOR at www.simonswerk.com

Functional areas

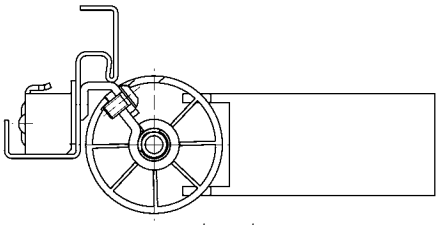
Finger protection on the hinge side/secondary closing edges

Note

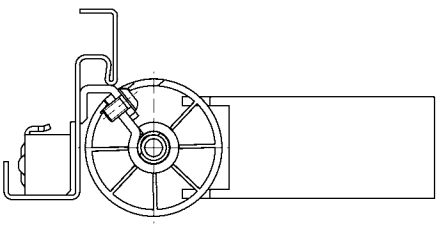
i The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). The system is designed for a door height of max. 2110 mm. Other door heights are available on request.

Scope of supply

2 x V 1999 Finger Protection hinges (glossy nickel-plated)
3 x round profile made of wood/wood materials
2 x round profile end piece (for rebated or unrebated doors)
1 x brush seal (black)
1 x soft rubber for punching out latch bolts (grey)
1 x bag of accessories with fixing screws for timber frames
1 x bag of accessories with fixing screws for steel and aluminium frames



rebated



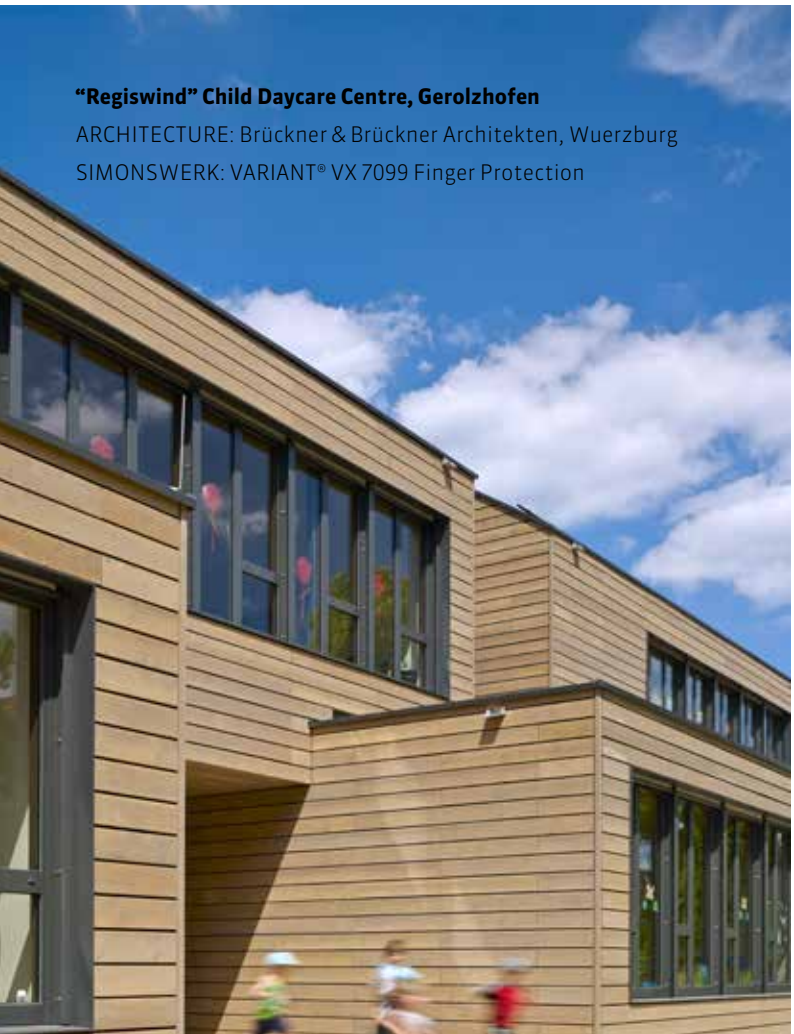
unrebated

FINGER PROTECTION ON TIMBER BLOCK FRAMES IN NEW BUILDINGS

There is no such thing as perfect protection – but hazards sources for children should be prevented if possible. Designed by SIMONSWERK, the VARIANT VX 7099 Finger Protection hinge system for use on timber block frames fulfils finger protection functions on the secondary closing edges of doors. Furthermore, the system meets the requirement of being a premium-quality and attractive addition to any interior décor.

BENEFITS AT A GLANCE

- for use on timber block frames
- finger protection thanks to half-rounded door leaf cladding
- for 3D adjustable receivers VARIANT® VX
- maintenance-free slide bearing technology



“Regiswind” Child Daycare Centre, Gerolzhofen
ARCHITECTURE: Brückner & Brückner Architekten, Wuerzburg
SIMONSWERK: VARIANT® VX 7099 Finger Protection

“Blickwinkel” Child Daycare Centre, Behringersdorf
ARCHITECTURE: Diana Iglesis Architect BDA + Team, Nuremberg
SIMONSWERK: VARIANT® VX 7099 Finger Protection

SIMONSWERK

EASY ASSEMBLY – VX 7099 FINGER PROTECTION

Installation

- simple cladding of the door leaf edge with a semi-circular timber strip
- easy mounting on the door leaf by a technician or carpenter
- maintenance-free
- virtually perfect protection in combination with an opening stop

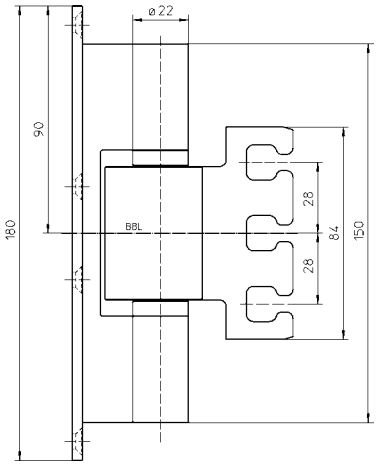
3D adjustability

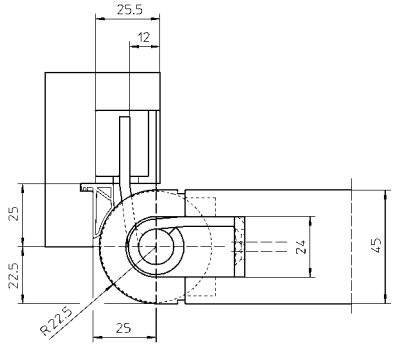
- optimal adaptation through three-dimensional adjustability in all directions:
  - horizontal +/- 3.0 mm
  - vertical +/- 3.0 mm
  - compression +/- 3.0 mm
- readjustment possible at anytime with removal of the cover plate

cover

- better aesthetic quality thanks to concealed adjustment mechanism
- optimal protection against injury through crushing or pinching
- tamper resistance

VARIANT® VX





VX 7099 Finger Protection

For doors with finger protection function on timber block frames

Hinge		up to 120 kg

Product features

- for rebated and unrebated doors
- for timber block frames
- for VARIANT VX 3D adjustable receivers
- door thickness 45 mm

Technical details

load capacity	i 2 hinges per door (1x2m)	120.0 kg
knuckle length		150.0 mm
knuckle diameter		22.0/44.0 mm
material thickness		4.0 mm
router diameter		24.0 mm
screws		5.0 x 50.0 mm
opening angle max		rebated max. 100° unrebated max. 90°

Finish

Stainless steel look

Combination

Receiver	Block frame	VX 7501 3D
	Blind frame	VX 7505 3D
Accessory	Seal	DS 7411

Installation tools

jig		universal milling frame
frame	receiver VX 7501 3D	Template Nr. 5 250 568 5
		Template Nr. 5 250 569 5
	receiver VX 7505 3D	Template Nr. 5 250 568 5
		Template Nr. 5 250 569 5
		Template Nr. 5 250 592 5
cover angle and plate	VX 7560 Finger protection	Template Nr. 5 250 570 5
door		Template Nr. 5 251 084 5
		Template Nr. 5 251 092 5

Detailed information in our PRODUCTSELECTOR at www.simonswerk.com

Functional areas

Finger protection on the hinge side

Note

i The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). Also the load capacities of the respective combined receiver have to be taken into consideration.

Scope of supply

1 x cover angle + cover plate VX 7560 finger protection
1 x plug
2 x countersunk screws

FINGER PROTECTION FOR STEEL AND ALUMINIUM FRAMES IN NEW BUILDINGS

With the VARIANT Finger Protection hinge system for steel and aluminium frames, small children's hands are protected at doors – whilst the high-quality appearance of doors and frames is maintained. The system is a unique, holistic solution that enables doors to smoothly open and close without any limitations. Thanks to a half-rounded frame facing in the style of an unrebated door leaf, the entire finger protection area is flawless. Together with the VN 7507 3D receiver, finger protection is an appropriate safety package for steel and aluminium frames, and also enables an unrestricted opening angle of up to 180°.

BENEFITS AT A GLANCE

- for unrebated doors on round-style steel and aluminium frames
- for doors with finger protection function
- easy installation
- unrestricted opening angle of up to 180°

“dSPACE” Child Daxcare Centre, Paderborn
ARCHITECTURE: architektur-werk-stadt
Balhorn Wewer Karhoff, Paderborn
SIMONSWERK: VARIANT® VN 7199 AL Finger Protection

VARIANT® VN

VN 7199 Finger Protection

for doors with finger protection function on the hinge side on steel frames

Hinge	unrebated	up to 120 kg

Product features

- for unrebated doors
- for steel frames with rounded facing
- maintenance-free running on steel balls

Technical details

load capacity	i 2 hinges per door (1x2m)	120.0 kg
knuckle length		160.0 mm
knuckle diameter		22.0 mm
material thickness		4.0 mm
router diameter		24.0 mm
screws		5.0 x 50.0 mm

Finish

polished nickelled

Combination

Receiver	Door leaf	VN 7507 3D

Installation tools

jig	universal milling frame
	template Nr. 5 250 358 6

Detailed information in our PRODUCTSELECTOR at www.simonswerk.com

Functional areas

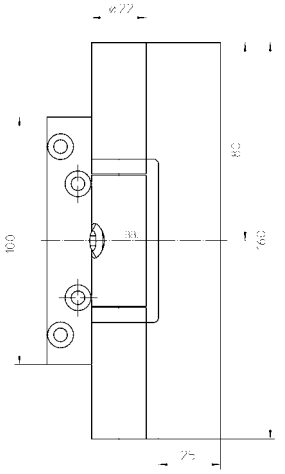
Finger protection on the hinge side

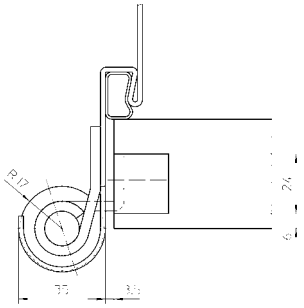
Note

i The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). The hinge consists of VN 7100 Finger Protection frame part and VN 0099 Finger Protection door part including VN 7507 3D receiver. Please order separately.

VN 0099 Finger Protection including VN 7507 3D

VN 7100 Finger Protection





VARIANT® VN

VN 0099 Finger Protection
including VN 7507 3D

VN 7100 AL
Finger Protection

VN 7199 AL Finger Protection

for doors with finger protection function on the hinge side on aluminium frames

Hinge	unrebated	up to 120 kg

Product features

- for unrebated doors
- for aluminium frames with rounded facing
- maintenance-free running on steel balls

Technical details

load capacity	i 2 hinges per door (1x2m)	120.0 kg
knuckle length		160.0 mm
knuckle diameter		22.0 mm
material thickness		4.0 mm
router diameter		24.0 mm
screws		5.0 x 50.0 mm

Finish

polished nickelled

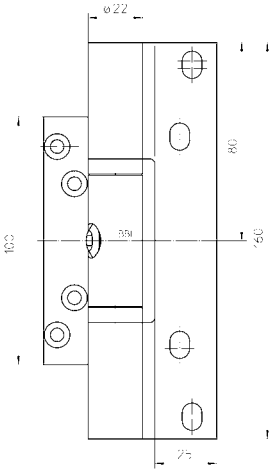
Combination

Receiver	Door leaf	VN 7507 3D

Installation tools

jig	universal milling frame
	template Nr. 5 250 358 6

Detailed information in our PRODUCTSELECTOR at www.simonswerk.com

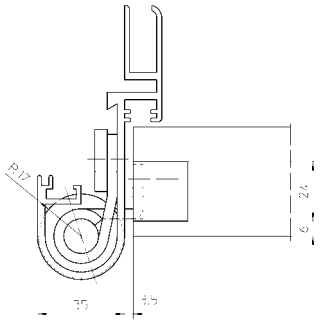


Functional areas

Finger protection on the hinge side

Note

i The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). The hinge consists of VN 7100 AL Finger Protection frame part and VN 0099 Finger Protection door part including VN 7507 3D receiver. Please order separately.



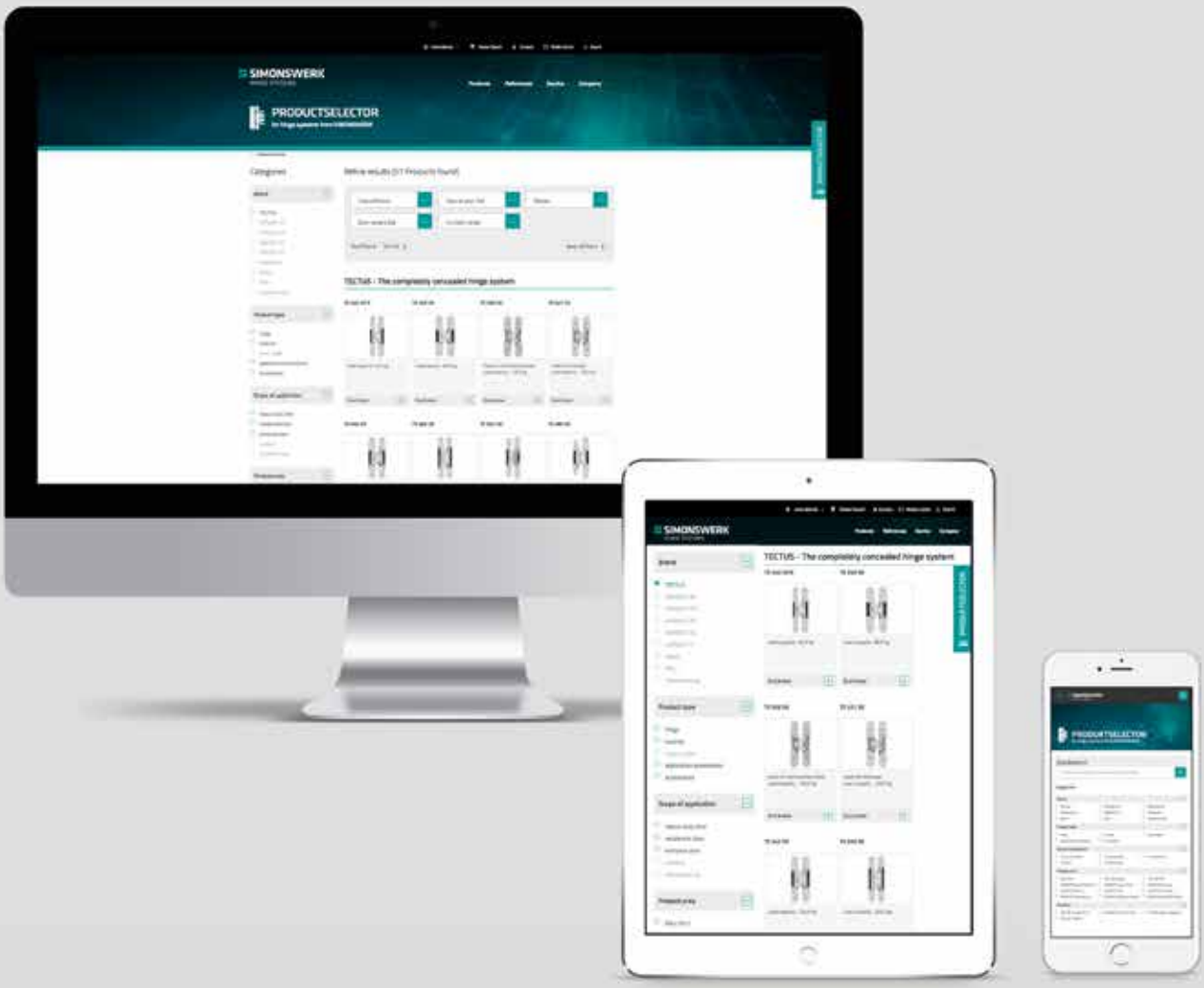
SERVICE – COMPREHENSIVE EXPERTISE FOR YOUR DAILY WORK

We are happy to provide you with all the documentation you need to determine the most suitable hinge system for your building project. Please contact us: we would be delighted to work with you to choose the best solution – from high-quality standard elements right up to the most complex solutions.

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

Our friendly and knowledgeable application engineers will be pleased to help you and advise you on finger protection.

www.simonswerk.com



VISIT OUR PRODUCTSELECTOR

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

SIMONSWERK
HINGE SYSTEMS

VARIANT® FINGER PROTECTION

VISIT OUR PRODUCTSELECTOR AT
www.simonswerk.com

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