

VARIANT® VX



SIMONSWERK
VARIANT® VX

Hinges for Heavy-Duty Doors

INDEX

Covers	4
--------	---

PRODUCTS

VX 7939/100	100 kg	6
VX 7939/120	120 kg	7
VX 7939/160 Planum	160 kg	8
VX 7939/160	200 kg	9
VX 7939/160 S WK MSTs	200 kg	10
VX 7939/160-4	300 kg	11
VX 7939/160 18-3	160 kg	12
VX 7939/160 18/5 FD	200 kg	13
VX 7728/100	80 kg	14
VX 7728/120	100 kg	15
VX 7859/120	100 kg	16
VX 7728/160	120 kg	17
VX 7859/160	120 kg	18
VX 7729/100	100 kg	19
VX 7729/120	120 kg	20
VX 7729/160 Planum	160 kg	21
VX 7729/160	200 kg	22
VX 7729/160-4	300 kg	23
VX 7939/160-4 Bronze	160 kg	24
VX 7729/160-4 Bronze	160 kg	25
VX 7729/160-4 HA MSTs	100 kg	26
VX 7729/160 18-3	160 kg	27

RECEIVERS

VX 2501 3D	28
VX 7501 3D	29
VX 2502 3D	30
VX 7502 3D	31
VX 2505 3D	32
VX 7505 3D	33
VX 7611 3D	34
VX 7521 3D	35

Technical Information	36
-----------------------	----



...the universal hinge system for heavy-duty doors

SIMONSWERK – Quality Made in Germany

SIMONSWERK is one of Europe's leading manufacturers and has been developing high-quality hinge systems for doors and windows for around 120 years. The focus for this extensive product range lies in the very latest design and the ultimate in product perfection.

The company's approx. 500 employees are committed to innovative product development and the manufacture and sale of their hinges under the motto "The right hinge for every application". With an extensive product range and many special customer solutions, SIMONSWERK covers almost every area where hinges are required. The company manufactures hinges for applications in wood, aluminium, steel, PVCu and glass. The usage areas include residential, heavy-duty, exterior doors, windows and metalworking.

With a subsidiary in Poland and a subsidiary in United Kingdom, SIMONSWERK now serves around 60 foreign markets in Europe, America, Asia and Australia. All over the world, fabricators, dealers and architects increasingly opt for the high-quality hinge systems from SIMONSWERK.

VARIANT VX – The universal hinge system for heavy-duty doors

Universal applicability and an elegant appearance combined with a high technical standard are the outstanding features of the hinge system VARIANT VX. The hinge system has been developed for extremely high usage in heavy-duty applications and is characterised by high load capacities of up to 300 kg. In addition to maintenance-free slide bearing technology, VARIANT VX door hinges also offer the facility for three-dimensional adjustment on a permanently fixed door.

The large number of receiver elements from the VARIANT VX product range enables an extremely variable usage range with exceptionally simple adjustment options. Hinges from the VARIANT VX range are suitable for unrestricted use on fire doors.

The integral unit comprising hinge, receiver and cover provides the right type for each application, with approved safety thanks to CE and RAL certification.

VARIANT VX receivers

VARIANT VX receivers are the key elements as far as frame fixings and adjustment of the VARIANT VX hinge system is concerned. The receivers are classified into the series VARIANT VX 25.. and VX 75..; all are continuously, three-dimensionally adjustable. The VARIANT VX 25... series is mainly characterised by a new type of 3D adjustment. Using sophisticated adjustment mechanisms, the door is permanently fixed during the adjustment process and can be brought into the correct position without sagging. The fact that the cover is screwed to the base plate also guarantees that extremely heavy door weights of up to 300 kg can be supported. Receivers in the VARIANT VX 75.. series are fitted with a proven adjustment mechanism. Thanks to improved fastenings within the receiver and on the frame, these can also achieve load capacities of up to 300 kg.



VX 2501 with VX 2560 KK



VX 7502 with VX 7580

Covers

Neither do the covers leave anything to be desired. A wider version of the familiar cover angles is now also available for extreme loads; both versions are available as cover plates, which are only visible from the rebate side.



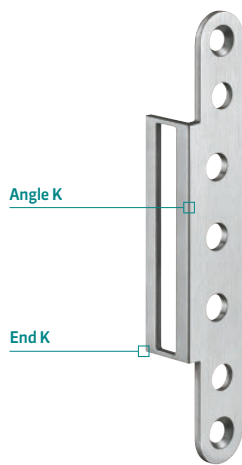
Cover plate VX 7580



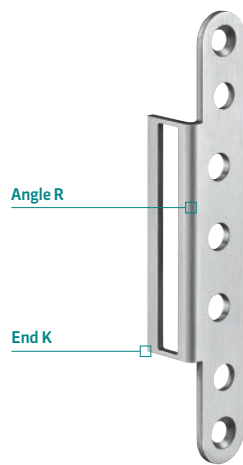
Cover plate VX 7590

As far as the angle and the end of the cover angle are concerned, both are available in a square or round design. The designations for the cover angle have been established in accordance with the following system:

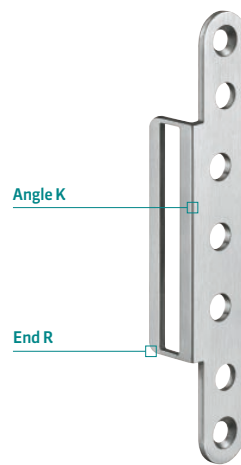
The first letter describes the angle, which is either square (K) or rounded (R), (R5). The second letter describes the end of the cover angle. Here too, they may be square (K) or rounded (R), (R6).



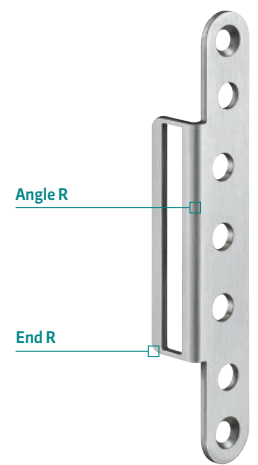
VARIANT VX 7560 KK



VARIANT VX 7560 RK



VARIANT VX 7560 KR



VARIANT VX 7560 RR

SIMONSWERK VARIANT® VX

VX 7939/100

for rebated heavy-duty doors

Hinge system	rebated	up to 100 kg
--------------	---------	--------------

Technical Details

Load capacity	100.0 kg
Knuckle length	95.0 mm
Knuckle diameter	20.0 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7939/100 for rebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 100 kg, knuckle length 95 mm, knuckle diameter 20 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250563 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

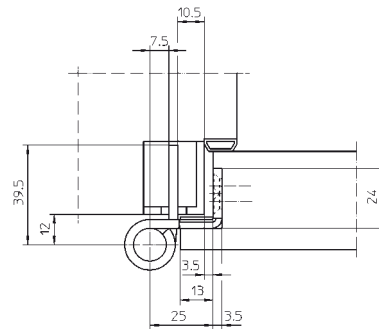
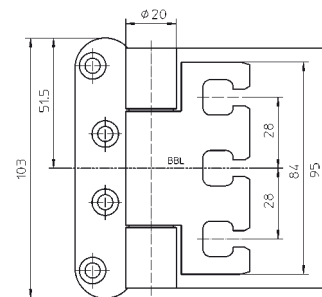
Also available with non removable pin (MSTS).

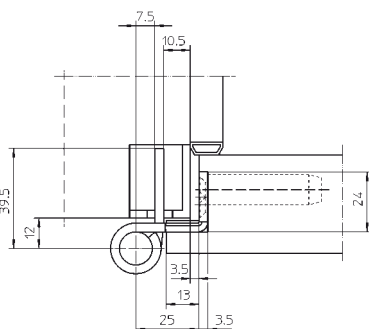
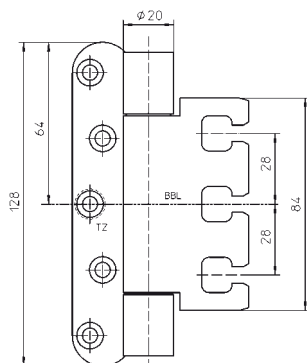
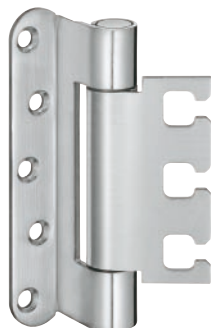
Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks





VX 7939/120

for rebated heavy-duty doors

Hinge system	rebated	up to 120 kg
--------------	---------	--------------

Technical Details

Load capacity	120.0 kg
Knuckle length	120.0 mm
Knuckle diameter	20.0 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7939/120 for rebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 120 kg, knuckle length 120 mm, knuckle diameter 20 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250564 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks



SIMONSWERK VARIANT® VX

VX 7939/160 Planum

with slim knuckle for rebated heavy-duty doors

Hinge system	rebated	up to 160 kg
--------------	---------	--------------

Technical Details

Load capacity	160.0 kg
Knuckle length	160.0 mm
Knuckle diameter	15.0 mm
Material thickness	3.0 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7939/160 Planum with reduced, slim knuckle for rebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 160 kg, knuckle length 160 mm, knuckle diameter 15 mm, right hand and left hand applicable. Internal, fixed hinge pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250560 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

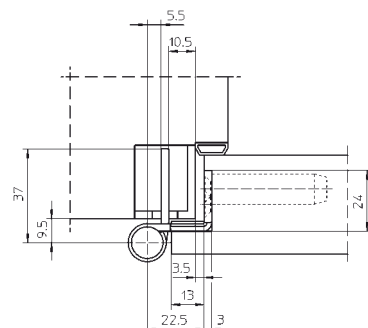
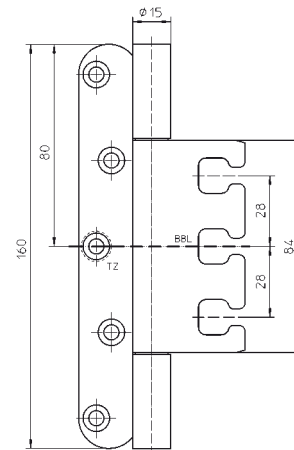
Note

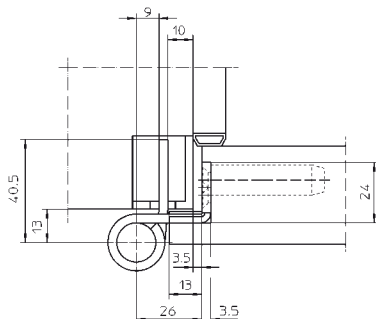
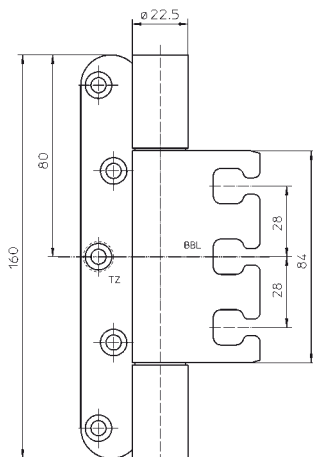
Adapted for the installation of doors within the project sector the filigree, diameter-reduced hinge knuckle is ideal for slim, recessed frame facings. A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks





VX 7939/160

for rebated heavy-duty doors

Hinge system	rebated	up to 200 kg
--------------	---------	--------------

Technical Details

Load capacity	200.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7939/160 for rebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 200 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250560 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks



SIMONSWERK
VARIANT® VX

VX 7939/160 S WK MSTs

for rebated, burglar resistant doors

Hinge system	rebated	up to 200 kg
--------------	---------	--------------

Technical Details

Load capacity	200.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7939/160 S WK MSTs for rebated burglar resistant doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 200 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, right hand and left hand applicable. Internal, torsion-proof pin, fitted with a non removable pin as standard, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame Drilling jig VX 0039 S
Template for universal milling frame	No. 5 250560 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

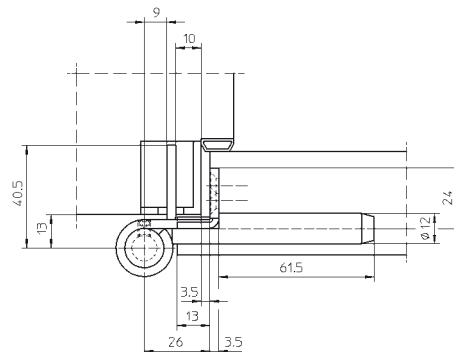
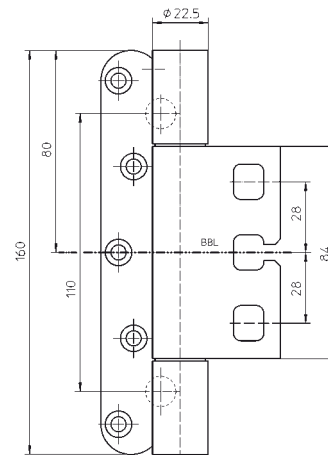
Note

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance, burglar resistance

Quality marks





VX 7939/160-4

for rebated high performance heavy-duty doors

Hinge system	rebated	up to 300 kg
---------------------	----------------	---------------------

Technical Details

Load capacity	300.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	4.0 mm
Cutter diameter	24.0 mm
Screw length	6.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7939/160-4 for rebated, heavy doors with particularly high usage with timber, steel or aluminium frames, with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 300 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250560 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

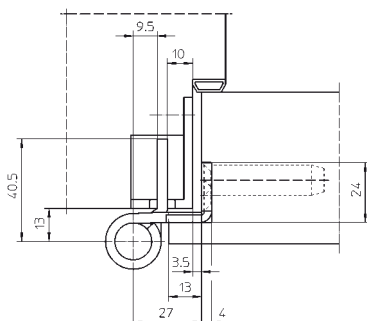
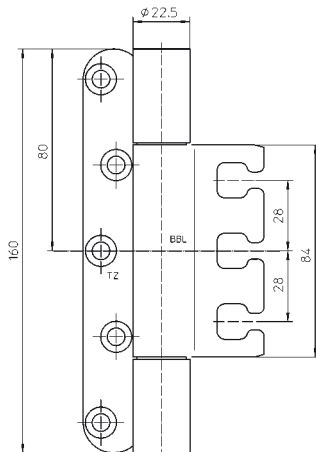
A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks



SIMONSWERK VARIANT® VX

VX 7939/160 18-3

for rebated heavy-duty doors

Hinge system	rebated	up to 160 kg
--------------	---------	--------------

Technical Details

Load capacity	160.0 kg
Knuckle length	160.0 mm
Knuckle diameter	18.0 mm
Material thickness	3.0 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy duty hinge VX 7939/160 18-3 for rebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 160 kg, knuckle length 160 mm, knuckle diameter 18 mm, right hand and left hand applicable. Internal torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250560 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

VARIANT VX 7939/160 18-3 FD available for doors with rebate seal.

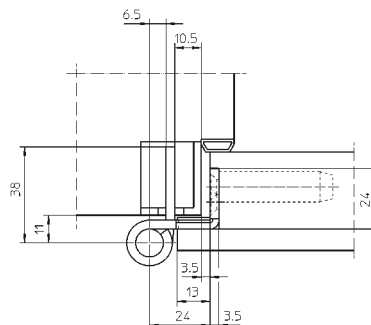
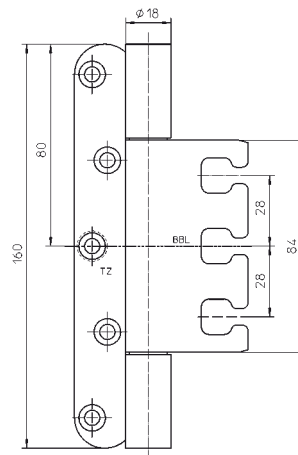
The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). A reinforcing dowel 12x50 mm per hinge is recommended when the door is subject to heavy usage.

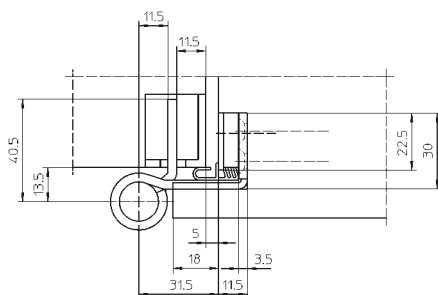
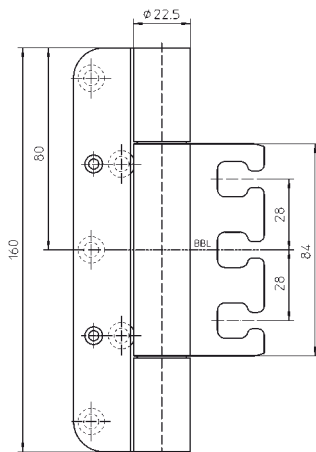
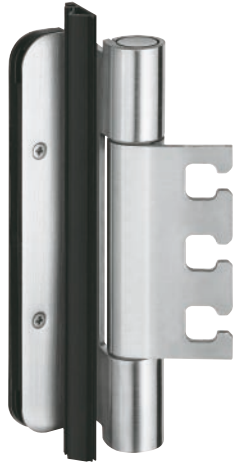
Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks





VX 7939/160 18/5 FD

for rebated entrance doors with overlap seals and 5 mm clearance

Hinge system	rebated	up to 200 kg
--------------	---------	--------------

Technical Details

Load capacity	200.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	6.0x50.0 mm
Screws for cover plate	3.0x25.0 mm

Descriptive Text

SIMONSWERK entrance door hinge VARIANT VX 7939/160 18/5 FD with groove for continuous acoustic seal for rebated doors with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 200 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, right hand and left hand applicable. Internal torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250572 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). A reinforcing dowel 12x50 mm per hinge is recommended when the door is subject to heavy usage.

Also available with security pin (MSTS).

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance, Soundproof

SIMONSWERK VARIANT® VX

VX 7728/100

for rebated flush heavy-duty doors

Hinge system	rebated flush	up to 80 kg
--------------	---------------	-------------

Technical Details

Load capacity	80.0 kg
Knuckle length	95.0 mm
Knuckle diameter	20.0 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7728/100 for rebated flush doors with timber, steel and aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 80 kg, knuckle length 95 mm, knuckle diameter 20 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250566 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

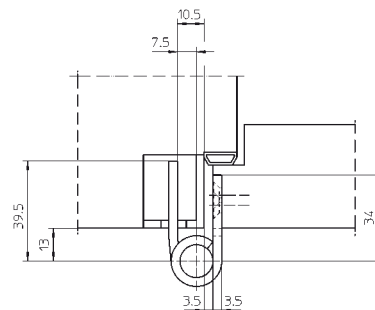
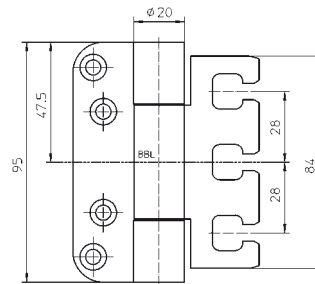
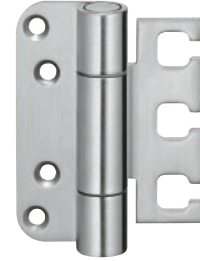
A reinforcing dowel 12.0x60.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

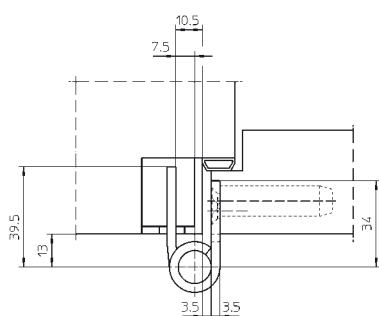
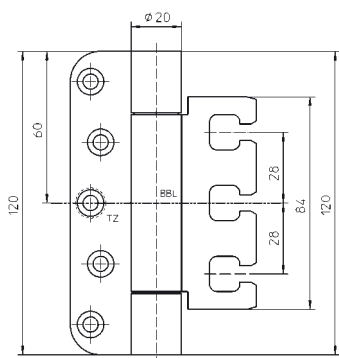
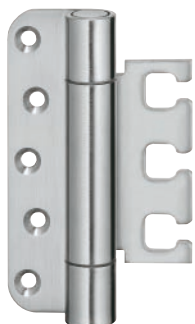
Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks





VX 7728/120

for rebated flush heavy-duty doors

Hinge system	rebated flush	up to 100 kg
---------------------	----------------------	---------------------

Technical Details

Load capacity	100.0 kg
Knuckle length	120.0 mm
Knuckle diameter	20.0 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7728/120 for rebated flush doors with timber, steel and aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 100 kg, knuckle length 120 mm, knuckle diameter 20 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250562 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks



SIMONSWERK VARIANT® VX

VX 7859/120

for rebated flush heavy-duty doors

Hinge system	rebated flush	up to 100 kg
--------------	---------------	--------------

Technical Details

Load capacity	100.0 kg
Knuckle length	120.0 mm
Knuckle diameter	20.0 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm
Screws for frame receiver DIN 7991	4.5x30.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7859/120 for rebated flush doors with timber, steel and aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 100 kg, knuckle length 120 mm, knuckle diameter 20 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250575 6

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

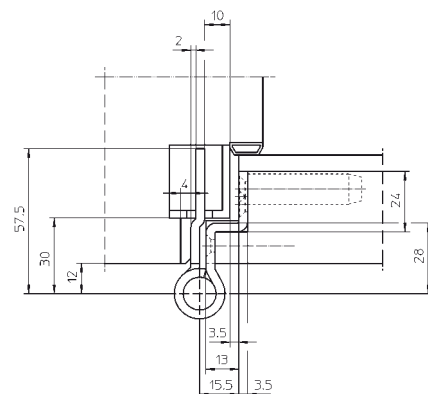
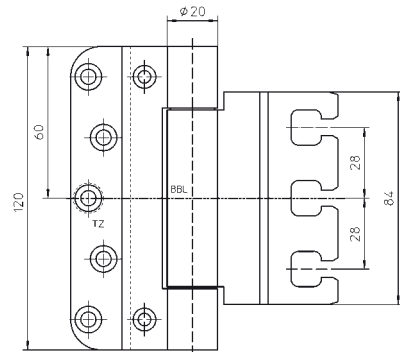
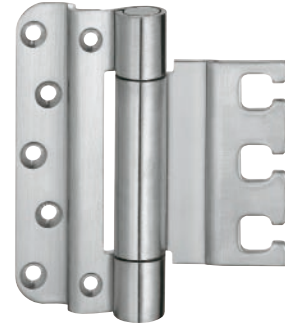
A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

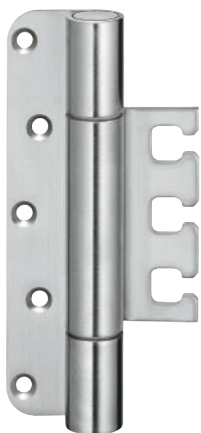
Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks





VX 7728/160

for rebated flush heavy-duty doors

Hinge system	rebated flush	up to 120 kg
---------------------	----------------------	---------------------

Technical Details

Load capacity	120.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7728/160 for rebated flush doors with timber, steel and aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 120 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250561.5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

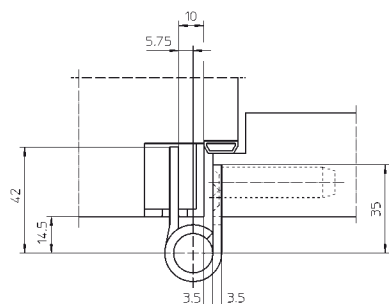
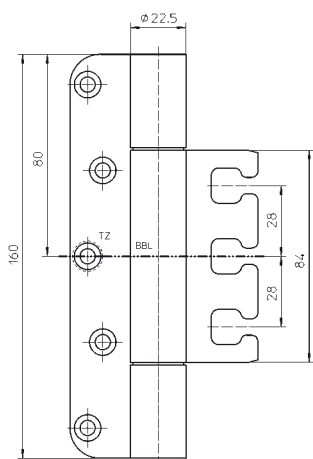
A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks



SIMONSWERK VARIANT® VX

VX 7859/160

for rebated flush heavy-duty doors

Hinge system	rebated flush	up to 120 kg
--------------	---------------	--------------

Technical Details

Load capacity	120.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm
Screws for frame receiver DIN 7991	4.5x30.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7859/160 for rebated flush doors with timber, steel and aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 120 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250577 6

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

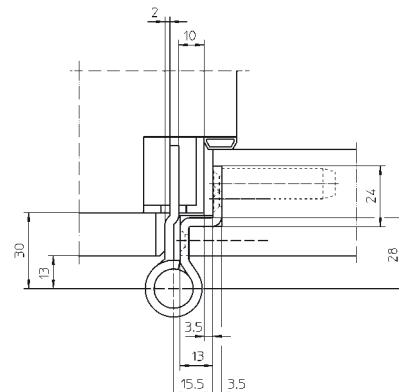
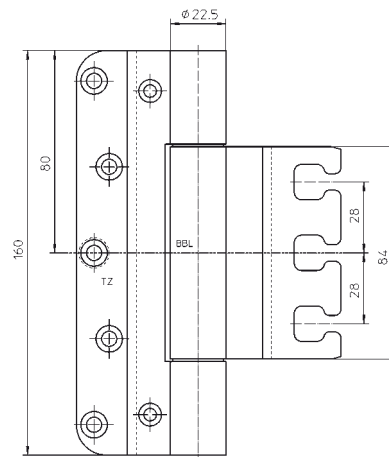
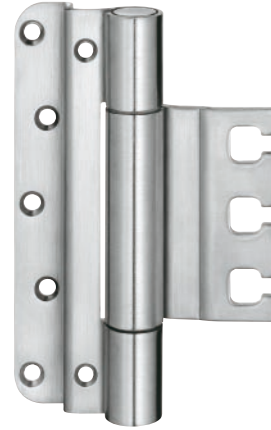
A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

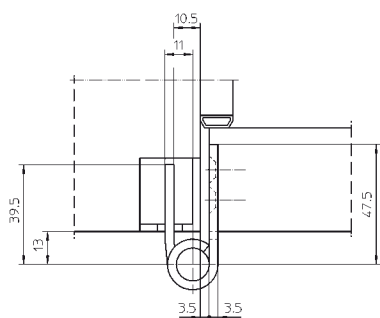
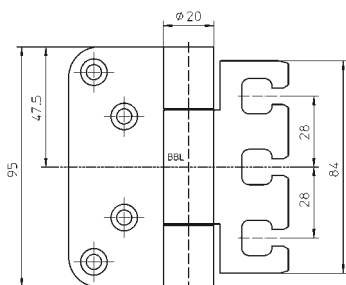
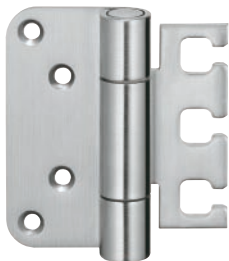
Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks





VX 7729/100

for unrebated heavy-duty doors

Hinge system	unrebated	up to 100 kg
--------------	-----------	--------------

Technical Details

Load capacity	100.0 kg
Knuckle length	95.0 mm
Knuckle diameter	20.0 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7729/100 for unrebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 100 kg, knuckle length 95 mm, knuckle diameter 20 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250565 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

Also available with non removable pin (MSTS).

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks



SIMONSWERK VARIANT® VX

VX 7729/120

for unrebated heavy-duty doors

Hinge system	unrebated	up to 120 kg
--------------	-----------	--------------

Technical Details

Load capacity	120.0 kg
Knuckle length	120.0 mm
Knuckle diameter	20.0 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7729/120 for unrebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 120 kg, knuckle length 120 mm, knuckle diameter 20 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250354 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

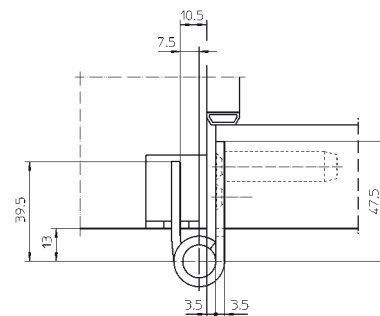
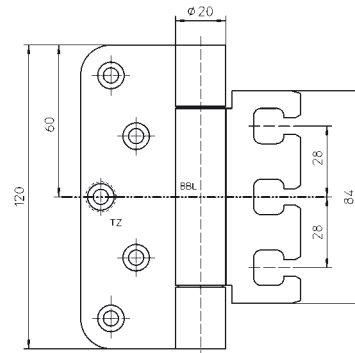
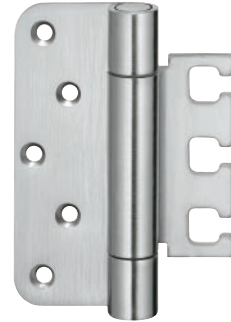
A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

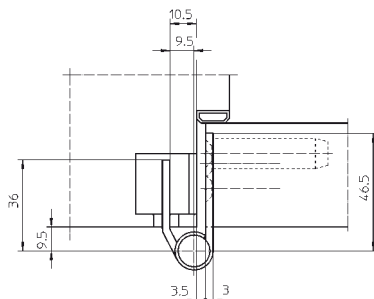
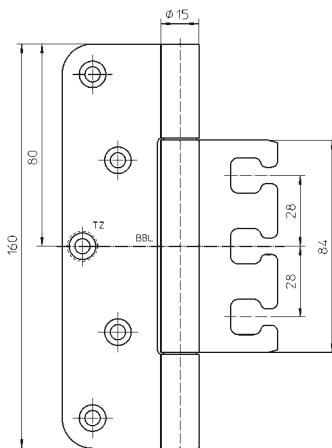
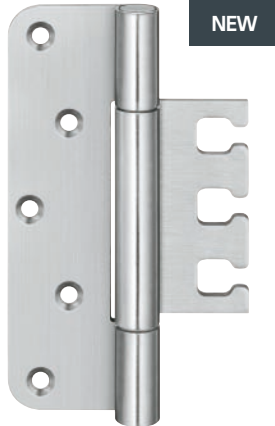
Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks





VX 7729/160 Planum

with slim knuckle for unrebated heavy-duty doors

Hinge system	unrebated	up to 160 kg
--------------	-----------	--------------

Technical Details

Load capacity	160.0 kg
Knuckle length	160.0 mm
Knuckle diameter	15.0 mm
Material thickness	3.0 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7729/160 Planum with reduced, slim knuckle for unrebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 160 kg, knuckle length 160 mm, knuckle diameter 15 mm, right hand and left hand applicable. Internal, fixed hinge pin, concealed, maintenance-free, axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250353 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks



SIMONSWERK VARIANT® VX

VX 7729/160

for unrebated heavy-duty doors

Hinge system	unrebated	up to 200 kg
--------------	-----------	--------------

Technical Details

Load capacity	200.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	3.5 mm
Cutter diameter	24.0 mm
Screw length	5.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7729/160 for unrebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 200 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250353 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

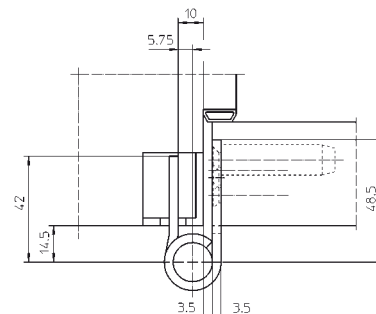
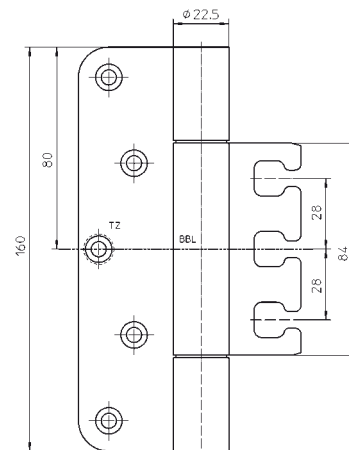
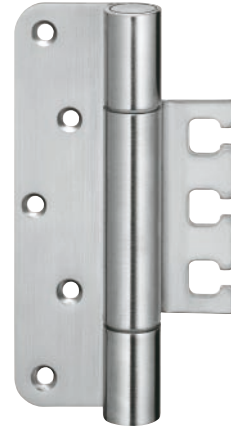
A reinforcing dowel 12.0x50.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks





VX 7729/160-4

for unrebated high performance heavy-duty doors

Hinge system	unrebated	up to 300 kg
--------------	-----------	--------------

Technical Details

Load capacity	300.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	4.0 mm
Cutter diameter	24.0 mm
Screw length	6.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7729/160-4 for unrebated, heavy doors with particularly high usage with timber, steel or aluminium frames, with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 300 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, material thickness 4 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250353 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

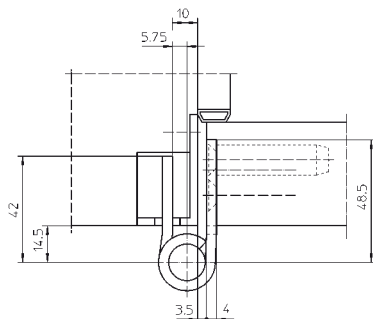
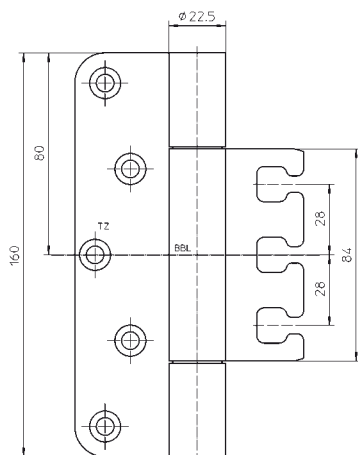
A reinforcing dowel 12.0x60.0 mm per hinge is recommended when the door is subject to heavy usage. Also available with non removable pin (MSTS).

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks



SIMONSWERK VARIANT® VX

VX 7939/160-4 Bronze

for rebated heavy-duty doors

Hinge system Bronze	rebated	up to 160 kg
---------------------	---------	--------------

Technical Details

Load capacity	160.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	4.0 mm
Cutter diameter	24.0 mm
Screw length	6.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7939/160-4 Bronze made from solid bronze for rebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 160 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, material thickness 4 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D
	Casing frame	VX 2502 3D
	Slim block	VX 2505 3D
	Steel frame	VX 7611 3D
		VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250560 5

Detailed information at www.simonswerk.com

Finish

Bronze bright patinated

Note

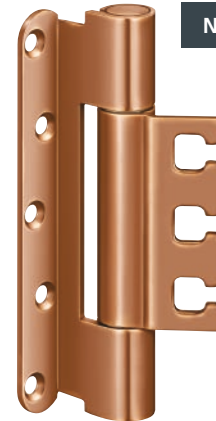
Delivery includes screws matching in colour of 6.0x50.0 mm. Hinge systems made from bronze material get dark by using and by environmental impact. The varying shades give no reason for quality defects, but point to a natural change process of the bronze material.

Page 36 contains detailed information about the load capacity stated above.

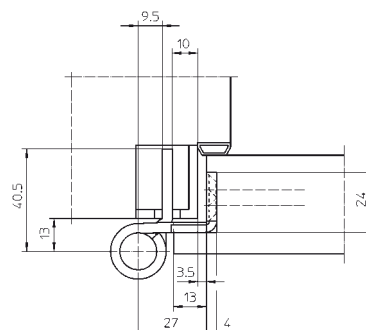
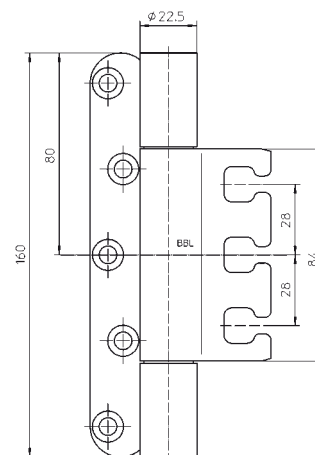
Function Range

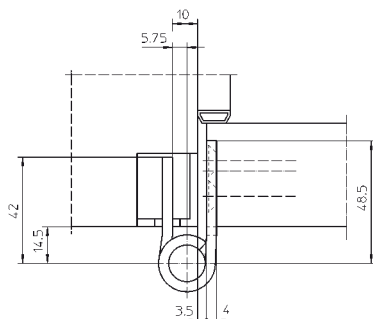
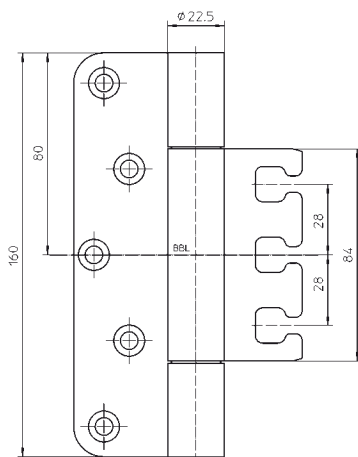
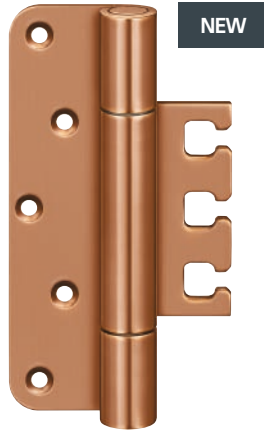
Fire resistance, Smoke resistance

Quality marks



NEW





VX 7729/160-4 Bronze

for unrebated heavy-duty doors

Hinge system Bronze	unrebated	up to 160 kg
---------------------	-----------	--------------

Technical Details

Load capacity	160.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	4.0 mm
Cutter diameter	24.0 mm
Screw length	6.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy-duty hinge VX 7729/160-4 Bronze made from solid bronze for unrebated doors with timber, steel or aluminium frames with threedimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 160 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, material thickness 4 mm, right hand and left hand applicable. Internal, torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D
	Casing frame	VX 2502 3D
	Slim block	VX 2505 3D
	Steel frame	VX 7611 3D
		VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250353 5

Detailed information at www.simonswerk.com

Finish

Bronze bright patinated

Note

Delivery includes screws matching in colour of 6.0x50.0 mm. Hinge systems made from bronze material get dark by using and by environmental impact. The varying shades give no reason for quality defects, but point to a natural change process of the bronze material.

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks



SIMONSWERK VARIANT® VX

VX 7729/160-4 HA MSTS

for unrebated outward opening timber/aluminium doors

Hinge system	unrebated	up to 100 kg
--------------	-----------	--------------

Technical Details

Load capacity	100.0 kg
Knuckle length	160.0 mm
Knuckle diameter	22.5 mm
Material thickness	4.0 mm
Screw length	6.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy duty hinge VX 7729/160-4 HA for unrebated outward-opening timber/aluminium doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. Load capacity 100 kg, knuckle length 160 mm, knuckle diameter 22.5 mm, material thickness 4 mm, right hand and left hand applicable. Internal torsion-proof screw pin, fitted with a security pin as standard, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

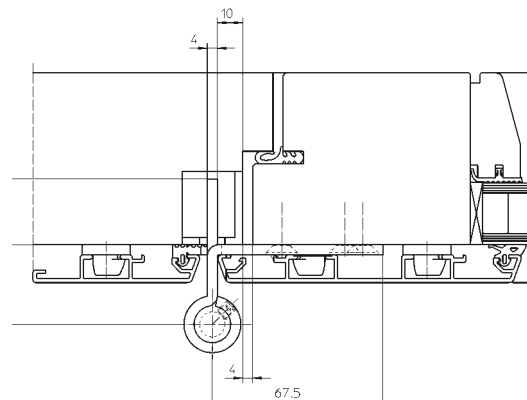
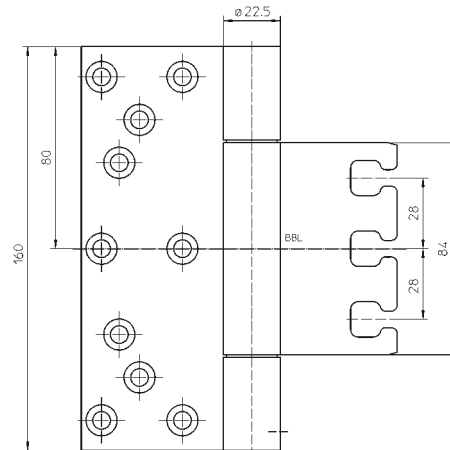
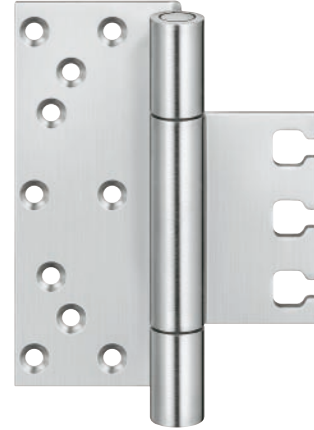
Finish

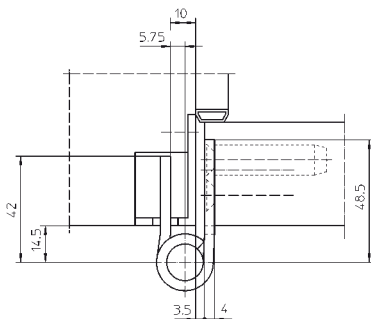
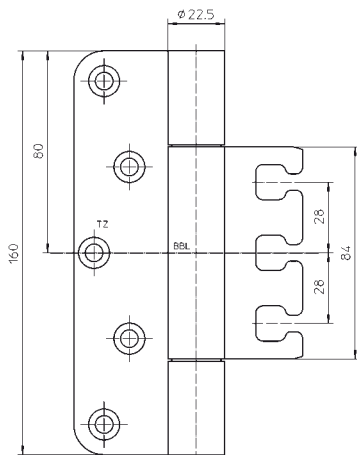
See page 38 for the range of finishes.

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). Delivery includes 2 screws incl. security pin protecting the hinge against illegal removing.

Page 36 contains detailed information about the load capacity stated above.





VX 7729/160 18-3

for unrebated heavy-duty doors

Hinge system	unrebated	up to 160 kg
--------------	-----------	--------------

Technical Details

Load capacity	160.0 kg
Knuckle length	160.0 mm
Knuckle diameter	18.0 mm
Material thickness	3.0 mm
Cutter diameter	24.0 mm
Screw length	6.0x50.0 mm

Descriptive Text

SIMONSWERK VARIANT heavy duty hinge VX 7729/160 18-3 for unrebated doors with timber, steel or aluminium frames with three-dimensionally adjustable SIMONSWERK receivers VARIANT VX. CE-certified, load capacity 160 kg, knuckle length 160 mm, knuckle diameter 18 mm, right hand and left hand applicable. Internal torsion-proof pin, concealed, maintenance-free, generously dimensioned axial-radial slide bearings. Finish...

Combination

Receiver	Block frame	VX 2501 3D, VX 7501 3D
	Casing frame	VX 2502 3D, VX 7502 3D
	Slim block	VX 2505 3D, VX 7505 3D
	Steel frame	VX 7611 3D, VX 7612 3D
	Aluminium frame	VX 7521 3D

See page 28 and following

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	No. 5 250353 5

Detailed information at www.simonswerk.com

Finish

See page 38 for the range of finishes.

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). A reinforcing dowel 12x50 mm per hinge is recommended when the door is subject to heavy usage.

Page 36 contains detailed information about the load capacity stated above.

Function Range

Fire resistance, Smoke resistance

Quality marks



VARIANT VX 2501 3D

for rebated and unrebated doors with block frames

VARIANT VX	Receiver	block frame
------------	----------	-------------

Technical Details

Cutter diameter	24.0 mm
-----------------	---------

Descriptive Text

SIMONSWERK receiver VARIANT VX 2501 3D for rebated and unrebated doors with block frames with SIMONSWERK heavy-duty hinges VARIANT VX and VARIANT VXG. Load capacity 200 kg (300 kg in combination with angle VX 2570 .. or plate VX 2590), three-dimensionally, continuously adjustable with permanently fixed door thanks to special adjusting mechanism: Side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 3.0 mm. Finish...

Combination

Hinge system	VARIANT VX VARIANT VXG	
Cover	Cover angles	VX 2560 .. VX 2570 ..
	Cover plates	VX 2580 VX 2590

Receiver and cover angle/plate form a unit. Cover angle/plate to be ordered separately. Versions are described on page 4.

Installation Tools

Jig	Universal milling frame	
Template for universal milling frame	Receiver VX 2501 3D	No. 5 250652 5
	Angle VX 2560	No. 5 250570 5 No. 5 250651 5
	Angle VX 2570	No. 5 250570 5 No. 5 250654 5
	Plate VX 2580	No. 5 250658 5 No. 5 250651 5
	Plate VX 2590	No. 5 250654 5

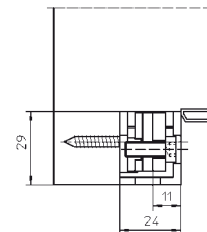
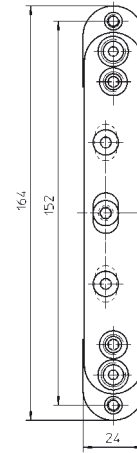
Detailed information at www.simonswerk.com

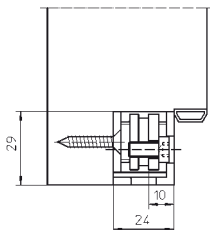
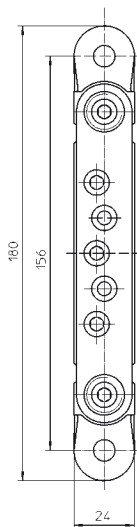
Finish

blue galvanised

Note

For fixing the cover angle chipboard screws of at least 6.0x40.0 mm are recommended.





VARIANT VX 7501 3D

for rebated and unrebated doors with block frames

VARIANT VX	Receiver	block frame
------------	----------	-------------

Technical Details

Cutter diameter	24.0 mm
-----------------	---------

Descriptive Text

SIMONSWERK receiver VARIANT VX 7501 3D for rebated and unrebated doors with block frames with SIMONSWERK heavy-duty hinges VARIANT VX and VARIANT VXG. Load capacity 200 kg (300 kg in combination with angle VX 7570 .. or plate VX 7590), three-dimensionally, continuously adjustable: Side +/- 3,0 mm, height +/- 3,0 mm, compression +/- 3,0 mm. Finish...

Combination

Hinge system	VARIANT VX VARIANT VXG
--------------	---------------------------

Cover	Cover angles	VX 7560 .. VX 7570 ..
	Cover plates	VX 7580 VX 7590

Receiver and cover angle/plate form a unit. Cover angle/plate to be ordered separately. Versions are described on page 4.

Installation Tools

Jig	Universal milling frame
Template for universal milling frame	Receiver VX 7501 3D No. 5 250569 5
	Angle VX 7560 No. 5 250570 5
	Angle VX 7570 No. 5 250570 5 No. 5 250568 5 No. 5 250657 5
	Plate VX 7580 No. 5 250658 5 No. 5 250568 5

Detailed information at www.simonswerk.com

Finish

blue galvanised

Note

For fixing the cover angle chipboard screws of at least 6.0x40.0 mm are recommended.

VARIANT VX 2502 3D

for rebated and unrebated doors with block frames

VARIANT VX	Receiver	block frame
------------	----------	-------------

Technical Details

Cutter diameter	24.0 mm
-----------------	---------

Descriptive Text

SIMONSWERK receiver VARIANT VX 2502 3D for rebated and unrebated doors with casing frames with SIMONSWERK heavy-duty hinges VARIANT VX and VARIANT VXG. Load capacity 200 kg, three-dimensionally, continuously adjustable with permanently fixed door thanks to special adjusting mechanism: Side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 3.0 mm. Finish...

Combination

Hinge system	VARIANT VX VARIANT VXG
--------------	---------------------------

Cover	Cover angles	VX 7560 .. VX 7570 ..
	Cover plates	VX 7580 VX 7590

Receiver and cover angle/plate form a unit. Cover angle/plate to be ordered separately. Versions are described on page 4.

Installation Tools

Jig	Universal milling frame	
Template for universal milling frame	Receiver VX 2502 3D	No. 5 250651 5
	Angle VX 2560	No. 5 250570 5
	Plate VX 2580	No. 5 250658 5

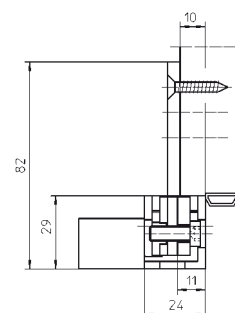
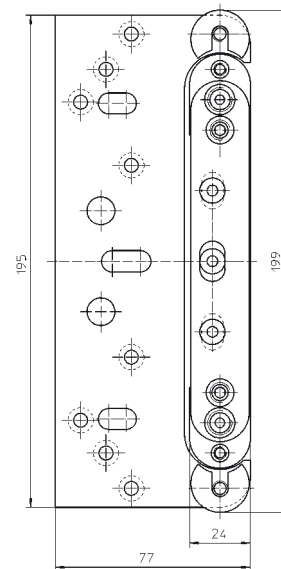
Detailed information at www.simonswerk.com

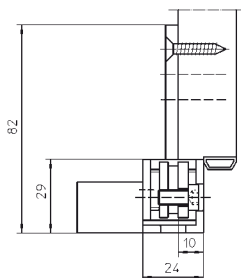
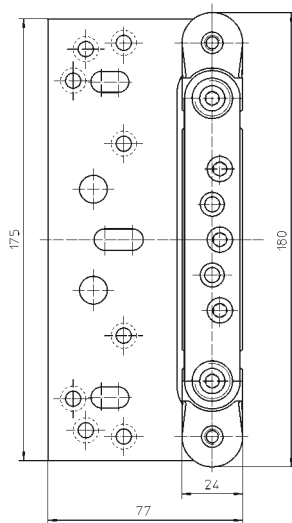
Finish

blue galvanised

Note

Delivery includes packers for casing thicknesses of 22-28 mm.





VARIANT VX 7502 3D

for rebated and unrebated doors with casing frames

VARIANT VX	Receiver	casing frame
------------	----------	--------------

Technical Details

Cutter diameter	24.0 mm
-----------------	---------

Descriptive Text

SIMONSWERK receiver VARIANT VX 7502 3D for rebated and unrebated doors with casing frames with SIMONSWERK heavy-duty hinges VARIANT VX and VARIANT VXG. Load capacity 200 kg, three-dimensionally, continuously adjustable: Side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 3.0 mm. Finish...

Combination

Hinge system	VARIANT VX VARIANT VXG
--------------	---------------------------

Cover	Cover angles	VX 7560 ..
	Cover plates	VX 7580

Receiver and cover angle/plate form a unit. Cover angle/plate to be ordered separately. Versions are described on page 4.

Installation Tools

Jig	Universal milling frame	
Template for universal milling frame	Receiver VX 7502 3D	No. 5 250568 5
	Angle VX 7560	No. 5 250570 5
	Plate VX 7580	No. 5 250658 5

Detailed information at www.simonswerk.com

Finish

blue galvanised

Note

Delivery includes packers for casing thicknesses of 22-28 mm.

SIMONSWERK
VARIANT® VX

VARIANT VX 2505 3D

for rebated and unrebated doors with blind frames

VARIANT VX	Receiver	blind frame
------------	----------	-------------

Technical Details

Cutter diameter	24.0 mm
-----------------	---------

Descriptive Text

SIMONSWERK receiver VARIANT VX 2505 3D for rebated and unrebated doors with blind frames with SIMONSWERK heavy-duty hinges VARIANT VX and VARIANT VXG. Load capacity 200 kg, three-dimensionally, continuously adjustable with permanently fixed door thanks to special adjusting mechanism: Side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 3.0 mm. Finish...

Combination

Hinge system	VARIANT VX VARIANT VXG
--------------	---------------------------

Cover	Cover angles	VX 2560 ..
	Cover plates	VX 2580

Receiver and cover angle/plate form a unit. Cover angle/plate to be ordered separately. Versions are described on page 4.

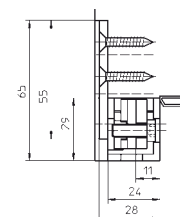
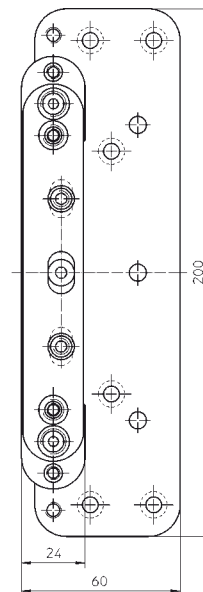
Installation Tools

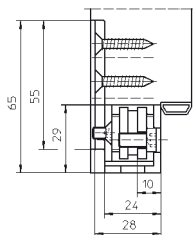
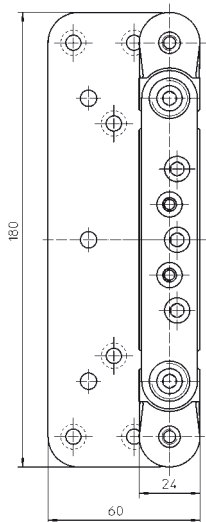
Jig	Universal milling frame	
Template for universal milling frame	Receiver VX 2505 3D	No. 5 250652 5
		No. 5 250653 5
	Angle VX 2560	No. 5 250570 5
		No. 5 250651 5
	Plate VX 2580	No. 5 250658 5
		No. 5 250651 5

Detailed information at www.simonswerk.com

Finish

blue galvanised





VARIANT VX 7505 3D

for rebated and unrebated doors with blind frames

VARIANT VX	Receiver	blind frame
------------	----------	-------------

Technical Details

Cutter diameter	24.0 mm
-----------------	---------

Descriptive Text

SIMONSWERK receiver VARIANT VX 7505 3D for rebated and unrebated doors with blind frames with SIMONSWERK heavy-duty hinges VARIANT VX and VARIANT VXG. Load capacity 200 kg, three-dimensionally, continuously adjustable: Side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 3.0 mm. Finish...

Combination

Hinge system	VARIANT VX VARIANT VXG
--------------	---------------------------

Cover	Cover angles	VX 7560 ..
	Cover plates	VX 7580

Receiver and cover angle/plate form a unit. Cover angle/plate to be ordered separately. Versions are described on page 4.

Installation Tools

Jig	Universal milling frame	
Template for universal milling frame	Receiver VX 7505 3D	No. 5 250569 5
	Angle VX 7560	No. 5 250592 5
		No. 5 250570 5
		No. 5 250568 5
	Plate VX 7580	No. 5 250658 5
		No. 5 250568 5

Detailed information at www.simonswerk.com

Finish

blue galvanised

SIMONSWERK
VARIANT® VX

VARIANT VX 7611 3D

for rebated and unrebated doors with steel frames

VARIANT VX	Receiver	steel frame
------------	----------	-------------

Descriptive Text

SIMONSWERK receiver VARIANT VX 7611 3D for rebated and unrebated doors with steel frames with SIMONSWERK heavy-duty hinges VARIANT VX and VARIANT VXG. Load capacity 200 kg, plaster-proof, three-dimensionally, continuously adjustable: Side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 3.0 mm. Finish...

Combination

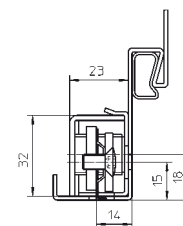
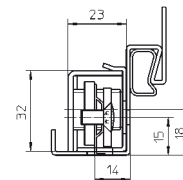
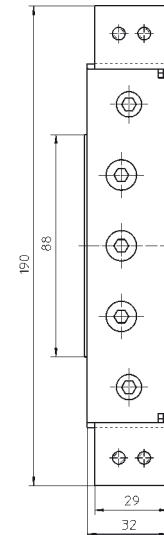
Hinge system	VARIANT VX VARIANT VXG
--------------	---------------------------

Finish

blue galvanised, stainless steel

Note

Also available without welding projections as version VX 7612 3D.





VARIANT VX 7521 3D

for rebated and unrebated doors with aluminium frames

VARIANT VX	Receiver	aluminium frame
------------	----------	-----------------

Descriptive Text

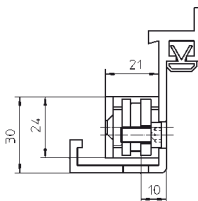
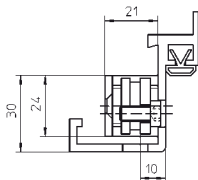
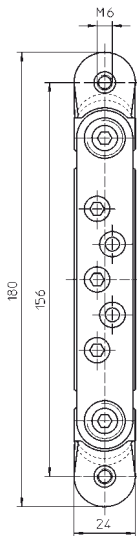
SIMONSWERK receiver VARIANT VX 7521 3D for rebated and unrebated doors with aluminium frames with SIMONSWERK heavy-duty hinges VARIANT VX and VARIANT VXG. Load capacity 160 kg, three-dimensionally, continuously adjustable: Side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 3.0 mm. Finish...

Combination

Hinge system	VARIANT VX VARIANT VXG
--------------	---------------------------

Finish

blue galvanised



HINGE LOAD CAPACITY

Selection criteria

When selecting or defining a hinge, the load itself is often equated to the door weight. However, due to a number of different factors, the load on the hinge can often be many times more than the door weight.

Even when all these different criteria have been considered, an additional reserve should always be calculated when selecting the hinge.

This is especially relevant in public buildings, where particular loads occur because it's not always possible to calculate the high frequency of opening and usage (schools, housing developments etc.), the hinges should be upgraded by size, even if this is unnecessary based purely on the door weight.

Ultimately a hinge is only as good as its subsequent application. That's why proper fitting and professional installation are absolutely essential. Only hinges that are fixed correctly can fulfil their designated function.

The material strength of the component to be fitted and the force-fit connection to the brickwork or frame is the basis for the respective hinge function. We are happy to help should you have any questions regarding the right hinge selection for a specific case.

To avoid consequential damage, the following criteria must be considered when selecting a hinge:

Installation site (residential property, public building, school, head office, housing developments etc.)

Element's material type

Frequency of opening

Door dimensions (e.g. extra wide)

Position of the hinges

Installation of the hinges

Outward opening doors (porch)

Door stoppers

Door closers

Wall soffits, etc.

Third hinge

In addition to the factors described above, the use of a third hinge can have a significant impact on the load capacity. However, it's important to bear in mind that the stated capacity cannot simply be multiplied by a factor of 1.5. The load capacity can only be influenced positively if a 3rd hinge is used in the upper third. SIMONSWERK recommends that a 3rd hinge is used 370 mm below the top hinge (based on the upper hinge reference line). This will increase the stated load capacity.

Extra wide doors

SIMONSWERK heavy-duty hinges are generally designed for the stated load capacities. Please note that from a door width of 100 cm, when the hinge spacing remains constant, the load capacities are reduced as a percentage to the extent by which the 100 cm door width is exceeded (e.g. door width of 125 cm = load capacity ./ 25%).

An accurate, professional fitting in accordance with the SIMONSWERK installation instructions is always a prerequisite.

The load specifications for SIMONSWERK hinges refer to a maximum door weight, in consideration of the named factors that influence the load on the hinges.

All specifications are based on the following references:

Door leaf size	1000 x 2000 mm
Use of	2 hinges
Hinge spacing	1435 mm

APPLICATION

**Reinforcing dowel (TZ)**

Depending on the application area, design and door usage, the use of reinforcing dowels may be recommended to stabilise the hinge leaves. Reinforcing dowels relieve the load on the fastening screws and stabilise the hinge leaves in the door leaf hole.

Hinges with a height of 160 mm or 120 mm can be fitted with an additional reinforcing dowel in the centre screw hole. The reinforcing dowel should be ordered separately.

With a material thickness of 3.0 mm or 3.5 mm, the reinforcing dowel will need to be 12 x 50 mm (M 5 screw). With a material thickness of 4.0 mm, use a reinforcing dowel of 12 x 60 mm (M 6 screw).

Rebate seal

For some VX hinges, versions for acoustic seal are available on request.

Screws

The countersunk screw holes on SIMONSWERK heavy-duty hinges are designed for German chipboard screws. For use in practice we recommend screws (e.g. Spax) with a 4.5–5.0 mm diameter. On hinges with a material thickness of 4 mm, the countersunk holes are designed for a 6 mm screw diameter. The outer fastening screws for the covers in the VARIANT VX series should be at least 6 x 40 mm.

In general we recommend that screw holes are predrilled to ensure an optimum hold and thereby guarantee the stated load capacities.

**Non removable pin (MSTS)**

On request, all SIMONSWERK hinges with a continuous hinge pin are also available with a non removable pin, for use on outward opening doors.

Material

SIMONSWERK exclusively uses tested, high-quality materials on all its hinge versions.

Finials for VARIANT VX heavy-duty hinges

SIMONSWERK designer door hinges are showpieces for sophisticated door appearance. Highly successful on interior and exterior doors, they also “wave the flag” in the heavy-duty sector. With basic and soft finials, VARIANT VX heavy-duty hinges in 100 mm and 160 mm sizes are also available in two outstanding designs in high-quality finishes.



APPLICATION

Special designs

If you have special designs and none of the hinges featured in this catalogue are suitable, please send us a dimensioned cross sectional drawing of the component design, if possible on a 1:1 scale – ideally in CAD format, e.g. DXF. SIMONSWERK will quickly check whether any of our hinges can be modified to suit your requirements.

Scale, scaled drawing

All CAD drawings have been produced to scale and are shown on a scale of 1:3 (photo and technical drawing).

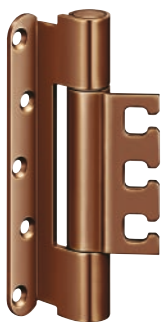
Scale of 1:3 corresponds to 33.3% (exception: chapter on application technology).

Knuckle

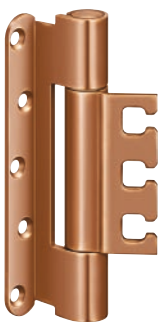
VARIANT heavy-duty hinges are available in the standard dimensions of 160, 120 and 100 mm. The knuckles of the 100 and 120 mm hinges have a 20 mm, the knuckles of the 160 mm hinges a 22.5 mm diameter. There are also two \varnothing 15 mm versions as a filigree alternative for design-oriented door elements.

Finishes for heavy-duty hinges VARIANT VX

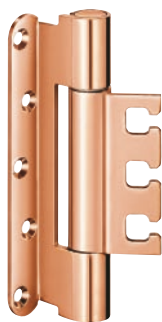
A wide range of finishes give planners the ability to match the various hardware components such as handles and hinges. All heavy-duty hinges are available in the „galvanised“ version. Stainless steel hinges are also available with PVD coating. Other finishes, in RAL colours for example, are available on request.



Bronze finish dark



Bronze finish bright



Bronze finish polished



Polished brass



Stainless steel satin brushed



Polished stainless steel



Satin chromed



Polished chromed



Satin nickelled

APPLICATION

Corrosion protection

When selecting a suitable finish or material, corrosion protection often plays a decisive role alongside the inclusive visual image of the door and hardware. In practice it is important to have both components working in harmony, to maintain a lasting, overall impression.

The main materials and finishes from SIMONSWERK are tested in accordance with the specifications of DIN EN 1670 and are classified as follows:

Stainless steel	Class 5
Powder coated (coloured)	Class 5
Stainless steel look (aluminium)	Class 4
Top zinc	Class 4
Galvanised	Class 3
Polished chromed	Class 2
Satin chromed	Class 1

- Class 1 = **24 hour** salt spray test
- Class 2 = **48 hour** salt spray test
- Class 3 = **96 hour** salt spray test
- Class 4 = **240 hour** salt spray test
- Class 5 = **480 hour** salt spray test

All other finishes not listed here satisfy only optical requirements.

In damp locations and on components exposed to the elements, we recommend the use of stainless steel hinges only, as this is the only material proved to be corrosion resistant over the long term.

Even stainless steel material can reach its limits under extreme conditions (such as coastal regions, indoor swimming pools, rooms with aggressive air, etc.). Continual maintenance will guard against the onset of light surface and flash rust. Cleaning periods depend on usage and the degree of pollution. Further information on caring for stainless steel material can be found at www.simonswerk.com.

Specific material usage can improve stainless steel's resistance to corrosion. We would be happy to advise you.

CONTAINS

 **SIMONSWERK**
VARIANT® VX

FURTHER BRANDS MADE BY SIMONSWERK

 **SIMONSWERK**
TECTUS®

 **SIMONSWERK**
VARIANT® VN

 **SIMONSWERK**
VARIANT® VG

 **SIMONSWERK**
VARIANT® V

 **SIMONSWERK**
BAKA®

 **SIMONSWERK**
SIKU®

 **SIMONSWERK**
ALPRO®

VARIANT® VX

Brochure VARIANT® VX 

10/2012
5 800309 0 00001/2.0

SIMONSWERK do not accept responsibility for misprints and subsequent specification changes although every effort has been made to avoid any errors during preparation of this brochure.

PLEASE VISIT OUR PRODUCT SELECTOR ON
www.simonswerk.com

SIMONSWERK GmbH
Bosfelder Weg 5
33378 Rheda-Wiedenbrück
Germany

Fon +49 (0)5242 / 413-0
Fax +49 (0)5242 / 413-260

sales@simonswerk.de
www.simonswerk.com

