

Connecting technology for conventional applications and lightweight design



Technik für Möbel

# Connecting technology from Hettich – strong, fast, reliable and proven



#### Securely anchored

Connecting technology from Hettich is simply unbeatable. No matter whether you are using conventional or lightweight materials, Hettich has the right connecting fitting to create keyed and friction-locked joints for shelves and side panels for any piece of furniture. Well accessible, they make furniture easy to assemble and dismantle. Whatever the application, the focus is always on providing a fast, reliable and easy-to-fit solution. The connecting fitting itself does its job hidden out of view or blends into the background, remaining completely invisible. Hettich connecting technology keeps the promise you give your customers.



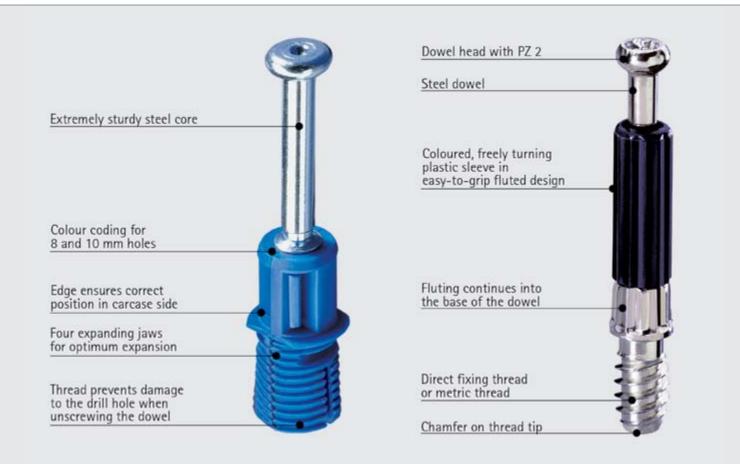
Intelligent solutions connecting all components in a well-functioning system are essential for future-proof design flexibility in lightweight furniture. This is the only way of creating furniture that can't be bettered. And it's what we demand from Hettinject – innovative lightweight connecting technology.

Strength and stability can be planned and provided exactly where it matters in the lightweight board. Teamed up with you and your ideas, we take Hettinject as the basis for developing cost-effective solutions for future generations of furniture.

Something we're looking forward to – because lightweight design is the future.



# Connecting technology from Hettich – the right solution for any application



Nothing's faster than Rapid S

The new generation of Hettich fast assembly dowels with steel core. Slim, light and incredibly strong. Fitted without the need for tools – the dowel simply pushes into place. Combined with Rastex, Rapid S makes a perfect pair.

Twister – driven home quickly and safely Thanks to the freely rotating sleeve, the cordless screwdriver lets you drive Twister in all the way without any risk of injury from sharp edges or burrs.



Rastex 15 can be used in combination with Twister and Rapid S dowels.



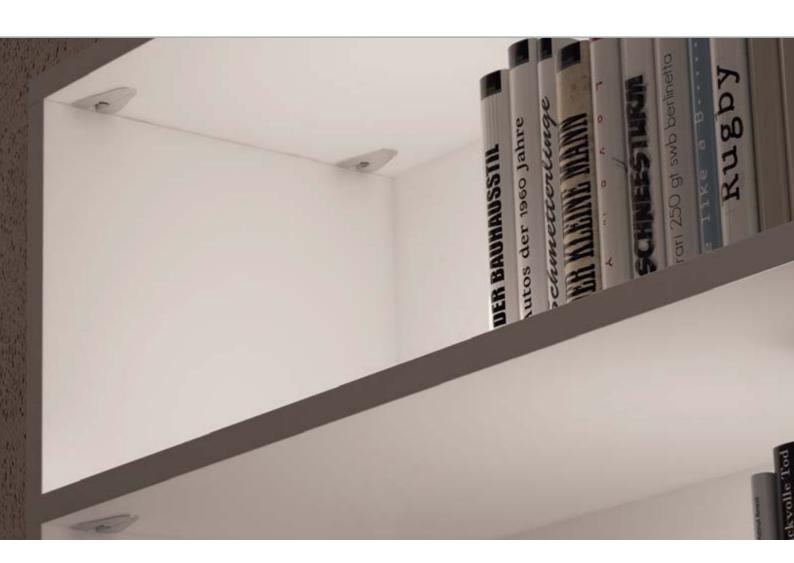
Rastex 25 can be used in combination with Twister dowels.



Coloured plastic sleeves in easy-grip fluted design indicate dowel length. Green (dowel length 20 mm) for Rastex 15, blue (dowel length 24.5 mm) for Rastex 25 and black (dowel length 30 mm) for Rastex 15.



Fits into the hole in the carcase side quickly and easily without the need for tools. Easy to tell apart with coloured expanding elements for 8 mm (blue) and 10 mm (green) drill holes.



Using eccentric connecting fittings in the VB35 and VB36 housings, shelves can be fitted from the front and from above. The user-friendly M version of these connecting fittings even saves the need to tighten the eccentric cam at the jointing stage. This only needs to be done once furniture is fully assembled. Even the smallest of connecting fittings comes with Hettich's brand values of quality, innovation, closeness to customers and reliability.



Small components, big performers: Hettich connecting technology is brimming with expertise. For perfect results.



The new spherical eccentric: additional vertical ribs for a firmer grip in the drill hole. Being able to hold the screwdriver at an angle makes the fitting easier to install.



Strong connections for shelves and side panels, high loading capacity.



The VB 36 TouchCam is pushed into the drill hole by hand. Locking the eccentric cam firmly holds the fitting in place.

Hettich and the environment: committed to responsible practice, active protection, innovative thinking.



Hettich takes a responsibility for the world we live in. This awareness defines the strict policy of environmental management we practise. Our environmental officer has taken personal responsibility for these aspects throughout the group of companies over a period of many years. In addition, a separate environment committee has been established for each production site. We regard statutory provisions as minimum requirements. At significant sites we also implement the stringent EMAS Regulation. And we drive forward developments that in future will help to save even more raw materials and support the necessary endeavours towards sustainability.



#### Hettich environmental management

In 1996 Hettich started introducing effective environmental management systems under the stringent EMAS Regulation (currently: EC Regulation No. 761/2001, including EN ISO 14.001/2004). This not only enables us to improve our environmental performance on a broad front but also achieve a high level of safety which, not least, also benefits our customers. This is why we also require our suppliers to meet the necessary minimum standards of environmental protection, industrial safety, health care and social welfare. The results achieved in the drawer-runner and drawer-system product segment at the Kirchlengern operation illustrate the impressive effects these measures have and verifiably demonstrate our tireless endeavours to translate words into action:

Relief to the environment between 1997 and 2008:

Specific water consumption:56 per centSpecific power consumption:21 per centSpecific heat consumption:84 per centSpecific CO2 emissions:29 per cent



#### Hettich standard for product materials

Hettich underpins its commitment by applying an internal standard for product materials. This ensures that every product – from production to disposal – satisfies all environmental requirements. Hettich products are durable. Appropriately foresighted, our rigorous standards are formulated to ensure that international legislation is met as well. This provides a reliable basis for marketing furniture world-wide.

#### Zero-energy building - Hettich Forum

The Hettich Forum building with its neutral energy balance is a shining example of future-proof building design. Photovoltaic panels and solar collection system providing hot water as well as extensive roof greening and use of rain water underscore this building's overall sustainability concept in just the same way as the broad use of cellulose insulation material from recycled newspapers, highly efficient heat recovery and the bulb-free lighting concept do.

With the Hettich Group having acquired European Commission GreenBuilding Partner status on 5 March 2009, the comprehensive approach demonstrated by the Hettich Forum has also convinced the adjudicating panel of the national "Green Building Award 2009". Hettich received the first prize to be presented in the "New Building" category.

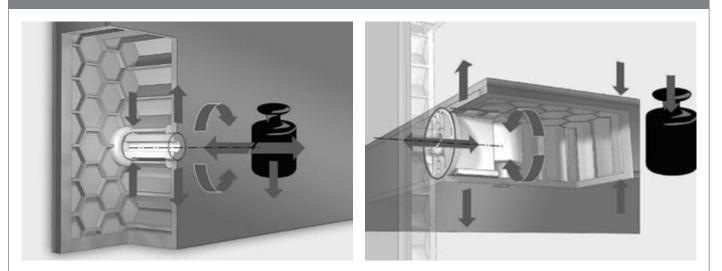


Hettich

Technik für Möbel

## Connecting technology

## Technical Information



Thin-faced lightweight boards used in conjunction with lightweight connecting systems are exposed to particularly heavy static and dynamic loads. This is where Hettinject connecting technology provides maximum strength and stability. Dynamic strain in furniture makes it necessary for both face layers to be connected. Hettinject VB insert absorbs the various forces at play directly in the board.

#### Hole distance

The hole distance for eccentric connecting fittings denotes the distance from the outer edge of the component to the centre of the drill hole.

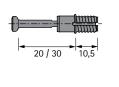
#### Dowel length

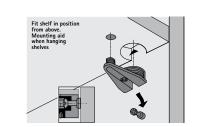
Dowel length denotes the distance from the base of the head to the bottom end of the dowel and is matched exactly to the eccentric connecting fitting and hole distance.

#### Mounting direction

Hettich connecting technology is the perfect choice for a whole host of different applications. The mounting direction is shown to make sure the connecting fitting is positioned in exactly the right way.







#### System 32



The "System 32" design principle combines machinery, hole patterns and connecting fittings to form a perfect unit. All drill holes are spaced apart at a distance of 32 mm or multiples of 32 mm (N x 32 mm). No matter which fittings are installed later on, drilling work is the same for all furniture components. This minimises mistakes, significantly speeding up production and making it far more cost-effective.

# Connecting technology

## • Quality criteria

#### Quality that meets all the demands

The quality of Hettich connecting technology is subject to a process of continuous monitoring. This takes account of the various requirements that markets and industries place on quality. The diagrams below show some of the tests Hettich fittings are required to pass.

#### Application

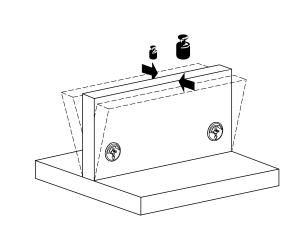
Hettich connecting fittings can be used in living-room, kitchen, bathroom and office furniture both in the home and business environment.

#### Loading capacity

Hettich connecting technology is engineered and tested in compliance with applicable fittings and furniture standards. Testing methods developed in-house also help to ensure constant high product quality.

#### Bending test for dowels with eccentric fittings

Use a force-travel diagram to verify values given for defined chipboard qualities.



#### Shelf-support test

Shelf supports are tested in compliance with the testing specifications defined in DIN 68874 - 1 and DIN EN 14749.

#### **Corrosion test**

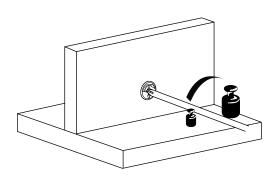
Catering to various climatic conditions, Hettich offers quality to meet the particular market's needs. For instance, many connecting fittings are available with corrosion-proof surface finishes.

#### Quality assurance

The processes for assuring the quality of Hettich hinges are certified under EN ISO 9001, Cert. No. DE001787-2.

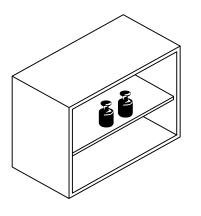
#### Torque test for dowels with eccentric fittings

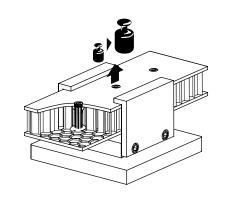
Verify torques given for the eccentric fitting used at specific positions with defined chipboard qualities.



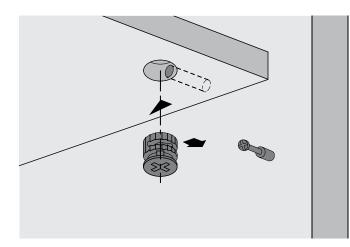
#### Testing bonded dowels used in lightweight applications

Bonded-dowel tear-out resistance is constantly tested on defined lightweight boards to ensure that given tear-out strengths are met.





Rastex 12



- Neat connecting fitting in a diameter of 12 mm, particularly suitable for occasional furniture, shelves and drawers
- Twice as secure thanks to inner and outer indentations The dowel is always pulled in to the centred position, ruling out any displacement of furniture components.
- Eccentric cam can be tightened with flat-blade screwdriver or PZ 2 Pozidrive screwdriver
- The rim covers any jagged hole edges, making an additional cover cap unnecessary
- Can be used in shelves in thicknesses 12 mm and over
- Zinc die-cast

## Rastex 12 with rim

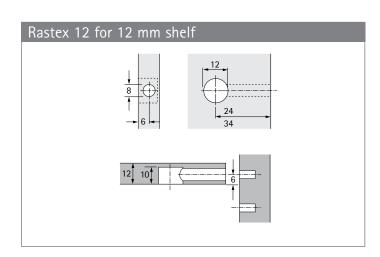


Finish	Order no. / for panel thickness mm 12	PU
nickel-plated, with rim	9 006 857	2000 ea.

#### Rastex 12 without rim

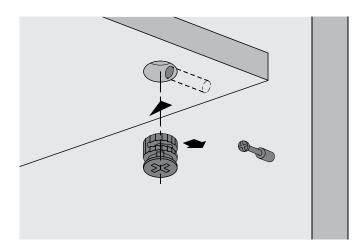


Finish	Order no. / for panel thickness mm 12	PU
nickel-plated, without rim	9 082 103	2000 ea.
bright, without rim	9 082 102	2000 ea.





Rastex 15



- With torque support allows furniture sides to be pulled into place from distances up to 4 mm from the panel end
- Twice as secure thanks to internal and external indentations the dowel is always pulled in to the centred position, ruling out any displacement of furniture components.
- Eccentric cam can be tightened with flat-blade screwdriver, PZ 3 Pozidrive screwdriver or A/F 4Allen key
- With or without rim, the rim covers any jagged hole edges, making an additional cover cap unnecessary
- Zinc die-cast

## Rastex 15 with rim



Finish	Order no. / for panel thickness mm					PU	
FINISTI	15	16	19	22	29	FU	
nickel-plated	0 079 451	0 071 948	0 071 950	0 071 952	0 079 478	1/200 ea.	
nickel-plated	0 079 452	0 073 459	0 073 460	0 073 461	0 079 479	2000 ea.	
nickel-plated	9 003 954	9 077 945	9 066 772	1 030 810	1 050 479	2000 ea.	

## Rastex 15 without rim



Finish	Order no. / for panel thickness mm						PU
1 1111511	12	15	18	22	25	29	PU
nickel-plated	0 020 049	0 079 457	0 013 957	0 025 066	-	0 079 484	1/200 ea.
nickel-plated	0 020 050	0 079 458	0 013 958	0 073 458	-	0 079 485	2000 ea.
nickel-plated	9 116 018	9 064 684	9 056 601	1 048 254	-	-	2000 ea.
nickel-plated	-	-	-	-	-	1 050 541	1000 ea.
bright	0 020 053	0 079 461	0 013 961	0 079 476	-	0 079 488	1/200 ea.
bright	-	0 079 462	0 013 962	0 079 477	-	0 079 489	2000 ea.
bright	9 116 019	9 059 487	9 056 599	1 007 794	9 084 518	-	2000 ea.
bright	-	-	-	-	-	1 050 400	1000 ea.

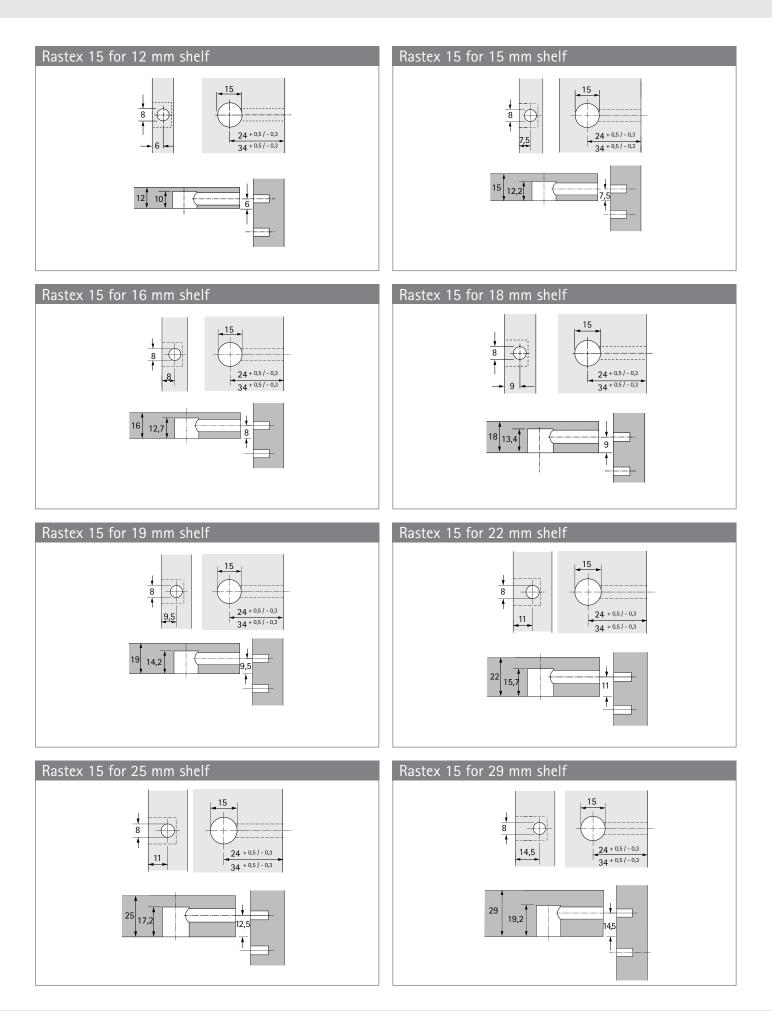
# Cover caps for Rastex 15 without rim (except for Rastex 15/12)



Order no. Finish PU 1 white 0 071 054 1/200 ea. 1 008 524 5000 ea. 1 white 0 079 490 1/200 ea. 2 black 2 black 1 009 563 5000 ea. 9 134 720 1/200 ea. 3 beige 3 beige 1 028 226 5000 ea. 4 grey 9 134 731 1/200 ea. 1 019 518 5000 ea. 4 grey



Rastex 15

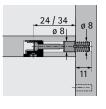




Dowels for Rastex 15

#### Rapid S DU 324 / DU 325 fast-assembly dowel





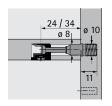


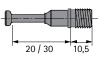
- Expanding socket for 8 mm drill hole diameter
- Dowel length 20 mm / 30 mm
- Galvanised steel / blue plastic

Article	Dowel length mm	Order no.	PU
Rapid S DU 324	20	0 044 750	1/200 ea.
Rapid S DU 324	20	9 046 180	2000 ea.
Rapid S DU 325	30	0 047 458	1/200 ea.
Rapid S DU 325	30	9 046 182	2000 ea.

## Rapid S DU 332 / DU 333 fast-assembly dowe







	Expanding	socket for	10 mm	drill	hole	diameter
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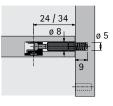
Dowel length 20 mm / 30 mm

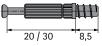
Gd steel / green plastic

Article	Dowel length mm	Order no.	PU
Rapid S DU 332	20	0 044 758	1/200 ea.
Rapid S DU 332	20	9 046 184	2000 ea.
Rapid S DU 333	30	0 044 759	1/200 ea.
Rapid S DU 333	30	9 046 186	2000 ea.

#### Twister DU 319 T / DU 320 T screw-in dowel







• With direct fixing thread for a hole diameter of 5 mm

Dowel length 20 mm / 30 mm

- DU 320 T can also be used for VB Insert for lightweight panels with 8 mm face layers
- For lightweight panels with 4 mm face layers: mounting only with Hettinject glued dowels
- Steel / green or black plastic
- Can be used in System 32

Article	Dowel length mm	Order no.	PU
Twister DU 319 T galvanised	20	0 048 037	1/200 ea.
Twister DU 319 T bright	20	9 012 908	2000 ea.
Twister DU 319 T galvanised	20	9 047 975	2000 ea.
Twister DU 320 T galvanised	30	0 048 038	1/200 ea.
Twister DU 320 T bright	30	9 047 976	2000 ea.
Twister DU 320 T galvanised	30	9 047 978	2000 ea.

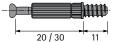


Dowels for Rastex 15

#### Twister DU 243 T / DU 232 T screw-in dowel



·		24/34 ø 8	<b>11</b> ,5	ø 5
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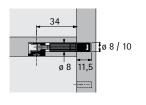


- With direct fixing thread for a hole diameter of 5 mm
- Dowel length 20 mm / 30 mm
- DU 232 T can also be used for VB Insert for lightweight panels with 8 mm face layers
- For lightweight panels with 4 mm face layers: mounting only with Hettinject glued dowels
- Steel / green or black plastic
- Can be used in System 32

Article	Dowel length mm	Order no.	PU
Twister DU 243 T galvanised	20	0 020 056	1/200 ea.
Twister DU 243 T bright	20	9 047 862	2000 ea.
Twister DU 243 T galvanised	20	9 047 301	2000 ea.
Twister DU 232 T galvanised	30	0 020 058	1/200 ea.
Twister DU 232 T bright	30	9 047 641	2000 ea.
Twister DU 232 T galvanised	30	9 047 861	2000 ea.

#### Twister DU 644 T screw-in dowel





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7,8

M6 x 7.8 mm thread

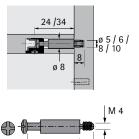
- Dowel length 30 mm
- Steel / black plastic
- Accessories, M6 sockets, see pages 29 30

• Can be used in System 32

Article	Order no.	PU
DU 644 galvanised	0 020 157	1/200 ea.
DU 644 bright	9 047 864	2000 ea.
DU 644 galvanised	9 047 865	2000 ea.

#### DU 425 / DU 428 screw-in dowel





20/30

7.8

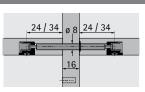
- M4 x 7.8 mm thread
- Dowel length 20 mm / 30 mm
- Bright steel
  - Accessories, M4 sockets, see pages 29 30
- Can be used in System 32

Article	Dowel length mm	Order no.	PU
DU 428	20	0 079 523	1/200 ea.
DU 428	20	1 053 821	1000 ea.
DU 425	30	0 079 521	1/200 ea.
DU 425	30	1 030 990	1000 ea.

## Dowels for Rastex 15

#### DU 883/DU 868 double dowel





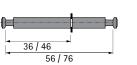
For 16 mm centre panel

With Seeger circlip ring

▶ Hole diameter 8 mm

• Dowel length 36 / 56 mm or 46 / 76 mm

Steel



Article	Dowel length mm	Order no.	PU
DU 883 galvanised	56	0 079 552	1/100 ea.
DU 883 bright	56	1 079 190	250 ea.
DU 868 galvanised	76	0 079 602	1/100 ea.
DU 868 bright	76	1 056 170	250 ea.

### DU 880/DU 853 double dowel



24/34	ø 8	24/34
	19	
-		

For 19 mm centre panel

• With Seeger circlip ring

Hole diameter 8 mm

• Dowel length 39 / 59 mm or 49 / 79 mm

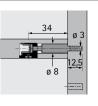
Galvanised steel

0=		
	39 / 49 59 / 79	

Article	Dowel length mm	Order no.	PU
DU 880	59	0 079 554	1/100 ea.
DU 853	79	0 079 568	1/100 ea.
DU 853	79	1 079 800	250 ea.

#### DU 225 A screw-in dowel





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#### • Direct fixing thread for a hole diameter of 3 mm

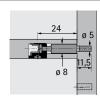
Dowel length 29.5 mm

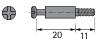
- Bright steel
- Can be used in System 32

Order no.	PU
1 015 505	1000 ea.

DU 243 A screw-in dowel







- Direct fixing thread for a hole diameter of 5 mm
- Dowel length 20 mm
- Bright steel
- Can be used in System 32

Order no.	PU
1 010 346	1000 ea.



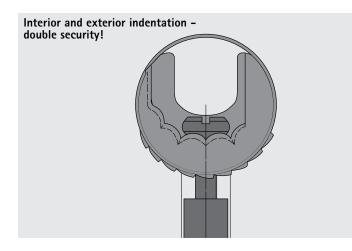
Rastex 25

#### Rastex 25

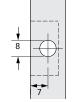


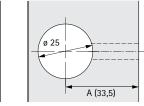
- > The latching stages on the curved tensioning surface and sawtoothlike external indentations prevent the eccentric cam from working loose
- ▶
- The dowel is always pulled in to the centred position The reverse torque is three time higher than that of comparable eccentric cam fittings
- With or without rim, the rim covers any jagged hole edges, • making an additional cover cap unnecessary
- ► Zinc die-cast

Article	Finish	Order no.	PU
1 With rim	nickel-plated	0 079 695	1/200 ea.
1 With rim	nickel-plated	1 066 213	2000 ea.
2 Without rim	bright	0 013 116	1/200 ea.
Without rim	bright	1 008 983	2000 ea.

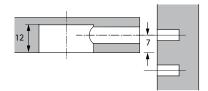


# Hole distance A = Dowel length + 9 mm





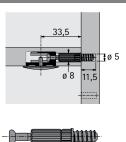
Dowel centre from underside of panel



## Dowels for Rastex 25

Twister DU 262 T screw-in dowel





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24,5

- Direct fixing thread for a hole diameter of 5 mm
- Dowel length 24.5 mm
- Steel / plastic, blue
- Can be used in System 32

Article	Order no.	PU
DU 262 T bright	0 020 060	1/200 ea.
DU 262 T bright	9 047 854	2000 ea.
DU 262 T galvanised	9 047 855	2000 ea.

## DU 643 screw-in dowel



Ø 8 	Ø 8
AW	M 6

24,5

7,8

- M6 x 7.8 mm thread
- Dowel length 24.5 mm

Steel

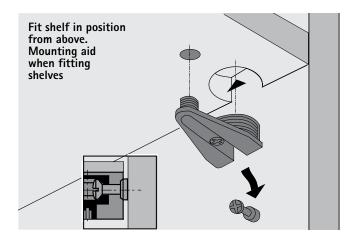
- Accessories, M6 sockets, see pages 29 30
- Can be used in System 32

Article	Order no.	PU
DU 643 galvanised	0 013 121	1/200 ea.
DU 643 bright	1 031 004	1000 ea.



## ▶ VB 18 / VB 20

• With rib



- For strong, positive-fitting and friction-locked connections between shelves and side panels, high load-bearing capacity
- The fitting is pressed into a double hole drilled 32 mm apart. Insertion holes in diameters of 30 and 10 mm.
- The shelf is fitted from above
- The eccentric can also be tightened in the bottom panel from above. A through hole is required in the panel for this purpose.

Article

VB 18

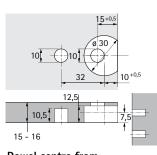
nickel-plated VB 18

nickel-plated

- Zinc die-cast nickel-plated
- Can be used in System 32

#### VB 18 for 15 - 16 mm shelves





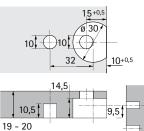
Drilling pattern for shelves

Dowel centre from underside of shelf

#### VB 20 for 19 - 20 mm shelves



Drilling pattern for shelves



VE 10+0.5

Article	Order no.	PU
VB 20 nickel-plated	0 025 049	1/200 ea.
VB 20 nickel-plated	1 069 042	200 ea.

Order no.

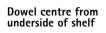
0 016 035

1 010 553

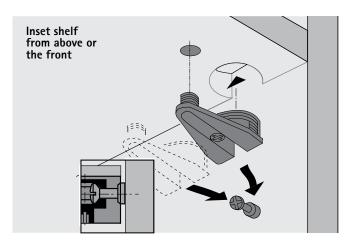
PU

1/200 ea.

200 ea.



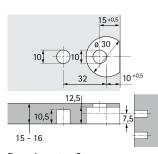
- ▶ VB 19 / VB 21
- Without rib



- For strong, positive-fitting and friction-locked connections between ▶ shelves and side panels, high load-bearing capacity
- The fitting is pressed into a double hole drilled 32 mm apart. ► Insertion holes in diameters of 30 and 10 mm.
- The shelf can be fitted from above or from the front
- ▶ The eccentric can also be tightened in the bottom panel from above. A through hole is required in the panel for this purpose.
- Zinc die-cast nickel-plated
- Can be used in System 32

#### VB 19 for 15 - 16 mm shelves





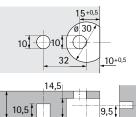
Drilling pattern for shelves

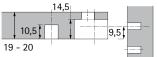
Dowel centre from underside of shelf

#### VB 21 for 19 - 20 mm shelves



Drilling pattern for shelves





Dowel centre from underside of shelf

Article		Order no.	PU
VB 19 nickel-	plated	0 079 606	1/200 ea.
VB 19 nickel-	plated	9 006 030	200 ea.

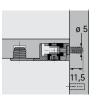
Article	Order no.	PU
VB 21 nickel-plated	0 047 454	1/200 ea.
VB 21 nickel-plated	1 069 043	200 ea.



Dowels for VB 18, 19, 20, 21

#### DU 327 screw-in dowel





- --- -

9 11

67

- Direct fixing thread for a hole diameter of 5 mm
- ▶ Dowel length 9 mm
- Galvanised steel •
- Can be used in System 32

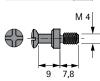
Article	Order no.	PU
DU 327 galvanised	0 025 052	1/200 ea.
DU 327 galvanised	9 039 828	2000 ea.





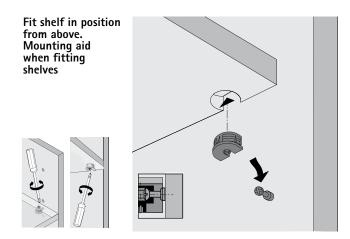


- M4 thread ▶
- Hole diameter 5 mm •
- ▶ Dowel length 9 mm
- Bright steel ▶
- Accessories, M4 sockets, see pages 29 30
  Can be used in System 32



Article	Order no.	PU
DU 427 bright	9 134 678	1/200 ea.
DU 427 bright	1 035 497	2000 ea.

- ▶ VB 35 M
- With rib

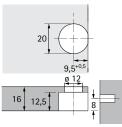


- Small, neat connecting fittings for sturdy, positive-fitting and friction-locked connections between shelves and side panels using the tried and proven eccentric latching principle
- The fitting is pressed into the cropped 20 mm ø hole
- The fitting has a spherical eccentric
- The eccentric can also be tightened in the bottom panel from above. A through hole is required in the panel for this purpose
- Zinc die-cast / plastic
- Can be used in System 32

#### VB 35 M / 16 for 16 mm shelves



#### Drilling pattern for shelves

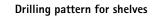


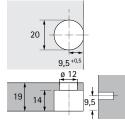
Dowel centre from underside of shelf

Finish	Order no.	PU
nickel-plated	0 065 501	1/200 ea.
nickel-plated	9 117 653	500 ea.
white	0 065 503	1/200 ea.
white	9 064 890	1000 ea.
brown	0 065 504	1/200 ea.
brown	9 066 718	1000 ea.
black	0 079 644	1/200 ea.
black	9 066 720	1000 ea.

## VB 35 M / 19 for 19 mm shelves







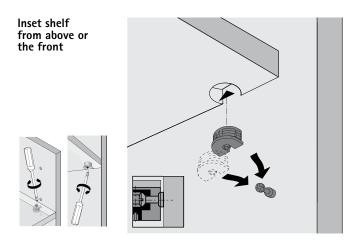
Dowel centre from underside of shelf

Finish	Order no.	PU
nickel-plated	0 065 505	1/200 ea.
nickel-plated	9 124 619	500 ea.
white	0 065 507	1/200 ea.
white	9 116 944	1000 ea.
brown	0 065 508	1/200 ea.
brown	9 116 945	1000 ea.
black	0 079 643	1/200 ea.
black	9 116 942	1000 ea.





- ▶ VB 35
- Without rib

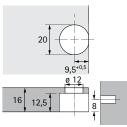


- Small, neat connecting fittings for sturdy, positive-fitting and friction-locked connections between shelves and side panels using the tried and proven eccentric latching principle
- The fitting is pressed into the cropped 20 mm ø hole
- The fitting has a spherical eccentric
- The eccentric can also be tightened in the bottom panel from above. A through hole is required in the panel for this purpose.
- Zinc die-cast / plastic
- Can be used in System 32

#### VB 35 / 16 for 16 mm shelves



#### Drilling pattern for shelves



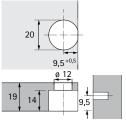
Dowel centre from underside of shelf

Finish	Order no.	PU
nickel-plated	0 065 509	1/200 ea.
nickel-plated	9 117 656	500 ea.
white	0 065 511	1/200 ea.
white	9 064 883	1000 ea.
brown	0 065 512	1/200 ea.
brown	9 066 738	1000 ea.
black	0 079 642	1/200 ea.
black	9 066 732	1000 ea.

## VB 35 / 19 for 19 mm shelves







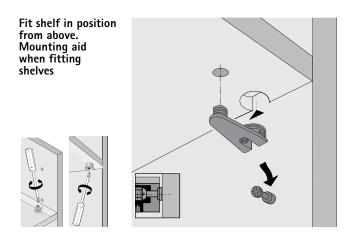
Dowel centre from underside of shelf

Finish	Order no.	PU
nickel-plated	0 065 513	1/200 ea.
nickel-plated	9 117 725	500 ea.
white	0 065 515	1/200 ea.
white	9 116 929	1000 ea.
brown	0 065 516	1/200 ea.
brown	9 116 930	1000 ea.
black	0 079 641	1/200 ea.
black	9 116 928	1000 ea.



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- ▶ VB 36 M
- With rib

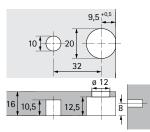


- Small connecting fittings for sturdy, positive-fitting and friction-locked connections between shelves and side panels using the tried and proven eccentric latching principle.
- The fitting is pressed into a double hole drilled 32 mm apart. Insertion holes in a diameter of 20 and 10 mm.
- The fitting has a spherical eccentric
- The eccentric can also be tightened in the bottom panel from above. A through hole is required in the panel for this purpose.
- Zinc die-cast / plastic
- Can be used in System 32

#### VB 36 M / 16 for 16 mm shelves



#### Drilling pattern for shelves



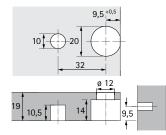
Dowel centre from underside of shelf

Finish	Order no.	PU
nickel-plated	0 065 517	1/200 ea.
nickel-plated	9 117 700	250 ea.
white	0 065 519	1/200 ea.
white	9 116 498	500 ea.
brown	0 065 520	1/200 ea.
brown	9 116 508	500 ea.
black	0 079 647	1/200 ea.
black	9 096 997	500 ea.

## VB 36 M / 19 for 19 mm shelves



Drilling pattern for shelves



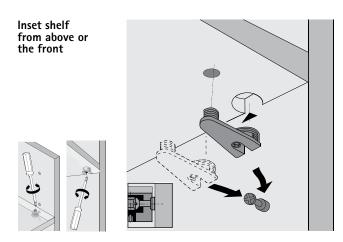
Dowel centre from underside of shelf

Finish	Order no.	PU
nickel-plated	0 065 521	1/200 ea.
nickel-plated	9 117 720	250 ea.
white	0 065 523	1/200 ea.
white	9 129 805	500 ea.
brown	0 065 524	1/200 ea.
brown	9 129 881	500 ea.
black	0 079 648	1/200 ea.
black	9 129 825	500 ea.





- ▶ VB 36
- Without rib

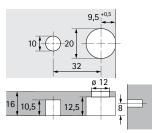


- Small, neat connecting fittings for sturdy, positive-fitting and friction-locked connections between shelves and side panels using the tried and proven eccentric latching principle.
- The fitting is pressed into a double hole drilled 32 mm apart. Insertion holes in a diameter of 20 and 10 mm.
- The fitting has a spherical eccentric
- The eccentric can also be tightened in the bottom panel from above. A through hole is required in the panel for this purpose.
- Zinc die-cast / plastic
- Can be used in System 32

#### VB 36 / 16 for 16 mm shelves



#### Drilling pattern for shelves



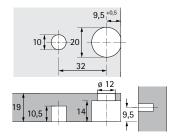
Dowel centre from underside of shelf

Finish	Order no.	PU
nickel-plated	0 065 525	1/200 ea.
nickel-plated	9 117 713	250 ea.
white	0 065 527	1/200 ea.
white	9 116 464	500 ea.
brown	0 065 528	1/200 ea.
brown	9 116 491	500 ea.
black	0 079 645	1/200 ea.
black	9 096 994	500 ea.

## VB 36 / 19 for 19 mm shelves



#### Drilling pattern for shelves



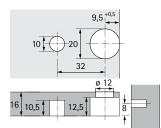
Dowel centre from underside of shelf

Finish	Order no.	PU
nickel-plated	0 065 529	1/200 ea.
nickel-plated	9 117 723	250 ea.
white	0 065 531	1/200 ea.
white	9 129 786	500 ea.
brown	0 065 532	1/200 ea.
brown	9 129 828	500 ea.
black	0 079 646	1/200 ea.
black	9 129 823	500 ea.

## VB 36 / 16 TouchCam for 16 mm shelves



Drilling pattern for shelves



Dowel centre from underside of shelf

Finish	Order no.	PU
nickel-plated	9 148 196	250 ea.



▶ VB 36 HT 38 / 50

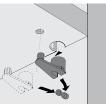
#### VB 36 HT with rib





Fit shelf in position from above. Mounting aid when fitting shelves



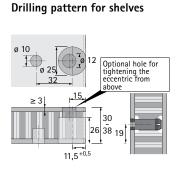


Fit shelf from above or the front

- Connecting fitting for sturdy, positive-fitting and friction-locked connections between shelves and side panels using the tried and proven eccentric latching principle
- ► Can be used with face layers from 3 mm
- For panel thicknesses from 30 38 mm or from 45 60 mm •
- ▶ The fitting is pressed into a double hole drilled 32 mm apart. Insertion holes in a diameter of 25 and 10 mm.
- Only for mounting in edged lightweight panels
- Knock-in pin increases expanding action
- With optional rib as mounting aid ▶
- Housing: black plastic •
- Eccentric cam: zinc die-cast ▶

#### VB 36 HT 38 for 38 mm shelves



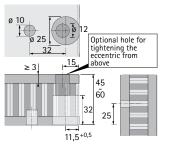


Order no.		PU
with rib	without rib	
9 066 389	9 066 388	1/200 ea.

#### VB 36 HT 50 for 50 mm shelves



Drilling pattern for shelves



Order no.		PU
with rib	without rib	
9 066 391	9 066 390	1/200 ea.

#### Cover cap for VB 36 HT





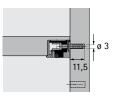
Finish	Order no.	PU
zinc die-cast nickel-plated	9 081 302	1/200 ea.



Dowels for VB 35, 35 M, 36, 36 M, 36 HT, 135

#### DU 328 screw-in dowel





- With direct fixing thread for a hole diameter of 3 mm
- Dowel length 6.7 mm
- Can also be used for lightweight panels with 8 mm face layers
- For lightweight panels with 4 mm face layers: mounting only with Hettinject glued dowels
- Galvanised steel
- Can be used in System 32

6,7 11

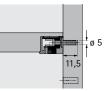
 Order no.
 PU

 0 065 540
 1/200 ea.

 9 039 822
 5000 ea.

#### DU 321 screw-in dowel





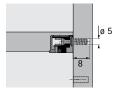
11

- With direct fixing thread for a hole diameter of 5 mm
- Dowel length 6.7 mm
- Can also be used for lightweight panels with 8 mm face layers
- For lightweight panels with 4 mm face layers: mounting only with Hettinject glued dowels
- Galvanised steel
- Can be used in System 32

Order no.	PU
0 074 688	1/200 ea.
9 021 847	5000 ea.

#### DU 322 screw-in dowel





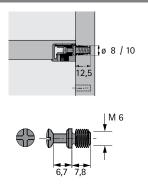
6.7 7.8

- With direct fixing thread for a hole diameter of 5 mm
- Dowel length 6.7 mm
- Can also be used for lightweight panels with 8 mm face layers
- For lightweight panels with 4 mm face layers: mounting only with Hettinject glued dowels
- Galvanised steel
- Can be used in System 32

Order no.	PU
0 064 872	1/200 ea.
9 022 370	5000 ea.

#### DU 648 screw-in dowel





- M6 x 7.8 mm thread
- Dowel length 6.7 mm
- Steel
- Accessories, M6 sockets, see pages 29 30

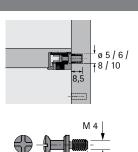
Finish	Order no.	PU
bright	0 065 534	1/200 ea.
galvanised	0 079 650	1/200 ea.
galvanised	1 044 143	1000 ea.



Dowels for VB 35, 35 M, 36, 36 M, 36 HT, 135

## DU 426 screw-in dowel





- M4 x 7.8 mm thread •
- Dowel length 6.7 mm
- ▶ Bright steel ▶
- ▶ Accessories, M4 sockets, see pages 29 - 30
- Can be used in System 32

Order no.	PU
0 065 370	1/200 ea.
1 035 240	1000 ea.

## DU 712 / DU 867 double dowel



Ø 5 10 / 19
----------------

6,7 7.8

- For 16 mm and 19 mm centre panel ▶
- Hole diameter 5 mm
- Dowel length 6.7 mm Can be used for lightweight panels ▶
- Bright steel
- Can be used in System 32

6,7	16 / 19	6,7	

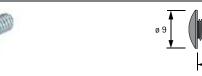
Article	Centre panel mm	Order no.	PU
DU 712	16	0 065 535	1/100 ea.
DU 712	16	1 019 462	1000 ea.
DU 867	19	0 065 536	1/100 ea.
DU 867	19	1 019 463	1000 ea.



## End screws and sleeves

• End screws, sleeves

End screw



M4 thread

M 4

- Suitable for use with M4 threaded sleeve
- Pozidrive cross head
- Steel, nickel-plated

Length mm	Order no.	PU
8	0 079 525	200 ea.
8	1 060 647	5000 ea.

## Threaded sleeve



_	
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## ► For M4 thread

- For drill hole diameter of 5 mm
- Galvanised steel

Length mm	Order no.	PU
15	0 063 016	1/200 ea.
15	1 004 938	1000 ea.
18	0 064 908	1/200 ea.
18	1 004 939	1000 ea.
22	0 063 017	1/200 ea.
22	1 004 940	1000 ea.

## Sockets

Plastic sockets

#### Socket No. 49





- For M6 thread
- Hole diameter 8 mm
- Suitable for use with Rastex 15 / 25, VB 18 / 19 / 20 / 21 und VB 35 / 36
- ▶ White plastic

Order no.	PU
0 040 005	1/200 ea.
1 004 925	10000 ea.

## Socket No. 30





#### For M4 thread

- Hole diameter 8 mm
- Suitable for use with Rastex 15 / 25, VB 35 / 36 and VB 135
- White plastic

Order no.	PU
0 079 529	1/200 ea.
1 004 927	5000 ea.

#### Socket No. 33





- For M6 thread
- Hole diameter 10 mm
- Suitable for use with Rastex 15 / 25, VB 18 / 19 / 20 / 21 und VB 35 / 36
- White plastic

Order no.	PU
0 079 539	1/200 ea.
1 004 928	5000 ea.

#### Socket No. 74





- For M4 thread
- ► Hole diameter 10 mm
- White plastic

Order no.	PU
1 005 288	2000 ea.





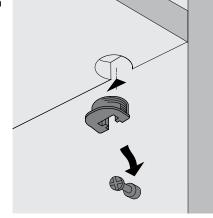
# Sockets

▶ Plastic sockets, expanding sockets

Socket No. 100						
	φ 10	<ul> <li>For M6 thread</li> <li>Hole diameter 10 mm</li> <li>Suitable for use with Rastex 15 /</li> <li>White plastic</li> </ul>	25 und VB 35 / 36	5 und VB 35 / 36		
	13		Order no.	PU		
			0 079 540	1/200 ea.		
			1 005 074	5000 ea.		
Plastic expanding socket						
()	Ø 8 0 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<ul> <li>For securing fittings to lightweigh</li> <li>Suitable for fittings with a restin load) such as shelf supports, cabi connectors</li> <li>For drill hole diameter of 8 mm</li> <li>Suitable for 6.3 mm</li> </ul>	g load (alster referred	to as static		
		direct fixing screw	Order no.	PU		
			9 079 736	1/500 ea.		
			9 066 392	5000 ea.		
Expanding socket No. 33						
	Ø 10	<ul> <li>For M6 thread</li> <li>Hole diameter 10 mm</li> <li>White plastic</li> </ul>				
	12		Order no.	PU		
			1 004 928	5000 ea.		
Expanding socket No. 43						
		<ul> <li>Hole diameter 5 mm</li> <li>Plastic, natural colour</li> </ul>				
			Order no.	PU		
				10		
			1 004 932	10000 ea.		
			1 004 932	10000 ea.		
Expanding socket			1 004 932	10000 ea.		
Expanding socket		<ul> <li>For M6 thread</li> <li>Hole diameter 8 mm</li> <li>Suitable for use with Rastex 15 / and VB 135</li> <li>Bright brass</li> </ul>				
Expanding socket	9 / 12	<ul> <li>Hole diameter 8 mm</li> <li>Suitable for use with Rastex 15 / and VB 135</li> <li>Bright brass</li> </ul>				
Expanding socket		<ul> <li>Hole diameter 8 mm</li> <li>Suitable for use with Rastex 15 / and VB 135</li> <li>Bright brass</li> </ul>	25, VB 18 / 19 / 20 / 2	1, VB 35 / 36		
Expanding socket		<ul> <li>Hole diameter 8 mm</li> <li>Suitable for use with Rastex 15 / and VB 135</li> <li>Bright brass</li> </ul>	25, VB 18 / 19 / 20 / 2 Order no.	1, VB 35 / 36 PU		

## Shelf connecting fitting ▶ VB 135

Fit shelf in position from above. Mounting aid when fitting shelves

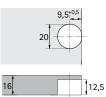


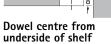
- The VB 135 connecting fitting is pressed into the cropped 20 mm ø hole. The shelf can only be inserted from above ▶
- ▶
- The shelf with the VB 135 is merely pressed onto the dowels. ▶ The wedging effect pulls the shelf to the side and prevents it from falling out
- ▶ Can be used for shelves in a thickness of 16 mm and over
- ▶ Plastic
- Can be used in System 32

## VB 135



#### Drilling pattern for shelves





Order no.	PU
0 073 616	1/200 ea.
1 016 559	1000 ea.
0 073 617	1/200 ea.
1 016 560	1000 ea.
0 079 649	1/200 ea.
1 028 915	1000 ea.
	0 073 616 1 016 559 0 073 617 1 016 560 0 079 649



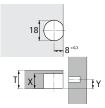
# Shelf connecting fitting

▶ VB 54 Toolex



- Tool-less shelf mounting to the carcase
  For 3 mm ø and 5 mm ø hole lines
- Flexible locking catch in the connector housing for easy shelf removal, shelves can then be re-fitted at any time
- Housing rim always ensures correct housing position even in holes that are drilled too deep
- For shelves in a thickness of 23 mm and over, keyhole suspension E • provides the capability of pre-mounting screws to carcase
  Zinc die-cast nickel-plated/grey plastic

## Housing



Article	Shelf thickness mm	T mm	X mm	Ymm
VB 54 / 16 Toolex	16	16	13.5	8
VB 54 / 19 Toolex	19	19	15	9.5
VB 54 / 23E Toolex	23	23	17	11.5
VB 54 / 29E Toolex	29	29	20	14.5

Article	Order no.	PU
VB 54 / 16 Toolex	1 049 575	1000 ea.
VB 54 / 19 Toolex	1 049 579	1000 ea.
VB 54 / 23 Toolex	1 049 580	1000 ea.
VB 54 / 26 Toolex	1 053 516	1000 ea.
VB 54 / 29 Toolex	1 053 518	1000 ea.

6					
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Article	Order no.	PU
VB 54 / 16 Toolex	1 049 572	1000 ea.
VB 54 / 19 Toolex	1 049 577	1000 ea.
VB 54 / 19 Toolex with knock-in socket	9 007 039	1000 ea.
VB 54 / 23 Toolex	1 049 581	1000 ea.
VB 54 / 26 Toolex	1 053 517	1000 ea.
VB 54 / 29 Toolex	1 053 519	1000 ea.

#### All-inclusive items

Article	Order no.	PU
VB 54 / 16 Toolex	1 049 582	1000 ea.
VB 54 / 19 Toolex	1 049 583	1000 ea.
VB 54 / 28E Toolex	1 053 533	1000 ea.



## Clip connector

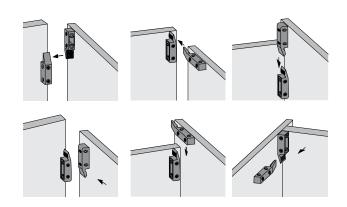
## MultiClip

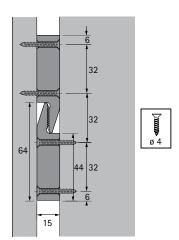
#### MultiClip



- MultiClip can be used in many different applications
- ▶ For wall panelling, room dividers, cladding pillars, ceiling panelling, fascias and cladding of all types
- In all applications, the fitting can be screw-mounted either parallel or at right angles to the fascia or cladding component
- If it is necessary to push the clip connectors on from the front, one of the fittings is screw-mounted at an angle of 90°
- Whether for interior fittings, contract work or volume production, this connector is a cost-saver – always and everywhere
- Only 1 fitting component for all types of application
- The clip connector components provide a secure hold with spring-loaded flexible clamps and serrated surfaces
- Variable screw-mounting positions permit attachment from above, from the front, from the side as well as flush
- Compensation for mounting tolerances
- Clip connectors can be adjusted for perfect alignment
- Made from heat-resistant thermoplastic material

Order no.	PU
0 046 080	1/200 ea.
1 009 684	200 ea.







# Rear panel connector

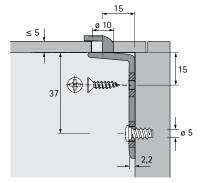
▶ RV 1, RV 3

RV 1



- Can be mounted in a ø 5 mm hole line
  The fitting pulls the rear part?
- The fitting pulls the rear panel against the cabinet side Zinc die-cast nickel-plated Can be used in System 32
- •

Attachment	Order no.	PU
without direct fixing screw	0 019 558	1/100 ea.
without direct fixing screw	1 075 395	250 ea.
with pre-mounted direct fixing screw	1 079 065	250 ea.

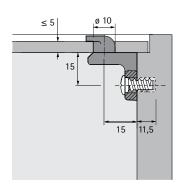


RV 3



- Oblong hole evens out drilling tolerances
- Attachment with 6.3 mm ø direct fixing screw Zinc die-cast nickel-plated ▶
- ▶

Order no.	PU
0 079 661	1/100 ea.
1 006 505	500 ea.





## Rear panel connector ▶ RV 7 D

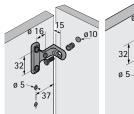
RV 7 D

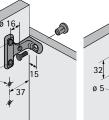


- With the RV 7 D, the rear panel is secured from the inside
- ▶ This makes assembly work easier because the cabinet can be assembled off the wall
- ▶ The RV 7 D can be mounted with a variety of fixing elements: with countersunk screw, with M6 x 12 raised-head screws (DIN 7985) and threaded cap or socket, with direct fixing screw or with the MultiClip
- Height-adjustable by  $\pm 1 \text{ mm}$  at oblong hole

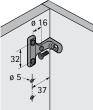
Article	Material / surface finish	Order no.	PU
Rear panel connector RV 7 D	zinc die-cast nickel-plated	0 056 614	1/100 ea.
Rear panel connector RV 7 D	zinc die-cast nickel-plated	1 019 812	200 ea.
6.3 x 13 Euro screw	steel, nickel-plated	0 040 007	200 ea.
ø 3.5 x 12 countersunk screw	galvanised steel	0 058 244	200 ea.
Countersunk ø 4 x 12 panhead screw	galvanised steel	0 058 243	200 ea.
M6 x 12 raised-head screw	steel, nickel-plated	0 058 242	200 ea.
M6 threaded cap with slot	white plastic	0 058 301	1/1000 ea
Socket No. 100	white plastic	0 079 540	1/200 ea.
MultiClip	black plastic	0 046 080	1/200 ea.

#### Examples of application RV 7D

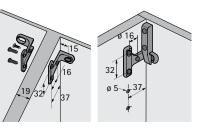




 Flush overlay back panel (min. 16 mm), mounting with raised head screw M 6 x 12 (DIN 7985) and socket No. 1
 Flush overlay back panel (min. 16 mm), mounting with raised head screw M 6 x 12 (DIN 7985) with threaded cap M6



Rebated back panel, mounting with Panhead screw diameter 4 x 12 mm



Centre panel mounting with Panhead screw diameter 4 x 12 mm

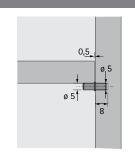
Flush overlay back panel, mounting with MultiClip



# Shelf supports

Duplo, Safety, Sekura

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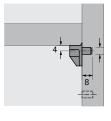
- Pin diameter 5 mm on both sides
- Steel
  Can be used in Steel
- Can be used in System 32
  Load group L 50 (50 kg / m<sup>2</sup>)

Steel pin with plastic mount

Finish	Order no.	PU
galvanised	0 013 138	1/500 ea.
nickel-plated	0 046 642	1/500 ea.
galvanised	1 004 701	3000 ea.

Safety



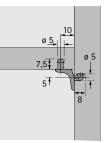


<ul> <li>Can be used in Sy</li> <li>Load group L 50 (</li> </ul>			
For drill hole diameter mm	Finish	Order no.	PU
5	translucent	0 016 180	1/500 ea.
5	translucent	1 005 655	4000 ea.
5	white	0 025 090	1/500 ea.

white

Sekura 1.





Pin diameter 5 mm

5

- ▶ 1 additional pin for shelf
- Zinc die-cast nickel-plated
- Can be used in System 32
- ▶ Load group L 75 (75 kg / m²)

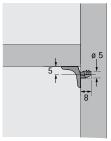
Order no.	PU
0 019 557	1/500 ea.
9 100 110	1000 ea.

4000 ea.

1 004 831

#### Sekura 2.1



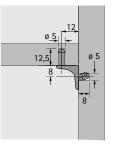


- ▶ Pin diameter 5 mm
- Zinc die-cast nickel-plated
- Can be used in System 32
- ▶ Load group L 75 (75 kg / m²)

Order no.	PU
9 134 679	1/500 ea.
9 010 111	1000 ea.

#### Sekura 6





- ▶ Pin diameter 5 mm
- ▶ 1 additional pin for shelf
- Zinc die-cast nickel-plated
- Can be used in System 32
- ▶ Load group L 75 (75 kg / m²)

Order no.	PU
0 079 707	1/500 ea.
9 005 558	500 ea.

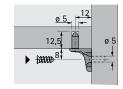


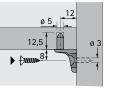
# Shelf supports

Sekura, glass-shelf supports, shelf stud

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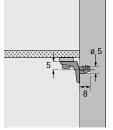


- Drill hole diameter 5 mm for direct fixing screw, countersunk, ø 6.3 mm
- Drill hole diameter 3 mm for ø 4 mm countersunk head screw ►
- ▶ Each with one additional pin for shelves
- Zinc die-cast, nickel-plated •
- Can be used in System 32 ▶
- Load group L 75 (75 kg / m<sup>2</sup>)

For drill hole diameter mm	Order no.	PU
5	0 053 012	1/500 ea.
5	1 011 027	1000 ea.
3	0 079 711	1/500 ea.
3	1 006 977	1000 ea.

#### Sekura 8



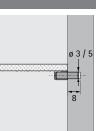


- Glass shelf support ▶
- ▶ Pin diameter 5 mm
- Zinc die-cast nickel-plated / clear plastic ▶
- Can be used in System 32 Load group L 75 (75 kg / m<sup>2</sup>) ▶
- ▶

Order no.	PU
0 047 609	1/500 ea.
1 010 564	2000 ea.

#### Glass shelf support



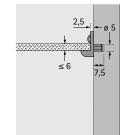


- With soft plastic cap
- Galvanised steel / clear plastic ▶
- Load group L 50 (50 kg / m<sup>2</sup>) ▶

For drill hole diameter mm	Order no.	PU
5	0 079 709	1/500 ea.
5	1 056 163	3000 ea.
3	0 079 710	1/500 ea.

### Glass shelf support in plastic



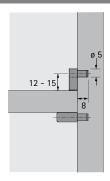


- With tilt guard ▶
- Pin diameter 5 mm ►
- Clear plastic ▶
- Can be used in System 32
- Load group L 25 (25 kg / m<sup>2</sup>)

Order no.	PU
0 073 615	1/500 ea.
1 001 105	5000 ea.

#### Shelf stud





- Pin diameter 5 mm ►
- Clear plastic ▶
- Can be used in System 32

Order no.	PU
0 063 549	1/500 ea.
1 005 082	5000 ea.



## Connecting technology for lightweight design

▶ Hettinject



Hettinject is the intelligent system for connecting lightweight panels: these strong connecting fittings can be used for creating innovative furniture and interiors in lightweight design as the perfect way for impressing customers with new, trendsetting ideas. Take advantage of new design flexibility – with Hettinject for lightweight materials.



Large sliding doors in lightweight design: permit the use of lightweight fittings



Hettinject lets you position strength and stability at the most effective point in the lightweight panel.



Customised lighting: a light or lighting profile can be fitted at any point in a piece of lightweight furniture.



Hettinject VB Insert: same interface. Tried and proven system. Fixing points can be positioned wherever you choose. Drilling work couldn't be easier



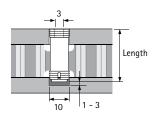
## Bonded dowel

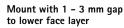
### Hettinject

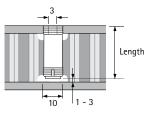
### Hettinject in 4 mm diameter



Mount with drilled lower face layer







### Hettinject in 6.3 mm diameter



Positioning flexibility
 Evens out tolerances

Positioning flexibility

Evens out tolerances

White plastic

Length mm

Maximum processing reliability

For drill hole diameter of 10 mm

Various adhesives can be used e.g. Henkel-Loctite® or Delo-Duopox®

PU

1/200 ea.

Order no.

9 066 657

9 066 397

9 066 404

9 066 406

9 066 407

9 083 492

9 066 409

Suitable for chipboard and 4 mm ø direct fixing screws

**)** 

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▶

14

20

25

27

33

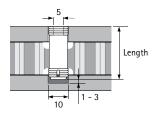
41

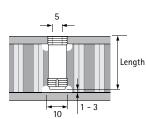
45

- Evens out tolerancesMaximum processing reliability
- Various adhesives can be used e.g. Henkel-Loctite<sup>®</sup> or Delo-Duopox<sup>®</sup>
- Suitable for chipboard and direct fixing screws of ø 6.3 mm
- For drill hole diameter of 10 mm
- White plastic

Length mm	Order no.	PU
33	9 083 488	1/200 ea.
41	9 083 493	1/200 ea.
45	9 083 490	1/200 ea.

Mount with drilled lower face layer





Mount with 1 - 3 mm gap

to lower face layer



# Hettinject VB Insert eccentric connecting fitting

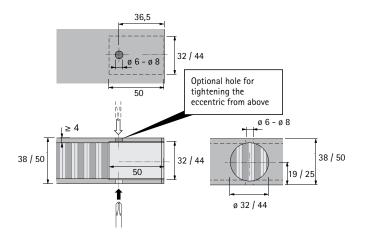
• Hettinject VB Insert 38 / 50

#### Hettinject VB Insert



- Concealed connecting fitting for particularly sturdy, positive-fitting and friction-locked connections between shelves and side panels using the tried and proven eccentric latching principle
- Can be used with face layers from 4 mm
- For panel thicknesses of 38 or 50 mm
- Various adhesives can be used e.g. Henkel-Loctite<sup>®</sup> or Delo-Duopox<sup>®</sup>
- Housing: white plastic
- Eccentric cam: zinc die-cast

Article	For drill hole diameter mm	Order no.	PU
VB Insert 38	32	9 097 989	1/200 ea.
VB Insert 50	44	9 097 991	1/200 ea.





## Mount for shelf supports

### Hettinject Titan 50

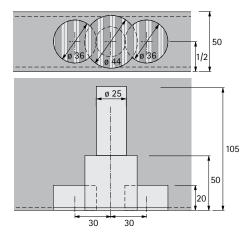
Hettinject Titan 50



- ▶ For sturdy, positive-fitting and friction-locked attachment of the Titan 1 shelf support
- Fits out of sight behind the shelf •
- ▶ Can be used with face layers from 4 mm
- For panel thickness 50 mm
- Only for mounting in edged lightweight panels Can be used for adjusting shelf support ▶
- ▶ (vertically / laterally / angle of tilt)
- White plastic ►
- Various adhesives can be used e.g.  $\mathsf{Henkel}{\operatorname{\mathsf{-Loctite}}}^\circ$  or  $\mathsf{Delo}{\operatorname{\mathsf{-Duopox}}}^\circ$
- ▶ 9 kg loading capacity with two self supports (shelf contents + shelf weight)

These figures apply to a shelf made of lightweight honeycomb board measuring 1000 mm x 300 mm x 30 mm (W x D x H) and weighing 3 kg

Order no.	PU
9 135 216	1/20 ea.
9 127 038	100 ea.



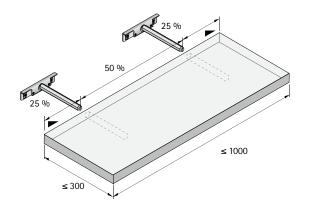


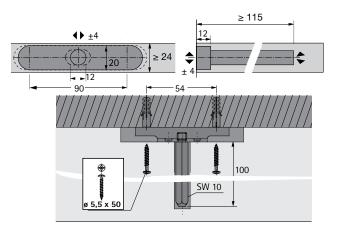
#### Titan 1 with lateral adjustment capability



- Fits out of sight behind the shelf
  Support pin: 10 mm A/F
- Max. loading capacity is 50 kg/m<sup>2</sup> for shelves measuring 1000 x 300 mm, 100 kg/m<sup>2</sup> for shelves measuring 1000 x 250 mm and 160 kg/m<sup>2</sup> for shelves measuring 1000 x 200 mm ▶
- ۲
- Vertical adjustment:  $\pm 4 \text{ mm}$ Lateral adjustment  $\pm 4 \text{ mm}$ Minimum shelf thickness: 24 mm Adjustment of shelf tilt ۲ ▶
- ▶
- ▶ Galvanised steel

Order no.	PU
0 079 713	1/20 ea.
1 001 167	100 ea.



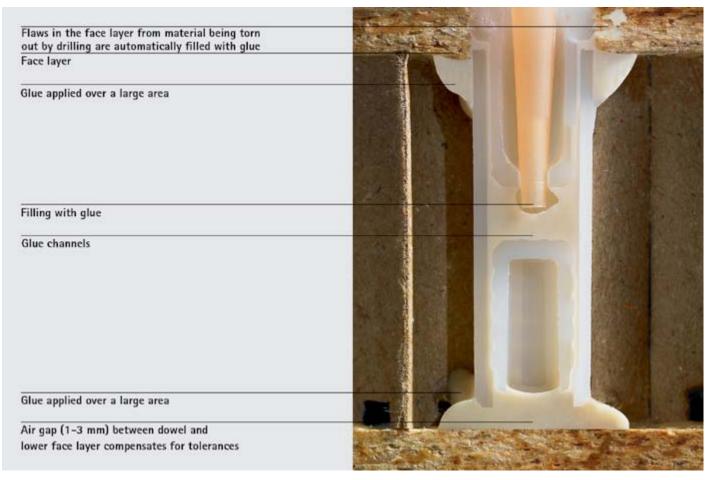






Hettich

- Bonded dowel
- Hettinject



The Hettinject bonded dowel feeds adhesive to the upper and lower face layers through flow channels. The process forms a 3-dimensional supporting structure that keeps the face layers firmly in place. This produces an extremely strong construction that can easily cope with tensile and compressive forces. Strong, reliable joints can even be achieved with lightweight panels finished in very thin face layers (< 4 mm).

The small amount of adhesive needed keeps cycles times short. Depending on the glue that's used, setting time can be selected to suit the particular application. Suitable adhesives include Henkel-Loctite<sup>®</sup> or Delo-Duopox<sup>®</sup>.



Drill a hole in the lightweight panel, drillings can be left in the board.



2 Fit Hettinject and simultaneously glue dowel in place



The adhesive sticks drillings and all of the dowel to face layers and honeycomb structure.



The process is identical for the Hettinject VB Insert connecting fitting.



- Eccentric connecting fitting
- Hettinject VB Insert 38 / 50



Hidden completely out of view, the Hettinject VB insert joins 38 or 50 mm lightweight panels with 4 mm face layers. All that's needed to fit it is a standard drill hole, taking far less time than routing. The adhesive for the VB Insert is injected at two points that feed it to both face layers through special glue channels and give the fitting a secure hold. Suitable adhesives include Henkel-Loctite® or Delo-Duopox®. Ideal distribution of forces ensures that the finished product can withstand heavy loads. Being able to combine this connecting fitting with the tried and proven Twister dowel provides an extremely practical option.



The fitting is inserted from the front at any chosen fixing point and can be used for attaching components from both sides.



Hettinject can also be used in solid materials, such as balsawood, foamed centre layers, multiwall panels as well as panels made partly or entirely of metal.



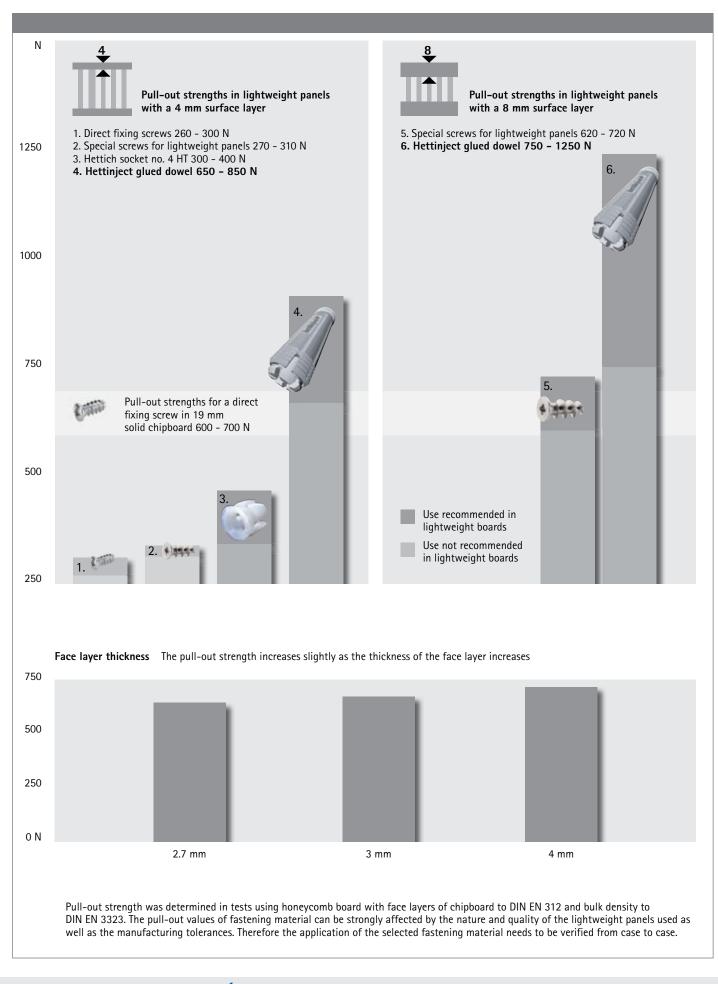
Hettinject gives you a future-proof concept that's capable of growing in line with processing needs, providing maximum flexibility while ensuring a high level of stability in production.



The process can be implemented in any process chain ranging from manual processing, upgrading tools in CNC production to fully automated manufacturing lines and ready-made concepts for continuous production.



Pull-out strengths in lightweight panels





www.hettich.com

• Suitability of fittings for use in lightweight panels

With frame < 4 mm face layer							
Fitting         Without frame           1         4 mm + 1000000000000000000000000000000000							
4 mm face layer         4 mm + dettiniset         4 mm + socket         8 mm + face layer         8 mm + Hettiniset         8 mm + face layer         8 mm + Hettiniset         8 mm + face layer         8 mm + Hettiniset           Connecting fittings         VB 36 / 36 MJ 36 HT / 36 HT M         X         X         X         X         X           Serew-in dowel for VB         X         X         X         X         X         X         X         X           Wadrobe rail         Wood) screws D3.5 / D4.0         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X <t< th=""><th>·</th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	·						
face layerHettinjectno. 4 HTface layerHettinjectConnecting fittingsVB 18 / 20 D / 19 / 21 DXXVB 36 / 36 M / 36 HT / 36 HT MXXXVB 36 / 36 M / 36 HT / 36 HT MXXXVB 36 / 36 M / 36 HT / 36 HT MXXXSteff supports Sekura / 30 kgXXXSteff supports Sekura / 30 kgXXXSerew-in dowel for VBXXXWardrobe railXXXWardrobe railXXXHingesEuro screws D6.3 (DBS)X*XEuro screws D6.3 (DBS)X*XXSideOn(Wood) screws D3.5 / D4.0X*XEuro screws D6.3 (DBS)X*XXSideOn(Wood) screws D3.5 / D4.0X*XEuro screws D6.3 (DBS)X*XXMounting plate(Wood) screws D3.5 / D4.0 / D4.5X*XEuro screws D6.3 (DBS)X*XXDrawer runnersQuadro 25X*XQuadro 25 / D4.0 / D4.5XXXFolding and sliding doorTopLine LXXTopLine LXXXTopLine LXXXTopLine LXXXTopLine LXXXTopLine LXXXTopLine LXXXTopLine LXXXTopLine LX <t< th=""><th>Fitting</th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	Fitting						
Connecting fittings         VB 18 / 20 D / 19 / 21 D         X           VB 36 / 36 M / 36 HT / 36 HT M         X         X           VB 36 / 36 M / 36 HT / 36 HT M         X         X           Hettinject VB Insert         X         X           Rear panel connectors         X         X           Screw-in dowel for VB         X         X         X           Wardrobe rail         X         X         X         X           Hinges         Intermat         (Wood) screws D3.5 / D4.0         X         X         X           Sensys         (Wood) screws D3.5 / D4.0         X*         X         X         X           Sensys         (Wood) screws D3.5 / D4.0         X*         X         X         X           Euro screws D6.3 (DBS)         X*         X         X*         X*         X*           SlideOn         (Wood) screws D3.5 / D4.0         X*         X         X*         X*         X*           Mounting plate         (Wood) screws D3.5 / D4.0         X*         X         X*							
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Kerw-in dowel for VBXXXXXWardrobe railXXXXXWardrobe rail(Wood) screws D3.5 / D4.0XXXXIntermat(Wood) screws D3.5 / D4.0XXXXSensys(Wood) screws D3.5 / D4.0XXXXEuro screws D6.3 (DBS)XXXXXStideOn(Wood) screws D3.5 / D4.0XXXXEuro screws D6.3 (DBS)XXXXXMounting plate(Wood) screws D3.5 / D4.0 / D4.5XXXXMounting plate(Wood) screws D3.5 / D4.0 / D4.5XXXXMounting plate(Wood) screws D6.3 (DBS)XXXXXDrawer runnersQuadro 25XXXXXXXTopLine LNadro V6 / V6 + / V8XX		Shelf supports Sekura / 30 kg	×			×	
Wardrobe railXXXXXHingesIntermat(Wood) screws D3.5 / D4.0XXXEuro screws D6.3 (DBS)XXXXSensys(Wood) screws D3.5 / D4.0XXXUro screws D6.3 (DBS)XXXXSlideOn(Wood) screws D3.5 / D4.0XXXMounting plate(Wood) screws D3.5 / D4.0 / D4.5XXXEuro screws D6.3 (DBS)XXXXDrawer runnersQuadro 25XXXXQuadro V6 / V6+ / V8XXXXFolding and sliding doorsTopLine LXXXTopLine LXXXXTopLine 22XXXXTopLine 27XXXXSlideLine 66 - door sideXXXHorizonSynchroXXXXHorizonSynchroXXXXHorizonSynchroXXXXHorizonSynchroXXXXHorizonSynchroXXXXHorizonSynchroXXXXHorizonSynchroXXXXHorizonSynchroXXXXHorizonSynchroXXXXHorizonSynchroXXXXHorizonSynchroXXXX <td></td> <td>Rear panel connectors</td> <td></td> <td></td> <td>×</td> <td>×</td> <td></td>		Rear panel connectors			×	×	
HingesIntermat(Wood) screws D3.5 / D4.0XXXEuro screws D6.3 (DBS)X*XXSensys(Wood) screws D3.5 / D4.0X*XXEuro screws D6.3 (DBS)X*XXSlideOn(Wood) screws D3.5 / D4.0X*XX*Mounting plate(Wood) screws D3.5 / D4.0 / D4.5X*X*X*Mounting plate(Wood) screws D3.5 / D4.0 / D4.5X*X*X*Drawer runnersQuadro 25X*X*X*Quadro V6 / V6+ / V8X*X*X*X*Folding and sliding doorsTopLine XLX*X*X*TopLine LX*X*X*X*TopLine DX*X*X*X*TopLine DX*X*X*X*SlideLine 66 - door sideX*X*X*HorizonSynchroX*X*X*	Screw-in dowel for VB		×	×		×	×
Intermat(Wood) screws D3.5 / D4.0XXXEuro screws D6.3 (DBS)X*XXSensys(Wood) screws D3.5 / D4.0X*XXSlideOn(Wood) screws D3.5 / D4.0X*XXMounting plate(Wood) screws D6.3 (DBS)X*XXEuro screws D6.3 (DBS)X*XXXDrawer runners(Wood) screws D3.5 / D4.0 / D4.5X*XX*Ouadro Screws D6.3 (DBS)X*XX*X*Folding and sliding doorsTopLine XLXX*X*TopLine LXXX*X*X*TopLine LXX*X*X*X*TopLine 22X*X*X*X*X*TopLine 27X*X*X*X*X*TopLine 10 - door sideX*X*X*X*SlideLine 66 - door sideX*X*X*X*HorizonSynchroX*X*X*X*SlideLine 66 - door sideX*X*X*X*SideLine 50X*X*X*X*X*SideLine 50 - door sideX*X*X*X*SideLine 50 - door sideX*X*X*	Wardrobe rail			×	×	×	×
Euro screws D6.3 (DBS)X*XX*Sensys(Wood) screws D3.5 / D4.0X*XX*SlideOn(Wood) screws D3.5 / D4.0X*X*X*Buro screws D6.3 (DBS)X*X*X*X*Mounting plate(Wood) screws D3.5 / D4.0 / D4.5X*X*X*Drawer runnersQuadro 25X*X*X*X*Drawer runnersOuadro V6 / V6+ / V8X*X*X*X*Folding and sliding doorsTopLine XLX*X*X*X*TopLine LX*X*X*X*X*X*TopLine 22X*X*X*X*X*X*TopLine 27X*X*X*X*X*X*TopLine 10 - door sideX*X*X*X*X*X*TopLine 10 - door sideX*X*X*X*X*X*TopLine 10 - door sideX*X*X*X*X*X*TopLine 10 - door sideX*X*X*X*X*X*X*X*X*TopLine 10 - door sideX* <td>Hinges</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Hinges						
Sensys(Wood) screws D3.5 / D4.0XXXEuro screws D6.3 (DBS)X*X*X*SlideOn(Wood) screws D3.5 / D4.0X*X*X*Mounting plate(Wood) screws D3.5 / D4.0 / D4.5X*X*X*It wo screws D6.3 (DBS)X*X*X*X*Drawer runnersQuadro 25X*X*X*X*Quadro V6 / V6+ / V8X*X*X*X*X*Folding and sliding doorsTopLine XLX*X*X*X*TopLine LXX*X*X*X*X*TopLine 20X*X*X*X*X*X*TopLine 20X*X*X*X*X*X*TopLine 20X*X*X*X*X*X*TopLine 20X*X*X*X*X*X*TopLine 20X*X*X*X*X*X*TopLine 20X*X*X*X*X*X*TopLine 20X*X*X*X*X*X*X*TopLine 20X*X*X*X*X*X*X*X*X*TopLine 20X*X	Intermat	(Wood) screws D3.5 / D4.0		×		×	×
Euro screws D6.3 (DBS)X*XX*SlideOn(Wood) screws D3.5 / D4.0X*XX*Mounting plate(Wood) screws D3.5 / D4.0 / D4.5X*X*X*Euro screws D6.3 (DBS)X*XX*X*Drawer runnersQuadro 25X*XX*Quadro V6 / V6+ / V8X*XX*X*Folding and sliding doorsTopLine XLXX*X*TopLine 22X*X*X*X*TopLine 27XX*X*X*Inpline 27XX*X*X*SlideLine 66 - door sideX*X*X*X*HorizonSynchroX*X*X*X*HorizonSynchroX*X*X*X*SlideLine 65 - More XieX*X*X*X*HorizonSynchroX*X*X*X*More XieX*X*X*X*More XieX*X* <td< td=""><td></td><td>Euro screws D6.3 (DBS)</td><td></td><td><b>X</b>*</td><td></td><td>×</td><td><b>X</b>*</td></td<>		Euro screws D6.3 (DBS)		<b>X</b> *		×	<b>X</b> *
SlideOn(Wood) screws D3.5 / D4.0×××Euro screws D6.3 (DBS)×*××*Mounting plate(Wood) screws D3.5 / D4.0 / D4.5××Euro screws D6.3 (DBS)×*××Drawer runnersQuadro 25××Quadro V6 / V6+ / V8×××Folding and sliding doorsTopLine XL××TopLine L×××TopLine L×××TopLine 22×××TopLine 10 - door side×××SlideLine 66 - door side×××HorizonSynchro×××	Sensys	(Wood) screws D3.5 / D4.0		×		×	×
Euro screws D6.3 (DBS)X*XMounting plate(Wood) screws D3.5 / D4.0 / D4.5XXEuro screws D6.3 (DBS)X*XX*Drawer runnersQuadro 25XXXQuadro V6 / V6+ / V8XXXX*Folding and sliding doorsTopLine XLXXX*TopLine LXXXX*TopLine 22XXX*X*TopLine 27XXX*X*TopLine 10- door sideXX*X*SlideLine 66 - door sideX*X*X*HorizonSynchroX*X*X*		Euro screws D6.3 (DBS)		<b>X</b> *		×	<b>X</b> *
Mounting plate(Wood) screws D3.5 / D4.0 / D4.5XXEuro screws D6.3 (DBS)X*XX*Drawer runnersQuadro 25XXXQuadro V6 / V6 + / V8XXXX*Folding and sliding doorsTopLine XLXXX*TopLine LXXXX*TopLine 22XXX*X*TopLine 27XXX*X*TopLine 10 - door sideXX*X*X*Folding Ge - door sideX*X*X*X*Foldine 6 - door sideX*X*X*X*Foldine 50 - More MarkX*X*X*X*Foldine 6 - door sideX*X*X*X*Foldine 6 - door sideX*X*X*X* <td>SlideOn</td> <td>(Wood) screws D3.5 / D4.0</td> <td></td> <td>×</td> <td></td> <td>×</td> <td>×</td>	SlideOn	(Wood) screws D3.5 / D4.0		×		×	×
Euro screws D6.3 (DBS)X*XX*Drawer runnersQuadro 25XXXQuadro V6 / V6+ / V8XXXXFolding and sliding doorsTopLine XLXXXTopLine LXXXXTopLine 22XXXXTopLine 27XXXXTopLine 10 - door sideXXXXHorizonSynchroXXXXKorrKXXXXKorrKKKKXKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKKKKorrKKKK <tr< td=""><td></td><td>Euro screws D6.3 (DBS)</td><td></td><td><b>X</b>*</td><td></td><td>×</td><td><b>X</b>*</td></tr<>		Euro screws D6.3 (DBS)		<b>X</b> *		×	<b>X</b> *
Drawer runnersQuadro 25XXXQuadro V6 / V6 + / V8XXXXFolding and sliding doorsTopLine XLXXXTopLine LTopLine 2XXXTopLine 22XXXXTopLine 27XXXXTopLine 110 – door sideXXXInde Ge – door side <td>Mounting plate</td> <td>(Wood) screws D3.5 / D4.0 / D4.5</td> <td></td> <td>×</td> <td></td> <td></td> <td>×</td>	Mounting plate	(Wood) screws D3.5 / D4.0 / D4.5		×			×
Quadro V6 / V6+ / V8XXFolding and sliding doorsTopLine XLXXTopLine LXXXTopLine 22XXXTopLine MXXXTopLine 27XXXTopLine 110 - door sideXXXSlideLine 66 - door sideXXXHorizonSynchroXXX		Euro screws D6.3 (DBS)		<b>X</b> *		×	<b>X</b> *
Folding and sliding doorsTopLine XLXXTopLine LXXXTopLine 22XXXTopLine 27XXXTopLine 110 - door sideXXXSlideLine 66 - door sideXXXHorizonSynchroXXX	Drawer runners	Quadro 25		×		×	×
TopLine LXXTopLine 22XXTopLine MXXTopLine 27XXTopLine 110 - door sideXXSlideLine 66 - door sideXXHorizonSynchroXX		Quadro V6 / V6+ / V8		×		×	×
TopLine 22XTopLine MXTopLine 27XTopLine 110 - door sideXSlideLine 66 - door sideXHorizonSynchroX	Folding and sliding doors	TopLine XL		×		×	×
TopLine MXXTopLine 27XXTopLine 110 - door sideXXSlideLine 66 - door sideXXHorizonSynchroXX		TopLine L		×		×	×
TopLine 27XTopLine 110 - door sideXSlideLine 66 - door sideXHorizonSynchroX		•		×			×
TopLine 110 - door sideXSlideLine 66 - door sideXHorizonSynchroX				×		×	×
SlideLine 66 – door sideXHorizonSynchroX							
HorizonSynchro X X							×

\* Used for Hettinject dowels with D5 mm screw slots

The load capacity is determined by the quality of the lightweight panels used.



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