

The UNI-JET Tilt&Turn hardware range







Securing technology for you

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Publisher

Gretsch-Unitas GmbH Baubeschläge Johann-Maus-Str. 3 I 71254 Ditzingen, Germany Tel. + 49 7156 301-0 I Fax + 49 7156 301-293 www.g-u.com Hardware for windows and balcony-doors must do so much more than just function correctly. Only those who also actively acknowledge the importance of aesthetic design, ease of installation and efficient warehouse storage can really deliver an efficient solution. This is why window manufacturers rely on the Gretsch-Unitas group: as one of the leading international providers of window and door technology as well as automatic entrance door and building management systems, we are also the competent partner for Tilt&Turn hardware. The basis is the 100-year history of our family-owned company which has always been intrinsically linked with technical progress, reliability and efficiency. With our Tilt&Turn hardware range we provide an aesthetically attractive, universally applicable, complete solution. In order to live up to our guiding principle "Securing technology for you", we combine first-class products with first-class services which we would like to present in this brochure.



The Gretsch-Unitas group: a traditional family-owned company for more than 100 years

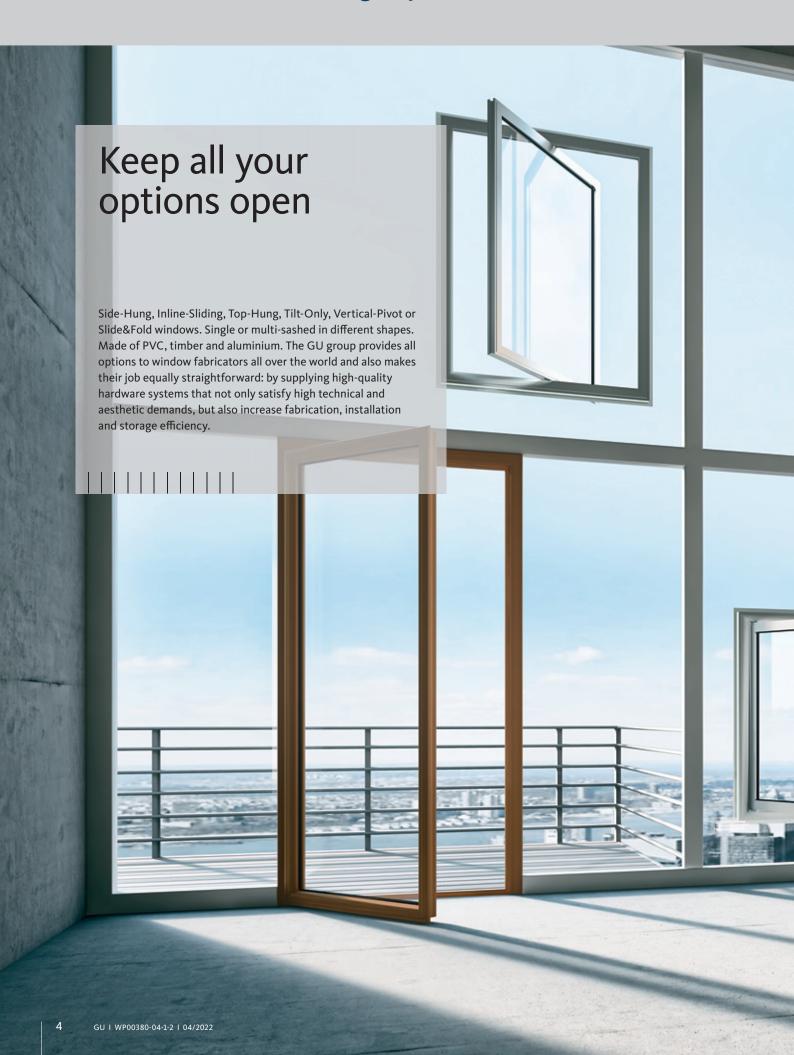








The hardware world of the GU group



GU



For universal use: the UNI-JET central locking system

GU





One solution fits all - the central locking system principle

With the central locking system, the GU group supplies a hard-ware system which can be used universally for all window shapes, whether for PVC, timber or aluminium windows with a 16 mm hardware groove: from Tilt&Turn windows to Horizontal-Pivot and Vertical-Pivot windows through to Tilt&Slide and Fold&Slide balcony-doors. Special shapes, such as round, basket and pointed arch windows are possible using a small number of additional components.



As the central locking system can be used universally, different hardware systems are no longer required during manufacturing: this reduces the expenditure for storage and reordering and simplifies installation. As the system requires comparatively few hardware components, which can be flexibly used in different opening types, this not only guarantees easy installation but also reduces the number of individual components to a minimum.

Integrated security benefits

In addition to opening and closing conveniently, window hardware is also required to satisfy another important criterion – burglar resistance. The design of the central locking system is always the same irrespective of the required security – from basic security through to the tested burglary resistance classes RC1N, RC2N, RC2 and RC3. The configuration of burglar resistance classes is determined most importantly by the selection of different strikers.



THE CENTRAL
LOCKING
SYSTEM
PRINCIPLE

One solution for all window types and frame materials. Special central locking systems are only required for the Lift&Slide systems and with ALU-JET.



Tilt&Turn window



Horizontal-Pivot window



Vertical-Pivot window



Tilt&Slide elements



Parallel-Slide elements
Parallel-Slide lightweight elements



Fold&Slide elements

Well thought out down to the last detail: the UNI-JET central locking system



From automatic cams through to anti-slam devices

Ingenious technical solutions that can be combined to form an intelligent system: all components of the central locking system are precisely coordinated and have been developed with the aim of simplifying manufacturing, installation and operation.



Cleverle

The Cleverle automatic cam compensates for rebate clearances of between 8.5 and 15 mm (with standard strikers) or 8.5 and 14 mm (with Sec strikers) simplifying installation and maintenance.



Clip connection

The drive-gear and stay-guide's connection is implemented both safely and practically, thanks to the clip-in function.



Linear, automated-machinery compatible connection

Build windows cost-effectively: the linear connection simplifies automated-machinery fabrication.



Straight cropping

Easily crop drive-gears and stay-guides to the required length – no special staggered punching machinery required: also ideally suited for subsequent cutting on site.



Fixed handle height drive-gear

Ideal for modular connections: the fixed handle height drive-gear can be cropped by 160 mm to accommodate other hardware components.







Sash lifter

The sash lifter gently lifts the sash into the closed position, supporting user-friendly operation and preventing mishandling.



Logo clip

The logo clip is suitable for the application of CE and RC2 markings or fabricator logos and addresses.



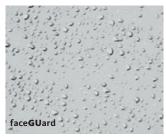
Magnetic contact

Various components incorporating magnets are available for opening & locking monitoring up to VdS grade C.



Standard ferGUard*silver surface sealing

Enduring high-quality aesthetics: fer**GU**ard*silver is highly resistant to corrosion as verified by the results of standardised salt spray tests.



face**GU**ard – surface treatment for the highest demands

The surface treatment for protection against aggressive climatic conditions, e.g. in coastal regions. Meets the requirements of the stringent salt spray test for up to 1500 hours.



Flat packaging

UNI-JET is supplied in ergonomic flat packaging which makes installation easier and saves warehouse space.

The surface-mounted UNI-JET hinge-sides

GU











The surface-mounted UNI-JET D, UNI-JET M, UNI-JET S and UNI-JET C hinge-sides

Aesthetics and slimline features in window design are becoming more and more important. The technical demands are also increasing: the emergence of trends such as triple glazing and floorto-ceiling windows mean that greater sash weights are required. With UNI-JET, the GU group provides a range of hinge-sides that satisfies these design and technology expectations – irrespective of whether for PVC, timber or aluminium windows.

Tried-and-tested technology with an appealing look

The UNI-JET hinge-side is convincing due to its cohesive elegant design which blends harmoniously with modern window frames: the high-quality surface in white paint or silver aesthetics has no visible screws or pins, which means cover caps are no longer required. Additional colours are available from the wide range of cover caps.

The lasting effective solution

The UNI-JET can carry sash weights up to 200 kg and floor-to-ceiling sashes up to a height of 2800 mm – without requiring any additional components and with identical visual appearance. Ease of movement when opening and closing is also ensured up to the safety class RC3. The hardware functions are guaranteed for 10 years, ensuring their long term reliability.

Easy handling in production

The entire UNI-JET hardware range is designed for easy, efficient and machine-compatible fabrication. Symmetrical components, hole and screw patterns make hardware installation easy. Flat packagings and a reduced number of components save warehouse space.

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Pro	oduct	over	view

Designation	PVC	Timber		Aluminium					
Tilt&Turn hardware	UNI-JET D	UNI-JET M	UNI-JET S	UNI-JET D	UNI-JET C				
Description	D = drilled	M = milled	S = screwed	D = drilled	C = clamped				
Sash rebate width [mm]	280-1600	280-1700	280-1600	280-1600	280-1600				
Sash rebate height [mm]	250-2800	250-2800	250-2800	250-2800	250-2800				
Tested hardware load- bearing capacity [kg]	150	200	130	130	130				

For all stated weights and dimensions, please refer to our application diagrams. For more information, visit our website www.g-u.com.

The concealed UNI-JET hinge-sides













The concealed UNI-JET SCF, UNI-JET CONTURA and UNI-JET CC hinge-sides

The GU group provides a wide range of concealed hinge-sides for PVC, timber and aluminium windows in order to meet high design expectations and extend the scope of window design and manufacturing freedom. The fully concealed hinges make the window profiles a visual highlight.

No compromises on design and functionality

The UNI-JET SCF hinge-side for PVC and timber windows (with/without overlap or with CONTURA-compatible profile), UNI-JET CONTURA for timber windows (flush) and the UNI-JET CC hinge-side for aluminium windows emphasise clear architectural lines and offer the same degree of safety and functionality as the surface-mounted hinge-sides from the GU group.

The invisible load carrier

Sash weights up to 160 kg, floor-to-ceiling sashes up to 2800 mm and ease of operation, also in safety classes up to RC3 - the UNI-JET SCF concealed hinge-side has been found to perfectly satisfy all of the above when subjected to 15 000 test cycles. The option of a barrier-free version provides an additional benefit.

More installation efficiency

With concealed hinge-sides, the sashes are hinged parallel to the frame. This allows for one-man installation. Space-saving packaging and a reduced number of components also reduce storage overheads.

Prod	uct o	verview

Designation	PVC	Timber	Timber		
Tilt&Turn hardware	UNI-JET SCF	UNI-JET SCF	UNI-JET CONTURA	UNI-JET CC	
Description	S = screwed C = concealed F = flush	S = screwed C = concealed F = flush	-	C = clamped C = concealed	
Sash rebate width [mm]	390-1400	390-1400	350-1600	390-1400	
Sash rebate height [mm]	280-2800	280-2800	250-2800	280-2800	
Tested hardware load- bearing capacity [kg]	130 160*	130 160*	130	130	

* with optional load absorbing device
For all stated weights and dimensions, please refer to our application diagrams. For more information, visit our website www.g-u.com.

The UNI-JET Tilt&Turn hardware range

The full product range

PVC, timber or aluminium; surface-mounted or concealed hinge-side: each window places specific demands on the hardware. The UNI-JET Tilt&Turn hardware range thankfully offers the right solution for all windows and balcony-doors – aesthetically pleasing, high-quality and easy to manufacture.

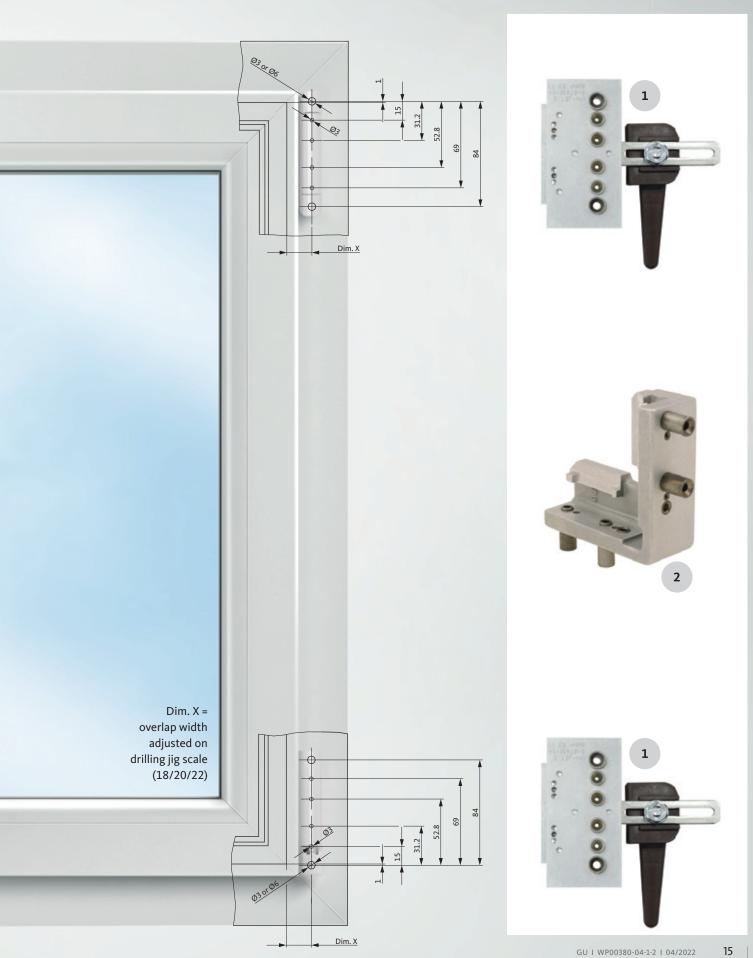
1 Drilling-jig for stay-bearing and pivot-rest

Perfect positioning of each hinge-side: the symmetrical solid drilling template makes installation easier and prevents installation errors.

2 Drilling jig for the drill-in hinge and rebate corner-hinge
The solid drilling jig with funnel-shaped

drill bushings of hardened steel allows the sash to be predrilled efficiently and precisely.





The surface-mounted hardware system for PVC

UNI-JET D



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Design benefits

- Cohesive elegant design
- High-quality surface available from stock in white and silver
- Cover caps available in a large selection of colours

Easy handling

- Assembly-friendly pin safeguard in the stay-bearing
- Convenient, three-dimensional hardware adjustment
- Easy to adjust without having to remove cap due to flexible adjusting cap on drill-in hinge and rebate corner-hinge
- Stay bearing pin can be conveniently removed using the GU pull handle or the GU adjustment tool, or a standard slotted screwdriver

#incrediblyversatile

Accessibility for balcony and patio-doors throuh higher-positioned rebate corner-hinges and floor-flush thresholds

Our product range for barrier-free threshold solutions:





Design freedom

Available with drill-in hinge or rebate corner-hinge



Technical data							
Designation	Rebate clearance [mm]	Axis [mm]	Sash overlap [mm]	Tested hardware load- bearing capacity [kg]	Sash rebate width [mm]		Version of pivot-rest with positioning pin [mm]
UNI-JET D	12	9 / 13	18 / 20 / 22	max. 150	max. 1600	max. 2800	Ø 3 mm and Ø 6 mm in different lengths

The concealed hardware system for PVC

UNI-JET SCF





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Design benefits

- No hardware components visible
- Suitable for use in flush windows

Easy handling

- No window drilling required
- One-man installation possible thanks to the parallel sash hinging
- No damage to components when plastering, as they are situated in the rebate area

#incrediblyversatile

- Also with triple sashed windows without mullion (Swiss windows)
- Opening angle up to 90°
- Tested resistance classes up to RC3



Design freedom

The inward-moving turning-curve provides 5 mm free space on the frame, thus allowing for more design freedom



Technical data

Designation	Rebate clearance [mm]	Axis [mm]	Sash overlap [mm]	Tested hardware load- bearing capacity [kg]	Sash rebate width [mm]	Sash rebate height [mm]	
UNI-JET SCF	12	9 / 13	max. 22	130 160*	max. 1400	max. 2800	· · · · · · · · · · · · · · · · · · ·

^{*} with optional load absorbing device

The surface-mounted hardware systems for timber

UNI-JET M and UNI-JET S



Design benefits

- Cohesive elegant design
- High-quality surface available from stock in white and silver
- Cover caps available in a large selection of colours

Easy handling

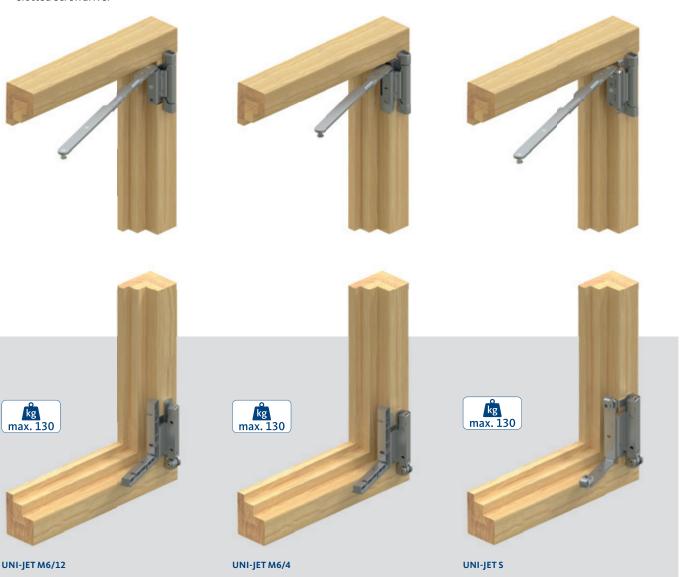
- Assembly-friendly pin safeguard in the stay-bearing
- Convenient, three-dimensional hardware adjustment
- Easy to adjust without having to remove cap due to flexible adjusting cap on rebate corner-hinge
- Stay bearing pin can be conveniently removed using the GU pull handle or the GU adjustment tool, or a standard slotted screwdriver

#incrediblyversatile

Accessibility for balcony and patio-doors throuh higher-positioned rebate corner-hinges and floor-flush thresholds

Our product range for barrier-free threshold solutions:





The surface-mounted hardware systems for timber

UNI-JET M and UNI-JET S















High load-bearing capacity

of hardware is 200 kg due to solid rebate corner-hinges for heavy weights with identical aesthetics as with the standard hinge-side version

Technical data

Designation	Rebate clearance [mm]	Axis [mm]	Sash overlap [mm]	Tested hardware load- bearing capacity [kg]	Sash rebate width [mm]	Sash rebate height [mm]
UNI-JET M6/12	12	9 / 13	18 / 20	max. 130	max. 1600	max. 2800
UNI-JET M6/150	12	9 / 13	18 / 20	max. 150	max. 1600	max. 2800
UNI-JET M8/12	12	9 / 13	18 / 20	max. 200	max. 1700	max. 2800
UNI-JET M6/4	4	9 / 13	15 / 18	max. 130	max. 1600	max. 2800
UNI-JET S	12	9 / 13	18 / 20	max. 130	max. 1600	max. 2800

Regarding the indicated weights and dimensions please observe our application diagrams! For more information, visit our website www.g-u.com.

UNI-JET M8/12

The concealed hardware system for timber

UNI-JET SCF



Design benefits

- No hardware components visible
- Suitable for use in flush windows

Easy handling

- No milling work necessary on the window
- One-man installation possible thanks to the parallel sash hinging
- No damage to components when plastering, as they are situated in the rebate area

#incrediblyversatile

- Also with triple sashed windows without mullion (Swiss windows)
- Opening angle up to 90°
- Tested resistance classes up to RC3



Design freedom

The inward-moving turning-curve provides 5 mm free space on the frame, thus allowing for more design freedom



Technical	data
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* with optional load absorbing device

For all stated weights and dimensions, please refer to our application diagrams. For more information, visit our website www.g-u.com.

The concealed hardware system for timber

UNI-JET CONTURA







Design benefits

- No hardware components visible
- Suitable for use in flush windows

Easy handling

- No milling work necessary on the window
- One-man installation possible thanks to the parallel sash hinging
- No damage to components when plastering, as they are situated in the rebate area

#incrediblyversatile

- Opening angle up to 90°
- Tested resistance classes up to RC2
- Tested resistance class SKG**





Technical data

Designation	Rebate clearance [mm]	Axis [mm]	Sash overlap [mm]	Tested hardware load- bearing capacity [kg]	Sash rebate width [mm]	Sash rebate height [mm]	
UNI-JET CONTURA	12	9	max. 7	130	max. 1600	max. 2800	

For all stated weights and dimensions, please refer to our application diagrams. For more information, visit our website www.g-u.com.

The surface-mounted hardware system for aluminium

UNI-JET C



Design benefits

- Coherent aesthetically appealing design using an aluminium profile hinge flush with the sash overlap
- High-quality surface finish in anodised silver, white or black available from stock, an uncoated version is also available for project-related coating

Easy handling

- Fabricator-friendly clamp fastening of the sash corner-hinge in the rear-cut hardware groove
- Convenient three-dimensional hardware adjustment
- Maintenance-free stay-bearings and corner-hinges

#incrediblyversatile

- All components are non-handed
- Opening angle up to 180°





Technical data							
Designation	Rebate clearance [mm]	Axis [mm]	Sash overlap [mm]	Tested hardware load- bearing capacity [kg]	Sash rebate width [mm]	Sash rebate height [mm]	
LINI-IFT C	12	9 / 13	18 / 20	130	may 1600	may 2800	

The surface-mounted hardware system for aluminium

UNI-JET D





Design benefits

- Cohesive elegant design
- High-quality surface ferGUard*silver
- Cover caps available in a large selection of colours

Easy handling

- Assembly-friendly pin safeguard in the stay-bearing
- Convenient three-dimensional hardware adjustment
- Stay bearing pin can be conveniently removed using the GU pull handle or the GU adjustment tool, or a standard slotted screwdriver
- Adjustable turn-brake in the rebate corner-hinge

#incrediblyversatile

- Versions in the same hinge design also available for pitched and round arch windows
- Opening angle up to 180°







Technical data

The concealed hardware system for aluminium

UNI-JET CC



Design benefits

■ No hardware components visible

Easy handling

- No machining necessary on the frame profile
- Installation without any drilling: the modular, fully clampable hinge-side
- One-man installation possible thanks to the parallel sash hinging
- Suitable for flat or rear-cut 16 mm sash grooves
- Convenient three-dimensional hardware adjustment

#incrediblyversatile

- Opening angle up to 100°
- Tested resistance classes up to RC2

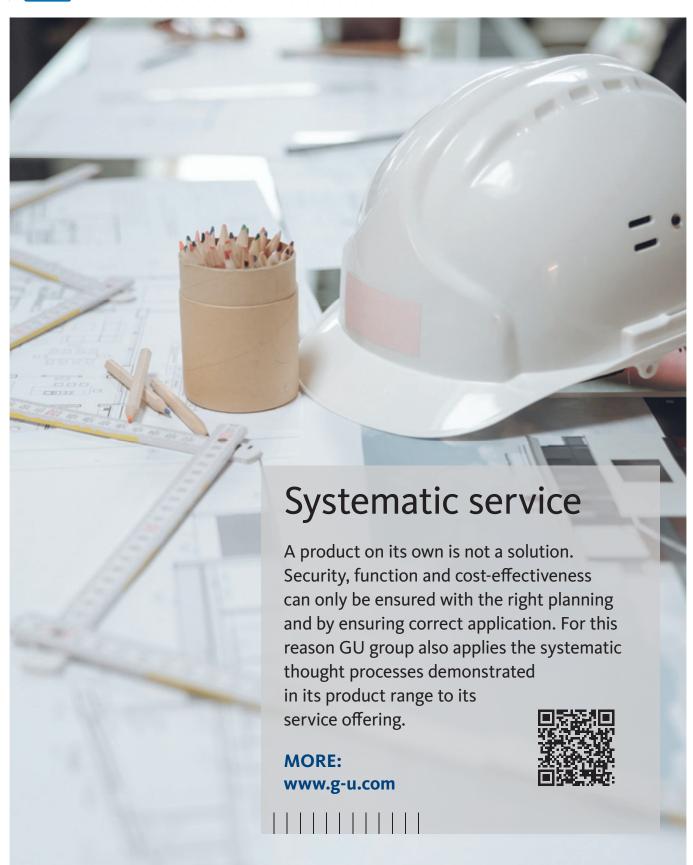




Technical data							
Designation	Rebate clearance [mm]	Axis [mm]	Sash overlap [mm]	Tested hardware load- bearing capacity [kg]	Sash rebate width [mm]	Sash rebate height [mm]	
UNI-IET CC	12	9 / 13	18 / 20	130	max. 1400	max. 2800	



GU



Notes

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