



WINDOW TECHNOLOGY
DOOR TECHNOLOGY
AUTOMATIC ENTRANCE SYSTEMS
BUILDING MANAGEMENT SYSTEMS



With kind permission of Jansen AG, CH

FOR TIMBER, PVC AND ALUMINIUM WINDOWS AND BALCONY-DOORS

Tilt&Slide hardware



Securing technology for you



Individual system solutions to meet the highest quality expectations

The Gretsch-Unitas range of Tilt&Slide hardware



With kind permission of: Glenn Howells Architects & Urban Splash's Giraffe Communications, UK-Birmingham, London

Tradition obliges – setting the highest design and quality standards

Gretsch-Unitas Group

The Gretsch-Unitas Group offers solutions for using Tilt&Slide hardware in all standard timber, PVC or aluminium window profiles. The most exacting quality expectations are met through systematic further developments and innovations.

Innovation

Tilt&Slide hardware has been part of the product range as standard for decades at the Gretsch-Unitas Group. Technical innovations, such as the GU-966/100 oZ bb Tilt&Slide hardware system which can be used for barrier-free dwelling concepts to DIN 18025, have shaped the market.

Tilt&Slide hardware

Tilt&Slide hardware is a hardware system that can completely satisfy the individual requirements of end users in relation to comfort, safety and functionality. Barrier-free dwellings to DIN 18025 are also possible with Tilt&Slide hardware from the GU Group.

System solutions for individual requirements

In accordance with our policy 'The systematic competitive edge', we ensure that an individual, sustainable and market-conform hardware solution can be provided in the form of a complete CE-certified system for each profile system. In its capacity as system supplier for timber elements, Gretsch-Unitas is in a position to pursue independent paths and meet all market requirements.

Tilt&Slide hardware

Hardware range

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For **timber and PVC** windows and balcony-doors

Central locking system with power control, versions 200 mZ and 150 mZPage 06

The hardware system GU-968 mZ

For **aluminium** windows and balcony-doors

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The hardware system GU-966 oZ

For **timber and PVC** windows and balcony doors

Central locking system without power control, version 150 oZPage 08

The hardware system GU-968 oZ

For **aluminium** windows and balcony-doors

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The hardware system GU-966 oZ bb



Barrier-free convenience for **timber and PVC** windows and balcony-doorsPage 09

The hardware system GU-90 oZ

For **timber, PVC and aluminium** windows and balcony-doors

Central locking system without power control, version 90 oZPage 10

The range of oZ handles

For GU-966 oZ / GU-968 oZ / GU-966/100 oZ bb / GU-90 oZ Tilt&Slide units.....Page 11

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Publisher

Gretsch-Unitas GmbH Baubeschläge

Johann-Maus-Str. 3 | D-71254 Ditzingen

Tel. + 49 (0) 71 56 3 01-0 | Fax + 49 (0) 71 56 3 01-2 93

www.g-u.com

The Gretsch-Unitas range of Tilt&Slide hardware

Convenient operation and functionality

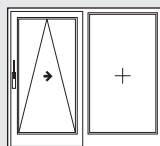


Fundamental characteristics and benefits of Tilt&Slide hardware systems:

- All central locking systems feature a mishandling device as standard
- All central locking components are equipped with the automatic cam **Cleverle** which adapts automatically to varying rebate clearances. All settings are made with torx. Installation and maintenance is easier, more practical and logical.
- The resistance classes are determined exclusively by the choice of striker
- All locks in the frame feature Tilt&Turn components as standard
- Units featuring the GU central locking system can generally be equipped with a locking monitoring system and connected to an alarm system
- Outstanding corrosion protection with ferGUard*silber surface sealing. Applied in three harmonised coats, the attractive bright silvery surface has become a tried-and-tested standard for window hardware.
- Outstanding operating convenience and reliable problem-free functionality in all weight classes
- Slides precisely into any required position and engages softly in the tilt position thanks to innovative bogie technology
- Solutions for barrier-free dwellings to DIN 18025
- Can be used with all standard profile materials such as timber, PVC, or aluminium
- Operation via aluminium or stainless steel turn handle
- Geared turn handle with anti-lockout device

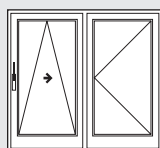
CE marking for windows and balcony-doors

At our premises we provide you with the opportunity to acquire the prerequisites needed for the CE marking of timber windows and window doors. For more detailed information please refer to your responsible contact.



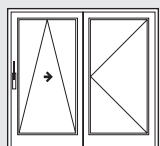
Pattern A – with mullion

- 1 Tilt&Slide sash
- 1 fixed glazing
- Fig. shows LH handle



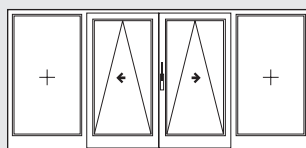
Pattern A – with mullion [1]

- 1 Tilt&Slide sash
- 1 Turn-Only sash
- Fig. shows LH handle



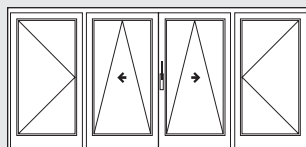
Pattern D – without mullion [2]

- 1 Tilt&Slide sash
- 1 Turn-Only sash
- Fig. shows LH handle



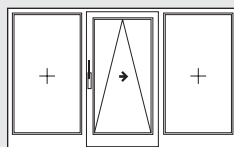
Pattern C – with mullions

- 2 Tilt&Slide sashes
- 2 fixed glazings
- Fig. shows first opening sash with LH handle



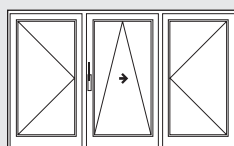
Pattern C – with mullions [1]

- 2 Tilt&Slide sashes
- 2 Turn-Only sashes
- Fig. shows first opening sash with LH handle



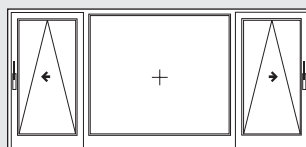
Pattern G – with mullions

- 1 Tilt&Slide sash
- 2 fixed glazings
- Fig. shows LH handle



Pattern G – with mullions [1]

- 1 Tilt&Slide sash
- 2 Turn-Only sashes
- Fig. shows LH handle



Pattern K – with mullions

- 2 Tilt&Slide sashes
- 1 fixed glazing
- Fig. shows LH and RH handle

[1] Patterns A, C and G with Turn-Only sash:
UNI-JET Turn-Only hardware with DIRIGENT-F/SG service handle (8-00694-33-0-*) and F cover rosette, inside - flat (6-24913-00-0-*)
[2] Pattern D: Turn-Only sash with UNI-JET lever-operated gear



With kind permission of: Jansen AG, CH-Oberriet

You can enter an entirely new dimension when manufacturing terrace elements from standard window profiles using Tilt&Slide hardware. Gretsch-Unitas hardware is fully-fledged from a technical point of view and therefore ensures long-lasting use due to its precise functionality, even with heavy weights.

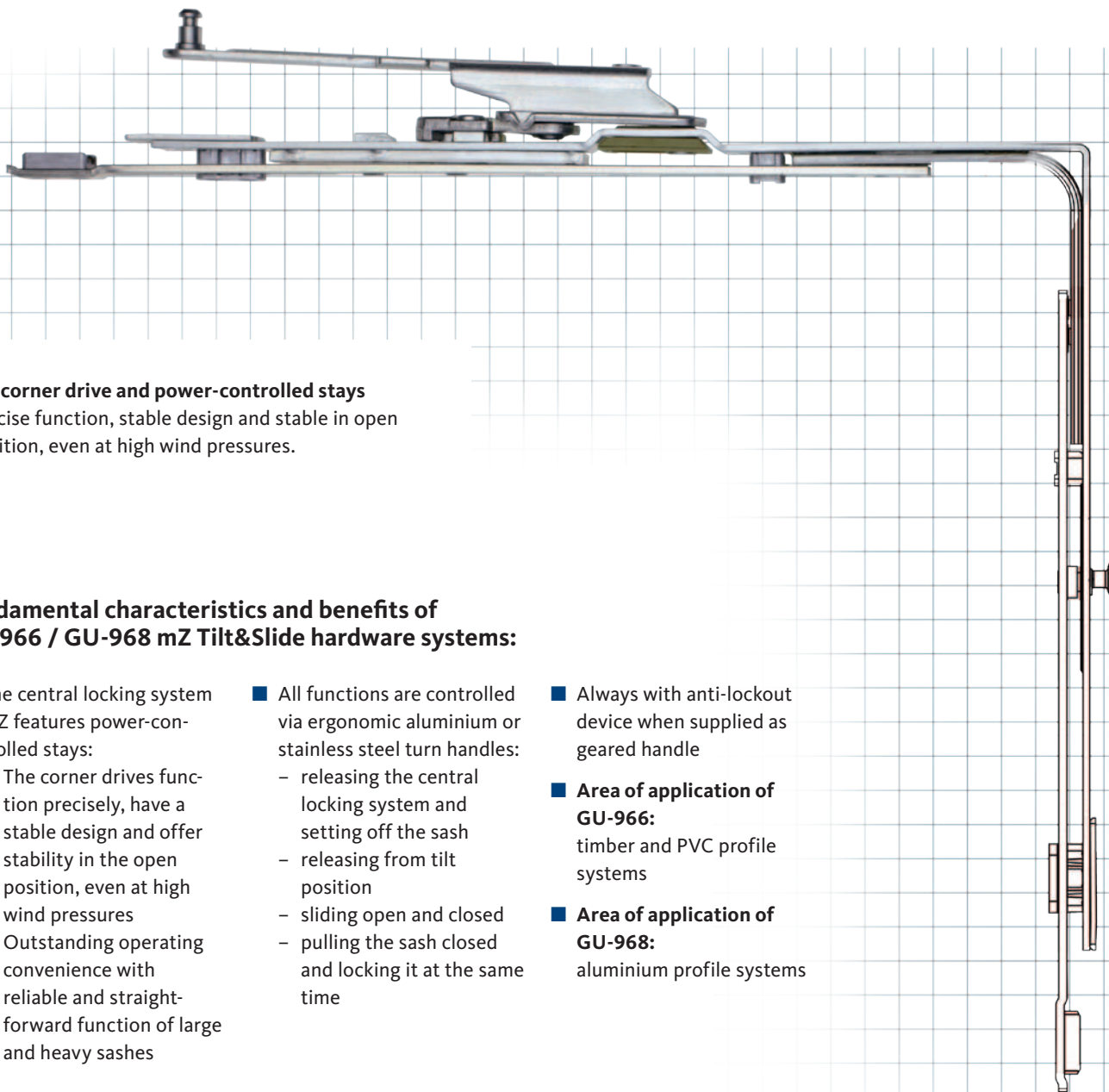
The additional power-control feature of the hardware variants for large and heavy units ensures that the sash is pulled against the gasket evenly at closing and moved back into the slide position at opening.

Description	GU-966/ 200 mZ**	GU-966/ 150 mZ	GU-968/ 200 mZ	GU-968/ 150 mZ	GU-966/ 150 oZ	GU-968/ 150 oZ	GU-966/ 100 oZ bb	GU-90 oZ
Application	Timber, PVC	Timber, PVC	Aluminium	Aluminium	Timber, PVC	Aluminium	Timber, PVC	Timber, PVC, aluminium
Sash weight (kg)	up to 200	up to 150	up to 200	up to 150	up to 130	up to 130	up to 100	up to 90
Sash rebate width (mm)	720 – 2000	720 – 1600	720 – 2000	720 – 1600	640 – 1600	600 – 1600	720 – 1600	640 – 1600
Sash rebate height (mm)	820 – 2370	820 – 2370	820 – 2370	820 – 2370	700 – 2350	730 – 2400	700 – 2350	700 – 2350
Basic security	■	■			■		■	■
Enhanced basic security	■	■			■		■	■
EN 1627 – RC2	■	■						

** From SRW 1851 – 2000 mm an additional centre stay is required.
From SRW 1600 – 2000 mm and for sash weights 180 – 200 kg, the use of tandem bogies is recommended.

Central locking system with power control (mZ)

GU-966 (timber / PVC) and GU-968 (aluminium) – 200 mZ and 150 mZ versions



mZ corner drive and power-controlled stays

Precise function, stable design and stable in open position, even at high wind pressures.

Fundamental characteristics and benefits of GU-966 / GU-968 mZ Tilt&Slide hardware systems:

- The central locking system mZ features power-controlled stays:
 - The corner drives function precisely, have a stable design and offer stability in the open position, even at high wind pressures
 - Outstanding operating convenience with reliable and straight-forward function of large and heavy sashes
- All functions are controlled via ergonomic aluminium or stainless steel turn handles:
 - releasing the central locking system and setting off the sash
 - releasing from tilt position
 - sliding open and closed
 - pulling the sash closed and locking it at the same time
- Always with anti-lockout device when supplied as geared handle
- **Area of application of GU-966:**
timber and PVC profile systems
- **Area of application of GU-968:**
aluminium profile systems



Innovative bogie technology

Based on many years of experience, we have developed bogies that effectively guarantee long-term use and outstanding precision. The bogies glide smoothly and safely from the tilt position into the slide position.



Automatic pin Cleverle

The different climatic conditions in the summer and winter frequently lead to changes in the locking cam settings. The Cleverle adapts automatically to the varying rebate clearances. This significantly reduces the effort required to carry out adjustments during manufacturing and when on-site.

The range of mZ handles

For Tilt&Turn units with power control



Geared turn handle DIRIGENT ^[1]
lockable – keyed alike

Stainless steel



Geared turn handle RONDO ^[1]
lockable – keyed alike

Stainless steel



Geared turn handle FORTE ^[1]
lockable – keyed alike

Stainless steel



Geared turn handle DIRIGENT ^[1]
lockable – keyed alike

Aluminium



DIRIGENT turn handle on both sides
with PC hole and lugs

Aluminium



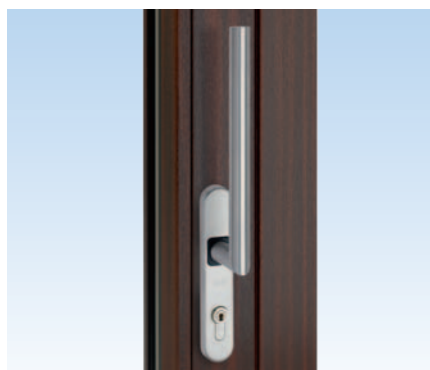
Geared turn handle DIRIGENT ^[1]

Aluminium



Turn handle DIRIGENT, inside
with PC hole and lugs

Stainless steel



Turn handle FORTE, inside
with PC hole and lugs

Stainless steel



Turn handle RONDO, inside
with PC hole and lugs

Stainless steel

Note: for additional handle designs, refer to our relevant order catalogues.

^[1] All geared turn handles feature an anti-lockout device as standard.

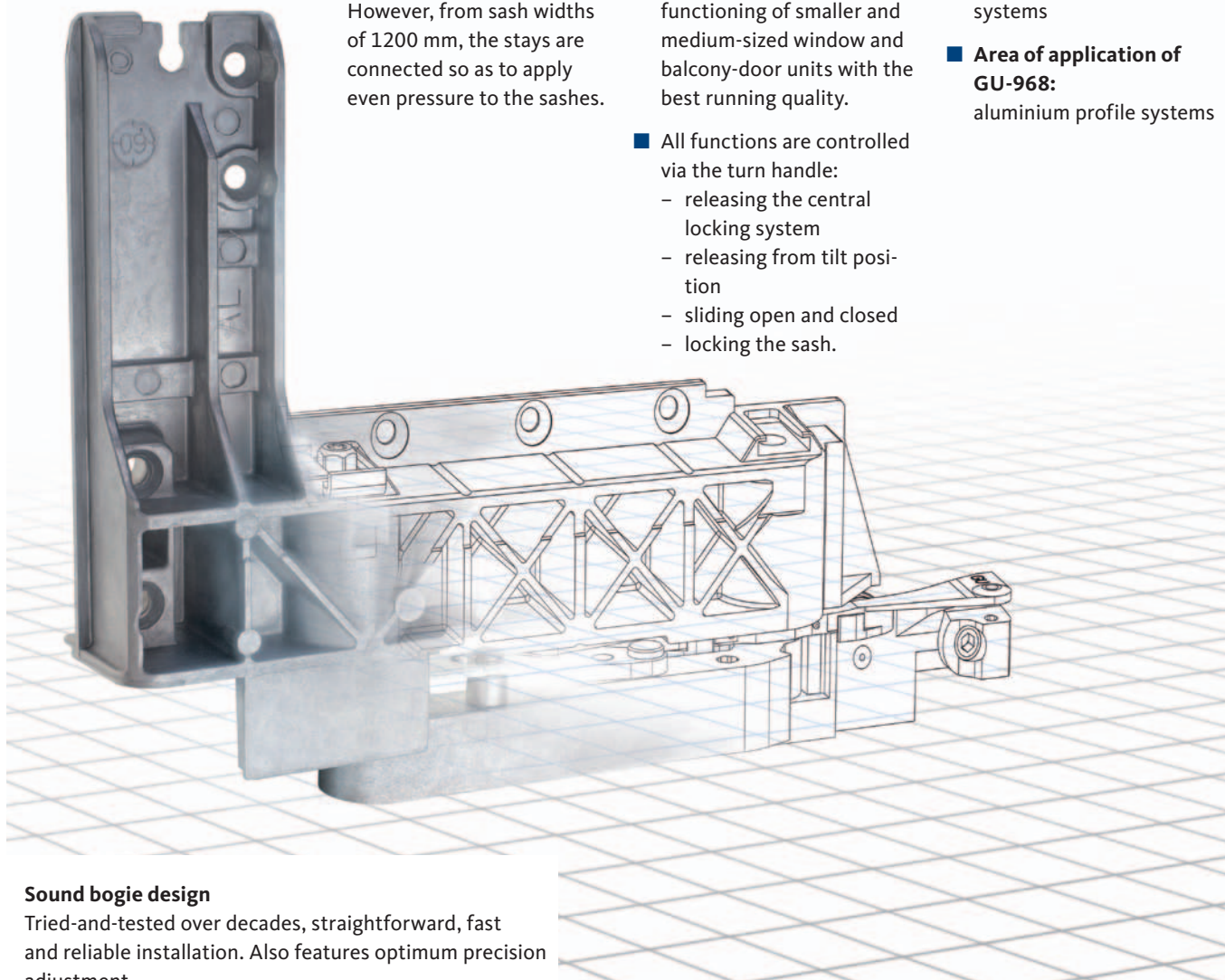
Central locking system without power control (oZ)

GU-966 (timber / PVC) and GU-968 (aluminium) – version 150 oZ



Fundamental characteristics and benefits of GU-966 / GU-968 oZ Tilt&Slide hardware systems:

- The oZ central locking system is not equipped with power-controlled stays. However, from sash widths of 1200 mm, the stays are connected so as to apply even pressure to the sashes.
- The stable design of the hardware components allows for the faultless functioning of smaller and medium-sized window and balcony-door units with the best running quality.
- All functions are controlled via the turn handle:
 - releasing the central locking system
 - releasing from tilt position
 - sliding open and closed
 - locking the sash.
- **Area of application of GU-966:** timber and PVC profile systems
- **Area of application of GU-968:** aluminium profile systems



Sound bogie design

Tried-and-tested over decades, straightforward, fast and reliable installation. Also features optimum precision adjustment.

The central locking system

All T&S central locking systems feature the **Cleverle** automatic cam and can be used for all requirements up to resistance class 2. The resistance class is defined exclusively by the striker.



The ferGUard*silver surface coating

All T&S central locking systems have first-class corrosion protection properties thanks to the ferGUard surface sealing. These are applied in state-of-the-art facilities in three coats which are harmonised with one another.



Central locking system without power control (oZ)

GU-966/100 oZ bb (timber / PVC) – suitable for barrier-free dwellings to DIN 18025



Fundamental characteristics and benefits of the GU-966/100 oZ bb Tilt&Slide hardware system:

- Cost-effective, barrier-free solution with high degree of operating convenience: the installation height of the threshold is only 20 mm
- For use in all standard timber and PVC profiles for units with sash weights up to 100 kg (pattern A)
- All central locking components feature the Cleverle automatic cam
- Centre locks with standard Tilt&Turn components
- Enhanced burglar protection with additional security components



Bogie design

Tried-and-tested bogie design and precise function incorporated into an extremely compact installation space provide the barrier-free solution for Tilt&Slide hardware without compromising operating convenience.



Barrier-free living

GU-966/100 oZ bb Tilt&Slide hardware, **the solution for barrier-free dwellings to DIN 18025.**

Suitable for barrier-free construction to



Central locking system without power control (oZ)

GU-90 oZ (timber / PVC / aluminium)



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Fundamental characteristics and benefits of Tilt&Slide hardware system GU-90 oZ:

- For small and light doors with sash weights up to 90 kg
- Identical stays and bogies for timber, PVC, or aluminium units
- Centre locks with standard Tilt&Turn components
- All central locking components feature the Cleverle automatic cam



Gasket pressure control

The stays are connected with a metal rod, so the gasket pressure is distributed evenly over the total sash width.



Smooth engagement

When opened, the sash glides more or less effortlessly into the required position – and smoothly engages in the end position when closed.

The range of oZ handles

For Tilt&Slide units without power control



DIRIGENT-F | Inner handle (not shown)
DIRIGENT-F/Z | Inner handle, lockable
Aluminium



ADAGIO-F | Inner handle (not shown)
ADAGIO-F/Z | Inner handle, lockable
Aluminium



MODENA-F | Inner handle (not shown)
MODENA-F/Z | Inner handle, lockable
Aluminium



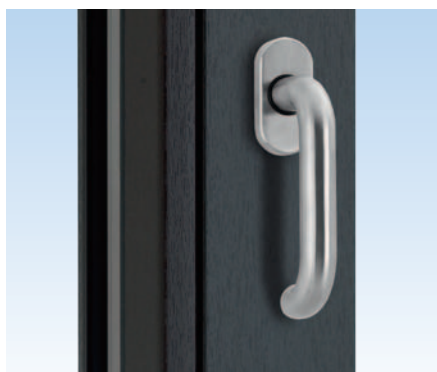
SOPRANO-F | Inner handle (not shown)
SOPRANO-F/Z | Inner handle, lockable
Aluminium



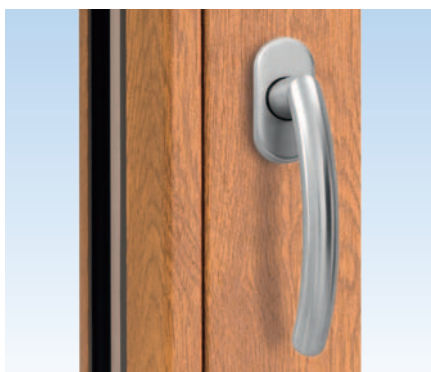
SAN REMO-F | Inner handle (not shown)
SAN REMO-F/Z | Inner handle, lockable
Aluminium



FORTE
Inner handle
Stainless steel



ANDANTE
Inner handle
Stainless steel



OFFICE
Inner handle
Stainless steel



CRESCENDO
Inner handle
Stainless steel

Note: for more turn handle versions, refer to our corresponding order catalogues.



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Gretsch-Unitas GmbH
Baubeschlage
Johann-Maus-Str. 3
D-71254 Ditzingen
Tel. + 49 (0) 71 56 3 01-0
Fax + 49 (0) 71 56 3 01-77 980

BKS GmbH
Heidestr. 71
D-42549 Velbert
Tel. + 49 (0) 20 51 2 01-0
Fax + 49 (0) 20 51 2 01-9733

www.g-u.com

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