



A bright future with
Auminium.

The LM hardware system:
the window fabricating industry's
new heavyweight.

SIEGENIA AUBI[®]
SOLUTIONS INSIDE

WINDOW HARDWARE

DOOR HARDWARE

SLIDING DOOR HARDWARE

VENTILATION AND BUILDING TECHNOLOGY

You are our Number One priority!



SIE

Windows are not simply made for buildings but primarily for people.

Whether you are a window fabricator, builder or architect: in SIEGENIA-AUBI your interests are always represented - right from the start.

However this alone did not make us the innovation leader in the window hardware industry. Our developments have time and time again set global standards. Whether it's the coupleable slider-rod hardware, the universally applicable clampable frame components and hinges, or the punchable profile machining for the routed-in drive gear: innovation has a long tradition with us. True to our company motto: We give windows and doors function, ventilate rooms and create the best solutions together with our partners.

In order to honour this claim, we invest in research, development and process management. At the same time our customers can be assured of consistently high product quality that far exceeds the legal requirements.

In order to monitor these enhanced standards, all of our product ranges have successfully passed the particularly strict QM 328 certification programme.



We would like to present our aluminium products in this brochure as an example of SIEGENIA-AUBI's consistent innovation policy that meets the fabricators and architects increasing demands and expectations in every sense.

From the detailed intelligent solution right up to optimising the whole manufacturing process, time and cost reduction potential is implemented, improving the profitability for the fenestration sector.

At the same time our aluminium products offer elegant design and an extensive product range for virtually all applications. Come and see for yourself!

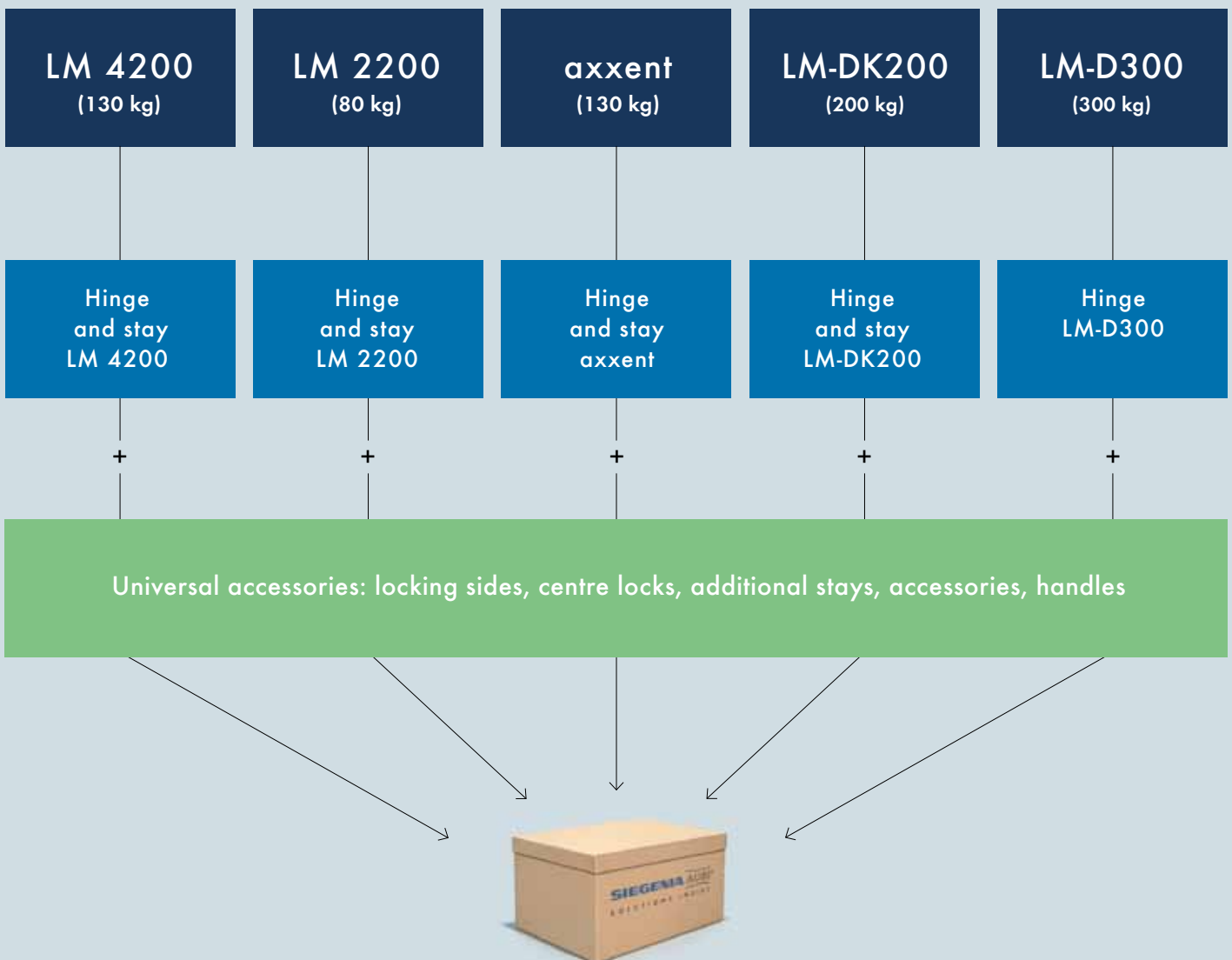


LM modular system.

Hardware ranges

Individual hinges and stays

Universal range of accessories



LM – The Logistics Master.

Those who can reduce costs can increase their opportunities in the market. Although the basic principle is simple, the possibilities of the LM modular system are immense. On the one hand our featured hardware ranges LM 4200, LM 2200, LM-DK200, LM-D300 and axcent demonstrates the consistent reduction of individual components with as many preassembled components as possible. This streamlines both the production and installation process.

The LM system's versatility however only come to light with the fact that all hardware lines only differ with different hinge sides and stays. The whole range of accessories – whether locks, additional stays, routed-in drive gears, turn locks etc. – can be easily combined with all product lines. This simplifies stock holding as well as handling and increases hardware combination flexibility for different window types. After all, efficiency is a question of intelligence.

Well thought-out logistics: multi-containers from SIEGENIA-AUBI.

The LM modular system also extends to the cardboard packaging. The dimensions of the individual cardboard boxes are perfectly matched to fit the different types of the multi-containers. Even when combining different units, the total surface area of the container and/or Euro pallet is always perfectly utilised. This aids the rationalisation effects of the entire logistics chain.



To be innovative
this is what we consider.

Speed



Cost effectiveness



Efficiency



The production-optimised hardware solution LM 4200iP.

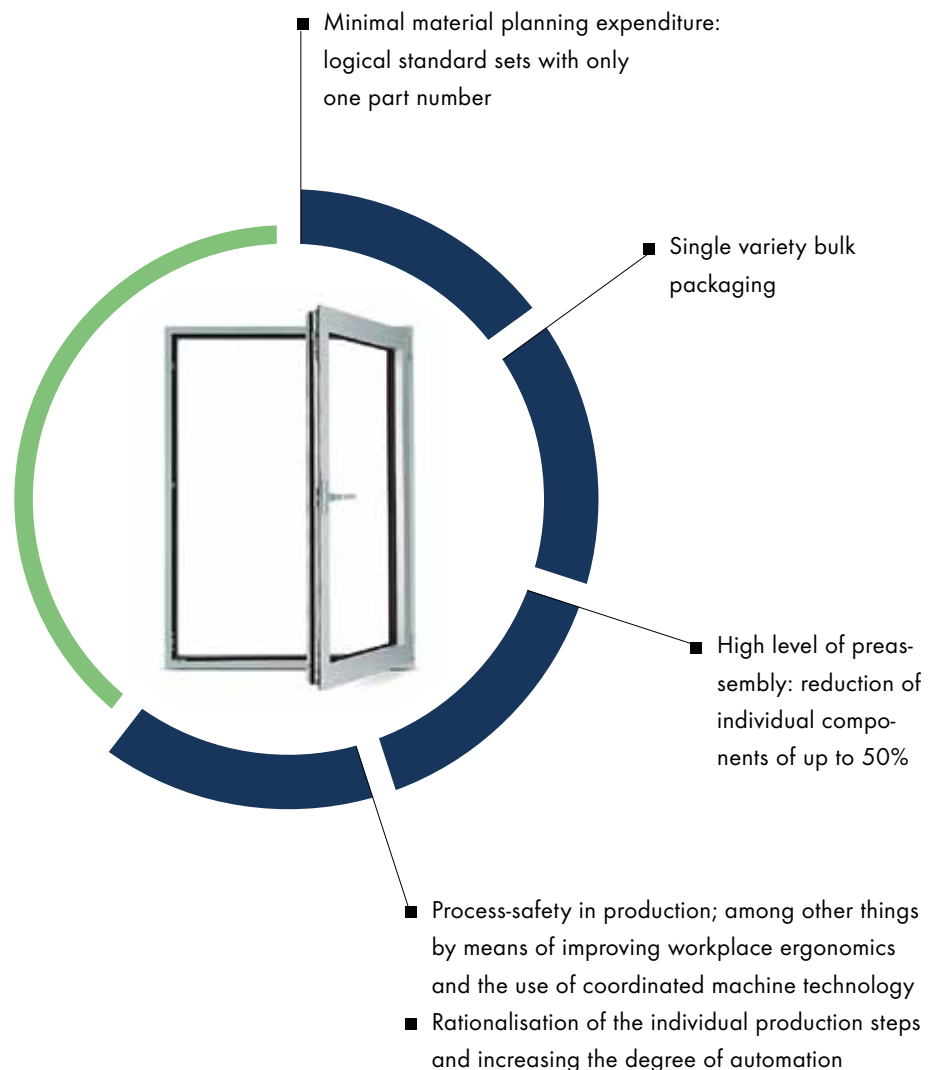
When our engineers simply improve a product in technical terms, we call this a further development. An improvement however only becomes an innovation when another economic dimension is added to the technical dimension. For us innovation leadership therefore always means that our innovations give our fabricators a clear competitive edge.

With regard to the LM 4200iP hardware concept; this question can be unequivocally answered with a 'Yes'.

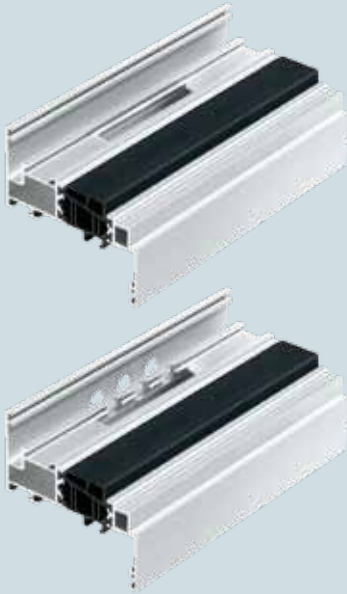
Due to the consistent use of rationalisation measures, the LM 4200iP production processes are sustainably streamlined, as the well-proven LM 4200 is integrated in an intelligent overall concept leading to substantial cost reduction.

-40%

- Faster installation: time savings of up to 40 % (sash hardware incl. glazing beads)
- Familiar sophisticated aesthetics and high degree of functionality of the LM 4200



Punchable profile machining.



Euro groove profiles challenge the systems with large hardware chambers by means of completely innovative processing

- Completely non-routing profile machining
- No more time-consuming routing and drilling operations
- Only two work steps: punching the profile chamber and the overlap
- Enables efficient and economical installation of routed-in drive gears
- Makes Euro-groove profiles more than competitive

Routed-in drive gear LM.



Compatible with the new punching process: our compact routed-in drive gear is an ideal solution for very slim sash profiles.

- Compact for less hardware components
- Integrated mishandling-device and closing function for the centre lock
- Universally applicable, but ideal for very slim profiles
- Compatible with the LM GLOBE RR handle, the TITAN handle and all commercially available handles with 7mm spindle
- Ease of operation and security (burglary resistance)
- Enhanced design options in colour and design

LM GLOBE RR handle.



Looks good: advantages in logistics and installation.

- Contemporary aesthetics
- Clip-on feature
- Easy on-site installation
- Prevention of transport damage
- Windows can be stacked during transport
- Versions: standard and lockable with integrated TBT function



Clampable hinge-side components.



Clever building components for an efficient hardware system: clampable hinges for even faster installation.

- Preassembled clamping support-strips and screws on the hinge-sided frame components
- Easy installation in seconds: insert and screw-fix the hardware components in the frame groove
- Slanted screwing axis for trouble-free use of manual and automatic screwing tools
- High level of functional safety
- Non-handed hardware components

Clampable corner drive with mishandling-device.



The new corner drive is a good match all round: it is solely fixed by one clamping support-strip.

- Installation time and cost savings due to the clamping support-strip fixing
- Integrated mishandling-device with increased travel for activation
- Frame component with integrated closing and stopping function

Mishandling-device on the handle.



Better safe than sorry: the mishandling-device on the handle as additional support.

- Compact component, with screw-fixed handle
- User-friendly function also for high window units by positioning at the force application point
- Additional support-brace for the sash overlap

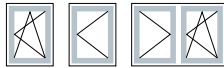
Atmospheric architecture, easy installation.



LM 4200 and LM 2200: The LM series makes life easier for you.

The visual simplicity of new architecture is matched by the preassembled component system and ease of installation of the LM 4200 hardware. You need fewer components, fewer packaging units and the Turn-Only stay with screws makes drilling surplus to requirements. Whether with the variable lateral and vertical adjustment

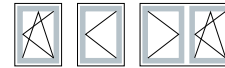
without having to unhinge the sash or the simplification of only two different stay sizes: you would have never installed Tilt&Turn hardware this fast, cost-effectively or efficiently! This also applies to the LM 2200 hardware, as the component system is used for this.



130 kg

LM 4200

- Preassembled component system for efficient installation and stock control
- Non-handed hardware components
- Clampable hinge-sided frame components
- Both the vertical and horizontal centre lock are the same
- The aesthetical three-pieced hinge ends flush and horizontally in line with the sash profile
- All fittings are non-corrosive
- Available in many RAL colours and in the new INOX surface-finish



80 kg

LM 2200

- Hinge passage minimum 3.5 mm
- The hinge has an aesthetical, two-piece appearance
- Fast connection of the projecting stay and hinge side due to the clip function
- Further technical features; same as LM 4200



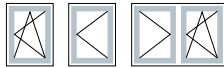
Concealed design axxents.



axxent and axxent motion: Focus on the essentials.

The clear style and contours of contemporary glass architecture has often been by the rotation point on the window frames. With axxent, these are now invisible. This provides architects with attractive design options and builders with an elegant window design. axxent also achieves top marks in

the installation process by reducing it to the bare essentials: With its clampable compact components, the system is exceptionally efficient. axxent motion offers sophisticated design options with a fully concealed chain drive opening system for tilt-only windows and skylights for user convenience.



130 kg

axxent

- Concealed rotation points support the implementation of slim-line profile elevations
- Non-handed hardware components
- Universally applicable in frame grooves from 10 up to 14 mm
- Large opening angle of 110° in the turn mode
- Stay snap function in the tilt position
- Universal hardware components for all opening versions
- Extensive range of accessories such as burglar-resistance hardware components and monitoring systems



axxent motion

- Aesthetically fully concealed technology
- Consistent combination of sophisticated building facades with enhanced ease of operation
- Opening, closing, tilting and 90° turn-opening at the push of a button
- Up to four drives can be linked with each other
- Perfectly suitable for integration in smoke and heat venting release systems (AOV's)



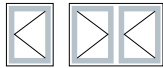
Glass is highly fashionable.



LM-D300 and LM-DK200: The load-bearing solution for large glazed surfaces.

Generously dimensioned glass facades bring lightness to any design, but are serious heavyweights. For hardware technology this poses an extraordinary challenge regarding the load-bearing capacity. With specially developed solutions for these heavyweights SIEGENIA-AUBI underlines its market-leading position in the aluminium sector. The LM-D300 is designed for Turn-Only sashes

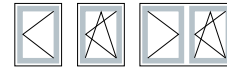
with up to 300 kg sash weight. It can be operated either manually or motor-driven. The LM-DK200 is designed for Tilt & Turn windows with up to 200 kg weight. Both systems feature the flexible adjustment options as well as an extensive range of accessories and the possibility of integrating these into monitoring or facility management systems.



300 kg

LM-D300

- Opening version: Turn-Only
- Screw fixed hinge hardware components
- Variable height-adjustment
- High degree of stability and impermeability due to the additional central hinge
- Efficient logistics with cross-product modular system
- Extensive range of accessories
- In conjunction with sound and heat insulation and burglary protection



200 kg

LM-DK200

- Opening versions: Tilt & Turn
- Variable height and lateral adjustment
- Efficient logistics with cross-product modular system
- Extensive range of accessories
- In conjunction with sound and heat insulation and burglary protection



Time, to get a handle on costs.



Our range of accessories can apply some leverage to cost effectiveness.

Speedier production, fast finish.

Recognising time as an expense factor in the production and assembly shows that SIEGENIA-AUBI innovations are specifically designed with a view to fabricators and architects requirements. This not only applies to our hardware systems, but also to the whole range of accessories. They are versatile and flexible enough to be applied to virtually all day-to-day and project solutions. This is shown for example in the new clip-on LM GLOBE RR handle for which no tools are required, as depicted here.

More flexibility, more efficiency.

Our multi-faceted handle range is now also available with ring rosettes to offer even more design flexibility. This gives the window not only appealing aesthetics, but through the intelligent product design also provides clear advantages in logistics and installation.



Whether the standard or lockable version: the handle can be clipped on easily and rapidly without the use of any tools. The quick handle installation upon completing all construction work enables fast use and helps to prevent transport damage.



LM handle range.

The GLOBE handle range creates new design freedom for historical architectural concepts with more elegant aesthetics and intelligent functions. The ergonomic design features rounded off contours and the drop-shaped end.

Millions of people all over the world grasp the Si-line design handle daily and with this, the guiding principle of modern architecture: "Less is more". The expression of form is created objectively and clearly. The technology designed for both durability and functional safety.

Our LM handle is not only available for all conceivable opening versions – including the outward opening window version: apart from the standard colours ranging from classic silver right up to Design-INOX, they also can be implemented in all possible RAL colours. There are no limits to any individual colour schemes in accordance with the architects' requirements and a TBT function integrated in the lockable version comes as standard.

LM GLOBE

LM Si-line

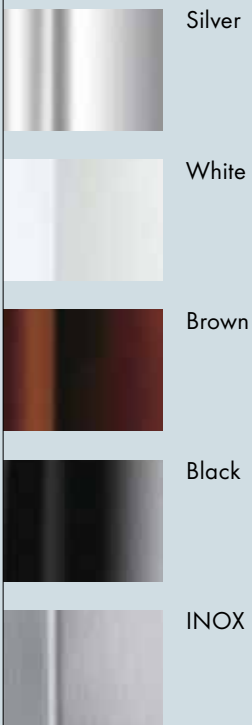


TITAN handle range.

Our TITAN handles re-assures in terms of safety. Windows can be locked effectively with Secustik, push-to-open or lockable push cylinder handles. Thanks to the optional TBT handles, windows also cannot be opened from the inside by unauthorised persons. This qualifies our handle range in particular for use in domestic, nursery and school environments.

The combination of the TITAN handle in conjunction with the LM routed-in drive gear also has a lot to offer fabricators. A completely innovative process enables punchable profile machining also on Euro groove systems. Thanks to its extremely compact design, the drive-gear is ideal for use on very slim profiles and demonstrates with its intelligent functions for ease of operation and security.

Handle colours



TITAN GLOBE



TITAN Si-line



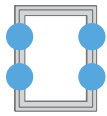
Lever-operated espagnolettes and shootbolts.



The universal solution for profile systems with the most diverse profiled faceplates: Single and double grooves; 10 or 14 mm.

- Lock technology: manually via shootbolts or a centrally located lever-operated espagnolette
- Lever-operated espagnolette: for 10 or 14 mm faceplate versions
- Shootbolt: coupleable and applicable up to 3000 Pa
- Cast shootbolts (for 14mm faceplate profiles) or stainless-steel (for 10mm faceplate profiles)
- Efficient and economically installation due to clampable components

Burglary resistance.



BRG2 ('WK2') level with only four additional locking pieces made of special brass – and all this for almost all window sizes.

- Solutions for BRG1 ('WK1') right up to BRG3 ('WK3') in accordance with EN 1627-1630
- Only four locking points for BRG2 ('WK2')
- Special brass hardware components

Energy saving stay.



Ventilation as required and depending on outdoor temperatures: reduce energy costs with the energy saving stay's winter night-vent.

- Tilt opening in the winter ventilation mode minimum 35mm, and the usual approx. 170mm in the summer ventilation mode
- Reduction of outside noise pollution, thermal heat loss and energy costs
- Neutralisation (change-over to summer ventilation) by hand without the use of any tools
- Integrated anti-slam device in the tilt-mode for draught protection
- Easy to retrofit

Special shapes:

Special shape, special advantages: non-standard window shapes give both the interior and exterior style an individual touch. However it is not always the aesthetics alone that can transform. The design can also go hand in hand with completely rational aspects; the best example of this is our hardware for barrier-free thresholds.

Arched and pitched windows.



The LM RB/SF Tilt & Turn hardware: a tailor-made solution for one and two-sash elements.

- Installation advantages for the manufacturer, more secure ease of operation for the end-users
- For one and two-sash elements with a load bearing capacity of up to 80kg sash weight
- Integrated anti-slam device in the tilt-mode
- Variable adjustment options on the stay for ideal sash positioning
- PVC bushes in the corner-bracket sash-hinges minimise wear and tear



Barrier-free solution.



Fewer obstacles without horizontal frame components: the perfect hardware for barrier-free thresholds.

- Integrate efficiency and timesaving in production: clampable components and no additional profile machining required
- Perfectly tailored to conform with the DIN 18025 barrier-free thresholds; without the use of horizontal frame components
- Suitable for use on Tilt & Turn, Tilt before Turn and Turn-Only windows
- For one and two-sash elements

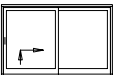
PORTAL LM product presentation.

Large sliding elements provide architects with more design freedom and customers with regards to furnishing their homes. They bring more light into rooms and provide a larger view from the inside. The overall aesthetic impression is airy and light, despite the fact that the sliding elements have a considerable weight. In order to ensure that the impression of visual lightness is not impaired by heavy

operability, we have developed the particularly smooth-running PORTAL hardware with which one can easily open and close glazed areas with up to 400kg weight. Either by hand or at the push of a button. Due to the fact that even our engineers cannot defy the force of gravity, numerous innovations were necessary to achieve the PORTAL product range goal; move heavy elements easily.

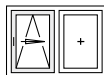
HS PORTAL LM

- For sash weights up to 400kg
- Bogies fixed during installation
- Safe, smooth-running operation
- Handle-controlled night ventilation as standard
- Up to 3300mm sash height and 3335mm sash width



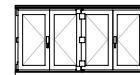
PSK PORTAL^{PLUS} LM

- No special profile sections required
- High level of stability on sash weights up to 160 kg
- Compact stay component
- Installation jigs for efficient installation of the ready-to-fit components
- Only 29mm roller track height

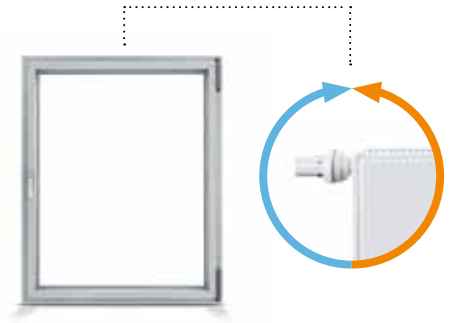


FS PORTAL^{PLUS} LM

- Top or bottom running with the same profile set
- Robust roller track with a favourable threshold height
- Smooth-running operation
- More efficient installation by means of few ready-to-fit components
- Maximum opening width



A systematic product range.



MHS400

As far as reliability and user safety are concerned, the motorised Lift & Slide system MHS400 – the only one of its kind available for windows with two moveable sashes – sets new standards. It even controls large elements weighing up to 400 kg. Another innovative solution providing you with new ways of attracting customers.

AEROCONTROL

The window opening and locking monitoring system can be combined with the LM hardware system. The opening status of all windows is available via the monitoring unit at all times. The AEROCONTROL system can also be connected up to radiators' thermostatic valves and extractor fans.



KfV, the youngest member of the SIEGENIA-AUBI Group and specialises in security solutions, with a product range of high-quality door hardware and intelligent locking systems.

KfV multi point locking systems

To provide the maximum protection in door locking use our robust round steel bolts and tapered swivel hooks providing you with the highest security. We can also recommend the tried and tested modular system offering a diversity of variation to provide the solution required. KfV locks are available for all profiles, single or double-leaf doors, key or lever handle operated.

KfV Mortise Locks

We offer single or double turn mortise locks with varying deadbolt projection (15, 20 and 25 mm), various backsets and face plate versions. As you can see, not only can you rely on the excellent workmanship and outstanding finish of our locks in accordance with DIN but also place your confidence in our great range of products.



SIEGENIA-AUBI KG
Hardware and ventilation technology
Industriestraße 1-3
D-57234 Wilnsdorf
GERMANY

Phone: +49 271 3931-0
Fax: +49 271 3931-333
post@siegenia-aubi.com
www.siegenia-aubi.com



SIEGENIA-AUBI world-wide:

Austria Phone: +43 6225 8301
Benelux Phone: +32 9281 1312
China Phone: +86 10 8739 89-51/-52/-53
France Phone: +33 38961 8131
Germany Phone: +49 271 3931-0
Great Britain Phone: +44 2476 622000
Hungary Phone: +36 76 500810

Italy Phone: +39 02 935 3601
Kazakhstan Phone: +7 7272 2914033
Poland Phone: +48 7744 77700
Russia Phone: +7 495 7211762
South Korea Phone: +82 31 7985590
Switzerland Phone: +41 333 4610-10
Turkey Phone: +90 272 2234862
Ukraine Phone: +38 044 4637979

Please contact your approved supplier or recognized distributor: