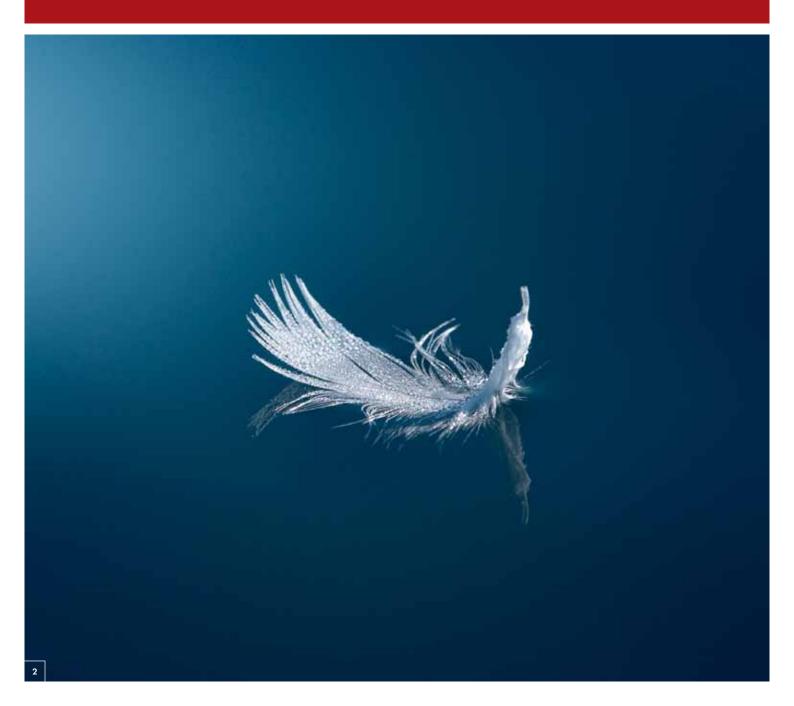


The PORTAL hardware product range: because the easiest way to move heavy sliding elements is with intelligent solutions.



Heavy can really be this light.



How to set a trend in motion.

The trend towards large glazed areas is the trend in modern architecture. They provide more freedom, convenience and light in living spaces, but also add more weight — weight that needs to be moved.

To prevent optical lightness from being accompanied by difficult handling, SIEGENIA-AUBI developed extremely smooth operating fittings, making it a breeze to open and close heavy sliding elements that can weigh up to 400 kg. Due to the fact that not even our engineers can defy the laws of gravity, numerous innovations were necessary to reach the goal for our PORTAL product range — heavy made light.

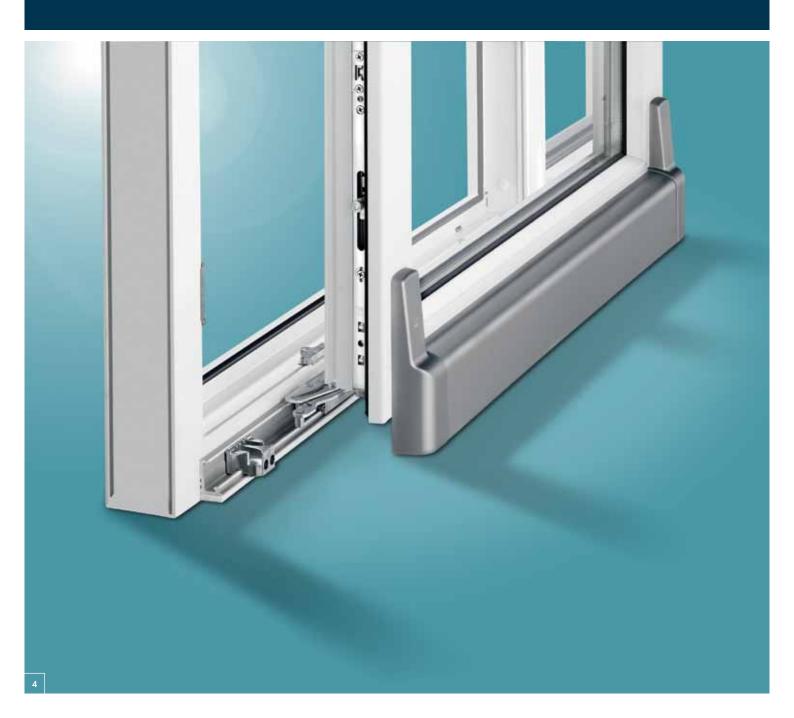
To consolidate our rank as the industry's innovation leader, we invest disproportionately high in research and development of intelligent and market-driven solutions. These solutions are tested in extensive test procedures for both their suitability and reliability in daily use. In doing so, our quality standards extend far beyond the legally required guidelines.

Our PORTAL product range depicted on the following pages is the result of our consistent innovation and quality policy.



CONSISTENTLY TURNING VISIONS INTO
REALITY: THROUGH AN ACTIVE AND PROCESSORIENTED CORPORATE CULTURE, COSMOPOLITANISM AND CUSTOMER ORIENTATION. THEY
SUCCESSFULLY UNITE WITH HIGH QUALITY
STANDARDS AND EXCEPTIONAL INNOVATIVE
STRENGTH.

From PSK to PSK^{PLUS}: More comfort, variety and security.



PSK^{PLUS}. Parallel Tilt & Slide hardware.

Architects want more variety and freedom in design. Building owners on the other hand want more light and convenience. You have the solution for both: Parallel Tilt & Slide elements with the PSKPLUS hardware from SIEGENIA-AUBI. The PLUS stands for a whole range of improvements, which further enhances the well-proven PSK range already on the market.

Comfort Plus.

The new comfort mushroom cam consolidates enormous advantages for you and your customers in a tiny space. It enables easy and absolutely precise installation due to the stepless height adjustment feature, compensates clearance tolerances automatically and in doing so, reduces the need for retro adjusting considerably, both in production and on site. The locking cam can also adjust automatically to changing weather conditions, for example through temperature fluctuations. This guarantees an optimally adjusted durable locking system at all times and avoids costly and time-consuming adjustment work.

Variety Plus.

Just grasping the handle will be enough to convince you of the quality of the PSK^{PLUS} range. Quality derived from the ideal combination of aesthetics, ergonomics, functionality and materials.

Security Plus.

Even the basic PSK^{PLUS} hardware version is equipped for security and protection against burglars: The mushroom locking cams in all four corners prevent jemmying the window. By using additional mushroom locking cams and special tempered steel strikers, the security standards can be variably upgraded.

Logistics Plus.

Furthermore, the new generation of PSK products provides logistics advantages and as a result savings potential. There is one standardised profile set for all of the PSK product ranges shown on the next page.

Also, the 35 mm required space for the running rail saves you having to use extra wide profiles and your customers will benefit from a lower step.

>

THE HANDLE DESIGN AND THE COLOUR-MATCHED COVERS PROVIDE YOU WITH DIVERSE WINDOW DESIGN POSSIBILITIES. THESE ARE AVAILABLE IN WHITE, BROWN, SILVER, LIGHT TITANIUM-MATT, MEDIUM BRONZE, MATT GOLD AND F9 (ANODISED TITANIUM).





The power of choice.

Large parallel Tilt & Slide elements provide light, air and a great deal of freedom of movement.

However making "heavy" not only "light" but also easy to operate requires high performance and reliable components.

Regardless of whether for small sashes or large, heavy sliding elements, whether for timber, PVC or aluminium: SIEGENIA-AUBI can provide you with the right solution for any application range from our large range of hardware, meeting all requirements on safety, ease of operation, fabrication efficiency as well as design.



PSK 100^{PLUS}.

PSK 130^{PLUS}.

PSK 160^{PLUS}.

Reliable and

straightforward.

Specially designed for small and medium sized timber or PVC sashes up to 160 kg; these three PSK product ranges demonstrate reliability by means of fully developed technology. A simple 90° handleturn brings the sash into the tilt position; yet another turn enables the sash to be slid sideways with ease.

- The operating sequence can be freely selected using standard Tilt & Turn hardware from the TITAN product range without any special components
- Efficient adjustability due to self-locking bogie height-adjustment
- Basic security is provided by mushroom locking cams on all corner drives, starting with the standard version. Possible upgrade to higher security levels such as WK2
- A frame to sash clearance up to 125 mm allows the hardware to be used even for doors with thicker thermally enhanced profiles
- Versatile design options due to the extensive range of handles and covers, available in white, brown, silver, light titaniummatt, medium bronze, matt gold and F9 (anodised titanium)
- PSK 160^{PLUS} is the only hardware in its category with a highly corrosion-resistant surface available in stainless-steel finish

PSK 200-Z^{PLUS}. Turning heavyweights into lightweights.

Specially optimised for large, heavy timber or PVC sliding elements up to 200 kg, the PSK 200-Z^{PLUS}. The comfortable stay control via the handle enables single-handed tilting and sliding of even the largest of sashes

- Reduced stock holding as gearboxes are screw fixed to drive gears with backsets 30, 40, 45 and 50 mm
- The largest frame to sash clearance on the market of 125 mm for 200 kg load bearing capacity allows the hardware to be used on windows with large profile depths, such as thicker thermally enhanced profiles.
- Efficient adjustability due to self-locking bogie height-adjustment
- No down time for tool changes as handle and wheel preparation uses same drilling diameter cutters
- Basic security is provided by mushroom locking cams on all corner drives, starting with the standard version
- Versatile design options due to the extensive range of handles and hardware covers available in white, brown, silver, light titanium-matt, medium bronze, matt gold and F9 (anodised titanium)

PSK PORTAL 160^{PLUS} LM. Helping aluminium preserve its lightness.

Specially designed for aluminium PSK elements with sash weights of up to 160 kg, the PSK PORTAL 160^{PLUS} LM provides multiple benefits.

- Suitable for aluminium windows and doors with 21 mm cavity
- The compact, preassembled tilt stay allows the sash to be guided precisely and smoothly into the parallel sliding or tilt position
- A spring-loaded rubber stop limits the opening of the sliding sash
- The PSK PORTAL 160^{PLUS} LM is equipped with a mishandling device, an adjustable anti-slam device and adjustable stay lead-in device
- Suitable for narrow sash profiles due to its small dimensions
- The frame to sash clearance up to 118 mm allows the hardware to be used on windows with large profile depths, such as thicker thermally enhanced profiles.
- Available in white, brown and silver

The magic spell is no longer "open sesame", from now on it's "positive dual stay control".



PS PORTAL^{PLUS}. Parallel Slide hardware.

Easy operation of heavy windows.

Just a simple 90° handle turn, and even large, heavyweight sliding elements can be opened with hardly any effort. There is no magic in here, just applied physics and material science. A key technical hardware detail is the positive dual stay control. The previously complex opening process which involved the manual effort of bringing the sash into the tilt and slide position has been simplified considerably. The solution: the bogies and dual stays move the sash out of the frame simultaneously. This is unique in the market.

In addition, the hardware is equipped with the same advantages as the well-proven PSK 200-Z^{PLUS}. This includes mushroom locking cams on all corner drives, the option to combine those with security strikers, as well as the option of upgrading to higher security levels such as WK2.

Less components – straightforward assembly.

The reduction of the quantity of new components to a minimum leads to a perceptible decrease in storage costs and initial training times. All PSK 200-Z PLUS jigs can be used for the Parallel Slide hardware. This hardware is applicable to the well-proven standard timber, PVC or aluminium Tilt & Turn profiles.

A SIMPLE 90° HANDLE MOVES THE

SASH OUT OF THE FRAME ON TOP AND

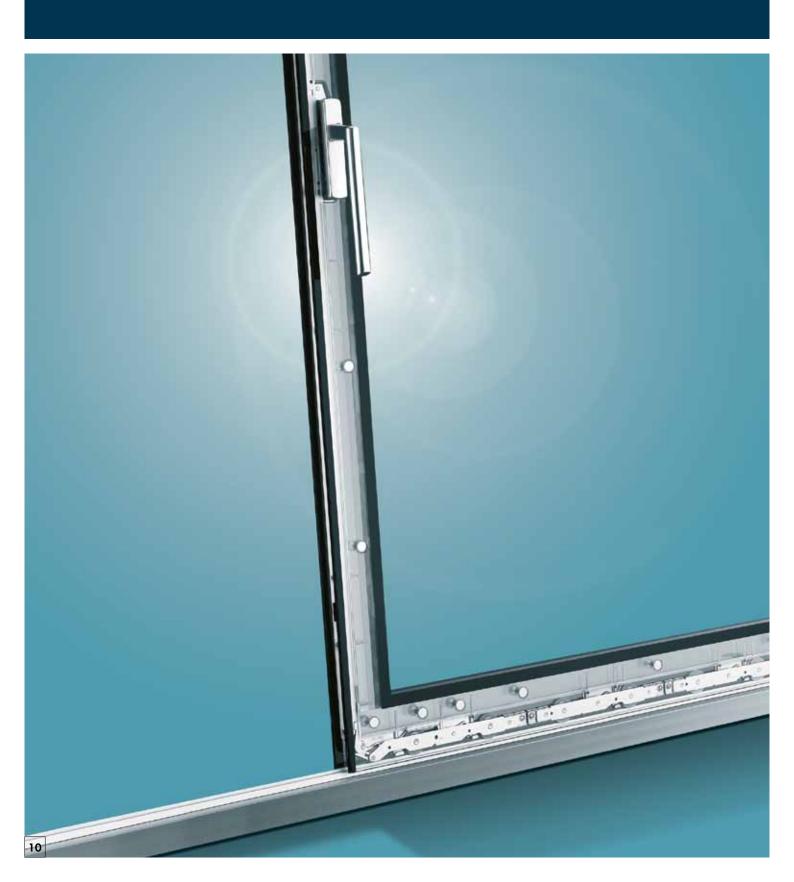
BOTTOM. FOR THE FIRST TIME, A SOLU
TION FOR BUILDINGS WITH FREQUENTLY

CHANGING USER GROUPS IS NOW

AVAILABLE TO THE WINDOW INDUSTRY.



It's not that easy to move 400 kilograms aside. Or is it?



HS PORTAL. Lift & Slide hardware.



Motion in all weight categories.

Through decades of development, SIEGENIA-AUBI's Lift & Slide technology has become so advanced that even sashes weighing up to 400 kg can be operated safely, comfortably and smoothly. This is how the new HS PORTAL technology enables opening widths up to 12 metres at a total width of over 19 metres. Regardless of whether timber, PVC or aluminium is used.

- With a step of 19 mm, the new threshold allows for access for handicapped people in accordance with DIN 18025
- The new threshold is thermally broken to avoid cold bridging and exceeds by far the requirements of the German energy saving regulation
- To be used on profile thicknesses up to 92 mm
- Equipped with night ventilation device as standard
- Basic security integrated already in the standard hardware. Possible upgrade to higher security levels such as WK2 in accordance with DIN V ENV 1627-1630
- Simple frame connections provide highly stable corners for timber windows which are nicely finished with end caps
- A wide range of handle and cover colours are available: white, brown, silver, nickel silver, light matt titanium and medium bronze
- Any other colours are possible with retropaintable handles



MOVING 400 KILOGRAMS CAN BE EASY AND LOOK GOOD AT THE SAME TIME.

CHOOSE FROM A WIDE RANGE OF COLOURS OR THE UNIQUE POSSIBILITY OF RETRO-PAINTING THE HANDLES IN ANY COLOUR YOU DESIRE.

A Wide open Space.



























FS PORTAL^{PLUS}. Fold & Slide hardware.



Large openings give you spaciousness and openness, but they also give many window fabricators something to worry about. Forget about these worries with FS PORTALPIUS hardware for timber, PVC or aluminium Fold & Slide doors. Up to seven elements, each with a sash weighing up to 80 kg, can be effortlessly folded together, creating opening widths of up to 6.3 metres.

How living comfort unfolds.

With the new threshold, Fold & Slide elements can be manufactured almost no step at all. The thermally broken threshold prevents condensation forming and facilitates a low threshold design in accordance with DIN 18025. Large ball bearing raced rollers together with folding hinges with special friction bearings guarantee light, quiet and durable operation. Brush strips keep the running rail free of dust and dirt.

The more variety the better.

FS PORTAL PLUS is well built with its efficient installation technology and great flexibility and is highly cost effective. Whether top or bottom running, opening in or out: the design possibilities are practically limitless. And due to the fact that the hardware covers are paintable, the range of colours to choose from is equally limitless. As the only hardware of its kind, FS PORTAL PLUS is also available in a highly corrosion-resistant stainless steel surface finish.

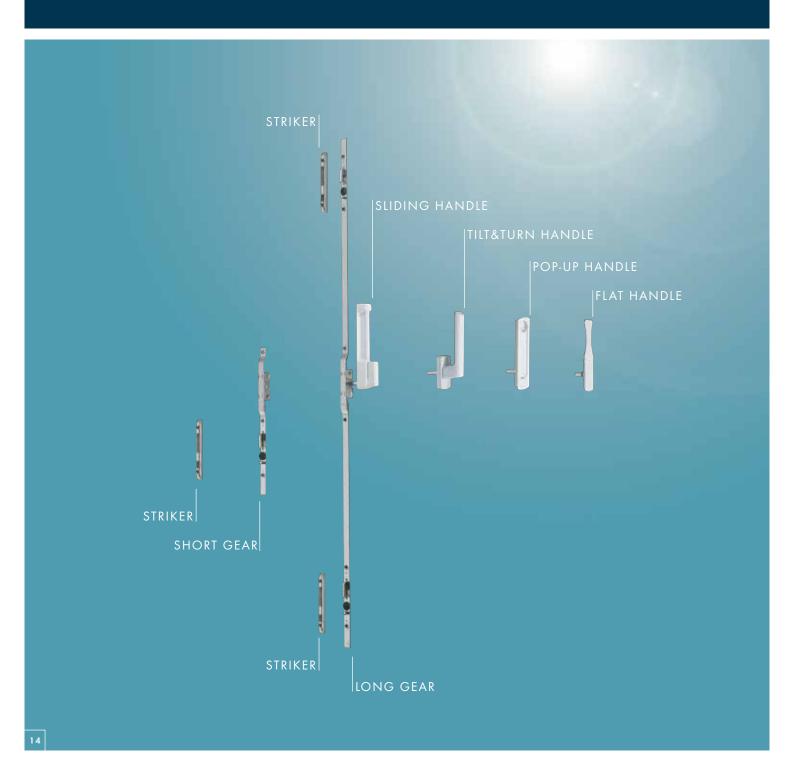
Create new business.

New business opportunities unfold with outward opening Fold & Slide elements. The use of new materials and coating technologies even makes the new hardware perfectly suitable for permanent use outdoors.

THE IDEAL CLEANING SOLUTION: THE
FS-RS SASH HINGE ENABLES CLEANING
THE OUTSIDE OF THE FOLDING SASH
COMFORTABLY FROM THE INSIDE. THE
SASHES ALWAYS REMAIN IN THEIR SAFEGUARDED POSITION.



Because simple is simply good.



CS PORTAL.

Simply upgrade.

Even simple sliding doors and sliding windows can be transformed into high-quality sliding elements with the CS PORTAL hardware system from SIEGENIA-AUBI. The handles, in their various designs and colours, meet all requirements. In the CS 150 version, as much as 150 kilograms can be moved effortlessly using height adjustable bogies. The bogie in the CS 80 version for smaller elements is made of stainless steel. Locking hooks made of special steel, up to four locking points on the locking side and integrated anti-lift device provide increased security.

Integrated lock indicator.

With its new locking sides, the CS PORTAL LM range has been specially developed for aluminium sliding elements. The routed-in and clampable recessed handle is equipped with a lock indicator that allows you to see from the outside whether the element is locked.



		PSK PORTAL 100 ^{PLUS} PSK PORTAL 130 ^{PLUS}	PSK PORTAL 160 ^{plus}	PSK PORTAL 200-Z ^{PLUS}
>	Sash rebate width	640 mm - 1200 mm	670 mm - 1600 mm	770 mm - 2000 mm
>	Sash rebate height	840 mm - 2360 mm	840 mm - 2360 mm	1000 mm - 2360 mm
>	Sash width	-	-	-
>	Sash height	-	-	-
>	Sash weight	max. 100/130 kg	max. 160 kg	max. 200 kg
>	Handle height	-	-	-
>	Schemes	A, C, G, K	A, C, G, K	A, C, G, K
>	Frame to sash clearance	125 mm	125 mm	125 mm
		 Requires only 35 mm for track Self-cleaning rollers For Tilt & Turn profiles with 16 mm hardware groove in all frame materials 	 Requires only 35 mm for track Self-cleaning rollers For Tilt & Turn profiles with 16 mm hardware groove in all frame materials 	 Comfortable stay control Requires only 35 mm for track Self-cleaning rollers For Tilt & Turn profiles with 16 mm hardware groove in all frame materials

	I		
	HS PORTAL 150	HS PORTAL 200	HS PORTAL 300
> Sash rebate width	-	-	-
> Sash rebate height	-	-	-
> Sash width	650 mm - 2485 mm	590 mm - 2485 mm	720 mm - 3335 mm
> Sash height	1175 mm - 2690 mm	1175 mm - 2690 mm	1175 mm - 3325 mm
> Sash weight	max. 150 kg	max. 200 kg	max. 300 kg
> Handle height	Variable (510 , 810, 910, 1010, 1110 mm)	410 mm for size 170 1010 mm for sizes 220, 260	410 mm for size 170 1010 mm for size 220, 260
> Schemes	A, C, D, G, G2, G3, H, K, F, E, L	A, C, D, G, G2, G3, H, K, F, E, L	A, C, D, G, G2, G3, H, K, F, E, L
	 Thermally broken aluminium threshold n Self-cleaning rollers n Self-cleaning rollers (barrier-free version optional) For timber, aluminium, and PVC profiles 	 Self-cleaning rollers Thermally broken aluminium threshold (barrier-free version optional) For timber, aluminium, and PVC profiles 	 Self-cleaning rollers Thermally broken aluminium threshold (barrier-free version optional) For timber, aluminium, and PVC profiles

PS PORTAL ^{PIUS}	PSK PORTAL 160 ^{PLUS} LM	FS PORTAL ^{PIUS}	FS PORTAL ^{PLUS} LM
770 mm - 1600 mm	-	-	-
1000 mm - 2360 mm	-	840 mm - 2360 mm	-
-	700 mm - 1650 mm	up to 900 mm	up to 900 mm
-	850 mm - 2400 mm	-	850 mm - 2400 mm
max. 160 kg	max. 160 kg	max. 80 kg per sash	max. 80 kg per sash
-	-	-	-
A, C, G, K	A, C, G, K	220, 321, 330, 431, 440, 541, 550 532, 651, 660, 633, 761, 770, 743	321, 330, 431, 541, 550, 532, 651, 633, 761, 770, 743
122 mm	118 mm	-	-
 With positive dual stay and bogies control For Tilt & Turn profiles with 16 mm hardware groove in all frame materials 	■ For aluminium Tilt & Turn profiles with LM euro-groove	 Top or bottom running Inward or outward opening Low threshold For Tilt & Turn profiles with 16 mm hardware groove in all frame materials 	■ Top and bottom running ■ For aluminium Tilt & Turn profiles with LM euro-groove

HS PORTAL 400	CS PORTAL	CS PORTAL LM
-	-	-
-	-	-
1370 mm - 3335 mm	-	-
1175 mm - 3325 mm	-	-
max. 400 kg	CS80 = 80 kg CS150 = 150 kg	100 kg
410 mm for size 170 1010 mm for size 220, 260	variable	variable
A, C, D, G, G2, G3, H, K, F, E, L	A, C, D, K	A, C, D, K
 Self-cleaning rollers Thermally broken aluminium threshold (barrier-free version optional) For timber, aluminium, and PVC profiles 	■ Gear with hooks or mushroom cams ■ CS80 height-adjustable stainless-stee bogie with ball bearing mounted rollers ■ CS150 height-adjustable bogie with ball bearing mounted rollers ■ For profiles with 16 mm hardware groove in all frame materials	 Routed-in and clampable recessed handle CS LM height-adjustable bogie with ball bearing mounted rollers For aluminium profileseuronut with LM euro-groove

With us, security and comfort are the order of the day.

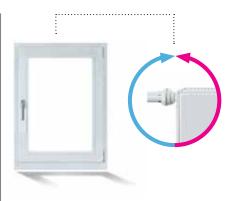


Comfort mushroom cam.

The innovative locking system that already proves its ability to perform day in, day out in our TITAN window hardware series is now also being used in the PORTAL range for multi point lockings and our KFV door hardware series. This combines all fabricator and end-user benefits already familiar from the Tilt & Turn range: smooth operation, automatic alignment, low wear and tear and a high level of security. Equipped with stepless height adjustment, the comfort mushroom cams ensure straightforward and precise installation. These automatically compensate for clearance tolerances and in doing so, reduces the need for retro adjusting considerably; both in production and on site.

With the comfort mushroom cam, our design technicians demonstrate that huge technical advances can be made in small components.





AEROCONTROL.

AEROCONTROL is the window opening and locking monitoring system for timber, PVC and aluminium doors and patio doors. The monitoring device makes it possible to call up the window's status at any time.

Furthermore, AEROCONTROL can be connected to radiators' thermostatic valves and to extractor units.



MHS400.

As far as reliability and user safety are concerned, the motorised Lift & Slide system MHS400 — the only one of its kind available for two-sashed window shop fronts - sets new standards. It even controls large elements weighing up to 400 kg and does without using crush guard devices, such as switching strips, light barriers or infrared motion detectors. Instead, the control system measures forces dynamically. Another innovative solution providing you with new ways of attracting customers.



Fingerprint.

Now easy has just become as easy as lifting a finger: In combination with the MHS400, large Lift & Slide elements weighing up to 400 kg can be easily controlled with the Fingerprint system. With its sophisticated functionality, our finger print recognition system is beyond comparison in the industry. The system can be programmed to open the door with a thumbprint and to lock the door with an index finger print. The principle of biometric recognition is an equally safe and convenient alternative to keys, number codes and cards.



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