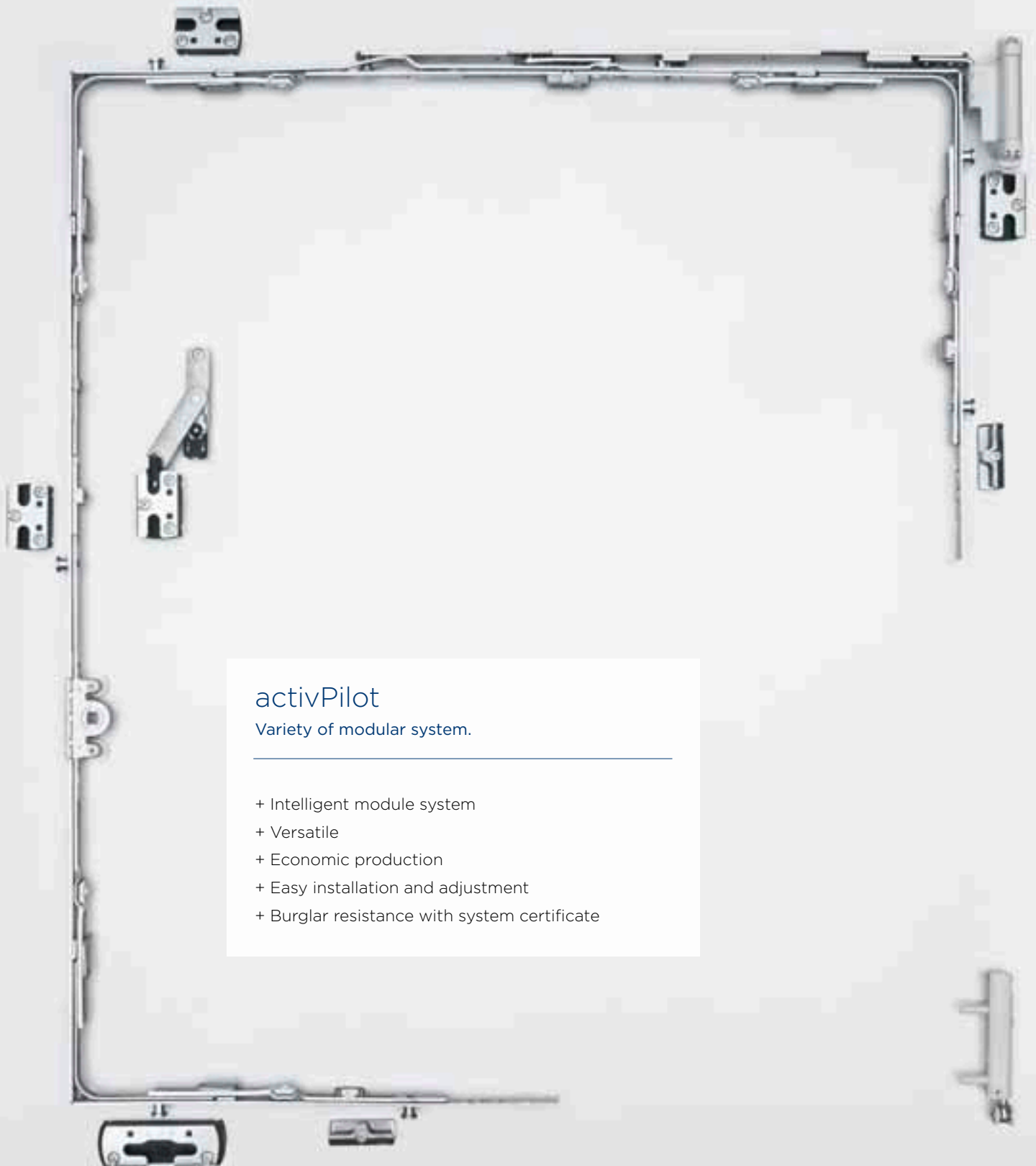


Winkhaus activPilot

The modular fitting system for PVC-U windows.





activPilot

Variety of modular system.

- + Intelligent module system
- + Versatile
- + Economic production
- + Easy installation and adjustment
- + Burglar resistance with system certificate

Many windows, many formats, one single fitting system.

The innovative Winkhaus systems for windows are intelligent, sophisticated and particularly efficient. On an international basis window manufacturers, dealers, architects, builders and users primarily appreciate the high material and manufacturing quality of the durable Winkhaus technology. Thanks to resistant surfaces, aesthetics and functionality are permanently maintained.

A system for all situations – activPilot

The unique activPilot fitting system from Winkhaus helps you to satisfy all requests individually and economically at the same time. Its major benefit: the intelligent modular system. It enables window producers to meet all requirements placed on modern windows. activPilot allows windows to be manufactured flexibly and economically living up to the highest standards in terms of function, design and security.

Based on the activPilot modular system it is possible to achieve rational and individual solutions by exchanging single fitting components. By replacing the hinge side you can install concealed hinges of the activPilot Select range. What is more, the convenient “opelose” ventilation variant is enabled by replacing just some individual parts. In case you wish to use a locking and / or opening surveillance system, only some additional components are needed.

Survey on special window types to design from Winkhaus activPilot fitting systems.



activPilot

Intelligent module system – individual and quick in assembly.

The unique modular Winkhaus system offers dual benefit: It makes production easier and quicker due to less components that need to be assembled. Furthermore, activPilot hardware modules can be retrofitted after installation for added functions.



Individual protection

The modular activPilot fitting system can be adapted to meet individual security requirements up to resistance class RC3.



Certified quality

Winkhaus activPilot fittings are certified in accordance with QM 328. The turn-only and turn-tilt fittings undergo a large number of tests in the stringent certification programme, which verifies aspects such as durability and quality control mechanisms.



Flexible retrofitting

activPilot fittings form an innovative modular system that can readily be enhanced with additional functions – even later on. This always allows the activPilot fitting system to be easily adapted to changing user requirements.



Easy adjustment

The activPilot fitting system offers manifold options for easy adjustment. For example as an added feature besides the height and side adjustment, the octagonal locking bolts with mushroom head design can be easily adjusted – for an optimally tight seal in seconds.

Scene of the crime: the window

Approved Winkhaus security.

Police statistics reveal it: Burglars do not only go to work when it's dark, but just as frequently in broad daylight when people are absent. All the more important to protect oneself at any time, 365 days a year!

Certified burglar resistance for effective protection!

Windows and patio doors are the Achilles heel of a house. They are the target in 80 % of all burglary attempts. However, concerted burglary-resistant action provides an efficient way to stop burglars. Benefit from the activPilot system testing for your production of burglary-resistant windows.

Individual burglar resistance

Octagonal locking bolts coupled with sturdy keeps allow the burglary-resistant features to be extended in modules and to be individually adjusted. Lockable window handles, drilling protection and security glass are available for the activPilot system to enable burglary-resistant solutions up to resistance class RC3.



The house's weak points

- 01. Basic security**
for dormer and gable windows
- 02. Burglar resistance to RC1 N**
for windows and patio doors in the upper floor that are hard to access and visible from the outside
- 03. Burglary resistance according to RC2, on request also RC3**
for ground floor windows and basement and souterrain windows as well as patio doors

activPilot Concept

The modular basis of the activPilot fitting system.



Value-added accents and precision technology guarantee an attractive window design.



* In case of PVC-U windows it is important to observe the weight transfer and processing instructions given by the system suppliers.

Product features

- + Modular turn-tilt fitting system with visible hinge side
- + Simple and intuitive operation
- + Versatile and simple adjustment
- + Individual design matching due to powder-coated hinge parts or caps in different colours
- + Economic and logistic advantages thanks to reduced number of components per window

Application area

- + Suitable for windows sashes up to 130 kg*
- + Surface-mounted hinges from the activPilot Giant range also suitable for PVC-U window sashes up to 180 kg*
- + For security requirements up to resistance class RC3
- + As an option: Topcoat surface finish for windows exposed to extreme environmental effects (salty air, humid climate, chemical compounds)
- + Suitable for round-arch and sloping windows



Appealing design and flexible retrofit options

- Security keeps with steel web and profile-related base unit enable easy upgrading of the fitting system to higher resistance classes
- Rounded corner and shear hinges easy to clean and flush with the window sash



Additional functions and fitting variants

- Double-sash drive with a noticeable unlocking button for great operating convenience
- Using components from the activPilot Ergo range, windows that are difficult to access can be conveniently opened and closed by means of the handle positioned horizontally at the bottom.

Advantages of the fitting system

- + Simple height and side adjustment
- + Simple installation thanks to pre-assembled units
- + Smooth entering of the octagonal locking bolt into the frame part
- + The modular frame part concept enables an individual level of security
- + Increased functional security for activPilot Concept due to progressive shear retraction of 18 to 25 mm
- + Convenient optional functions: e. g. fail safe device, support keep, balcony door catch, variable tilt device or locking surveillance

activPilot Select

The fully concealed turn-tilt fitting system.



High performance of
mechanical details.
Up to 100 kg sash weight
without additional components.



* In case of PVC-U windows it is important to observe the weight transfer and processing instructions given by the system suppliers!

Product features

- + Fully-concealed turn-tilt fitting system
- + No visible hinge parts
- + Free choice of colour for window sashes and frames
- + Certified according to QM 328
- + Additional functions can be retrofitted at any time

Application area

- + Meets the demanding aesthetic requirements of modern architecture
- + Suitable for door and window sashes up to 3 m² and 150 kg*
- + For burglar-resistant windows according to DIN EN 1627-1630
- + 3-sash windows can be implemented without central post



**Innovative technology
adding hidden strength**

- Aesthetic window design without visible fitting parts – even for large and heavy window sashes
- Patented technology
- Stability and high durability demonstrated in test series and in practice

**Elegant strength - up to 150 kg
sash weight**

- With just two add-on components, a sash hinge rail and adapter plate, you can increase the load bearing capacity from 100 kg to up to 150 kg*

Advantages of the fitting system

- + Efficient production without the need for special drilling action, time-consuming routings or special tools
- + Quick installation due to fewer components
- + Simple height and side adjustment
- + Retrofit possible from 100 kg to 150 kg* without additional treatment of the sash and the frame
- + Quick and easy installation of the sash
- + Opening angle > 95° (without turn limiter)
- + Increased weather tightness of windows due to continuous overlap seal

activPilot Comfort

“Opelose” : a new ventilation dimension.



6 mm ventilation gap all around the sash

With the new and innovative opelose function Winkhaus revolutionises ventilation. Using activPilot Comfort fittings a circumferential, almost invisible ventilation gap of approx. 6 mm between the sash and the frame is created.



Product features

- + The convenient solution for a healthy living ambience
- + No drafts and no windows slamming shut
- + Ventilation possible in all weathers
- + Effective exchange of air – and still the largest part of thermal energy remains in the room
- + Parallel opening of the window is hardly visible from the outside
- + Simple and secure usage

Application area

- + activPilot Comfort PADK
 - Turn, tilt, and parallel opening
- + activPilot Comfort PADM
 - Motorised parallel opening with manual turning
- + activPilot Comfort PADS
 - Turn and parallel opening of special window types
- + activPilot Comfort PAD
 - Parallel action and turn functions
 - Handle can also be mounted at bottom horizontal position



The variable fitting system with parallel action

- activPilot Comfort PADK*
 - Also in parallel position increased burglary protection up to security level DIN EN 1627-1630 class RC2
- activPilot Comfort PADM*
 - A real alternative to ventilation systems
 - Remote control possible
 - User-independent ventilation (to DIN 1946-6) helps to avoid structural damage
- activPilot Comfort PADS
 - Visual appeal of a historical façade is not affected
 - For these types of windows the shear is always positioned vertically. Advantage for window manufacturers: low warehousing costs
- activPilot Comfort PAD*
 - Easy opening and closing thanks to intuitive operation
 - Window handles can also be reached from a seated position

	Tilted	Opelosed
Air exchange	✓	✓
Easy to use	✓	✓
Saves energy		✓
Burglary-resistant*		✓
Better noise suppression		✓
Better protection from rain		✓
Protection from insects		✓
Protection of pets		✓
Temperature loss**	2 °C/10 min.	0.5 °C/10 min.

*Up to RC2 possible.
 **Source: Study by the Technical University of Münster.



* Possible up to resistance class RC 2 to DIN EN 1627-1630

Advantages of the fitting system

- + activPilot Comfort PADK with Tilt First (tilt before turn) operating sequence provides additional security for end users
- + activPilot Comfort PADM enables automated and natural ventilation with increased burglary resistance
- + Ventilation functions such as pre-set ventilation intervals can be adjusted in the motor control of activPilot Comfort PADM. Fresh air is supplied to interiors with no action needed on the part of users.
- + The turn fitting system activPilot Comfort PADS allows for round-arch windows as well as studio and triangle windows to be produced with identical fitting parts for the hinge and bottom sides.

activPilot Control

Turn-tilt fittings with integrated window surveillance.



activPilot Control fittings
comply with protection
class B or C (RFID).

Product features

- + Fitting-integrated locking and opening surveillance
- + Can be integrated into Winkhaus activPilot fittings directly
- + Reliable signal transfer with airgaps of 10 to 15 mm
- + Suitable for controlling heating and alarm systems
- + RFID: transponder technology offers extended protection from manipulation in combination with burglar alarm systems

Application area

- + Magnetic contact as switch unit for climate control systems
- + To avoid loss of energy when the window is open while the heating is on
- + Magnetic contact for VdS class B burglar alarm systems
- + RFID transponder technology for burglar alarm systems up to VdS class C level

**Versatile.**

Signal contacts based on magnetic field technology are approved for VdS class B burglar alarm systems. At the same time they can be used as window contacts for controlling radiators, extractor hoods and any other kinds of switching and securing functions which depend on the opening / locking position of the window sash.

Unassailable.

The RFID transponder technology is a yardstick of locking and opening surveillance. The transponder is integrated into the window sash whereas the locking sensor is a frame component. When the window sash is locked, the transponder is identified by the locking sensor via a code and this identification is conveyed to an alarm system. In this way a very high level of protection from manipulation is achieved.

Advantages of the fitting system

- + Extended protection against manipulation
- + Certified to VdS class B or C (RFID)
- + Received the "GIT Security Award"
- + For rebate depths of 18 mm and more
- + Elegantly integrated into the frame

Innovative product extensions

Special demands? Winkhaus has got the solutions.

Product types and additions

The activPilot fitting system offers a large variety of individual solutions. Thanks to the fittings' modular system, additional functions can easily be integrated at any time.



Operating sequence tilt before turn

For use in kindergartens, schools, hospitals and nursing homes: fittings that first move the window into the tilt position (90° handle position). The modular system is easily retrofittable.



Low thresholds

No matter whether you use pushchairs, wheelchairs or serving trolleys: The activPilot portfolio offers the suitable frame parts for low-threshold living concepts.



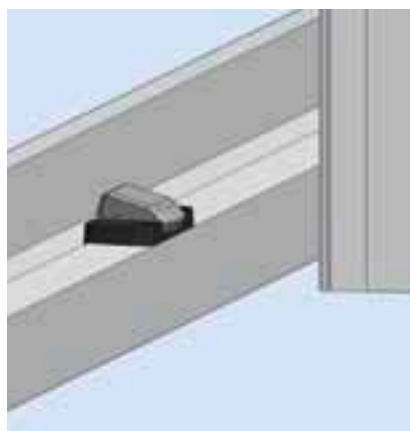
Dual function element

The fail safe device prevents improper use of the window. At the same time, the integrated support keep guarantees precise entry of the sash into the frame. It is optionally available as triple function element including an additional balcony door catch function.



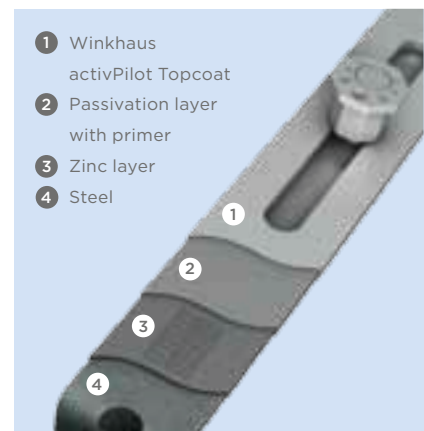
Window lock

The window lock prevents a turn-tilt window from being opened into the turn position.



Sash lifter

The patented Winkhaus sash lifter enables an easy closing of heavy windows. Sashes are lifted up to 6 mm when they run up onto the piece.



- 1 Winkhaus activPilot Topcoat
- 2 Passivation layer with primer
- 3 Zinc layer
- 4 Steel

activPilot Topcoat surface finishing

The premium Winkhaus surface finish provides the fittings with additional protection from extreme environmental effects. In coastal regions or areas exposed to increased corrosion we recommend you to use fittings with this surface finish.

Service and quality

Winkhaus warranty and certification.

By using activPilot fittings you and your customers can benefit from innovative and durable product quality “Engineered in Germany”. Our products are all controlled very thoroughly – from the core functions to the surface. The demanding requirements of the DIN EN ISO 9001 standard determine the optimum distribution of all tasks and responsibilities with the aim to guarantee maximum benefits for our customers. Internal and external controllers permanently make sure that the quality standards are adhered to.

Winkhaus warranty

The Winkhaus seal of quality for the activPilot fitting system ensures that no security-relevant parts and the components linked to them will break. In a warranty case free replacement of the defective parts is provided by Winkhaus. You can gather the detailed warranty terms from our warranty certificate.



Winkhaus certification process

The QM 328 certification process places high demands on turn and turn-tilt fittings. Tests are carried out both to EN 13126-8 standards (endurance testing of turn and turn-tilt fittings) and EN 1191 standards (endurance testing of windows and doors). Winkhaus assures the high product quality by conducting continuous internal tests. Additionally we have products and processes controlled by independent test institutes on a regular basis. In the long term the high quality level of our products is ensured by our consistent quality management.

Winkhaus. Competence to produce the best solutions.

Winkhaus has committed itself to quality since 1854 – without compromise, but indeed with great success. We have constantly advanced quality standards for window fittings, security door locking systems and access control systems with numerous innovations. Winkhaus products mark the latest developments in state-of-the-art window technology engineered in Germany.

Aug. Winkhaus GmbH & Co. KG

August-Winkhaus-Straße 31

D-48291 Telgte

T +49 2504 921-0

F +49 2504 921-340

winkhaus.com

fenstertechnik@winkhaus.de