

# WHY USE ROOF WINDOW ACCESSORIES?





# PROTECTION AGAINST EXCESSIVE HEAT GAIN INSIDE

External accessories (awning blinds and roller shutters) are the best means of defense against bothersome heat as they effectively protect the room from overheating on hot summer days.



# INTERIOR DESIGN

Internal accessories can put the finishing touches on any loft conversion.

The wide range of types, styles and colours ensures complete harmony with your chosen décor and helps shape a room's character.



# **CONTROL OF LIGHT**

Accessories regulate the amount and intensity of light entering the room. At one extreme, you can have total darkness, even on a sunny day while at the other you can simply use a blind to prevent light reflection on computer and TV screens.



# PROTECTION AGAINST UV RADIATION

Accessories protect against UV rays penetration inside, preventing the room furnishings from fading or yellowing.



# PROTECTION OF PRIVACY

FAKRO roof window accessories protect your house interior against viewers and ensure a feeling of privacy.



# EASE OF INSTALLATION

All FAKRO accessories are designed for total ease of installation with our windows, something which is not always the case with blinds from some sources. Internal accessories come with a 2-year warranty and combine the highest standard of functionality and design.



#### EASE OF USE

Our internal and external accessories are characterized by their ease of use. The FAKRO range also includes electrically operated accessories which are equipped with a Z-Wave module for comfortable control via a remote or wall switch.

# PROTECTYOURSELF FROM HEAT GAIN...

# WHICH ACCESSORIES PROVIDE THE BEST PROTECTION FROM OVERHEATING?

DIN 5034-1 covers the required levels of natural light which should be provided to interiors. It says that rooms should be protected from overheating through the use of external accessories (awning or shutter blinds) as they provide better protection than internal blinds.

#### **HOW DOES IT LOOK IN PRACTICE?**

FAKRO continually analyses all accessories for their efficiency of protection against heat gain in order to improve their performance and enhance user comfort. We have built eight identical room environments to enable us to carry out tests in relation to solar and UV exposure and equipped them with the same roof windows and different accessories. Windows

have been closed during the research and the temperature was constantly measured one metre above the floor at different points and these test results are reflected in the graph below.







Solar radiation coefficient 'g' informs about the amount of solar energy reaching the glass which penetrates into the room. The higher value of 'g' coefficient, the room heats up

faster. The external awning blind offers up to 8 times more effective protection in comparison with internal blackout blinds.

# 8 times more effective

Documented research\* clearly shows that external accessories (awning blinds and roller shutters) protect against heat gain. Awning blinds provide the best means of protection as well as being the most cost-effective and practical. Internal blinds can also be used but are generally less effective, their main benefits being light reduction and internal decoration.

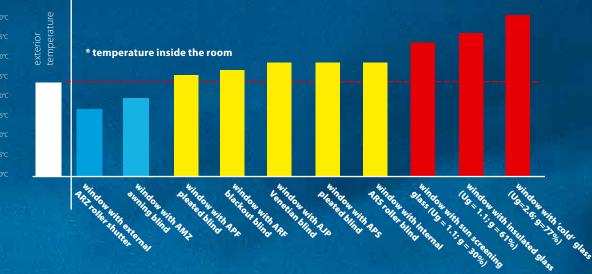
Solar energy transmittance:

Figure 1: Window without blinds g = 61% ( 0.61) as per EN 410 Figure 2: Window with internal blackout blind g = 37% (0.37) as per EN 13363-1

Figure 3: Window with awning blind (depending on the fabric used) g = 4-14% (0.04 - 0.14) as per EN 13363-1

#### **MAXIMUM TEMPERATURE**

in the attic space on a hot summer day, depending on the type of installed protection accessories.



- \* Presented results and diagram are for illustrative purposes only they relate to specific weather conditions during the test.



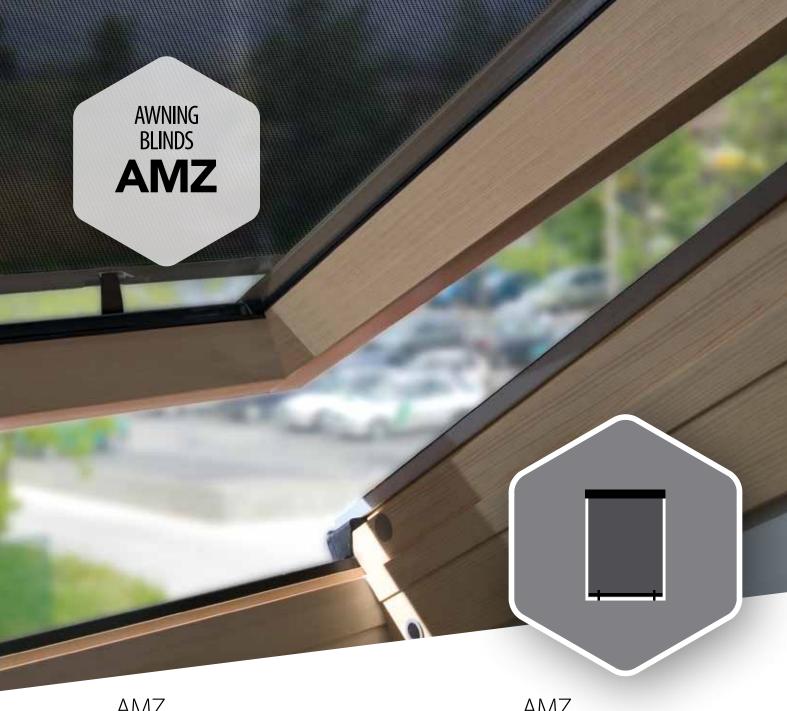
the heat radiates to the interior in the form of long wave infrared radiation which is not transmitted through the glass back to the

The blind acts as a radiator causing overheating, particularly on south-facing roofs.

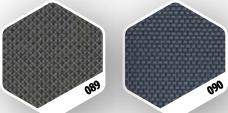


External accessories offer the best protection from high temperatures as they absorb solar radiation before it reaches the glazing as well as significantly reduce heat flow and keep warm outside.

excessive heating of the indoor air, especially during warm seasons, or the presence of glare [...]. Suitable movable systems include external Venetian blinds, shutters or awnings." - *DIN 5034-1* 







fabric with 10% relative open area

#### AMZ **II PRICE GROUP**



fabric with 1% relative open area

### TAKE A REST IN THE SHADE...

The awning blind offers the best means of protection against overheating while at the same time providing unrestricted views. It absorbs solar radiation before it reaches the glazing and reflects heat effectively, even on the sunniest days. It also provides relief for the eyes and protection from the harmful effects of intense, reflected light.



AMZ **Z-Wave**AMZ **WiFi**AMZ **Solar**AMZ **Electro**AMB



The AMZ awning blind is made of durable, weather-resistant mesh. It is rolled up on a spring-loaded shaft and inserted in an aluminium cassette mounted above the window. This design stands behind ease of operation and provides a wider fabric area to shade the interior more effectively.

#### **FEATURES:**

- Up to 8 times more effective protection against overheating compared to internal blinds
- Effective shading without restricting views to the outside.
- Ease of operation as the window can be covered for long periods without the need to roll the blind up.
- Protection against UV radiation.
- Reduced noise from rain and hail when rolled down.
- Optimum protection against heat gain.
- Ease of installation as the blind is mounted from the inside of the roof (by simply unscrewing four screws, fitting the blind and then reusing the same holes).

#### **CONTROL:**

● The AMZ blind is operated by hand or by using the control rod provided.



#### **AMZ**



AMZ NEW LINE



#### **AMZ Z-WAVE**



- Ease of operation by handheld remote or wall switch in wireless Z-Wave system.
- Powered by 15V DC mains supply.
- Fully compatible with other Z-Wave devices and appliances including the FTP-V Z-Wave roof window.

#### **AMZ WIFI**



- Easy operation via wBox app.
- Powered by 15V DC mains supply.
- Compatible with other devices operating in μWiFi technology.

#### **AMZ SOLAR**



- Comfortable and automatic operation of the blind (intelligent system controls the blind depending on the insolation level). High levels trigger the blind to unroll automatically, while in cloudy weather it rolls back up.
- Powered by solar battery pack.

#### **AMZ ELECTRO**



- AMZ Electro 230 mains connection.
- AMZ Electro 24 24V DC control unit.

#### **CONTROL:**

• Operated via a remote control or wall switch.





#### **CONTROL:**

• Operated using smartphone.





#### CONTROL:

 Automatically operated or via a remote control.







#### **CONTROL:**

Operated via a wall switch.







# DISCOVER AN OASIS...

External roller shutter provides total comfort when using the attic space because it protects from overheating, enables complete shading of the room, reduces noise from the outside and ensures a sense of privacy in the attic.





ARZ-H ARZ **Z-Wave** ARZ **WiFi** ARZ Solar ARZ Electro

As roller shutters are fitted outside they provide effective protection from undesired heat gain. Aluminium slats are joined by means of a special rubber connector to increase weather resistance.

#### **FEATURES:**

- Effective protection against burdensome heat.
- Reduction of heat loss during winter by up to 15% (for a window with a U-value of 1.3W/m<sup>2</sup>K).
- Complete blackout for total privacy.
- Protection against UV radiation.
- Acoustic protection against external noise.
- Protection against break-in attempts.

When installing roller shutters on windows in vertical combinations a minimum 20 cm must be maintained between windows, while in horizontal combinations this distance may be reduced to 10 cm.

#### **ARZ-H**



#### **CONTROL:**

● The **ARZ-H** is operated by means of crank handle supplied.



#### **ARZ Z-WAVE**



#### **CONTROL:**

● The **ARZ** in wireless **Z-Wave** system is operated by wall switch or remote and powered by 15V DC supply.







#### **ARZ WIFI**



#### **CONTROL:**

● The **ARZ** in wireless **WiFi** system is operated using smartphone and powered by 15V DC supply.





#### **ARZ SOLAR**



#### **CONTROL:**

● The **ARZ Solar** is operated by means of a remote control. The Solar roller shutter is equipped with a control unit and accumulator which are powered by a solar cell on the shutter. Recommended in places where it is not possible to run power supply.





#### **ARZ ELECTRO**



#### **CONTROL:**

ARZ Electro 230 - mains connection,

#### ● ARZ Electro 24

- 24V DC control unit. The **ARZ Electro** roller shutters are operated by means of a wall switch.







### **LIGHT CONTROL IN YOUR HANDS...**

The AJP Venetian blind is a popular roof window accessory which can control the amount of light and heat entering the room. The angle of slats can be changed in the traditional way to vary the amount of light and let us enjoy remarkable effect created within the room.





The AJP Venetian blind protects against overheating and can be used to enhance interior design. The blind is enclosed by an aluminium cassette which protects against light infiltration down the sides. The window sash can also be turned with the blind down.

#### **FEATURES:**

- Adjustment of slats to change the amount and direction of light entering the room.
- Enhanced interior design.
- Partial reduction of heat gain in the room.
- The blind can be locked in any position.
- Protection against UV radiation.
- Provision of privacy without significant reduction of natural light within the room.









#### **CONTROL:**

- The AJP is manually operated. For operation of the blind which is out of reach the universal ZST control rod is available.
- The AJP in wireless Z-Wave system is operated by a wall switch or remote control powered by 15V DC supply.

The electric drive of the AJP Venetian blind in a Z-Wave system controls the angle of slats only when the window is closed.





Side aluminium guide rails enable a complete shading of the room and keep the slats in line.



# COLOURS

OF VENETIAN BLINDS AJP



#### I PRICE GROUP



### **II PRICE GROUP**





# LIVE WITH COLOUR...

The standard ARS roller blind is used to reduce light entering the room while offering scope to be used as an intrinsic element of interior design. In addition to reducing incoming light, the wide range of fabric colours and patterns can enhance room decor and style.





The ARS roller blind is a fabric wound on a spring-loaded shaft. It comes with an attractive aluminium fascia which elegantly conceals the shaft and has three pairs of hooks placed in the sash to enable the blind to be locked in these positions.

#### **FEATURES:**

- Variable reduction of incoming light.
- Wide range of colours and patterns to suit varied tastes.
- Partial protection against heat gain.
- $\bullet$  Can be locked in three different positions.
- Provision of complete privacy when closed.

#### **CONTROL:**



• The ARS is manually operated. For operation of the blind which is out of reach the universal ZST control rod is available.



Aluminium fascia to conceal the shaft of the blind



Hook to lock the blind in one of three positions



# COLOURS

### ARS, ARP I PRICE GROUP



#### ARS II, ARP II PRICE GROUP







### ARS **II PRICE GROUP**







The ARP roller blind is used in to reduce light entering the room while offering scope to be used as an intrinsic element of interior design. In addition to reducing intense light, the wide range of fabric colours and patterns can enhance room decor and style.





The wide range of colours and patterns can be used to greatly enhance the aesthetics of any room. Aluminium guide rails cover the fabric edges and enable the blind to be set in any position.

#### **FEATURES:**

- Variable reduction of incoming light.
- Wide range of colours and patterns to suit individual tastes.
- Partial protection against heat gain.
- Can be locked in any position thanks to side guide rails.
- Protection against UV radiation.
- Provision of complete privacy.

#### **CONTROL:**

- The ARP is manually operated. For operation of the blind which is out of reach the universal ZST control rod is available.
- The ARP in wireless Z-Wave system is operated by means of a wall switch or remote control,15V DC power supply.
- The ARP in wireless µWiFi system is operated using smartphone, 15V DC power supply.

Operating the ARP Z-Wave and ARP WiFi is only possible when the window is





closed.

The ARP electric roller blinds are also available in the Electro 24 version upon

request - power supply and control from 24V DC control unit.



Aluminium fascia to conceal the shaft of the blind



Side guide rails enable to stop the blind in any position







The ARF Sunset provides complete protection against sunlight entering the room space. As a result, you can enjoy a pleasant darkness even on the most sunniest days when you need to take a rest.





The ARF blackout blind is made of an elegant and decorative fabric which does not let light through. It comes with side guide rails which allow to stop the blind in any position and ensure shading of the room.

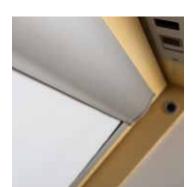
#### **FEATURES:**

- Variable reduction of incoming light.
- Partial protection against heat gain.
- Can be locked in any position thanks to side guide rails.
- Reduced heat loss in winter season.
- Protection against UV radiation.
- Provision of complete privacy.
- Easy to clean.

#### **CONTROL:**

- The ARF is manually operated. For operation of the blind which is out of reach the universal ZST control rod is available
- The ARF in wireless Z-Wave system is operated by means of a wall switch or remote control, 15V DC power supply.
- The ARF in wireless µWiFi system is operated using smartphone, 15V DC power supply.
- The ARF Solar is operated by means of a remote control.

Operating the ARF Z-Wave and ARF WiFi is only possible when the window is closed.



Aluminium fascia to conceal the shaft of the blind



Side guide rails enable to stop the blind in any position and ensure shading of the room.

The ARF electric blackout blinds are also available in the Electro 24 version upon request - power supply and control from 24V DC control unit.



# COLOURS

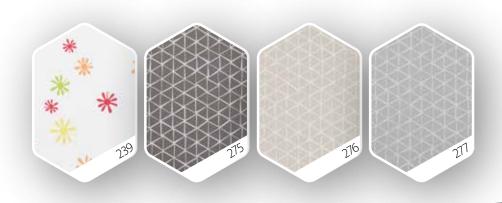
OF BLACKOUT BLINDS ARF

#### I PRICE GROUP



#### **II PRICE GROUP**







# 

### **WINDOWS IN ANY CLIMATE**

The new ARF Print collection is the latest range of blackout blinds that feature unique graphics tu suit different spaces. They are designed for both children's and youth rooms, modern office spaces and romantic interiors

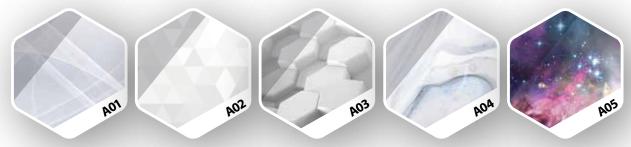




NEW

#### **ABSTRACTION AND 3D THEMES**

• Raw and modern interiors can be warmed up with blackout blinds presenting an abstraction of intertwining lines or graphics with 3D themes.



#### THEMES DEDICATED TO CHILDREN

• Graphics, which will not only decorate children's rooms within the attic space, but also stimulate their imagination.



#### **FLORAL THEMES**

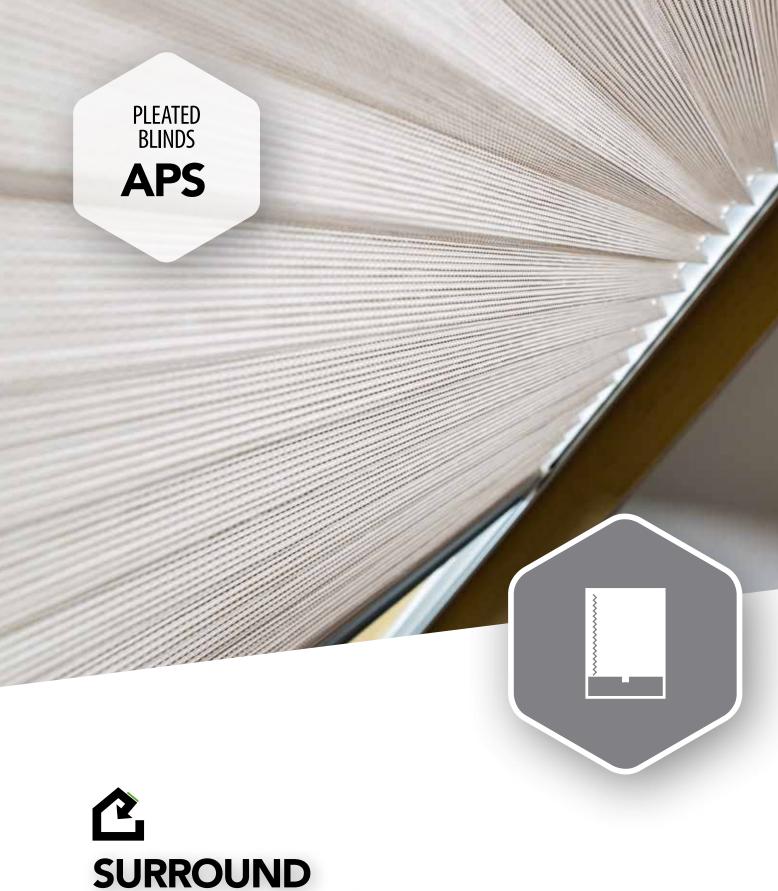
• Dedicated to people who value original style and form. Interweaving leaves in shades of green and beige will give a bit of a romantic atmosphere.



#### **GRAPHICS WITH CITY VIEWS**

• They add originality and modernity creating a unique character of the room.





# **YOURSELF WITH BEAUTY ...**

The APS pleated blind is a stylish and decorative sun screening device which can be used to provide a diffused lighting effect and harmony of colours which will enhance any interior design.





Aluminium guide rails are available in two colour versions – lacquered white and anodised silver.

#### **FEATURES:**

- Provision of soft, diffused light and harmony of colours.
- Variable reduction of incoming light.
- Partial protection against heat gain.
- Can be locked in any position thanks to side guide rails.
- Top-down system easy operation by means of an upper and lower bar.
- Protection against UV radiation.
- Provision of complete privacy.

#### **CONTROL:**



• The APS blind is manually operated. For operation of the blind which is out of reach the universal ZST control rod is available.



Aluminium guide rails enable to stop the blind in any position



Convenient finger grip to operate the blind



Top-down system - easy operation by means of the upper and lower bar

# COLOURS

OF PLEATED BLINDS APS



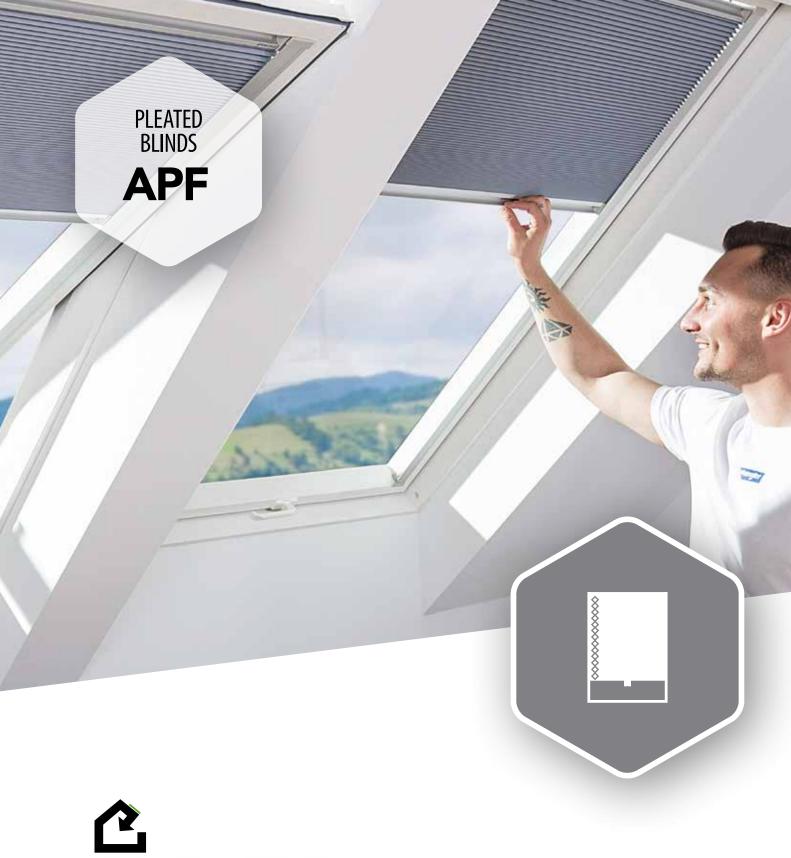
#### I PRICE GROUP



#### **II PRICE GROUP**







# CI INNOVATIVE BEAUTY...

The APF pleated blind is an ideal sun screening device for use with contemporary interiors. Its fabric has a honeycomb structure and an aluminium coating which provides blackout and good thermal performance.





Aluminium guide rails are available in two colour versions – lacquered white and anodised silver.

#### **FEATURES:**

- Variable reduction of incoming light.
- Partial protection against heat gain.
- Can be locked in any position thanks to side guide rails.
- Top-down system easy operation by means of an upper and lower bar.
- Protection against UV radiation.
- Provision of complete privacy.

#### **CONTROL:**



• The APF blind is manually operated. For operation of the blind which is out of reach the universal ZST control rod is available.



Aluminium guide rails enable to stop the blind in any position



Fabric with the structure resembling honeycomb and internal aluminium coating



Top-down system - easy operation by means of the upper and lower bar

# COLOURS

OF PLEATED BLINDS APF

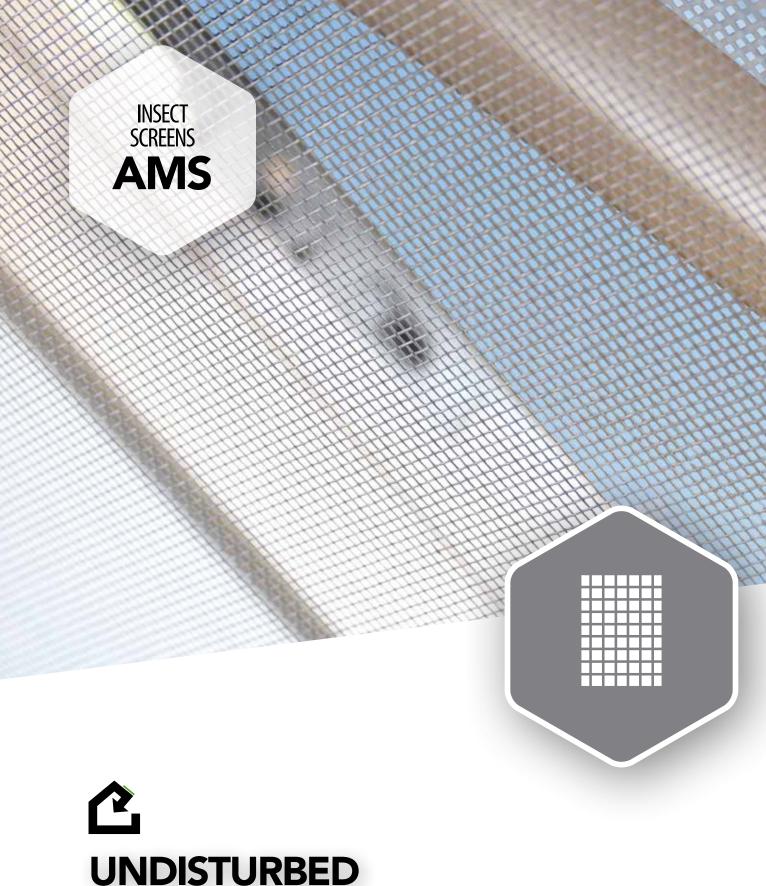


#### I PRICE GROUP



### **II PRICE GROUP**







The AMS roll-up insect screen protects the room from the smallest insects so your rest won't be disturbed even if your roof windows are open.





The AMS insect screen is the only FAKRO roof window accessory that is mounted onto the lining, not the window. It is made of mesh-coated PVC and has aluminium guide rails which are available in two colour versions – lacquered white and anodised silver.

#### **FEATURES:**

- Effective protection against mosquitoes and other insects.
- Minimum reduction of natural light.
- Can be installed with other internal and external blinds and awnings.

#### **CONTROL:**



• The AMS insect screen is manually operated. For operation of the screen which is out of reach the universal ZST control rod is available.





Insect screen structure ensures full protection against insects

#### **INSECT SCREEN DIMENSIONS**

WINDOW WIDTH [CM]	55	55	66	66	78	78	94	94	114	114	B4	B4
INTERNAL LINING WIDTH [CM] WOODEN AND PVC WINDOWS (2006-2020)	48,5	48,5	59,5	59,5	71,5	71,5	87,5	87,5	107,5	107,5	127,5	127,5
INTERNAL LINING WIDTH [CM] PVC WINDOWS (2ND QUARTER 2020 - TILL PRESENT)	49,5	49,5	60,5	60,5	72,5	72,5	88,5	87,5	108,5	108,5	128,5	128,5
MAX. LINING INTERNAL HEIGHT [CM]	170	200	200	240	200	240	200	240	200	240	200	240







# **REACH...**

The Z-Wave is a communication technology that is specially designed to allow the control and monitoring of both residential and commercial buildings. The Z-Wave technology provides the highest level of quality and safety available in the field of wireless technology. The Z-Wave system is easy to install, develop and manage at all stages of the building process. As the system does not require the use of an electrical switchboard or communication cables between the electric products, the cost of fitting is greatly reduced both in terms of the time taken to fit, and the amount of materials required to complete the installation.





FAKRO products equipped with the **Z-Wave** module are integrated into an advanced technological solution of FAKRO smartHome system and can be operated locally via a remote control.





FAKRO products equipped with the **Z-Wave** module work in conjunction with FIBARO devices. Using the FIBARO Home Center 2 Control Unit the user can create a smart home that can be controlled by means of a smartphone from any place in the world.

The FAKRO smartHome system (FSH) can be integrated with products offered by other manufacturers within one application. Other devices equipped with the Z-Wave module such as lighting, heating or different types of sensors such as wind, rain, smoke, smog or carbon monoxide can also be added to the FSH System. As many as 600 companies form around the world offer more than 2100 "smart products" for use within the Z-Wave network that enhance the comfort of living for millions of people in many aspects of their lives.





#### **Z-WAVE ELECTRIC CONTROL DEVICES**



#### **ZRH12**

The ZRH12 remote control to operate many products separately or simultaneously in 12 groups. It is used to control the Z-Wave window, ZWS230 and ZWS12 actuators for opening windows, ARZ Z-Wave external roller shutter, AMZ Z-Wave awning blind, ARF Z-Wave internal blackout blind, AJP Z-Wave Venetian blind



#### **ZRS24**

A multi-functional remote control that allows operation of devices in the Z-Wave network individually, in groups and scenes, including the Z-Wave window, ZWS230 and ZWS12 actuators for opening windows, ARZ Z-Wave external roller shutter, AMZ Z-Wave awning blind, ARF Z-Wave internal blackout blind, ARP Z-Wave venetian blind.



#### **ZRW7**

The ZRW7 wall keypad to operate many products separately or simultaneously in 7 groups. It is used to control the Z-Wave window, ZWS230 and ZWS12 actuators for opening windows, ARZ Z-Wave external roller shutter, AMZ Z-Wave awning blind, ARF Z-Wave internal blackout blind, ARP Z-Wave internal roller blind, AJP Z-Wave Venetian blind.



#### ZWL1

The Z-Wave radio controller used for the remote control of a single Z-Wave device or a group of devices, including the Z-Wave window, ZWS230 and ZWS12 actuators for opening windows, ARZ Z-Wave external roller shutter, AMZ Z-Wave awning blind, ARF Z-Wave internal blackout blind, ARP Z-Wave internal roller blind, AJP Z-Wave Venetian blind. It also comes as ZWL 2 - double controller and ZWL3 - triple controller.

#### **ELECTRIC POWER SUPPLY ELEMENTS – 15V**



#### **ZZ60**

The 15V DC switched-mode power supply to power Z-Wave devices. Output power of 60W. To be installed on DIN TS35 rail. A maximum number of devices connected to the ZZ60 power unit: ARZ Z-Wave (2 items), AMZ Z-Wave (2 items), ARF Z-Wave (6 items), ARP Z-Wave (6 items), ZWS12 (5 items).



#### ZZ60H

The 15V DC hermetic switched-mode power supply to power Z-Wave devices. Output power of 60W. To be installed outside the distribution board. A maximum number of devices connected to the ZZ60 power unit: ARZ Z-Wave (2 items), AMZ Z-Wave (2 items), ARF Z-Wave (6 items), ARP Z-Wave (6 items), AJP Z-Wave (6 items), ZWS12 (5 items).

#### **ELECTRIC CONTROL ELEMENTS – 230V**



#### **ZKP**

A single flush-mounted wall switch with backup to control a single device such as the AMZ Electro 230.



#### ZKN

A single surface-mounted wall switch with backup to control a single device such as the AMZ Electro 230.



The µWiFi technology is a solution dedicated to the data transmission in harsh environment. It is characterized by resistance to interference, high throughput and the ability to connect devices to existing infrastructure networks based on standard WiFi Access Points (backward compatibility with WiFi standard has been preserved).

The µWiFi technology allows for connections with all devices directly and using the existing WiFi network (eq. private homes, businesses). In addition, the cloud architecture provided by Blebox.eu enables the user to control devices from anywhere in the world via the Internet - only a WiFi network with Internet access is required to which the modules are included.

#### ADVANTAGES:

- The WiFi system is easy to install, expand and manage. It can be used at any stage of the building's operation. An additional benefit is the ability to obtain a remote access to devices via a router.
- Installation of the system does not require the use of any control panels or connecting cables between electrical devices, which clearly cuts down costs and installation time and ensures maximum comfort of operating the system. All devices in the WiFi system are operated via a smartphone. The application provided by the manufacturer enables the user to create scenes and schedules.
- Operation of the system consists in the fact that a control device, eg smartphone sends a signal to the router which then distributes signals to individual devices. Failure of one device does not affect the operation of other devices. All functional devices are still available remotely and locally.

WiFi accessories work with Google Assistant, which means that they can be controlled by voice using the app. The Google Assistant application allows to create a virtual Google Home and manage FAKRO products in the WiFi version using the wBox app.

WiFi products work with Google Assistant and thanks to the Google Home app the user can control devices with an assistant such as Google Home speaker. Google Home allows to create a smart home by connecting devices from many manufacturers, including FAKRO WiFi using the wBox app. This application enables the user to control FAKRO WiFi products from anywhere in the world.



### ZST ZSZ

FAKRO offers extendable control rods for opening and closing roof windows and blinds which may be out of reach.

# CONTROL RODS FOR OPERATING ROOF WINDOWS AND ACCESSORIES



#### **CONTROL ROD ZST**

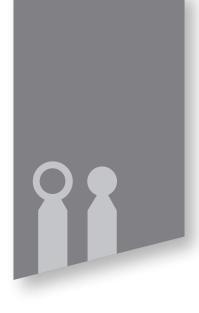
The universal ZST telescopic control rod enables the user to open and close windows and blinds at high level. It can be used with the ARS, ARP, ARF, APS, APF and AJP blinds and AMS insect screen. The standard rod length is 119 cm but this can be extended to 134, 162, 190 or 218 cm. The ZSP extension can further extend this to 246, 274, 302 or 330 cm.



#### **ROD ZSZ**

The ZSZ is a round-shaped aluminium bar for opening and closing highly fitted AMZ awning blind which is supplied with an 80 cm rod. The standard length of the ZSZ is 150 cm.





### **CHOOSING ACCESSORIES**

In order to select the right size and type of accessory you must first ensure you know the roof window type and its dimensions. These are to be found on a data plate which is mounted on the window sash.

FAKRO accessories are available via:

- FAKRO roof windows sales chain.
- Dedicated online stores
- Best stores offering accessories for windows Using original FAKRO accessories from this catalogue helps maintain the **10-year warranty** of your roof windows.

Please note: colour swatches in this catalogue may differ from the actual fabric. Consult your FAKRO representative for details.

type and dimensions





FAKRO offers a wide range of external awning blinds and accessories adapted to different roof window designs. The external awning blind and internal accessory fitted on the same FAKRO roof window create a set of accessories providing a maximum comfort of living in the attic space. They protect the room against excessive heat and light, additionally enhancing interior design.

#### **INTERNAL ACCESSORIES**

	FTS,	FTT	FTT U6,	PTP,	FPP-V,	PPP-V		FEP FYP-V F		FDY-V		FGH-V		BD_,	FTP/D.	FXP,	FWR	
	FTP, FTU	U5*, FPT U5*	FTT U8 Thermo	PTP-V	FPU-V preSelect	preSelect	FEP		V PYP-V	top sash	botom sash	top sash	botom sash	BVP, BXP	FTU/D	FXU	FWL	FWP
AJP Venetian blind	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+3	+
AJP Z-Wave Venetian blind	+	+		+	+	+	+	+	+	+	_	+	_	_	+		+3	+
ARS roller blind	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ARP roller blind	+	+	+	+	+	+	+	+	+	+	+	_	+	+	+	+	+3	+
ARP Z-Wave, ARP WiFi roller blind	+	+	_	+	+	+	+	+	+	+	_	_	—	_	+	_	+3	+
ARF blackout blind	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+3	+
ARF SOLAR blackout blind	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+3	+
ARF Z-Wave, ARF WiFi blackout blind	+	+	_	+	+	+	+	+	+	+	_	+	_	_	+	_	+3	+
APS pleated blind	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+3	+
APF pleated blind	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+3	+
AMS insect screen	+	+	+	+	+	+	+	+	+	-	<b>+</b> ¹	_	_	_	+1	+1	+	+

#### **EXTERNAL ACCESSORIES**

AMZ, AMZ New Line awning blind	+	+	+	+	+	+		+	+	+	+4	+	+4	_	+	+ 4	_	_
AMZ Z-Wave, AMZ Solar, AMZ WiFi awning blind				+	+	+		+	+	+ 4	+4	+ 4	+4	_	+	+ 4	+ 3,4,5	+ 3,4,5
AME awning blind	-	_	_	_	_	_	+	_	_	_	_	_	_	_	_	_	_	
AMB awning blind	-	_		_	_	_		_	_	_	_	_	_	+	_	_	_	_
ARZ-H roller shutter	+	_	-	_	+	_		+ 4	_	+4	_	+ 4	_	_	+2	_	_	
ARZ Z-Wave, ARZ Solar, ARZ WiFi roller shutter	+	+	+	+	+	+		+4	+4	+4	+4	+ 4	_	_	+2	+4	_	_
ARK Z-Wave, ARK Solar roller shutter	_	_	_	_	_	_	+	_	_	_	_	_	_	_	_	_	_	_

<sup>\*-</sup> internal accessories made to order standard external accessories

5 - available in Solar version only

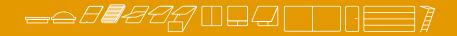
<sup>1 -</sup> for lining for combination up to 230 cm long

<sup>&</sup>lt;sup>2</sup> - retaining 20 cm distance between windows

<sup>&</sup>lt;sup>3</sup> - installation for side hung escape windows recommended to be performed by FAKRO service 4 - made to special order, limited application

















www.fakro.com