

We have brought light to new solutions for roller shutters and blinds.



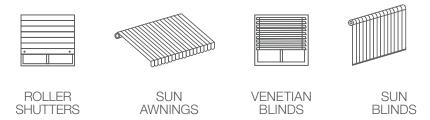
AUTOMATION FOR WINDOWS AND DOORS





The automation range for windows and doors expands to bring light to solutions that meet all installation needs.

The current offering of Elvox products for the automation of rolling shutters, awnings, Venetian blinds and blackout curtains is extended to include several new products: new operators with electronic limit switches and integral radio receiver, new control units with radio receiver, also back-box installation, plus new radio controls. Highly evolved devices developed in compliance with our hallmark characteristics: consistent use of rugged and practical materials and reliable mechanical components. These are the essential requirements to support your work and allow you to meet all the automation needs of your customers quickly, accurately and reliably by offering simple and immediate solutions or more sophisticated and higher performance solutions, potentially integrated in the By-me home automation system.





Tubular motors with mechanical limit switch.

Reliable and efficient.

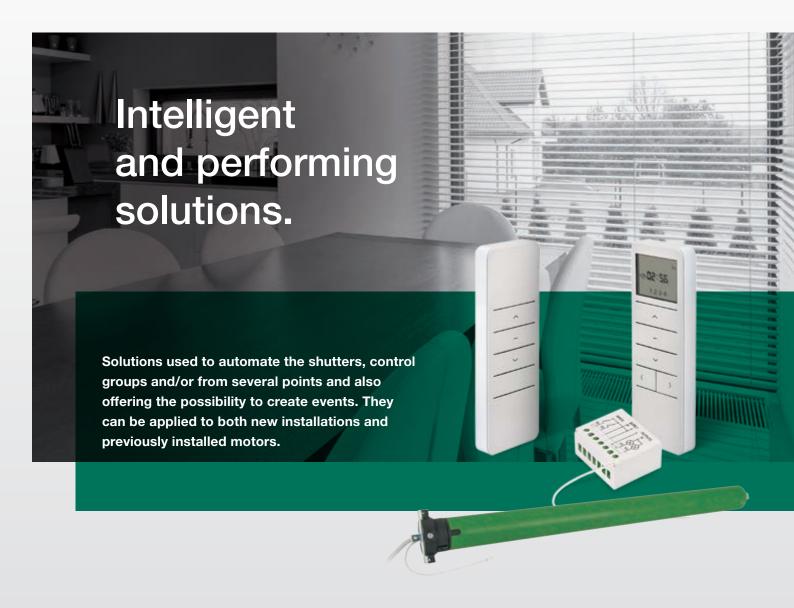
Available both with different diameters and lengths and different lifting capacities, the motors are equipped with a mechanical limit switch, adjusted manually using the two screws on the head of the motor - which automatically stops the shutter after closing or opening.

Control device.

The control device is wired to the motor and is used to select the required function for each motor: winding or unwinding of the relative shutter.

Release action.

Some of the more performing models are equipped with a manual operating system which, in the case of a blackout, can be used to move the shutter or sun awning.



New motors with radio receiver.

With advanced functions built-in.

Used to create new shutter automation systems to control movements from several points or in groups, directly from the remote control. They represent the most performing solution for up-to-date functionality and comfort.

New control units with miniature receivers, for installation inside the roller shutter box or back-box installation.

Functionality comes on board.

Very small in size, the new control units with radio receiver are used to automate previously installed motors, providing them with all the functions and advantages of radio-controlled devices.

The intelligence of this solution lies in every single element.



Motors with radio receiver.

Available with 45 mm diameter and a range of lifting capacities, the new motors come with a built-in radio receiver that captures a remote control signal, automatically winding or unwinding the shutter. With an electronic limit switch - which locks the shutter or awning when it reaches a set number of turns - they can be controlled in groups or included in programmed events. The electronic unit can be directly programmed from the remote control without having to access the motor.

Control units with radio receiver.

Very small in size, these electronic control units can be installed either in the roller shutter box or in the back-box.

A versatile solution for converting standard, previously installed motors, in radio controlled motors, also in groups, by remote control and/or from different points around the building.



Remote controls.

Comfort all around, at a touch. The new motors and the standard motors mounted on-board the receiver control unit can be controlled by remote control from the simple, user-friendly interface. With a modern, elegant design, they are available in single- or multi-channel versions, and can be used to manage different functions, controlling the roller shutters singly or in groups. The most advanced models can also be used for programming events.



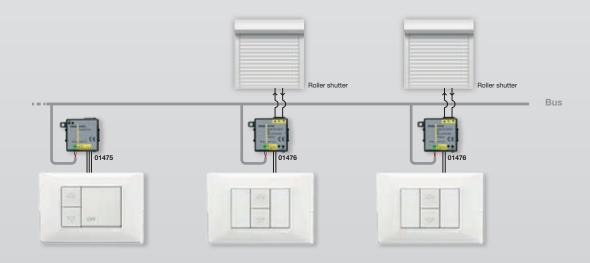


Evolved solutions with the simplicity of Plug&Play-based home automation

All the solutions for moving roller shutters and awnings can be incorporated in the By-me home automation system. The first step starts with the Plug&Play home automation kits: pre-configured devices, which require no specific programming and can be used to create a small home automation system for managing lighting and roller shutters. They can be installed in "star point" or "distributed" systems, in existing buildings or ones under renovation, in residential and small commercial premises.

Total shutter control, to create perfect scenarios.

With the pre-configured plug&play home automation devices, roller shutters can also be included in a scenario that can also control the lights at the same time.





But this is just the first step.

The versatility of the Plug&Play devices means they can also be incorporated into more advanced By-me home automation systems. All you need to do is choose among the many options in the Vimar catalogue, configure the whole system, and that's it! Control, comfort, security and energy efficiency will then be integrated by a single technology that is intelligent and intuitive in equal measure.



Remote control from smartphone, tablet and PC.

The entire home automation system can be controlled over the internet using a PC, smartphone or tablet of the latest generation.



Automation systems for windows and doors Selection guide



Automation systems for windows and doors



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Selection guide

Automati	on systems f	or roller b <mark>lind</mark>	ls, sun shac	des and rol	ler shutters	(230 Vac))		
Motor diameter	Adapter type	Adapter diameter	Limit switch	Command	Rolle shut- ter weight	Manual action	Torque max	Actuator	Photo
35 mm	Octagonal	40 mm	Mechanical	Wired	15 kg	-	6 Nm	EV15/35	376
				20 kg - 10 Nm EV20/45		EV20/45	1876		
					40 kg	-	20 Nm	EV40/45	376
	Octagonal				40 kg	Yes	20 Nm	EV30/45	
45 mm		60 mm	Mechanical	Wired	80 kg	-	- 40 Nm EV60/45	146	
					00 kg	Yes	40 Nm	EV50/45	- m
					05 kg	-	50 Nm	EV80/45	181
					95 kg	Yes	50 Nm	EV70/45	- m
					20 kg		10 Nm	EV45ER/10	
					40 kg		20 Nm	EV45ER/20	
45 mm	Octagonal (not included)	60 mm (not included)	Electronic	Radio	60 kg	-	30 Nm	EV45ER/30	
					80 kg		40 Nm	EV45ER/40	
					95 kg		50 Nm	EV45ER/50	-

Remote con							
Frequency	No. of control- lble motor or groups	Indicators display	Functions	Power supply	Installation	Code	Photo
	1	-	-			ETT01	HIE
	1	Time, date and battery charge level	Hourly, daily and weekly programming	Battery	Wall-mounted	ETT01T	1111
433 MHz rolling code	4+1	Channel, time, date and battery charge level	Hourly, daily and weekly programming	CR2450 3 V	with magnetic support	ETT05T	1
	15+1	Channel and battery charge level	Channel Select			ETT15	1111
	1 -		-	12/24 Vdc	Flush mounting for back-box with traditional residential series button	ETT01F	

VIMAR group



Automation systems for roller blinds and roller shutters

230 V automation system for roller shutters and sun shades

Tubular gearmotors for roller window shutters. Designed to facilitate installation and - thanks to the accessories supplied - fit into the various types of windows and doors available, even existing models. For residential, commercial and tertiary use.

Main specifications

- motor tube diameter 45 mm
- version with electronic limit switches and built-in radio receiver
- motor thermal protection at 4 min

230 V operator technical data					
Article	EV45ER/10	EV45ER/20	EV45ER/30	EV45ER/40	EV45ER/50
Ø motor tube (mm)	45	45	45	45	45
Limit switch	Electronic	Electronic	Electronic	Electronic	Electronic
Built-in radio receiver	Yes	Yes	Yes	Yes	Yes
Manual action	-	-	-	-	-
Power supply (Vac)	230	230	230	230	230
Power (W)	113	161	200	228	228
Absorption (A)	0,48	0,69	0,87	0,99	0,99
Torque (Nm)	10	20	30	40	50
Rotation speed (rpm)	15	15	15	15	12
Maximum rpm	No limit				
Ø adapter	60	60	60	60	60
Adapter type	Octagonal	Octagonal	Octagonal	Octagonal	Octagonal
Thermal protection (min.)	4	4	4	4	4
Operating temperature (Min./Max. °C)	-20 to +55				
Length (mm)	607	607	637	637	637

Selection guide to motors for roller shutters:

To choose the right gearmotor for the roller shutter you need to know:

- the weight of the roller shutter
- the diameter of the tube of the roller shutter

To calculate the weight of the roller shutter to be motorized you need to know the surface area and weight per m2 of the material of which it is made. Here you can find a table showing typical weights of the materials used for roller shutters.

Once you have calculated the weight of the roller shutter, by cross-checking the figure obtained with the diameter of the roller, you obtain the torque in Nm of the suitable motor.

Weights of materials	
Material:	kg/m²
Aluminium with polyurethane foam	4
Aluminium with high-density polyurethane foam	5
PVC	6
Extruded aluminium	7
Wood	10
Steel with polyurethane foam	10
Steel with high-density polyurethane foam	10,5
Steel	11

Table to calculate motor torque (Nm) for roller shutters

Roller shutter weight	5 kg	10 kg	15 kg	20 kg	25 kg	30 kg	35 kg	40 kg	45 kg	50 kg	55 kg	60 kg	65 kg	70 kg	75 kg	80 kg	85 kg	90 kg	95 kg	100 kg
Roller diameter 40 mm	6 Nm	6 Nm	6 Nm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roller diameter 60 mm	10 Nm	10 Nm	10 Nm	10 Nm	20 Nm	20 Nm	20 Nm	20 Nm	30 Nm	30 Nm	30 Nm	30 Nm	40 Nm	40 Nm	40 Nm	40 Nm	50 Nm	50 Nm	50 Nm	-
Roller diameter 70 mm	10 Nm	10 Nm	10 Nm	20 Nm	20 Nm	20 Nm	20 Nm	30 Nm	30 Nm	30 Nm	40 Nm	40 Nm	40 Nm	40 Nm	50 Nm	50 Nm	50 Nm	-	-	-
Roller diameter 80 mm	10 Nm	10 Nm	20 Nm	20 Nm	20 Nm	30 Nm	30 Nm	30 Nm	40 Nm	40 Nm	40 Nm	50 Nm	50 Nm	50 Nm	-	-	-	-	-	-



Automation systems for roller blinds and roller shutters

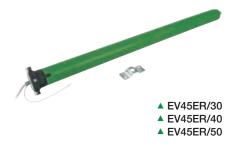
230 V automation systems for roller shutters, residential, commercial and tertiary use

- ▲ EV45ER/10 Ø45 mm tubular motor for roller shutters, 230 Vac, torque 10 Nm, rotation speed 15 rpm, absorbed power 112 W. With radio receiver and electronic limit switch incorporated in the motor. Residential, commercial and tertiary. Wall fixing bracket included. Power cable length 2.5 m
- ▲ EV45ER/20 Ø45 mm tubular motor for roller shutters, 230 Vac, torque 20 Nm, rotation speed 15 rpm, absorbed power 145 W. With radio receiver and electronic limit switch incorporated in the motor. Residential, commercial and tertiary. Wall fixing bracket included. Power cable length 2.5 m



230 V automation systems for roller shutters, residential, commercial and tertiary use

- ▲ EV45ER/30 Ø45 mm tubular motor for roller shutters, 230 Vac, torque 30 Nm, rotation speed 15 rpm, absorbed power 191 W. With radio receiver and electronic limit switch incorporated in the motor. Residential, commercial and tertiary. Wall fixing bracket included. Power cable length 2.5 m
- ▲ EV45ER/40 Ø45 mm tubular motor for roller shutters, 230 Vac, torque 40 Nm, rotation speed 15 rpm, absorbed power 198 W. With radio receiver and electronic limit switch incorporated in the motor. Residential, commercial and tertiary. Wall fixing bracket included. Power cable length 2.5 m
- ▲ EV45ER/50 Ø45 mm tubular motor for roller shutters, 230 Vac, torque 50 Nm, rotation speed 12 rpm, absorbed power 205 W. With radio receiver and electronic limit switch incorporated in the motor. Residential, commercial and tertiary. Wall fixing bracket included. Power cable length 2.5 m





Automation systems for roller blinds, sun shades and roller shutters

230 V automation system for roller shutters, roller blinds and sun awnings

Tubular gearmotors for roller shutters and sun awnings. Designed to facilitate installation and - thanks to the accessories supplied - fit into the various types of windows and doors available, even existing models. For residential, commercial and tertiary use.

Main specifications

- motor tube diameter 35 and 45 mm
- with and without manual action
- limit adjustment via mechanical screw-controlled limit switches
- motor thermal protection at 4 min

230 V operator technical data								
Article	EV15/35	EV20/45	EV40/45	EV60/45	EV80/45	EV30/45	EV50/45	EV70/45
Ø motor tube (mm)	35	45	45	45	45	45	45	45
Limit switch	Mechanical							
Built-in radio receiver	-	-	-	-	-	-	-	-
Manual action	-	-	-	-	-	Sì	Sì	Sì
Power supply (Vac)	230	230	230	230	230	230	230	230
Power (W)	98	112	145	198	205	145	198	205
Absorption (A)	0,43	0,46	0,64	0,86	0,89	0,64	0,86	0,89
Torque (Nm)	6	10	20	40	50	20	40	50
Rotation speed (rpm)	14	15	15	15	12	15	15	12
Maximum rpm	30	22	22	22	22	22	22	22
Ø adapter	40	60	60	60	60	60	60	60
Adapter type	Octagonal							
Thermal protection (min.)	4	4	4	4	4	4	4	4
Operating temperature (Min./Max. °C)	-20 to +55							
Length (mm)	457	467	467	537	537	528	598	598

Selection guide to motors for roller shutters:

To choose the right gearmotor for the roller shutter you need to know:

- the weight of the roller shutter
- the diameter of the tube of the roller shutter

To calculate the weight of the roller shutter to be motorized you need to know the surface area and weight per m2 of the material of which it is made. Here you can find a table showing typical weights of the materials used for roller shutters.

Once you have calculated the weight of the roller shutter, by cross-checking the figure obtained with the diameter of the roller, you obtain the torque in Nm of the suitable motor.

Material: kg/m² Aluminium with polyurethane foam 4 Aluminium with high-density polyurethane foam 5 PVC 6 Extruded aluminium 7 Wood 10 Steel with polyurethane foam 10 Steel with high-density polyurethane foam 10,5 Steel 11	Weights of materials	
Aluminium with high-density polyurethane foam 5 PVC 6 Extruded aluminium 7 Wood 10 Steel with polyurethane foam 10 Steel with high-density polyurethane foam 10,5	Material:	kg/m²
PVC 6 Extruded aluminium 7 Wood 10 Steel with polyurethane foam 10 Steel with high-density polyurethane foam 10,5	Aluminium with polyurethane foam	4
Extruded aluminium 7 Wood 10 Steel with polyurethane foam 10 Steel with high-density polyurethane foam 10,5	Aluminium with high-density polyurethane foam	5
Wood 10 Steel with polyurethane foam 10 Steel with high-density polyurethane foam 10,5	PVC	6
Steel with polyurethane foam 10 Steel with high-density polyurethane foam 10,5	Extruded aluminium	7
Steel with high-density polyurethane foam 10,5	Wood	10
	Steel with polyurethane foam	10
Steel 11	Steel with high-density polyurethane foam	10,5
	Steel	11

Table to calculate motor torque (Nm) for roller shutters

Roller shutter weight	5 kg	10 kg	15 kg	20 kg	25 kg	30 kg	35 kg	40 kg	45 kg	50 kg	55 kg	60 kg	65 kg	70 kg	75 kg	80 kg	85 kg	90 kg	95 kg	100 kg
Roller diameter 40 mm	6 Nm	6 Nm	6 Nm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roller diameter 60 mm	10 Nm	10 Nm	10 Nm	10 Nm	20 Nm	20 Nm	20 Nm	20 Nm	30 Nm	30 Nm	30 Nm	30 Nm	40 Nm	40 Nm	40 Nm	40 Nm	50 Nm	50 Nm	50 Nm	-
Roller diameter 70 mm	10 Nm	10 Nm	10 Nm	20 Nm	20 Nm	20 Nm	20 Nm	30 Nm	30 Nm	30 Nm	40 Nm	40 Nm	40 Nm	40 Nm	50 Nm	50 Nm	50 Nm	-	-	-
Roller diameter 80 mm	10 Nm	10 Nm	20 Nm	20 Nm	20 Nm	30 Nm	30 Nm	30 Nm	40 Nm	40 Nm	40 Nm	50 Nm	50 Nm	50 Nm	-	-	-	-	-	-

Selection guide to motors for sun awnings:

To choose the right gearmotor for the sun awning you need to know:

- the measurement of the stand-out of the extended arms of the awning
- the number of arms of the awning

• the diameter of the tube of the awning

By cross-checking the above data and the table below, you obtain the torque in Nm of the suitable motor (please note that the operators for sun awnings are always equipped with a manual option).

Table to calculate motor torque (Nm) for sun awnings

				1 /				J -										
Roller diameter		70 mm					78 mm					85 ı	mm			89 mm		
Arm stand-out	1,5 m	2 m	2,5 m	3 m	4 m	5 m	1,5 m	2 m	2,5 m	3 m	4 m	1,5 m	2 m	2,5 m	3 m	1,5 m	2 m	2,5 m
Number of arms 2	20 Nm	20 Nm	40 Nm	40 Nm	40 Nm	50 Nm	20 Nm	40 Nm	40 Nm	40 Nm	50 Nm	40 Nm	40 Nm	40 Nm	50 Nm	40 Nm	40 Nm	50 Nm
Number of arms 4	20 Nm	40 Nm	40 Nm	40 Nm	50 Nm	-	40 Nm	40 Nm	40 Nm	50 Nm	-	40 Nm	40 Nm	50 Nm	-	40 Nm	50 Nm	-
Number of arms 6	40 Nm	40 Nm	50 Nm	50 Nm	-	-	40 Nm	40 Nm	50 Nm	-	-	40 Nm	50 Nm	-	-	50 Nm	-	-
Number of arms 8	50 Nm	50 Nm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Automation systems for roller blinds, sun shades and roller shutters

230 V automation systems for roller blinds and roller shutters, residential, commercial and tertiary use

EV15/35 Ø 35 mm tubular motor for sun blinds and roller shutters. Torque 6 Nm, rotation speed 14 rpm, power supply 230 V, power 98 W. Complete with sliding wheel and 40 mm and wall fixing bracket. Lifting capacity 15 kg. Actuator length 457 mm



230 V au	tomation systems for roller shutters, residential, commercial and tertiary use
EV20/45	Ø 45 mm tubular motor for roller shutters. Torque 10 Nm, rotation speed 15 rpm, power supply 230 V, power 112 W. Complete with sliding wheel and 60 mm and wall fixing bracket. Lifting capacity 20 kg. Actuator length 467 mm
EV40/45	Ø 45 mm tubular motor for roller shutters. Torque 20 Nm, rotation speed 15 rpm, power supply 230 V, power 145 W. Complete with sliding wheel and 60 mm and wall fixing bracket. Lifting capacity 40 kg. Actuator length 467 mm
EV60/45	Ø 45 mm tubular motor for roller shutters. Torque 40 Nm, rotation speed 15 rpm, power supply 230 V, power 198 W. Complete with sliding wheel and 60 mm and wall fixing bracket. Lifting capacity 80 kg. Actuator length 537 mm
EV80/45	Ø 45 mm tubular motor for roller shutters. Torque 50 Nm, rotation speed 12 rpm, power supply 230 V, power 205 W. Complete with sliding wheel and 60 mm and wall fixing bracket. Lifting capacity 95 kg. Actuator length 537 mm



230 V au	tomation systems for roller shutters and sun shades, residential, commercial and tertiary use
EV30/45	Ø 45 mm tubular motor for roller shutters and sun blinds with manual movement. Torque 20 Nm, rotation speed 15 rpm, power supply 230 V, power 145 W. Complete with sliding wheel and 60 mm and wall fixing bracket. Lifting capacity 40 kg. Actuator length 528 mm
EV50/45	Ø 45 mm tubular motor for roller shutters and sun blinds with manual movement. Torque 40 Nm, rotation speed 15 rpm, power supply 230 V, power 198 W. Complete with sliding wheel and 60 mm and wall fixing bracket. Lifting capacity 80 kg. Actuator length 598 mm
EV70/45	Ø 45 mm tubular motor for roller shutters and sun blinds with manual movement. Torque 40 Nm, rotation speed 15 rpm, power supply 230 V, power 198 W. Complete with sliding wheel and 60 mm and wall fixing bracket. Lifting capacity 80 kg. Actuator length 598 mm



EV30/45 EV50/45 EV70/45



Completion devices

Remote control for roller shutters

- Remote control for 433 MHz tubular motors, rolling code. Can control a single or group of tubular motors. Includes wall support with magnetic hook
- ▲ ETT01T Remote control for 433 MHz tubular motors, rolling code. Can control a single or group of tubular motors, with hourly, daily or weekly programming. With LCD display for setting the time and date and indication of battery charge level. Includes wall support with magnetic book
- ▲ ETT05T As above, to control 4+1 tubular motors or 4+1 groups with channel selecting
- A ETT15 Remote control for 433 MHz tubular motors, rolling code. Can control 15+1 tubular motors or 15+1 groups of tubular motors. With LCD display for channel selection and indication of battery charge level. Includes wall support with magnetic hook
- A ETT01F Remote control for 433 MHz tubular motors, rolling code. Can control a single or group of tubular motors. For back-box installation coupled to conventional residential series buttons. Power supply 12/24 Vac









▲ ETT01T ▲ ETT05T

15 ▲ ETT01F

Consumer control units

- ▲ ECGC Miniature control unit 230 Vac max 1000 W for roller shutter box installation with built-in 433 MHz radio receiver for tubular motors and actuators for windows
- ▲ ECGF Control unit 230 Vac max 450 W for back-box installation with built-in 433 MHz radio receiver for tubular motors and actuators for windows
 - ECG3 120/230 V control panel with built-in 433 MHz radio receiver for tubular motors and actuators for windows
 - ECGS Expansion card for ECG3 control unit for zone control of tubular motors, manages 7 independent zones and 31 motors per zone that are individually controllable or in cascade, maximum connection distance 1000 m
 - **ECGT** Card with 2 relay outputs 230 V~ 300 W for single and central control of tubular motors

▲ ECGF











Sensors

	6113013	
•	EGA3.1	Tachometric anemometer for ECG3 control unit for tubular motors
Δ	EGA3	Tachometric anemometer for ECG3 control unit for tubular motors
Δ	EGL3	Twilight sensor with adjustable sensitivity for ECG3 control unit for tubular motors
Λ	FGP3	Rain sensor with thermostat for ECG3 control unit for tubular motors, 12 Vdc nower supply







Δ EGL3

For availability, please contact the sales network



Completion devices

Controls and joints		
ZXVD	Joint-enabled control arm with hook, length 1.50 m	
ZXVG	Double universal joint with 45° support, complete with 500 mm long rod and manoeuvring grommet	
ZXVM	Control eye	



Mounting frames		
EVS01	Bracket for roller blinds	
EVS02	Fast bracket for roller blinds	
EVS03	Metallic bracket for roller blinds	
EVS04	Silenced bracket	
EVS11	Fast bracket	
EVS12	Fast bracket max 20 Nm	
EVS13	Fast bracket max 40 Nm	
EVS21	Omega bracket with star pin hole, distance between centres 57.9 M8 threaded holes, distance between centres 46.7 M6 threaded holes	
EVS22	Omega bracket with star pin hole, distance between centres 55 mm non-threaded holes	
EVS23	Saddle bracket for square pin, distance between centres 55 mm	
EVS41	Short wall mounting frame, length 100 mm, distance between centres of slots 55 mm, slot length 75 mm	
EVS42	Long wall mounting frame, length 170 mm, distance between centres of slots 55 mm, slot length 130 mm	
ZXVA	Adjustable motor support with 10 mm pin	



VIMAR group

ZXVA



Completion devices

Adapte	rs
EVA01	Wheel for round pipe Ø 40 mm thickness 2 mm
EVA02	Pair of adapters for round pipe Ø 40 mm thickness 1 mm
EVA03	Pair of adapters for octagonal pipe Ø 40 mm
EVA04	Pair of adapters for round pipe Ø 50 mm thickness 1.5 mm
EVA05	Pair of adapters for round pipe Ø 50 mm thickness 2 mm
EVA06	Conversion ring for adapters for tubular sections Ø 45 mm
EVA401	Wheel for round pipe Ø 50 mm
EVA402	Pair of adapters for octagonal pipe Ø 52 mm
EVA403	Pair of adapters for ZF round pipe Ø 54 mm
EVA404	Pair of adapters for round pipe Ø 58 mm
EVA406	Pair of adapters for round pipe Ø 60 mm
EVA407	Pair of adapters for octagonal pipe Ø 60 mm
EVA409	Pair of adapters for DEPRAT round pipe Ø 62 mm
EVA410	Pair of adapters for round pipes and corrugated round pipes with slanting ogive/ROLLER BAT Ø 63 mm
EVA411	Pair of adapters for ZF round pipe Ø 64 mm
EVA412	Pair of adapters for round pipe Ø 70 mm
EVA413	Pair of adapters for octagonal pipe Ø 70 mm
EVA414	Pair of adapters for round pipes and corrugated round pipes with slanting ogive Ø 70 mm
EVA415	Pair of adapters for round pipes and corrugated round pipes with slanting ogive/ROLLER BAT Ø 70 mm
EVA417	Pair of adapters for ZF round pipe Ø 80 mm
EVA418	Pair of adapters for round pipes and corrugated round pipes with slanting ogive/ROLLER BAT Ø 80 mm
EVA419	Pair of adapters for round pipes and corrugated round pipes with slanting ogive Ø 85 mm
EVA420	Pair of adapters for DEPRAT round pipe Ø 89 mm
ZXVB	Pair of octagonal star adaptors, diameter 60 mm
ZXVC	Pair of adaptors with ogive for sun shades, diameter 70 mm
ZXVL	Pair of adaptors with ogive for sun shades, diameter 78 mm
ZXVO	Pair of octagonal adapters for roller shutters, diameter 60 mm





