

## Roller garage doors



### General

The roller garage door is intended for use in private buildings and utility rooms. The door rolling shutter is made of aluminium profiles filled with freon-free polyurethane foam. The shutter is rolled-up on a steel winding shaft installed at the lintel inside of the room. The vertical rails are made of powder coated aluminium. The door in standard version is equipped with an electric drive, an indoor key switch, an outdoor key lock switch and a hand-crank for emergency opening. The door is installed behind the opening (indoors) in standard version. Doors driven by tubular actuators cannot be used in multi-vehicle garages or in any other industrial facilities where heavy duty operation is expected (above 4 cycles/h or 25 cycles/day).

**Note! The emergency hand-crank is not intended for normal operation of the door. It only enables operation upon power outages. The roller door cannot be equipped with a wicket door (additional entrance to the garage room is recommended).**

### Explanation of name codes:

- BR-77E** - Roller door with AW 77 profile, E - partial winding shaft cover;
- BR-77s** - Roller door with AW 77 profile, s - winding shaft case;
- BR-100E** - Roller door with AW 100 profile, E - partial winding shaft cover;

### Door rolling shutter

The rolling shutter is made of aluminium profiles with freon-free polyurethane foam. Two profile types are used: AW 77 (BR-77E and BR-77s doors) or AW 100 (BR-100E doors). The profiles are coated with highly abrasion resistant varnishes. The profiles are joined by shackles (profile brackets) which prevent displacement of profiles and protect from scratching. The bottom profile has a hollow rubber seal which adheres to the ground. Effective profile height: AW 77 = 77 [mm]; AW 100 = 100 [mm]

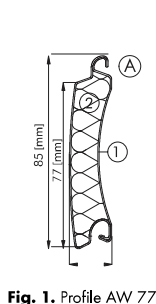


Fig. 1. Profile AW 77

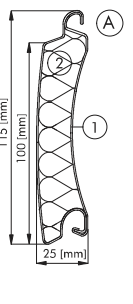


Fig. 2. Profile AW 100

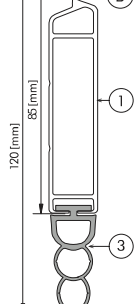


Fig. 3. Bottom profile

### Lock

Makes it possible to bolt the door from both sides. Deadbolts are made of steel galvanized bars connected with rods to the lock (installed inside the profile). The lock is fitted with locking sensors preventing the door from being opened when the lock is in the locked position. Plastic pull inside, rotating aluminium pull outside. Lock cylinder with three keys. The lock is fitted in the bottom profile of the door, on the side of the power supply. Full clear passage height cannot be achieved with the "Installation outside of the room" and "Lock" options. The lock option is available with the BR-77E and BR-77s doors (for the BR-100E doors, please check for availability with our Sales Department).



**Note! The marks on the profiles which appear during use result from natural wear and are not covered by warranty.**

**The same door colours specified in various orders (delivery lots) may vary slightly in shade.**

**Dewing on the glazings and aluminium profiles is normal, and it is not covered by the warranty.**

### Rails, case, cover

The aluminium profiles (without thermal break) are installed indoors along the side edges of the opening. They are provided with brush seals. The case / cover of specific door types are:

- **BR-77E** - the partial winding shaft cover is made of aluminium sheets. The side covers are made of powder coated galvanized steel sheet and connected by a galvanized steel profile.
- **BR-77s** - the case covers the entire circumference of the winding shaft. It is made of aluminium. The side covers are made of powder coated galvanized steel sheet.
- **BR-100E** - the partial winding shaft cover is made of aluminium sheets. The side covers are made of powder coated galvanized steel sheet and connected by a galvanized steel profile.

### Seal

The vertical rails are equipped with brush seals. The brush seal is also installed at the lintel. The first bottom profile has a hollow rubber seal.

### Colours

	BR-77E and BR-77s	BR-100E
Door shutter	RAL 5012, RAL 7016, RAL 7040, RAL 8014, RAL 8019, RAL 9010, RAL 3003, RAL 6005, RAL 6009, RAL 9006, RAL 7038, golden oak, dark oak	RAL 3000, RAL 5010, RAL 5012, RAL 7012, RAL 7016, RAL 8014, RAL 8019, RAL 9006, RAL 9007, RAL 9010.
Rails	<ul style="list-style-type: none"> <li>• RAL 8019 - for shutters in: golden oak, dark oak</li> <li>• pozostałe RAL - w kolorze kurtyny</li> </ul>	w kolorze kurtyny
Winding shaft cover (BR-77E, BR-100E) or BR-77s case	<ul style="list-style-type: none"> <li>• RAL 9010 or RAL 8019 - for shutters in: RAL 3000, RAL 3003, RAL 5010, RAL 5012, RAL 7012, RAL 7016, RAL 7040, RAL 3003, RAL 6005, RAL 6009, RAL 7038, RAL 8014, RAL 8019, RAL 9007, RAL 9006, RAL 9010,</li> <li>• RAL 8019 - for shutters in: golden oak, dark oak.</li> </ul>	
Glazed / ventilation profile	<ul style="list-style-type: none"> <li>• RAL 8003 - for shutters in: golden oak</li> <li>• RAL 8014 - for shutters in: dark oak</li> <li>• RAL, other - in the shutters colour</li> </ul>	in the shutters colour

Tab. 1. Colours of individual door components.

### Other RAL colour

The door leaf can be coated in any RAL colour (non-standard colour). This does not apply to colours with pearl, reflective or metallic effect, as well as to wood-effect colours. See „NOTE” on p. 1, item 1.

BR-100 door shutter is coated on both sides. Please contact the Sales Department to check whether the option is available. Lead time can be extended.

**Note! If multiple garage doors are ordered in the same colour, partial deliveries (lots) may have varying shades.**

### Drive unit and opening mechanism

The roller doors in standard version are equipped with: a 230 [V] AC tubular actuator, an up-down indoor key switch, an up-down outdoor key lock switch, a crank handle for emergency opening upon power outage (the crank handle is installed indoors on the actuator side in standard; its operation requires another access to the room).

**The actuator in standard version is installed on the right-hand side looking at the shaft case / cover.**

The door can be operated by remote control transmitters, see p.106.

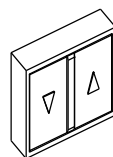


Fig. 13. Indoor key switch.

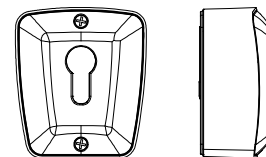


Fig. 14. Outdoor key lock switch.

### Glazed / ventilation profile

The glazed / ventilation aluminium profile without thermal break features no thermal insulation. The glazings in glazed and ventilation profiles are placed symmetrically along the profile width. The ventilation profiles are filled with perforated aluminium sheets with the hole diameter of approx. 7 [mm]. Up to 5 glazed or ventilation profile can be installed in one door. They cannot be installed directly one after another; each must be separated with a foam-filled profile. The glazed or ventilation profiles are coated in colours similar to the door shutter colours, see p. 109 table 1.

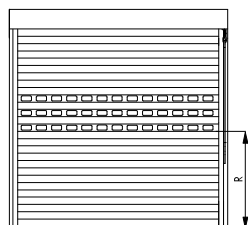


Fig. 4. The BR-77E door with the glazed profile, internal view.

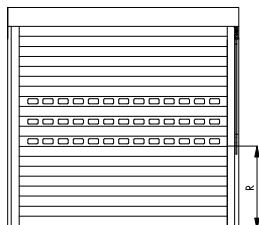


Fig. 5. The BR-100E door with the glazed profile, internal view.

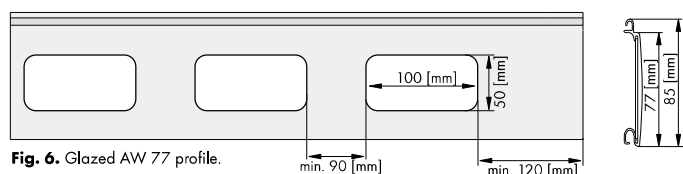


Fig. 6. Glazed AW 77 profile.

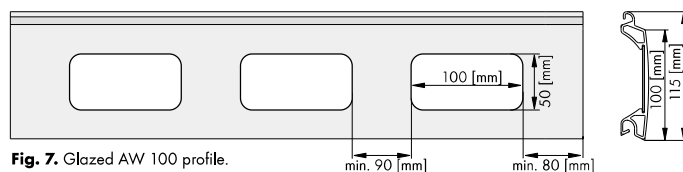


Fig. 7. Glazed AW 100 profile.

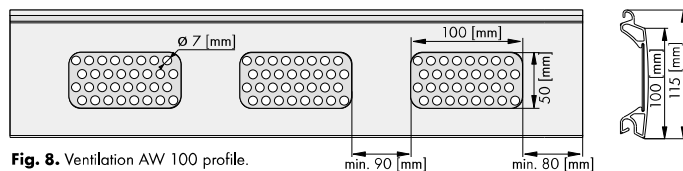


Fig. 8. Ventilation AW 100 profile.

**Note! The colour of ventilation or glazed profiles may differ in texture and shade from other parts of the rolling shutter. Dewing on the glazings and aluminium profiles is normal and it is not covered by the warranty.**

### Protection features

- Anti-prise protection - the BR-77s doors feature adjustable anti-prise protection; this protective feature in the BR-77E and BR-100E is provided by the cross member which binds the side covers.
- Safety brake which prevents uncontrolled falling of the door shutter.
- Safety edge (option)
- Photocells (option).
- External and/or internal coded lock (option).
- Door shutter interlock (option).
- Proximity card reader (option).

### Safety brake

The safety brake prevents uncontrolled falling of the door shutter.

### Shaft case / cover in door colours

Coating of the winding shaft case or cover in colours similar to the door shutter colours. Except for wood-effect colours. Contact the Sales Department for available finishes.

### Crank handle lock

The crank handles extended outdoors is protected from unauthorised access with a special grip and a padlock. Unavailable for BR-100E.

### Outdoor extension of the crank handle

If the room with the door has no other access, the optional outdoor extension of the crank handle must be used, where the handle shaft is extended to the outside through the lintel. Please specify the wall thickness when ordering. Unavailable for BR-100E.

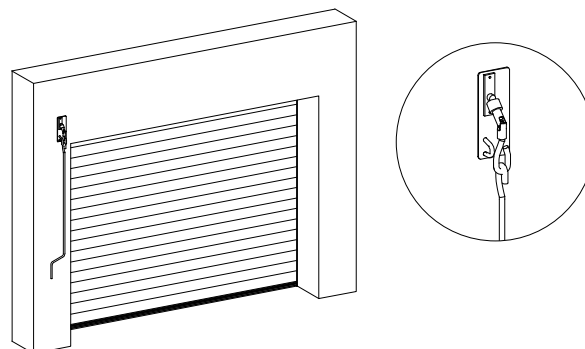


Fig. 9. Outdoor extension of the crank handle, external view.

### External installation

The option is available for BR-77s doors, and allows for installation of the roller doors outside of the room, on condition that the instruction manual is observed.

The option includes:

- „slanted“ side covers (galvanised and powder coated),
- triple weather strip installed around the whole perimeter of the shaft box (black colour),
- angle pcs.s to protect the joining place of seal, shaft box and cover (galvanised and powder coated in RAL 9005).

**Note! The door with external installation features as standard a hand crank to be installed through the wall (the wall thickness is to be stated at the time of ordering). The concave side of the profile forms the external side of the door and is visible from outside of the room. With safety edge installed, spiral cable is mounted on the convex side of the profile.**

### Door shutter curtain interlock

The interlock is an additional protection which prevents unauthorised persons from opening the door. The interlock is installed on the winding shaft. Available for the BR-77E garage doors in the dimensional range up to 2800 [mm] of width and 2700 [mm] of height, and the BR-77s up to 3500 [mm] of width and 2700 [mm] of height.

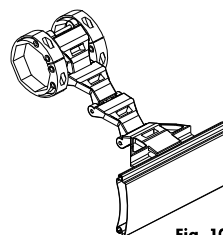


Fig. 10. Door rolling shutter interlock.

**Note! The number of locks depends on the door leaf weight. The value can be verified in AWTrader or by consulting the Sales.**

### General information

The BR-77E, BR-77s, and BR-100E roller doors are fitted with a tubular operator, Totmann and Automatik modes are available.

### The Totmann version

Components: tubular operator, pushbutton switch, key switch.

### The Automatik version

Components: tubular operator, central control unit with an integrated radio receiver, two four-channel remote control transmitters, safety edge, and a spiral cable with a cable box. The transmitter can be used for remote control only when the safety edge is used.



Fig. 13. Control Rollixo.

### Photocells <sup>(1)</sup>

The photocells (the transmitter and the receiver) protect from uncontrolled motion of the door leaf if there are obstacles in the opening which interrupt the IR beam. Photocells are a required safety feature in doors actuated by a remote control transmitter.

### RTS wall-mounted transmitter

The 2-channel transmitter works with the RF receiver to enable wireless drive unit control. 3V CR2430 battery powered. The protection rating is IP54. The operating range is 30 m. Dimensions: 104 x 74 x 26 [mm]. Operating temperature range: -20°C to +60°C. Plastic enclosure.

### Digipad RTS code keypad

The Digipad works with the RF receiver to enable wireless drive unit control. The keypad is a 2-channel device which exchanges encrypted data with the drive unit. 3V CR2450 battery powered. The protection rating is IP 54. The operating range is 30 m. Dimensions: 105 x 75 x 25 [mm]. Operating temperature range: -20°C to +60°C. Plastic enclosure.

### RTS RF receiver

Enables control over other drive units with the PULSAR RTS transmitters. The RF receiver is a 2-channel device which can be linked to a maximum of 16 transmitters. Supply voltage: 12-24 [V] AC. The protection rating is IP 55. Dimensions: 110 x 110 x 40 [mm].

### LED warning lamp

An orange light which indicates that the door is moving. Supply voltage: 24 [V].

### Proximity reader <sup>(1)</sup>

A reader which allows access control for the door with the use of proximity cards or keyfobs (up to 120 cards/keyfobs). Protection rating: IP 67. Supply voltage: 12 [V] DC. Power supply adaptor included.

### Proximity card / keyfob <sup>(1)</sup>

The card and the keyfob are intended for the proximity card reader.

### External coded lock ROGER <sup>(1)</sup>

The accessory enables operating the door with a code. Supply voltage: 12 [V] DC (power supply adaptor included). Protection rating: IP 67.

### Outdoor key lock switch

A switch intended for operating the door with a key. It is usually installed outdoors or where access to the door must be strictly controlled.

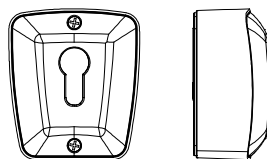


Fig. 11. Outdoor key lock switch.

### GSM control system

Enables toll-free control of the drive unit with an authenticated mobile or landline phone from any place in the world. This is a single-channel device. Light: 10 users, Full: 2000 users. Supply voltage: 9-30 [V] AC/DC.

### Elektromat SIK drive

The BR-77s doors can be operated with a three-phase compact drive (Elektromat SIK Totmann or Elektromat SIK Automatik rated at ED 60%) which allows an increased frequency of use. The drive is installed outside of the case.

If this drive type is used, the minimum required headroom is 370 [mm] irrespective of the door height, whereas the minimum required operating space on the drive side is 400 [mm]. Contact the Sales Department whether the option is available.

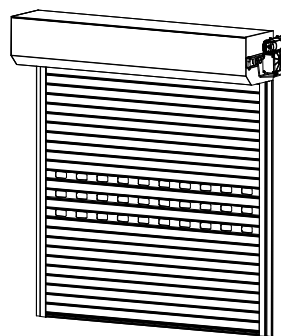


Fig. 12. Door with the three-phase drive.

### Minimum protection level of the main closing edge required by PN-EN 12453 and PN-EN 13241-1.

Door actuation method	Method of use		
	Trained door operators (private property)	Trained door operators (public property)	Untrained door operators (public property)
dead man's control, the door should be observed (Totmann version)	SP	SPK	⊗
impulse control, the door should be observed (Automatik version)	KLB BF	KLB BF	KLB BF
impulse control, the door should not be observed (Automatik version)	KLB BF	KLB BF	KLB BF
automatic control (Automatik version with automatic closing)	KLB BF	KLB BF	KLB BF

Tab. 2. Minimum protection levels.

- safety edge - required
- photocell barrier - required
- photocell barrier - extra option
- key switch operated control without electric latching
- key-lock switch operated control without electric latching
- not permitted

