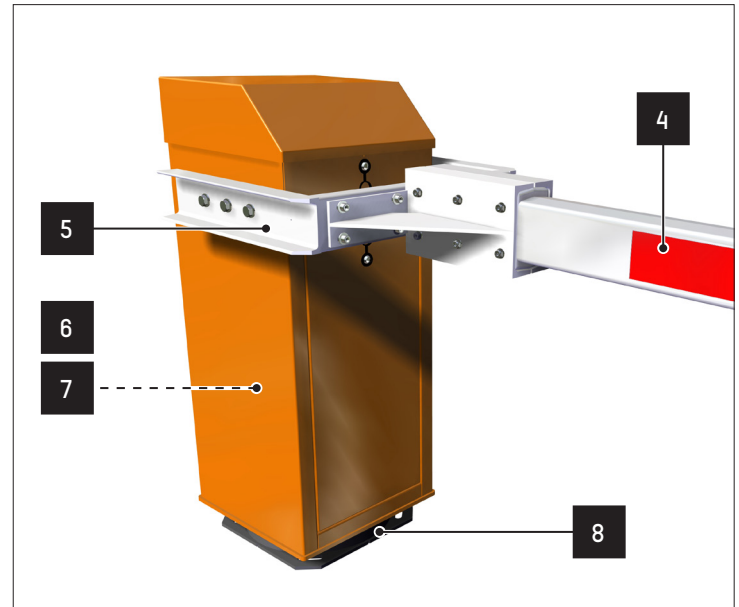
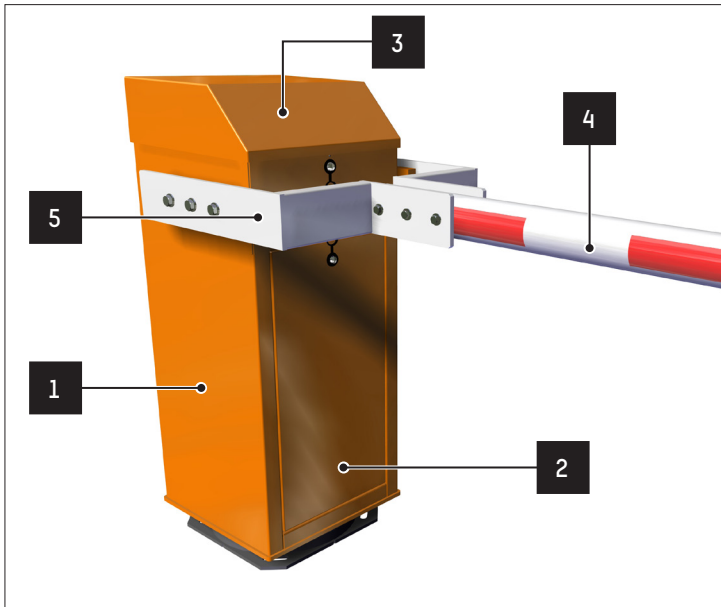


# BL 45

## Technical datasheet

Rev. 08 • Update 04/2025

**AUTOMATIC**  
SYSTEMS

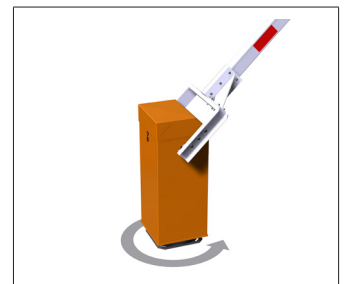


Long span rising barrier particularly suitable for secure control of major roads such as bridges, tunnels, level crossings, mountain passes, etc.

### DESCRIPTION

1. Sheet metal body folded and welded, from 3 to 8 mm thick.
2. Side and front doors with peripheral sealing joint and lock, ensuring easy access to the mechanism.
3. Removable top cover, with lock and key.
4. **Model BL 45A**  
Round aluminium central arm, lacquered white with red reflective strips.
- Model BL 45F**  
Rectangular glass fibre central arm, with a white polyester resin coating with red reflective strips.
5. Solid driving shaft for the arm, diameter 50 mm, mounted on 2 bearings lubricated for life.
6. Electromechanical assembly:
  - Reversible three-phase asynchronous gear motor, ensuring protection of the mechanism in the event of forced lifting of the arm due to fraudulent action.
  - Secondary transmission on gearwheel and sprocket wheel. Maintaining the arm in its two extreme positions (open and closed), as well as during the Stop command, achieved by means of an electromagnetic brake.
  - Frequency inverter ensuring progressive accelerations and cushioned decelerations, for movement without vibration, direction inversion without jolts (reopening) and increased protection of the mechanism.
  - Electronic limitation of the electromechanical assembly torque allowing for the immediate stop of the arm during closing in the event of an obstacle.
  - Analog sensor.

- Balancing of the arm by means of one or more compression springs, depending on the weight of the arm.
  - Lever for manual lifting of the arm (except for the automatic opening option).
7. Parametrisable electronic control board allowing for various control options and/or additional accessories.
  8. Rotating base with breaker block in case of impact and report of housing position by floating contacts.



### STANDARD RAL COLOURS



**RAL 2000 (\*)**  
Orange



**RAL 3020**  
Red



**RAL 7016**  
Anthracite grey



**RAL 9010**  
White

(\*) Standard color.

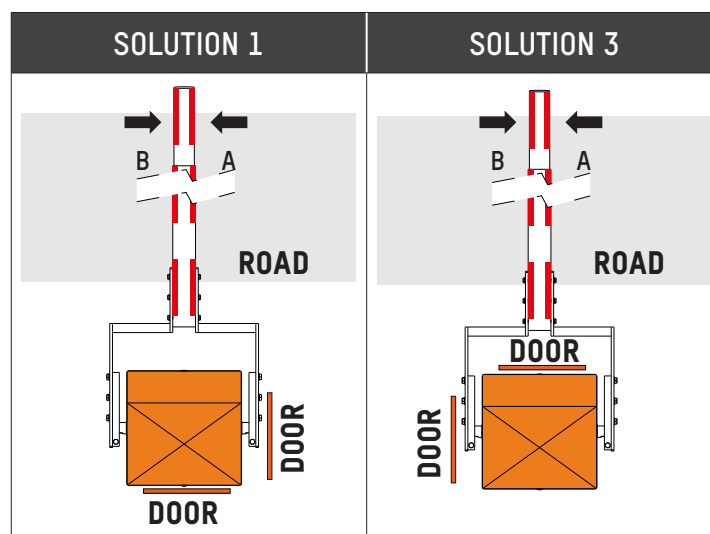
All other colors must be specified when ordering.

**Note :** These RAL references are available for free.



[www.automatic-systems.com](http://www.automatic-systems.com)

## CONFIGURATIONS



## STANDARD TECHNICAL CHARACTERISTICS

Power supply	Single-phase 230 VAC - 50/60 Hz. <sup>(1)</sup>
Consumption	450 W
Motor	Three-phased asynchronous 250W
Reversible ring and pinion speed reducer	
Useful arm length (L)	<b>Model BL 45A</b> Round aluminium arm, length 6 to 12 m by 1m multiples, made up of 2 or 3 segments fitting into each other of a diameter of 100 - 90 - 84 mm and which may be guyed by galvanized steel cables (depending on length or options) <b>Model BL 45F</b> Rectangular glass fibre arm, 145 x 85 mm, in 2 segments 6 to 10 m in length by 1m multiples
Operation not hampered by 120 km/h winds	
Ambient operating temperature	Between -25 and +60°C (without optional heating)
Relative ambient humidity	95% without condensation
Minimum opening/closing time	3.5 to 8 sec.
Net weight (without arm)	250 kg
MCBF (Mean Cycle Between Failure)	<b>5,000,000</b> cycles, in compliance with recommended maintenance
IP rating	IP44
CE	Complies with European standards.

<sup>1</sup> Do not connect to an isolated ground network or a high impedance earthed industrial network.

## SURFACE TREATMENTS

- Zinc-coated internal mechanical parts.
- Door and cover: stainless steel + structured paint.
- Frame : primer + structured paint.

## WORKS TO BE PROVIDED BY THE CUSTOMER

- Adapted ground fastening
- Power supply
- Wiring towards eventual external peripherals

**Note:** Follow the installation plan

## OPTIONS

	BL45 A	BL45 F
<b>ARMS</b>		
• Double arm stretcher (Above and below the arm). <sup>1</sup>	•	
• Arm locking system - Closed position. <sup>2</sup>	•	•
• Arm locking system - Open position. <sup>2</sup>	•	•
• Arm locking system - Open & closed. <sup>2</sup>	•	•
• Limit switch for info - Arm position in case of power failure.	•	•
<b>TIP SUPPORTS</b>		
• Folding tip support.	•	•
<b>SECURITY &amp; SAFETY</b>		
• Opening protection of both cover & door - Information by a dry contact. <sup>3</sup>	•	•
<b>CONTROL &amp; COMMAND</b>		
• Push button box - 2 buttons (opening / closing).	•	•
• Push button box - 3 buttons (opening / closing / stop).	•	•
• Push button box - 2 push buttons + 1 switch (3 positions). <sup>4</sup>	•	•
• Inductive loop for detection.	•	•
• Presence sensor for inductive loop.	•	•
• Human Machine Interface colour screen with keypad for AS1620 logic board (AS1621).	•	•
• Ethernet interface (AS1622).	•	•
• SD memory card for AS1620 Ethernet board - Industrial grade.	•	•
• Input / output (I/O) extension card for AS1620 logic board (AS1623).	•	•
<b>SIGNALISATION</b>		
• LEDs on arm (Flashing lights (red) when closed) - Per pair.	•	•
• Traffic lights (Ø 180 mm) R2 - Orange LEDs - Fixed on the arm.	•	•
• Traffic lights (Ø 300 mm) R24 - Red LEDs - Fixed on a support post on the barrier.	•	•
• Traffic lights (Ø 300 mm) R24 - Red LEDs - Supply.	•	•
• Acoustic alarm 105 dB (Ø 265 mm) - G2 type (external mounting).	•	•
• Aluminium traffic sign (Ø 450 mm) - Class II.	•	•
<b>AESTHETICS</b>		
• Paint of another RAL colour.	•	•
• Treatment for aggressive saline environment. <sup>5</sup>	•	•
<b>ENVIRONMENT</b>		
• Thermostatic heating - Heating for operation until -45°C.	•	•
<b>CASES</b>		
• Painted IP66 steel case (dimensions 600x380x120mm) on the housing (with a lock & a key settled with a cable retainer).	•	•
• Plastic IP66 case (dimensions 290x340x128mm) in the housing.	•	•
• Painted IP66 stainless steel case (dimensions 600x380x120mm) on the housing (with a lock & a key settled with a cable retainer).	•	•

**Note :** For restrictions on options, please contact us.

<sup>1</sup> Not suitable with an offset stirrup

<sup>2</sup> Not suitable with electromagnetic tip support / electrolocked tip support.

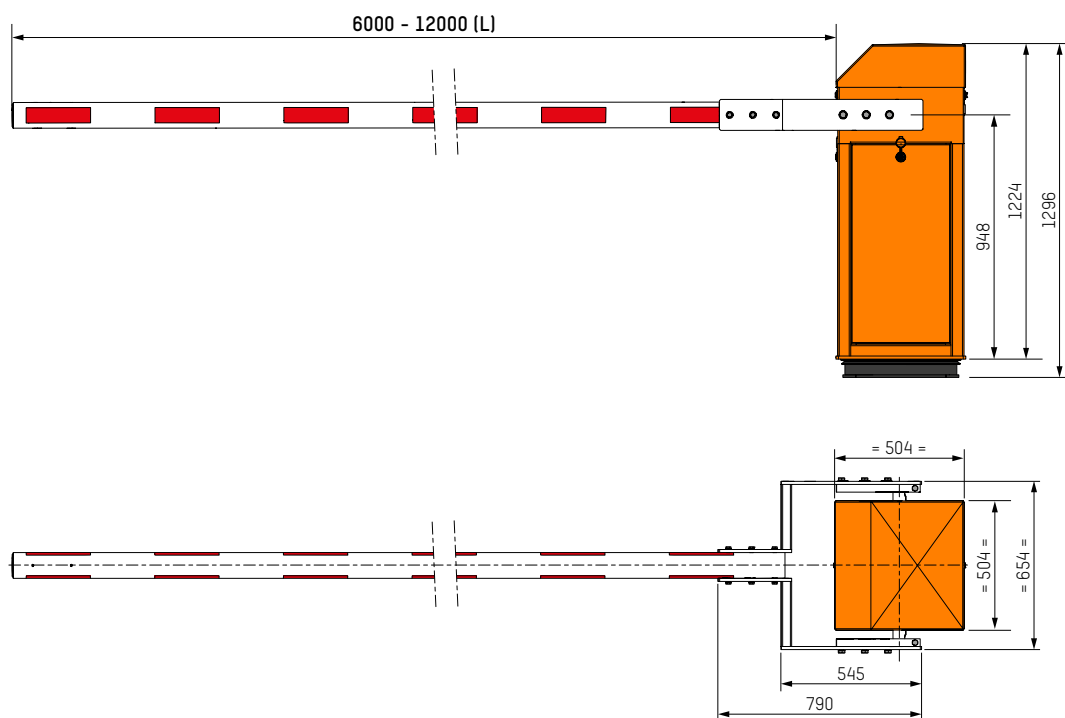
<sup>3</sup> ☐ Standard : info sent back to terminal block without action;  
☐ Please contact us for frequency inverter cut-off (forbidding any movement);  
☐ Please contact us for power outage;

<sup>4</sup> Opening/Closing + switch for Automatic or Manual mode.

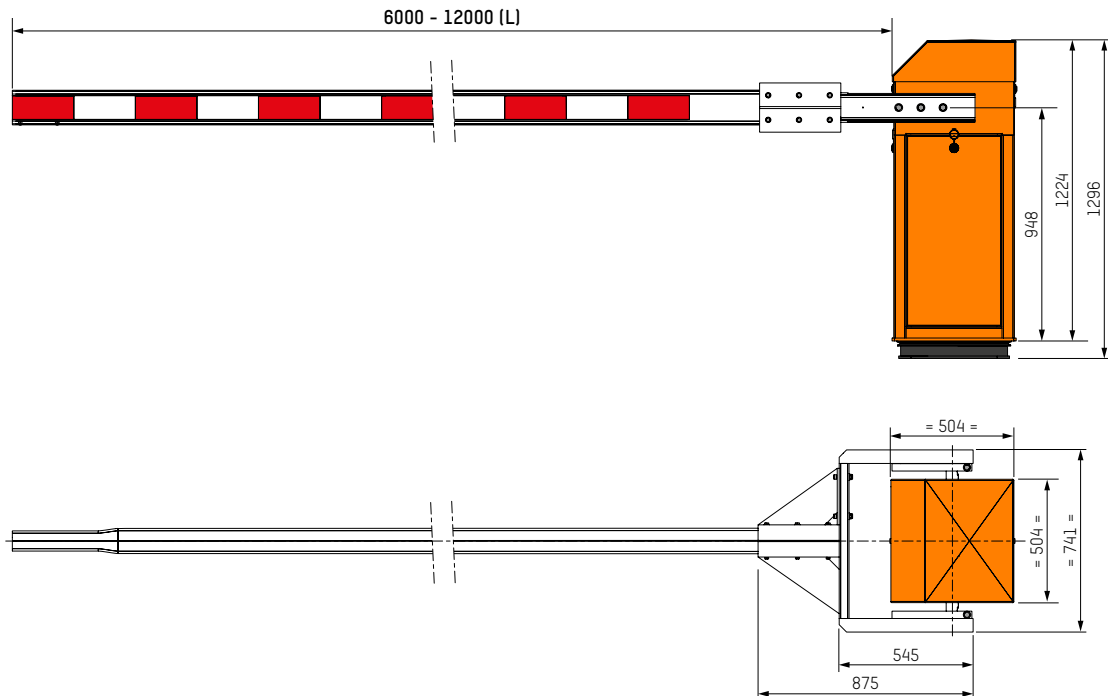
<sup>5</sup> Recommended for an installation within 10 km of the coast: sandblasting + Alu Zinc plating 80µm outside (40µm inside) + polyzinc 80µm + 80µm powder coat.

### STANDARD DIMENSIONS (MM)

#### BL 45A - Round aluminium arm



#### BL 45F - Rectangular glass fibre arm



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