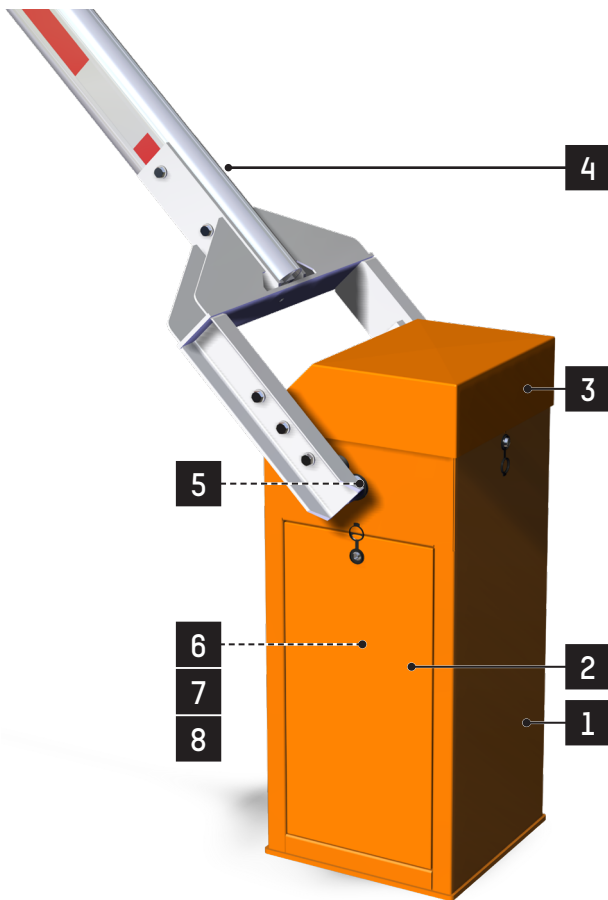


BL 43

Technical datasheet

Rev. 18 • Update 04/2025



The **BL 43** is a **rapid** rising barrier, short- and medium-range with reinforced oval section arm, for installation on public roads: parking, traffic management, etc.

STANDARD RAL COLORS



RAL 2000 (*)
Orange



RAL 3020
Red



RAL 7016
Anthracite grey



RAL 9010
White

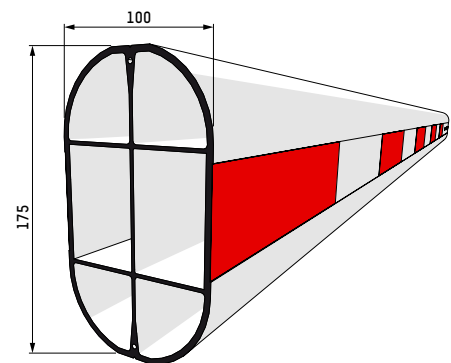
(*) Standard color.

All other colors must be specified when ordering.

Note: These RAL references are available for free.

DESCRIPTION

1. Sheet metal body folded and welded, from 3 to 8 mm thick.
2. Lateral and frontal doors with peripheral sealing joint and lock, ensuring easy access to the mechanism. Two configurations are possible for their installation (see illustration).
3. Removable top cover, with lock and key.
4. Central oval reinforced section arm* measuring 175 x 100 mm, in aluminium, white lacquered with red reflective strips.

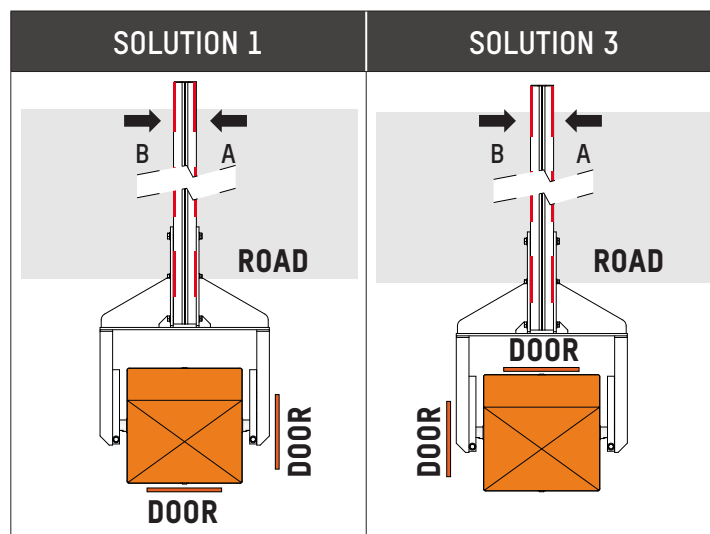


* Weight of the arm, per linear metre = 6.2 kg/m.

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 after a STOP command, is 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. Connecting terminal block on the control board, in order to provide, for example, the status of the presence detectors.



CONFIGURATIONS



STANDARD TECHNICAL CHARACTERISTICS

Power supply	Single-phase 230 VAC - 50/60 Hz + ground ^[1]
Consumption	450 W
Motor	Three-phased asynchronous 250W
Reversible ring and pinion speed reducer, service factor 1.2	
Useful arm length (L)	2 to 6 m, in increments of 0.5 m
Operation not hampered by 120 km/h winds	
Ambient operating temperature	Between -20 and +50°C (without optional heating)
Relative ambient humidity	95% without condensation
Minimum opening/closing time	Up to 3,2 sec., depending on the configuration and on the application.
Net weight	230 kg (without arm)
Weight of the arm	20 to 30 kg, depending on length and without options
MCBF (Mean Cycle Between Failure)	5,000,000 cycles, in compliance with recommended maintenance
Sound level	<70 db(A) ^[2]
IP rating	IP44
CE	Complies with European standards.

[1] Do not connect to an isolated ground network or a high impedance earthed industrial network.

[2] Measured at 1 m from the machine surface and at a height of 1.60 m above the floor according to ISO3744. No hearing protection equipment required.

SURFACE TREATMENTS

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

Total thickness of the surface treatment exceeds 160 µm.

WORKS TO BE PROVIDED BY THE CUSTOMER

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

Note: Follow the installation plan (CH6943).

OPTIONS

ARMS

- Folding rigid aluminium skirt.
- Offset stirrup (Left or Right).
- Foam protection under the aluminium arm (for higher speed within EN 12453).
- Automatic opening of the arm in case of power failure.
- Arm locking system: open and/or closed position.^[3]
- Limit switch for info (Arm position in case of power failure).

TIP SUPPORT

- Height adjustable tip support.
- Electromagnetic tip support - Ø 100 mm or oval arm.
- Vandal-proof tip support.
- Anti-vandalism tip support with electromagnetic suction device.
- Electro-locked tip support.
- Anti-Ram tip support.

SECURITY & SAFETY

- Rotating base with reporting of information on the housing position.^[4]
- Vandal-proof package (locking of doors and cover with belts and padlocks). Vandal-proof protection (bolt covers for stirrup and arm).
- Opening protection of both cover & door - Information by a dry contact.

CONTROL & COMMAND

- 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).^[5]
- Fireman emergency opening embedded in the housing (11mm spanner wrench).
- Programmable clock (Weekly or Yearly).
- Key switch on the housing.^[6]
- Radio transmitter/receiver - 2 or 4 channels.
- Inductive loop for vehicle detection.
- Presence sensor for inductive loop.
- Photo-electric cell (Transmitter / Receiver or Reflex).
- Support post for photo-electric cell (H = 0,7 m).
- Cell mounting - Transmitter + Receiver or Reflex.
- Ultrasonic detector installed in the housing under the arm (protection cover included).^[7]
- Human Machine Interface colour screen with keypad for AS1620 logic board (AS1621).
- Ethernet interface (AS1622).
- SD memory card for AS1620 Ethernet board.
- Input / output (I/O) extension card for AS1620 logic board (AS1623).
- Totalling counter (number of vehicle operations or with resetting).
- Counter / Count down (parking : in - out = total).
- Laser sensor - On separate post.
- Laser sensor - fixed on barrier housing.
- Remote control for laser sensor.
- Reference point for laser sensor fixed on post.
- Reference point for laser sensor fixed on tip support.
- Double laser sensor - fixed on barrier housing.

SIGNALISATION

- LEDs on arm - Per pair (Flashing lights (red) when closed).
- Traffic lights (Ø 100 mm) - Red/green LEDs - Supply.
- Traffic lights (Ø 200 mm) - Red/green LEDs - Fixed on a support post on the barrier.
- Traffic lights (Ø 200 mm) - Orange LEDs - Fixed on a support post on the barrier.
- Traffic lights (Ø 200 mm) - Red/green LEDs - Supply.
- Traffic lights (Ø 200 mm) - Orange LEDs - Supply.
- Support post (H = 2,7 m) for traffic lights - Supply.
- Wall bracket for traffic lights (Ø 100mm)
- Acoustic alarm 100dB (internal mounting) during the barrier closing movement.
- LED boom lighting for arm up to 3 to 6 m.^[8]
- Integrated display module for semi-reinforced and reinforced arms.
- Aluminium composite traffic sign (Ø 300 mm).
- LED flashing light on the cover.^[9]
- LED flashing light with grid on the top cover.^[9]
- Vandal-proof LED module on the cover.

AESTHETIC

- Non standard colour.
- Treatment for aggressive saline environment.^[10]
- Steel raised base (RAL 9005 painted).

POWER SUPPLY

- Power supply 120 V - 50/60 Hz.

ENVIRONMENT

- Thermostatic heating - Heating for operation until -25°C.
- Thermostatic heating - Heating for operation until -45°C.

CASES

- Painted IP66 steel case (dimensions 600 x 380 x 120 mm) on the housing (with a lock & a key settled with a cable retainer).
- Plastic case IP66 (dimensions 290 x 340 x 128 mm) in the housing.
- Painted IP66 stainless steel case (dimensions 600 x 380 x 120 mm) on the housing (with a lock & a key settled with a cable retainer).

Note: For restrictions on options, please contact us.

(3) Not suitable with electromagnetic tip support / electrolocked tip support.

(4) Not suitable with folding fence / folding rigid skirt

(5) Opening/Closing + switch for Automatic or Manual mode.

(6) Automatic / Locked open / Locked closed.

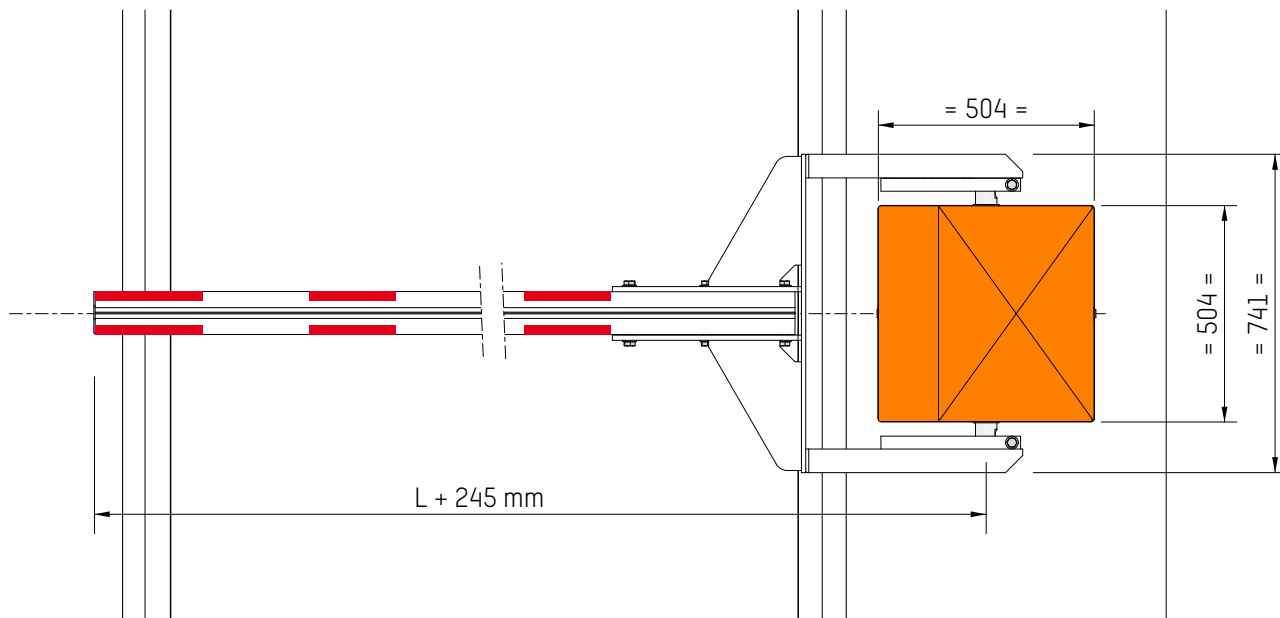
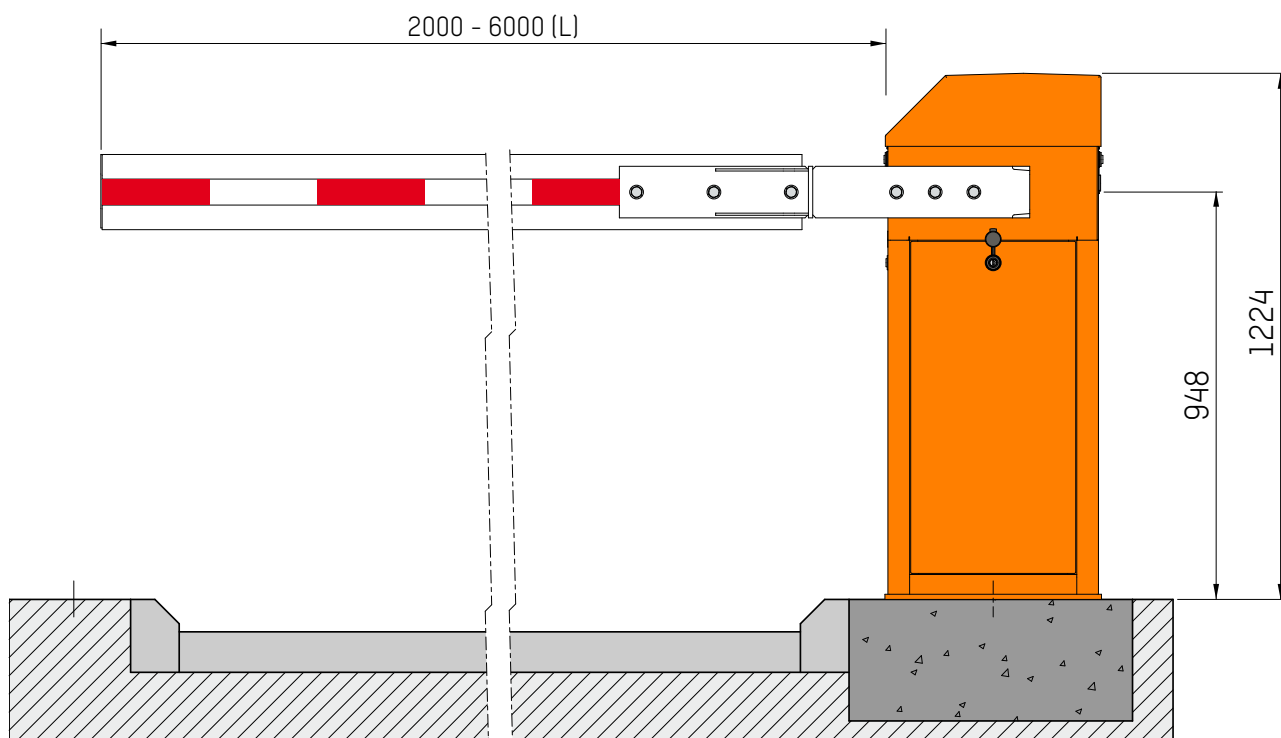
(7) Not considered as a safety device if used alone.

(8) Incompatible with swing-off oval arm

(9) Flashing when opening/closing movement and when open - Off when closed.

(10) 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)



Headquarters

Avenue Mercator, 5
1300 Wavre - Belgium



sales.asgroup@automatic-systems.com



+32.(0)10.23.02.11



www.automatic-systems.com



BL43-FT-EN-18