

BL 229

Technical datasheet

Rev. 22 • Update 09/2025

AUTOMATIC
SYSTEMS

DESCRIPTION

1. Housing made of folded and welded sheet steel, from 2 to 6 mm thick, protected by cataphoresis and two coats of structured paint (standard color: orange RAL2000).
2. Internal mechanical elements treated by electrogalvanisation.
3. Side door giving access to the mechanism, with security lock.
4. Removable cover, locked by key.
5. Aluminium tube boom arm, varnished white with red reflecting stripes and end-sealing.
6. Arm shaft mounted on two life-lubricated ball bearings. The protrusion of the shaft, centred on the housing side, allows it to be easily reversed from one side of the housing to the other: arm on the left or on the right of the framework housing.
7. Arm balancing by springs.
8. Electro-mechanical assembly including:
 - An asynchronous three-phase geared motor.
 - Movement transmission by crankshaft-rod device insuring mechanical locking of the boom arm in end positions.
 - Automatic barrier unlocking device in case of power failure, opening then being possible by hand.
 - Frequency converter ensuring progressive accelerations and controlled decelerations, for a vibration-free movement and enhanced protection of the mechanism.
 - Analogue inductive limit switch that detects the extreme positions (open/close) and informs at any time of the exact position of the arm for a better control of the movement.
9. Lever for manual unlocking (if not automatic mode set up).
10. Control board enabling various additional commands and/or accessory options
11. Adjustable information contacts:
 - State of the barrier's position (open or closed),
 - State of the presence detectors,
 - Command for master-slave barriers (movement of one barrier controlled by the other barrier),
 - ...
12. Fixing frame to be fixed in a concrete base to be provided by the customer.

The **BL 229** rising barrier is a universal barrier: its high performance and great reliability enable it to be used in a wide range of applications.

Numerous accessories offered, allow to meet various installation constraints and various requirements in terms of security.

STANDARD RAL COLOURS



RAL 2000 (*)
Orange



RAL 3020
Red



RAL 7016
Anthracite grey



RAL 9010
White

(*) Standard color.

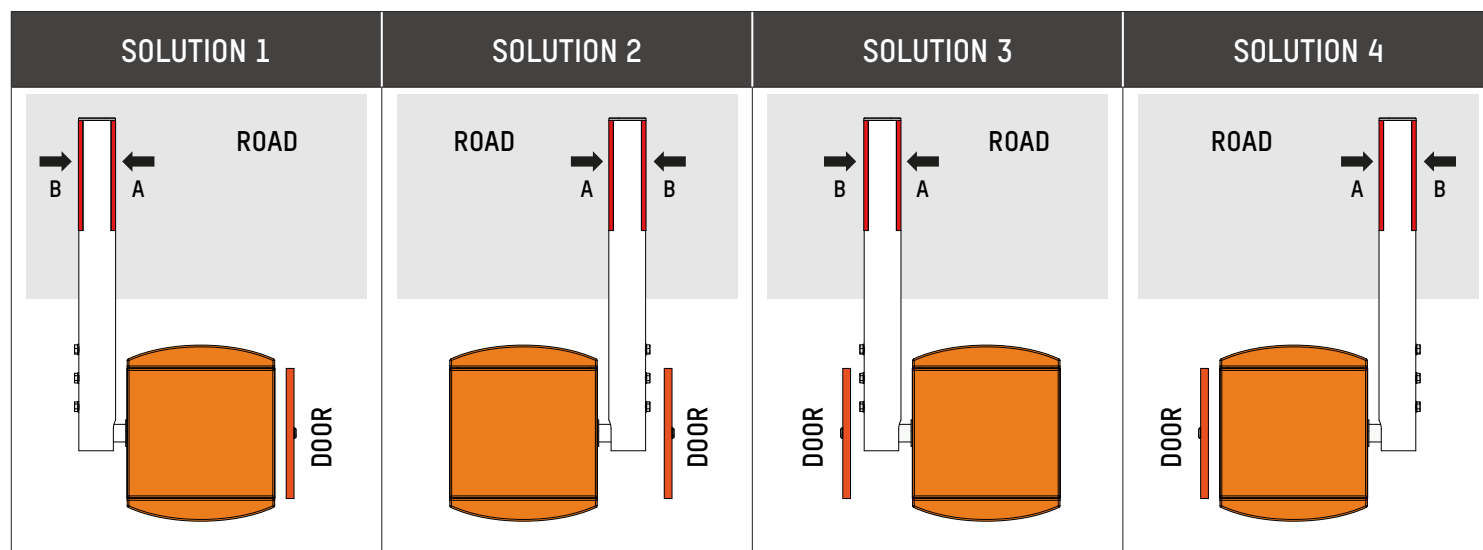
All other colors must be specified when ordering.

Note: These RAL references are available for free.



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CONFIGURATIONS



STANDARD TECHNICAL CHARACTERISTICS

Power supply	Single phase 230VAC, 50/60Hz + Ground ⁽¹⁾ .
Consumption	335 W (at maximum speed and without options)
Motor	Three-phase asynchronous 250W motor
Gearbox	Life-lubricated worm-screw speed reduction unit.
Type of arm	Aluminium tube boom arm, with round section diameter 84 mm.
Minimum operation time	Adjustable between 1,2 and 4 sec. according to 3 profiles : 1. Standard ⁽²⁾ 2. Intermediate ⁽³⁾ 3. Maximum ⁽⁴⁾
Ambient operating temperature	Between -20 and +50°C (without optional heating)
Relative ambient humidity	max. 95% without condensation
Free passage (L)	From 2 to 6m ⁽⁵⁾
MCBF (Mean cycles between failures)	10,000,000 cycles, in compliance with recommended maintenance
Net weight	83 kg (excluding arm)
IP rating	IP44
Sound level	<70db(A) ⁽⁶⁾
CE	Complies with European standards

⁽¹⁾ Not to be connected to a floating network or to high impedance earthed industrial distribution network.

⁽²⁾ Standard speed - Impact force in accordance with EN 12453.

⁽³⁾ Intermediate speed - Impact force in accordance with EN 12453 with the addition of a foam protection under the arm.

⁽⁴⁾ Maximum speed - The installer must ensure that the installation conforms to the standard, e.g. with dead man operation.

⁽⁵⁾ Between 5 and 6 m, a tip support is delivered with the barrier.

⁽⁶⁾ Measured at 1 m from the surface of the machinery and at a height of 1.60 m above the ground; according to ISO 3744. No hearing protection needed.

WORK TO BE PROVIDED BY THE CUSTOMER

- Ground installation
- Power supply
- Wiring to any external devices.

Note: Follow the installation plan.

OPTIONS

ARMS

- Articulated round arm.
- Articulated flat arm.
- Folding rigid aluminium skirt.
- Back oval arm swing-off (swinged-off arm detection device included).
- Carbon Protecta® arm - Lg. 2.5m; 3m; 3.5m.
- Foam protection under the aluminium arm (for higher speed within EN 12453).
- Rubber protection profile.
- Automatic opening of the arm at 45° in case of power failure. ^[1]
- FLimit switch for info - Arm position in case of power failure.
- Boom breaking detection on round boom.

TIP SUPPORT

- Height adjustable tip support.
- Electromagnetic tip support - Ø 80 mm or Ø 84 mm arm.
- Folding tip support.

SECURITY & SAFETY

- Opening protection of both cover & door - Switch-off of the frequency inverter.

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). ^[2]
- Programmable clock - Weekly (locked open during a period of time).
- Programmable clock - Yearly (locked open during a period of time).
- Key switch on the housing (Automatic / Locked open / Locked closed).
- Radio transmitter - 2 channels.
- Radio receiver - 2 channels. + Antenna.
- Radio transmitter - 4 channels.
- Radio receiver - 4 channels. + Antenna.
- Inductive loop for detection - Car (2 x 1 m / connection 5 m).
- Inductive loop for detection - Truck (3,5 x 1 m / connection 20 m).
- Presence sensor - Single channel - for inductive loop.
- Presence sensor - Double channel - for inductive loop.
- Photo-electric cell - Transmitter / Receiver.
- Photo-electric cell - Reflex.
- Support post for photo-electric cell (H = 0,7 m).
- Cell mounting - Transmitter + Receiver or Reflex.
- Ultrasonic detector with protective cover included. ^[3]
- Human Machine Interface colour screen with keypad for AS1620 logic board (AS1621).
- Ethernet interface.
- SD memory card for Ethernet board - Industrial grade.
- Input / output (I/O) extension card.
- Totalling counter (number of vehicle operations).
- Totalling counter with resetting.
- 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.
- Extension board AS1049 (electronic board for third-party traffic lights).
- Acoustic alarm 100dB (internal mounting) during the barrier closing movement.
- LED boom lighting for arm up to 3m, 4m, 5m and 6m.
- Aluminium composite traffic sign (Ø 300 mm).
- LED flashing light on the cover. ^[4]
- LED flashing light with grid on the top cover. ^[4]

AESTHETIC

- Non standard colour.
- Treatment for aggressive saline environment. ^[5]
- Raised base - 60 mm thick - RAL9005 painted steel.

POWER SUPPLY

- Power supply 120V - 50/60Hz.

ENVIRONMENT

- Thermostatic heating - Heating for operation until -35°C.
- Cooling kit (frequency inverter & housing door).

Note: For restrictions on options, please contact us.

(1) This option is limited to 4 m.

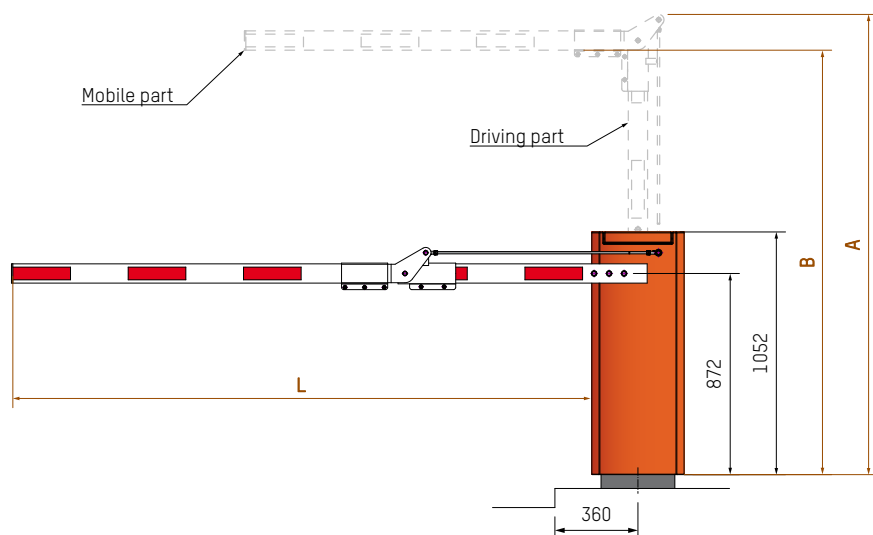
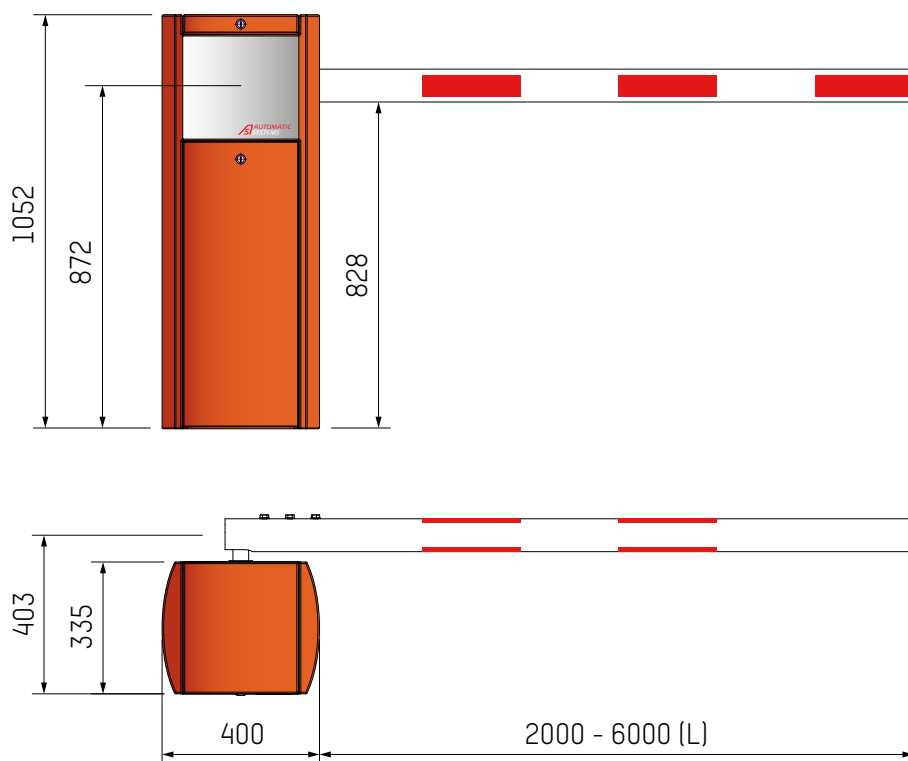
(2) Opening/Closing + switch for Automatic or Manual mode.

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

(4) Flashing during opening/closing movement and in open position - Off in closed position

(5) 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)



¹⁹⁾ Folding arm (option)

	Driving part length (mm)	A (mm)	B (mm)	L (mm)
Round arm	1030	1995	1840	2500 to 5000
	1130	2095	1940	
	1230	2195	2040	
	1330	2295	2140	
Flat arm	1000	1972	1810	2200 to 3000
	1100	2072	1910	
	1200	2172	2010	
	1300	2272	2110	

