

Access controlled... Future secured.



# BL 229

UNIVERSAL RISING BARRIER

**AS** **AUTOMATIC**  
**SYSTEMS**  
LEBER GROUP

VEHICLE



## BL 229

### One model... All applications

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: traffic management, parking areas, industrial sites... and even toll roads.

#### PERFORMANCE

- Fast and smooth opening and closing (from 0.6 sec)
- Assimilation of major flows of vehicles
- Designed for intensive use
- Reversible movement at any time

#### RELIABILITY

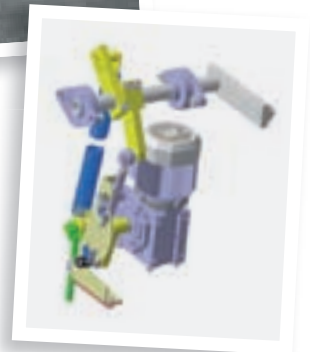
- Automatic Systems 40 years experience
- Robust housing designed to protect the components, even when hit by a vehicle
- Long life cycle

#### MODULARITY

- Designed for many applications and environments
- Unlocking is possible in case of power failure
- Numerous accessories offered, allowing to meet various installation constraints, and various requirements in terms of security
- Change of configuration or operation possible, even after initial installation of the product
- Equipped with AS1320 control unit

#### SECURITY

- Fast closing after the passage of each vehicle
- Mechanical locking in open and closed positions
- Many accessories enable to adjust the security level (skirts, fences, tip supports...)



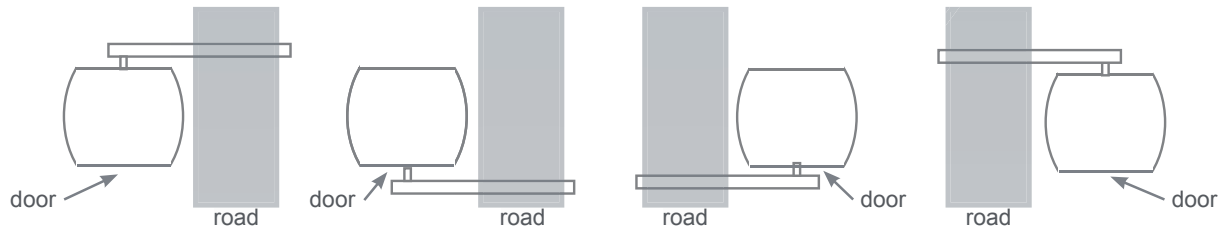
### Automatic Systems AS1320 control board: for a tailor-made solution

- All barrier functions are managed by software and can be customised to fit your application (opening speed, accessories management, command, safety, security...)
- Compliant with any access control device (presence detectors, photocells...)
- User friendly interface for a precise configuration of the barrier behaviour
- The barrier is perfectly integrated to your security system (many inputs/outputs for command and reporting, RS232 port...)

# THE BL 229 BARRIER IS MODULAR, AND IDEAL FOR ALL YOUR APPLICATIONS

## THE HOUSING

- Interchangeable handling solutions



## THE ARM

- Boom length from 2 meters to 6 meters



○ Straight arm



○ Boom lighting



○ Folding fence



○ Folding arm



○ Folding skirt

## TOLL APPLICATIONS



○ Swing-off device



○ *Protecta* carbon fibre arm



○ Automatic rehinging system

## BENEFITS

- Tailor-made solution
- High vehicle flows
- Easy integration to your site
- Low maintenance costs
- Long term investment

## MARKETS

- Perimeter access
  - Residential
  - Tertiary sector, hospitals
  - Industries
- Parking areas
- Toll roads

## OPTIONS AND ACCESSORIES

For an ideal solution, find below options and accessories that enable to adjust the security level, the control and a perfect integration of the barrier in your environment.

### SECURITY

- Electromagnetic tip support
- Folding skirt
- Folding fence
- ...



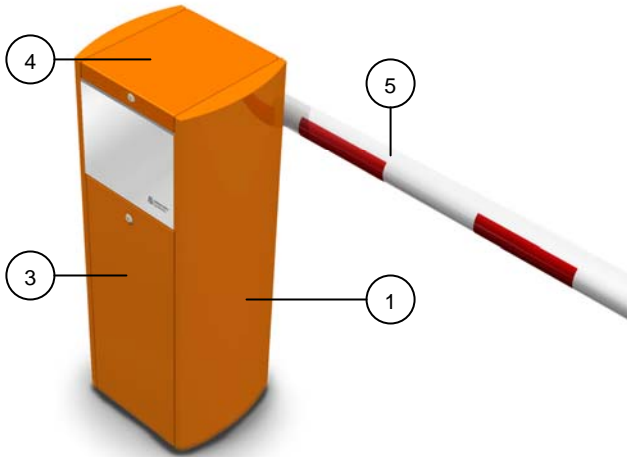
### DETECTION & COMMAND

- Push button boxes
- Radio transmitter and receiver
- Inductive loops
- Presence detectors
- Photo-electric cells
- ...

### CUSTOMISATION

- Folding arm
- *Protecta* carbon fibre arm
- Swing-off arm
- Rehinging system
- Boom or hood lighting
- Traffic lights
- Colour
- ...



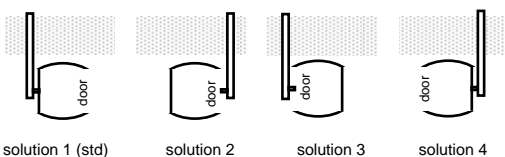


Versatile rising barrier for medium to high flow traffic: perimeter fencing, traffic management, parking areas, etc.

## 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 colour: 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.
  - Limit switches activated by leaf spring.
9. Lever for manual unlocking (if not automatic mode set up).
10. AS1320 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.

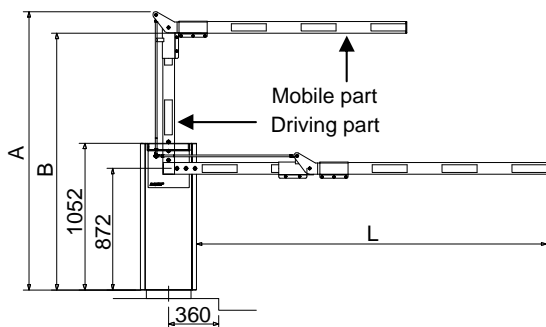
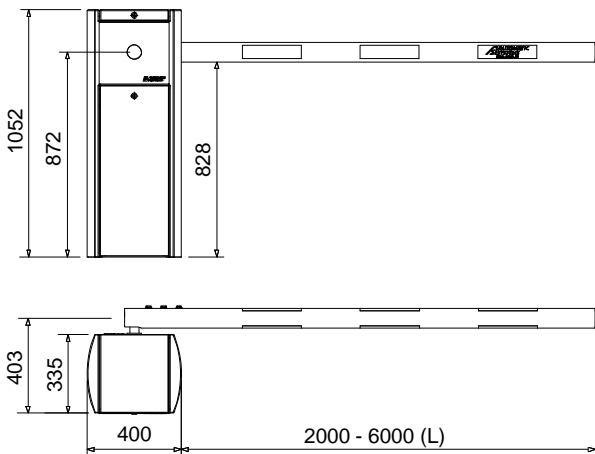
## Conventions



**Technical Characteristics (standard)**

- Electrical power supply: single phase 230VAC, 50/60Hz.  
(not to be connected to a floating network or to high impedance earthed industrial distribution network)
- Nominal power consumption: 335 W (at maximum speed and without options).
- Three-phase asynchronous 250W motor.
- Life-lubricated worm-screw speed reduction unit.
- Aluminium tube boom arm, with round section diameter 84 mm.
- Free passage (L): 2 to 6 m.  
Beyond 5 m, a standard tip support at the end of the arm is supplied.
- Operational temperature (without optional heating): between -20° and +50°C.
- Operation unperturbed by winds of 120 km/h.
- Minimum operation time: from 1 to 4 seconds according to the boom length and the options chosen.
- Net weight (excluding arm) 83 kg.
- MCBF (mean cycles between failures): 2,000,000, with normal maintenance.
- IP44.
- Conform to EC norms.

**Standard dimensions (mm)**



**Options**

1. Push button(s) box.
2. Key switch on housing.
3. Command by radio transmitter/receiver.
4. Inductive loops for cars or trucks detection.
5. Presence detector for inductive loops.
6. Photo electric cell (automatic opening, closing after passage, safety).
7. Cell support post.
8. Cell fixed on housing.
9. Aluminium rigid folding skirt for round arm <sup>(a)</sup>.
10. Flat folding arm <sup>(a) (b)</sup>.
11. Round folding arm <sup>(a) (b)</sup>.
12. Arm swing-off device in case of vehicle impact <sup>(a)</sup>.
13. Detector for arm swing-off.
14. Rubber protection profile on arm <sup>(a)</sup>.
15. Standard tip support for round arm <sup>(a)</sup>.
16. Folding tip support for round arm <sup>(a)</sup>.
17. Electro-magnetic tip support for round arm <sup>(a)</sup>.
18. Boom lighting (LED).
19. Traffic lights (LED) fixed on a post on housing.
20. Traffic lights (LED).
21. Support post for traffic lights.
22. STOP traffic sign Ø400 mm on the boom arm <sup>(a)</sup>.
23. Non standard RAL colour.
24. Analogue sensor for accurate boom movement management (boom feedback).  
*Recommended option for arms > 5m in windy sites.*
25. Raised base.
26. 120 VAC, 60 Hz power supply (*reduces performances*).
27. Double limit switches for information on BL status in the event of power failure.
28. Heating resistance 80W, for operation down to -35°C.
29. Plastic folding fence <sup>(a)</sup>.
30. Flashing light on cover.
31. Electronic board for Input/Output extension (CAN).
32. Electronic board for third-party traffic lights control.
33. Protection switches in case of door and cover opening.
34. Cooling fan for Variable Speed Controller.

<sup>(a)</sup> Certain options are mutually incompatible and/or reduce the arm's range. Consult the "Limit of use" table of the price list.

**<sup>(b)</sup> Folding arm (option)**

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

**Déclaration CE de conformité**

Nous, soussignés,

AUTOMATIC SYSTEMS s.a.  
Avenue Mercator, 5  
B-1300 WAVRE  
Belgique

Déclarons que la machine

**Barrière levante électrique  
BL229**

est conforme aux dispositions des Directives, normes  
et autres spécifications suivantes:

- Directive Sécurité des Machine 2006/42/CE.
- Directive Basse Tension 2006/95/CE.
- Directive Compatibilité électromagnétique 2004/108/CE.
- EN 12100-1: 2003 Sécurité des machines- Terminologie de base et méthodologie.
- EN 12100-2: 2003 Sécurité des machines- Principes techniques et spécifications.
- EN 60204-1: 2006 Sécurité des machines, Equipement des machines- Règles générales.
- EN 61000-6-3: 2001 Compatibilité électromagnétique- Norme générique émission- Résidentiel, commercial, industrie légère.
- EN 61000-6-2: 2001 Compatibilité électromagnétique- Norme générique immunité- Résidentiel, commercial, industrie lourde.

Fait à WAVRE,  
le : 2009-12-03

Nom du signataire : Denis VANMOL  
Fonction : Directeur du développement  
Signature :



**EC declaration of conformity**

We, undersigned,

AUTOMATIC SYSTEMS s.a.  
Avenue Mercator, 5  
B-1300 WAVRE  
Belgium

Herewith declare that the machinery

**Electrical rising barrier  
BL229**

is in accordance with the conditions of the following  
Directives, standards and other specifications:

- Machinery Directive 2006/42/CE
- Low-voltage Directive 2006/95/CE
- Electromagnetic compatibility Directive 2004/108/EC
- EN 12100-1: 2003 Machinery – Basic terminology and methodology.
- EN 12100-2: 2003 Machinery – Technical principles and specifications.
- EN 60204-1: 2006 Safety of machinery. Electrical equipment of machines. General requirements.
- EN 61000-6-3: 2001 Electromagnetic compatibility (EMC). Generic standards. Emission standard for residential, commercial and light-industrial environments.
- EN 61000-6-2: 2001 Electromagnetic compatibility (EMC). Generic standards. Immunity standard for industrial environments.

Made in WAVRE

Date: 2009-12-03

Name : Denis VANMOL

Function : Director of Development

Signature :