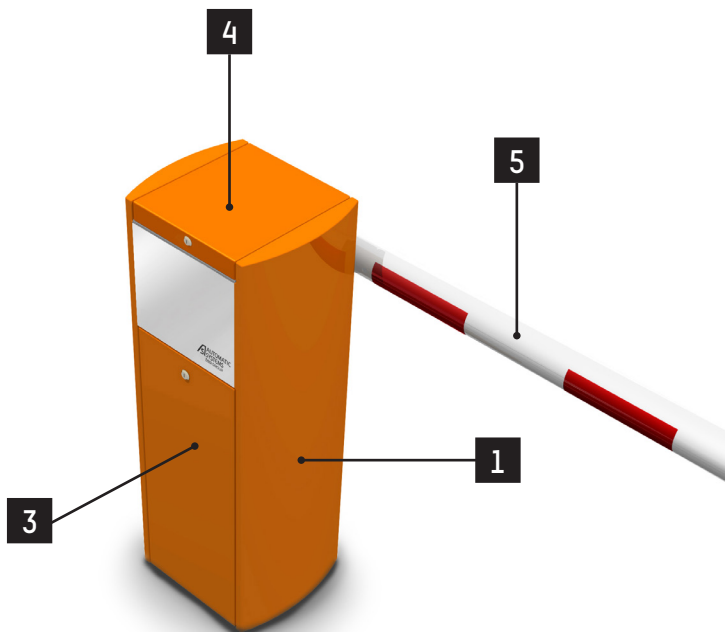


# BL 229

## Datasheet

Rev. 14 • Update 02/2020

**AUTOMATIC**  
SYSTEMS



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.

### DESCRIPTION

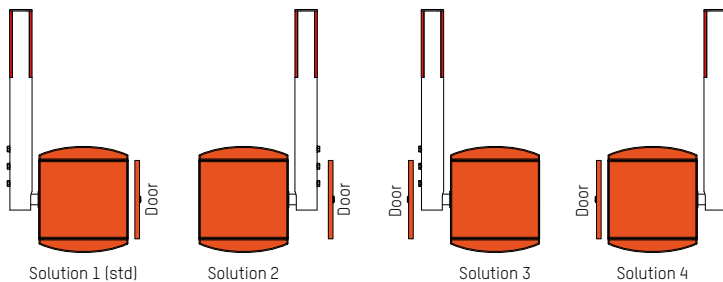
1. Housing made of folded and welded sheet steel, from 2 to 6 mm thick, protected by cataphoresis and two coats of structured paint (*standard color: orange RAL2000*).
2. Internal mechanical elements treated by electrogalvanisation.
3. Side door giving access to the mechanism, with security lock.
4. 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.
  - Limit switches activated by leaf spring.
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.



## STANDARD TECHNICAL SPECIFICATIONS

Electrical Power supply	Single phase 230VAC, 50/60Hz + Ground <i>(Not to be connected to a floating network or to high impedance earthed industrial distribution network)</i>
Nominal power consumption	335 W <i>(at maximum speed and without options)</i>
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	From 1 to 4 seconds according to the boom length and the options chosen.
Operational temperature	Between -20 and +50°C <i>(without optional heating)</i>
Free passage (L)	From 2 to 6m <i>(between 5 and 6m, a tip support is delivered with the barrier)</i>
MCBF <i>(mean cycles between failures)</i>	10,000,000, with normal maintenance.
Net weight	83 kg <i>(excluding arm)</i>
IP	44
Noise emitted during operation	<70db(A) <i>(measured at 1 m from the surface of the machinery and at a height of 1.60 m above the ground; according to ISO3744. No hearing protection needed)</i>
CE	Conforms to european standards

## CONVENTIONS



## WORKS TO BE SUPPLIED BY THE CUSTOMER

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

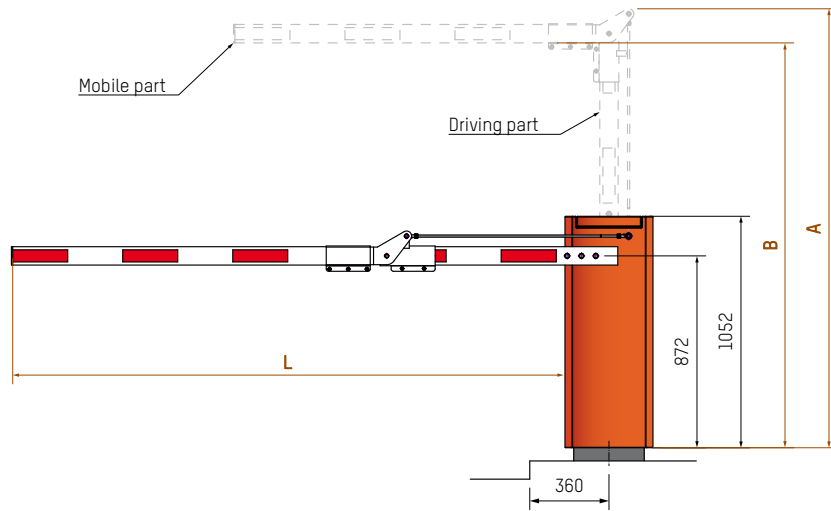
*Note: comply with the installation plan.*

## OPTIONS

1. Round folding arm <sup>[a]</sup> <sup>[b]</sup>.
2. Flat folding arm <sup>[a]</sup> <sup>[b]</sup>.
3. Aluminium rigid folding skirt for round arm <sup>[a]</sup>.
4. Arm swing-off device in case of vehicle impact <sup>[a]</sup>.
5. Rubber protection profile on arm <sup>[a]</sup>.
6. Analogue sensor for accurate boom movement management *(boom feedback)*.  
Recommended option for arms > 4.5 m in windy sites.
7. Double limit switches for information on BL status in the event of power failure.
8. Standard tip support for round arm <sup>[a]</sup>.
9. Electro-magnetic tip support for round arm <sup>[a]</sup>.
10. Folding tip support for round arm <sup>[a]</sup>.
11. Protection switches in case of door and cover opening.
12. Push button(s) box.
13. Programmable clock *(weekly or yearly)*.
14. Key switch on housing.
15. Command by radio transmitter/receiver.
16. Inductive loops for cars or trucks detection.
17. Presence detector for inductive loops.
18. Photo electric cell *(automatic opening, closing after passage, safety)*.
19. Cell support post.
20. Cell fixed on housing.
21. Ultrasonic detector under arm *(Protective cover included)*.
22. Ethernet interface.
23. SD memory card.
24. Input/Output extension card.
25. Totalling counter *(with or without reset)*.
26. Boom lighting *(Leds)*.
27. Traffic lights *(Leds)* fixed on a post on housing.
28. Traffic lights *(Leds)*.
29. Support post for traffic lights.
30. Electronic board for third-party traffic lights control.
31. Acoustic alarm 100 dB  $\pm$ 5 *(Fixed inside)*.
32. STOP traffic sign  $\varnothing$  400 mm on the boom arm <sup>[a]</sup>.
33. Flashing light on cover.
34. Non standard RAL colour.
35. Treatment for aggressive saline environment.
36. Raised base.
37. 120 VAC, 60 Hz power supply *(reduces performances)*.
38. Heating resistance 80W, for operation down to -35°C.
39. Cooling fan for Variable Speed Controller.

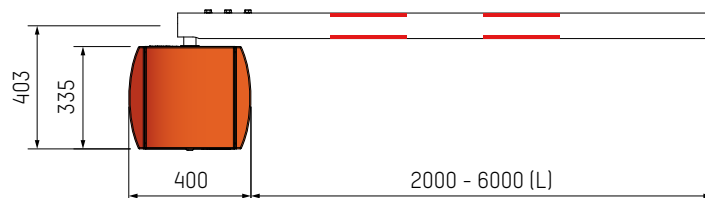
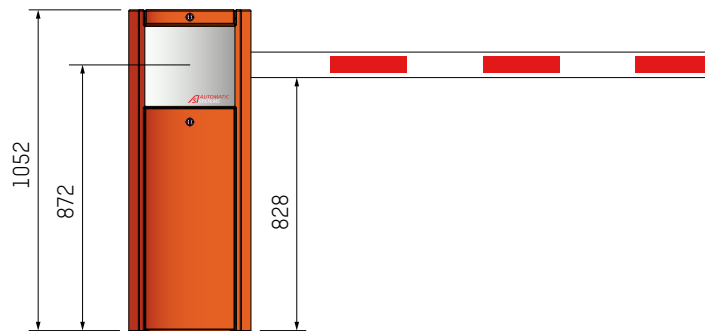
<sup>[a]</sup> Certain options are mutually incompatible and/or reduce the arm's range. Consult the "Limit of use" table of the price list.

## STANDARD DIMENSIONS (MM)



<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 to 3000
	1100	2072	1910	
	1200	2172	2010	
	1300	2272	2110	



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