Access controlled… Future secured.

VEHICLE SECURITY BARRIERS

PORTFOLIO
Automatic Systems is a world leader in the automation of secure entrance control. Moreover, we are one of the few companies which designs and manufactures equipment for all access control segments: pedestrian, vehicle and passenger.

For over 45 years, with over 200,000 products in use in 150 countries globally, Automatic Systems is renowned for its innovativeness, high performance and reliability.

Currently, there are more than 90 million daily users of Automatic Systems equipment worldwide.
VEHICLE BARRIERS BY AUTOMATIC SYSTEMS

REGULAR
- Electromechanics

DISSUASIVE
- Hydraulics or Electromechanics

SECURITY
- Impact resistance rated
- Minimum 200,000 joules
- Hydraulics or Electromechanics

HIGH-SECURITY
- Crash tested or rated
- Minimum 700,000 joules
- Hydraulic pumps
Ongoing current global terrorist activity threats continue to drive demand for anti-terror measures.

HIGH-SECURITY products (also known as HVM products) protect the infrastructure against vehicle-borne threats, creating blast stand-off distance.

Since September 11th 2001, several international accreditation standards have defined essential impact performance requirements for a vehicle security barrier (VSB) and a test method for rating its performance.

There are essentially 2 standard families:
- US standards with the precursor DOS K-rating which has been replaced and extended by the ASTM F2656-07 standard;
- UK created PAS68 standard which has been replaced and extended by international standard IWA14-1 (ISO).

Impact resistance equivalences between these standards do not officially exist but all those rating are using the same calculation method, that of the kinetic energy:
\[ E = \frac{1}{2} (m \cdot U^2) \]
Resulting in conclusion:
- M50 <> K12 <> PAS 68 V/7500/80 <> IWA14 V/7200/80 <> 1,800,000 joules
- M40 <> K8 <> PAS 68 V/7500/64 <> IWA14 V/7200/64 <> 1,200,000 joules
- M30 <> K4 <> PAS 68 V/7500/48 <> IWA14 V/7200/48 <> 700,000 joules

Impact resistance will be certified by a crash-test, a computer simulation or an engineer calculation.

SECURITY products are also defined by US, UK and ISO standards. Then, for those very products, the impact resistance are between 200,000 joules and 700,000 joules.

HIGH-SECURITY and SECURITY products differentiate also themselves by several features such as: passage width, obstacle height, foundation depth, rising/ lowering speed and also the Emergency Fast Operation (E.F.O) which is mandatory for high-security installations.
BL43 C50M1
Rising barrier
Impact resistance: 250.000 joules
Height: 770 mm
Length: 3 m
Shallow mounted
Electromechanical actuator
2 directions of obstacle
For type M1 vehicle (car)

BL43 C50N1
Rising barrier
Impact resistance: 250.000 joules
Height: 1030 mm
Length: 3 m
Shallow mounted
Electromechanical actuator
2 directions of obstacle
For type N1 vehicle (flat bed)

BL M50
Lift Barrier
Impact resistance: 1.800.000 joules
Height: 1300 mm
Length: from 3 to 10 m
Shallow mounted
2 hydraulic pumps
2 directions of obstacle
Also available in BL M30

High security
TK AUTO

Immobilization of a vehicle by puncturing its tires
Height: 450 mm
Length: from 2 to 6 m
Spikes 25mm
Automatic with remote hydraulic pump

TK MAN

Immobilization of a vehicle by puncturing its tires
Height: 70 mm
Length: from 2 to 6 m
Spikes: 10 mm
Mechanical with return spring
Free exit
ROAD BLOCKERS

RSB C60SM
Impact resistance: 400,000 joules
Height: 500 mm
Length: 3 m
Surface or shallow mounted depending on the nature of the soil
Local hydraulic pump

RSB M30 (ex RSB77)
Impact resistance: 700,000 joules
Height: 500 mm
Length: from 2 to 6 m
Shallow mounted
Remote hydraulic pump

RSB M50 (ex RSB79)
Impact resistance: 1,800,000 joules
Height: 1000 mm
Length: from 2 to 6 m
Shallow mounted
Remote hydraulic pump
Crash-test:
PAS68:2013 V/7500(N3)/80/90:0.2/10
RB C50

**RB C50_800 (ex RB80)**
- Impact resistance: 250,000 joules
- Height: 800 mm
- Width/Thickness: Ø 275/6 mm

**RB C50_600 (ex RB60)**
- Impact resistance: 250,000 joules
- Height: 600 mm
- Width/Thickness: Ø 275/6 mm

RB C60

**RB C60_800**
- Impact resistance: 400,000 joules
- Height: 800 mm
- Width/Thickness: Ø 275/10 mm

**RB C60_600**
- Impact resistance: 400,000 joules
- Height: 600 mm
- Width/Thickness: Ø 275/10 mm
**AUTOMATIC HIGH-SECURITY BOLLARDS**

*with built-in hydraulic pump*

**RB M30**

- **RB M30_700 (ex RB70S)**
  - Impact resistance: 700,000 joules
  - Height: 700 mm
  - Width/Thickness: Ø 275/10 mm
  - Also available as RB M40

- **RB M30_900 (ex RB90S)**
  - Impact resistance: 700,000 joules
  - Height: 900 mm
  - Width/Thickness: Ø 275/10 mm
  - Crash-test:
    - IWA 14-1: 2013 V/7200(N3C)/48/90:1.0
    - PAS68: 2013 V/7500(N3)/48/90:1.0/2.5
  - Also available as RB M40

- **RB M30_1200**
  - Impact resistance: 700,000 joules
  - Height: 1200 mm
  - Width/Thickness: Ø 275/15 mm
  - Crash-test:
    - ASTM: M30/P1
  - Also available as RB M40

**RB M50**

- **RB M50_900 (ex RB90HS)**
  - Impact resistance: 1,800,000 joules
  - Height: 900 mm
  - Width/Thickness: Ø 275/25 mm
  - Crash-test:
    - DO5: K12/L1

- **RB M50_1200 (ex RB120HS)**
  - Impact resistance: 1,800,000 joules
  - Height: 1200 mm
  - Width/Thickness: Ø 275/25 mm
  - Crash-test:
    - PAS68: 2013 V/7500(N3)/80/90:1.4/8.0
    - ASTM: M50/P3
**FIXED SECURITY BOLLARDS**

Fixed into the ground or unscrewable

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**FB C50/C60**

Fixed into the ground

**FB C50**

- 800: Impact resistance 250,000 joules
- Height: 800 mm
- Shallow mounted
- Width/Thickness: Ø 275/6 mm
- Fixed into the ground

**FB C60**

- 800: Impact resistance 400,000 joules
- Height: 800 mm
- Shallow mounted
- Width/Thickness: Ø 275/10 mm
- Fixed into the ground

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**FB C50UN/C60UN**

Unscrewable

**FB C50UN**

- 800 (ex FB80): Impact resistance 250,000 joules
- Height: 800 mm
- Shallow mounted
- Width/Thickness: Ø 275/6 mm
- Unscrewable with counterframe

**FB C60UN**

- 800: Impact resistance 400,000 joules
- Height: 800 mm
- Shallow mounted
- Width/Thickness: Ø 275/10 mm
- Unscrewable with counterframe
**Fixed High-Security Bollards**

**FB M30UN_700 (ex FB70S)**
- Impact resistance: 700,000 joules
- Height: 700 mm
- Width/Thickness: Ø 275/10mm
- Unscrewable with counterframe

**FB M30_700**
- Impact resistance: 700,000 joules
- Height: 700 mm
- Shallow mounted
- Width/Thickness: Ø 275/10mm
- Fixed into the ground

**FB M30_900 (ex FB90S)**
- Impact resistance: 700,000 joules
- Height: 900 mm
- Shallow mounted
- Width/Thickness: Ø 275/10mm
- Fixed into the ground

**FB M30_1200**
- Impact resistance: 700,000 joules
- Height: 1200 mm
- Shallow mounted
- Width/Thickness: Ø 275/15mm
- Fixed into the ground

**FB M30_700**
- Impact resistance: 700,000 joules
- Height: 700 mm
- Width/Thickness: Ø 275/10mm

**FB M30_1200**
- Impact resistance: 1,800,000 joules
- Height: 1200 mm
- Shallow mounted
- Width/Thickness: Ø 275/15mm
- Fixed into the ground

**FB M50_900 (ex FB90HS)**
- Impact resistance: 1,800,000 joules
- Height: 900 mm
- Shallow mounted
- Width/Thickness: Ø 275/25 mm
- Fixed into the ground

**FB M50_1200 (ex FB120HS)**
- Impact resistance: 1,800,000 joules
- Height: 1200 mm
- Shallow mounted
- Width/Thickness: Ø 275/25 mm
- Fixed into the ground
RB EM_600
Automatic Rising/Lowering
Electromechanical activator
Height: 600 mm
Width/Thickness: Ø 275/4 mm

MB_500 (ex MB 50)
Semi-automatic bollard
Gas-embedded activator
Height: 500 mm
Width/Thickness: Ø 275/6 mm

FR_600
Fixed removable bollard
Height: 600 mm
Width/Thickness: Ø 275/5 mm

FR M30_700
Fixed removable bollard
Impact resistance 700,000 joules
Height: 700 mm
Width/Thickness: Ø 275/10 mm
**Fixed column**
For integration of traffic light, intercom or command
Height: 1500 or 1800 mm
Diameter: 170 or 275 mm

**Retractable or modular column**
For integration of RB control unit
For integration of traffic light, intercom or command
Sliding cover to the top
Height: 1500 or 1800 mm
Diameter: 170 mm

**Fix cabinet BOR 235**
For integration of traffic light, intercom or command
Car height or truck height

**Retractable cabinet**
For integration of RB control unit
Retractable structure integration into the pavement
**BL43**
Reinforced aluminium arm  
Height: 1025 mm  
Passage width: from 2 to 6 m  
Fast opening/closing: 3.5 sec.  
Mechanical locking

**BL53**
Reinforced aluminium arm  
Height: 1010 mm  
Passage width: from 3 to 8 m  
Opening time: between 5 - 10 sec.  
Unbreakable mechanical locking

**TIP SUPPORT**
Barrier arm support  
To reinforce the security level

**TRS 371**
Four section full-height turnstile  
Single passage  
Passage width: 560 mm  
Mechanical locking

Synchronisation with rising barriers
RISING FENCED BARRIERS

No infiltration of pedestrians

BL 46
Aluminum folding fence
Max height from ground: 2,3 m
Max free passage: 7 m
Opening time: min. 3.5 sec.
Mechanical locking

BL 47
Aluminum rigid fence
Height from ground: 2 m
Max. free passage: 4,35 m
Opening time: min. 5 sec.
Mechanical locking

BLG76
Wire mesh fence
Max height from ground: 2,3 m
Max free passage: 4,7 m
Opening time: 8 sec.
Unbreakable mechanical locking

BLG77
Metal mesh fence
Max height from ground: 3,46 m
Max free passage: 6,15 m
Opening time: 7 sec.
Unbreakable mechanical locking

No access for pedestrian
Access controlled…
Future secured.

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