# BL53-HD Technical datasheet

NAM-BL53-HD-FT-EN-A



Access controlled... Future secured

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BL53-HD rising barrier is designed and manufactured by Automatic Systems. It is a unique product that effectively prevent vehicles from unauthorized access. BL53-HD barrier is typically used for medium traffic volume and single lane access point management.

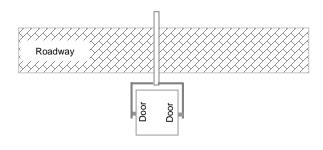
It is used fort asset protection in facilities such as court houses, police service buildings, etc. The BL53-HD offers free passage width up to 20' [6m]. It opens completely within 10 seconds.

#### Impact simulation



Barrier free passage length	Penetration 'X'	Max Vehicle speed
6m	34 <sup>1</sup> / <sub>4</sub> " [0.87m]	9.3mph [15km/h]

#### **Configurations**



# DESCRIPTION

- 1. Operator cabinet made of folded and welded sheet metal, ranging from 1/8 to 3/8 in. [3 to 10 mm] in thickness.
- 2. Removable side panels provide easy access to the mechanism (locked by key).
- 3. Weather-resistant, removable cover (locked by key).
- 4. Central arm, painted white with red and white reflective stripes. The arm is made of a one-piece extruded aluminium profile with tip plug. Profile dimensions: 6" x 4" (175mm x 100mm); 6 gauge (4mm) thick
- 5. Two bracing posts to support the arm (anchored in concrete). Made of steel and painted white with red and white reflective strips.
- 6. Electromechanical assembly:
  - Reversible three-phase asynchronous gear motor.
  - Crankshaft/rod device with rubber abutments ensuring smooth, flexible movements, and progressive decelerations at the end of the movements.
  - Safety torque limiter with adjustable friction disks. (HD Safety Clutch).
  - · Limit switches activated by adjustable cams.
  - Transmission between motor and gearbox by trapezoidal pulleys and V-belt.
- Integrated strip heater for low temperatures down to -13°F [-25°C].
- 8. Emergency crank with safety switch for manual operation of the barrier in the event of a power failure.
- 9. Audible Alarm activated during movement.
- **10. AS1320 control board** enabling various commands and/or accessory options
  - Possibility of 2 built in vehicle detectors (allowing 4 detectors).
  - · Overload protection
  - Terminal blocks for motor, detector relays and options.
  - Dry contact output for information on the barrier or to control other equipment.
  - · Status of the barrier's position (open or closed),
  - Status of the presence detectors,
- Command for master-slave barriers (movement of one barrier controlled by the other barrier)

#### 11. Safety detection photocells.

12. Anti-vandalism bolt covers.





# ANTI-CORROSION TREATMENT

- Zinc-coated internal mechanical parts.
- Complete body (housing, cover and doors): 4000 hrs salt spray resistant primer + powder coat paint (standard color: Orange RAL 2000)

### STANDARD TECHNICAL CHARACTERISTICS

Input power <sup>(1)</sup>	120 VAC / 60 Hz (with ground)	
Consumption	473 W (nominal) - 973 W (max. with largest heater)	
Motor	Three-phase 120 V / 373 W	
Transmission	Gearbox and pulley	
Arm length (B)	14ft 9in to 24ft 7in [4.494 to 7.494m].	
Free Passage (L)	10ft [3.05m] to 20ft [6m]	
Operating temperature	-13°F to 122°F (-25°C to 50°C) without heater option	
Relative Humidity	95% without condensation	
Opening speed <sup>(2)</sup>	10 sec	
Closing speed <sup>(2)</sup>	10 sec	
Weight (without arm)	748lbs (340kg)	
Weight arm	66 to 110lbs (30 to 50kg)	
Impact Rating	Impact simulation not rated Vehicle 3819.2lbs [1736 kg] at 9.3mph [15 km/h] Vehicle penetration 34 <sup>1</sup> / <sub>4</sub> in [870.8mm]	
MCBF <sup>(3)</sup>	1,250,000 cycles (with recommended maintenance)	

 not to be connected to a floating network or to a high impedance earthed industrial distribution network

(2) adjustable through the control board

(3) Mean Cycle Before Failure

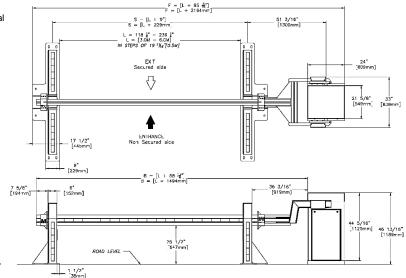
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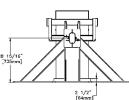


- 1. STOP sign 11 13/16 in [300 mm] diameter.
- 2. Traffic lights mounted on a standalone post
- 3. Push-button box.
- 4. Key switch (with captive or removable key)
- 5. Remote control.
- 6. Detection loop.
- 7. Presence detector for inductive loops.
- 8. Additional photocells to open, close or automatically stop/reopen the barrier arm.
- 9. Photocell support post (car or truck height)
- 10. AS1321 Input/Output extension board.
- 11. AS1049 board for third-party traffic signs.
- 12. Arm lights.
- Thermostatic heater for operation down to -49°F [-45°C]
- 14. Other RAL colors available.
- For restrictions on options please speak to your sales representative.

#### STANDARD DIMENSIONS (INCHES & MM)

 $ec{l}$  Refer to the installation drawing.





With a constant view to adopting the latest technological developments, Automatic Systems reserves the right to amend the above information at any time.

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