



## ***Gate Automation Systems (Irl)***

**Locall:** 1890 74 75 76    **Tel:** +353 65 6841175    **Fax:** +353 65 23639

**Email:** [sfe@eircom.net](mailto:sfe@eircom.net)    **Web:** [www.automationgate.com](http://www.automationgate.com)

### ***Speedgate BG***

The ***Speedgate BG*** is suitable for installation at any exterior vehicular or vehicular and pedestrian gate where its heavy duty construction and fast operation would be advantageous. It is widely employed at airports, military complexes, prisons, cash-in-transit companies and other access points to very high security areas. A quite different application is in the entrances to off street car parking areas, including multi-storey car parks, where it can be built to exactly fit the existing archway or opening and can totally seal the car park against vandals, car thieves, drug dealers and other undesirables. It can be used in locations where previously a fast acting boom barrier and a slow moving sliding gate would have been used, therefore replacing both of these products as it combines the speed of the boom barrier with the sealing off capability of the steel sliding gate.

#### ***Dimensions***

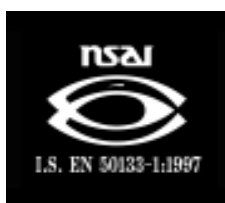
- Made to project specifications so any entry can be closed perfectly
- Maximum clear width internally is 8000 mm.
- Maximum clear height is 5000 mm.

#### ***Construction materials***

- Built entirely of steel (S 235 JR - quality 37)
- Many parts fabricated from steel sheet which is cut out on a high precision CNC controlled plasma-cutting machine
- Other parts are die-cast made out of a special aluminium-bronze mixture

#### ***Safety devices***

As the ***Speedgate BG*** is a fast operating gate, it is possible that a hazard could be caused to pedestrians who might be trapped or injured by the motion of the wings. Therefore the ***Speedgate BG*** is fitted with a number of electronic safety devices which will automatically stop the gate in such an eventuality, including photoelectric sensors between both columns and active safety edges at the end of the wings.



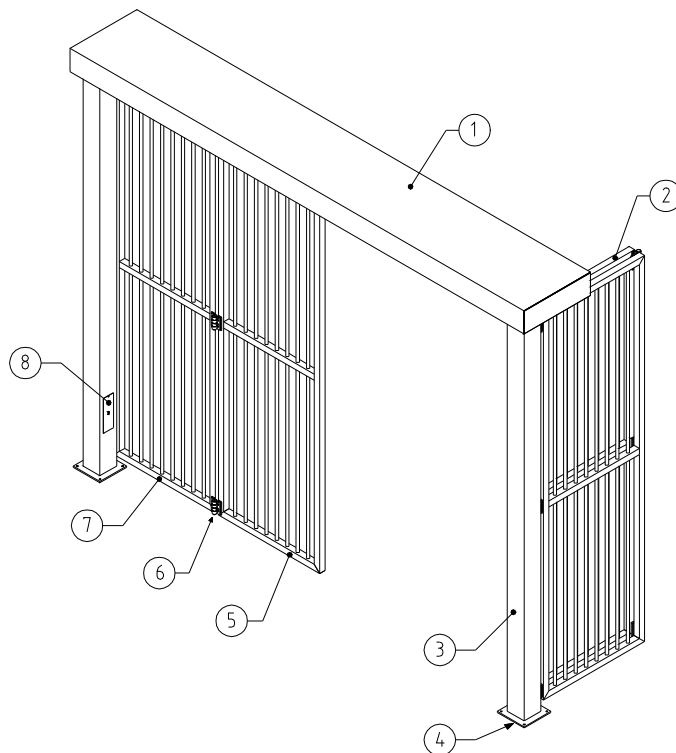
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## Main parts

The drawing below shows all main parts of the *Speedgate BG*.



- 1 – Top Drive Casing
- 2 – Right Leaf (Inner and outer)
- 3 – Column
- 4 – Mounting Plate
- 5 – Left Leaf (Inner)
- 6 – Hinge
- 7 – Left Leaf (outer)
- 8 – Photo Sensor Hatch

## Finishing

- Wings and columns are fully hot dip galvanised to 60 microns ( $\mu\text{m}$ )
- Top drive casing is zinc plated to a thickness of 80 microns
- All parts are then powder coated as required to a thickness of 80 microns in a colour of the client's choice.
- Company or National Logos etc. can be produced and mounted on the wings of the *Speedgate BG*
- In the absence of any special choice, the standard colour finish of the *Speedgate BG* is anthracite grey (RAL 7011).



## Electric motor

- Normally powered by a 750 Watt motor
- 1100 Watt or 1500 Watt motor on request
- Motor controlled by a frequency regulator to create a ramp-up and ramp-down time, which reduces the impact of the weight of the wings



- Motor is linked to a special mechanism which moves the individual wings through 90 degrees
- Mechanism also mechanically locks the Speedgate in the closed position

### **Limit switches**

- Four proximity switches at standard to detect the position of the wings
- The following positions are detected:
  - i. Wings completely open
  - ii. Wings almost open
  - iii. Wings almost closed
  - iv. Wings completely closed
- Proximity switches are connected to a special designed connection board (PCB), mounted in a junction box
- PCB also has terminals to connect all other sensors and switches



### **Safety contacts**

The **Speedgate BG** is supplied with the following safety contacts and signals:

- Photoelectric transmitter and photoelectric receiver
- Safety-edges at the end of the inner wings (vertical), to protect when closing
- Safety-edges at the side of the inner wings (vertical), to protect when closing
- Safety-edges at the side of the outer wings (horizontal), to protect when opening
- Temperature sensor in the motor van de Speedgate (PTC)
- Crank-switch on the hand control
- Sabotage switches on the doors of the top drive (optional)

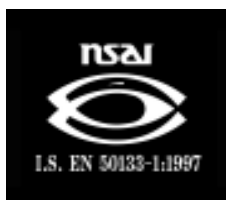
Most safety contacts are connected to the PCB mentioned before.

### **Driving unit**

- Driven by a combination of an electric motor and a frequency regulator
- Standard speed of opening and closing is one metre per second

### **Control unit**

- Can be controlled in various ways such as push-buttons, handheld transmitters or any existing access control system with card-readers or others
- Depending on the traffic situation the installation can be supplied with traffic lights and vehicle detection loops



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### ***Power supply***

- Single phase 230 VAC, 50 hertz power supply

### ***Mounting***

- Bolted to a concrete foundation sufficiently strong to withstand the resulting wind pressure on the structure under all climatic conditions
- Where the existing road surface or concrete floor is not of sufficient strength, it is necessary to excavate and construct a reinforced concrete block of appropriate size and specification in order to ensure safe mounting of the Speedgate

### ***Maintenance***

- Design and construction of the ***Speedgate BG*** ensure that maintenance requirements are light and relatively simple
- Routine maintenance and greasing is normally carried out at 6 monthly intervals
- Detailed operators and maintenance manual is supplied with the Speedgate

### ***Reliability and durability***

- Extremely durable and reliable
- Built to very high standards with the finest materials
- Provided it is maintained in accordance with the manufacturer's instructions, it will give many years of trouble free service.



### ***Ancillary equipment***

A wide range on ancillary equipment is available, for example:

- Control cabinets with frequency regulator
- Installation cabinets
- Detection loops
- Traffic lights, poles and mounting devices
- Cabling sets

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## Options

Some optional expansions are available

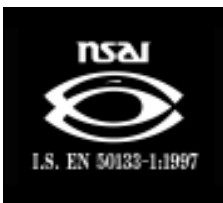
- Hand crank:** A special mechanism, to open or close the Speedgate with a hand-crank in case of a power failure. The mechanism has a safety switch that switches off the controller if the hand-crank is in place.
- Emergency control:** A special electric driving mechanism with electro-magnetic lock. In case of a power failure, the electromagnet is unlocked and the *Speedgate BG* can be controlled with a battery powered system for several times.
- Sabotage switches:** The doors of the top drive can be supplied with a switch that detects the door for being opened. The sabotage switches give a potential free switch (NO and NC) that can be connected to a burglar alarm.
- Different colour:** The *Speedgate BG* can have almost any other RAL-colour or a logo can be made on the wings.
- Fencing mounting:** The outside of the columns can be supplied with mounting devices for standard fencing of various types and manufacturers.



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# SPEEDGATES



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