



## TECHNICAL SPECIFICATION

### CSG 10605

Trackless Bi-Folding Speed Gate  
(European Patent No 1595050 - Drive)



#### PRODUCT OVERVIEW

The CSG 10605 trackless bi-folding speed gate consists of a post onto which a bi-folding leaf is attached. Unlike other bi-folding gate systems, this does not require a track either in the ground or overhead to fold the leaf but uses a unique folding system.

Operating speed from 6 seconds depending on site conditions, gate configuration etc, rated for continuous operation - 100% duty cycle.

The post hung section of the bi-fold leaf is driven by a unique innovation, consisting of a motor drive unit connected to a crank arm assembly which locks the gate in both open and closed positions.

The gate leaf sections are fully welded assemblies. The leaf frames are constructed of RHS steel section stiles and top rail with a wide folded steel bottom rail section. The leaves are in-filled with closely spaced vertical bars and/or other infill materials to suit and the gate structure is manufactured from proprietary steel.

Unlike our model CSG 10604 trackless speed gate which had the folding mechanism located on the top of the gate leaf, the CSG 10605 has its folding mechanism located at a lower level which leaves the top of the gate free for spikes, barbed wire, decorative ironmongery or other features as required.

Typically a system consists of a single unit of one post supporting one bi-folding leaf spanning up to 5 metres. The leading edge is received into a post on the other side of the roadway.

#### CONTACT US

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On wider openings up to 10 metres span, a pair of opposite handed units (a bi-parting pair) needs to be used.

In the centre of the roadway, a receptor plate will be required to receive the leading edge rollers when the gate reaches the fully closed position.

The operation of the torque drive motor is controlled by a Programmable Logic Controller (PLC) based unit located within the associated control cabinet.

#### CONSTRUCTION

- Drive: Electromechanical or hydraulic driving through a 270 degree system (European Patent No 1595050)
- Hinges: 25mm dia stainless steel pins, DU self lubricating plain bearings, and ball thrust bearings with stainless steel covers.
- Leaf Folding: Rack and pinion system.
- Gate structure is manufactured from proprietary mild steel.

## DIMENSIONS

Single unit:

- Maximum Width: Max 5m (between motor post and receptor post).
- Height Typically: 2.4 - 3.0m but can be higher.

Bi-parting pair:

- Maximum Width: Max 10m (between motor posts).
- Height Typically: 2.4m but can be higher.
- For bi-parting pairs the roadway needs to be level between the posts or made-up to level on the installation.
- Typically the road receptor plate protrudes 50mm from the road surface.

## INSTALLATION

Generally there are two fixing methods either 'surface-fix' or 'sub-fix'.

- Surface-fix is for existing surfaces usually within a building or where it is difficult to provide submerged foundations. Simply the base plates are bolted directly to a suitable concrete surface using chemical anchor bolts. Base plates can be angled to suit ramp gradients. On larger gates it is sometimes found necessary to cleat to the structure of the building or design bracing to increase rigidity. Minimum slab thickness 300mm.
- Sub-fix is usual for perimeter applications whereby foundations are cast, to a required size, in two stages. Stage one is typically 500mm concrete poured into a 900mm hole, cast prior to the gate installation. Once cured, typically after one week, the gate is bolted to this foundation. With gates levelled, fully wired and operationally checked, stage two, concrete backfill, typically 400mm deep can be conducted.

A finished surface can then be installed to match the surrounding area.



## DRIVE

- Electromechanical drive up to 3.5m span per leaf.
- Hydraulic drive up to 5m span per leaf.

## SAFETY

- Designed to meet BS-EN13241-1 standard for installation, testing and ongoing compliance of automatic gate and door systems.
- The bi-folding method of gate operation requires considerably less power to operate than conventional swing gates and also has less wind effect -- combined with the unique motor drive, it results in a relatively lower powered and thus safer drive.
- All gate systems come complete with a through photo beam system between posts. Additional photo beams can be added for extra protection.
- The leading edges of the leaves can be fitted with electrical rubber safe edges which, if in contact with an obstruction will stop the operation of the gate.
- It is recommended that all installations include vehicle detection loop systems.

## CONTROLS

- Controls are Programmable Logic Controller (PLC) based and therefore are very flexible and can be configured to suit customer's requirements.
- Optional features can include conventional push button station or Human-machine interface (HMI) terminals.
- Single or multiple control positions and all forms of access control can be utilised.

## ELECTRICAL SUPPLY

Supply 240volt 50Hz single phase rated at 10 amp.

Please contact us to discuss your power supply requirements.

## FINISH

Polyester powder coated to a specific RAL No.

Galvanised or galvanised and polyester powder coated to a specific RAL No.



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