

Automatic Traffic Control Bollards



EASYSpec -The Automation Specification Service for Professionals

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OVERVIEW

Electro J275 Bollard is a metal cylinder, providing ultra high resistance to impact and weather. It has a piston mechanism enabling movement by command and is housed inside a cavity in the road paving to discourage unauthorised traffic and/or parking. J275 Bollard offers help and is an intelligent alternative solution to fixed stations, railings, barriers, chains etc. It provides the possibility of regulating entry and/or exit of vehicles in certain zones and prevents illegal parking. The concealed bollard therefore has many different uses. It defines pedestrian areas in the busiest periods or permanently, it allows entry and/or exit to or from given zones only for authorised persons (shopkeepers, residents, hotel guests, customers of garages, taxis and owners of car parking facilities), it restricts car parks, squares and pavements. The main applications of J275 traffic bollards are vehicle access control and city traffic.

PREAMBLE

This specification allows for 3 traffic control bollards to control vehicular access to a courtyard area. The traffic control bollards shall be the Electro J275 Bollard and shall be supplied and installed by Electro Automation (NI) Ltd. All operating and safety accessories shall be supplied by Electro Automation as part of this contract.

GENERAL

The traffic control bollards shall incorporate the latest technology and design features and be manufactured with precision engineering. The manual traffic control barrier shall be CE approved and comply with all relevant EN safety standards.

MODEL

Electro J275 Traffic Control Bollard

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TECHNICAL SPECIFICATIONS

J 275/600 HA J

275/800 HA

Drive	Hydraulic	
Cylinder stroke	600mm	800 mm
Cylinder diameter	275 mm	
Cylinder material standard release	Steel Fe360	
Cylinder material special release stainless steel	AISI 316	
Cylinder thickness	7 mm	
Cylinder surface treatment	Cataphoresis & polyester powder painting	
Head surface treatment	Anticorodal case aluminium RAL 9006	
Rising time	About 5.0 sec	About 7.0 sec
Descent time (standard)	About 2.8 sec	About 3.5 sec
Descent time (rapid)	(*) 1.0 sec	1.2 sec
Hydraulic drive unit	Power supply 230vAC +6% - 10%; 50 Hz	
Power consumption	220W	
Protection class	IP 67	
Work frequency	Heavy duty	
Reflective strip	Standard height 55mm	
Manual lowering operation	Possible by hydraulic circuit unlocking	
Impact resistance	9.000 Joules	
Break in resistance	120.000 Joules	
Walled in pit with cylinder profile	560x560x950 mm	560x560x1220mm
Cable to link bollard to control unit	FG7OR-0.6/1Kv-16G-1.5	
Max cable length	50m	
Environment temperature	-15 / +55°C	

(*) By emergency release activation

TECHNICAL SUPPORT

The specialist contractor shall undertake to hold all parts required and to allow access to a full 365 day 24 hour manned service and support telephone line.

ENTRY

Will be controlled via a hard wired intercom system with the bollards set in fully automatic mode. The intercom entrance panel will be mounted on a reader post located to the external right hand side of the bollards. A user presses a call button on the intercom entrance panel and this sounds a handset located internally. A two way conversation takes place and if entry is to be granted a release button is pressed. This in turn sends a command to the bollards to descend. The bollards will descend, they enter and after a pre-set delay (adjustable) they will automatically rise unless blocked.

EXIT

Will be via a free exit induction loop that is buried within the ground approximately 3m from the bollards on the internal side (distance can be adjusted). The user will be approaching the bollards in a vehicle and pass onto the induction loop. This in turn sends a command to the bollards. They will descend, they exit and after a pre-set delay (adjustable) the bollards will automatically rise unless blocked.

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SAFETY

A safety induction loop will be positioned on the internal and external sides of the bollards, they will inhibit the bollards from rising should a vehicle remain over the bollard. We also include for 2 sets of safety photocells. When the photocell beam is broken i.e. by a pedestrian standing within the operation of the bollards or a car being too close to the bollards, the bollards will not operate. In addition the bollards also have an in-built buzzer and LED outer ring both of which operate when the bollard is functioning.

PEDESTRIAN SAFETY

It is the responsibility of the client to ensure that suitable signage is in place to prevent injury or damage to pedestrians or vehicles.

POWER AND CABLING REQUIREMENTS

A 230v single phase supply rated at 6 amps is to be provided to the control panel point by the main contractor. In addition ducting is to be supplied by the main contractor to enable connection between bollards, intercom, photocells etc. The Specialist Contractor Electro Automation (NI) Ltd will complete all local cabling.

SYSTEM CONTENT

- 3 No. J275 Automatic Bollards 275/600
- 3 No. J275 Bollard Foundation Boxes 275/600
- 1 No. J275 Bollard Control Unit
- 2 No. Proloop Detectors for 3 Loops 230v
- 2 No. Safety Induction Loop
- 1 No. Free Exit Induction Loop
- 1 No. Detector Cable 100m
- 1 No. Bollard Cable 100m
- 1 No. Set of Safety Photocells
- 1 No. Audio Intercom System 1 Call Button to 1 Handset
- 1 No. Push Button Console Switch (UP/DOWN)

All materials and specialist advice can be obtained from:

Electro Automation (NI) Ltd

21 Crescent Business park
Lisburn BT28 2GN

Tel: 028 9266 4583

Local Contact: David Cobain

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