

PERIMETER · ELECTRONIC RAZOR-WIRE CONCERTINA

D-Concertina

L3 Layer · The perimeter line

Standard razor-wire concertina turned into a detection line: strain-gauge sensors report the exact zone of a cut or climb.



KEY BENEFITS

- 01 Barrier and sensor in one**
The coil still stops and delays the intruder; the sensors add an exact alarm zone.
- 02 Any coil, new or existing**
Retrofit two sensing wires inside the concertina you have, or install a complete new line.
- 03 Built for exposed sites**
Anti-corrosion treatment to MIL T 152, -25 °C to +72 °C, 10-year sensor warranty.

HOW IT WORKS

- 01 Coil on sensor posts**
Razor-wire concertina of any diameter mounts on arms or posts with strain-gauge sensors.
- 02 Sensing wires**
Two wires run inside the coil and connect to the sensors.
- 03 Detection**
A cut, climb or push of 15 kg and above changes the tension and raises the alarm.

SPECIFICATIONS

Concertina	Standard razor-wire concertina of any diameter (open design)
Configurations	Retrofit: 2 sensing wires inside an existing coil · New: coil and system supplied
Concertina sensor	120 × 37 × 42 mm
Fence length	No fixed limit (practical limitation)
Fence height	According to customer specification
Length of system zone	Not exceeding 100 m
Unit dimensions	250 × 55 × 25 mm, 200 g
Processing unit	Up to 32 sensors
Deflection force	15 kg and above activates the alarm
Dry contact	N.O. & N.C. 1 A @ 48 VDC
Power supply	12 mA @ 48 VDC
Communication output	RS232
Operating temperature	+72 °C to -25 °C
Storage temperature	+80 °C to -32 °C
Humidity	95 %
Corrosion	All parts treated to MIL T 152

- 04 Control centre**
The alarm and its exact zone reach a local, remote or central control centre.

Lightning & electronic transients	MIL STD 9094
EMI & RFI	MIL STD 461, 462
False alarm rate (catalogue)	Less than 1 per km per 3 months
MTBF sensor	4.7×10^8 hours
MTTR	30 minutes
Warranty	10 years on the sensors

TENDER SPECIFICATION TEXT

1. GENERAL

The system shall be D-Concertina by D-FENCE Electronic Fencing and Security Systems Ltd. (ISO 9001:2015 certified quality management), or an approved equivalent that meets every requirement in this section.

2. FUNCTION

Standard razor-wire concertina turned into a detection line: strain-gauge sensors report the exact zone of a cut or climb.

3. THE SYSTEM SHALL PROVIDE

- **Barrier and detection:** A coil that is very hard to penetrate, with the exact alarm point shown in the control centre.
- **Retrofit option:** Sensors on sensor posts, with two wires stretched inside the existing concertina.
- **New-fence option:** Supply and installation of both the open-design concertina and the electronic system.
- **Flexible management:** Locally, remotely, from a central control centre or a monitoring centre.
- **Walls and fences:** On wall crowns, at the foot of a wall, or on chain-link and welded-mesh fences.

4. TECHNICAL REQUIREMENTS

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5. DETECTION SEQUENCE

1. **Coil on sensor posts:** Razor-wire concertina of any diameter mounts on arms or posts with strain-gauge sensors.

2. **Sensing wires:** Two wires run inside the coil and connect to the sensors.
3. **Detection:** A cut, climb or push of 15 kg and above changes the tension and raises the alarm.
4. **Control centre:** The alarm and its exact zone reach a local, remote or central control centre.

6. SUBMITTALS

Before installation, the contractor shall submit the manufacturer's datasheet, the installation instructions and the zone layout for approval.