Radar sensor Comfort

FURTHER INFORMATION

Time-consuming roadworks are a thing of the past: with the ELKA radar sensor Comfort, the clever alternative to induction loops and photoelectric barriers, installation is simple, clean and can be carried out in just a few steps.

- ✔ INDUCTION LOOP REPLACEMENT
- ✔ PHOTOELECTRIC BARRIER REPLACEMENT
- ✔ EASY INSTALLATION
- ✔ INSENSITIVE TO WEATHER CONDITIONS
- ✔ NO ROAD WORKS

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Radarsensor Comfort

Small format, great performance

The alternative to photoelectric barriers and induction loops

With our high-performance radar sensor Comfort, we offer you a reliable solution for demanding applications in the field of presence and motion detection of pedestrians and vehicles (EN12453 type D).

The radar sensor is the easy-to-install alternative to classic induction loops and phototelectric barriers. For existing systems where pedestrian traffic cannot be excluded (e.g. multi-storey car parks), it is the ideal addition to ensure that an installation complies to valid norms.

It can be installed in just a few steps and without the need for time-consuming roadworks. An integrated web interface enables a configuration independently of a device.

The virtual loops can be flexibly set and changed as required. The detection system is extremely insensitive to weather conditions such as rain, snow, frost and fog.

Convince yourself of the advantages!

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Radar sensor Comfort

Clever advantages at a glance

- Virtual induction loops without complex construction works
- Radar sensor can be used as a D-device in accordance with EN 12453
- Insensitive to weather influences
- Quick and easy installation
- Directional logic
- 4 relay outputs, 3 of which are freely configurable
- Arrangement of the presence fields freely selectable
- 13m range for all ELKA barrier types
  also with hanging skirt and swinging support
- Configuration via web server-user-interface (Wifi-Direct)

Advantages at a glance

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Convincing advantages

Maximum operational reliability - anytime and anywhere

Wherever reliable detection of vehicles and people is required, the radar sensor Comfort can fulfill its potential. It is ideal for access control at entrances to company premises, multi-storey car parks and security areas. Individually adjustable virtual loops can e.g. controll barriers, activate ticketing- or ANPR systems or provide protection against the collision with the barrier boom.

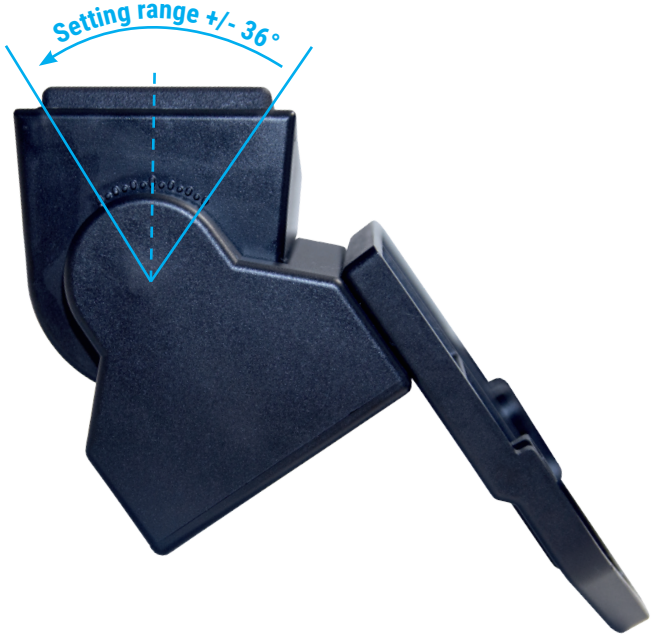
The radar sensor Comfort

- **is insensitive to weather influences such as rain, snow, frost and fog**
- **is unaffected by darkness / brightness**
- **provides a message in the event of manipulation**
- **Can fade out hanging skirts and swinging supports**
- **Fast and cost-effective commissioning in the event of vandalism - Sensor and evaluation unit separate**

Features of the radar sensor Comfort

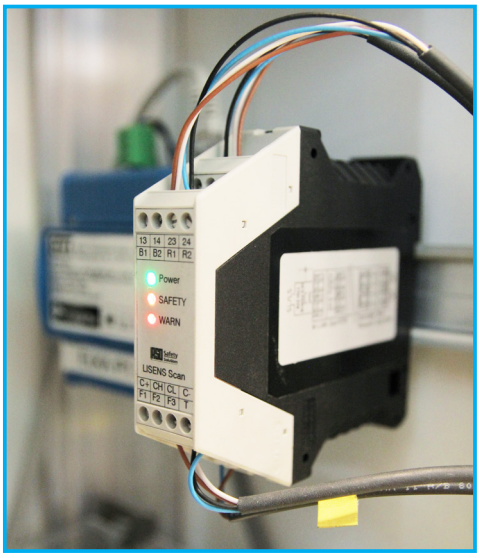
The sensor has a monitoring angle of 120° and an adjustable range of up to 13 metres for all ELKA barrier types. A pre-set inclination angle of 15° ensures optimum monitoring of the safety zone close to the ground.

After installation, the sensor can be swivelled in 6 steps of 6° each (36° in total).



ELKA

Convincing advantages



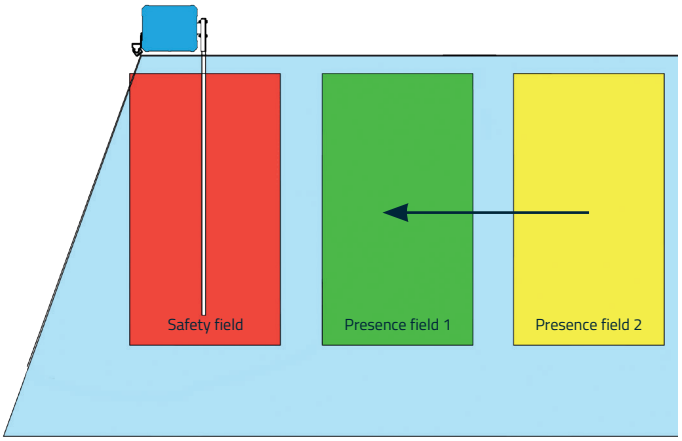
With a total of four relay outputs, the Comfort radar sensor has an additional relay for the safety field.

The advantage: In addition to the relay that controls the actions for protecting the barrier boom, an extra action can be assigned to the safety field.

The switching signals can be triggered upon presence or departure from the fields (e.g. closing after leaving). Permanent or pulse commands can be configured. 3 RGB LEDs on the sensor (and on the evaluation unit) provide feedback on the status in the respective fields and the system as a whole.

The monitored area can be divided into up to three fields, which act as virtual loops. In addition to the safety field under the barrier boom, two additional presence fields enable individual coverage of the area to be monitored.

The highlight: By configuring the two presence fields accordingly, the radar sensor Comfort can create a directional logic. For this, the 2 presence fields form a combination that can be reliably analysed depending on the direction of passage, in contrast to the usual direction detection with only one field. The desired actions can be put out via the 2 relays.



Assembly

The ELKA radar sensor Comfort consists of two separate units for the sensor and the evaluation unit. While the evaluation unit is connected in the barrier housing for protection, the compact sensor can be attached to the left or right of any ELKA barrier housing using protected cables (the sensor can also be mounted on a flat surface using the enclosed adapter plate).

The monitoring area is easy to teach in - a reference object is not required. The connection is made via the light barrier connection of the motor control unit (resistance evaluation or NC contact).

If the sensor is positioned to the side sensor can be installed at open cabinet door!

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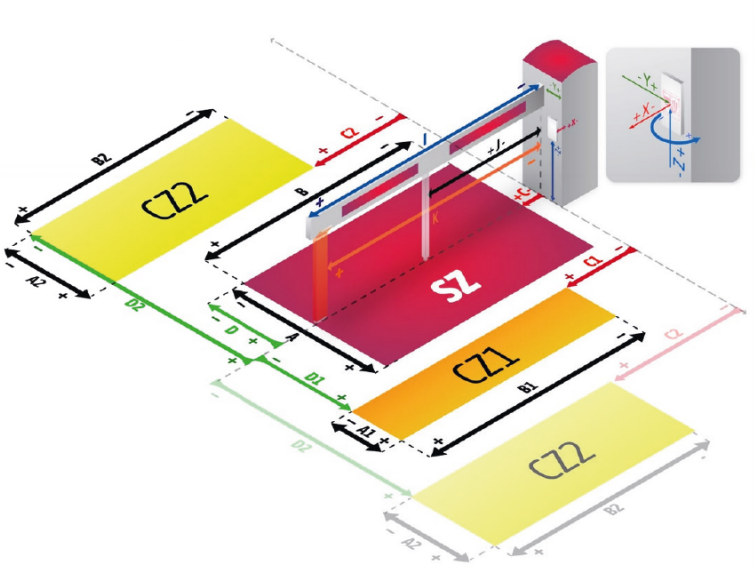
Intuitive Konfiguration

Sicherheits und Komfortzonenkonfiguration

A: Breite Sicherheitszone (SZ) [cm]	200
B: Länge Sicherheitszone (SZ) [cm]	500
C: Versatz Sicherheitszone (SZ) [cm]	0
D: Versatz Sicherheitszone (SZ) [cm]	-100
A1: Breite Komfortzone 1 (CZ1) [cm]	0
B1: Länge Komfortzone 1 (CZ1) [cm]	0
C1: Versatz Komfortzone 1 (CZ1) [cm]	0
D1: Versatz Komfortzone 1 (CZ1) [cm]	0
A2: Breite Komfortzone 2 (CZ2) [cm]	0
B2: Länge Komfortzone 2 (CZ2) [cm]	0
C2: Versatz Komfortzone 2 (CZ2) [cm]	0
D2: Versatz Komfortzone 2 (CZ2) [cm]	0

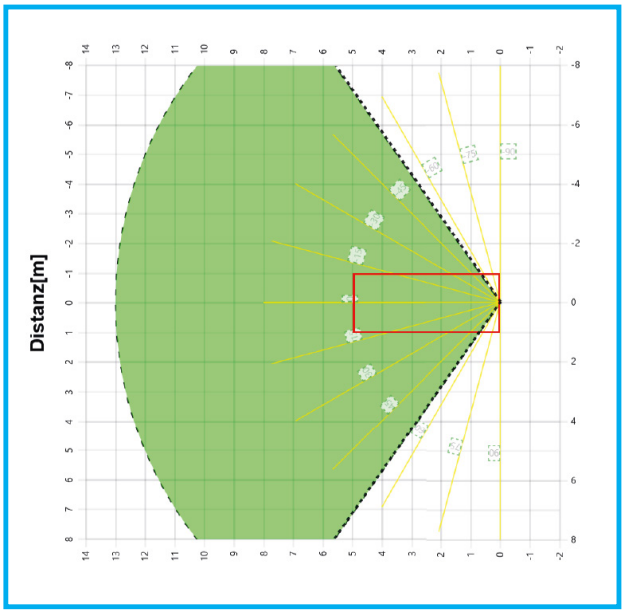
Konfiguration widerherstellen | Auswahl speichern



Device-independent installation - secure and convenient via the web server

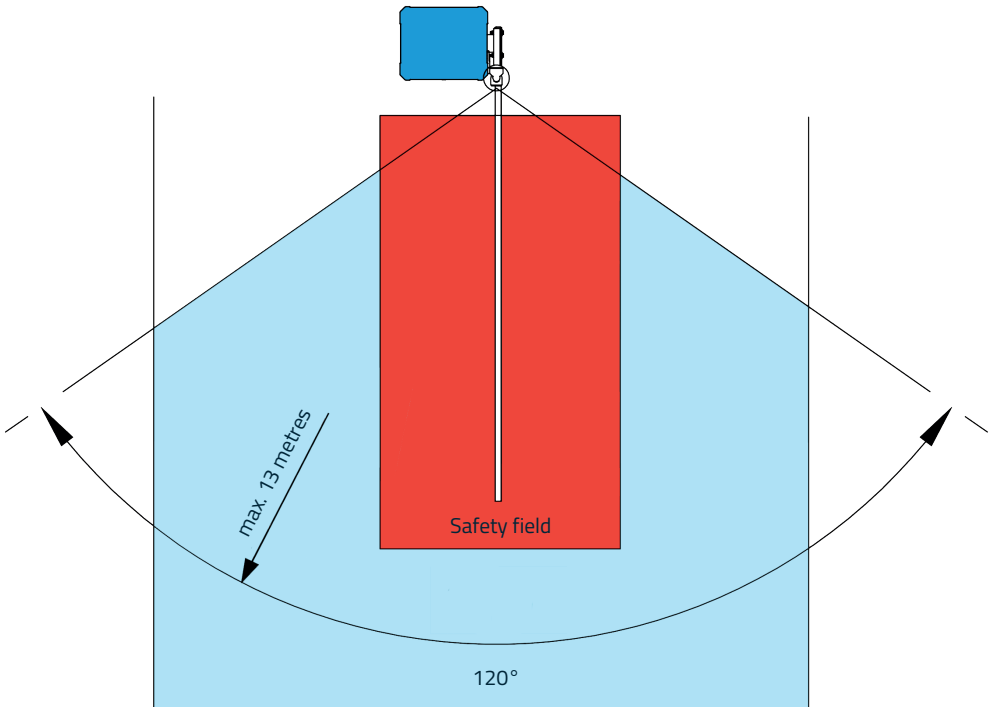
No APP is required for configuration. It is simply carried out via the web interface of the analyser. The clear user interface and clear illustrations make entries easier and show which field dimensions are affected.

You can then view the configurations you have made as an image and list without having to teach in the system again.

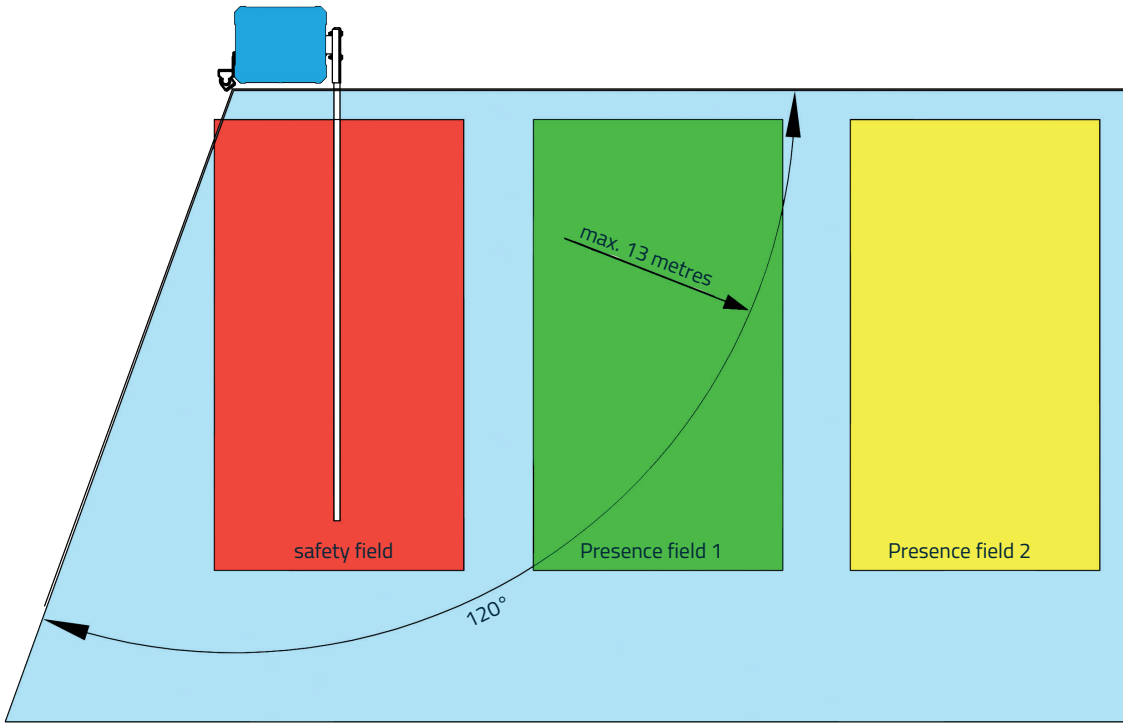


Assembly examples

The Comfort radar sensor can be flexibly mounted in various positions and therefore fulfils a wide range of requirements. The following are examples of possible mounting positions.

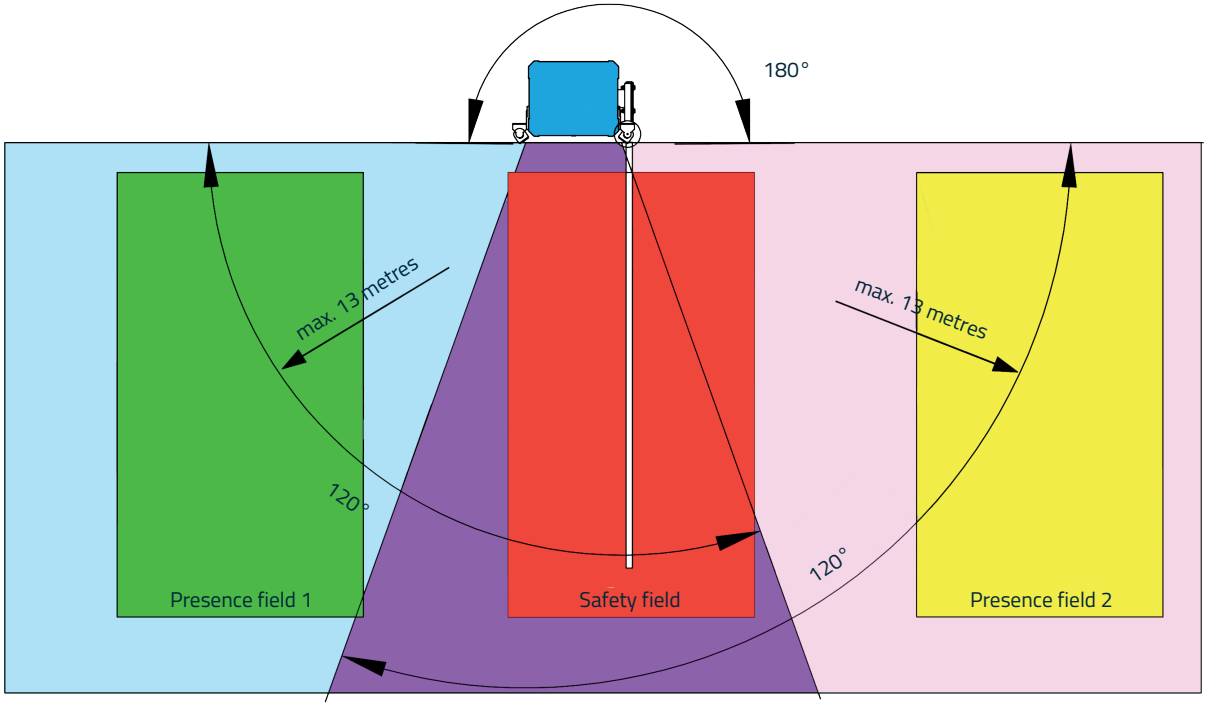


Installation under the barrier boom, e.g. for the exclusive safety function or as a loop replacement.

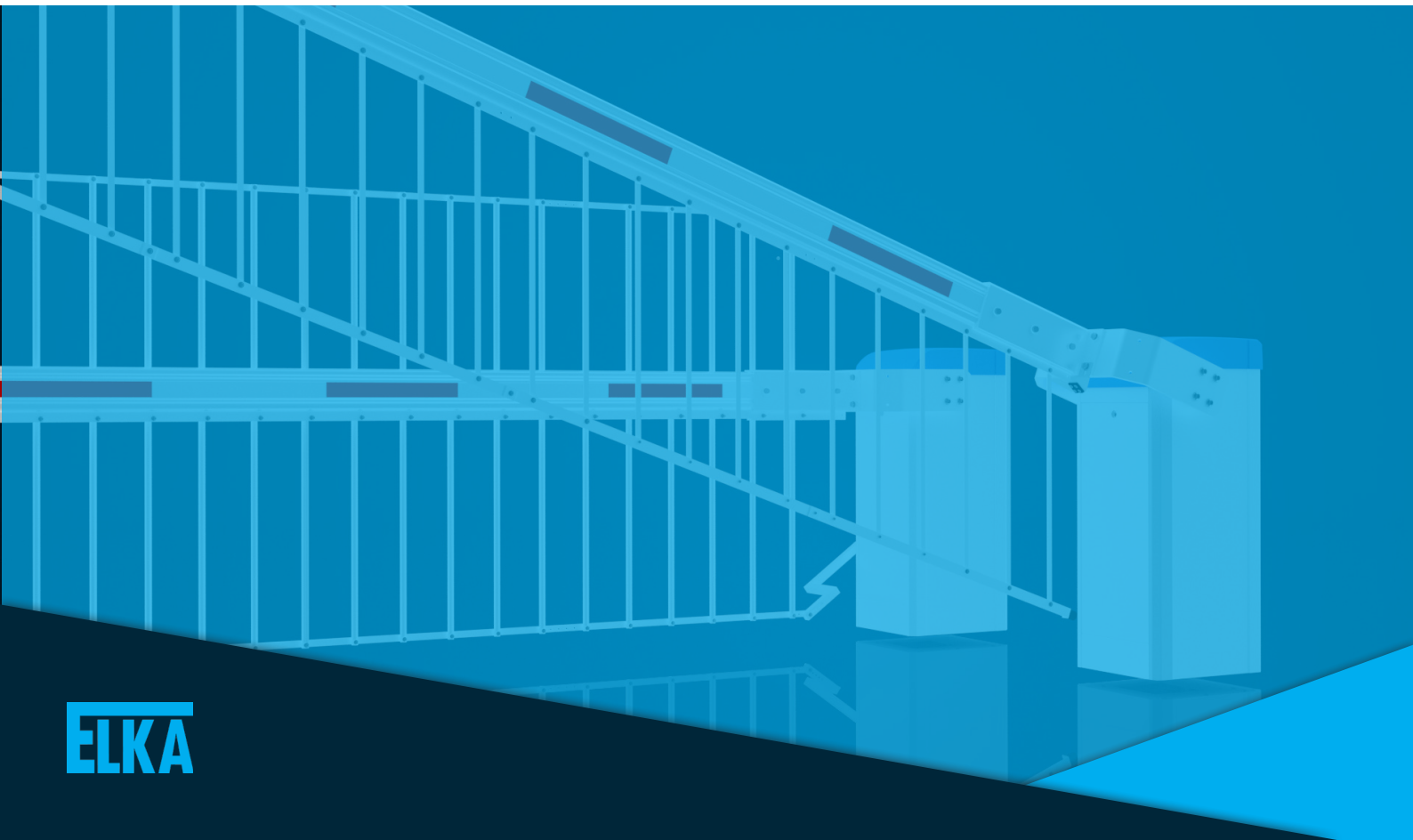


Mounting opposite the barrier boom, e.g. for protection and vehicle detection. Presence fields can be combined for directional logic.

Assembly examples



Mounting with 2 sensors (monitoring angle extended to 180°) e.g. for protection and vehicle detection on both sides.



Technical data

Key figures	Sensor (antenna)	Evaluation unit
Dimensions	49 x 56 x 15mm (without holder), 200 x 81 x 67mm (with holder)	22.5 x 114 x 99mm
Horizontal angle (azimuth)	+/- 60° tolerance zone, +/- 50° detection zone	
Vertical alignment (elevation)	+/- 20° tolerance zone, +/- 15° detection zone	
Detection capability	Vertical alignment +/- 17° Horizontal angle up to 9m +/- 57°, up to 13m +/- 50° Distance 13 metres when using angled reflector RCS=0.17m²	
Supply voltage	10V to 30V DC	14V to 27V AC
Current consumption	Approx. 5.28W (at 24V DC)	
Power consumption	220mA and 24V DC	
Output signal FSS	Pulsed signal, 1kHz, 50% switch-on time, max. 24V 100mA	
Output signal 8k2 simulation	Quiescent current output, max. 5V, with testing	
Comfort Relay	500mA at 30V DC	
AUX Relay	500mA at 30V DC	
FMCW Radar	60 to 64GHz	
Protection class	IP67	IP20
Area of application	Virtual induction loops	
Property classification and monitoring	Differentiation between static and dynamic objects	
Konfiguration	WIFI	
Protection	according to DIN EN 12453 Type D	

Sensor with holder

Sensor without holder

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ELKA TORANTRIEBE

For more than 45 years, ELKA stands for quality “Made in Germany”

As an experienced manufacturer, we develop high-quality barrier systems for parking lots, parking garages, commercial entrances and toll stations, robust traffic bollards for reliable protection in pedestrian zones and entrances, high-performance gate drive technology and suitable accessories for modern access control solutions - innovative and designed to meet the highest demands. Our products are developed and manufactured in Germany and are subject to strict quality controls - this enables us to achieve maximum reliability for daily use.

“Partner with competence” - this philosophy is firmly anchored in our corporate culture. Fast order processing, short delivery times and adherence to delivery dates are a matter of course for us. We supply to customers in over 80 countries worldwide and provide them with experienced advice. Our experts know every product in detail and are happy to support you in planning your projects. Contact us - we look forward to hearing from you.

You can find further information on our website: **www.elka.eu**

✔ Competent customer service **✔ Quality „Made in Germany“** **✔ Short delivery times and adherence to delivery dates**

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