ExpertSystem

The comprehensive safety solution for gates and door systems

ExpertSystem – the new safety standard for gates and door systems

Strict safety regulations, complex installation conditions and the shortage of skilled professionals set big challenges to gate manufacturers, installers and building owners. Faster gate speeds and increasing design requirements are further demands from the market.

ExpertSystem is the answer from BBC Bircher Smart Access to meet these challenges and establishes a new standard in the market. The well thought-out system fulfils wide customer requirements and simultaneously adds value. Clever features enable customers to safeguard gates in just a few steps, while being cost effective and enhancing performance. Thanks to the self-assembly, the pluggable connections and an optionally available quick mount feature, installation time and the frequency and duration of service operations can be reduced considerably. This reduces customers' inventory, service and investment costs sustainably.

Above picture: LIBERO Torbau, www.libero-torbau.com; picture page 1: Falken Tore, www.falken.at

ExpertSystem – the smart safety solution from Bircher

ExpertSystem is a comprehensive safety for automatic gates consisting of the well-known, self-assemble safety edge system "ExpertLine" – newly marketed under the name "ExpertSystem XL" – a completely new developed wireless signal transmission system called ExpertSystem XRF and a quick mount system. In addition to eight highly sensitive contact profiles and nine aluminum rails, ExpertSystem also includes three radio transmitters and three innovative receivers. A wide range of accessories and connecting cables complete the system for a wide range of applications. This innovative system is rounded off by a flexible logistics and service concept and offers uncompromised safety, scalability as well as efficiency and sustainability thanks to its well thought-out design.

Safe

- High sensitivity ensures fast activation behaviour – With the innovative profile cross-section and short actuating distance, ExpertSystem responds even at very low actuating forces
- Optimal design allows for unrestricted overtravel – The increased overtravel makes it possible to choose the smallest available profile height for each application
- Fast reaction time of the complete sensor system – ExpertSystem has a large active switching surface
- Selectable safety category – Automatic use of ideal safety between PLc, cat. 2 or PLd, cat. 3

Scalable

- High-performance components – ExpertSystem combines safety edges and signal transmission into an uncompromising safety solution
- High flexibility for various applications – Being a modular solution means components are perfectly matched to each other, and can be combined in various ways for any application
- Attractive appearance for seamless integrations into gate/door design – ExpertSystem safety edge profiles cover both the aluminium rails as well as the radio transmitter, and can be harmoniously integrated into ambitious gate designs
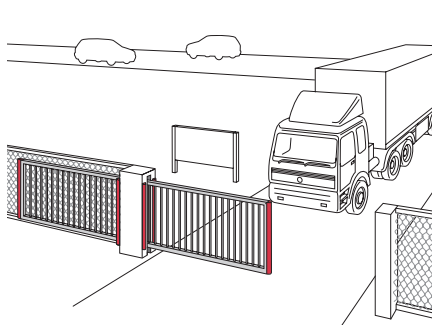
Sustainable

- Smart design for fast assembly and installation – As an all-in-one solution, ExpertSystem ensures service, storage and maintenance savings while reducing the risk of liability
- Modular components provide secure operation – ExpertSystem offers "peace of mind" for the whole life cycle of the door or gate
- Easy integration into customers' logistics and warehousing – To meet individual requirements ExpertSystem offers various component combinations that work in a wide range of applications
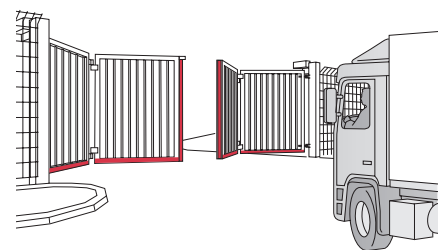
Application areas

From a design and standard compliance perspective, ExpertSystem fulfils different aspects in terms of safety and reliability with its six profile heights, versatile features and a transmission system tailored to customer needs. This comprehensive safety solution is mainly intended for perimeter protection.

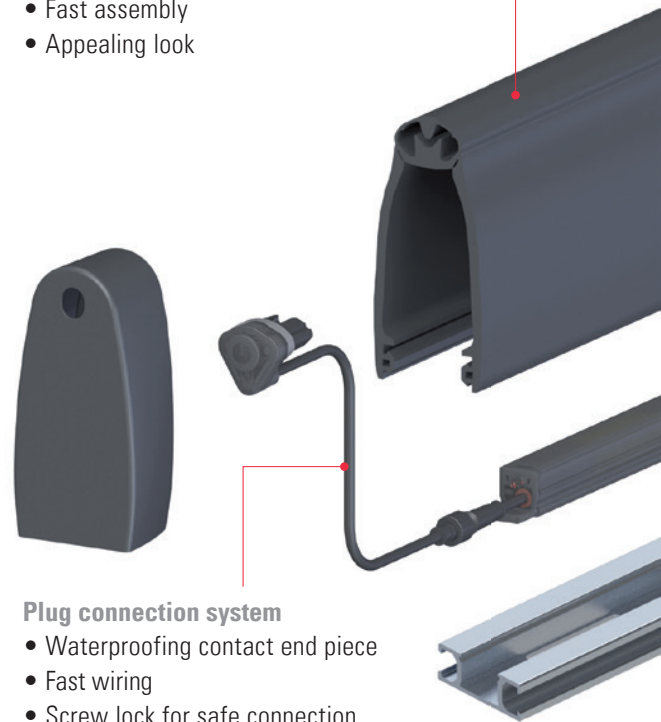Sliding gates

Swing gates

Folding gates

System overview and components

Profile types

XL-CP42A
42 mm

XL-CP49A
49 mm

XL-CP56A
56 mm

XL-CP56B
56 mm (+13 mm)

XL-CP74A
74 mm

XL-CP80A
80 mm

XL-CP80B
80 mm (+10 mm)

XL-CP99A
99 mm

Aluminium rails

XL-AP24
24 mm

XL-AP30
XL-AP30Q
30 mm

XL-AP36
XL-AP36Q
36 mm

XL-AP3020
XL-AP3020Q
30 mm

XL-AP3620
XL-AP3620Q
36 mm

Sensor edges
• High sensitivity
• Fast assembly
• Appealing look

Plug connection system
• Waterproofing contact end piece
• Fast wiring
• Screw lock for safe connection

Radio system
• Selectable safety category
• Radio range up to 100 m
• High interference immunity of signal

Transmitter

XRF-TI
Integrated
transmitter

XRF-T.2
Transmitter

XRF-TW
Wicket door
transmitter

Receiver

XRF-R.1
Single-channel
receiver

XRF-R.2
Two-channel
receiver
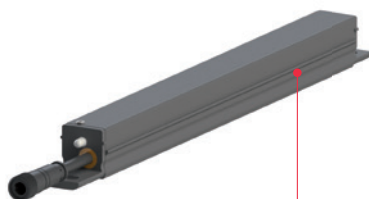
XRF-RD / XRF-RD.A
DIN housing
Receiver

Quick mount system
- Faster than every installation
- Easy edge exchange for maintenance
- Allows for pre-assembly in workshop

DIN receiver (XRF-RD)
- Intuitive user interface of XRF
- Inputs for stationary edges
- Suitable for installation on DIN rails

Integrated transmitter (XRF-TI)
- Peace of mind thanks to long-life battery
- Can be integrated into edges, safe from vandals
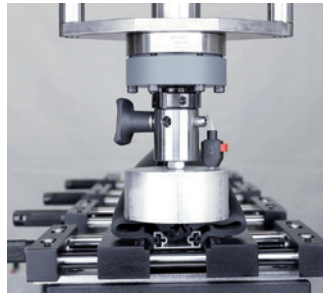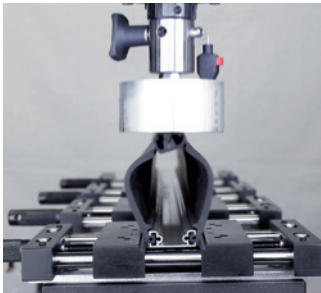- Harmonic look at gates

Solution highlights and benefits

System design

- One system suitable for all gate applications, thanks to modular design and wide product range
- Plug-in contact end pieces allow ExpertSystem safety edges to be assembled in a matter of minutes. The plug connections and plug-on profile end caps ensure very short assembly times
- Based on the enhanced sensitivity, smaller safety edge profiles can be used
- ExpertSystem features an appealing look consisting of covered aluminium rails and a vandal-proof transmitter for integration into ExpertSystem XL safety edges

Safety & tested quality

- ExpertSystem represents a comprehensive safety system with reduced liability for the installer
- ExpertSystem goes beyond safety standard DIN EN 12453 and allows for higher gate speeds resulting in improved safety of perimeter accesses
- Excellent sensitivity throughout the surface from all directions of actuation making it the most sensitive edge on the market
- Proven radio technology (PLd, cat. 3 and PLc, cat. 2), engineered in Switzerland, ensures high reliability, fast and comfortable set-up, e.g. pairing by pressing an edge twice

Quick mount system

- Shortened assembly and installation time of safety edges with wireless signal transmission
- The system design makes it possible to manufacture edges in-house and simply snap them into place on site
- Quick mount brackets tolerate positional deviations of up to 3 millimetres in all directions
- Easy and quick replacement of edges in service and maintenance cases

Service and logistics concept

ExpertSystem is designed to optimally meet specific customer demands and allows for easy integration in customers' logistics. Depending on individual business models, customers can choose between three service and logistics models available: make-to-order, kits and self-assembly. In this way customers can optimize their operation with a logistics model that exactly meets specific needs.

Make-to-order

- High quality through qualified process
- Quick mount system at gate or door
- Customer proximity through global production network
- Next day shipping

Kits

- 2 meter standard length
- Low assembly effort
- Other lengths can be delivered upon request
- Allows minimum storage space in service van

Self-assembly

- Compact packaging units
- Assembly in a few easy steps
- Quick mount system at gate or door
- High flexibility through modular system

Complementary products

The following products work well with ExpertSystem and provide effective presence detection and additional safety.

ProAccess
Microwave and ultrasonic sensor

Vehicle detection sensor for barriers and gates

- Quick and easy to install thanks to above ground mounting
- With built-in heater and IP65 protection optimally suitable for outdoor operation
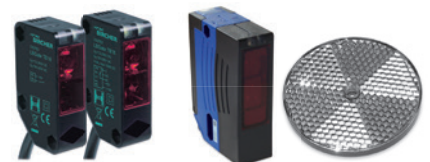- Several features allow for convenient adaption to various applications

ProLoop2
Programmable loop detector

Reliable evaluation and monitoring of induction loops

- Intuitive user interface with LCD display
- Quick startup thanks to automatic configuration (Plug&Play)
- Simulation mode

LBGate
One-way/reflection light barrier

Effective presence detection and extensive safety for gates

- Insensitive to extraneous light
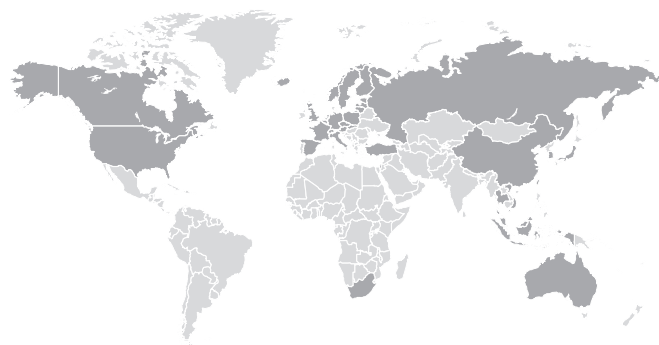- Robust and waterproof housing
- Easy to install

BBC Bircher Smart Access
Your solutions provider for smart access systems

BBC Bircher Smart Access, based in Beringen, Switzerland, is one of the world's leading providers of sensor solutions for access systems. Across our network of international locations, our experts develop, produce and sell innovative solutions for doors, gates and access points – both for public and industrial buildings and for public transport vehicles.

Alongside an extensive product portfolio spanning a number of different fields, BBC Bircher Smart Access also provides its customers around the world with tailored sensor solutions for particularly high demands regarding safety, hygiene, accessibility and energy efficiency.

The company, which was founded in 1957, has been a business unit of the BBC Group since 2003.

An international contact overview can be found on our website at bircher.com

Customer First
- Worldwide support and service
- Comprehensive portfolio
- Customised solutions

Tested Quality
- Swiss engineering
- User-friendly, reliable and certified products
- Extended warranty

Access Expertise
- Specialized in access solutions
- Hygienic and convenient access
- Sustainability and long term experience

Ease of doing business
- Short delivery times
- Trustful and competent partner
- One stop-shop

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