**BLACK BULL FLEX+ impact protection railing,** Polymer, black/yellow, S-Line with underride guard center extension

## Flexible S-Line impact protection guardrail with underride guard

The BLACK BULL FLEX+ S-Line impact protection guardrail with underride guard is a reliable choice for personal protection wherever pedestrians and internal traffic meet and there are additional hazards at ground level. While conventional guardrails primarily protect at vehicle height, the integrated underride guard additionally secures the ground level - and thus prevents forks from entering pedestrian areas. It ensures safe separation of walkways, workplaces and traffic areas and is used in warehouses, logistics and production. The combination of S-Line guardrail and underride guard creates a continuous line of protection for personal safety - from the ground to standing height.

Instead of rigid barriers, the system relies on controlled absorption: It absorbs impact energy, distributes forces across the entire protection line and then returns to its original shape automatically. This means that the protective function is retained even after an impact.

## What happens in detail in the event of an impact

Crossbars & posts

The polymer crossbars of the S-Line form a clearly visible protective line and prevent vehicles from entering pedestrian areas. The integrated underride guard additionally secures the ground level and protects against forks, tires and collision damage. The posts absorb the transmitted forces and ensure stability along the entire safety line. The result: maximum personal protection, reduced accident risks, safe working areas.

Connections & junctions

The FlexLink connection technology distributes the forces evenly across the entire system. Point loads are avoided, individual components as well as the floor and anchor points are relieved. Result: Permanently stable guard lines without loose posts or consequential damage.

Base

The FLEX+ Base connects the posts to the Base ground anchor and forms an impact-resistant outer shell. It protects the internal screw connection and prevents damage to the tires of industrial trucks. The result: high suitability for everyday use and reduced maintenance.

Base floor anchor

The FLEX+ Base floor anchor combines robust anchoring in concrete with force-absorbing rubber dampers. This design reduces the load on the screw connection, protects the substrate and ensures a permanently stable attachment - even with repeated approaches.

## Multiple impacts? No problem.

FLEX+ is made for everyday use. The system remains functional, especially after repeated bumps. No permanent deformation. Durable plastic thanks to high elasticity. This significantly reduces downtimes and follow-up costs.

**Important note:** The information is based on manufacturer data as well as practical experience. For legally compliant use, the applicable regulations, standards, and codes as well as local conditions must always be taken into account. Technical changes, printing errors, and mistakes are reserved.

## Typical application scenarios for the FLEX+ S-Line impact protection railing with underrun protection

This solution is particularly suitable for areas with high pedestrian traffic and additional protection requirements at ground level: separation of walkways and traffic areas, protection of workstations along forklift routes, picking, assembly and crossing areas, use with mixed human and vehicle traffic. A typical example is a warehouse with heavily frequented walkways along traffic routes. The FLEX+ S-Line impact protection railing with underrun protection reliably protects employees, creates clear structures and can be flexibly adapted or extended - seamlessly integrated into a comprehensive FLEX+ protection concept.

## Properties

| | |
|---|---|
| Application Area | Inside |
| Base Plate (Dimensions) | Ø850 × 6,4 mm |
| Certificate | PAS 13:2017 |
| Colour | yellow / black |
| Crossbar (length) | 2260.6 mm |
| Design | S-Line |
| Drill hole spacing | 110 × 110 mm |
| Fixing Holes Diameter | 18 mm |
| Fixture | For doweling |
| Hazardous Goods | no |
| Height (Overall) | 1170 mm |
| Main Material | Polypropylene (PP) |
| Material 2 | Metal |
| Temperature Resistant | 0 - 54 ° |
| Test load | 7020 J |
| Under-run Plate (Height) | 200 mm |
| Under-run Plate (Material Thickness) | 6 mm |
| Underride guard (cross-section) | 203,2 × 101,6 mm |
| Underride guard (material) | Polypropylene (PP) |
| Weight (gross) | 33.19 kg |

## Accessories & Add-ons

| | Category | Text | Quantity |
|---|---|---|---|
| | Consists of | BLACK BULL FLEX+ Base center | 1 |
| | Consists of | BLACK BULL FLEX+ Base floor anchor | 1 |

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| | Category | Text | Quantity |
|---|---|---|---|
| | Consists of | BLACK BULL FLEX+ concrete screw | 4 |
| | Consists of | BLACK BULL FLEX+ connector crossbar S- & High-Line | 4 |
| | Consists of | BLACK BULL FLEX+ crossbar floor barrier & underride guard | 1 |
| | Consists of | BLACK BULL FLEX+ Crossbar S- & High-Line | 2 |
| | Consists of | BLACK BULL FLEX+ S-Line center post | 1 |
| | Consists of | BLACK BULL FLEX+ cover cap | 1 |

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