BLACK BULL FLEX+ impact protection railing, Polymer, black/yellow, High-Line with underride guard Medium extension

Flexible High-Line impact protection railing with underride guard

The BLACK BULL FLEX+ High-Line impact protection railing with underride guard offers reliable protection up to a height of approx. 2.8 m in block storage and high stacked pallet areas. The system effectively protects against collision, underride and overturning risks by reliably preventing forks and uncontrolled movements of loads. This reliably protects people, goods and rack structures. Thanks to its robust design, visibility and modular adaptability, the FLEX+ system is suitable for all warehouse and logistics areas with dense material handling traffic where extended protection over several levels is required.

The combination of raised guardrail and integrated underride guard creates a continuous line of protection from the floor up to a height of 2.8 m.

What happens in detail in the event of an impact

Crossbars & posts

The polymer crossbars of the High-Line form a raised, continuous protective line. They prevent vehicles, pallets or shelves from hitting or moving and goods from toppling over in an uncontrolled manner. The integrated underride guard provides additional protection at floor level against forks, tires and collision damage. The posts absorb the transmitted forces and ensure stability over the entire height of the protection line. The result: protection of goods and infrastructure, reduced material damage, increased process reliability.

Connections & junctions

The FlexLink connection technology ensures that forces are not applied at specific points, but are distributed evenly across the entire system. This relieves the load on individual components as well as the floor and anchor points. Result: Permanently stable protection lines without deformation 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 forklifts and pallet trucks. The result: high suitability for everyday use and reduced maintenance.

Base ground anchor

The FLEX+ Base ground 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 impacts. No permanent deformation. Durable plastic thanks to high elasticity. This significantly reduces downtimes and follow-up costs.

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

This solution is particularly suitable for areas with increased protection requirements for goods and infrastructure: block storage and racking areas, securing goods against tipping over or shifting, traffic routes along pallet and

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storage areas, transfer and picking zones, use with forklift and tugger train traffic with high frequency.

A typical example is a block warehouse with a dense arrangement of goods and regular forklift traffic. The FLEX+ High-Line impact protection railing with underride guard reliably protects goods from collision and underride movements, maintains the stability of the storage areas and can be flexibly adapted or extended - seamlessly integrated into a holistic 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	High-Line
Drill hole spacing	110 × 110 mm
Fixing Holes Diameter	18 mm
Fixture	For doweling
Hazardous Goods	no
Height (Overall)	2870 mm
Main Material	Polypropylene (PP)
Material 2	Metal
Temperature Resistant	0 - 54 °
Test load	7380 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)	62.84 kg

Accessories & Add-ons

	Category	Text	Quantity
	Consists of	BLACK BULL FLEX+ Base center	1
	Consists of	BLACK BULL FLEX+ Base floor anchor	1
	Consists of	BLACK BULL FLEX+ concrete screw	4

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	Category	Text	Quantity
	Consists of	BLACK BULL FLEX+ connector crossbar S- & High-Line	12
	Consists of	BLACK BULL FLEX+ crossbar floor barrier & underride guard	1
	Consists of	BLACK BULL FLEX+ Crossbar S- & High-Line	6
	Consists of	BLACK BULL FLEX+ Post extension High-Line	2
	Consists of	BLACK BULL FLEX+ post S-Line start/end	1
	Consists of	BLACK BULL FLEX+ High-Line center post	2
	Consists of	BLACK BULL FLEX+ cover cap	1

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