Bollards

X-Protect Bollards safeguard corners, doorways and equipment from vehicle impacts. The black and yellow colour scheme enhances visibility and helps direct forklift traffic, creating safer, well-organised industrial routes.



The X-Protect Classic Bollards are built for heavy-duty protection in areas exposed to frequent vehicle movement. Ideal for safeguarding doorways, exposed corners and machinery, they attract attention and help drivers navigate safely along traffic routes. The Classic Bollards are available in four sizes, from 350 to 1160 mm, and can also be seamlessly integrated into the X-Guard Machine Guard System, creating a continuous safety solution across the facility.

The X-Protect Essential Bollards, by contrast, are designed for light-duty impact zones where flexibility and fast installation are key. They provide dependable ground-level protection against accidental contact from forklifts, AMRs or pallet trucks while maintaining an open layout. Available in four sizes from 620 to 1170 mm, the Essential Bollards allow easy adaptation to different layouts and traffic conditions.

As part of the X-Protect Impact Protection System, both bollard types feature modular components, quick installation and easy maintenance which gives long-term performance with minimal disruption.

Key features

- Fast to install
- Kind to the floor
- Easy to repair

Impact test results					
Classic Bollard					
Bollard height	*Load*	*Equivalent to*		*90° Deflection*	*Force to fixings*
350mm	2100 J	2500 kg 4,6 km/h	5000 kg 3,3 km/h	NA*	18 kN
610mm	5250 J	2500 kg 7.3 km/h	5000 kg 5.2 km/h	300mm	19.5 kN
870mm	5250 J	2500 kg 7.3 km/h	5000 kg 5.2 km/h	420mm	17.5 kN
1160mm	5250 J	2500 kg 7.3 km/h	5000 kg 5.2 km/h	620mm	12 kN
Essential Bollard					
Bollard height	*Load*	*Equivalent to*		*90° Deflection*	*Force to fixings*
620mm	1500 J	2500 kg 3.9 km/h	1500 kg 5 km/h	160mm	5.6 kN
880mm	1500 J	2500 kg 3.9 km/h	1500 kg 5 km/h	380mm	6.4 kN
1170mm	1500 J	2500 kg 3.9 km/h	1500 kg 5 km/h	585mm	4.3 kN

- Due to the bollard height, it is considered that the deflection is not critical for product selection.

Models

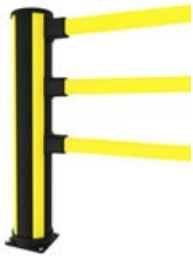
Essential Bollards 3 articles

ARTICLES / DESCRIPTION	WIDTH (MM)	HEIGHT (MM)	COLOR
 **BEP0-062-0000** Essential Bollard	114	620	Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
 **BEP0-088-0000** Essential Bollard	114	880	Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
 **BEP0-117-0000** Essential Bollard	114	1170	Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)

Classic Bollards 4 articles

ARTICLES / DESCRIPTION		WIDTH (MM)	HEIGHT (MM)	COLOR
	**BCP0-035-0000** Classic Bollard	200	350	Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
	**BCP0-061-0000** Classic Bollard	200	610	Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
	**BCP0-087-0000** Classic Bollard	200	870	Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)
	**BCP0-116-0000** Classic Bollard	200	1160	Zinc Yellow (RAL 1018) Graphite Black (RAL 9011)

Related products



Pedestrian

Use the X-Protect Pedestrian barrier configuration to define pedestrian routes and protect from light duty impacts. It is also possible to combine with a pedestrian gate. The pedestrian gate is sel...

9 articles



Pedestrian with impact

Use the X-Protect Pedestrian + Impact barrier configuration to protect walkways from medium duty vehicles where there is an increased risk of ground level impacts. It is also possible to combine wi...

16 articles



COLUMN GUARDS

X-Protect Column guard

Use the X-Protect Column Guard when you need to protect the columns in your facility from impact damage. The unique design features specially formed air channels that effectively dissipate impact f...

1 articles



X-PROTECT X-GUARD BOLLARDS

X-Guard Connection bollards

Use our X-Protect bollards to protect doorways, exposed corners and machinery. The black and yellow bollards also attract the fork lift driver’s attention and act as guidance along traffic routes....

6 articles

Technical Information

X-Protect components

These are the building blocks of our modular Impact Protection range.

BARRIERS & RAILS

Pedestrian Rails



Width x Height:
68 × 72 mm | 2 11/16" × 2 27/32"
Length:
270 - 1770 mm | 10 5/8" - 69 11/16"

Impact Barriers



Width x Height:
116 × 220 mm | 4 9/16" x 8 21/32"
Length:
270 - 2770 mm | 10 5/8" - 109 1/16"

POSTS & BOLLARDS



Classic
4 connection sides
Width:
200 mm
7 7/8"
Height:
350 – 1160 mm
13 13/16" – 45 11/16"

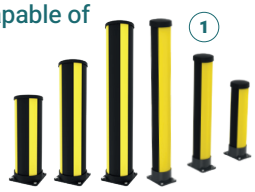
Essential
2 connection sides
Width:
132 mm
5 3/16"
Height:
620 – 1170 mm
24 7/16" – 46 1/16"

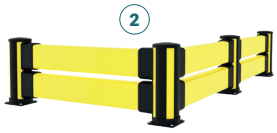


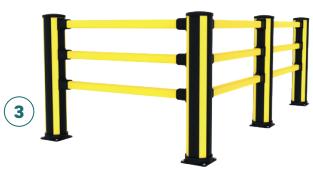
X-Protect Standard Configurations

+ the highest impact energy (J) they are capable of withstanding*

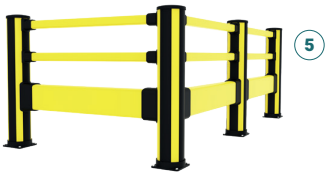
* The highest force depends on the C-C. More information is available upon request.





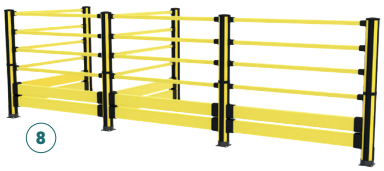


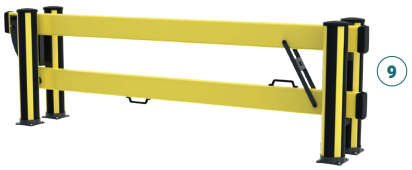






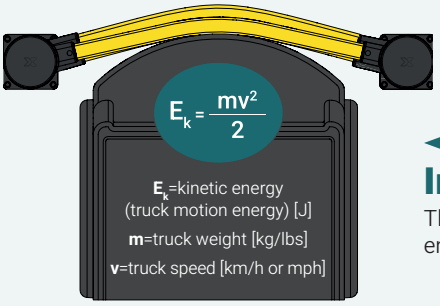












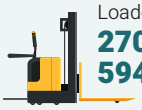
Impact testing

This is how we calculate the energy from a vehicle impact.



Loaded weight
3600 kg / 7930 lbs

Speed	Load
6 km/h | 3.7 mph	5020 J
8 km/h | 5 mph	8880 J
12 km/h | 7.5 mph	19960 J



Loaded weight
2700 kg / 5940 lbs

Speed	Load
6 km/h | 3.7 mph	3770 J
8 km/h | 5 mph	6660 J
12 km/h | 7.5 mph	14970 J



Loaded weight
2100 kg / 4620 lbs

Speed	Load
6 km/h | 3.7 mph	2930 J
8 km/h | 5 mph	5180 J
12 km/h | 7.5 mph	11670 J

Component Colours

RAL 1018 RAL 9011

Operating temperature

-10°C → 40°C



1. **Bollards**
   - Classic | 5220 J
   - Essential | 1500 J
2. **Impact Barriers**
   - Impact | 4500 J
   - Impact High | 6200 J
   - Double Impact Low | 7700 J
   - Double Impact High | 7000 J
3. **Pedestrian Rails**
   - Pedestrian | 5000 J
   - Essential Pedestrian | 2250 J
   - Essential Pedestrian 2 rail | 1700 J
   - Essential Pedestrian | 2250 J
4. **Floor Barrier** | 2250 J
   - Can be used both with Impact & Pedestrian configurations or as stand-alone protection.
5. **Pedestrian Rails + Impact Barriers**
   - Pedestrian + Impact | 6700 J
   - Pedestrian + Impact High | 8000 J
   - Pedestrian + Double Impact | 8300 J
   - Essential Pedestrian + Impact High | 3100 J
6. **Pedestrian Gate** | 0 J
7. **Column Guard** | 1800 J
8. **Topple Barriers**
   - Pedestrian | 5250 J
   - Impact | 6200 J
9. **Dock Gate** | 10200 J
10. **Height Restrictors**
    - Goal Post | 4200 J
    - Height Guard
11. **Upright Protector**