

Elkosta offers from its bollard product family a wide range of solutions for entries, where pedestrians may enter unhindered but vehicle traffic is to be stopped. Due to their attractive designs the bollards can be used in inner city surroundings for city security and traffic management. Applications can range from temporary closing of city centres, but still allowing vehicles with permission to pass, to real estate properties with high security needs. Elkosta products are widely used for military sites, government buildings, embassies, banks and city centres.

## "Different Types And Many Features"

The crash bollard M30 is designed for high security applications and has a height of 1000 mm. The bollard M50 is able to take an even higher impact load and has a height of 1100 mm. All elkosta bollards can be supplied with different control features or can be integrated into existing security systems. For user safety, optical and acoustic warning devices as well as induction loops and photo beam systems are available.

Crash bollards share a rigid steel tube as a blocking element and are available in different sizes. The lowered bollards adhere to bridge class 60, so even the heaviest wheeled vehicles can drive over them safely. All movable bollards are equipped with an integrated hydraulic drive. The advantages of this drive technology are maximum power transmission and working reliability under most adverse weather conditions. During power failure the bollards can be lowered manually. The blocking width can be varied by the number of bollards in a row. Up to five bollards can be operated with one common control unit.

## AT A GLANCE

- Vehicle crash-tested to internationally accepted standards
- ➤ Robust construction with heavy gauge material and high tensile steel
- Fast operating times
- ► Easy installation due to ready-to-install bollard unit and separate control box
- Shallow foundation
- Optional Emergency Fast Operation (EFO)
- Installation in all climate zones possible
- ▶ Reliable operation and low maintenance
- Operation of up to five bollards with one common control unit
- Traversable in lowered position according to bridge class SLW 6
- ▶ Blocking element with optional top lighting
- Override facility for manual lowering
- Optional accumulator for emergency operation during power failure

BOLLARD M50 FIXED VEHICLE PERFORMANCE CLASSIFICATION					
VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION	25KG+ Dispersion
V/7500KG	N3	80	90	0.4	15.4
V/7200KG	N3C	80	90	0.8	











STANDARD TECHNICAL SPECIFICATIONS					
Design	Blocking bollard(s) with base supports for shallow mount installation. Bollard system can be adapted on site for corner applications.	Foundation Top Edge	100 mm below finished floor level		
Impact Load	1699 kJ (6.8 t @ 50 mph) Crash test certified according to PAS 68 V/7500[N3]/80/90:0.4/15.4 IWA 14-1 V/7200[N3C]/80/90:0.8	Weight	620kg		
Blocking Element	Diameter: 355 mm with welded on steel top plate, optional: screwed on steel top plate, in galvanised finish or coated in colour of blocking element	Options	Bollard top lighting, Ufo-shape, red, white or yellow Stainless steel sleeve with screwed on or welded stainless steel top plate		
Wall Thickness	30mm	Colour (Standard)	RAL 6005 moss green RAL 7016 anthracite grey RAL 7030 stone grey RAL 7035 light grey RAL 9010 pure white		
Blocking Height	1000mm	Colour (Optional)	Other RAL colours or DB colours		
Foundation Size	4500 x 2500 x 400 mm (triple unit)				

## STANDARD TECHNICAL DRAWING









