

BOLLARD M50 MOVABLE

(BSI PAS68:2010) V/7500[N3]/80/90:5.2/7.8
(BSI IWA14-1:2013) IWA 14-1 V/7200[N3C]/80/90:5.5

VEHICLE CRASH-TESTED TO INTERNATIONALLY ACCEPTED STANDARDS



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 bollard M50 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 AUTO VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
V/7500KG	N3	80	90	5.2
V/7200KG	N3C	80	90	5.5



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STANDARD TECHNICAL SPECIFICATIONS

Design	High security bollard in compact style with integrated hydraulic aggregate incl. EFO and separate control unit for up to five bollard units.	Control Cabinet	Control box installed in outdoor control cabinet complete with rain cover, hygostat, thermostat, heater and outdoor coating HxWxD = 1000x800x400 mm + 200 mm socket (for control unit configuration Vario) HxWxD = 1200x1200x400 mm + 200 mm socket (for control unit configuration Vario RO 1)
Impact Load	1852 kJ (7.5 t @ 80 km/h) Crash test certified according to PAS 68:2013 V/7500[N3]/80/90:5.2/7.8, IWA 14-1:2013 V/7200[N3C]/80/90:5.5 and ASTM F 2656-07 M50/P2	Supply Voltage	400 V (3Ph + N + PE), 50 Hz
Blocking Element	Diameter: 355 mm, 30 mm wall thickness	Lighting	Bollard top lighting, Ufo-shape, LED red, white or yellow
Blocking Height	1100 mm above finished floor level	Weight	Approx. 1400 kg incl. Metal housing
Emergency Operation	Bollard remains in the raised position power failure and can be lowered manually during	Colour (Standard)	Blocking element RAL 6005, 7016, 7030, 7035 or 9010 Bollard top plate galvanised finish Cover plate galvanised finish Metal housing galvanised finish
Emergency fast operation (EFO)	Approx. 2-3 seconds raising	Optional Finish	Blocking element with stainless steel sleeve and stainless steel top plate
Operating Times	Raising: approx. 5-6 seconds Lowering: approx. 5-6 seconds	Temperature Range	-20°C – 65°C
Wheel Load	100 kN according to SLW60 – DIN 1072	Optional	Heating for up to -30°C
Drive	2.25 kW nominal power, 400 Volt AC, three phase, 50 Hz		
Hydraulic Fluid	Mineral oil HLP 22 or biodegradable oil PlantoHyd 22 S, non-hazardous to water		
Control Unit	PLC in control box for wall installation inside a building, control voltage 24 V max distance between bollard and control unit: 50 m		
Control Box	Control unit configuration Standard/Plus: HxWxD = 400x400x200 mm, IP 66 (for single bollard unit) HxWxD = 600x400x200 mm, IP 66 (for double and triple bollard unit) HxWxD = 600x600x200 mm, IP 66 (for quadruple and penta bollard unit) Control unit configuration Vario: HxWxD = 600x400x200 mm, IP 66 (for single and double bollard unit) HxWxD = 600x600x200 mm, IP 66 (for triple up to penta bollard unit) Control unit configuration Vario RO 1: HxWxD = 800x400x300 mm, IP 66 (for single and double bollard unit) HxWxD = 800x600x200 mm, IP 66 (for triple up to penta bollard unit)		

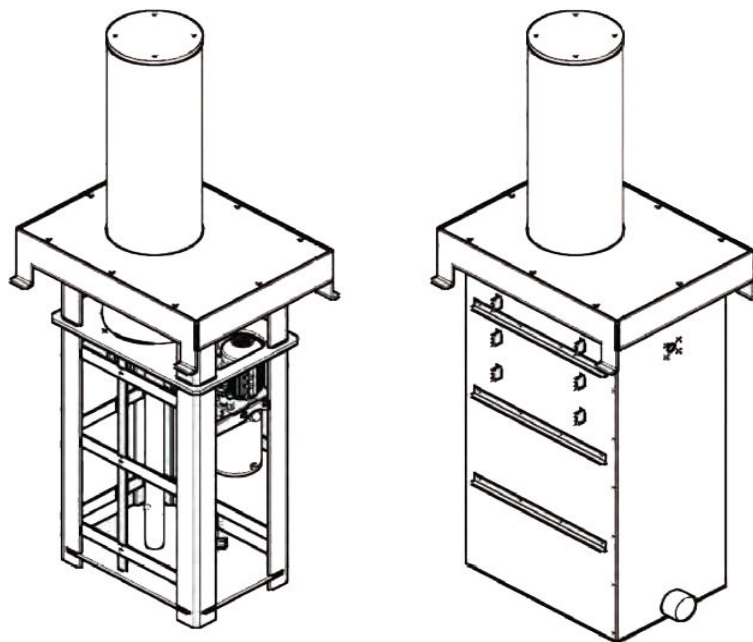
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STANDARD TECHNICAL DRAWING



Ezi Security Systems
SERIOUS SECURITY IS EZI

**PERIMETER
PROTECTION
GROUP**

PSSA
Perimeter Security Suppliers Association
MEMBER

ASIAL
MEMBER
AUSTRALIAN SECURITY INDUSTRIES
ASSOCIATION