



BOLLARD M30 & M50

CERTIFIED TO



Ezi Security Systems
SERIOUS SECURITY IS EZI

BOLLARD M30 & M50

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.

	M30 Rating	M50 Rating
Elkosta Movable Bollards	PAS 68 V/7500[N2]/48/90:0.0/0.0 IWA 14-1 V/7200[N2A]/48/90:0.4	ASTM F 2656-07 M50-P2 PAS 68 V/7500[N3]/80/90:5.2/7.8 IWA14-1 V/7200[N3C]/80/90:5.5
Elkosta Fixed Shallow Mounted Bollards	Vehicle Impact Simulation M30 - P1 (Triple Unit)	PAS 68 V/7500[N3]/80/90:0.4/15.4 IWA 14-1 V/7200[N3C]/80/90:0.8

Elkosta Bollards 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



** EZI MASTER MANUAL BOLLARD M30 & M50 ARE ALSO AVAILABLE



STANDARD TECHNICAL SPECIFICATION

M30 BOLLARD - MOVABLE (HYDRAULIC)

Design	High security bollard in compact style with integrated hydraulic aggregate and separate control unit for up to five bollard units.
Impact Load	667 kJ (7.5 t @ 48 km/h) Crash test certified according to PAS 68:2013 V/7500[N2]/48/90:0.0/0.0 IWA 14-1:2013 V/7200[N2A]/48/90:0.4
Blocking Element	Diameter: 355 mm, 16 mm wall thickness with screwed on top plate
Blocking Height	1000 mm above finished floor level
Emergency Operation	Bollard remains in the raised position during power failure and can be lowered manually Accumulator and rechargeable battery pack for one raising movement (RO1) with charged accumulator (optional)
Operating Times	Raising: approx. 5-6 seconds Lowering: approx. 3-4 seconds Emergency fast operation (EFO): approx. 2-3 seconds raising (with optional accumulator)
Wheel Load	100 kN according to SLW60 – DIN 1072
Drive	1.4 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 Control unit: 50 m
Supply voltage	400 V (3Ph + N + PE), 50 Hz
Lighting (Optional)	Bollard top lighting, Ufo-shape, LED red, white or yellow
Tamper resistance	Reed contact for cover plate

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 RO1: HxWxD = 800x400x300 mm, IP 66 (for single and double bollard unit) HxWxD = 800x600x200 mm, IP 66 (for triple up to penta bollard unit)
Control Cabinet (Optional)	Control box installed in outdoor control cabinet complete with rain cover, hygrostat, 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 RO1)
Weight	Approx. 870 kg incl. Metal housing
Colour (Standard)	Blocking element RAL 6005, 7016, 7030, 7035 or 9010 Bollard top plate galvanised finish Cover plate galvanised finish Metal housing galvanised finish Metal housing frame galvanised finish Installation frame galvanised finish
Colour (Optional)	Blocking element other RAL colour Bollard top plate in RAL colour of blocking element Cover plate in RAL colour of blocking element
Optional Finish	Blocking element with stainless steel sleeve and stainless steel top plate
Temperature Range	-20°C – 65°C Optional: Heating for up to -30°C

M30 BOLLARD - FIXED

Design	Blocking bollard(s) with base supports for shallow mount installation. Bollard system can be adapted on site for corner applications.
Impact Load	612 kJ (6.8 t @ 30 mph) Vehicle Impact Simulation M30/P1 (triple unit)
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
Wall Thickness	30 mm
Blocking Height	1100 mm (bollard M30-1100) or 1000 mm (bollard M30-1000)
Total Height	1552 mm (bollard M30-1100) or 1452 mm (bollard M30-1000)
Base support construction	Total WxD = 900 x 1555 mm

Foundation Size	4500 x 1750 x 400 mm (triple unit)
Foundation Top Edge	100 mm below finished floor level
Weight	Approx. 620 kg (bollard M30-1100) or Approx. 590 kg (bollard M30-1000)
Options	Bollard top lighting, Ufo-shape, red, white or yellow Stainless steel sleeve with screwed on or welded on stainless steel top plate
Colour (Standard)	RAL 6005 moss green RAL 7016 anthracite grey RAL 7030 stone grey, RAL 7035 light grey RAL 9010 pure white
Colour (Optional)	Other RAL colours or DB colours

STANDARD TECHNICAL SPECIFICATION

M50 BOLLARD - MOVABLE (HYDRAULIC)

Design	High security bollard in compact style with integrated hydraulic aggregate incl. EFO and separate control unit for up to five bollard units.
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
Blocking Element	Diameter: 355 mm, 30 mm wall thickness
Blocking Height	1100 mm above finished floor level
Emergency Operation	Bollard remains in the raised position power failure and can be lowered manually during
Operating Times	Raising: approx. 5-6 seconds Lowering: approx. 5-6 seconds
Emergency fast operation (EFO)	Approx. 2-3 seconds raising
Wheel Load	100 kN according to SLW60 – DIN 1072
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 RO1: HxWxD = 800x400x300 mm, IP 66 (for single and double bollard unit) HxWxD = 800x600x200 mm, IP 66 (for triple up to penta bollard unit)

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 RO1)
Supply voltage:	400 V (3Ph + N + PE), 50 Hz
Lighting (Optional)	Bollard top lighting, Ufo-shape, LED red, white or yellow
Weight	Approx. 1400 kg incl. Metal housing
Colour (Standard)	Blocking element RAL 6005, 7016, 7030, 7035 or 9010 Bollard top plate galvanised finish Cover plate galvanised finish Metal housing galvanised finish
Optional Finish	Blocking element with stainless steel sleeve and stainless steel top plate
Temperature Range	-20°C – 65°C
Optional	Heating for up to -30°C

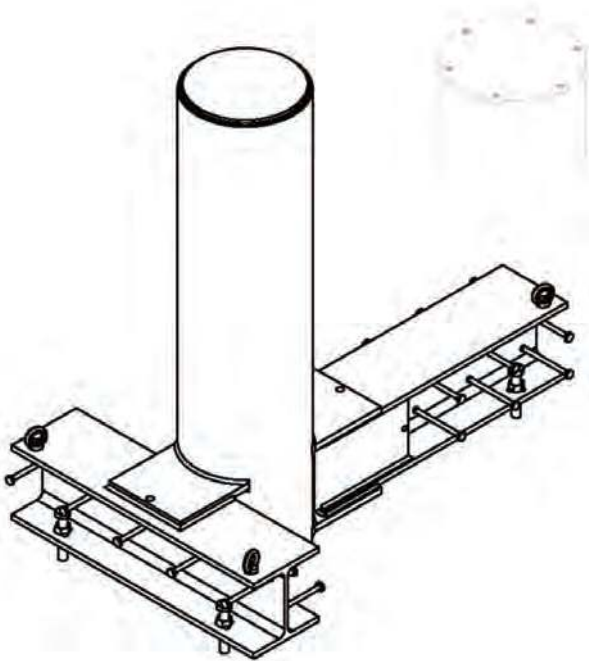
M50 BOLLARD - FIXED

Design	Blocking bollard(s) with base supports for shallow mount installation. Bollard system can be adapted on site for corner applications.
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
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
Wall Thickness	30 mm
Blocking Height	1000 mm

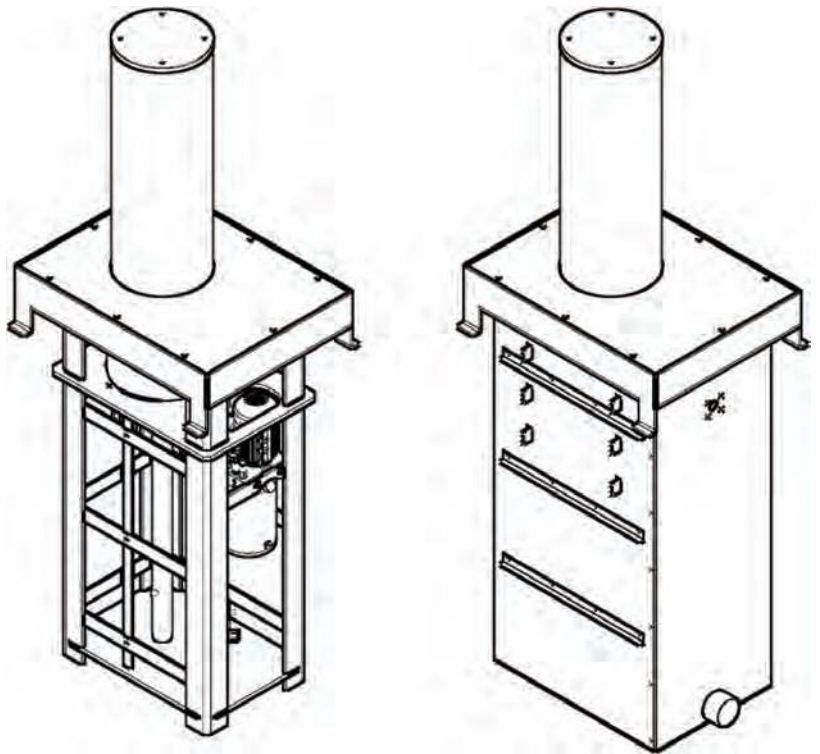
Foundation Size	4500 x 2500 x 400 mm (triple unit)
Foundation Top Edge	100 mm below finished floor level
Weight	620 kg
Options	Bollard top lighting, Ufo-shape, red, white or yellow Stainless steel sleeve with screwed on or welded stainless steel top plate
Colour (Standard)	RAL 6005 moss green RAL 7016 anthracite grey RAL 7030 stone grey RAL 7035 light grey RAL 9010 pure white
Colour (Optional)	Other RAL colours or DB colours

STANDARD TECHNICAL DRAWING M30 BOLLARD

M30 BOLLARD FIXED

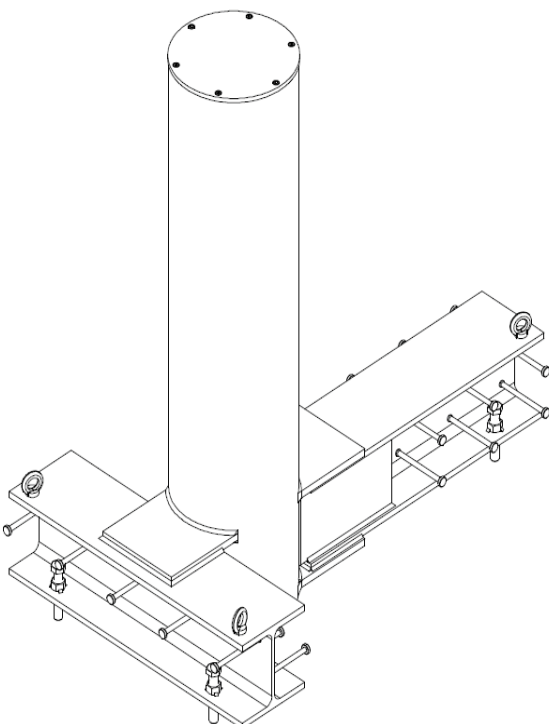


M30 BOLLARD - MOVABLE (HYDRAULIC)

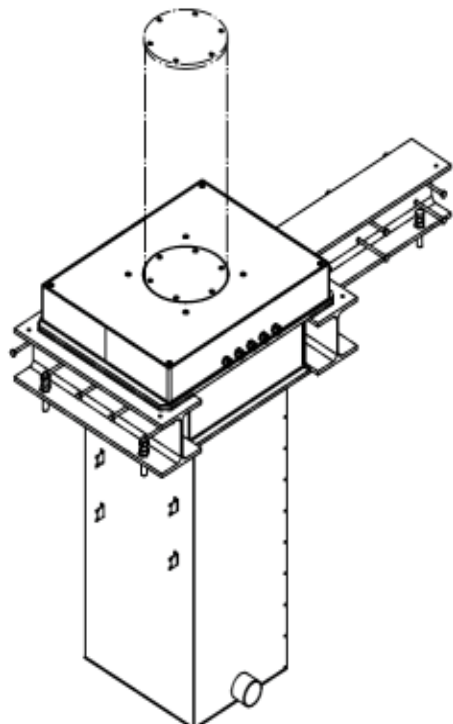


STANDARD TECHNICAL DRAWING M50 BOLLARD

M50 BOLLARD FIXED



M50 BOLLARD - MOVABLE (HYDRAULIC)



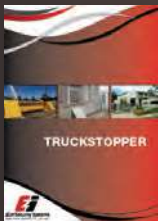


Ezi Security Systems

S E R I O U S S E C U R I T Y I S E Z I

OUR PRODUCTS AVAILABLE

CRASH RATED RANGE



FOLLOW US ON



AUSTRALIA NATIONAL

1300 558 304

11 Cooper Street Smithfield NSW 2164

www.ezisecurity.com.au

Email: sales@ezisecurity.com