

HYDRA MICRO BOLLARD

/ FULLY RETRACTABLE OIL-HYDRAULIC BOLLARDS



DESIGNED AND MANUFACTURED TO CONTROL OR STOP TRAFFIC

Will control or stop traffic from private and public vehicle entrances, car parks, mines, factories and warehouses. Bollard diameter of 100mm. Various height options and LED lights available. Protective rubber band around the bollard head.

OIL-HYDRAULICS

Easy and quick to access the hydraulic drive unit and piston. Manual override by tool to lower the post. Tested to ensure heavy duty performance even at low or high temperatures. Simple maintenance.

SIMPLE AND QUICK TO INSTALL

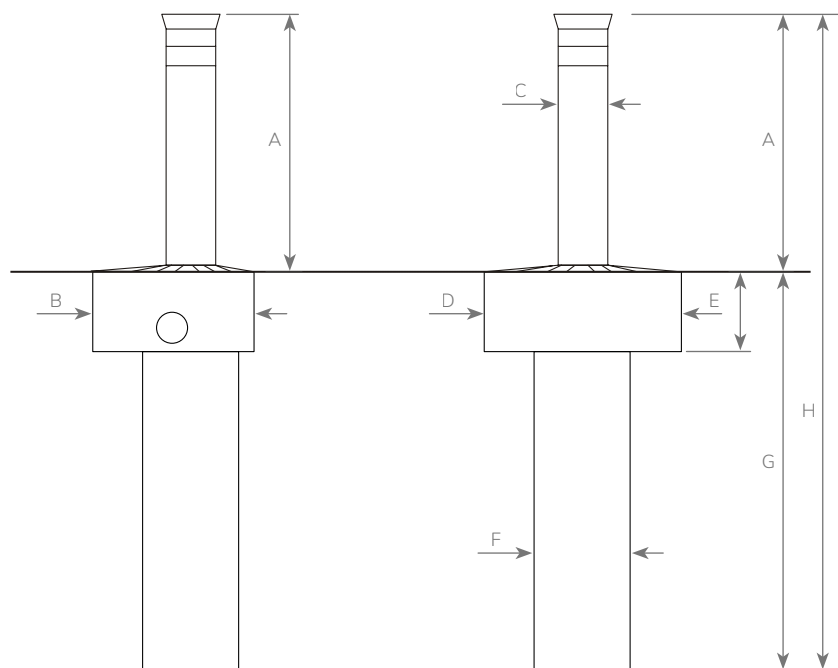
With the reduced weight and the ground casing, no particular excavation or brick works are needed. Each electric cable is (standard) 10m in length.

VERSATILE

A vast range of accessories for triggering the bollard is available (pushbuttons, remote controls and card / biometric access control) and safety (loop detector, radar, infrared sensors and traffic lights) allow for reliable and precise control of the bollards.

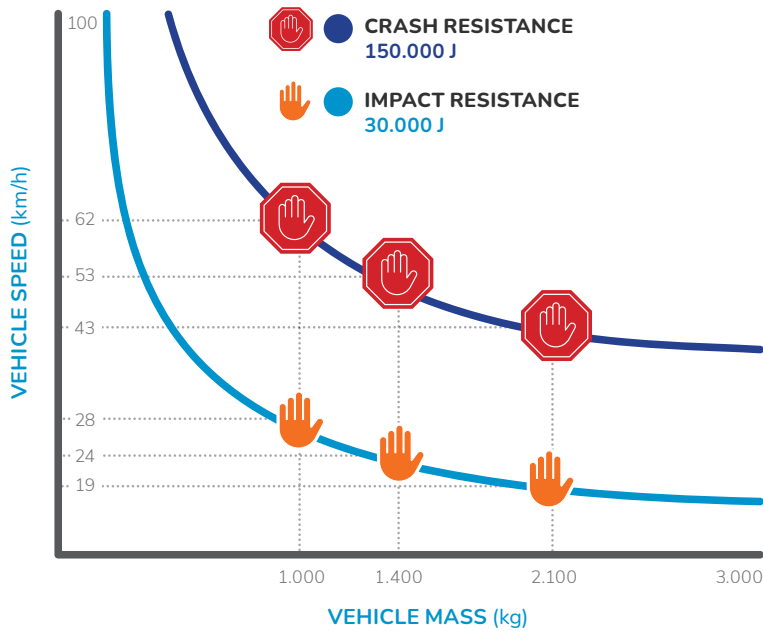
The electronic controller **TURCP S40** manages up to four bollards simultaneously.

OVERALL DIMENSIONS (mm)



Each bollard comes pre-cabled with cables 10 metres long (for electric motor, limit switches, solenoid valve, LED lights)

| | A | B | C | D | E | F | G | H |
|------------------|-----|-----|------|-----|-----|------|------|------|
| HYDRA MICRO 1050 | 500 | 330 | Ø100 | 400 | 170 | Ø195 | 850 | 1350 |
| HYDRA MICRO 1063 | 600 | 330 | Ø100 | 400 | 170 | Ø195 | 960 | 1560 |
| HYDRA MICRO 1080 | 800 | 330 | Ø100 | 400 | 170 | Ø195 | 1140 | 1940 |



CRASH RESISTANCE
 This describes the bollard’s capability to endure and stop high-energy impacts, such as those from deliberate vehicle ramming at significant speeds. Crash resistance is typically evaluated according to standardized crash test certifications (e.g., ASTM F2656, PAS 68, or IWA 14-1), which assess the bollard’s effectiveness in halting vehicles and preventing penetration into secured areas.

IMPACT RESISTANCE
 This refers to the bollard’s ability to withstand a sudden force or shock without sustaining damage. It is a measure of the bollard’s toughness against lower-energy impacts, such as accidental bumps from vehicles or minor collisions. This characteristic ensures the bollard remains operational after such incidents.

KEY DIFFERENCE

- Crash resistance pertains to extreme, intentional collisions and is often tied to anti-terrorism or high-security applications.
- Impact resistance focuses on minor, non-catastrophic events.

Various factors, such as the compaction index, soil permeability coefficient and kind of concrete may reduce the values indicated in the diagram even significantly.

TECHNICAL SPECIFICATIONS

| | HYDRA MICRO 1050 | HYDRA MICRO 1063 | HYDRA MICRO 1080 |
|---|----------------------------------|------------------------|------------------------|
| POST DIAMETER | Ø100 | Ø100 | Ø100 |
| POST THICKNESS | 5mm | 5mm | 5mm |
| POST HEIGHT | 500mm | 600mm | 800mm |
| POST MATERIAL | Steel S235J | Steel S235J | Steel S235J |
| POST FINISHING | Powder Coating Polyester RAL7016 | | |
| GROUND CASING | Hot dip galvanization | | |
| RISING TIME | ~4.7s | ~5.6s | ~7.5s |
| LOWERING TIME | ~4.4s | ~5.1s | ~6.6s |
| WORKING TEMPERATURE | -20°C +80°C (*) | -20°C +80°C (*) | -20°C +80°C (*) |
| OIL TYPE | Oil Turnstar code 708L | Oil Turnstar code 708L | Oil Turnstar code 708L |
| SUPPLY VOLTAGE | 230 Vac – 50 Hz | 230 Vac – 50 Hz | 230 Vac – 50 Hz |
| ABSORBED POWER | 330 W | 330 W | 330 W |
| ABSORBED CURRENT | 1.8 A | 1.8 A | 1.8 A |
| POWER OUTAGE | 0.25 kW (0.33 HP) | 0.25 kW (0.33 HP) | 0.25 kW (0.33 HP) |
| PROTECTION STANDARD OF OIL-HYDRAULIC MOTOR PUMP | IP67 | IP67 | IP67 |
| FREQUENCY OF USE | Intensive | Intensive | Intensive |
| IMPACT RESISTANCE | 30.000 J | 30.000 J | 30.000 J |
| CRASH RESISTANCE | 150.000 J | 150.000 J | 150.000 J |
| WEIGHT | 86 kg | 90 kg | 104 kg |

(*) -40° C with specific optional accessories. For a correct installation always consult the specific instructions manual. Check soil permeability and provide a rain water drain system at the base of casting if necessary.

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