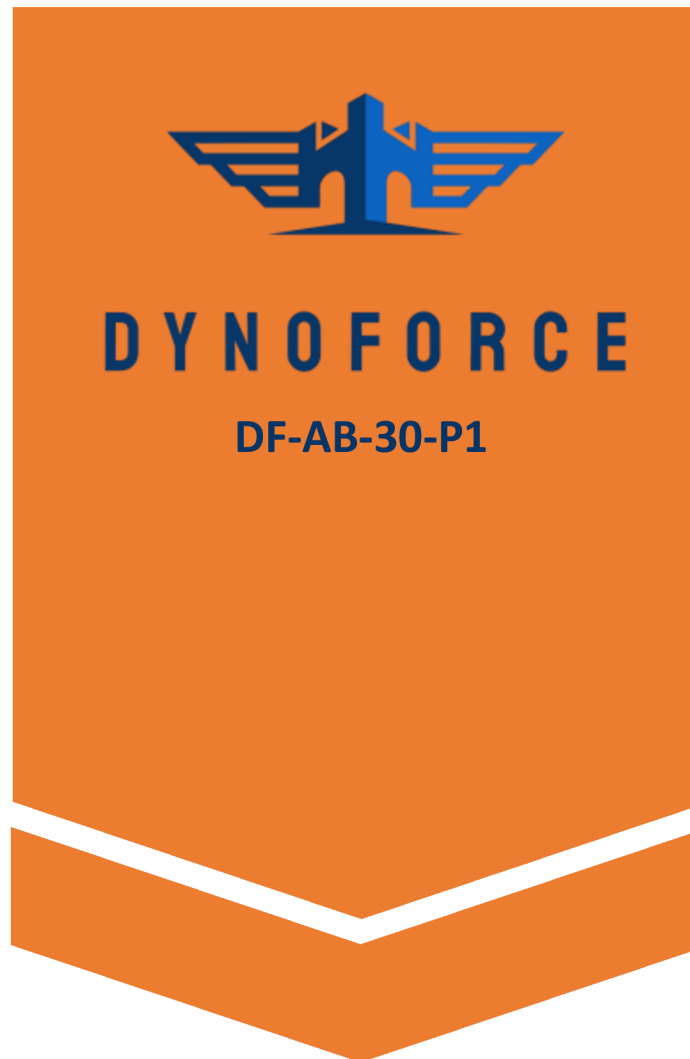
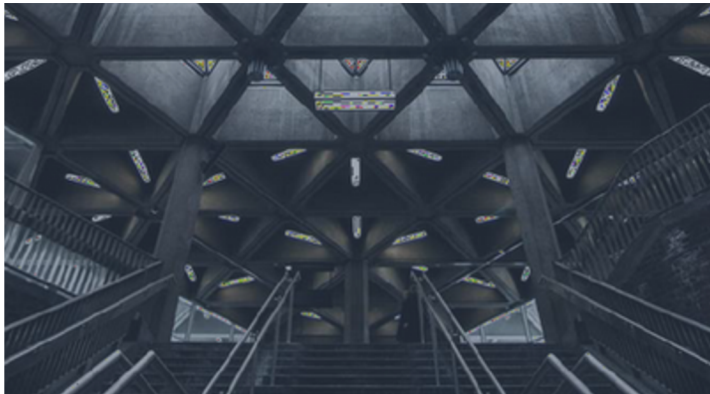


DYNOFORCE PROFILE

Dynoforce designs, supplies, and installs one of the most comprehensive ranges of Parking Management and Hostile Vehicle Mitigation (HVM) solutions globally, supported by a full suite of specialized professional services.

Our team of engineers and technical experts deliver custom-designed security solutions, including crash-rated bollards, automatic and manual crash-rated gates, non-crash-rated perimeter systems, and pedestrian access control systems. Dynoforce products are trusted and installed across high-security sites around the world.

Headquartered in India with a strong domestic presence and supported by global partners and distributors, Dynoforce serves clients across international markets with end-to-end security solutions built to global standards.



Website: www.dynoforce.in
Email: info@dynoforce.in



PRODUCT RANGE:

- Crash Rated Bollard - Fixed
- Crash Rated Bollard - Automatic/Retractable
- Non Crash Rated Bollards
- Parking Bollards
- Crash Rated Automatic/Manual gates
- Non crash Rated Automatic/Manual gates
- Pedestrian Gates
- Automatic/Manual Boom Barrier
- Crash Rated Wall

K4 Crash Rated Auto Bollard

DF-AB-30-P1

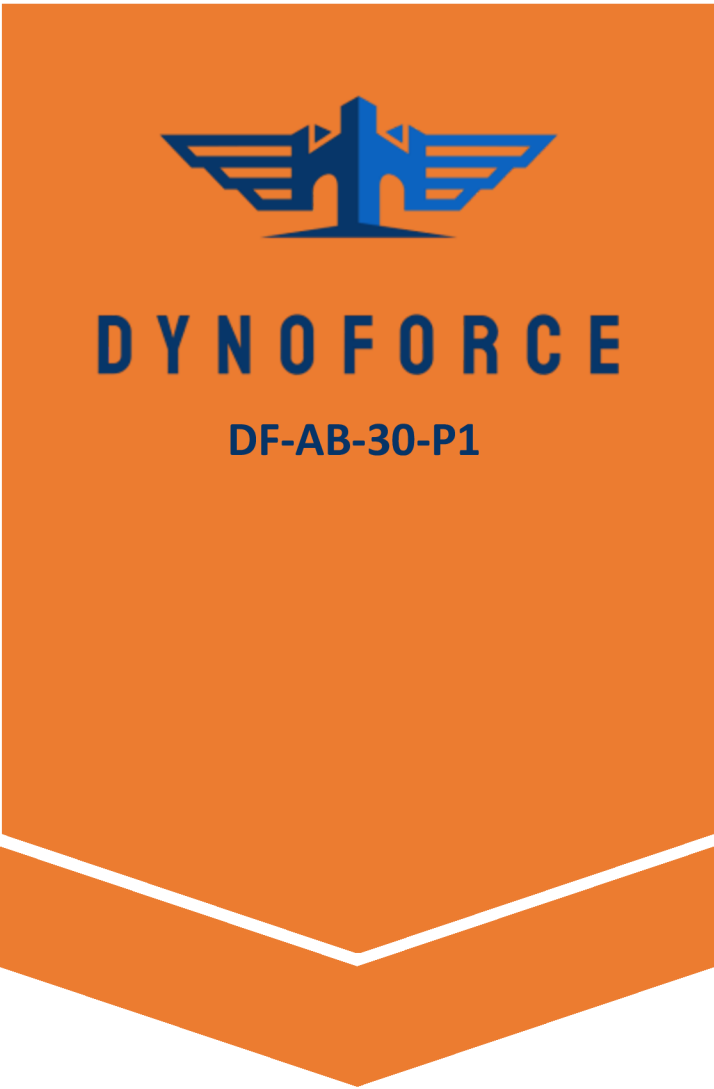
ARAI and MIRA certified as per ISO 22343 IWA14-1 standard K4, capable of stopping a 7.2-tons vehicle at 48 km/h with 0.7m penetration. Constructed using High-grade steel for the bollard pipe, for its high strength and impact resistance. Equipped with a hydraulic actuator for automatic rising and lowering, providing rapid and reliable deployment. The bollard is designed for outdoor environments, ensuring durability with galvanization and optional RAL powder coating for extra weather protection.

Key Dimensions:

- Height: 1000 mm
- Seamless Integration: Easily connects to existing security systems for automatic access control.
- Diameter : 219mm

Additional Features:

- Safety Mechanisms: Equipped with sensors to prevent accidental lowering or collisions with pedestrians.
- Energy Efficiency: Designed for low power consumption while maintaining high operational efficiency.
- Emergency Override: Manual override option for emergency situations where immediate bollard lowering or raising is necessary.
- Seamless Integration: Easily connects to existing security systems for automatic access control.



Dimensions :

If dimensions are critical, please contact sales to confirm.

Benefits:

- High Impact Resistance: Certified to K4 standards, capable of stopping heavy vehicles traveling at significant speeds, offering strong perimeter protection.
- Automatic Hydraulic Operation: Provides rapid bollard deployment and retraction using hydraulic actuators, with seamless integration into existing access control systems.
- Customization Options: Available in a variety of RAL colors to meet specific aesthetic or branding requirements for different sites.
- Weather Resistant: Constructed with galvanized and powder-coated surfaces to ensure durability in harsh weather conditions and long-term resistance to rust and wear.
- Low Maintenance: Built with robust, corrosion-resistant materials, the system requires minimal maintenance, reducing long-term operational costs.

DF-AB-30-P1

Installation

- **Foundation Requirements:** Bollards must be installed with a solid concrete foundation to ensure structural stability, especially during high-impact situations.
- **Array Configurations:** Units can be installed either as standalone elements or in a series (array), depending on the site's specific security needs.
- **Site Preparation:** Requires groundwork preparation for both electrical connections (to support the hydraulic system) and for setting the concrete foundation.
- **Maintenance:** Minimal maintenance is required due to the use of durable construction materials and anti-corrosion treatments.

Configuration

- **Hydraulic Power Unit (HPU):** Drives automatic bollard movement; housed in a separate control cabinet.
- **Control System:** Integrates with gate entry, barriers, and traffic light systems.
- **Rising Speed:** 5-6 seconds for both raising and lowering.
- **Accumulators:** Provide backup power for multiple cycles during outages.
- **Emergency Operation:** Enables bollards to rise in 2-3 seconds during emergencies.



Uses

- **Perimeter Security:** Ideal for securing the outer boundaries of high-risk areas such as military bases, government buildings, and critical infrastructure facilities.
- **Traffic Management:** Controls and restricts vehicular access in high-security zones, effectively preventing unauthorized entry.
- **Impact Protection:** Acts as a robust physical barrier to absorb and mitigate the force of high-speed vehicle impacts—protecting both people and infrastructure.
- **Infrastructure Protection:** Deployed to safeguard vital installations like data centers, power plants, refineries, and airports from hostile vehicle attacks.