

TB-HS 400 SERIES ELECTROMECHANICAL HIGH SPEED ARM BARRIER



GENERAL INFORMATION

TB-HS 400 series crash arm barriers are designed for special applications like access and traffic control in extremely busy areas such as highway toll booths, bridges, airports, military compounds, business centers, etc. thanks to their high-speed operation time.

TB-HS 400 series arm barriers are designed to fulfill the latest requirements of industry and suitable for high flow traffics, intensive usage and harsh environmental conditions. Thanks to their high speed operation capability, it is a unique solution for security of busy access points. With the help of frequency inverter which controls the powerful motor with a high precision, the system is able to achieve a smooth operation even at the highest speeds under 1 second.

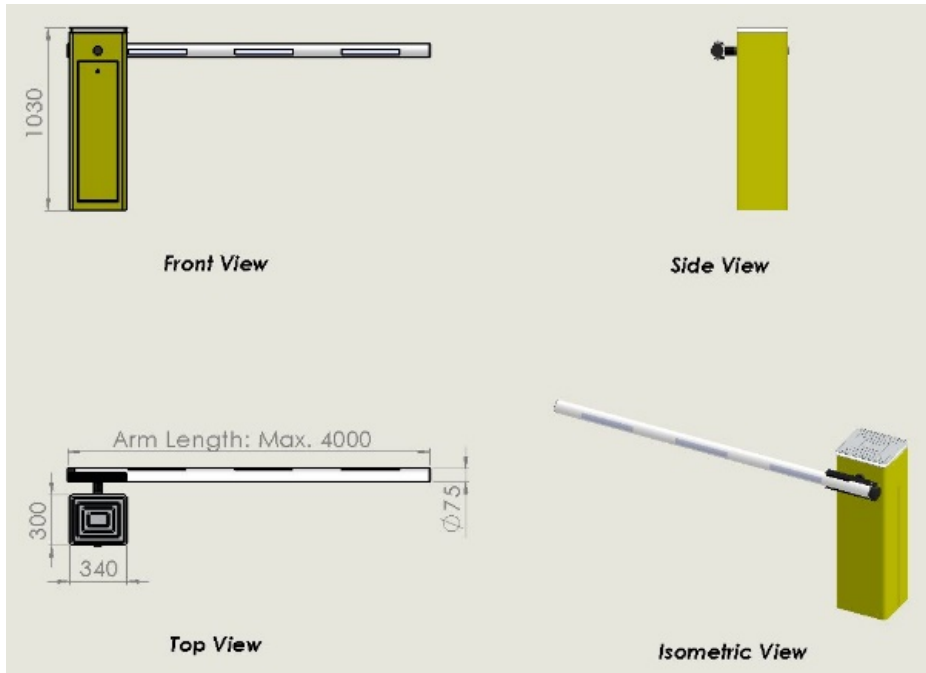
Although the drive unit is electromechanical, in case of a power failure, the arm is lifted automatically with the help of controlled electronics.

Arm barriers can be integrated with other kinds of security access systems like tyre killers, road bollards, different kinds of barriers etc.

MAIN CHARACTERISTICS

- High speed performance in 0.5 seconds,
- Working speed control, 50 vehicle pass per minute,
- Crash detection breaking arm function,
- Returning to the ready position automatically or manually in case of arm breakage,
- Automatic / manual collection optionally on standard high speed arm barrier,
- 3.00 meters of maximum arm length,
- Thanks to its mechanical design, arm can be mounted in reverse direction,
- Easy to install, low maintenance cost,
- During a power failure the arm rises and stayed at open position automatically,
- The system can handle more than 30000+ movements per day,
- Aesthetic and elegant design,
- Can be integrated with other access control systems,
- Robust structure can resist to harsh environmental conditions.

TECHNICAL DRAWINGS



PHYSICAL CHARACTERISTICS

CASE DIMENSIONS	340mm x 300mm x 1030mm (W x L x H)
BARRIER ARM	75 mm of diameter, 3000 mm (standard), aluminum alloy, warning reflective stripes on the color of white (RAL 9016)
MECHANISM	Drive unit consists of electric motor, reducer (gearbox), mounting parts and there is a spring mechanism which helps rising-lowering movement of the arm.
BARRIER CASE	Manufacture of 2 mm thickness of electrostatic painted DKP steel sheet plate barrier case, 304 grade stainless steel is optional, motor and gearbox holder is 10 mm electrostatic coated steel sheet, 10 mm galvanized slotted external mounting steel plate for robust and easy installation
TOP COVER	5 mm thickness of electrostatic painted DKP steel sheet plate (standard), 30 mm cast aluminum with LED stripe to enhance visibility (optional)
MECHANICAL ELEMENTS	Stainless steel, aluminum, galvanized coating, plastic materials are preferred for the mechanical elements of mechanism according to requirements

OPERATIONAL CHARACTERISTICS

OPERATION	Electromechanical
POWER (MOTOR)	220 VAC, 50-60 Hz, 1 Phase, 0,75 kW
RISING/LOWERING TIME	0.5 seconds at 3 meters arm
OPERATION FREQUENCY	30.000 + continuous movements with %100 duty cycle
SPEED/MOVEMENT CONTROL	Smooth operation with PLC control panel
POSITION CONTROL	Inductive limit switches (weather proof) with physical position adjustment for up and down positions
OBSTACLE DETECTION	Arm can detect obstacles in both direction and reverse operation instantly
BREAKING ARM KIT	Optionally, arm releases itself from its mounting point, activate the alarm and warning signal in the situation of hitting by a vehicle (Breaking arm signal feature can be integrated with other access control systems)
AUTO CLOSE	Closing automatically in adjustable time, after the passage of the vehicles

RESISTANCE CHARACTERISTICS

ENVIRONMENTAL CONDITIONS	-25 °C / +70 °C, %100 RH or less humidity (without condensation)
PROTECTION CLASS	IP 65

EQUIPMENT AND ACCESSORIES

MANUEL OPERATION SWITCH	When switch turns on, barrier arm is raised without triggering any alarm or any other commands. When switch is off, barrier arm is lowered and continues to its automatic operation. (Optional)
CRASH ARM MECHANISM	In a case of a vehicle hits arm barrier, the arm is displaced from its mounting point and alarm is activated by a proximity sensor, in order to save the mechanism of barrier from damage and detect the hostile vehicle. (Optional)
OPTIONAL ACCESSORIES	Button control, Loop Detector, Safety photocell, Traffic light, Led Top Cover, RF Receiver, RF Transmitter, RF Antenna

CERTIFICATIONS AND WARRANTY

CERTIFICATIONS	ISO 9001:2015, ISO 14001:2015, OHSAS 18001, CE, TSE
WARRANTY	2 years