



HDAB-CT Series Crash Tested Hydraulic Drop Arm Barriers

General Description



OPTIMA HDAB-CT Series Crash Tested Hydraulic Drop Arm Barriers are designed especially for entrances where there is a threat of suicide vehicle attack, or for the entrances that have very high security requirements. If there is a threat of vehicle attack in addition to the control of vehicle access in high security applications, hydraulic drop arm barriers are one of the best and most secure solutions. Even though the attack is from high tonnage vehicles with high speeds, it is not possible for the vehicle to keep on moving forward anymore beyond the arm of the barrier. Optima Hydraulic Crash Tested Drop Arm Barriers are designed for PAS68:2013 crash rating and classified as PAS 68:2013 Rising Gate V/7500[N3]/80/90:0.0/2.1. (This means that M50-P1 "zero penetration" according to American standard). Drive unit is electro-hydraulic, but in case of power failure drop arm barrier can be lowered or lifted manually with the help of hand pump. Thanks to advanced control electronics, raise/lower function can be achieved by every kind of card readers, biometric readers like fingerprint or hand shape, radio control, on/off key switch etc. Besides, safety accessories like photocells, inductive loop detectors, flashing lights or red/green traffic lights can be integrated to the system very easily.

Optima HDAB-CT Series Crash Tested Hydraulic Drop Arm Barrier is BSI PAS 68:2013 Rising Gate V/7500[N3]/80/90:0.0/2.1. zero penetration crash tested and certified.

CONSTRUCTION

The arm of the barrier which is called the "crash beam" is supported by two "support columns" in both ends when closed. Both support columns and the crash beam is manufactured by welding NPU and NPI beams, constructing a robust steel structure. Steel construction is sand blasted and primer coated or hot dip galvanized, to prevent corrosion. Additionally the parts which stand above the ground level are yellow-black painted.

HYDRAULIC POWER UNIT AND CONTROL ELECTRONICS

All the hydraulic components are tested at 250 bars although normal operating pressure is around 75-100 bars. Manual hand pump is standard in HDAB-CT Series Crash Tested Hydraulic Drop Arm Barriers, therefore in case of power failure it is possible to raise and lower the barrier by manual hand pump. Coolers or heaters are can be integrated to the hydraulic power unit optionally. Control electronics utilized in hydraulic drop arm barrier is microprocessor controlled. Two keyboards with emergency stop are standard; one desktop, other being integrated in the hydraulic power unit. Motor is driven by a contactor and protected by a thermic breaker. The low current voltage required by the system is supplied by a switch mode power supply. There is a fuse for every component in the system.

Traffic light can be integrated to prevent accidents, the traffic lights have independent lights for barrier lowered (red color) and barrier raised (green color). The lights change state automatically depending on barrier position. In addition to this, loop detector can be connected to prevent accidents. Radio control receiver, transmitter and antenna, card reader etc. can be integrated to any access control system. The crash barrier control system can be controlled remotely and connected to an external computer system via a communication link (ethernet). All the cables running in the system are color coded and numbered for easy tracking. It possible to check the position of barrier by using SCADA system or any control system.

ENVIRONMENTAL CONDITIONS AND POWER REQUIREMENT

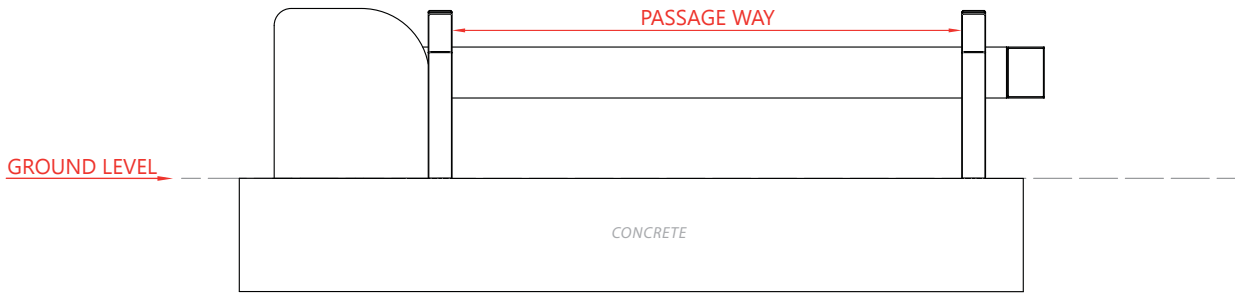
Between -20°C and +65°C, %95 non condensing humidity, 3 phase 380-415 V 50-60 Hz (or 220 V, 50-60 Hz, optional)

OPTIONAL ACCESSORIES

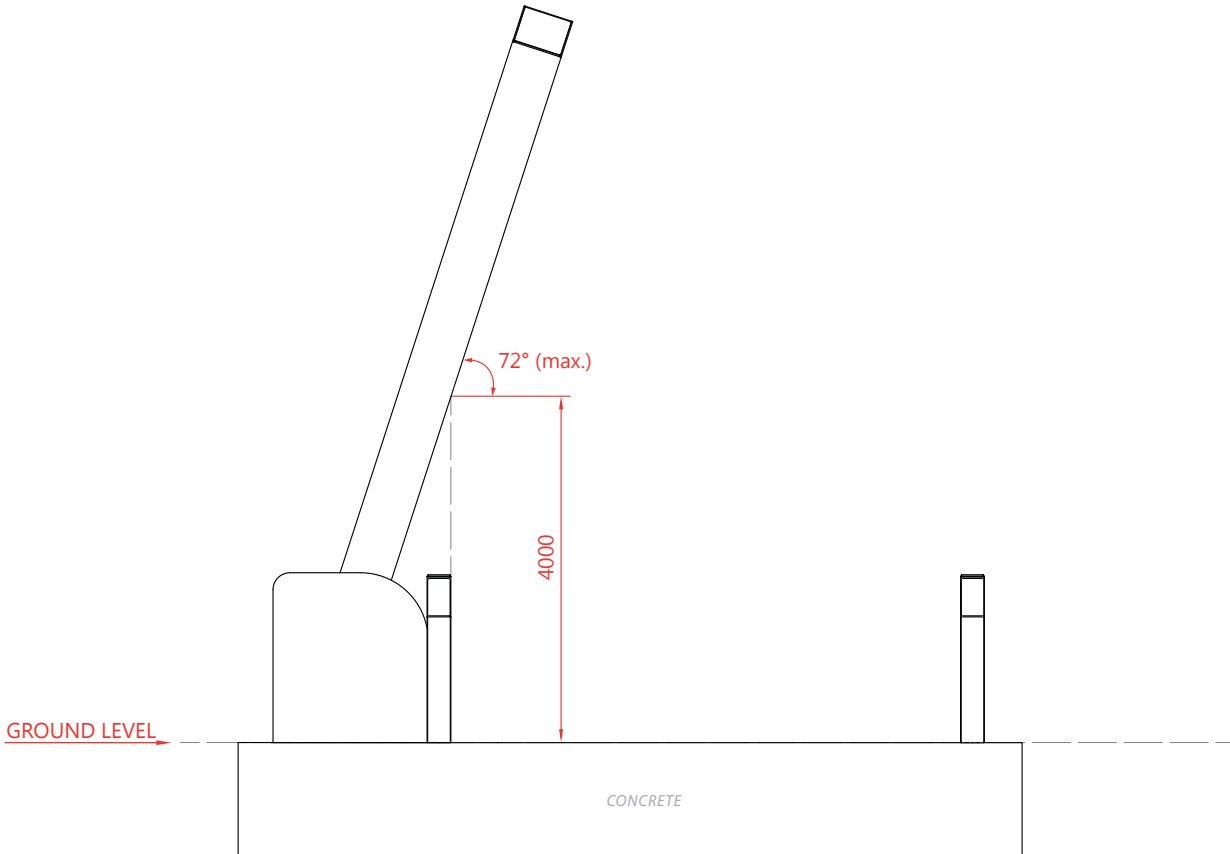
1. Flashing or red/green lights
2. Radio control receiver, transmitter and antenna
3. Safety photocell, stand and casing
4. Inductive loop detector
5. Drainage pump
6. Card reader system
7. Hydraulic accumulator
8. Uninterrupted power supply (UPS)
9. DC motor and pump
10. Different colors

ARM LENGTH: From 4.5m to 8m

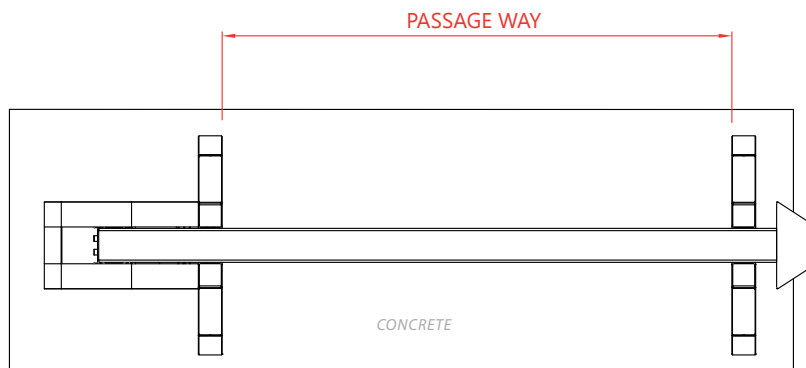




FRONT VIEW



FRONT VIEW



TOP VIEW