

## HDAB-CT



## GENERAL DESCRIPTION

Optima HDAB-CT 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 and classified as PAS 68: 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 crash-tested drop arm barrier can be lowered or lifted manually with the help of a hand pump. Thanks to advanced control electronics, raise/lower function can be achieved by every kind of card reader, 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 into the system very easily.

## STRUCTURE

The arm of the barrier which is called the "crash beam" is supported by two "support columns" in both ends when closed. Drive of the barrier is both "adjustable counterweight and hydraulic". All the elements are epoxy coated for long service lives.

## HYDRAULIC POWER UNIT AND CONTROL ELECTRONICS

All the hydraulic components are tested at 250 bars although normal operating pressure is around 75-100 bars. A manual hand pump is a standard in the HDAB series, therefore in case of power failure, it is possible to raise and lower the barrier by a manual hand pump. Coolers or heaters are can be integrated into the hydraulic power unit. Control electronics utilized in the hydraulic drop arm barrier is PLC controlled. Two keyboards with emergency stop are standard; one desktop, other being integrated into the hydraulic power unit. The 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. All the cables running in the system are color-coded and numbered to ease tracking.

## OPTIONAL ACCESSORIES

- ⇒ Flashing light (flashes while the arm is in motion).
- ⇒ Safety photocell.
- ⇒ Stand and casing for safety photocell.
- ⇒ Protective construction(tubular) around drive unit.
- ⇒ Uninterrupted power supply (UPS).
- ⇒ DC motor and pump with dry batteries.
- ⇒ Transformer to convert the power.
- ⇒ Wrong way alarm.
- ⇒ High speed alarm.
- ⇒ Stop sign in the middle of aluminum barrier arm.
- ⇒ Different color options.
- ⇒ Hot dip galvanizing.
- ⇒ SCADA or any control system: It is possible to change and check the position of barrier with touch screen control panel, mobile devices (ios-android), computer, etc.

## INCLUDED ACCESSORIES

- ⇒ Red/green traffic lights with steel pole.
- ⇒ Dual vehicle safety loop detector.

## ENVIRONMENTAL CONDITIONS AND POWER REQUIREMENT

Between -15°C and +65°C, 95% non-condensing humidity; 380V, 3 phase, 50-60 Hz (or 220 V, three phase, 50-60 Hz, optional by transformer).

## ARM WIDTH

⇒ HDAB-CT series : From 3000 to 7500mm.

## MAIN BODY MEASUREMENTS

