



HRR-HS-CT Series Crash Tested Hydraulic Rising Road Blockers

General Description

HRR-HS series crash tested road blockers are designed especially for entrance points which have a threat of vehicle attack or for the ones that have high security requirements. And according to ASTM F2656-07. If there is a threat of vehicle attack in addition to the control of vehicle access in high security applications, hydraulic road blockers are the unique solution and the most secure systems. Even though the attack is from high tonnage vehicles with high speeds, it's not possible for the vehicle to keep on moving because of the damage given to front, wheels and the bottom of the vehicle. Optima crash tested road blockers are designed to PAS68:2010 V/7500[N3]/80/90:0.0/6.15 (This means that M50-P1 "zero penetration" according to American standard) like actual crash tested which Optima make. Drive unit is electro-hydraulic, but in case of power failure road blocker can be lowered or lifted manually with the help of hand pump. Or by using hydraulic accumulator, it is a pressure storage reservoir in which a non-compressible hydraulic fluid is held under pressure by an external source. It is used for 3-4 cycle raise/lower. Typical raise/lower time is 3-5 seconds. In case of emergency, raise/lower time can be as low as 1.5 seconds. With the help of PLC (programmable logic control), 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. Typical weight of a road blocker is 2-2.5 tons (depending on road blocker type).

STEEL CONSTRUCTION

Main mechanical elements forming the construction are heavy duty 10-12 mm top plate and the frame consisting of 100x100 box, 200x75mm U and 100x10 mm metal sheet & plate. According to ASTM 514 standards. This sophisticated mechanical design enables the road blocker to withstand minimum 22 tons of axle loads, besides, in case of crash, linkage bars transmit the impact directly to the foundation, therefore help to protect the steel structure. Cushioned cylinders power the road blocker up as they pivot on multi-sealed bearings. Steel construction is sand blasted or hot dip galvanized according to ASTM A123. 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 all HRR series, therefore in case of power failure it is possible to raise and lower the blockers by manual hand pump. Control electronics utilized in hydraulic road blocker is PLC controlled. Two keyboards with emergency stop are standard with light indicators; The Emergency stop has protective mechanism to prevent accidental activation but it is easy activation when required. In case of activation switch should raise all



barricades at the gate. The normal deploy/retract buttons should not affect barricade operation once the emergency deploy button has been activated on desktop. Retraction of the blocker after emergency deploy is required activation of a key-switch or a command from a remote security control room, to retract the blocker. A single key-switch should control multiple barriers for clearing the emergency deploy switch activation. Other being integrated in the hydraulic power unit. Motor is driven by a contactor and protected by a thermal 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. It has traffic light for prevent crash blocker, the traffic lights has independent lights for blocker lowered (green color) and blocker deployed (red color). The lights is changed state automatically depending on blocker position. Stop sign with English writing on the blocker. It has loop detector for prevent any crash. And Radio control receiver, transmitter and antenna, and card reader, And all these integrated with an access control system. All these options the operator can be decided by consultation instead of guard security. The crash blocker control system can be controlling remotely and connected to an external computer system via a communication link. The external system can be raised and lower the blocker including emergency raise and subsequent lower. All the cables running in the system are color coded and numbered to easy tracking. It possible to check the position of Road Blocker by using SCADA system or any control system .In case of power failure it can be used USP according to SEC-07 'Power Supply.'

ENVIRONMENTAL CONDITIONS AND POWER REQUIREMENT

Between -20°C and +65°C, % 95 non-condensing humidity, (380 VAC, 50-60Hz) , and these environmental conditions according to SEC-01 'Application of Security Directives'.

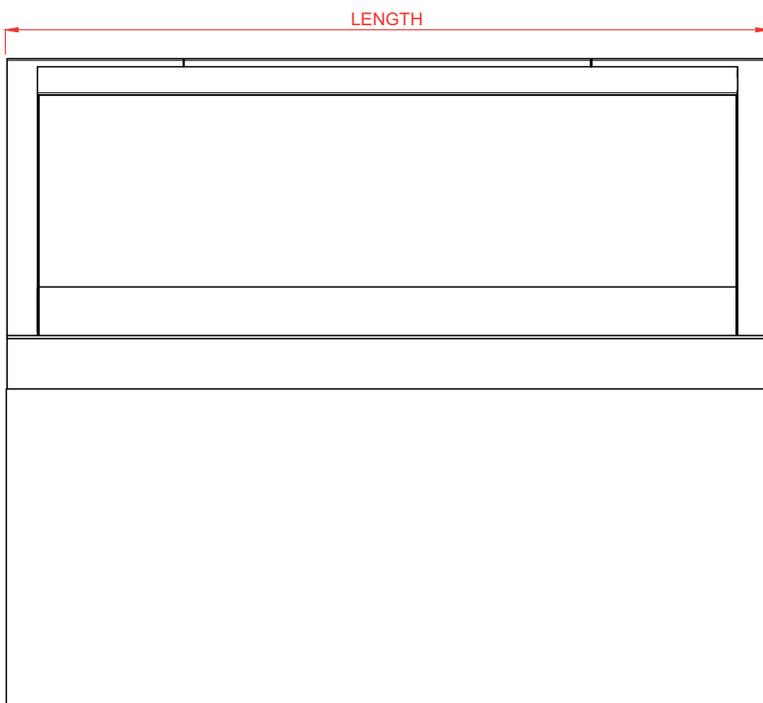
OPTIONAL ACCESSORIES

1. Flashing or red/green lights
2. Stop Lamp on the Blocker with Arabic/English writing
3. Safety photocell, stand and casing
4. Drainage Pump
5. Transformer for convert the power
6. DC motor and pump
7. It possible to operate the system by using solar panel with DC motor
8. Road blocker controlling on computer by using SCADA & Network System connection
9. Stainless steel desktop control panel with light buttons
10. Wrong way alarm
11. High speed alarm
12. Different colors

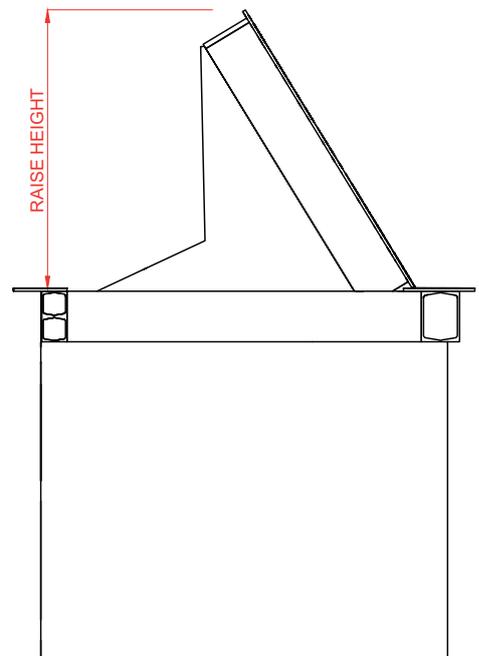
MODELS:

RAISE HEIGHT: 1100 mm

LENGTH: From 2000mm to 6000mm



FRONT VIEW



SIDE VIEW

