

CRASH TESTED SHALLOW MOUNT HYDRAULIC ROAD BLOCKERS



Shallow Mount Hydraulic Roadblockers Crash Tested



General Description

Road blockers are designed especially for entrance points which have a threat of vehicle attack or for the ones that have high security requirements. 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. Shallow Mount Hydraulic Road Blocker is ideal product in areas where deep excavation is not allowed. 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. Also these road blockers have **IWA 14-1:2013 Blocker v/7200[N3C]/80/90:7.3** Crash Tested Certificate. Shallow mount road blockers have a depth of only 30 cm. Drive unit is electro-hydraulic, but in case of power failure road blocker can be lowered or lifted manually with the help of manual hand pump. Typical raise/lower time is 3 seconds. With the help of PLC controller, 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 mm thick steel top plate and the frame consisting of box, U and I beams. This sophisticated mechanical design enables the road blocker to withstand minimum 40 tons of axle loads, besides, in case of crash, linkage bars transmit the impact directly to the foundation. Cushioned cylinders power the road blocker up as they pivot. Steel construction is either hot dip galvanized or 3 layer primary coated in order to prevent rusting. Additionally the parts which stand above the ground level are yellow-black ("STOP" warning in the front).

HYDRAULIC POWER UNIT AND CONTROL ELECTRONICS

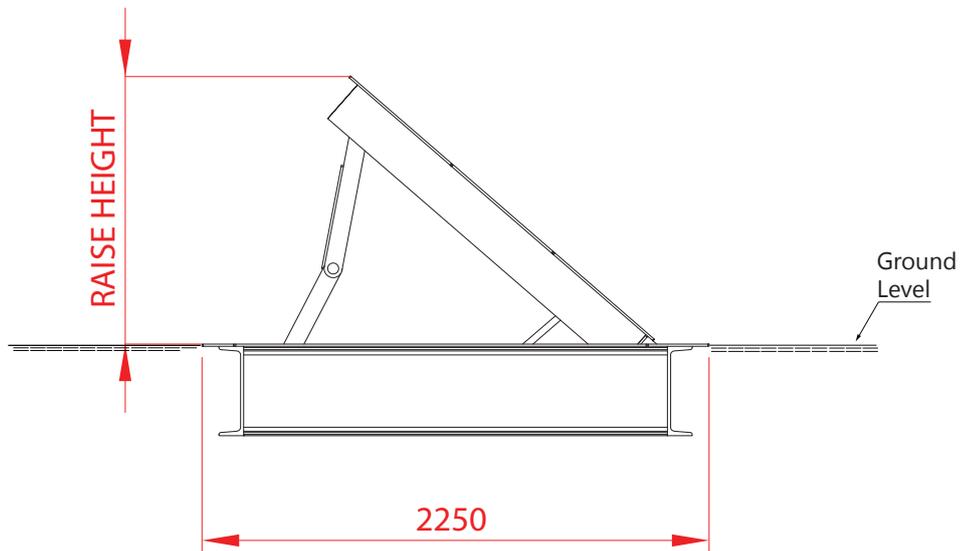
All the hydraulic components are tested at 250 bars although normal operating pressure is around 75-100 bars. Manual hand pump is standard in HRR series, therefore in case of power failure it is possible to raise and lower the blocker by manual hand pump. Control electronics utilized in hydraulic road blocker is PLC 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. Protection system when overload, failure circuit, increase the voltage or over current. 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. All the cables running in the system are colour coded and numbered to ease tracking.

ENVIRONMENTAL CONDITIONS AND POWER REQUIREMENT

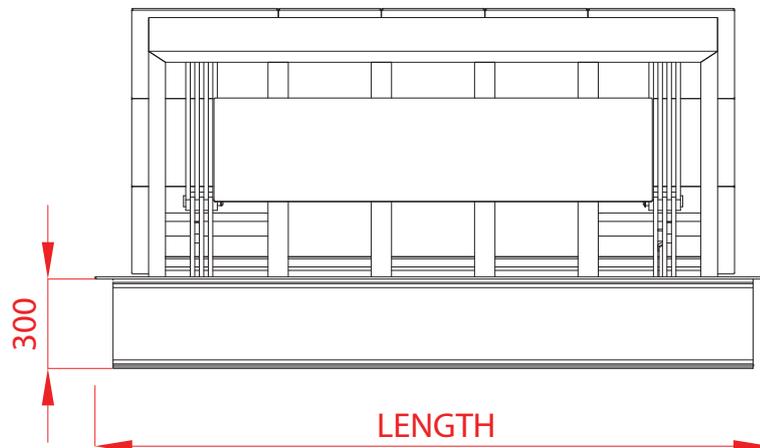
Between -20°C and +75°C, % 95 non-condensing humidity, 380-415 VAC 50~60Hz.

OPTIONAL ACCESSORIES

1. Flashing light
2. Radio control receiver, transmitter and antenna
3. Safety photocell, stand and casing
4. Submersible drainage pump
5. Card reader system
6. Hydraulic accumulator kit
7. Uninterrupted Power Supply (UPS)
8. DC motor and dry batteries kit
9. SCADA system
10. Transformer to convert power
11. Different color options



SIDE VIEW



FRONT VIEW