



Hydraulic Tyre Killers



General Description

Optima hydraulic tyre killers 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 tyre killer are one of 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 wheels and the rim of the vehicle. Drive unit is hydraulic, but in case of power failure tyre killer can be lowered or lifted manually with the help of manual hand pump. Typical raise/lower time is 3 seconds. In case of emergency, raise/lower time can be as low as 1.5 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 tyre killer is 1-1.5 tons (depending on tyre killer type and accessories).

CONTROL CABINET

IP 55 protection is available in the cabinet 1.2 mm thick galvanized sheet metal is utilized in the body. It is painted electrostatically with RAL 7032 emboss point.

CONTROL SYSTEM

Control electronics utilized in hydraulic tyre killer is PLC controlled. 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. All the cables running in the system are colour coded and numbered to ease tracking. There is a control keyboard in the power group as well as the desk-top one for the guard room. Time delay automatic-raising of the hydraulic tyre killer can be adjusted between any time period. Power requirement of the hydraulic tyre killer is 380 V 50~60Hz (or 220 V 50~60Hz, optional).

CONSTRUCTION AND DRIVE UNIT

Main mechanical elements forming the construction are heavy duty 12mm top plate and the frame consisting of 80x60x3 mm box, 100*50 mm NPU and 100 mm NPI beams. This sophisticated mechanical design enables the tyre killer to withstand 60 tons of axle loads, besides, in case of crash, linkage bars transmit the impact directly to the foundation, therefore help to protect mechanism. A cushioned cylinder powers the road blocker up as it pivots on multi-sealed bearings. All the parts are hot dip galvanized/3 layers primary coated and 3 layers painted to yellow and black, in order to prevent rusting.

ENVIRONMENTAL CONDITIONS AND POWER REQUIREMENT

Between -20°C and +75°C, %95 non-condensing humidity, 380 V 50~60Hz (or 220 V, 50~60Hz, optional).

OPTIONAL ACCESSORIES

1. Flashing or red/green traffic 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

TYPE DESCRIPTION

RAISE HEIGHT: 25CM TO 125CM

LENGTH: 1MT TO 6MT

