



HRB-HS-CT Series Retractable Bollard



General Description

Optima HRB-HS-CT Series Retractable Bollard are designed for high security vehicle entrances, army, industrial, governmental and commercial buildings or streets which are closed to vehicle traffic between certain hours of the day. The thickness of the bollard, the underground construction, the self-lubricating sealing and guide ring made of special plastic types, hydraulic piston, hydraulic connections, installation and drainage procedures etc. are all the same. These units are designed to PAS68:2010 7500(N3)/80/90 standards. Typical raise/lower time is 3-4 seconds.

STEEL CONSTRUCTION

Raising section of the bollards is 350 mm in diameter for HS series, raised height is 1100 mm. made of St52 steel, hot dip galvanized, three times epoxy primer and then three times yellow/black epoxy painted. PAS68:2010 7500(N3)/80/90 crash rated, heavy duty. In lowered position bollard will stand 55 tons of axle load.

HYDRAULIC POWER UNIT AND CONTROL ELECTRONICS

All the hydraulic components are tested at 250 bars although normal operating pressure is around 75-100 bars. Manuel hand pump is standard in HRB series, in normal case bollards can be raise/lower speed in 3-4 sec. Therefore in case of power failure it is possible to raise and lower the bollards by manual hand pump. And the accumulator integrated with the hydraulic power unit for emergency fast raise in 1.5 sec and can be working 3cycle . Control electronics utilized in hydraulic road bollard 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. 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 color coded and numbered to ease tracking.it has dual channel safety loop detector for high security and 200 mm diameter red & green LED traffic lamp with steel pole.

ENVIRONMENTAL CONDITIONS AND POWER REQUIREMENT

Between -20°C and +75°C, % 95 non-condensing humidity, (220/380 VAC, 50-60Hz)

OPTIONAL ACCESSORIES

1. Flashing or red/green lights
2. Stop Lamp on the Blocker with Arabic/English writing
3. Radio control receiver, transmitter and antenna
4. Safety photocell, stand and casing
5. Inductive loop detector
6. Wrong way alarm
7. High speed alarm
8. Emergency raise(1-1,5sec)
9. Stainless Steel Smart Desktop Keyboard
10. Drainage Pump
11. Card Reader System
12. Hydraulic accumulator
13. Uninterrupted Power Supply (UPS)
14. Transformer for convert the power
15. It possible to check the position of Road Blocker by using SCADA system
16. It possible to operate the system by using solar panel with DC motor
17. DC motor and pump
18. Different colors

MODELS:

RAISE HEIGHT: 1100mm

DIAMETER: Ø350mm

FLANGE DIAMETER: 710mm

GROUP: From 1 bollard to 12 bollards per hydraulic power unit

