

# Crash Rated Boom Barrier- NCRB Series

NEPTUNE Crash Rated Boom Barriers are designed to protect sensitive areas that require high level of security. Cutting edge internal hydraulic power pack of NCRB Series provides silent and smooth operation with ease of installation and maintenance. The product is engineered to withstand high impact forces by destroying the front suspension system of the hostile vehicle. In cooperation with an accredited crash test laboratory, the product is certified from ARAI for Crash Rating ASTM 2656-18 M30-P1. The certification is also equivalent to D/7200 [N2B}/48/90.0.0 as per ISO IWA 14-2:2013 standards and D/7200/48/90/640 As per BSI Pas 68 (2013). Successfully stimulation impact tested against a range of different threats and successfully stimulated impact tested to ASTM-2656, capable of stopping a 7200 Kg truck traveling at 48 km/h (30 MPH) within one meter (750mm). With reinforced infrastructure and powerful hydraulic unit, NCRB Series is an ideal choice for high frequency heavy duty operation, achieving high level of security while maintaining an aesthetic look.

Industrial hydraulically operated automatic crash rated boom barrier. Designed for easy installation and also maintenance. With the help of microprocessor controlled electronics, open/close 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 lights & ANPR can be integrated to the system. The automatic Crash Boom Barrier, and has a maximum width of 6000 mm and has a crash beam height of 800 mm ~ 1050mm.

#### **Features**

Reliable Hydraulic Power Drive Unit

Certified as per ASTM 2656-18 M30- P1 equivalent to K4 Crash Certification Standards to stop 7.2 Ton vehicle traveling at 50 km/h (30 MPH)

100% Duty Cycle
Wide Range of Accessories and Safety Features
Best in Class Operation Speed
15 Year Corrosion Protection





## **Application**

High Security Premises, Defense Military Sites, Embassies, Airports, Air Force Stations, Police Headquarters, Hospitality, Refineries, Transport & Infrastructure, Government Offices, Research Centers, Sensitive Sites (Subject to Ram Attacks)

### Models Available

NCRB K4-3	Crash Rated Boom Barrier for upto 3 Meter
NCRB K4-4	Crash Rated Boom Barrier for upto 4 Meter
NCRB K4-5	Crash Rated Boom Barrier for upto 5 Meter
NCRB K4-6	Crash Rated Boom Barrier for upto 6 Meter



# Standard Features In NCRB Series

Arm width	3000 – 6000 mm
Weight (approximately)	1100-1600 kg
Drive Unit	Electro -Hydraulic
Environmental durability	Shot blast, hot zinc sprayed (galvanised), primed and finished with a final coat of polyurethane paint. This process also provides a 15-year corrosion protection system for exterior, industrial polluted inland sites to BS5493, 1977 (Revised 1984). Alternative finishes also available on request.
Structure	Heavy duty
Type of steel	S235/RAEX250-Quality 37 minimum or FE 360 (Galvanised)
Red/Green LED traffic light (Optional, On Request)	Available with steel post 2 meter height and electrostatically powder coated
Hinges	Heavy duty hardened and or stainless steel AISI 303 Quality for hydraulic cylinder connections and moving part of the barrier
Bearing	Bronze
Power	380V-420V. 3 Phase
Current Consumption	6~8 Ampere
Power failure Option	Manual hand pump
Raise lower time	4~6 Seconds. Depending on length and configuration
Electronic Motion Adjustment	1 ~ 20 Levels
Duty Cycle	100% (for intensive use frequency)
Desktop Button	Raise, lower, emergency stop, key operated,
Extra I/O at the PCB	Enough I/O's to connect any card reader, extra override keyboard etc. later on
Limit switch	Available to sense the position of the barrier
Loop detector (optional)	For Vehicle Safety
Power back-up system options	DC motor and batteries, UPS
Cabinet	IP 66 with continuous ventilation
Motor Power	1500 Watt (4 mtr) & 2000 W (5 mtr& 6 mtr), 1500 rpm
Certification	CE Approved, ISO
Environmental conditions	-20 to +65°C, 95% Humidity



### Dimensions:

Arm Length: 2500-6000MM

Height of Arm from Ground: 1000 mm

Arm Cross Section: 120X60 mm

Barrier power pack dimensions (LxWxH) 900x900x1400mm

# Crash Rating ASTM 2656-18 M30:P1 The Automotive Research Association of India (A.R.A.I)

Tested for Vehicle Crash Testing as per ASTM 2656-18 (2018) for M30 (K4) Standard Equivalent to ISO IWA 14-2 2013 (D/7200 [N2B]/48/90.0.0) Equivalent to BSI PAS 68 2013 (D/7200/48/90/640)

Parameter of Testing: Validated and Tested by reputed agency i.e. ARAI for M30 Standard

Tested in accordance to ASTM 2656-18 (2018)

Vehicle Load - 7200 KG

Vehicle Speed – 48 KM/HR

Impact Angle - 90 Degree

Vehicle Impact Energy - 640 KJ

## Reference Pictures (Actual Installation)



