

# HYDRAULIC ROAD BLOCKER

## TPR-3080



### GENERAL INFORMATION

TPR series Hydraulic Road Blockers are the most reliable Hostile Vehicle Mitigation (HVM) products that provide high level security protection against hostile vehicle attacks.

While road blockers provide safe access control, in case of a vehicle attack, they prevent the vehicle from moving by damaging the wheels, front and lower parts and provide effective protection and security by disabling it.

TPR Hydraulic Road Blockers are manufactured in developed production facilities by experienced technical staff, using quality materials and electronic components with the highest reliability in the market.

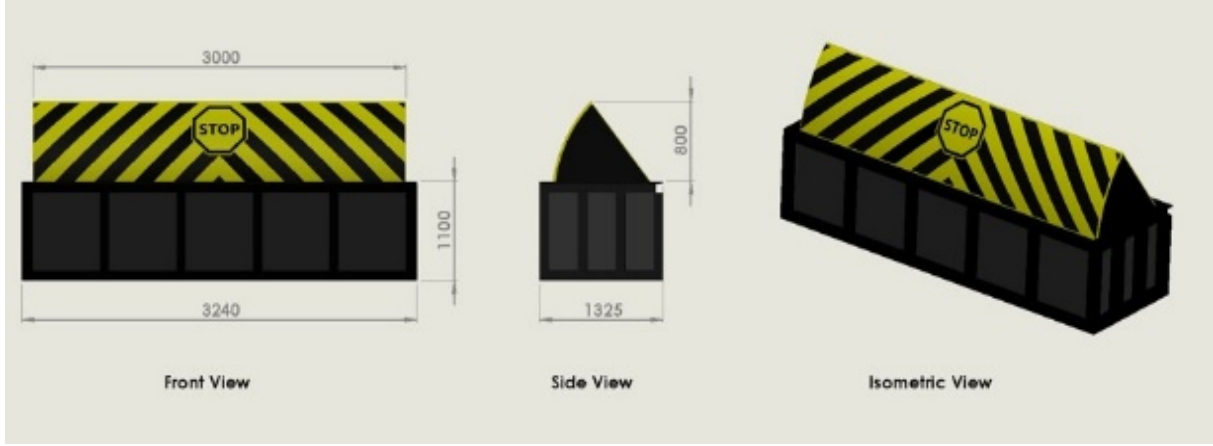
In addition to standard sizes and features, it is possible to customize specifications and dimensions according to customer needs and provide practical solutions.

### MAIN CHARACTERISTICS

- Robust construction of TPR series road blockers are designed for heavy duty operations and made out of heavy materials,
- TPR series road blockers are designed to meet the K12 level of DOS SD-STD-02.01 standards. Computer-aided element tests have proven that the TPR series can withstand an impact force of 7500 kg @ 80 km/h.,
- Position sensing and speed control with water proof proximity limit sensors which immediately stop the motor operation at limit points. Slowing down at closing and opening limit points which provides silent operation,
- The drive unit is hydraulic but in a case of power failure or in an emergency situation, road blocker can be controlled manually with the help of manual hand pump,
- Easy to install and maintain,
- Can be integrated with other access control systems easily.

### TECHNICAL SPECIFICATIONS

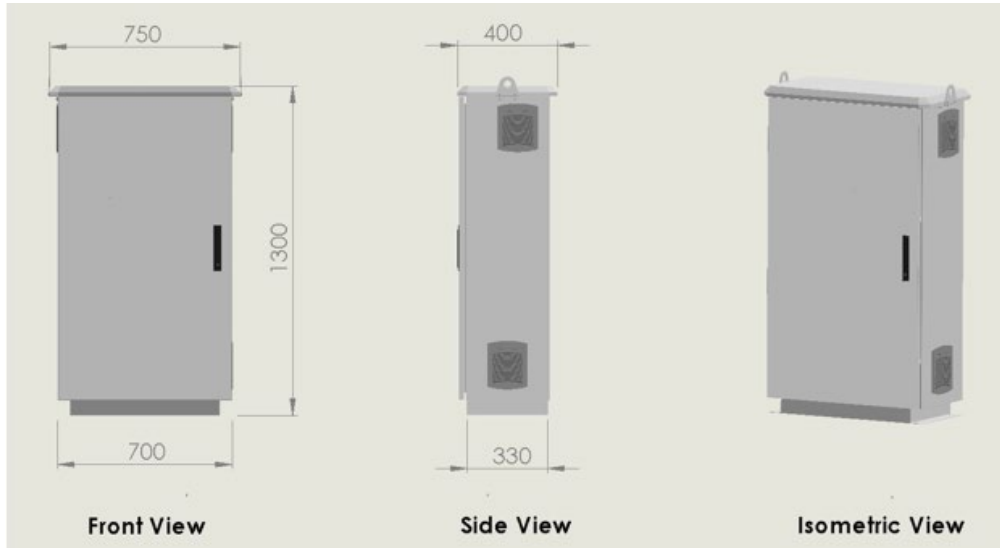
#### BLOCKER PHYSICAL CHARACTERISTICS



#### PHYSICAL CHARACTERISTICS

<b>BLOCKING LENGTH</b>	3000 mm standard (Optional 2000 to 7000 mm)
<b>OBSTACLE HEIGHT</b>	800 mm standard (Optional 500 mm to 1200 mm)
<b>CASE DIMENSIONS</b>	1325 x 3240 x 1100 mm (W x L x H) for 800 mm standard obstacle height
<b>WEIGHT</b>	1500 kg – 1800 kg
<b>UNDERGROUND CASE</b>	Heavy 100 x 100 x 4 mm square structural profiles, Horizontal 120 / 200 mm NPU steel structural profile supported by vertical 100 mm NPI steel beams, All sides covered with 2 mm thick steel plates
<b>OBSTACLE STRUCTURE</b>	Heavy 100 mm NPI and 100 mm NPU profiles, 5 mm thick steel front circular plate and side plates, 12 mm top plate
<b>COVERING</b>	Two component surface tolerant epoxy mastic coating for anti-corrosion (Jotamastic) and polyester outdoor painted, black finishing with yellow stripes on the circular front steel of the blocker

#### CONTROL CABINET PHYSICAL CHARACTERISTICS



**CABINET:** 2 mm thick DKP sheet, anti-corrosion electrostatic oven painted, continuous ventilation system.

### CONTROL CABINET DIMENSIONS:

FEATURE	WIDTH	LENGTH	HEIGHT
STANDARD HPU	750	400	1300
DCO	1250	510	1320
EFO	1250	510	1320
DCO/EFO	1250	510	1320



**STANDARD HPU**



**DCO**



**EFO**

**STANDARD HPU:** Hydraulic unit is specially designed for road blockers and bollards. The capacity of oil tank is 40 lt. There are manometer, manual hand pump, oil level and temperature indicator, direction control valve, tank cover, pressure setting, 5,5 kW electric motor in hydraulic system.

**DC OPERATION (DCO):** In case of power outage, 6 to 10 complete cycles without electricity can be performed by using the optional DCO. Switching between AC and DC power is provided seamlessly, thanks to high-end battery charger circuit. 24 VDC, 2,2 kW DC power pack, 2 x 12 VDC 50 A Dry Type Non-maintenance battery. The capacity of oil tank is 100 lt.

**EMERGENCY FAST OPERATION (EFO):** In case of emergency, optional Emergency Fast Operation feature raises the road blocker to fully up position in less than 1 second, thanks to high-pressured accumulator. This feature is activated by the panic button on remote control keyboard or any external signal such as TP-HS Series Rising Arm Barrier's crash detection. The capacity of oil tank is 100 lt.

**OPERATIONAL CHARACTERISTICS**

<b>OPERATION</b>	Hydraulic
<b>OPERATION PRESSURE</b>	Min 60 Bars / Max 180 Bars
<b>HYDRAULIC OIL</b>	Number 37 - 46 Hydraulic Oil
<b>LIFTING/LOWERING TIME</b>	Adjustable, 3 - 4 seconds (standard)
<b>SPEED CONTROL</b>	Slowing down at opening and closing limit points
<b>OPERATION FREQUENCY</b>	300 + Cycles / Hour
<b>EMERGENCY FAST OPERATION</b>	Rising in 1 second (with optional EFO)
<b>DC OPERATION</b>	Capable to complete 10 cycles without electricity (with optional DCO)
<b>MANUAL OPERATION</b>	Raising and lowering with manual hand pump
<b>POSITION DETECTION</b>	M18 Non-Contact Position sensor (Weatherproof)
<b>SAFETY</b>	Photocell / Loop detector

**ELECTRICAL CHARACTERISTICS**

<b>ELECTRICAL MOTOR</b>	380 VAC, 50-60 Hz, 3 Phases, 3 to 5,5 kW
<b>CONTROL PANEL</b>	PLC, Programmable for integration with various different systems
<b>TEST PANEL</b>	Integrated test panel on electric cabin cover with phase indicators

**RESISTANCE CHARACTERISTICS**

<b>IMPACT RESISTANCE</b>	K12 Equivalent
<b>AXLE LOAD RESISTANCE</b>	35 Tons
<b>ENVIRONMENTAL CONDITIONS</b>	-15 °C / +70 °C, % 95 non-condensing humidity
<b>PROTECTION CLASS</b>	IP 65

**EQUIPMENT AND ACCESSORIES**

<b>HYDRAULIC HOSES</b>	24/1.5 Connector - 1/2 Radius, 350 Bars max pressure, 10 m hydraulic hose (standard)
<b>SAFETY EQUIPMENTS</b>	Emergency stop buttons (standard), Front and rear loop detectors, Safety Photocell (Optional)
<b>STANDARD ACCESSORIES</b>	Control Keyboard (on the Control Panel), Temperature and oil level indicator, Manometer
<b>OPTIONAL ACCESSORIES</b>	Control Keyboard (Wired), Traffic Light, Flasher Lamp, Drainage Pump, Siren, RF Receiver, RF Transmitter, RF Antenna

**CERTIFICATIONS AND WARRANTY**

<b>CERTIFICATIONS</b>	ISO 9001:2015, ISO 14001:2015, OHSAS 18001, CE, TSE
<b>WARRANTY</b>	2 years