

ROAD BLOCKER BARRIERS GSR-X Series

GateSet GSR3100-X Series **High Impact Rated** Hydraulic Road Blockers are designed to meet ASTM M50 / IWA14-1 / PAS68 level impact resistance. The product has successfully passed a full scale crash test with zero penetration and maintained its operational functions after impact. Certified by IWA14-1:2013 standards, GSR-X Series Road Blockers provide maximum protection in areas that require high-level security through idealistic design, high quality components and top grade material.

GSR-X Datasheet v.2.1

Crash Test (IWA 14-1:2013) Photos *



Before Test: Blocker ready for impact of 7.2 tons @ 80 kph

Truck Stopped: With negative (-1.18 mt) static and zero dynamic penetration

Continuity of Services: Blocker remained intact and fully operable after impact



* Certificate and test videos are available on demand

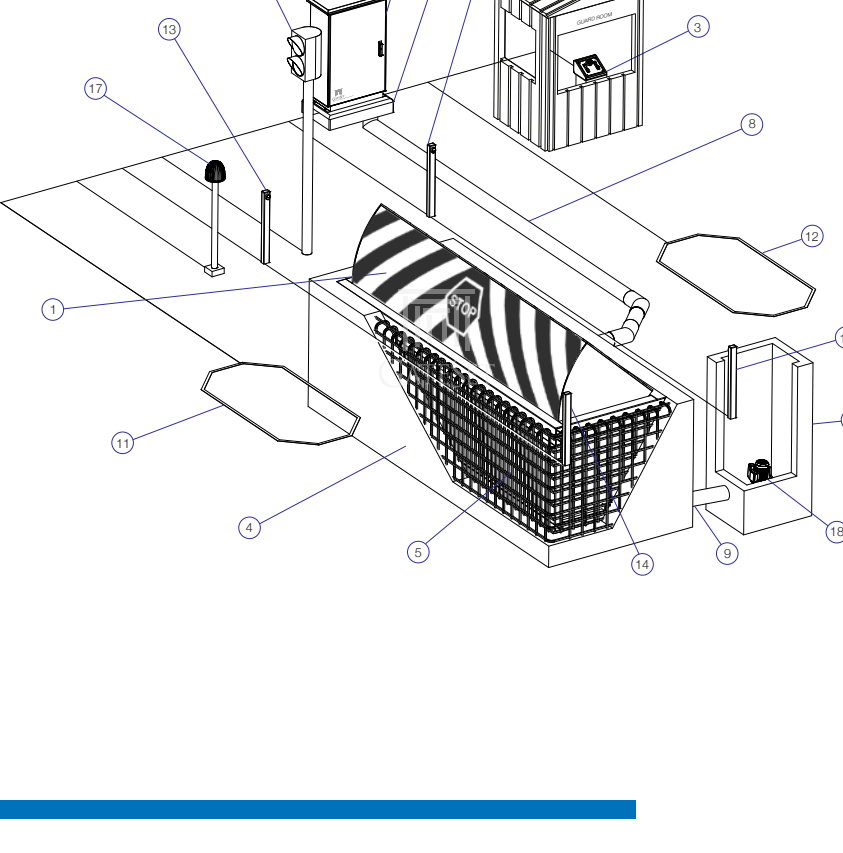
Usage Areas

- Access Control**
- Military Sites
 - Government Offices
 - Police Headquarters
 - Research Centers
 - Embassies
 - Airports
 - Industrial Areas

Featured Characteristics

- Heavy Gauge Structure** Road Blocker Structure is made out of the heaving gauge material. Underground case has a top frame made of NPU Steel. Inside the blocking wedge there are 6 sets of 3-up hinge bars, constructed from heavy duty Steel Plates, which support the structure against impact.
- Heavy Duty Operation** Designed for intense industrial usage with 100% Duty Cycle, by powerful HPU, strong wedge and durable hydraulic lift piston. With its 5.5 kW powerful motor GSR-X Series are capable to complete up or down movement in 4-5 seconds without any limitation of daily usage.
- Speed Control & Position Sensing** GSR-X Series possess two advanced features which extend the usage life of the system: Position Detection with weather proof proximity limit sensors which immediately stops the motor operation at limit points. Descending Speed at Closing and Opening Points which provides a silent operation.
- High Impact Resistance** GSR3100-X Series is Crash Test Certified in accordance with IWA14-1:2013 standards with zero penetration, providing a direct equivalence with PAS 68 and a superior energy resistance compared to M50 P1 rating of US Standard ASTM F2656-07
- Flexible and Reliable** Ease of integration with all access control equipment through its Schneider PLC unit which possesses 12 Inputs and 8 Outputs. All electronic equipment are Schneider branded with the highest reliability available in the market.

System Components and Accessories



- Main Components**
- Road Blocker Structure
 - Control Cabinet
 - Control Keyboard
- Foundational Components**
- Foundation Concrete
 - Reinforced Steel Bars
 - Control Cabinet Mounting Plate
 - Drainage Pit Concrete
 - Hoses and Electrical Cables at PVC Underground Pipe
 - Drainage Pipe
- Optional Accessories**
- Traffic Lights
 - Front Loop Detector
 - Rear Loop Detector
 - Front Photocell Transmitter
 - Front Photocell Receiver
 - Rear Photocell Transmitter
 - Rear Photocell Receiver
 - Flashing Warning Light
 - Drainage Pump
- Additional Accessories**
- Siren
 - Remote Control
 - RFID - LR Card Reader
- HPU Options**
- Emergency Operation Kit
 - 24 V DC Operation with Batteries

GSR-X Datasheet v.2.1

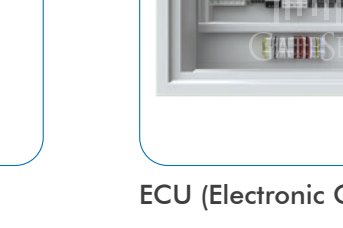
Control Cabinet



- HPU (Hydraulic Power Unit)**
- New Compact Design
 - More Silent Operation
 - Heavy Duty with 5.5 kW Motor
 - All Equipment are European and Turkish Made
 - Galtech Hydraulic Pump (Italian)
 - PZB Manual Pump (Italian)
 - Ease of Access to All Equipment



- Control Cabinet**
- New Compact Design
 - 2 mm Steel Thickness
 - Extra Strong Anti-Rust Finishing
 - Weather Resistant Sealing
 - Dust Filtered Air Cooler
 - Operation Testing Panel on Cover
 - Ease of Access - Single Cover
 - Ease of Installation - Mounting Base



- ECU (Electronic Control Unit)**
- New Compact Design
 - Operation Control with Schneider PLC
 - All Equipment are European Made
 - Electrical Safety
 - Multilevel Overcurrent Protection
 - Operation Testing Panel on Cover
 - Ease of Access - High Positioning

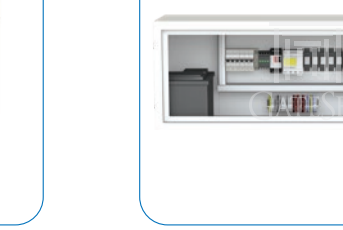
HPU and ECU Options



- EOK (Emergency Operation Kit)**
- Optional Feature
 - High Pressured Accumulator at HPU
 - Panic Button at Remote Keyboard
 - 1.5 Second Raising Time in Case of Emergency



- Control Cabinet**
- Optional Features
 - HPU 2400
 - EOK
 - HPU2400 + EOK

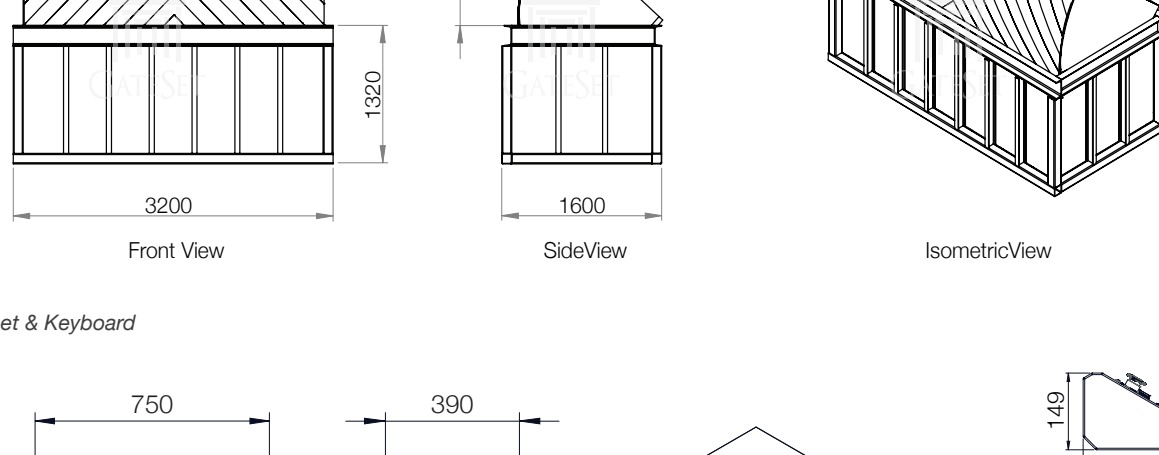


- HPU 2400 KIT**
- Optional Feature
 - Spare 24 V DC Motor and Pump at HPU
 - 2x 12 V 50 mAh Batteries at ECU
 - Meanwell (Canadian) Battery Charger
 - Circuit at ECU
 - 10 Complete Cycles without Electricity
 - Seamless Auto Switch between AC and DC Power

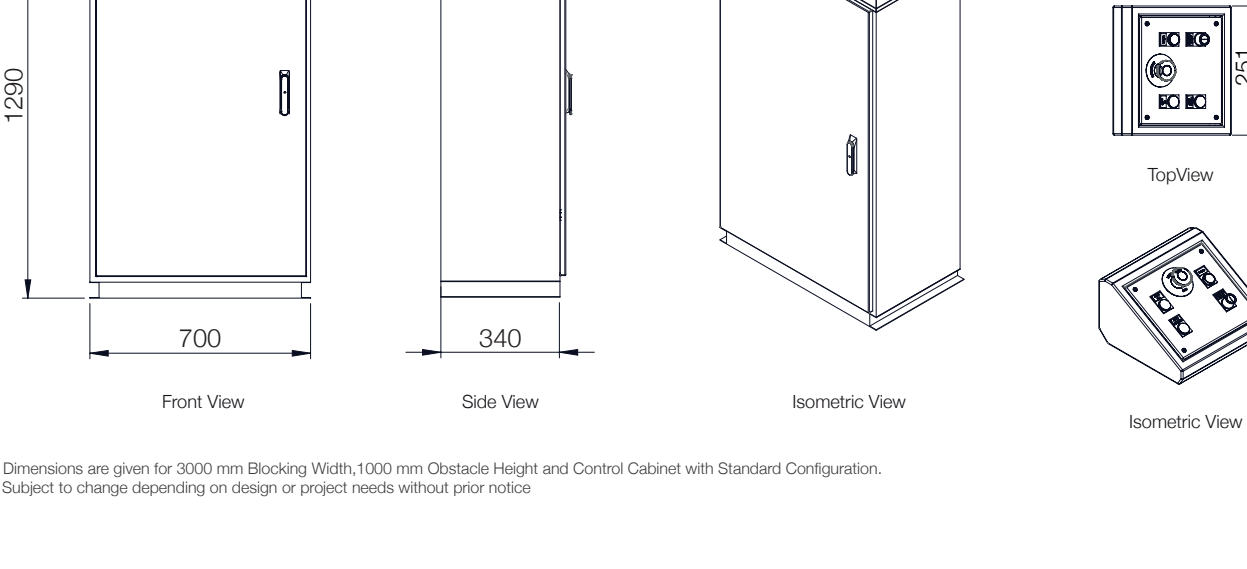
GSR-X Datasheet v.2.1

Drawings and Dimensions*

Blocker



Cabinet & Keyboard



* Dimensions are given for 3000 mm Blocking Width, 1000 mm Obstacle Height and Control Cabinet with Standard Configuration. Subject to change depending on design or project needs without prior notice

Technical Specifications

BLOCKING PHYSICAL CHARACTERISTICS	
BLOCKING LENGTH	3000 mm
OBSTACLE HEIGHT	1000 mm (standard)
CASE DIMENSIONS	3200 x 1600 x 1320 mm (for GSR3100-X)
BLOCKER UNDERGROUND CASE	Heavy Gauge NPU Steel Profile Top Frame, Supported by vertical NPI Steel Profiles placed all along the perimeter of the case within intervals less than 500 mm
BLOCKING WEDGE	Heavy Gauge NPU Steel, Supported by Vertical and Diagonal NPI Steel Profiles delicately finished with Heavy Gauge Steel Top Plate, 6 sets of 3-up hinge bars, constructed from Heavy Gauge Steel Plates
TREATMENT	Highest Grade Corrosion Protection Primer finished with Polyester Outdoor Paint, Black Finishing with Yellow Stripes on the Circular Front Steel and Top Plate
OPERATIONAL CHARACTERISTICS	
DRIVE	Heavy Duty Hydraulic
DRIVE POWER	Min 10 Bars / Max 120 Bars
RISING / FALLING TIME	4-5 Seconds (Adjustable)
SPEED CONTROL	Slowing Down at Opening and Closing Limit Points
WORKING FREQUENCY	300+ Cycles/Hour
EMERGENCY OPERATION	Rising in 1.5 Seconds (with optional EOK Kit)
POWER OUTAGE	Capable to make 10+ Complete Cycles without Electricity (with optional HPU2400 Kit)
POSITION DETECTION	2 Weather Proof Proximity Limit Sensors
MANUAL OPERATION	Ascending and Descending with Manual Hand Pump
CONTROL CABINET PHYSICAL CHARACTERISTICS	
CONTROL CABINET	2 mm Thick Steel, Electrostatic Thermal Painting for Anti-Corrosion Resistance
CABINET DIMENSIONS	Feature: Standard +HPU2400 +EOK +HPU2400+EOK
(may vary in accordance with project specific features)	Width: 390 mm 510 mm 510 mm
	Length: 750 mm 1250 mm 1310 mm 1310 mm
	Height: 1290 mm 1050 mm 1250 mm 1250 mm
ELECTRICAL CHARACTERISTICS	
ELECTRIC MOTOR	380 V AC / 50-60 Hz, 5.5 kW,
CONTROL PANEL	Schneider PLC, Integration with Various Systems
TEST PANEL	Integrated Test Panel on Electric Cabin Cover, Phase Indicators
RESISTANCE CHARACTERISTICS	
IMPACT RESISTANCE	7,200 kg at 80 km/h
AXLE LOAD RESISTANCE	35 Tons
PENETRATION LEVEL	Static Penetration of Truck: -1.18 m (negative) - Dynamic Penetration of Truck: 0.0 m (zero)
CRASH TEST CERTIFICATION	14-1:2013 Blocker V/7200[N2A]/80/90:0.0
PROTECTION CLASS	IP 65
OPERATING TEMPERATURE	+ 70 °C / - 15 °C
EQUIPMENT AND ACCESSORIES	
HYDRAULIC PIPES	18/1.5 Connector - 1/2 Radius, 350 Bars Max Pressure, 10 m Pipe Length (standard)
SAFETY EQUIPMENT	Emergency Stop Button (standard), Front and Rear Loop Sensor (optional)
STANDARD ACCESSORIES	Remote Control Keyboard (wired), Test Unit on ECU Panel, Oil Level and Temperature Indicator, Manometer
OPTIONAL ACCESSORIES	Traffic Lights, Flashing Light, Siren, Warning Sign, Drainage Pump, Touchscreen Control Keyboard
CERTIFICATIONS AND WARRANTY	
CERTIFICATIONS	IWA 14-1:2013, ISO 9001:2015, CE
WARRANTY	2 Years