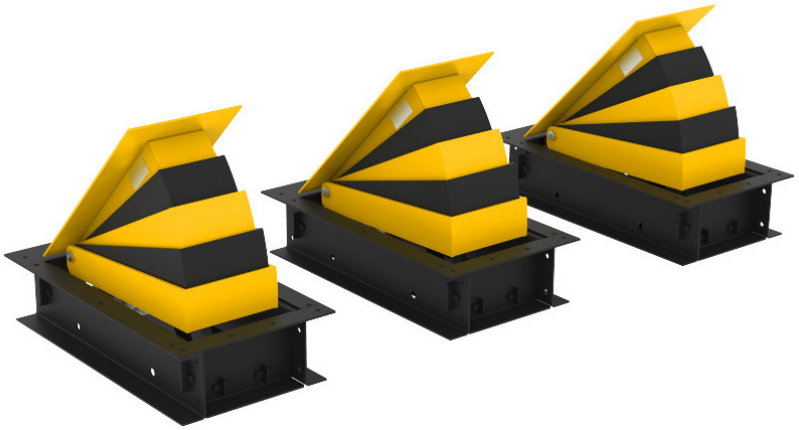
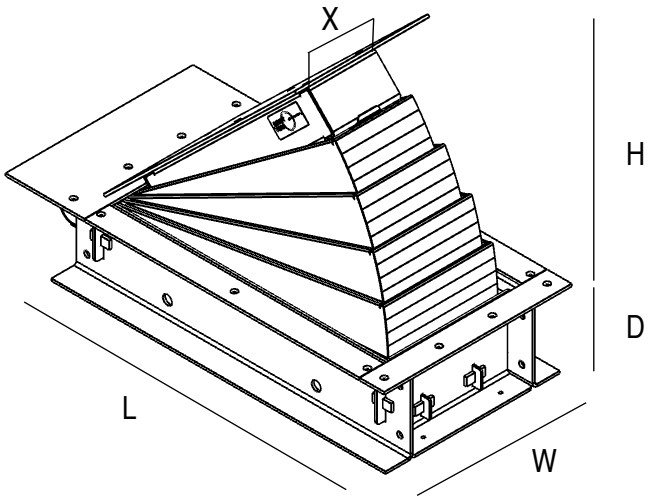
MRB SHLW ROAD BLOCKER

CAME ÖZAK

TECHNICAL SPECIFICATIONS



Power	Standard 380V AC 3-Phase 50/60 Hz, 2,2 - 11 kW motor (varies depending on the number of blockers in the set to be fed and the accessories to be included). Operating with 24V DC in case of power failure is optionally available.
Control Pack	24V DC powered PLC control unit is placed in power unit cabinet. 24V DC (opt.12V DC / 220V AC) solenoids.
Speed	Standard operation ~3 - 5 sec. (ascend/descend) depending on road blocker dimensions. Fast raise up (EFO, by optional hydraulic accumulator) ~1 - 1,5 sec. and may differ depending on number of blockers in the set and the raising height.
IP Rating	IP55 - Hydraulic Power Unit (optionally electronics control unit with IP67 protection box) IP68 - Hydraulic Piston
Operating Temperature	-5°C / +55°C (opt. -30°C / +70°C)
Crash / Impact Rating	-



Product Code	Blocker Unit Width - mm (X)	Nr. of Pistons	Dimensions - mm (LxWxD)	Raising Height -mm (H)	Mounting Depth-mm
MRB 25P 60 SHLW	250	1	1420 x 705 x 290	600	290
MRB 35P 90 SHLW	350	1	1920 x 925 x 390	900	390

Axle Load Resistance	20 t
Hydraulic Cylinder Unit	Dust sealed hydraulic cylinder, developed for heavy duty use. Contains safety valve for hose bursts.
Hydraulic Power Unit and Cabinet	Strengthened industrial hydraulic pump. 40 - 120 lt capacity oil tank (depending on the number of blockers to be fed and the raising height) with magnetic metal collector and suction filter. Built-in oil level and oil temperature indicator. Standard 60 - 120 bar pressure (depending on the number of blockers to be fed, max. 160 bar). 10 m R2 type (double wire braided mesh) reinforced hydraulic hose.

TD-1302-0151(0) Y.T.27.04.2023

Interconnecting hoses in case of installations of multiple blocker units.
Motor, hydraulic pump and solenoid valves are placed in an easily accessible galvanized and electrostatic powder coated steel cabinet with 2 built-in lock lids (opt. stainless steel cabinet).

Cabinet Type	Width (mm)	Length (mm)	Height (mm)
Cabinet 1	940	570	970
Cabinet 2	1040	590	1285
Cabinet 3	1243	840	1285

*Suitable cabinet type is selected according to the preferred product configuration.

System

Down, up, stop, emergency inputs and external sensor inputs/outputs (e.g. loop detector, safety sensor, traffic light, remote control, etc.).
System alerts with an audio signal during lowering and raising operation. A loud siren alert in case of alarm or emergency.
System stops in case of emergency as per default set-up and possible to be lowered or raised automatically (user's preference).
Can be lowered and raised manually in case of power failure or during maintenance with manual pump and manual valve feature.
Automatic raise up mode deploys (available with optional loop detector) the road blocker after the vehicle has passed over.
Sensor controlled stopping both at the top and bottom positions of the blocker unit.
Free standing piston connection structure that does not put any load on the piston during vehicle passage and in case of an impact.
Safety devices (if any, such as; safety sensor, loop detector, etc) are enabled in case fast raise up (EFO, optional) feature is activated and they can be optionally disabled.

Blocker Unit (Underground Unit)

All parts are coloured with industrial paint with two components over anticorrosive primer application.
Body is structured and strengthened with U-shaped beams.
Product is designed that no vehicle crashing effect can displace it after embedded or installed in to the ground.

Blocker Unit (Impact Blocking Unit)

Top plates (vehicle pass through surface) are hot dip galvanised and electrostatic powder coated.
All other parts are coloured with industrial paint with two components over anticorrosive primer application.
Moving parts are colored with RAL 1003 yellow (impact surface yellow-black) and fixed road surface plates in RAL 9005 black. In addition, the impact surface is finished with reflective signs and warnings.
Bulge free hidden hinge structure below the ground level allows vehicles to pass over smoothly and quietly.
Top panels where the vehicles pass over are made of 8 / 9 mm thick hot-dip galvanized steel with non-skid surface.
The road blocker moves up and down as a block supported by a Ø 50 mm steel hinge at pivot point, which are welded on the main frame with wedges for extra strength. Impact blocker unit raises with 45°angle from the ground level.
Impact blocking unit and the underground unit are connected with 1 set of linkages in 2 pairs of 15 mm each fastened together by a stainless steel shafts of Ø 30 mm diameter.
Front and side faces of the blocker unit are covered with decorative telescopic panels.
A top lid integration is available for easy access to interior units for service and maintenance purposes.

Control System

3 buttons for up, down and stop operations and 1 button for emergency stop are contained in a box that is suitable for outdoor use (optionally, 1 button for EFO-fast raise up).
System stops its movement with the command from safety sensor (opt.) and loop detectors (opt.).
Contains built-in LED indicators and 10 m cable.
The system works with PLC as standard.
Status of safety sensors (if any) and loop detectors (if any), position and movement of the blocker and low oil level situation of the system can be monitored with optional PLC with diagnostic display.
Compatible with any access control system (by third parties).

Power-off Situation

Road Blocker remains in its position in case of power-off. Optionally; can be lowered or raised and lowered by battery pack with 24V DC motor. Battery pack provides min. 60-100 movements when fully charged (minimum number of movements vary depending on the number of blockers in the set to be fed).

Optional Features and Accessories

Telescopic front panels, hydraulic accumulator for EFO-fast raise up , 24V DC motor in case of power failure (min. 60-100 movements), oil heater (for oil tank), oil cooler, heater for electronic components, submersible pump, traffic light (Ø200/300 mm, red-green LED, electrostatic powder coated over 304 grade stainless steel body), traffic light pole (electrostatic powder coated over hot dip galvanised steel), loop detector (double contact), safety sensors (with 50 cm height poles), IP67 box (for PLC, SMPS, connectors etc inside power unit), wireless remote control (receiver and transmitter), external buttons, hot dip galvanization, double effect hydraulic unit, double speed hydraulic unit, PLC with diagnostic display, front flashing indicators, oil level sensor.

Installation

Installation with C30 grade concrete and steel rebar reinforcement. Ground levelling and preparation works shall be carried on before pouring the concrete. Allowable bearing value of the ground shall be minimum 1/2 kg/cm^2, if not, works shall be carried on to fulfil. Installation shall be done according to the manufacturer's instructions.