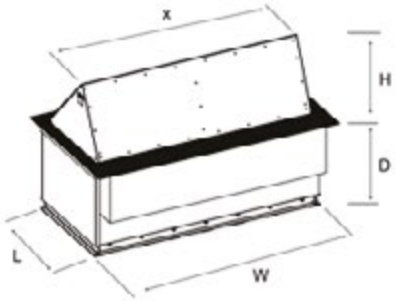
HRB ROAD BLOCKER
(Anti-terror / Heavy Duty Model)

Power	Standard 380V AC 3-Phase 50/60 Hz, 2,2 - 11 kW motor (varies depending on blocker size). 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 road blocker dimensions for road blockers wider than 4,0 m.
IP Rating	IP55 - Hydraulic Power Unit IP67 - Electronics Control Unit with IP67 housing/box protection (optional) IP68 - Hydraulic Piston
Operating Temperature	-5°C / +55°C (opt. -30°C / +70°C)
Crash / Impact Rating	Crash tested and certified according to IWA 14-1:2013 Road Blocker V/7200[N3C]/80, PAS68:2013 Road Blocker V/7500[N3]/80, and ASTM F2656-20 C750/7200 standards **(HRB 30 R 110).** Crash tested and certified according to ASTM F2656-07 at M50 P1 (K-12) level **(HRB 30 R 90)** also designed and produced to withstand impacts mentioned below:

Standard	Vehicle Type	Weight	Speed
PAS 68	N3	7500 kg	80 km/h (50 mph)
IWA 14-1	N3C	7200 kg	80 km/h (50 mph)

(Please contact for applicable product dimensions)



			Raising Height 600 mm	Raising Height 900 mm
Product Code	**Blocker Unit Width (X)**	**Nr. of Pistons**	**Dimensions (LxWxD)**	**Dimensions (LxWxD)**
HRB 10R_ _	1000	1	1255 x 1170 x 975	1665 x 1170 x 1270
HRB 15R_ _	1500	1	1255 x 1670 x 975	1665 x 1670 x 1270
HRB 20R_ _	2000	1	1255 x 2170 x 975	1665 x 2170 x 1270
HRB 25R_ _	2500	1	1255 x 2670 x 975	1665 x 2670 x 1270
HRB 30R_ _	3000	1	1255 x 3170 x 975	1665 x 3170 x 1270
HRB 35R_ _	3500	1	1255 x 3670 x 975	1665 x 3670 x 1270
HRB 35R_ _	3500	2	1255 x 3670 x 975	1665 x 3670 x 1270
HRB 40R_ _	4000	1	1255 x 4170 x 975	1665 x 4170 x 1270
HRB 40R_ _	4000	2	1255 x 4170 x 975	1665 x 4170 x 1270
HRB 45R_ _	4500	2	1255 x 4670 x 975	1665 x 4670 x 1270
HRB 50R_ _	5000	2	1255 x 5170 x 975	1665 x 5170 x 1270
HRB 55R_ _	5500	2	1255 x 5670 x 975	1665 x 5670 x 1270
HRB 60R_ _	6000	2	1255 x 6170 x 975	1665 x 6170 x 1270

* Different raising heights are optionally available.

Axle Load Resistance	50 t
Hydraulic Cylinder Unit	Dust sealed hydraulic cylinder, developed for heavy duty use. 1 - 4 m wide models contain single piston (opt. 3,5 and 4 m wide models contain double pistons). 4,5 - 6,0 m wide models contain double pistons. Contains safety valve for hose bursts.

Hydraulic Power Unit and Cabinet

Strengthened industrial hydraulic pump.
40 - 120 lt capacity oil tank with magnetic metal collector and suction filter.
Built-in oil level indicator and sensor, oil temperature indicator and audio alarm feature for low oil level.
Standard 70 - 150 bar pressure (max. 180 bar).
10 m R2 type (double wire braided mesh) reinforced hydraulic hose.

Motor, hydraulic pump and solenoid valves are placed in an easily accessible hot-dip-galvanized and electrostatic powder coated steel cabinet with a built-in lock lid (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. Contains galvanised steel sleeve around main chassis.
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.
Impact blocking unit is made of special, reinforced, 6 mm thick, solid V-formed vertical impact load distributing panel construction assembled to the main chassis with 350 - 550 mm distance from each other. Each impact load distributing panel is supported with 4 pieces of 30 x 10 mm solid steel bars placed with equal distance from each other so that a strong steel construction has been designed.
Impacts are absorbed and blocked by impact load distributing panels together with 10 mm thick steel bars attached to their V-formed front sides and specially formed hook type holders.
Frontal crash-facing section is furnished with a replaceable 3mm thick round formed steel sheet to handle light impacts.
Resistance of 10 mm + 3 mm thick impact surfaces are increased with the constructive structure by vertical solid panels behind and the 30 x 10 mm solid steel bars.
Top panels where the vehicles pass over are made of 10 / 11 mm thick hot-dip galvanized steel with non-skid surface.
The system moves up and down as a block through Ø50 mm stainless steel hinges of which quantity varies according to blocker width (a 3 m wide blocker contains 7 pieces of hinges).
Impact blocker unit raises with 45° angle from the ground level and equipped with flashing indicators on side and front 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 an IP67 box (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.100 movements (50 deploy + 50 retract) when fully charged.

Optional Features and Accessories

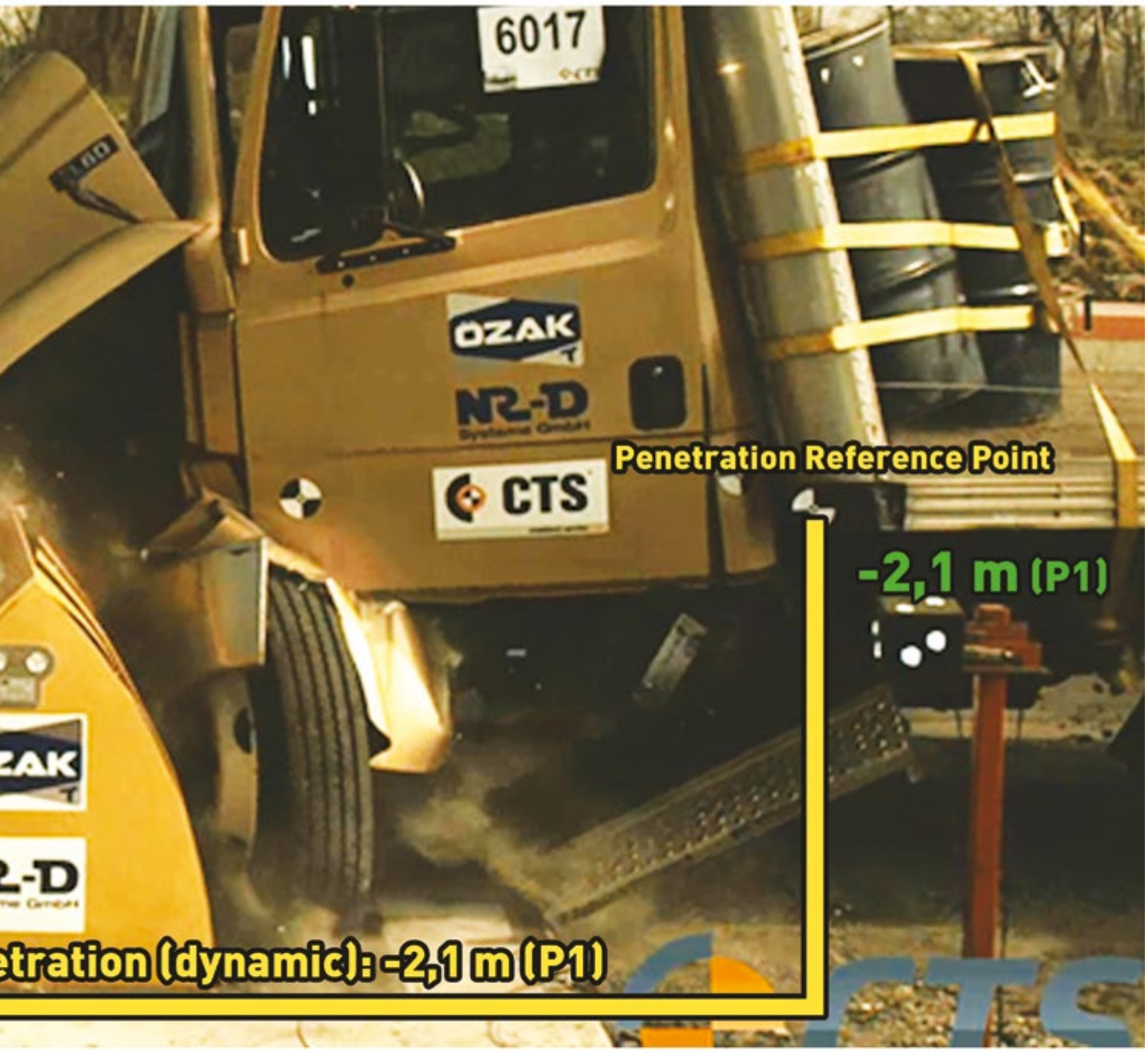
Hydraulic accumulator for EFO-fast raise up (1 piston or 2 pistons systems), 24V DC motor in case of power failure (50 deploy + 50 retract), oil heater (for oil tank), oil cooler, heater for electronic components, submersible pump, traffic light (Ø200/300 mm, red-green LED, electrostatic powder coated 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, different product dimensions.

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.

*Design and specifications are subject to change without notice.


CRASH
CERTIFIED
TESTED
M50 P1 (K12)
ASTM F2656-07
for crash
test video
Max P1 Limit
Maximum Pene


6017
OZAK
NR-D
CTS
Penetration Reference Point
-2,1 m (P1)
etration (dynamic): -2,1 m (P1)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STOP


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STOP