



CAME.COM



WE TALK ABOUT QUALITY LIVING, IN ALL OF THE WORLD'S LANGUAGES.

CAME has fulfilled people's needs for over 60 years by using technology as a key to a quality life. All our projects and ideas drive our innovation and focus to make people's lives as comfortable as possible. This is where our company's skills and experience come into play. We know how to blend functionality and design that drives our excellent performance.

We trust professionals to shape our innovations into solutions. We know it's about customising proposals for automation and integrating them with cutting edge connectivity and mobile technology. CAME and partners strive together to satisfy our ever-more-demanding and culturally diverse customer-base, with its varying needs for transforming their living spaces into much more intelligent, and safer homes.





ALWAYS ONE STEP AHEAD

We are a leading brand in the design of integrated solutions for automation, video door entry, access control and public and private parking facilities. Over time, the group has incorporated highly specialised companies, which have allowed us to broaden our horizons and provide cutting-edge solutions for the residential, business and urban sectors, including home automation, temperature control, road barriers, high security bollards, sectional garage doors and industrial doors. Today, we have a single, unique vision which makes us an innovative and reliable technological partner.

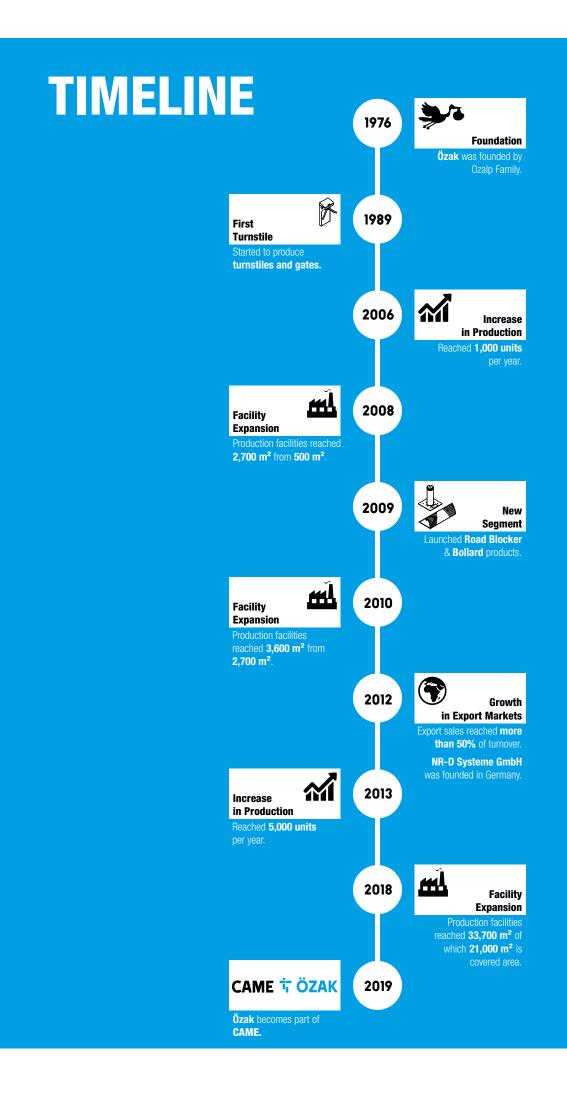
CAME T BPT

CAME T PARKARE

CAME T URBACO

CAME **†** GO

CAME T ÖZAK



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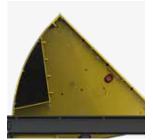






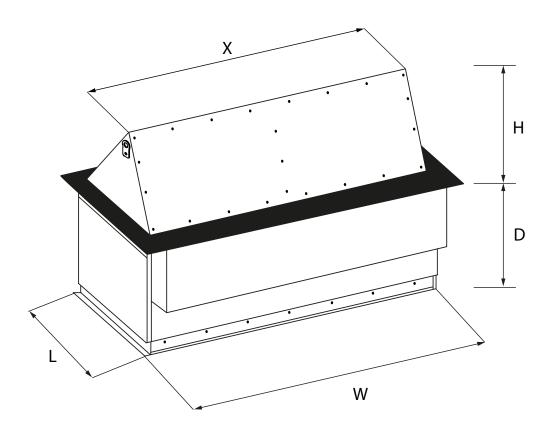
HRB ROAD BLOCKER Heavy Duty Model







Power	Standard 380V AC 3-Phase 50/60 Hz, 3,3 - 7,5 KvA motor (varies depending on blocker size).						
	Opt. 220V, 110V 1-Phase 50/60 Hz (for some models/sizes only), optionally 24V DC for emergency situations in case of power failure.						
Control Pack	24V DC powered and PLC control unit is placed in power unit cabinet.						
	Solenoids 24V DC (Ops.12V DC / 220V AC).						
Speed	Standard Operation ~2,5 - 6 sec. (ascend/descend) depending on unit dimensions.						
	Emergency raise up (upwards) by optional hydraulic accumulator ~1,5 sec. and may vary depending on unit dimensions.						
IP Rating	IP 55 - Hydraulic Power Unit,						
	IP 67 - Electronics (optional), protection with housing/box						
	IP 68 - Hydraulic Piston						
Crash / Impact	M50 P1 (K-12) crash tested and certified (HRB 30 R 90) according to ASTM 2656-07,						
Rating	Designed and produced to withstand H30.						



			Raising Height 65 - 50 cm	Raising Height 90 - 70 cm
Product Code	Blocker Unit Width (X)	No. of Pistons	Dimensions	Dimensions
			(LxWxD)	(LxWxD)
HRB 10R	1000	1	1275 x 1170 x 975	1481 x 1170 x 1270
HRB 15R	1500	1	1275 x 1670 x 975	1481 x 1670 x 1270
HRB 20R	2000	1	1275 x 2170 x 975	1481 x 2170 x 1270
HRB 25R	2500	1	1275 x 2670 x 975	1481 x 2670 x 1270
HRB 30R	3000	1	1275 x 3170 x 975	1481 x 3170 x 1270
HRB 35R	3500	1	1275 x 3670 x 975	1481 x 3670 x 1270
HRB 35R	3500	2	1275 x 3670 x 975	1481 x 3670 x 1270
HRB 40R	4000	1	1275 x 4170 x 975	1481 x 4170 x 1270
HRB 40R	4000	2	1275 x 4170 x 975	1481 x 4170 x 1270
HRB 45R	4500	2	1275 x 4670 x 975	1481 x 4670 x 1270
HRB 50R	5000	2	1275 x 5170 x 975	1481 x 5170 x 1270
HRB 55R	5500	2	1275 x 5670 x 975	1481 x 5670 x 1270
HRB 60R	6000	2	1275 x 6170 x 975	1481 x 6170 x 1270
HRB 65R	6500	2	1275 x 6670 x 975	1481 x 6670 x 1270

^{*}To complete the product code (HRB 10R__) simply choose a raising height in increments of 5cm between either 65-50cm or 90-70cm. For example the code for a 60cm raising height would be HRB 10R 60.

Battery unit with capacity of min. 100 movements (50 deploy + 50 retract) when fully charged is optionally available.					
50T					
Heavy duty, dust sealed electrostatic powder coated hydraulic cylinder.					
Models between 1- 4 metre widths contain a single piston.					
(Double piston versions are optionally available for models with 3,5 & 4 metre widths).					
Models between 4,5 - 6,5 metre widths contain double pistons.					
Cylinder unit features a safety valve against leakage and hose failure.					
Strengthened industrial pump, 40-120 lt oil tank capacity with magnetic metal collector and particle filter.					
Built-in oil level and oil temperature sensor with low oil level warning.					
70-100 Bar pressure; maximum running pressure is 150 Bar.					
10 mt R2 (double wire braided mesh) reinforced hydraulic hose.					

HRB ROAD BLOCKER

Heavy Duty Model

System

Down, Up, Emergency and external sensor inputs/outputs (e.g. loop detector, beam detector, Signalisation, Remote Control, etc.)

System alerts with an audio signal during lowering and raising operation.

A loud siren output in case of alarm or emergency.

Can be lowered or raised automatically in case of emergency (User's preference).

Can be lowered and raised manually in case of power failure or during the maintenance service with manual pump and manual valve feature. Automatic raise up mode deploys (optionally with synchronised 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

Power Unit

Motor, hydraulic pump and solenoid valves are contained in an easily accessible hot-dip-galvanised and electrostatic powder painted cabinet with a built-in lock lid. (Opt. Stainless Steel Cabinet)

Cabinet Dimensions: 1000 mm x 570 mm x 1200 mm (W x L x H).

Blocker Cabinet (underground unit)

All parts are coloured with industrial paint with two components.

U-shaped profile structure for maximum strength.

The blocker and cabinet are designed so that no vehicle crashing effect can displace it after embedded or installed into the ground.

Blocker Unit (impact blocking unit)

All parts are coloured with industrial paint with two components.

Hot dip galvanised vehicle pass through surface (top plates).

The construction is aesthetically and functionally completed with reflecting strips and warning signs.

The hinge system is specially designed to have a flattened surface level with the top plate so that vehicles can pass over smoothly and quietly. The blocker unit is made of a reinforced construction strengthened by 6mm thick special design, V-formed, vertical solid steel panels distanced between 350-550mm along the blocker width and assembled together with the main chassis for evenly distributed impact absorption. All vertical impact absorption panels have special shape and contain hook type holders (patent pending 2015/12506) for high impact resistance and are installed with equal distance to each other and supported by 4 pieces of 30x10mm solid steel beams to further strengthen the construction.

Impact Absorbing Panel Quantity												
Blocker Size	1 m	1,5 m	2 m	2,5 m	3 m	3,5 m	4 m	4,5 m	5 m	5,5 m	6 m	6,5 m
Single Piston	4	4	6	6	8	8	10					
Double Piston						10	12	12	12	15	18	18

To stop severe impact loads there is an additional 6mm (optionally 10mm) thick sheet metal attached to the vertical impact absorption nanels.

At the frontal crash-facing section, there is replaceable 3mm thick steel sheet with rounded form to handle light impacts.

Resistance of crash surface consisting of 6mm+3mm sheet metal is equal to resistance of a 74mm thick sheet metal due to its construction structured with vertical solid panels and 30x10mm solid bars behind.

Top panel where the vehicle pass over is made of 10/11mm thick non-slip surface steel hot-dip galvanised before paint.

The system moves up and down with 50mm diametre stainless steel hinges (example: 3 metre blocker contains 7 pieces of 50mm diametre stainless steel hinges).

Blocker unit raises 45° angle from the ground level and equipped with built in indicators on side and front panels.

A top lid is provided for easy access for service and maintenance on the top plate.

Control System

Manual Control Button Unit:

Provided with an IP67 CRM yellow box including 3 switches for downwards, upwards, stop (optional emergency operation), can stop the blocker motion with the command/signal coming from detector, equipped with built-in LED visual indications and 10 metre cable.

Compatibility with Access Control Systems:

Compatible with any access control system (by third parties).

Optional Unit:

With the optional model "RB CONT.UNIT.V.001" users can monitor the diagnostic functions, can be accessed through LAN, RS485 protocols. System is provided inside a metal cabinet that also includes the other functional switches like downward, upward, stop, emergency operations.

With the built in 124x68 LCD screen, all status of the operation and system diagnostic can be monitored through messaging functions like oil status, loop or beam detectors status, water level inside the cabinet, blocker position according to user preference, any .bmp files can be displayed.

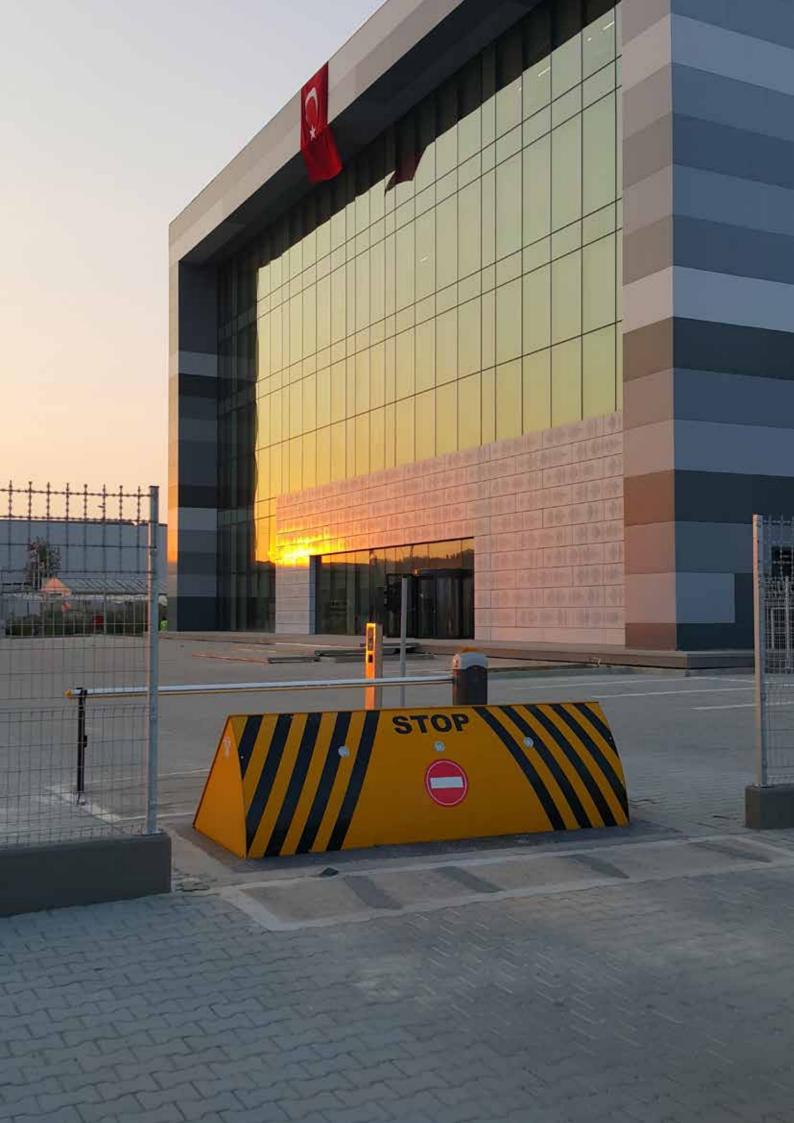
The system is driven by the PLC.

Optional Features and Accessories

Traffic lights (red-green), traffic light pole, loop detector (double/single contact), beam detector, 220V, 110V motor, 24V DC for emergency situations in case of power failure, remote control (receiver and transmitter are 3 channels), UPS, photocell sensor (receiver + transmitter with 50cm height pole), RB CONT. UNIT.V.001 control unit, intercom, external buttons, emergency submersible pump, hydraulic accumulator for emergency fast raise up (1 piston or 2 pistons systems), surface frame (sizes: from 250mm to 1000mm), oil cooler, oil heater, heater for electronic components, hot-dip galvanisation for cabinet, blocker and impact surface units, double effect hydraulic unit, double speed hydraulic unit, ground mounting plate, powered audio signal (siren), PLC diagnostic monitor, IP67 box (for PLC, SMPS, connectors etc inside power unit).

Installation

Easy Installation with C30 grade concrete and steel rebar reinforcement.



HRB ROAD BLOCKER Heavy Duty Model

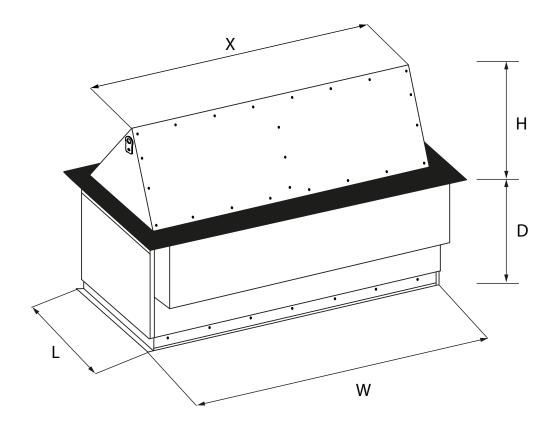




RRB ROAD BLOCKER Reinforced Model



Power	Standard 200V AC 2 Phase EU/EU Hz 2.2. E.E. Kr.A. mater (varies depending on blocker size)						
ruwei	Standard 380V AC 3-Phase 50/60 Hz, 3,3 - 5,5 KvA motor (varies depending on blocker size).						
	Opt. 220V, 110V 1-Phase 50/60 Hz (for some models/sizes only), optionally 24V DC for emergency situations in case of power failure						
Control Pack	24V DC powered and PLC control unit is placed in power unit cabinet.						
	Solenoids 24V DC (Ops.12V DC / 220V AC)						
Speed	Standard Operation ~4 - 6 sec. (ascend/descend) (opt. 2,5 - 4 sec.) depending on unit dimensions.						
	Emergency raise up (upwards) by optional hydraulic accumulator ~1,5 sec. and may vary depending on unit dimensions.						
IP Rating	IP 55 - Hydraulic Power Unit,						
	IP 67 - Electronics (optional), protection with housing/box						
	IP 68 - Hydraulic Piston						
Crash / Impact	Designed and produced to withstand M50 P1 (K-12).						
Rating							



			Raising Height	Raising Height
Product Code	Blocker Unit Width (X)	No. of Pistons	65 - 50 cm Dimensions	90 - 70 cm Dimensions
Troudet oode	Diocker offic Width (A)	140. 01 1 1310113	(LxWxD)	(LxWxD)
RRB 10F	1000	1	1275 x 1170 x 975	1481 x 1170 x 1270
RRB 15F	1500	1	1275 x 1670 x 975	1481 x 1670 x 1270
RRB 20F	2000	1	1275 x 2170 x 975	1481 x 2170 x 1270
RRB 25F	2500	1	1275 x 2670 x 975	1481 x 2670 x 1270
RRB 30F	3000	1	1275 x 3170 x 975	1481 x 3170 x 1270
RRB 35F	3500	1	1275 x 3670 x 975	1481 x 3670 x 1270
RRB 35F	3500	2	1275 x 3670 x 975	1481 x 3670 x 1270
RRB 40F	4000	1	1275 x 4170 x 975	1481 x 4170 x 1270
RRB 40F	4000	2	1275 x 4170 x 975	1481 x 4170 x 1270
RRB 45F	4500	2	1275 x 4670 x 975	1481 x 4670 x 1270
RRB 50F	5000	2	1275 x 5170 x 975	1481 x 5170 x 1270
RRB 55F	5500	2	1275 x 5670 x 975	1481 x 5670 x 1270
RRB 60F	6000	2	1275 x 6170 x 975	1481 x 6170 x 1270
RRB 65F	6500	2	1275 x 6670 x 975	1481 x 6670 x 1270

^{*}To complete the product code (RRB 10F__) simply choose a raising height in increments of 5cm between either 65-50cm or 90-70cm. For example the code for a 60cm raising height would be RRB 10F 60.

Battery Back-up for	Battery unit with capacity of min.100 movements (50 deploy + 50 retract) when fully cha	arged is optionally available.
Power-off Situation		
Axle Load Resistance	50T	
Hydraulic Cylinder	Heavy duty, dust sealed electrostatic powder coated hydraulic cylinder.	
Unit	Models between 1- 4 metre widths contain a single piston.	
	(Double piston versions are optionally available for models with 3,5 & 4 metre widths).	
	Models with 4,5 - 6,5 metre widths contain double pistons.	
	Cylinder unit features a safety valve against leakage and hose failure.	
Hydraulic Power Unit	Strengthened industrial pump, 40-120 lt oil tank capacity with magnetic metal	
	collector and particle filter.	
	Built-in oil level and temperature indicator,	
	70-80 Bar pressure; maximum running pressure is 120 Bar	
	10 mt R2 (double wire braided mesh) reinforced hydraulic hose.	

RRB ROAD BLOCKER

Reinforced Model

System

Down, Up, Emergency and external sensor inputs/outputs (e.g. loop detector, beam detector, Signalisation, Remote Control, etc.)

System alerts with an audio signal during lowering and raising operation.

A loud siren output in case of alarm or emergency.

Can be lowered or raised automatically in case of emergency (User's preference).

Can be lowered and raised manually in case of power failure or during the maintenance service with manual pump and manual valve feature. Automatic raise up mode deploys (optionally with synchronised 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

Power Unit

Motor, hydraulic pump and solenoid valves are contained in an easily accessible hot-dip-galvanised and electrostatic powder painted cabinet with a built-in lock lid. (Opt. Stainless Steel Cabinet)

Cabinet Dimensions: 1000 mm x 570 mm x 1200 mm (W x L x H).

Blocker Cabinet (underground unit)

All parts are coloured with industrial paint with two components.

U-shaped profile structure for maximum strength.

The blocker and cabinet are designed so that no vehicle crashing effect can displace it after embedded or installed into the ground.

Blocker Cabinet (underground unit)

All parts are coloured with industrial paint with two components.

Hot dip galvanised vehicle pass through surface (top plates).

The construction is aesthetically and functionally completed with reflecting strips and warning signs.

The hinge system is specially designed to have a flattened surface level with the top plate so that vehicles can pass over smoothly and quietly. The blocker unit is made of a reinforced construction strengthened by 6mm thick special design, vertical solid steel panels distanced between 350-550mm along the blocker width and assembled together with the main chassis for evenly distributed impact absorption. All vertical impact absorption panels have special shape and contain hook type holders (patent pending 2015/12506) for high impact resistance and are installed with equal distance to each other and supported by 4 pieces of 30x10mm solid steel beams to further strengthen the construction.

	Impact Absorbing Panel Quantity											
Blocker Size	1 m	1,5 m	2 m	2,5 m	3 m	3,5 m	4 m	4,5 m	5 m	5,5 m	6 m	6,5 m
Single Piston	4	4	6	6	8	8	10					
Double Piston						10	12	12	12	15	18	18

To stop severe impact loads there is an additional 6mm thick sheet metal attached to the vertical impact absorption panels.

Top panel where the vehicle pass over is made of 8/9mm thick non-slip surface steel hot-dip galvanised before paint.

The system moves up and down with 50mm diametre stainless steel hinges (example: 3 metre blocker contains 7 pieces of 50mm diametre stainless steel hinges).

Blocker unit raises 45° angle from the ground level and can be equipped with optional flashing light indicators on side and front panels. A top lid is provided for easy access for service and maintenance on the top plate.

Control System

Manual Control Button Unit:

Provided with an IP67 CRM yellow box including 3 switches for downwards, upwards, stop (optional emergency operation), can stop the blocker motion with the command/signal coming from detector, equipped with built-in LED visual indications.

Compatibility with Access Control Systems:

Compatible with any access control system (by third parties).

Optional Unit:

With the optional model "RB CONT.UNIT.V.001" users can monitor the diagnostic functions, can be accessed through LAN, RS485 protocols. System is provided inside a metal cabinet that also includes the other functional switches like downward, upward, stop, emergency operations.

With the built in 124x68 LCD screen, all status of the operation and system diagnostic can be monitored through messaging functions like oil status, loop or beam detectors status, water level inside the cabinet, blocker position according to user preference, any .bmp files can be displayed. The system is driven by the PLC.

Optional Features and Accessories

Traffic lights (red-green), traffic light pole, loop detector (double/single contact), beam detector, 220V, 110V motor, 24V DC for emergency situations in case of power failure, remote control (receiver and transmitter are 3 channels), UPS, photocell sensor (receiver + transmitter with 50cm height pole), RB CONT. UNIT.V.001 control unit, intercom, external buttons, emergency submersible pump, hydraulic accumulator for emergency fast raise up (1 piston or 2 pistons systems), surface frame (sizes: from 250mm to 1000mm), oil cooler, oil heater, heater for electronic components, hot-dip galvanisation for cabinet, blocker and impact surface units, double effect hydraulic unit, double speed hydraulic unit, ground mounting plate, powered audio signal (siren), PLC diagnostic monitor, flashing light indicators, round shaped front panel, oil level sensor, optional speed, IP67 box (for PLC, SMPS, connectors etc inside power unit).

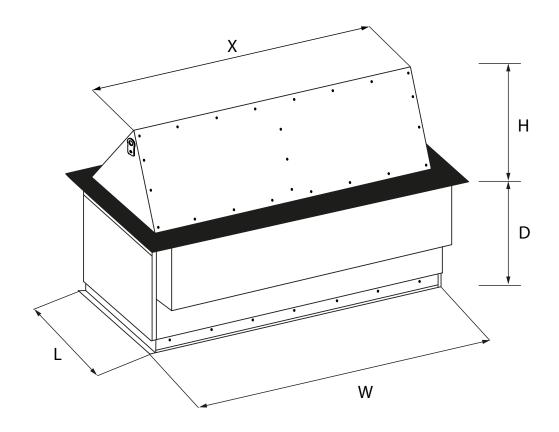
Installation

Easy Installation with C30 grade concrete and steel rebar reinforcement.

RB ROAD BLOCKER Residential Model



Power	Standard 380V AC 3-Phase 50/60 Hz, 3,3 - 5,5 KvA motor (varies depending on blocker size).						
	Opt. 220V, 110V 1-Phase 50/60 Hz (for some models/sizes only), optionally 24V DC for emergency situations in case of power failure.						
Control Pack	24V DC powered and PLC control unit is placed in power unit cabinet.						
	Solenoids 24V DC (Ops.12V DC / 220V AC)						
Speed	Standard Operation ~4 - 6 sec. (ascend/descend) (opt. 2,5 - 4 sec.) depending on unit dimensions.						
	Emergency raise up (upwards) by optional hydraulic accumulator ~1,5 sec. and may vary depending on unit dimensions.						
IP Rating	IP 55 - Hydraulic Power Unit,						
	IP 67 - Electronics (optional), protection with housing/box						
	IP 68 - Hydraulic Piston						
Crash / Impact	Designed and produced to withstand M40 P1 (K-8).						
Rating							



			Raising Height 65 - 50 cm	Raising Height 90 - 70 cm
Product Code	Blocker Unit Width (X)	No. of Pistons	Dimensions (LxWxD)	Dimensions (LxWxD)
RB 10F	1000	1	1275 x 1170 x 975	1481 x 1170 x 1270
RB 15F	1500	1	1275 x 1670 x 975	1481 x 1670 x 1270
RB 20F	2000	1	1275 x 2170 x 975	1481 x 2170 x 1270
RB 25F	2500	1	1275 x 2670 x 975	1481 x 2670 x 1270
RB 30F	3000	1	1275 x 3170 x 975	1481 x 3170 x 1270
RB 35F	3500	1	1275 x 3670 x 975	1481 x 3670 x 1270
RB 35F	3500	2	1275 x 3670 x 975	1481 x 3670 x 1270
RB 40F	4000	1	1275 x 4170 x 975	1481 x 4170 x 1270
RB 40F	4000	2	1275 x 4170 x 975	1481 x 4170 x 1270
RB 45F	4500	2	1275 x 4670 x 975	1481 x 4670 x 1270
RB 50F	5000	2	1275 x 5170 x 975	1481 x 5170 x 1270
RB 55F	5500	2	1275 x 5670 x 975	1481 x 5670 x 1270
RB 60F	6000	2	1275 x 6170 x 975	1481 x 6170 x 1270
RB 65F	6500	2	1275 x 6670 x 975	1481 x 6670 x 1270

^{*}To complete the product code (RB 10F__) simply choose a raising height in increments of 5cm between either 65-50cm or 90-70cm. For example the code for a 60cm raising height would be RB 10F 60.

Battery Back-up for	tery Back-up for Battery unit with capacity of min. 100 movements (50 deploy + 50 retract) when fully charged is optionally available.					
Power-off Situation						
Axle Load Resistance	40T					
Hydraulic Cylinder Unit	Heavy duty, dust sealed electrostatic powder coated hydraulic cylinder.					
	Models between 1- 4 metre widths contain a single piston.					
	(Double piston versions are optionally available for models with 4 metre widths).					
	Models between 4,5 - 6,5 metre widths contain double pistons.					
	Cylinder unit features a safety valve against leakage and hose failure.					
Hydraulic Power Unit	Strengthened industrial pump, 40-120 It oil tank capacity with magnetic metal collector and particle filter,					
	Built-in oil level and temperature indicator, 70-80 Bar pressure; maximum running pressure is 120 Bar					
	10 mt R2 (double wire braided mesh) reinforced hydraulic hose.					

RB ROAD BLOCKER Residential Model

System	Down, Up, Emergency and external sensor inputs/outputs (e.g. loop detector, beam detector, Signalisation, Remote Control, etc.)
	System alerts with an audio signal during lowering and raising operation.
	A loud siren output in case of alarm or emergency.
	Can be lowered or raised automatically in case of emergency (User's preference).
	Can be lowered and raised manually in case of power failure or during the maintenance service with manual pump and manual valve
	feature. Automatic raise up mode deploys (optionally with synchronised 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
Power Unit	Motor, hydraulic pump and solenoid valves are contained in an easily accessible hot-dip-galvanised and electrostatic powder painted cabinet
	with a built-in lock lid. (Opt. Stainless Steel Cabinet)
	Cabinet Dimensions: 1000 x 570 x 1200 mm (W x L x H).
Blocker Cabinet	All parts are coloured with industrial paint with two components.
(underground unit)	U-shaped profile structure for maximum strength.
	The blocker and cabinet are designed so that no vehicle crashing effect can displace it after embedded or installed into the ground.
Blocker Unit	All parts are coloured with industrial paint with two components.
(impact blocking unit)	Hot dip galvanised vehicle pass through surface (top plates).
	The construction is aesthetically and functionally completed with reflecting strips and warning signs.
	The hinge system is specially designed to have a flattened surface level with the top plate so that vehicles can pass over smoothly and
	quietly.
	Top panel where the vehicle pass over is made of 8/9mm thick non-slip surface steel hot-dip galvanised before paint.
	The system moves up and down with 50mm diametre stainless steel hinges (example: 3 metre blocker contains 7 pieces of 50mm diametre
	stainless steel hinges).
	Blocker unit raises 45° angle from the ground level and can be equipped with optional flashing light indicators on side and front panels.
	A top lid is provided for easy access for service and maintenance on the top plate.
Control System	Manual Control Button Unit:
•	Provided with an IP67 CRM yellow box including 3 switches for downwards, upwards, stop (optional emergency operation), can stop the
	blocker motion with the command/signal coming from detector, equipped with built-in LED visual indications.
	Compatibility with Access Control Systems:
	Compatible with any access control system (by third parties).
	Optional Unit:
	With the optional model "RB CONT.UNIT.V.001" users can monitor the diagnostic functions, can be accessed through LAN, RS485 protocols.
	System is provided inside a metal cabinet that also includes the other functional switches like downward, upward, stop, emergency
	operations.
	With the built in 124x68 LCD screen, all status of the operation and system diagnostic can be monitored through messaging functions like
	oil status, loop or beam detectors status, water level inside the cabinet, blocker position according to user preference, any .bmp files can be
	displayed. The system is driven by the PLC.
Optional Features	Traffic lights (red-green), traffic light pole, loop detector (double/single contact), beam detector, 220V, 110V motor, 24V DC for emergency
and Accessories	situations in case of power failure, remote control (receiver and transmitter are 3 channels), UPS, photocell sensor (receiver + transmitter
	with 50cm height pole), RB CONT. UNIT.V.001 control unit, intercom, external buttons, emergency submersible pump, hydraulic accumulator
	for emergency fast raise up (1 piston or 2 pistons systems), surface frame (sizes: from 250mm to 1000mm), oil cooler, oil heater, heater
	for electronic components, hot-dip galvanisation for cabinet, blocker and impact surface units, double effect hydraulic unit, double speed
	hydraulic unit, ground mounting plate, powered audio signal (siren), PLC diagnostic monitor, flashing light indicators, round shaped front
	panel, oil level sensor, optional speed, IP67 box (for PLC, SMPS, connectors etc inside power unit).
Installation	Easy Installation with C30 grade concrete and steel rebar reinforcement.

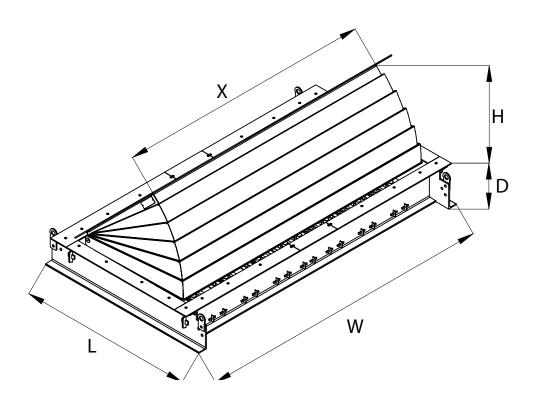




HRB ROAD BLOCKER Heavy Duty - Shallow Mount Model



Power	Standard 380V AC 3-Phase 50/60 Hz, 3,3 - 7,5 KvA motor (varies depending on blocker size).		
	Opt. 220V, 110V 1-Phase 50/60 Hz (for some models/sizes only), optionally 24V DC for emergency situations in case of power failure.		
Control Pack	24V DC powered and PLC control unit is placed in power unit cabinet.		
	Solenoids 24V DC (Ops.12V DC / 220V AC)		
Speed	Standard Operation ~2,5 - 6 sec. (ascend/descend) depending on unit dimensions.		
	Emergency raise up (upwards) by optional hydraulic accumulator ~1,5 sec. and may vary depending on unit dimensions.		
P Rating	IP 55 - Hydraulic Power Unit,		
	IP 67 - Electronics (optional), protection with housing/box		
	IP 68 - Hydraulic Piston		
Crash / Impact Rating	Designed and produced to withstand impacts at M50 (K12) level, full scale crash test pending.		



			Raising Height (H) 90 cm
Product Code	Blocker Unit Width (X)	No. of Pistons	Dimensions (LxWxD)
HRB 10P 90 SRF	1000	1	2025 x 1455 x 390
HRB 15P 90 SRF	1500	1	2025 x 1955 x 390
HRB 20P 90 SRF	2000	1	2025 x 2455 x 390
HRB 25P 90 SRF	2500	1	2025 x 2955 x 390
HRB 30P 90 SRF	3000	1	2025 x 3455 x 390
HRB 35P 90 SRF	3500	1	2025 x 3955 x 390
HRB 35P 90 SRF	3500	2	2025 x 3955 x 390
HRB 40P 90 SRF	4000	2	2025 x 4445 x 390
HRB 45P 90 SRF	4500	2	2025 x 4955 x 390
HRB 50P 90 SRF	5000	2	2025 x 5455 x 390
HRB 55P 90 SRF	5500	2	2025 x 5955 x 390
HRB 60P 90 SRF	6000	2	2025 x 6455 x 390
HRB 65P 90 SRF	6500	2	2025 x 6955 x 390

Battery Back-up for Battery unit with capacity of min. 100 movements (50 deploy + 50 retract) when fully charged is optionally available.			
Power-off Situation			
Axle Load Resistance	50T		
Hydraulic Cylinder Unit	Heavy duty, dust sealed electrostatic powder coated 50 mm hydraulic cylinder.		
	Models between 1- 3 metre widths contain a single piston.		
	(Double piston version is optionally available for model with 3,5 metre width).		
	Models between 4,0 - 6,5 metre widths contain double pistons.		
	Cylinder unit features a safety valve against leakage and hose failure.		
Hydraulic Power Unit	Strengthened industrial pump, 60 lt oil tank capacity with magnetic metal collector and particle filter.		
	Built-in oil level sensor and oil temperature indicator.		
	70-100 bar pressure; maximum running pressure is 150 bar.		
	10 mt R2 (double wire braided mesh) reinforced hydraulic hose.		

HRB ROAD BLOCKER Heavy Duty - Shallow Mount Model

System	Down, Up, Emergency and external sensor inputs/outputs (e.g. loop detector, beam detector, Signalisation, Remote Control, etc.)
	System alerts with an audio signal during lowering and raising operation.
	A loud siren output in case of alarm or emergency.
	Can be lowered or raised automatically in case of emergency (User's preference).
	Can be lowered and raised manually in case of power failure or during the maintenance service with manual pump and manual valve
	feature. Automatic raise up mode deploys (optionally with synchronised 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.
Power Unit	Motor, hydraulic pump and solenoid valves are contained in an easily accessible hot-dip-galvanised and electrostatic powder painted cabine
	with a built-in lock lid. (Opt. Stainless Steel Cabinet)
Blocker Cabinet	All parts are coloured with industrial paint with two components.
(underground unit)	U-shaped profile structure for maximum strength to withstand impacts at M50 (K12) level.
	The blocker and cabinet are designed so that no vehicle crashing effect can displace it after embedded or installed into the ground.
Blocker Unit	All parts are coloured with industrial paint with two components.
(impact blocking unit)	Hot dip galvanised vehicle pass through surface (top plates).
	The hinge system is specially designed to have a flattened surface level with the top plate so that vehicles can pass over smoothly and
	quietly. Top panel where the vehicle pass over is made of 10/11mm thick non-slip surface steel hot-dip galvanised before paint.
	The system moves up and down with 50mm diametre stainless steel hinges (example: 3 metre blocker contains 7 pieces of 50mm diametre
	stainless steel hinges).
	Blocker unit raises 45° angle from the ground level.
	A top lid is provided for easy access for service and maintenance on the top plate.
	Accordion type panel closure on front is optionally available.
Control System	Manual Control Button Unit:
	Provided with an IP67 CRM yellow box including 3 switches for downwards, upwards, stop (optional emergency operation), can stop the
	blocker motion with the command/signal coming from detector, equipped with built-in LED visual indications and 10 mt cable.
	Compatibility with Access Control Systems:
	Compatible with any access control system (by third parties).
	Optional Unit:
	With the optional model "RB CONT.UNIT.V.001" users can monitor the diagnostic functions, can be accessed through LAN, RS485 protocols
	System is provided inside a metal cabinet that also includes the other functional switches like downward, upward, stop, emergency
	operations.
	With the built in 124x68 LCD screen, all status of the operation and system diagnostic can be monitored through messaging functions like
	oil status, loop or beam detectors status, water level inside the cabinet, blocker position according to user preference, any .bmp files can be
	displayed.
	The system is driven by the PLC.
Optional Features	Traffic lights (red-green), traffic light pole, loop detector (double/single contact), beam detector, 220V, 110V motor, 24V DC for emergency
and Accessories	situations in case of power failure, remote control (receiver and transmitter are 3 channels), UPS, photocell sensor (receiver + transmitter
	with 50cm height pole), RB CONT. UNIT.V.001 control unit, intercom, external buttons, hydraulic accumulator for emergency fast raise up
	(1 piston or 2 pistons systems), surface frame (sizes: from 250mm to 1000mm), oil cooler, oil heater, heater for electronic components,
	hot-dip galvanisation for cabinet, blocker and impact surface units, double effect hydraulic unit, double speed hydraulic unit, powered audio
	signal (siren), PLC diagnostic monitor, IP67 box (for PLC, SMPS, connectors etc inside power unit), LED indicator on front, accordion type
	front closure.
Installation	Easy Installation with C30 grade concrete and steel rebar reinforcement.
	Ground leveling and preparation works shall be done before concrete pouring. Allowable bearing value of the ground shall be minimum 1/2 kg/cm ² .



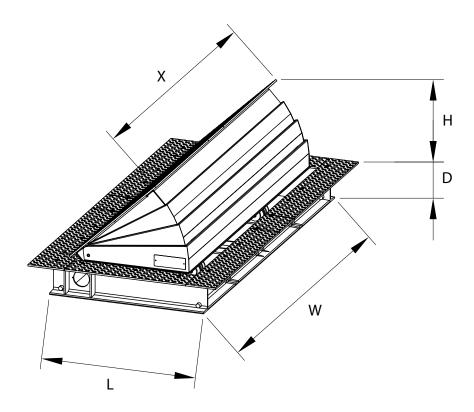


RB ROAD BLOCKER Residential - Shallow Mount Model





Power	Standard 380V AC 3-Phase 50/60 Hz, 3,3 - 5,5 KvA motor (varies depending on blocker size).		
	Opt. 220V, 110V 1-Phase 50/60 Hz (for some models/sizes only), optionally 24V DC for emergency situations in case of power failure.		
Control Pack	24V DC powered and PLC control unit is placed in power unit cabinet.		
	Solenoids 24V DC (Ops.12V DC / 220V AC)		
Speed	Standard Operation ~2,5 - 6 sec. (ascend/descend) depending on unit dimensions.		
	Emergency raise up (upwards) by optional hydraulic accumulator ~1,5 sec. and may vary depending on unit dimensions.		
IP Rating	IP 55 - Hydraulic Power Unit,		
	IP 67 - Electronics (optional), protection with housing/box		
	IP 68 - Hydraulic Piston		
Crash / Impact Rating	Designed and produced to withstand impacts at M40 (K8).		



			Raising Height 65 - 50 cm	Raising Height 90 - 70 cm
Product Code	Blocker Unit Width (X)	No. of Pistons	Dimensions (LxWxD)	Dimensions (LxWxD)
RB 10P SRF	1000	1	1342 x 1440 x 210	2665 x 1440 x 210
RB 15P SRF	1500	1	1342 x 1910 x 210	2665 x 1910 x 210
RB 20P SRF	2000	1	1342 x 2440 x 210	2665 x 2440 x 210
RB 25P SRF	2500	1	1342 x 2910 x 210	2665 x 2910 x 210
RB 30P SRF	3000	1	1342 x 3440 x 210	2665 x 3440 x 210
RB 35P SRF	3500	1	1342 x 3910 x 210	2665 x 3910 x 210
RB 35P SRF	3500	2	1342 x 3910 x 210	2665 x 3910 x 210
RB 40P SRF	4000	1	1342 x 4440 x 210	2665 x 4440 x 210
RB 40PSRF	4000	2	1342 x 4440 x 210	2665 x 4440 x 210
RB 45P SRF	4500	2	1342 x 4910 x 210	2665 x 4910 x 210
RB 50P SRF	5000	2	1342 x 5440 x 210	2665 x 5440 x 210
RB 55P SRF	5500	2	1342 x 5910 x 210	2665 x 5910 x 210
RB 60P SRF	6000	2	1342 x 6440 x 210	2665 x 6440 x 210
RB 65PSRF	6500	2	1342 x 6910 x 210	2665 x 6910 x 210

^{*}To complete the product code (RB 10P__SRF) simply choose a raising height in increments of 5cm between either 65-50cm or 90-70cm. For example the code for a 60cm raising height would be RB 10P 60 SRF.

Battery Back-up for	Battery unit with capacity of min. 100 movements (50 deploy + 50 retract) when fully charged is optionally available.		
Power-off Situation			
Axle Load Resistance	50T		
Hydraulic Cylinder Unit	Heavy duty, dust sealed electrostatic powder coated 50 mm hydraulic cylinder.		
	Models between 1- 4 metre widths contain a single piston.		
	(Double piston versions are optionally available for models 3,5 & 4 metre widths).		
	Models between 4,5 - 6,5 metre widths contain double pistons.		
	Cylinder unit features a safety valve against leakage and hose failure.		
Hydraulic Power Unit	Strengthened industrial pump, 60 lt oil tank capacity with magnetic metal collector and particle filter.		
	Built-in oil level and oil temperature indicator.		
	70-80 Bar pressure; maximum running pressure is 120 Bar.		
	10 mt R2 (double wire braided mesh) reinforced hydraulic hose.		

RB ROAD BLOCKER Residential - Shallow Mount Model

System	Down, Up, Emergency and external sensor inputs/outputs (e.g. loop detector, beam detector, Signalisation, Remote Control, etc.)
	System alerts with an audio signal during lowering and raising operation.
	A loud siren output in case of alarm or emergency.
	Can be lowered or raised automatically in case of emergency (User's preference).
	Can be lowered and raised manually in case of power failure or during the maintenance service with manual pump and manual valve
	feature. Automatic raise up mode deploys (optionally with synchronised 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.
Power Unit	Motor, hydraulic pump and solenoid valves are contained in an easily accessible hot-dip-galvanised and electrostatic powder painted cabine
	with a built-in lock lid. (Opt. Stainless Steel Cabinet)
Blocker Cabinet	All parts are coloured with industrial paint with two components.
(underground unit)	U-shaped profile structure for maximum strength.
(· · · · 3 · · · · · · · · · · · · · · · · · · ·	The blocker and cabinet are designed so that no vehicle crashing effect can displace it after embedded or installed into the ground.
Blocker Unit	All parts are coloured with industrial paint with two components.
(impact blocking unit)	Hot dip galvanised vehicle pass through surface (top plates).
(impact blocking unit)	The hinge system is specially designed to have a flattened surface level with the top plate so that vehicles can pass over smoothly and
	quietly. Top panel where the vehicle pass over is made of 8/9mm thick non-slip surface steel hot-dip galvanised before paint.
	The system moves up and down with 50mm diametre stainless steel hinges (example: 3 metre blocker contains 7 pieces of 50mm diametre
	stainless steel hinges).
	Blocker unit raises 45° angle from the ground level.
	A top lid is provided for easy access for service and maintenance on the top plate.
	Accordion type panel closure on front is optionally available.
Control System	Manual Control Button Unit:
	Provided with an IP67 CRM yellow box including 3 switches for downwards, upwards, stop (optional emergency operation), can stop the
	blocker motion with the command/signal coming from detector, equipped with built-in LED visual indications and 10 mt cable.
	Compatibility with Access Control Systems:
	Compatible with any access control system (by third parties).
	Optional Unit:
	With the optional model "RB CONT.UNIT.V.001" users can monitor the diagnostic functions, can be accessed through LAN, RS485 protocols
	System is provided inside a metal cabinet that also includes the other functional switches like downward, upward, stop, emergency
	operations.
	With the built in 124x68 LCD screen, all status of the operation and system diagnostic can be monitored through messaging functions like
	oil status, loop or beam detectors status, water level inside the cabinet, blocker position according to user preference, any .bmp files can be
	displayed.
	The system is driven by the PLC.
Optional Features	Traffic lights (red-green), traffic light pole, loop detector (double/single contact), beam detector, 220V, 110V motor, 24V DC for emergency
and Accessories	situations in case of power failure, remote control (receiver and transmitter are 3 channels), UPS, photocell sensor (receiver + transmitter
	with 50cm height pole), RB CONT. UNIT.V.001 control unit, intercom, external buttons, hydraulic accumulator for emergency fast raise up
	(1 piston or 2 pistons systems), surface frame (sizes: from 250mm to 1000mm), oil cooler, oil heater, heater for electronic components,
	hot-dip galvanisation for cabinet, blocker and impact surface units, double effect hydraulic unit, double speed hydraulic unit, powered audio
	signal (siren), PLC diagnostic monitor, IP67 box (for PLC, SMPS, connectors etc inside power unit), LED indicator on front, oil level sensor,
Installation	accordion type front closure.
เมอเสมสนบม	Easy Installation with C30 grade concrete and steel rebar reinforcement.
	Cround loveling and proparation works shall be done before concrete neuring
	Ground leveling and preparation works shall be done before concrete pouring. Allowable bearing value of the ground shall be minimum 1/2 kg/cm².



ROAD BLOCKERS

		pecifications (Embedded Series)	
	HRB (Heavy Duty Road Blocker)	RRB (Reinforced Road Blocker)	RB (Residential Type Road Blocker)
	THE PARTY OF THE P		
	Standard Featu	res and Built-in Properties	
Axle Load	50 T.	50 T.	40 T.
Panel Thicknesses	Solid 6mm (at every 35-55 cm)	Solid 6mm (at every 35-55 cm)	Solid 4mm panels
Flashing Light	Standard	Optional	Optional
Round Front Panel	Standard	Optional	Optional
Top Plate	10/11 mm	8/9 mm	8/9 mm
Oil Level Sensor	Standard	Optional	Optional
Impact Resistance (Crash Test)	M50 P1 (K-12) tested and certified (HRB 30 R 90) Designed and produced to withstand H30	Designed and produced to withstand M50 P1 (K-12)	Designed and produced to withstand M40 P1 (K-8)
Front Panel Thickness	30+6 (opt. 10)+3mm	30+6mm	4mm
Speed	2.5/6 sn	4/6 sn (Opt. 2.5/4sn)	4/6 sn (Opt. 2.5/4sn)
Control System		380V 3-Phase AC	
		IP 67 manual control button unit 3 functions	
		Emergency button	
	Down	n/descent button (manual) in case of power off or mainte	nance
		PLC control unit	
		24V DC control	
		24V DC solenoids	
		Automatic/manual programmable access authorisation	
		Outputs (siren, light, beam, flashes)	
		Movement buzzer	
Blocker Unit	Special design	gn hinge structure spread on the total width of the blocke	r without gap
	Unladen piston connecti	on at top and bottom positions of the blocker enabling fr	ee-standing of the piston
		Galvanised sheet metal main body side covers	
	ŀ	ot dip galvanised vehicle pass through surface (top plate	s)
		60 litre oil tank	
	IP55 - Hydraulic Po	wer Unit, IP 58 - Blocker Cabinet (underground unit), IP 6	88 - Hydraulic Piston
		Solid impact absorption panels	
		Maximum reinforced static construction cabin	
		Service access lid (screwed)	
	Reinforto	ed industrial pain with two components in yellow and bla	ck colours
	High v	isibility with yellow and black diagonal stripes on impact	surface
		Reflective marking	
		Hose for Hydraulic Oil (10mt)	
		25cc hand pump (manual)	
		Oil level and temperature indicator	
		Protective valve for oil hose	
		Oil tank with particle filter	
		Oil tank with magnetic metal collector	
		Hot dip galvanised power and control unit cabin	
		-5°C / +55°C (opt30°C / +70°C)	
Installation		Ground mounting apparatus	
		Easy installation	

	Optional Features and Accessories
Features	PLC diagnostic monitor (LAN)
	Hot dip galvanisation both for cabinet and blocker unit
	Hot dip galvanisation for impact surface
	Double effect hydraulic movement
	Double speed
	Optional speeds for RRB and RB
Accessories	Accumulator for emergency fast raise up (app. 1.5sn speed) Traffic lights (red-green)
Accessories	Traffic lights (red-green), dia: 100mm or 200mm
	Loop detector
	Beam detector
	Photocell
	Remote control (wireless)
	Rain water damage pump (emergency submersible pump)
	Roudned front panel (recommended for residential use for safety)
	Ground mounting plate
	Oil level sensor
	1 phase 220V AC or 24V DC motor
	UPS
	Oil cooler
	Oil heater
	Component heater IP67 control box (for PLC, SMPS, connectors, circuit breakers, loop detector (if any), relays)
	Surface frames in optional sizes (25cm to 100cm)
	Audio Signal (Siren, powered)
	11.1.1.4 to 11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1







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We have a worldwide network.

From our Treviso Headquarters - the heart of the Group - we coordinate 7 production plants and 6 R&D centres. We sit across the market thanks to branches in 21 countries, and operate in 118 countries through our business partners and distributors.

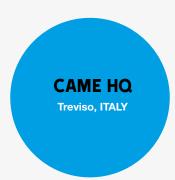
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We have gone beyond the simple idea of Home Automation, and taken the concept full circle. Now every device is fully integrated and connected into a system that improves people's lives. Today, we believe automation is at the heart of everything: to handle the entrances and blinds, to control awnings and shutters, plus video intercom-entry systems, CCTV, and, burglar alarms.

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For every public venue, our offer provides the most sophisticated systems for controlling accesses and the most evolved solutions for burglar systems, video-intercom entry panels and barriers for parking facilities. Small and large companies, commercial enterprises, large buildings: CAME-branded Building-Automation operators provide control and safety in both small and large working environments.

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Our offer is geared to meet the different automation needs for urban planning and architectural scenarios. CAME solutions are engineered for managing safety and control in large works and for contributing to the planning of urban spaces so as to make them "Safe and Smart", as called for in today's fast-paced, metropolitan centres.

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CAME ÖZAK, a global player, has incorporated one of the widest range of products offering solutions in pedestrian and vehicle access control fields. We owe our success to our talented designers and engineers along with our flexible manufacturing processes.

Understanding people's needs, thus providing customised solutions tailored to expectations has made our offering a choice for numerous residential, governmental, urban and sports facilities. Our fully integrable, user friendly and high performance solutions are available with our solution partners all over the world.



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