

BR500 intelli BARRIER

Intelligent Vehicle Barrier Gate

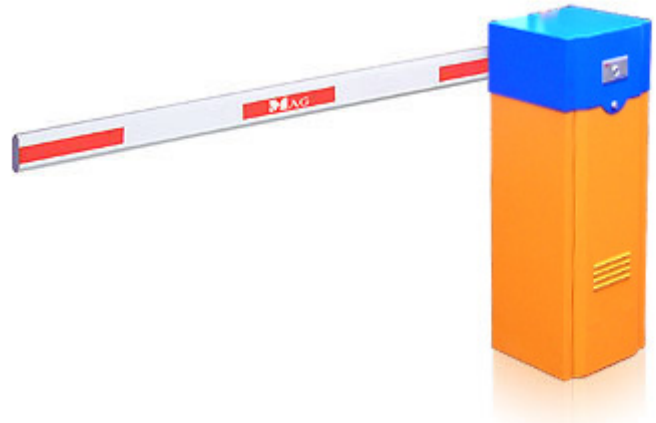


Date: 18 September 2011, Revision: V2

General Description

MAG BR500 series intelli barriers utilize innovative technology design and manufactured with precision machinery to guarantee satisfaction in quality and reliability for years to come.

MAG intelligent barrier has been lab tested for more than 2.5 millions opening / closing and still without any degrade in performance - superb mechanical life time for heavy duty application. It composed primarily of an electronic panel that controls the mechanical unit to lift or release the barrier arm.



Application

Suitable for indoor as well as outdoor parking area at airport, shopping mall, warehouse, hotel, factories, condominium, car rental companies, etc. It can also be customized to be used together with any auto-pay ticketing parking system.

Features

Intelligent. No limit switch - smart processor auto-detects open and close position for higher accuracy. Combination of unique lever design and smart motor control allow swift arm movement that reduces bouncing at end position.

Optimal speed. Able to fully lift up a 3 meter arm in between 1 to 6 sec depends on the models. This allows smoother and more efficient traffic flow.

Heavy Duty. AC based motor is stronger and maintenance free (no need to change carbon). Compressed counter balance spring avoids possibility of spring over-stressed and break due to high volume continuous open/lose cycle.

Safe. Arm will auto-reverse when hitting an obstacle during closing. Photo beam can be added to auto-reverse the arm ahead of time before hitting approaching vehicle or human. BR510, BR518 and BR530's arm will auto-fall out if hit by vehicle to avoid breaking the arm and minimize damage to the vehicle. Traffic light (red & green) can be added to indicate permission to pass through and further enhance safety usage. Built-in MSB to protect against any electric hazard.

Durable. Housing is polished, phosphorized and further finished with plastic coating to ensure long lasting bright colors.

Secure. Arm is self-locked in any position to avoid unauthorized person to manually open/close arm. All internal parts inside housing is protected by cam lock to avoid tampering.

User Friendly. Clutch can be conveniently released without opening casing. Arm can be easily lifted or closed by hand after clutch is released. More intuitive control - 3 separate input for arm up, stop and down.

Easy maintenance. Damaged barrier arm can be replaced easily. Epoxy powder paint will keep the unit looking clean and new for years

Technical specification

Mechanical unit

Consist of the drive motor, speed reduction gear box and casing. Control panel is mounted into mechanical unit casing as a complete system that drives the arm movement. Casing is made with electroplated mild steel and finished with epoxy powder paint. The top cover and door on casing is cam locked (requires key) to avoid tampering with the internal system. The following is the parameter for complete system:

Description	Parameter
Mechanical temperature	-40° to 75 C
Electrical temperature	-10° to 75 C
Power supply input	220V ± 10% AC, 50/60Hz
Power consumption	80 watt
Relative humidity	< 90 %
Arm speed	1 , 1.8, 3 , 6 second
Internal lubrication	Grease
Max starting torque	1 second : 1.4±0.2 N.M 3 / 6 second : 0.87±0.1 N.M
AC rotation speed	1 second : 440±40 RPM 3/6 second : 900±50 RPM

Built in spring mechanism to counter balance arm's weight allow for effortless motor drive and longer mechanical life span.

Control panel

Consist of advance intelligent microprocessor based board and transformer housed in a weather resistant casing. It controls the operation of the barrier system. Control panel is stored inside the mechanical unit casing.



Function:

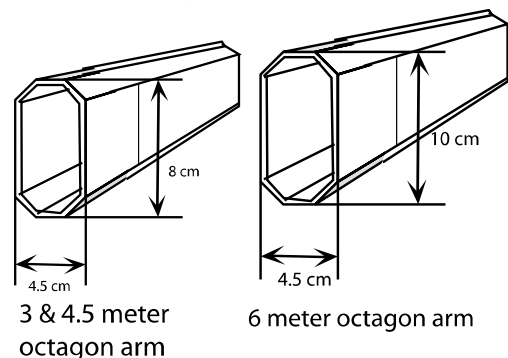
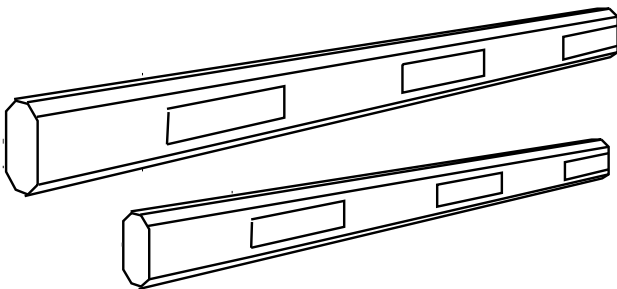
- Support 4 types of speed - 1 , 1.8, 3 , and 6 second
- Support separate push button for opening , closing and stop
- Support motor counter
- Support traffic light (red - green) output AC230
- Optical slot sensor to control up and down limit

Casing is made from weather proof ABS plastic.

Casing dimension: 211mm x 95mm x 118mm

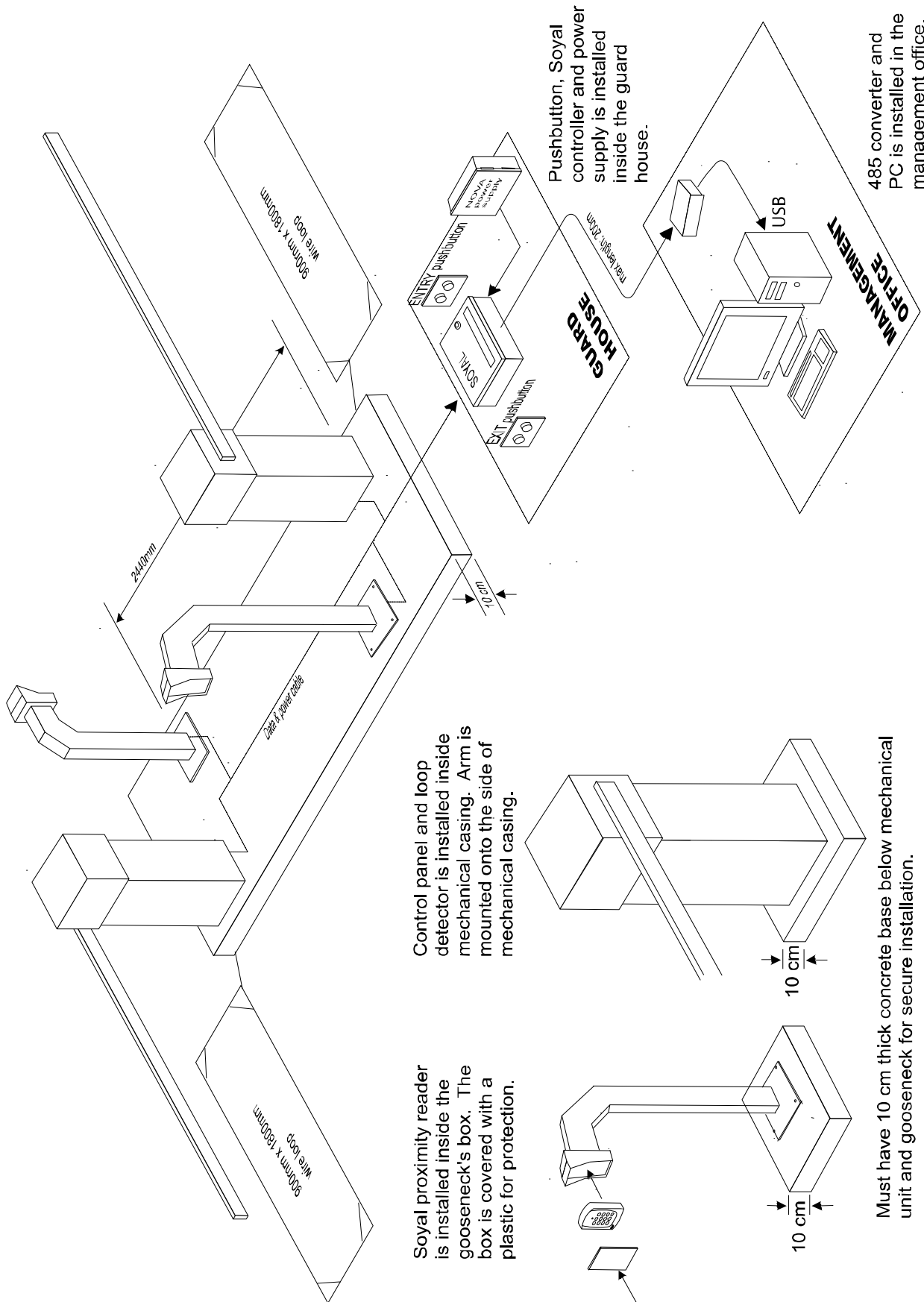
Barrier arm

Arm is made of octagon aluminum hollow. There are 4 standard lengths available: 3m, 4m, 4.5m or 6m depend on which model. Other customized length is also available upon request. Red reflective adhesive is put onto the arm alternately for better visual during night time.



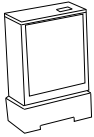
Aluminum hollow bar cross section

Typical installation diagram - with access control system

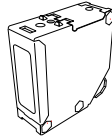


***Diagram is for illustration only and does NOT reflect actual installation. Actual installation dimension varies depending on site.*

Optional accessories

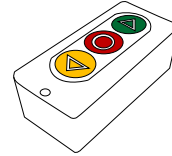


Loop detector - detect presence of vehicle in closing operation



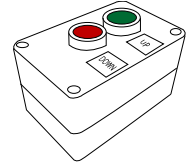
ESQ501

Infrared sensor - detect presence of human, vehicle and other object for extra safety

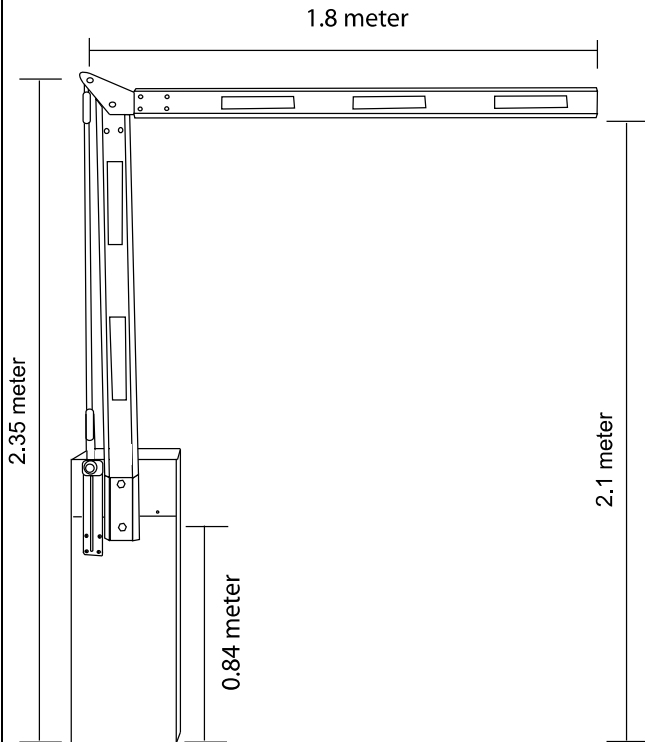


BR_PB2

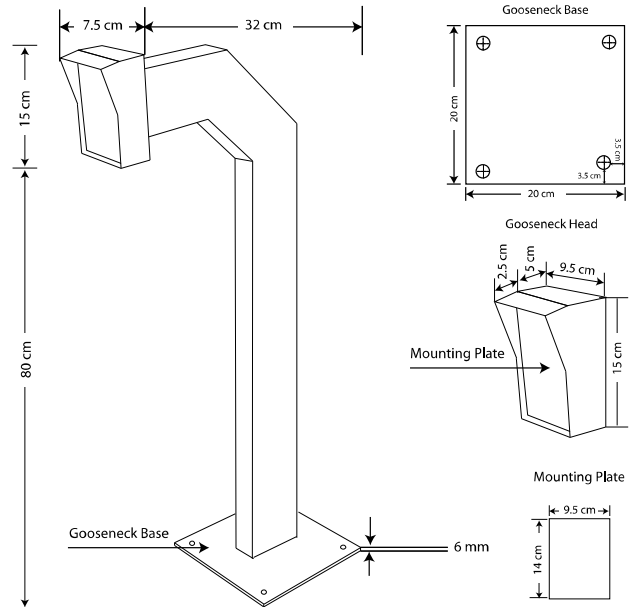
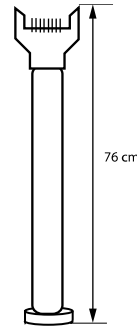
Push button for barrier manual control



BR_PB3

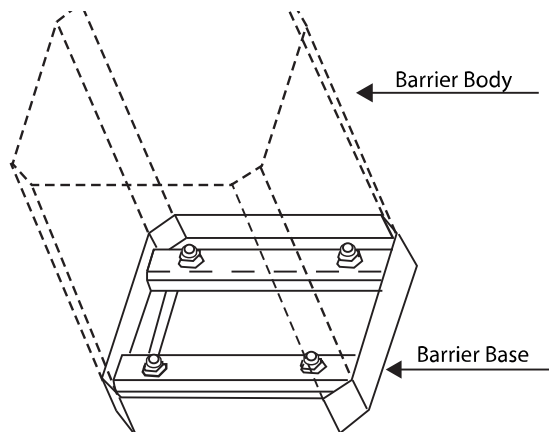
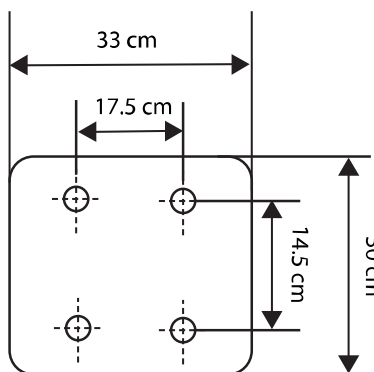


Right angle elbow kit; for installation site that does not have sufficient height to accommodate the fully lifted arm.



Gooseneck - are used to mount proximity reader installed outdoor for parking application.

Base Installation Footprint



Ordering information

Ordering code:

Model No.	Open/close Speed	Max straight arm	Arm swing out
BR510	1 sec	3 meter	Yes
BR518	1.8 sec	4 meter	Yes
BR530	3 sec	4 meter	Yes
BR560	6 sec	6 meter	No
BR530A90	3 sec	4 meter	No
BR560AFE	6 sec	4.5 meter	No

* M = Meter, sec = second

Left Side Arm	BR510L, BR518L, BR530L, BR560L, BR530A90L, BR560AFEL
Right Side Arm	BR510R, BR518R, BR530R, BR560R, BR530A90R, BR560AFER

Standard color body is orange, top cover is blue in color.
By default, all barriers are right side oriented.

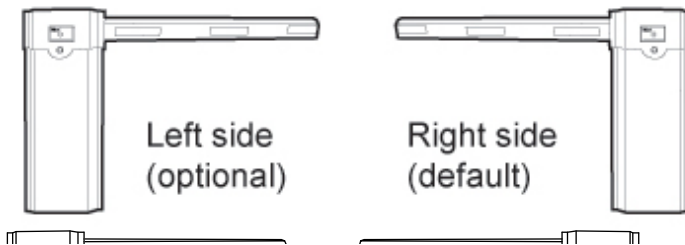
Package system consists of:

- 1 pcs Standard AC 230 Motor
- 1 pcs Control panel and 20A MCB switch
- 1 set Aluminum Arm
- 2 pcs U bracket for base mounting
- 4 pcs Wall plug screw

Packaging information

The following is the approximate weight information of major components to help estimate shipping cost.

Items	Weight
Mechanical unit and control panel	65 kg
Gooseneck	9 kg
6 meter arm	7 kg
4 meter arm	5 kg
3 meter arm	3 kg



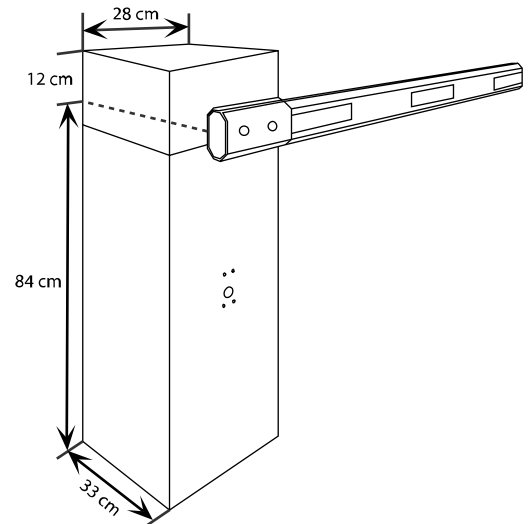
Disclaimers

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Dimension drawing



Authorized dealer: