

## RETRACTABLE BOLLARDS

Retractable bollards are designed for medium security applications such as traffic and parking control. They offer a simple, trouble free operation proven over many years of installation.

Note: A retractable bollard should not be used where high security locking is required, such as car yards etc. For these applications insurance companies insist on our "Cam-lok" removable bollards.

### Value features:

- » Locks in both up and down positions.
- » Strong circular design 90mm diameter x 5mm wall.
- » Black anti-slip surface on top of bollard.
- » Unique low cost 'T' handle key.
- » Convenient: no loose posts to store.
- » Powder coated post with galvanised in ground casing.
- » Trouble free design. Only 2 moving parts.
- » Internal locking system can't be tampered with or fouled by dirt or water.

**Note:** 2 keys supplied per order. Additional keys may be purchased.

### Specifications

<b>Description:</b>	Retractable bollard for vehicle access and parking control.
<b>Material:</b>	Bollards 90mm diameter with 5mm wall mild steel. In ground casing 140mm with 5mm wall mild steel.
<b>Finish:</b>	Bollards safety yellow powder coat. In-ground casing hot dip galvanised. Black anti-slip surface at top.
<b>Height:</b>	Above ground 900mm. Below ground 1150mm.
<b>Weight:</b>	BR900 41.5kg. / Operating weight 6kgs
<b>Locking:</b>	Unique internal locking mechanism with 'T' handle key.
<b>Installation:</b>	Excavation and concrete footing.

PART No.	DESCRIPTION
BR900	Retractable bollard assembly
BR900R	Replacement bollard
BRKEY	Additional 'T' handle key for retractable bollard



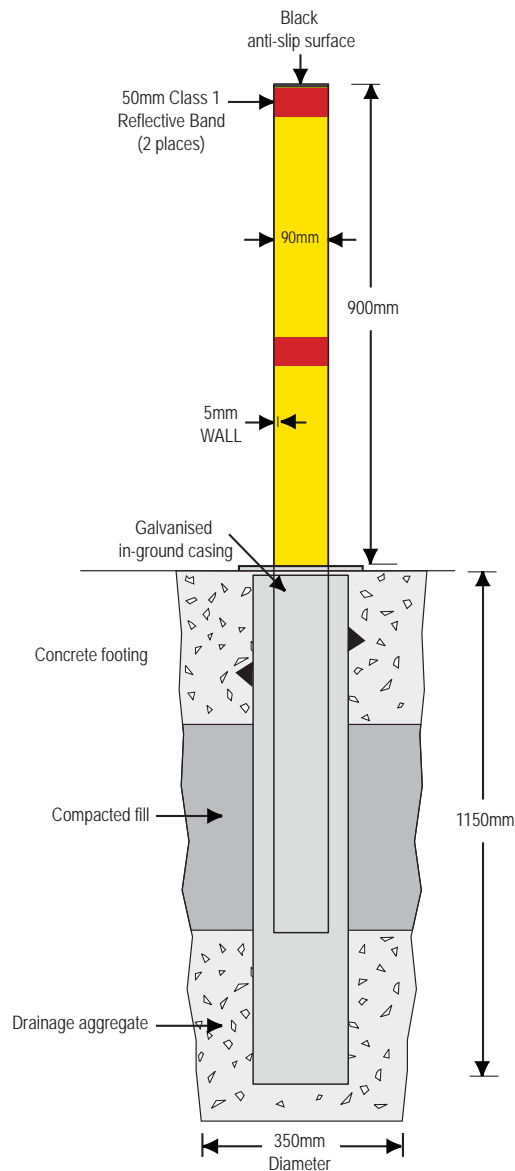
1. Locks in down position.



2. Turn to unlock and lift.



3. Turn to lock in up position.



The BR900 retractable bollard has only two moving parts. The bollard itself which raises, lowers and rotates through 180 degrees for locking, and the internal locking rod which locks the bollard in both the up and down positions.

**IMPORTANT NOTE:** when lifting the bollard the internal locking rod must be engaged by the key. Failure to do so will result in the bollard not being locked when in the raised position. SEE CUT-AWAY VIEWS BELOW.



1. Insert key with teeth facing narrow side of bollard.



2. With key fully inserted move to upright position to engage locking rod.



3. Key shown correctly inserted prior to lifting.



4. Lift key until it stops. Locking rod is now disengaged.



5. Rotate bollard to locked or unlocked position. Release key to re-engage locking rod. Check lock.

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### Installation Procedure:

1. Set out and bore holes approximately 500mm diameter. Recommended spacing for bollards is 1400mm maximum, centre to centre. Holes should be 100mm deeper than the length of the galvanised ground casing. (PHOTO 1).
2. Place coarse gravel in the bottom of the hole, sit the bollard on this base until the top flange plate is approximately 10mm above the natural ground level. Ensure bollard is plumb then place more gravel around the bollard until the hole is approximately  $\frac{1}{3}$  full. (PHOTO 2).
3. Replace some of the excavated soil from the hole and compact until the hole is approximately  $\frac{2}{3}$  full. Check the operation of the bollard. (PHOTO 3).
4. When satisfied the bollard is plumb and at the correct height, cover the top with tape to prevent entry of cement into bollard casing. Fill the balance of the hole with 35-50 mpa concrete. Add steel reinforcing if required. (PHOTO 4).
5. Finish off concrete as desired, remove the protective tape and clean around the bollard and top flange. (PHOTO 5).
6. Stand back and admire your beautiful work. Well done! (PHOTO 6).



1.



2.



3.



4.



5.



6.



### PLEASE NOTE

- a. When finishing off the concrete, taper the surface slightly away from the surface flange. This will reduce the amount of water that finds its way into the ground casing.
- b. The coarse gravel in the bottom of the hole acts as a drainage sump for water that finds its way into the casing. This is normal and should not be seen as a problem.
- c. Never allow the bollard to free-fall from the raised position. Always lower using the 'T' handle key.

Photos courtesy of R.L. Reed Inc. (Las Vegas).