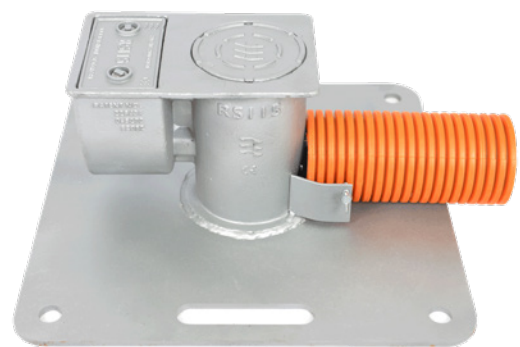




# Retention Sockets

## Shallow Foundation



### Applications:

**Traffic Signals, Street Lighting, Signage, EV Charging Units, VMS/VAS Signs, CCTV Posts**

The NAL Retention Socket with Shallow Foundation Base is a range of galvanised cast steel and ductile iron sockets which securely retain in position all types of illuminated street furniture posts. They are manufactured in a range of sizes and shapes to suit the wide variety of street furniture being installed on the highway today. All posts are secured into the socket by stainless steel setscrews, located in a recessed chamber of the socket head, which locks the post/street furniture in place. The design of the Retention Socket with Shallow Foundation Base allows any post or column to be planted as shallow as 220mm, ensuring any depth restrictions can be overcome. NAL provide foundations for all Retention Sockets to either EN40 or BD94/07.

### Advantages

- ◆ Removes the need for special columns or cranked roots
- ◆ 300mm depth as standard
- ◆ EN40 or BD94/07 foundations calculated by NAL
- ◆ Any height column can be supported
- ◆ Four duct entry points
- ◆ Withstands vehicular impacts removing the need for costly and disruptive excavations, as posts can be replaced in minutes
- ◆ Civil's contracts cannot be delayed by late deliveries of street furniture/posts
- ◆ Retention Sockets are flush with the ground with a pedestrian cover plate allowing civil works to be completed prior to installation of the street furniture
- ◆ Allows contractor to cable the post at ground level, eliminating the working at height and manual handling risks



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# Purchase Specification

The socket head shall be constructed of cast steel to ISO 3755 230-450 or Ductile Iron to BS2789 500-7, galvanised on all internal and external surfaces.

The socket shall be capable of withstanding impact forces from vehicle impact to steel posts with wall thickness up to 6mm.

All assembly screws shall be M12 A2 stainless steel. It shall contain two M16 A2 stainless steel lateral fixing setscrews inside a locking chamber. This locking chamber shall be covered with a locking lid, EN124-B125 load rated fitted with RS worm lock. The socket shall have a galvanised steel base.

The socket shall contain a steel protective pressure plate. All operating components shall be serviceable on site. NAL calculate foundations to EN40 or BD94/07 for all Retention Sockets. ST4 Concrete and A393 mesh must be used for all installations of Shallow Foundation Retention Sockets.

The Shallow Foundation Retention Socket consists of a cast steel or ductile iron head and locking lid together with a steel pressure plate, pedestrian plate and steel base plate. \*Varies on socket size

**Assembly screws:** a2 stainless steel

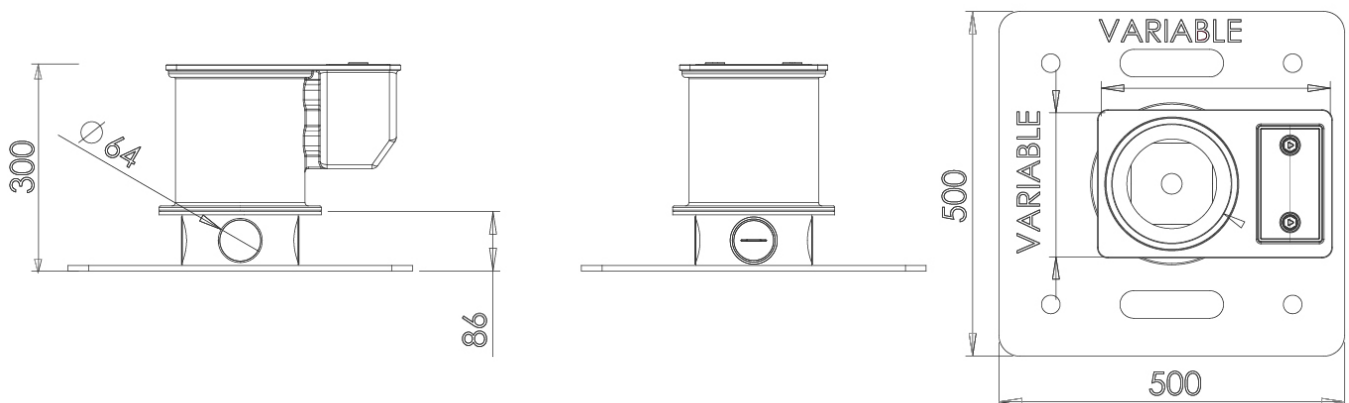
**Pressure plate, pedestrian plate:** mild steel, cast steel

**Setscrews:** m16 a2 stainless steel

**Head, locking lid:** cast steel or ductile iron\*

**Body:** cast steel or ductile iron\*

**Base:** galvanised steel



Please see individual Retention Socket drawings for dimensions and individual specifications. Please refer to the NAL installation guide for correct installation and foundation details.

| Standard Retention Socket Sizes |           | OD = Overall depth (mm)<br>PPD = Pole planting depth (mm) |                    |
|---------------------------------|-----------|---|--------------------|
| RS size                         | Pole size | Depths  | Shallow Foundation |
| RS48                            | 48.3mm    | OD  | 160                |
|                                 |           | PPD   | 155                |
| RS50                            | 50.1mm    | OD  | 160                |
|                                 |           | PPD   | 155                |
| RS50x50                         | 50x50mm   | OD  | 160                |
|                                 |           | PPD   | 155                |
| RS50x60                         | 50x60mm   | OD  | 160                |
|                                 |           | PPD   | 155                |
| RS60                            | 60.3mm    | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS76                            | 76.1mm    | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS80x40                         | 80x40mm   | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS89                            | 88.9mm    | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS100x50                        | 100x50mm  | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS100x60                        | 100x60mm  | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS100x100                       | 100x100mm | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS115                           | 114.3mm   | OD  | 218                |
|                                 |           | PPD   | 210                |
| RS120x60                        | 120x60mm  | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS120x80                        | 120x80mm  | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS120x120                       | 120x120mm | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS140                           | 139.7mm   | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS145(alu)                      | 145mm     | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS150x80                        | 150x80mm  | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS150x150                       | 150x150mm | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS168 (alu with reducer plate)  | 165mm     | OD  | 300                |
|                                 |           | PPD   | 220                |



| Standard Retention Socket Sizes |           | OD = Overall depth (mm)<br>PPD = Pole planting depth (mm) |                    |
|---------------------------------|-----------|---|--------------------|
| RS size                         | Pole size | Depths  | Shallow Foundation |
| RS168                           | 168.3mm   | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS177 (alu)                     | 177mm     | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS185x185                       | 185x185mm | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS194                           | 193.7mm   | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS200 (alu)                     | 200mm     | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS200x100                       | 200x100mm | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS219                           | 219.1mm   | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS226 (alu)                     | 226mm     | OD  | 300                |
|                                 |           | PPD   | 220                |
| RS245                           | 244.5mm   | OD  | 400                |
|                                 |           | PPD   | 312                |
| RS250 (alu)                     | 250mm     | OD  | 400                |
|                                 |           | PPD   | 312                |
| RS250x150                       | 250x150mm | OD  | 400                |
|                                 |           | PPD   | 312                |
| RS265                           | 265mm     | OD  | 400                |
|                                 |           | PPD   | 312                |
| RS273                           | 273mm     | OD  | 400                |
|                                 |           | PPD   | 312                |



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