

## Intelligent Foundation Solutions

**RETENTION SYSTEM™ sockets are intelligent foundation solutions for the installation and maintenance of posts.**

Essential to sustainable infrastructure design, they add value through improved asset management and performance, reduced operational costs and deliver environmental, health and safety benefits.



### world leading design...

- Patented design tested to international standards
- Approved and used throughout the world
- High-strength, reusable design survives vehicle impact
- Solution for knock-down and access-control locations
- Eliminates repeat excavation, disruption and expense
- Shallow foundation options for congested sites
- Easy to handle, adjust and install on site
- Facilitates electrical cabling at ground level
- Simplifies project, contractor & site management
- Assists maintenance and seasonal schedules
- Supports health and safety work practices
- Promotes environmental policies and targets

### Sustainable Infrastructure Design



# RS89

RS89 socket for the installation of Ø89mm (3.5in) posts including signs, bollards, lighting columns...

## RETENTION SYSTEM™ sockets for post installation



RS sockets are available in common industry sizes and post installation depths. Base options include: standard [flat] / duck-foot & tee bends for cable access / shallow foundation. RS engineered sockets are made to size, specification and installation requirements.

[www.retention-system.com](http://www.retention-system.com)

- » Facilitates Passive Safety design to EN12767
- » Foundation size and specification to EN40 & BD94/07
- » Product tested and load rated to EN124 B125

RETENTION SYSTEM™ is a trademark and patented product of IPL group | Innovative Products Ltd:  
ISO 9001 / ISO 14001 / OHSAS 18001

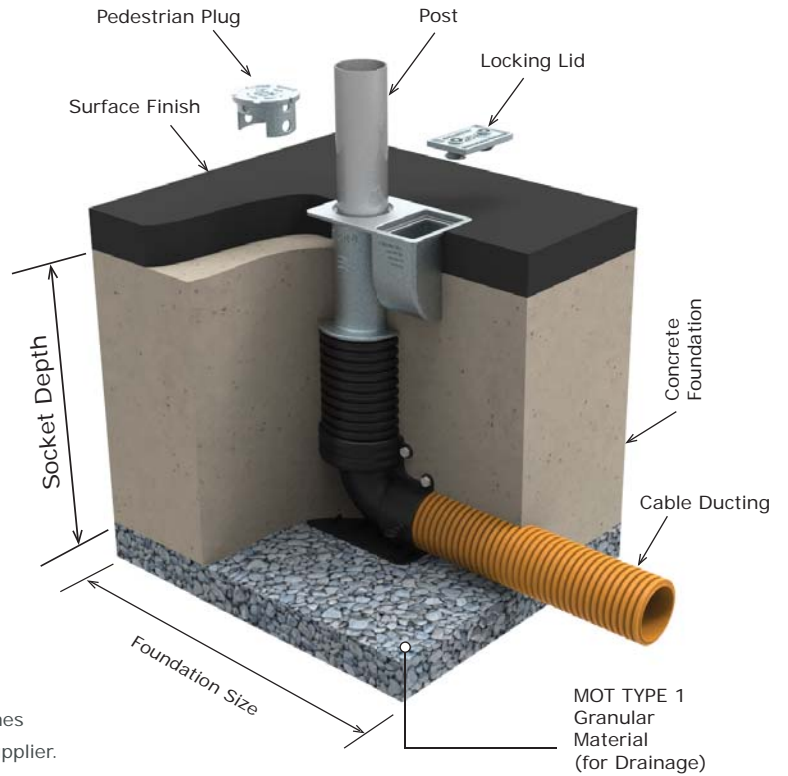
IPL group | +353 (0) 41 983 2591



# RS socket installation & specification...

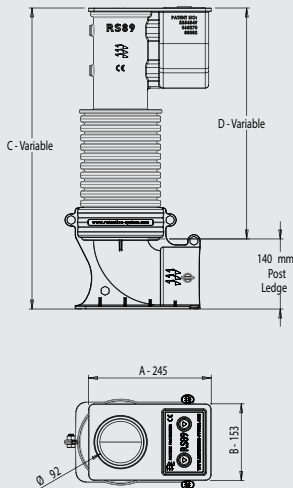
The **RS socket** should be set into concrete generally in accordance with International Standards or good Codes of Practice for the installation of posts.

1. Prepare hole at least 75mm deeper than the overall height of the **RS socket**. If depth for **RS socket** cannot be achieved, unit can be shortened on site. Please contact your supplier for technical support.
2. Compact at least 75mm of MOT type 1 granular material in base of hole.
3. Position **RS socket** in centre of hole. For cabled installations connect ducting from remote chamber to swivel bend on socket. Leave draw cord in base of **RS socket** bend.
4. Rotate the **RS socket** head into the required orientation.
5. Remove locking lid, loosen the two M16 locking set-screws and remove the pedestrian plug.
6. Install a levelling post (stump pole) in the **RS socket**, fasten the locking set-screws and replace the locking chamber lid.
7. Surround with the required amount of concrete (ST4 mix or stronger). Use stump pole to achieve a vertical level.
8. Once vertical level is achieved, compact concrete.
9. Once concrete has been compacted and has begun to cure, carefully remove stump pole and lock the pedestrian plug in place.
10. Replace the locking chamber lid and secure in position. Finish footway with required surface when concrete has cured.



See **RS socket** installation guide for EN40-3-1:2000 foundation guidelines  
For detailed foundation sizing on specific site conditions contact your supplier.

## RS89 socket for the installation of Ø89mm (3.5in) posts



Ref No:	Base Type	A (mm)	B (mm)	C* (mm)	D** (mm)	Weight (kg)
<b>RS89x300sf</b>	shallow foundation	245	153	300	210	20
<b>RS89x300</b>	standard [flat]	245	153	300	300	13.7
<b>RS89x450</b>	standard [flat]	245	153	450	450	14
<b>RS89x450df</b>	duck foot bend	245	153	450	310	13.7
<b>RS89x450t</b>	tee bend	245	153	450	310	23.5
<b>RS89x600</b>	standard [flat]	245	153	600	600	14.5
<b>RS89x600df</b>	duck foot bend	245	153	600	460	14
<b>RS89x600t</b>	tee bend	245	153	600	460	24.2
<b>RS89x750</b>	standard [flat]	245	153	750	750	15
<b>RS89x750df</b>	duck foot bend	245	153	750	610	14.3
<b>RS89x750t</b>	tee bend	245	153	750	610	25
<b>RS89x900</b>	standard [flat]	245	153	900	900	15.5
<b>RS89x900df</b>	duck foot bend	245	153	900	760	15
<b>RS89x900t</b>	tee bend	245	153	900	760	25.3

### Options:

**rs stump pole**  
(non-standard foundation depths & base types per specification)

## RS89

**C\*** rs socket foundation depth  
**D\*\*** post insertion depth

Technical drawings for all **rs sockets** available from **IPL group**.

*Drawings not to scale, illustrations, technical data, dimensions and weights are subject to alteration without notice.*

### Material Specification:

Head, Plug, Locking Lid: Cast Steel (BS EN 10283:2019)  
Body: PP - Polypropylene Twin Wall  
Flat Base: Mild Steel  
Duck Foot Bend: PC/ABS - Polycarbonate  
Tee Bend: Ductile Iron (BS EN 1563:2018)  
Setscrews: M16 A2 Stainless Steel  
Assembly Screws: M12 A2 Stainless Steel  
Finish: Galvanised

Further information on the RETENTION SYSTEM sockets for post installation is available at [www.retention-system.com](http://www.retention-system.com)  
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