

## 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



## RS219

RS219 socket for the installation of Ø219mm (8.6in) posts including traffic signals, flag poles, signs, 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

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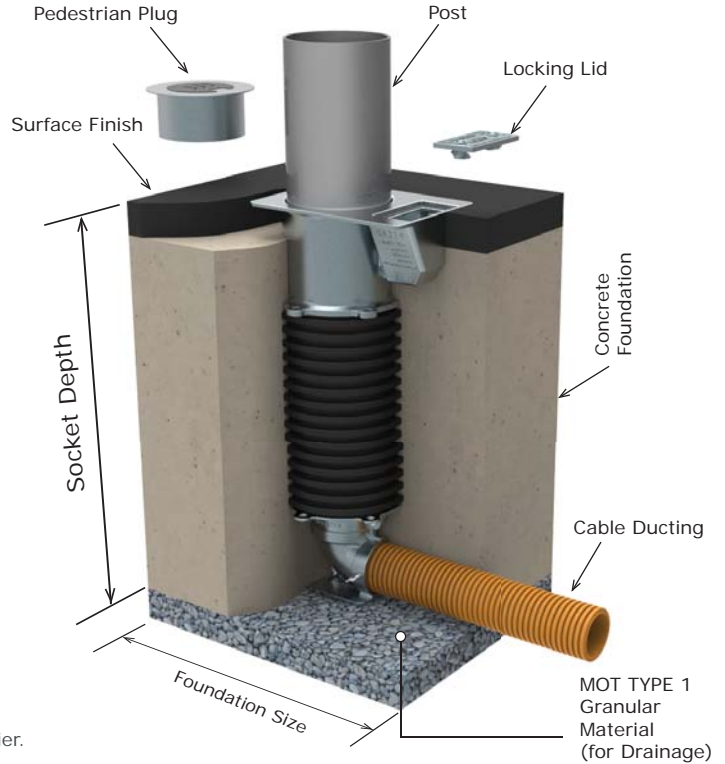


# RS socket installation & specification...

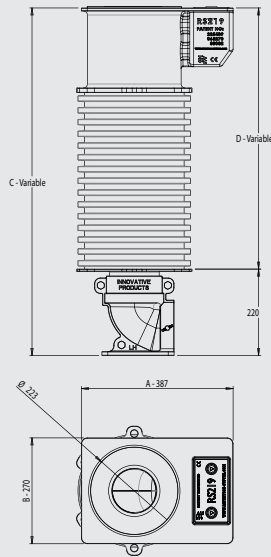
The **RS socket** should be set into concrete generally in accordance with International Standards or good Codes of Practice for the installation of posts.

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.



## RS219 socket for the installation of Ø219mm (8.6in) posts



Ref No:	Base Type	A (mm)	B (mm)	C* (mm)	D** (mm)	Weight (kg)
<b>RS219x300sf</b>	shallow foundation	387	270	300	210	30.2
<b>RS219x300</b>	standard [flat]	387	270	300	300	27
<b>RS219x450</b>	standard [flat]	387	270	450	450	28
<b>RS219x600</b>	standard [flat]	387	270	600	600	30.2
<b>RS219x600df</b>	duck foot bend	387	270	600	380	38
<b>RS219x600t</b>	tee bend	387	270	600	380	41
<b>RS219x750</b>	standard [flat]	387	270	750	750	32
<b>RS219x750df</b>	duck foot bend	387	270	750	530	39
<b>RS219x750t</b>	tee bend	387	270	750	530	42
<b>RS219x900</b>	standard [flat]	387	270	900	900	34
<b>RS219x900df</b>	duck foot bend	387	270	900	680	40
<b>RS219x900t</b>	tee bend	387	270	900	680	43

### Options:

**RS stump pole**  
**RS219x1220 / RS219x1220df / RS219x1220t**  
(non-standard foundation depths & base types per specification)

### Material Specification:

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

## RS219

**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.*

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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