

FOGRod Installation Guide V2.2

Introduction

FOG stands for FAT OIL and GREASE in sewage, FOGRod was developed specifically to give high reliability even in wastewater wet wells with lots of rag and/or FOG. Designed as a cost effective alternative to stainless steel rods, ball floats, ultrasonics etc for raw water, grey water and wastewater application (NOT potable water as no WRAS approval at this time). FOGRod is a very simple device that electrically connects liquid level controller electrode inputs to ground via effluent using high grade stainless steel corrosion resistant electrodes.

Installation Guidelines for Wastewater Applications

1. Hang FOGRod using the stainless steel S hook from the cleaning bracket directly into the effluent with a minimum of 150mm clearance from objects such as pumps, walls, guide rails, ladders etc.
2. Position the mounting/cleaning bracket to allow ease of access for inspection and cleaning of FOGRod.
3. DO NOT install in a stilling tube, always hang free in effluent.
4. Ideally position the FOGRod in a turbulent area of the wet well, next to (not directly under) the inflow is the preferred position. Turbulence helps keep FOGRod clean, use 5ft or 7.5ft FOGRods in very turbulent wells as the weight keeps it stabilised.
5. Use the bottom electrode (black wire) as the DUTY pump off point, this has the additional benefit of keeping wet well rag accumulation down.
6. In pumping applications position the very bottom of the FOGRod a minimum of 75mm above the snore point of the pump.
7. Leave enough spare cable coiled loosely by the cleaning bracket to allow the FOGRod to be pulled fully up through the cleaning bracket.
8. When using a 3 or 5 electrode + earth FOGRod the earth electrode on the very bottom tip of the FOGRod (green wire on 3 electrode version, blue wire on 5 electrode version) is for use in water applications or wastewater applications **with plastic tanks where no metal earthing is present.**
9. Notwithstanding the exception in note 8. above an earth terminal in the panel must be connected to an earth point in the wet well, this can be existing metal in constant contact with the effluent i.e. guiderails etc (if site has existing earth bonding then no further action required). This earth return conductor should be a minimum 1mm in size, importantly this **ISN'T FOR ELECTRICAL MAINS EARTH BONDING** but simply a guaranteed low conductivity return path for the FOGRod controller. For 10 electrode FOGRods where no metal exists install a 6mm 316 stainless steel rod permanently in contact with the effluent.

Maintenance Guidelines

1. In sewage applications FOGRod should be cleaned annually by pulling it up through the mounting and cleaning bracket.

FOGRod Connections to Ball Float Replacement FOGRod RETROFIT BOX

3 Electrode example using 3 electrode FOGRod

4 Electrodes example using 10 electrode FOGRod

