

PRODUCT MANUAL – SHORTER FOGRods

Updated JUNE 2021

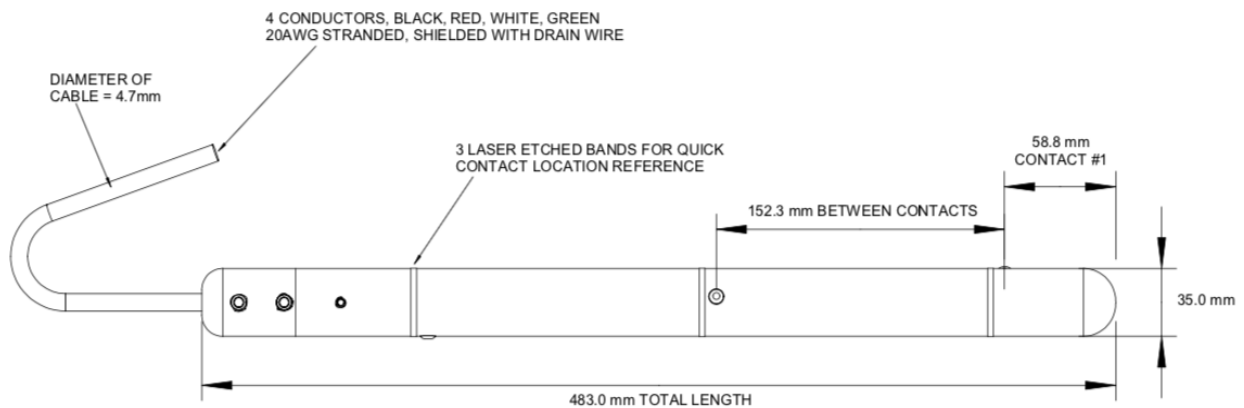
UK PART NUMBER 3 electrode version **FOG-1.6-30-G**

UK PART NUMBER 5 electrode version **FOG-2.5-30-G**

This technical note explains the short version of the FOGRods with 3 conductive level sensing electrodes plus an earth stud ground electrode on the bottom of the FOGRod. The 5 is very similar, it has 2 extra control electrodes for more on off level choice.

The Fogrod is a very simple and reliable conductive level device for use with conductivity level relays and controllers. The LIT100 controller (Liquid Indicator Transmitter) is for use with 10 electrode FOGRods and the LLR-240 (Liquid Level Relay) for use with the shorter FOGRod's (3 or 5 electrode FOGRods)

Dimensions 3 Electrode Version



*Grounding point / earth stud electrode (3 and 5 electrode FOGRods only, **NOT FOR USE IN SEWAGE**)*



SHORT FOGRod CABLE WIRING

3 ELECTRODE

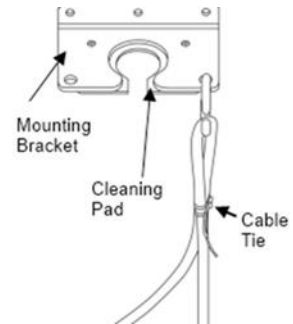
- | | | |
|----|-------|----------------------|
| 5. | N/A | |
| 4. | N/A | |
| 3. | White | Upper electrode |
| 2. | Red | Middle electrode |
| 1. | Black | Lower electrode |
| | Green | Earth stud electrode |

5 ELECTRODE

- | | |
|--------------|----------------------|
| Brown | Top electrode |
| Green | Between |
| White | Middle electrode |
| Red | Between |
| Black | Lower electrode |
| Blue | Earth stud electrode |

Installation

1. 3 or 5 electrode versions not supplied with a mounting cleaning bracket, order separately part number FOG-BRACKET, can easily be mounted using UNISTRUT etc. for raw/grey water applications. If a mounting/cleaning bracket is required for sewage applications then order separately.
2. When using a mounting/cleaning bracket hang FOGRod using the cable looped over the stainless steel S hook, this should be hooked to the cleaning bracket directly into the effluent with a minimum of 150mm clearance from objects such as pumps, walls, guide rails, ladders etc.
3. Position the mounting/cleaning bracket to allow ease of access for inspection and cleaning of FOGRod.
4. DO NOT install in a stilling tube, always hang free in water or effluent.
5. In sewage pumping applications position the FOGRod in a turbulent area of the wet well eg. near, (not directly under) the inflow.
6. In pumping applications position the bottom of the FOGRod a minimum 75mm above the snore point of the pump.
7. The earth stud electrode on the very bottom of the FOGRod (pictured above) is **NOT FOR WASTEWATER APPLICATIONS**. (green wire on 3 electrode version, blue wire on 5 electrode version). It's for use in water applications with plastic tanks where no metal earthing is present.
8. Notwithstanding the exception in note 7. 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 ie. 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.



3/5 Electrode FOGRod Specifications

Construction	PVC
Metal contacts	AL6XN (super-austenitic steel for very high corrosion resistance)
Dimensions	Diameter: 35mm, Length 483mm (5 Electrode model length 760mm)
Rating	Nema 6P IP68
Temperature rating	Operating: -40°C to + 70°C Stored: -40°C to + 85°C
Cable	4-core screened cable, diameter 5mm (5 Electrode 6 core screened cable)
Mounting bracket	Aluminum (powder coated) or 316 Stainless Steel with polyurethane cleaning pad

Specifications subject to change without notice

email: contact@waterauto.co.uk website: www.waterauto.co.uk