

## WaterMATIC KorrosionGUARD

### (Open Pipe System)

**Model KorrosionGUARD 54** - is an environmentally friendly non-polluting electrolytic physical water conditioning process that protects an 'open' pipe system from the various forms of corrosion that can arise through



electrolytic and oxygen means. This is achieved without use of either chemicals or the need for any electrical power supply. This is suitable for pipework systems used in domestic, commercial and industrial premises. In hard water areas, the process will also mitigate the formation of limescale encrustation.

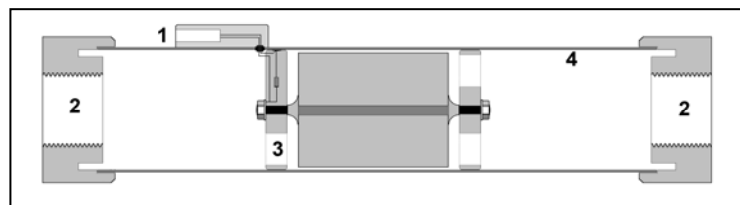
The KorrosionGUARD works by a natural electrolytic process, with the help of a zinc electrode which provides cathodic protection, a well established protection method in industry. It begins its process immediately the unit has been installed. The unit has to be earth bonded to the pipe system. The process is not sensitive to low water flow. The process works as a galvanic cell, encouraging the sacrifice of zinc which will sacrifice itself when electrically connected to other metals higher in the galvanic series (copper, steel, aluminium alloys, stainless steels etc.) It will impart of a thin passivated protective layer on the internal pipe surfaces and help extend the protection process. The KorrosionGUARD is fitted with a status indicator (meter) to confirm that it is operational when water is flowing.

The product specification for system/installation design purposes is :-

**Manufacturer** : WaterMATIC Div., Sentinel Performance Solutions Grp  
**Product Code** : KorrosionGUARD 54  
**Pipe Size** : 2" BSPT steel pipe or adapter for 54 mm copper pipe  
**Connection** : 2" BSP F. Iron  
**Design Flow** : 0 - 423.0 l/min (25.4 M<sup>3</sup>/hr) requiring p = 0.20 bar

1 Meter  
 2 Pipe Connection  
 3 Zinc (Anode)  
 4 Copper Wall (Cathode)

**Δp=½ Bar Flow** : 670 l/min (40.2 M<sup>3</sup>/hr)  
**Length** : 550mm  
**Diameter (body)** : 108 mm  
**Weight** : 12.5 kg  
**Test Regulations** : BS EN ISO 9002 (1994) accredited;



(UK) WRAS Certification 0706038; (Germany) TÜV Nord Prüfprogramm Cert. Nr. 2.4-498/01

**Materials Used** : Outer Body - Copper BS 2871 Pt.1 Table X  
 Anode Support - Grilamid L20G Natural  
 Anode Material - Pure Zinc with Magnesium BS 6561

**Construction** : The anode assembly is pressed into the copper body and locked into position. The body diameter is reduced at the ends and brazed to the end connectors. The unit cannot be opened.

The KorrosionGUARD (tested to 45 bar) is designed to work in a max. system pressure of 30 bar treating a mains water supply at between 2°C - 100°C, with a max. system flow rate of 2M/sec. (for silent operation) in the nominal pipe size for the product. The water should have a pH range of 5.0 - 8.5.

**Supplier** : WaterMATIC Division,  
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Technical Specification subject to change (11-6-09 – MJP).