|      | Ausschreibungstext GUS Gewässer-Umwelt-Schutz | EP   | GP   |
|------|---|------|------|
| Stck | Waveprotektor                                 | Euro | Euro |

The Wave protector prevents the escape of water pollutants outdoors. It was designed specifically for non-pressure systems and large-scale installations. The system reacts to the dye that is most hazardous substances included in the factory in order to distinguish you from the water. To allow detection of water-polluting substances already in drip and spray losses, can the cycle, a dedicated, highly concentrated dye are mixed. A sequence in befindlicher optical sensor monitors the outflowing material on this dye and continuously transmitted to the content of the dye concentration in the effluent to a switch box. This evaluates the data and triggers in the event of a significant measure of the ink particles from the fenceline. The drain in the downstream quick closing valves are locked and the same time an alarm message on the dry contact.

This technique is combined with a stainless steel tray, but also in a roof drain integrable whose drainage is retained in case of alarm message in a separate container.

Through the advanced sensor technology leakage in the monitored unit is detected early, evaluated by a microprocessor, the drain valves are closed and an alarm contact (potential free) enabled. Thus, the outgoing waterglycol mixture is held securely back. The alarm output can be read in plain text on the display of the microprocessor.

It can be monitored up to 2 units with a microprocessor. A special circuitry prevents the valves open again without the operator has given a release. To meet the general requirements for safety systems, are at:

- Power failure,
- Cable break
- Microprocessor defect
- Defective control valve,
- Sensory defect

the drain valves automatically closed, locked and the alarm contact is activated. The alarm can be forwarded to the building control system. To unlock the operator must confirm the release.

The Wave Protector is a security system made of stainless steel 1.4301. Is manufactured in accordance with EN ISO 9445 and is confirmed by the manufacturer if required (test certificate EN10204).

The drain valves are designed for outdoor installation and equipped with dry contacts for alarm and event message. Usable temperature range: -30  $^{\circ}$  C to +50  $^{\circ}$  C.

EMC: CE according to 89/336/EEC. Low Voltage Directive: CE according to 2006/95/EC. The drain valves are maintenance free.

The switch is rated IP65, and UV-resistant and contains a microprocessor, relays, terminal blocks and complete the internal wiring.

The microprocessor with up to 2 configurable analog inputs (0-1V, 0-10V, 2-10V, 0-20mA, 4-20mA, resistance measurement) Alarm message text by changing color (green / red), 3 option slots, 4 limit comparators, fast and convenient configuration through Setup program. Detection of cable breaks or short circuits to avoid false alarms.

2 relays change as output, and 2 logic outputs, power supply for two-wire transmitter and setup interface.

Optional math and logic module, RS422/485 interface, Profibus-DP interface.

The Wave protector is particularly suitable for cold water systems and coolers filled with water-glycol mixture and set up outdoors. Mounted on the wave protector chillers and coolers thus cause leaks in any water pollution.

The maximum precipitation in Germany are safely absorbed, or removed (312mm continuous rain in 24 hours) (data from the German Weather Service).

With the wave protector requirements are fulfilled according to § 62g and following of the WHG and AwSV.

Optional accessories available:

- Leaf guard
- Mats and thermostat in IP65 / UV resistant for year-round operation
- Base platforms for installation in Wave Protector
- Sensor for the second circuit
- Sensor with 7/16 "incl Copper Welding
- Alarm message via SMS, fax or e-mail

Material: Stainless steel 1.4301

Manufacturing: welding according to DIN EN 287/288

Technical documentation includes installation instructions with tech. Data, maintenance instructions, commissioning information and data on the electrical equipment, spare parts and service.

Sourcing reference:

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