

ABSTRACT

PIPE WATER LEAK DETECTOR DEVICE AND LEAK DETECTION PROCEDURE

The device of the invention is materialised as a small sphere with neutral buoyancy, within which there is, at least, one hydrophone (2) that is connected to a signal processor (9), which stores the information on a memory card (10) and that is powered by at least one battery (11). This signal processor (9) has a clock module (12), through which the sailing time elapsed for each audio signal received by the hydrophone (2) is recorded in the memory (10). Therefore, based on the sailing time, the exact position of the detected anomalies or leaks can be ascertained. The device is complemented by a series of external synchronisation systems, laid out every certain distance, by which the position error that could be accumulated by the device is neutralised. Thus, we attain a simple device, which is cheap, solid, durable and highly effective.