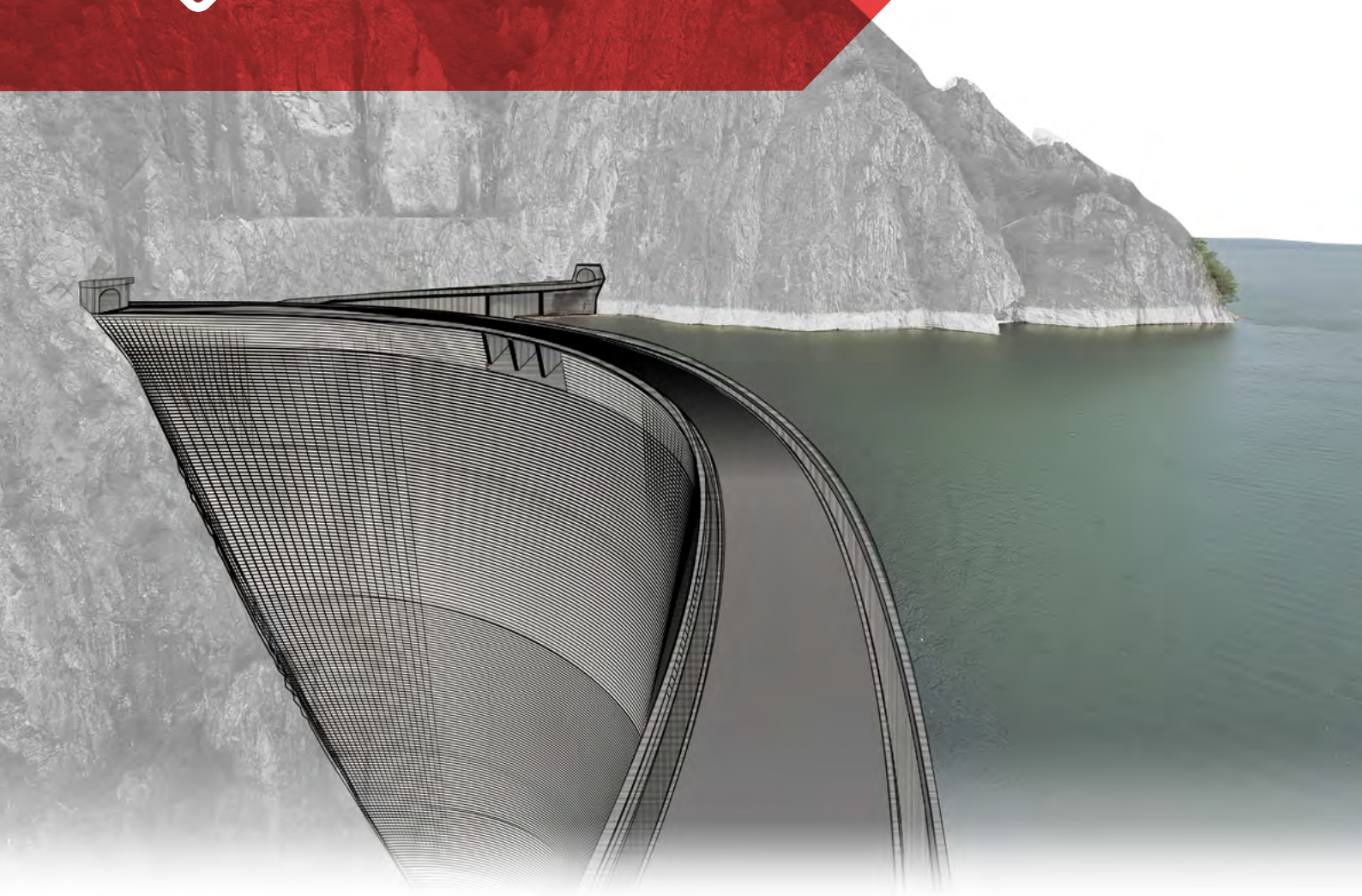
pizzi instruments



Ultrasonic Leakage Meters

www.pizzi-instruments.it

Instruments and Systems for Geotechnical and Structural Monitoring

Sistemi di misura perdite ad ultrasuoni

Description

The ultrasonic measuring system is often used for the measurement of levels, especially in dynamic regime channels; it is available in various measuring ranges, and can also be used in channels with small levels (up to one meter), always with acceptable accuracy.

Easy to install and easy functional verification, it is particularly used in dams, both in tributary channels and in tunnels for the measurement of levels.

Application

The instrument is particularly suitable for monitoring levels in tunnels in concrete, RCC and Earthfill dams, for monitoring leaks and drainage. It is also used for measuring levels in reservoirs.

Especially recommended for:

- **Lakes**
- **Wells**
- **Tanks**
- **Harbours**
- **Docks**
- **Channels**
- **Rivers**

Features and benefits

The ultrasonic sensor also allows measurement of levels in dynamic regimes. The instrument is characterized by:

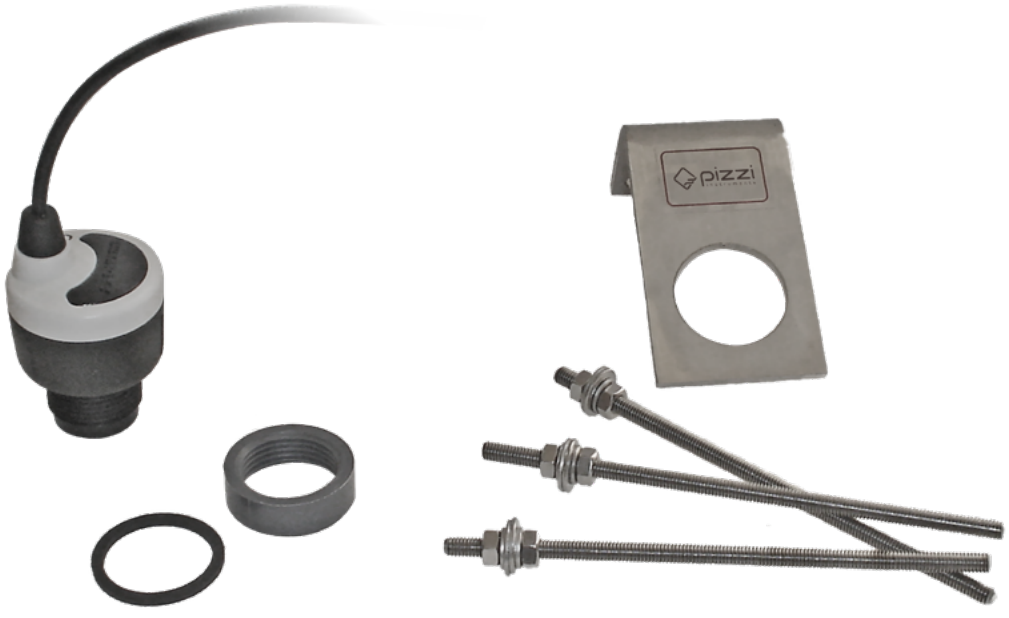
- **Non-contact measurement**
- **Simple installation**
- **No wear and tear**
- **Maintenance free**
- **Independent of pressure**
- **Independent of temperature**
- **Independent of the characteristic of the liquid**
- **Immune to electromagnetic disturbances**
- **High precision measurement**

Measuring principle

The sensor is composed by an antenna which emits ultrasonic pulses at short intervals between them; the pulses are generally directed perpendicular to the water surface whose level is being measured. The pulse is reflected by the free surface of the liquid and bounces towards the instrument which picks up the return signal.

The running runtime of the signals is proportional to the distance from the emitter at the free surface of the liquid.

A special procedure for processing data ensures reliable and precise measurement.



Technical specifications

Range	3, 5, 8 and 10 meters
Dead zone	10 or 20 cm
Dimensional deviations	±0.2% of the measuring range
Metallic process connection	Thread GAS 1” or 2” Mounting bracket
Process temperature	-20 …… +60 °C
Storage and transport temperature	-35 +60°C
Operating Voltage	24 Vdc
Output Signal	4-20 mA

Accessories and spare parts

Mounting bracket	For application on vertical or horizontal walls
Protection group from overvoltages	Electric Protection

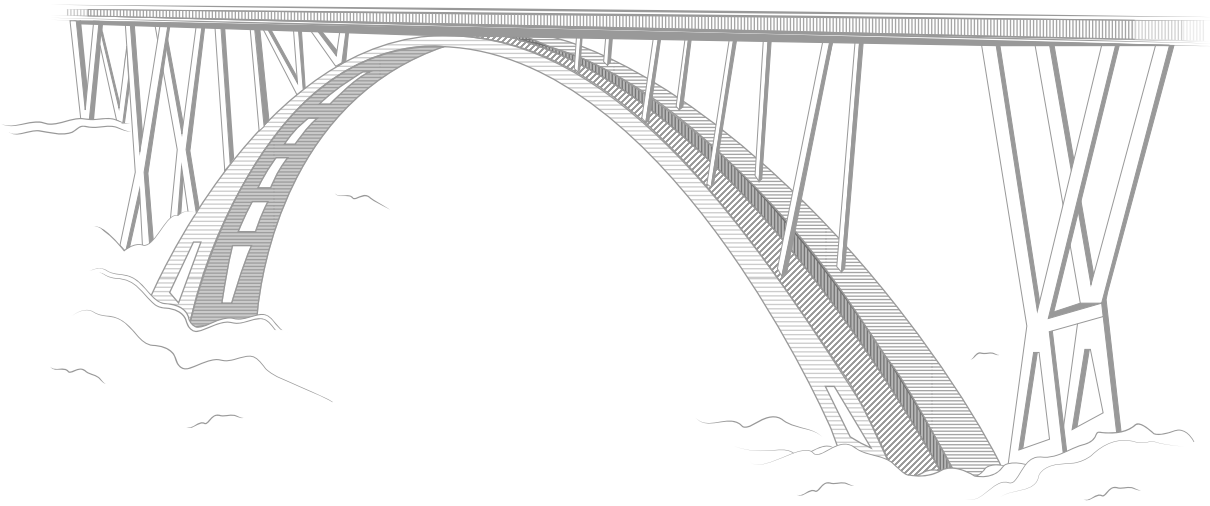
Related products

V-Notch Weir	For the regulation of the flow to be checked
Enamelled Staff Gauge	For the manual and measurement with direct reading
Stainless Steel Staff Gauge (special version)	For the manual and measurement with direct reading

The Company

For over 40 years we have been producing precision and large facility monitoring instruments sold throughout the world.

Accuracy in design, efficiency in construction, reliability in management; these are the prerogatives that every major work must have and that Structural Monitoring Systems must guarantee.



Technical assitance

If you have any requests or questions about our instruments or if you have special needs that require different solutions from the standard, please contact us. Our team will provide all the necessary information and will be very happy to work with you to study, develop and customize instruments and solutions suitable for your specific needs.

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