Datasheet QP011-UDP-QB

Ultrasonic Density & Concentration Probe

Principle

Ultrasonic Spectroscopy

Description

Model QB is designed to be installed in small critical process lines to measure the acoustical physical properties (APP's) of chemicals, emulsions and slurries. These APP's could be density, speed of sound, attenuation and temperature. In the QA04 analyzer, the physical APP's are related to dissolved and suspended solids concentration at sub-ppm repeatability and accuracy.

These Arenal ultrasonic probes are fit to be applied in flows up to 0,5 m/s and 1 LPM. The sensor is designed to fit in Teflon flow through blocks, as part of the process lines of the customer. These blocks can be extended with other sensors available, like electrical conductivity or massflow. The probe material is PEEK, PVDF, PP or PVC, which suits the chemical the best.

Features

- The probe does not erode, it is chemical and wear resistant
- Very stable measurement
- Suits all (mixed) chemicals in any concentration
- For low temperature slurries (up to 65 degC)

Specification

- EPDM-PC or Tefzel double o-rings
- Coaxial cable connection
- Suits density of 600 up to 2000 g/l
- Suits temperatures up to 65 degC

Connectivity

- Coaxial cable or LEMO connector

Mounting

- M28x1,5 threaded or compression

Engineering specifications

Make: Arenal PCS BV, The Netherlands
Advanced Ultrasonic Probe for (aggressive) chemicals
Material sensor: PEEK, PVDF, PP, PVC
Material housing: Same as sensor material, or SS316
Temperature range 0-65 degC

Product variations

QP011-UDP-QB-PEEK-LT
Model for inline applications in demanding chemical processes.
> PEEK
> M28x1,5
> Mounting is from inside to outside the Flow trough block
> Fixed cable

Dimensions

Length = 100mm, d=25 mm

Picture on the right shows the QB01 flow through block for 3 sensors.
Arenal offers flow through blocks for 1 or 3 sensors and with compression or flare connections from ¼”to 1-1/2” tubing.

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