



Datasheet QB05-SWC

Sensor Wafer Cell

Principle

Acoustic impedance, speed of sound, attenuation

Description

Model SWC is designed to avoid intruding single ultrasonic sensors in dangerous liquids as well as reducing risks for leakages. Instead, the wafer cell is the sensor! Non-contact sensors like this behave like a part of the pipe and nothing sticks to this.

Depending on the liquid or slurry, various materials can be used, like PEEK, PP, PVDF, C-PVC, SS304, SS316, Hastelloy-C as well. Additionally, more ports can be made in the spool, like for flow meter, temperature, pressure and conductivity.



Features

- Non-contact sensors
- Leakage free
- No O-rings
- High pressure ratings possible, up to 1200 bar
- Easy installation
- Various materials

Specification

- DN40 minimum
- Temperature range: 0-55°C or 0-110°C
- With fixed (see picture) or separate transmitter

Connectivity

- Coaxial cable to transmitter, max 3 meter

Mounting

- Between two flanges in pipe. Length 45-60 mm
- Sensor at 3pm o'clock in horizontal lines
- After 7xD of last obstruction and after 5xD before next obstruction

Engineering specifications

Make: Arenal PCS BV, The Netherlands
Sensor Wafer Cell

- One or two ports for QP017-UDP-WCP
- (SS316 Tagplate with) laser engraving

The wafer cell shall be mounted between two flanges of the pipe

- Material : <to be filled in by Arenal>
- Nominal Diameter: >ND50 (NPS= 2")
- Pressure Norm: <to be filled in by customer>
- Length: 45-60 mm <to be filled in by Arenal>
- Weight: <to be filled in by Arenal>

All wafer cell probes are made according to a customer approved drawing.

Product variations

QB05A-SWC-B-C-D-E

A – the amount of measuring ports, between 1..4. Example:

A=1: One measuring port

B – Nominal diameter, between DN50...DN2000. Example:

B=ND0150 (equals to 6")

C – Pressure Norm, between 6...600 bar. Example:

C=PN16 (equals 150#)

D – Material of the liquid contact. Example:

D=SS316

E – Extra information, like ceramic coating

Dimensional drawing

Example:

