

Datasheet QB03-WFC

Wafer cell

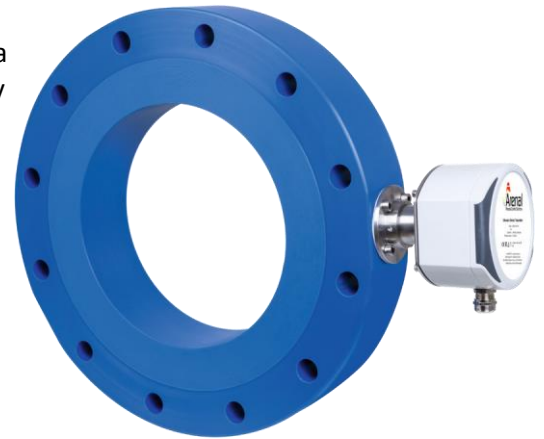
Principle

Wafer cell to integrate the Density Probe, Massflow Probe and a sampling point in the process

Description

Model WFC is designed to fit the piping of the customer and to offer a connection to our Ultrasonic Density Probe, Thermal Massflow Probe or/and Sampling Valve. Additional sensors can be pre-mounted, like pressure and conductivity sensors.

The wafer cell is constructed from SS316 or UHMPE (ultra high molecular weight polyethylene, also UPE-1000) and is available in sizes from DN40 to DN800. Pressure norm is up to 16 bar, but limited on temperature of the slurry.



The sensors are flush mounted and does not wear for many years.

Features

- Flush mounted sensors, mounting from outside to inside
- Leakage free
- O-rings
- Easy installation, pre-installed from factory

Specification

- Size: DN40...DN450 (for bigger sizes, select QB06)
- Temperature range: 0-55°C
- With fixed transmitters, see picture

Mounting

- Between two flanges in pipe. Length 100 mm or according to specification client
- Sensor at 4:30 pm o'clock in horizontal lines
- Just after the pump for density and 5xD of last obstruction and 3xD before next obstruction for flow meter

Engineering specifications

Make: Arenal PCS BV Netherlands
Model: QB031-WFC-ND0080 (example)

Wafer cell includes:

- one port for QP014-UDP-WFC
- connection set SS316, to mount the UDT to the wafer.

The wafer shall be mounted between two flanges of the customer.

- Material : Ultra High Molecular Weight UPE-1000
- Colour: Blue

- Nominal Diameter: ND0080 (NPS= 3" or DN80)
- Length: 100 mm
- Weight: 3,3 kg

All wafers are made according to client specification.

At order the following specifications are required:

- Normalization reference
- Exact inner diameter in mm (including lining)

A drawing for approval will be issued

Product variations

QB03A-WFC-B-C-D

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

A=1: One measuring port for density

A=2: Two ports for Massflow

A=3: Three ports for Massflow and sampling valve

B – Nominal diameter, between DN40...DN800. Example:

B=ND0150 (equals to 6")

C – Pressure Norm, between 6...80 bar. Example:

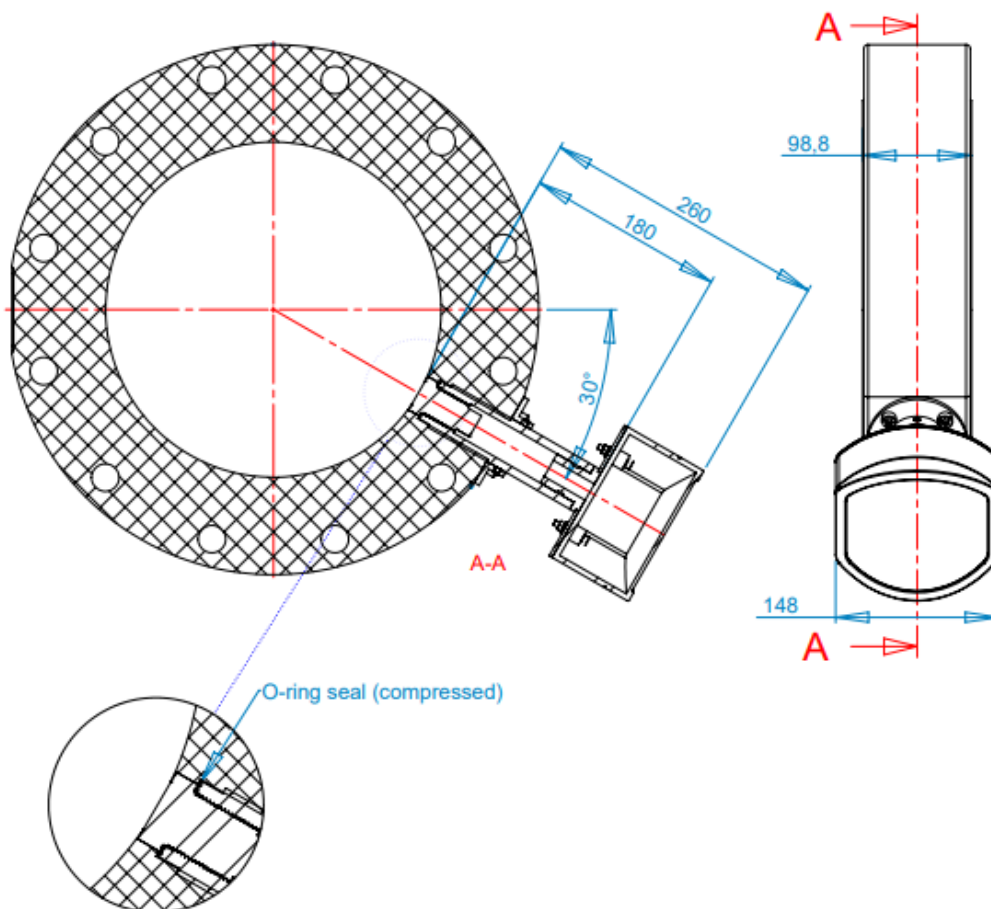
C=PN16 (equals 150#)

D – Material of the pipe, example:

D=SS316 or UPE

Dimensional drawing

Example: QB031-WFC-ND..



Nominal Diameter according to DIN EN-1092-1:2002 type 11 PN16		ID	RF-OD	OD	PCD	Bolt Hole Size	Bolts #	Length
		d1	d2	d3	d4	d5	d6	d7
50	2"	54,5	102	165	125	18	4	98,8
80	3"	82,5	138	200	160	18	8	98,8
100	4"	107,1	158	220	180	18	8	98,8
125	5"	131,7	188	250	210	18	8	98,8
150	6"	159,3	212	285	240	22	8	98,8
200	8"	206,5	268	340	295	22	12	98,8
250	10"	260,4	320	405	355	26	12	98,8
300	12"	309,7	378	460	410	26	12	98,8
350	14"	339,6	438	520	470	26	16	98,8
400	16"	390,4	490	580	525	30	16	98,8
450	18"	441	550	640	528	30	16	98,8

Pricing reference, validity until 2020-Q4. Prices in Euro, excl. VAT, EXW

Nominal Diameter according to DIN EN-1092-1:2002 type 11 PN16		QB031	QB032	QB033
		Slurry Density	Slurry Massflow	Additional sampling valve
50	2"	2700	3500	3700
80	3"	2700	3500	3700
100	4"	2700	3500	3700
125	5"	2700	3500	3700
150	6"	2700	3500	3700
200	8"	2750	3550	3750
250	10"	2750	3550	3750
300	12"	2800	3600	3800
350	14"	2800	3600	3800
400	16"	2850	3650	3850
450	18"	2850	3650	3850