AQ Air Sensor

Continuously monitors gas and particles in flowing liquid

AQ Air Sensor operates without direct contact with liquid. The liquid that flows trough the sensor is monitored using soundwaves. The soundwaves register the presence of gas and particles and the results are displayed on an external control unit.

■ Design

AQ Air Sensor is compact, turned from one piece and the inside is completely smooth, Ra <0.4um.

All wetted parts are made of acid-proof steel or polypropylene. AQ Air Sensor can be CIP (Clean In Place) and the steel air sensor can furthermore be SIP (Steam In Place) up to 130°C. The AQ Air Sensor has full traceability with 2.1B certificates (polypropylene) and 3.1B certificates (316 L steel).

All the connections are standard tri clamp connections which gives good aseptics and makes it easy to assemble and disassemble.

■ Adjustable

The AQ Air Sensor can be set on different levels of sensitivity. At maximum sensitivity the sensor detects bubbles as small as 2mm.

At low sensitivity the sensor detects liquid or no liquid.

■ Usable in many areas

AQ Air Sensor can be used in biochemical industries and different process industries as a:

- pump guard
- bubble sensor

There is an explosion safe model of AQ Air Sensor that can be used in explosive environments.
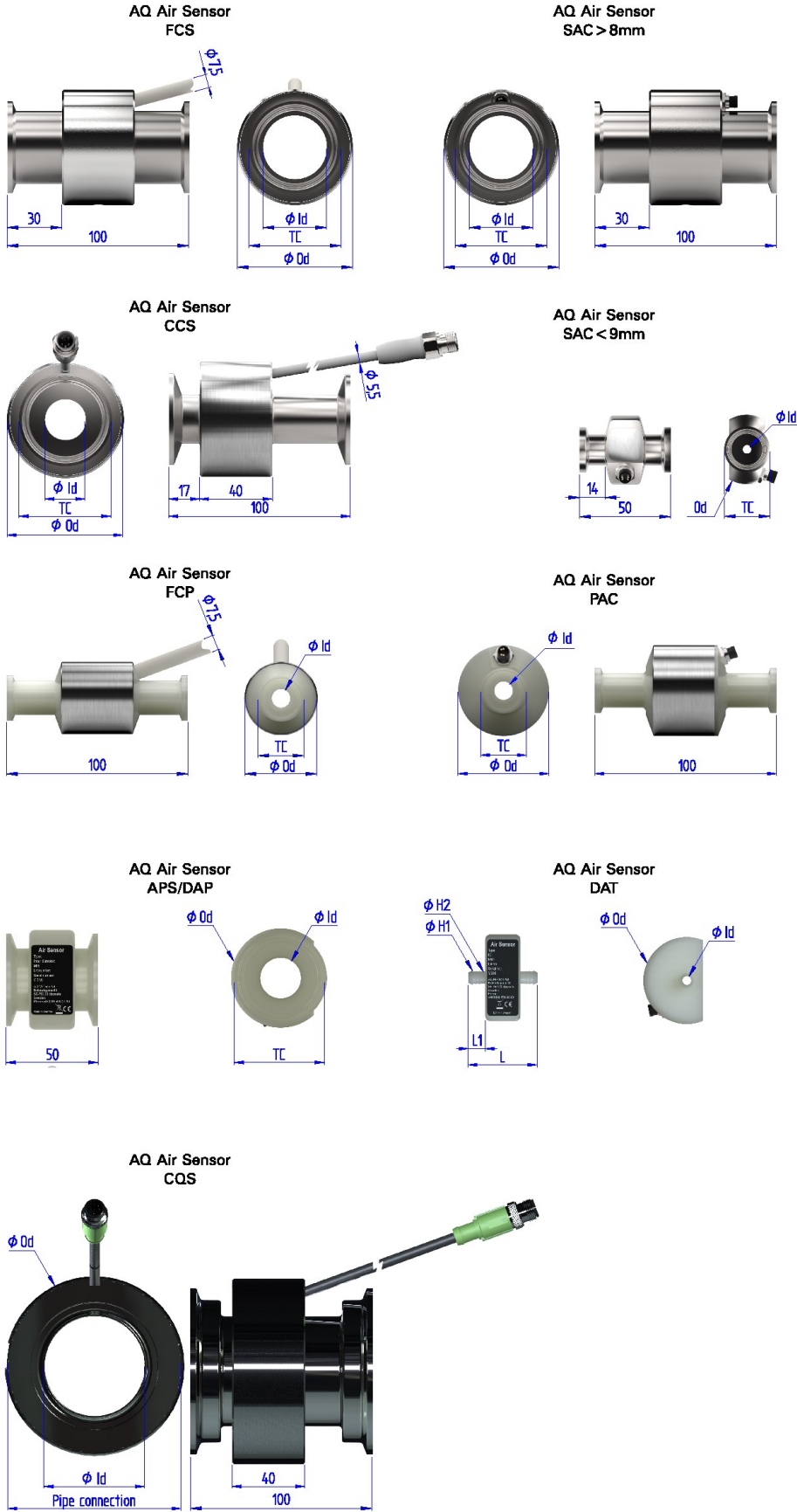
■ Reliable and flexible

AQ Air Sensor shall be connected to an external control unit, Ultrasound Controller D72/DP72 or D107.

No moving parts, easy connection and calibration makes AQ Air Sensor very reliable and easy to use.

AQ M-Tech AB

AQ Air Sensor, drawings and dimensions, specifications

AQ Air Sensor
FCS

Ø 15

30
100

Ø Id
TC
Ø Od

AQ Air Sensor
SAC > 8mm

Ø Id
TC
Ø Od

30
100

AQ Air Sensor
CCS

Ø 5.5

Ø Id
TC
Ø Od

17   40
100

AQ Air Sensor
SAC < 9mm

Ø Id
Od   TC

14
50

AQ Air Sensor
FCP

Ø 15

Ø Id

100

TC
Ø Od

AQ Air Sensor
PAC

Ø Id

TC
Ø Od

100

AQ Air Sensor
APS/DAP

Ø Od   Ø Id

50

TC

AQ Air Sensor
DAT

Ø H2
Ø H1

Ø Od   Ø Id

L1   L

AQ Air Sensor
CQS

Ø Od

Ø Id
Pipe connection

40
100

AQ Air Sensor, 316L (Acid-proof Steel) model CCS

Model number	CCS9.4-25	CCS15.75-25	CCS22.1-50	CCS34.8-50	CCS47.5-64	CCS60.2-77
Id (Inner diameter)	9.4 mm	15.75 mm	22.1 mm	34.8 mm	47.5 mm	60.2mm
Od (Outer diameter)	51mm	51mm	64mm	64mm	76mm	102mm
TC (Tri Clamp Connecion)	25	25	50	50	64	77
Extension cable length		7 m, Option: 20m or 40m			Fixed 0.5m cable from the sensor	

AQ Air Sensor, 316L (Acid-proof Steel) model SAC

Model number	SAC2-25	SAC4.5-25	SAC6-25	SAC8-25	SAC10-25	SAC16-25
Id (Inner diameter)	2,0 mm	4,5 mm	6,0 mm	7,75 mm	10,0 mm	16,0 mm
Od (Outer diameter)	38mm	38mm	38mm	38mm	51mm	51mm
TC (Tri Clamp Connecion)	25	25	25	25	25	25

Model number		SAC16-50	SAC22-50	SAC35-50	SAC46-64	SAC60-77
Id (Inner diameter)		16,0 mm	22,0 mm	35,0 mm	46,0 mm	60,0 mm
Od (Outer diameter)		64mm	64mm	64mm	76mm	102mm
TC (Tri Clamp Connecion)		50	50	50	64	77
Standard cable length		7 m, Option: 20m or 40m				
Option		Ex model, SP17ATEX3654X		⟨Ex⟩ II 1/2G Ex ib IIB T4 Ga/Gb		
				(Not availble for SAC2-SAC8)		

AQ Air Sensor, 316L (Acid-proof Steel) model FCS

Model number	FCS10-25	FCS16-25	FCS16-50	FCS22-50	FCS35-50	FCS46-64
Id (Inner diameter)	10,0 mm	16,0 mm	16,0 mm	22,0 mm	35,0 mm	46,0 mm
Od (Outer diameter)	51mm	51mm	64mm	64mm	64mm	76mm
TC (Tri Clamp Connecion)	25	25	50	50	50	64
Standard cable length	5 m, Option: Up to 25 meters (10 meters in Ex model)					
Option	Ex model, SP17ATEX3654X, ⟨Ex⟩ II 1/2G Ex ib IIB T4 Ga/Gb					

AQ Air Sensor, 316L (Acid-proof Steel) model CQS (Quad piezo channels)

Model number	CQS56.3-91
Id (Inner diameter)	56.3 mm
Od (Outer diameter)	101.5mm
Connecion—DIN 11865-3 Form A	DN50

Stainless steel sensors (FCS, SAC, CCS, CQS) fulfils:
Traceability 3.1
AOF

WE ARE RELIABLE

AQ Air Sensor, PP (Polypropylene) model PAC

Model number	PAC4-25	PAC6-25	PAC10-25	PAC14-25	PAC22-50	PAC38-64
Id (Inner diameter)	4 mm	6 mm	10 mm	14 mm	22 mm	38 mm
Od (Outer diameter)	50mm	50mm	50mm	50mm	76mm	84mm
TC (Tri Clamp Connecion)	25	25	25	25	50	64
Standard cable length	7 m Option: 20m or 40m					

AQ Air Sensor, PP (Polypropylene) model FCP

Model number	FCP4-25	FCP6-25	FCP10-25	FCP14-25	FCP22-50	FCP38-64
Id (Inner diameter)	4 mm	6 mm	10 mm	14 mm	22 mm	38 mm
Od (Outer diameter)	40mm	40mm	40mm	40mm	76mm	76mm
TC (Tri Clamp Connecion)	25	25	25	25	50	64
Standard cable length	5 m Option: Up to 25 meters					

AQ Air Sensor, PP (Polypropylene) model APS

Model number	APS4-25	APS6-25	APS10-25	APS14-25	APS22-50
Id (Inner diameter)	4mm	6mm	10mm	14mm	22mm
Od (Outer diameter)	49mm	49mm	49mm	49mm	54mm
TC (Tri Clamp Connecion)	25	25	25	25	50

AQ Air Sensor, PP (Polypropylene) model DAP (Single Use, clean room manufactured)

Model number	DAP4-25	DAP6-25	DAP10-25	DAP14-25	DAP22-50
Id (Inner diameter)	4mm	6mm	10mm	14mm	22mm
Od (Outer diameter)	49mm	49mm	49mm	49mm	54mm
TC (Tri Clamp Connecion)	25	25	25	25	50

AQ Air Sensor, PP (Polypropylene) model DAT (Single Use, clean room manufactured)

Model number	DAT-4.8-A	
Id (Inner diameter)	4.8 mm	
Od (Outer diameter)	49mm	
Hose/barb connector	H1=8mm	H2=7mm
	L1=9,5mm	L=39mm

Plastic sensors (APS, PAC, FCP, DAP, DAT) fulfils:
Traceability 2.2
USP <88> class VI
USP <87> ; ISO 10993-5
AFO EMEA 410/10
21§CFR177.1520

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