

QUALIFIED TO SPECIFICATION EI 1598 2ND EDITION

Electronic sensor for the detection of free water in aviation fuels. The AFGUARD® is recommended for use downstream of all EI-qualified filtration technologies to verify filter performance. It is designed to interface with various Programmable Logic Controllers (PLC). The AFGUARD® XII is qualified for use as an alternative to Chemical Water Detectors (CWD) by JIG.

The AFGUARD® XII operates for 12 months from initial power-up. This eliminates the need for annual recertification.

References:

- Accepted by Joint Inspection Group (JIG)
- Recommended by IATA Fuel Quality Pool (IFQP)
- Fully hazardous-area (ATEX and IECEx) approved
- Performance tested under various environmental conditions
- In the market for more than 10 years



APPLICATION AREA

- Electronic sensor according to EI 1598 2nd Edition
- Fit for purpose on civil and military mobile into-plane fuelling applications
- To be used in conjunction with EI-qualified filtration technology
- Suitable to aviation fuels with FSII

TECHNICAL DATA

Input

- Measuring range: 0 ... 50 ppm (accuracy depending on calibration)

Environmental conditions

- Operating temperature range: -30°C (-40°F) to 60°C (140°F)
- Storage temperature range: -40°C (-40°F) to 75°C (167°F)
- Rel. humidity: 10 % ... 90 %
- Ingress protection acc. EN 60529: IP67
- Operating pressure: 16 bar

Electrical parameters

- Voltage U_0 : 16...30 V DC
- Current I_0 : 3,8...20,2 mA
- Max Power P_{max} : $U \times 20,2 \text{ mA}$

Output

- Linear signal output: 4 to 20 mA

DATA FOR APPLICATION IN CONNECTION WITH HAZARDOUS AREAS

2014/34/EU (ATEX):		II 1G Ex ia IIC T4 Ga
IECEx Scheme:		Ex ia IIC T4 Ga
• Voltage		30 V DC
• Current		100 mA
• Power		750 mW
• Ambient temperature		-30 °C ≤ Ta ≤ 60 °C
• Explosion group		IIC
• Temperature class		T4 (135°C)
• Type of Protection		Intrinsically safety level
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STANDARD DESIGN

- Material
Sensor head: SS 1.4301
Glass rod: Optical Glass
Sealing: Klingersil, FKM
- Process connection: G 3/4 inch

DIMENSIONS

