

AFGUARD®

Electronic sensor for the detection of free water in Jet fuel.

- **Qualified and tested according to specification EI 1598, 2nd Edition**
- **Accepted by Joint Inspection Group (JIG)**
- **Recommended by IATA Fuel Quality Pool (IFQP)**

The AFGUARD® sensor is qualified for use as an alternative to Chemical Water Detectors (CWD). The AFGUARD® is regarded as fail safe and fully hazardous-area (ATEX and IECEx) approved. Sensor System conforms to ISO 13849 standard.

Application area (with reference to individual EI standard):

- EI 1598 2nd edition sensor can/shall be used in conjunction with EI 1581 filter/water separators, EI 1583 filter monitors, EI 1599 dirt defence filter as well as other technologies

Technical Data

Measurement range	0 - 50 ppm	
Accuracy	+/- 3 ppm	
Linear analog output signal	4 to 20 mA	
Contact Load DC	16 - 30 V DC	
Available variants	Intrinsically safe	
Hazardous area approvals (ATEX and IECEx)	II 1/2G Ex ib [ia] IIB T4	Ex ia/ib IIB T4 Ga/Gb
	II 1/2G Ex ia IIB T4	Ex ia IIB T4 Ga/Gb
	II 3G Ex ic IIB T	Ex ic IIB T4 Gc
Ingress protection	IP 67	
Operating temperature	-30 to + 60 °C	
Storage temperature	-30 to + 70 °C	
Power consumption	max. 750 mW	
Pressure range	10, 16 bar	
Wrench size	AF 36	
Torque	50 Nm	

Standard design

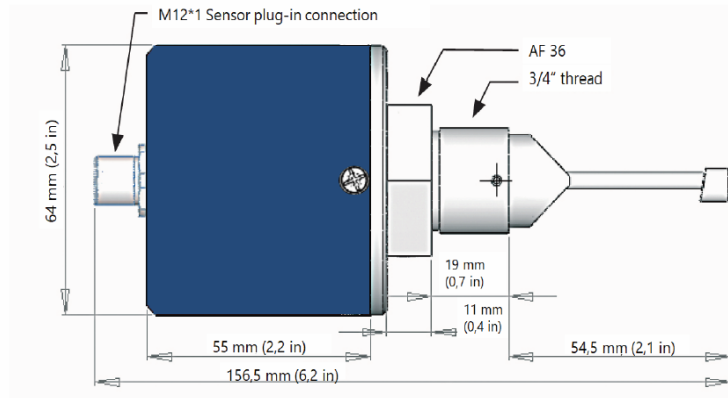
The AFGUARD® is a unique design combining quality and safety approved standards. This allows a fast and simple field installation into pipework. Standard calibration settings and operating parameters are made to meet requirements and operational procedures.



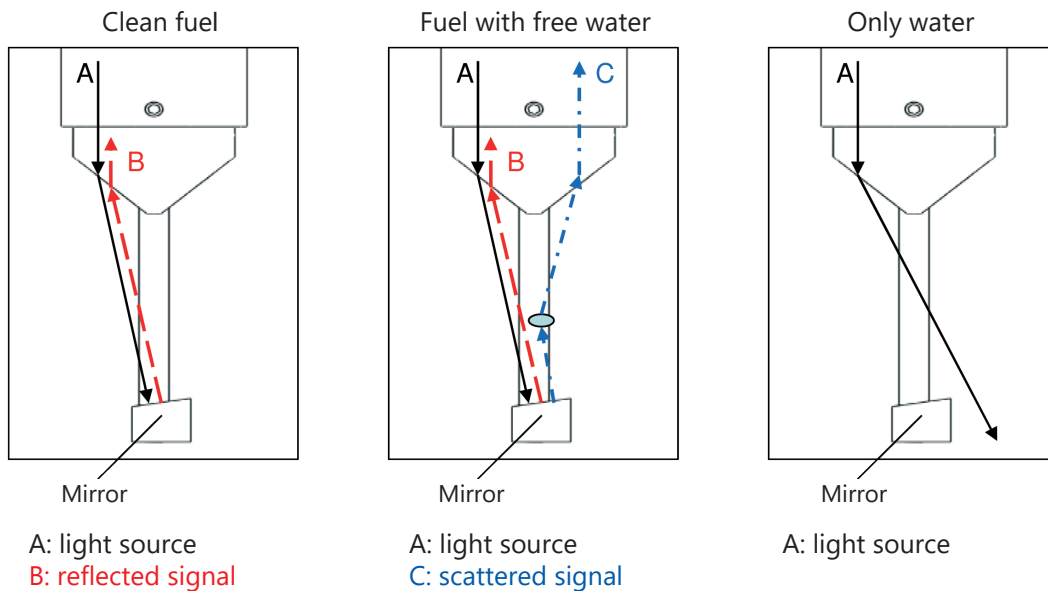
Recommended Accessories

- Control system for water level indication (e.g. FAUDI Aviation Contamination Control System)
- Flashing lamp for alert function if water is detected (e.g. FAUDI Aviation blue lamp)
- Functional check system (e.g. FAUDI Aviation Loop tester)
- Torque Wrench

Dimensions



Functionality



A precisely defined light beam penetrates the process medium. The IR signal passes through the medium to be examined and is reflected by the mirror back to the receiver. When free water is present in Jet fuel, the emitted light is scattered at the water/Jet fuel interface. If refraction index of the medium is different to Jet fuel, sensor comes up with an alarm signal.