SENSOR TECHNOLOGY

AFGUARD[®]

The FAUDI Aviation AFGUARD[®] is a measurement system, which supervises the quality of Jet Fuels.

The AFGUARD[®] is recommended for insitu measurement of particulate matter in Jet Fuel like free water. The AFGUARD[®] is a scattered light sensor and is designed to provide inline control solution for a variety of processes.

Functionality: A precisely defined, constant light beam penetrates the process medium. Scattered light from particles (undissolved liquids like free water or gas bubbles) in the medium is detected by photo diodes. It is also possible to determine a water slug in Jet Fuel.

The AFGUARD® can be used perfectly to detect the functionality of Fil-

ter Water Separators or to measure the water absorbing performance of Filter Monitors. This can be done by measuring the level of free water detected by AF-GUARD[®] sensors, placed at the vessel inlet

and outlet. Free water will be detected and,

with AFGUARD[®] in place, the monitors are under constant surveillance to insure their proper function.

Extended service life for FAUDI Aviation Elements could

be a result – provided that the indicated differential pressure range is observed.

Technical Details

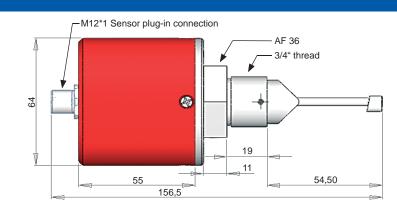
Measurement range	0 - 50 ppm or 0 - 100 ppm	
Accuracy	+/- 3 ppm	
Linear analog output signal	4 to 20 mA	
Contact Load DC	24 V DC	
Available variants	intrinsically safe / safe area version	
Hazardous area approvals	Ex II 1/2G Ex ib [ia] IIB T4 II 1/2G Ex ia IIB T4	
	Ex II 3G Ex ic IIB T4	
Ingress protection	IP 67	
Operating temperature	-30 to + 60 °C	
Storage temperature	-30 to + 70 °C	
Relative humidity	10 to 90 %	
Pressure range	10, 16 bar	
Wrench size	AF 36	
Torque	50 Nm	

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Germany	Web:	www.faudi-aviation.com	quality guarantees s

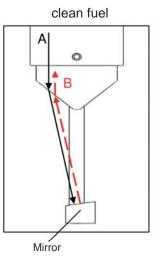


AFGUARD®

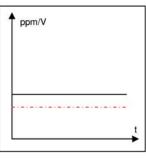
Dimensions



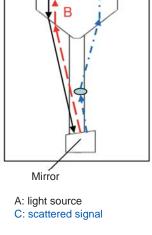
Operation Mode



A: light source B: reflected signal



- no light scattering
 no analog output
- no ppm reading
- no water slug

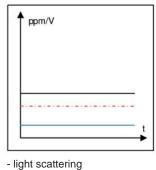


fuel with free water

0

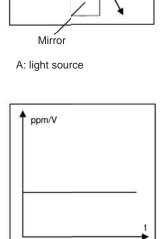
C

A



- analog output

- ppm reading



only water

0

Δ

no light scattering
output "Water Slug"

(Transmitter 2)

- Features
- Output for Water Slug
- Detects water inline
- Self check of diodes and contaminations
- Power Supply 24 VDC

- Installation 3/4" Thread
- Easy installation retrofit in existing systems
- Hazardous Area Approval

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