FLUENTA

Document number: 75.122.001

Document title: Fluenta TFS-55 and TFS-55 Bias-90 Ultrasonic Sensors

EU Declaration of Conformity

Scope:	Different standards, see document

Additional Information (when applicable):

Rev. index	Issue date	Reason for issue	Author	Review	Review	Review by QA	Approved
D	12-May-2023	Updated Inmetro directive reference	KO	PJ	NB	GD	GD
C	13-Jul-2021	Added Bias-90	AK	NB	-	KO	NB
B	13-Aug-2020	Added cert no, updated standard revisions	MB	KO	NB	MB	NB
A	08-Jan-2020	Issued for Fluenta release	AK	NB	ST	KO	MB

Replacement for:	n/a	Total pages: 3
Fluenta source doc. (for translations):	n/a	

EU Declaration of Conformity

Manufacturer:	Fluenta AS
Address:	Haraldsgate 90 N-5501 Haugesund Norway
Operations Office:	ul. Leborska 3B 80-386 Gdansk Poland
Phone:	+47 21 02 19 27

Manufacturer hereby declares that:

Products	**TFS-55 and TFS-55 Bias-90**		
Type	**Ultrasonic Sensor**		
	II 1 G Ex ia IIC T* Ga		-40°C ≤ Ta ≤ 60°C (Ambient Temperature)
		T4:	-110 °C ≤ Tp ≤ +120°C (Process Temperature)
		T5:	-110 °C ≤ Tp ≤ +85°C (Process Temperature)
		T6:	-110 °C ≤ Tp ≤ +60°C (Process Temperature)

- is produced in conformity with the following directives and standards:
  - **A) ATEX Directive 2014/34/EU** (18ATEX13228X)
    Equipment and protective systems intended for use in potentially explosive areas
  - **B) ISO/IEC 80079-34** (PRE 18.0062X)
    Explosive atmospheres - Part 34: Application of quality systems for equipment manufacture
  - **C) INMETRO – Portaria 115** (DNV 18.0183 X)
    Requirements for Conformity Assessment of Electrical and Electronic Equipment for Explosive Atmospheres
  - **D) IECEx Scheme** (PRE 18.0062X)
  - **E) EN ISO 9001:2015** (Nemko 900998)
    Quality management system requirements

- has been tested with a FGM 160 field computer and is compliant with the following:
  - **A) Directive 89/336/EEC, EN 61000-6-2:2019**
    Part 6-2: Generic standards - Immunity for industrial environments
  - **B) Directive 89/336/EEC, EN 61000-6-4:2019**
    Part 6-4: Generic standards – Emission standard for industrial environments

- the following test standards were applied for the EMC emission and immunity tests:

Standard		Measurement		Result (Pass/Fail)
EN 55022 Class B		Radiated Disturbance 30 - 1000 MHz, Enclosure Port		Pass
EN 55022 Class B		Conducted Disturbance 0.15 – 30 MHz, Mains Port		NA
EN 55022 Class B		Conducted Disturbance 0.15 – 30 MHz, Telecomm. Port		NA
EN 61000-4-3		Radiated, radio-frequency electromagnetic field – Immunity test		Pass
EN 61000-4-6		RF common mode, induced by radio-frequency fields – Immunity test		Pass
EN 61000-4-2		Electrostatic discharge (ESD) immunity test		Pass
EN 61000-4-4		Electrical fast transient/burst (EFT/B) immunity test	AC Signal	Pass Pass
EN 61000-4-5		Surge immunity tests	AC Signal	Pass Pass
EN 61000-4-11		Voltage dips, short interrupts and voltage variations immunity tests		Pass

- compliance with the essential health and safety requirements has been assured by compliance with:

EN 60079-0:2018 (IEC 60079-0 ed.7)	Electrical apparatus for potentialy explosive atmospheres – General requirements
EN 60079-11:2023 (IEC 60079-11 ed.7)	Electrical apparatus for potentialy explosive atmospheres – Intrinsic safe protection

- ATEX EU-type examination certificate proofs this (related to design, examination, and tests in accordance with 2014/34/EU).

Respective test reports and issued certificates are available upon request at Fluenta AS.

Position: Quality Manager
Name: Graham Davies
Company: Fluenta AS

Date: 12 May 2023

Signed: