



SIL

Functional Safety Certificate

No. 6G250613.ZJLTD84

Certificate's Holder: ZHE JIAGN LEFOO SENSING TECHNOLOGY CO. LTD.
 Building 3, NO.118 Changda Road, Linping Street, Linping District,
 Hangzhou City, Zhejiang Province

Manufacturer: ZHE JIAGN LEFOO SENSING TECHNOLOGY CO. LTD.
 Building 3, NO.118 Changda Road, Linping Street, Linping District,
 Hangzhou City, Zhejiang Province

Product: Pressure/differential pressure transmitter
Model(s): LFT700, LFT701, LFT703, LFT705, LFT710, LFT715, LFT720

Standard: Has been assessed per the relevant requirements of:
 IEC 61508:2010 Parts 1-7

And meets requirements providing a level of integrity to:
 Systematic Capability: SC 3 (SIL 3 Capable)
 Random Capability: Type B Element
 SIL 2 @ HFT= 0; SIL 3@ HFT=1; Route 2_H
 PFD_{AVG} and Architecture Constraints must be verified each application

*** Safety Function:**

The pressure/differential pressure transmitter abnormal alarm supports three modes:

- ① High: Output 20.8mA when the pressure exceeds the upper limit of the range;
- ② Low: Output 3.8mA when the pressure is lower than the lower limit of the range;
- ③ None: Both the high and low limits trigger alarms, outputting 20.8mA or 3.8mA respectively.

*Is suitable to be safety function according to the description and the configuration defined in Annex I.

Verification Mark:



The Verification Mark can be affixed on the product. It is NOT permitted to alter the Verification Mark in any way

Remark: This SIL Verification of Compliance has been issued on a voluntary basis. ECM confirms that a Test Report is existent for the above listed product(s) and found to meet the requirements of above standards for application in safety related system up to Safety Level of **SIL 3**. The unit must be properly designed into a Safety Instrument Function as per the requirements in the Safety Manual. The Verification Mark shown above can be affixed on the product. It is NOT permitted to alter the Verification Mark in any way. In addition the Verification's Holder is NOT allowed to transfer the Verification to third parties. This certificate can be checked for validity at www.entecerma.it

Date of issue 13 June 2025

Expiry date 12 June 2030

For online check:



Approver
Ente Certificazione Macchine
Legal Representative
Luca Bedonni





Annex I

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- The product has met manufacturer design process requirements of Safety Integrity Level (SIL) 3. These are intended to achieve sufficient integrity against systematic errors of design by the manufacturer.
- The product version of hardware components used for validation and type tests are the following:

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- Acceptable environmental constraints for the system are recalled in the safety Manual. These elements must be checked for each integration operation of the product.
- Hypothesis used for calculations are presented here under:
 - The mode of operation is Low demand, which means less than 1 trip demand each year;

Component architecture	SIL Capability	Demand frequency	PFD
1oo1 configuration	SIL2	Low	6.84E-04
1oo2 configuration	SIL3	Low	2.28E-05

- IEC 61508 Failure Rates in FIT*

Failure Category	λ_{SD}	λ_{SU}	λ_{DD}	λ_{DU}	SFF
Average	11	194	25.45	9.14	96.20%

Tests intervals=12months, MTTR=24h

*FIT=1 failure/10⁹ hours

- The Safety Integrated Level of the safety function using the product shall be calculated taking into account the characteristics of the whole system.