

# FUNCTIONAL SAFETY CERTIFICATE

CERTIFICATO – ZERTIFIKAT – CERTIFICADO – CERTIFICAT

The product:

*High Temperature Velocity Transducer  
5485C*

Manufactured by:

*Metrix Instruments Co.  
8824 Fallbrook Dr. Houston, TX 77064  
United States of America*

suitable for the following safety function(s):

Generate an emf directly proportional to the oscillatory velocity applied to the sensor body by the external environment

has been assessed per the relevant requirements of

**IEC 61508:2010 Parts 1 to 7**

and meets the requirements providing the following:

## Systematic Capability:

The compliance with the requirements for the avoidance of systematic faults and the requirements for the control of systematic faults have been achieved following the compliance route 1s.

SC 3

## Hardware Safety Integrity:

The constraints on hardware safety integrity have been verified in order to achieve a sufficiently robust architecture taking into account the level of element and subsystem complexity following the compliance route 1<sub>H</sub>.

Type  
A

## Random Safety Integrity:

The estimated safety integrity, for each safety function, due to random hardware safe and dangerous failures rates (excluding "no part" and "no effect" contribution).

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The architectural constraints and the effects of random failures (PFH/PFD<sub>AVG</sub>) must be verified for each specific application and safety function implemented by the E/E/PE safety-related system.

Certified by:

**BYHON**

BYHON Certification Director:

  
Rosati Francesco

CERTIFICATE No:  
MTXI-5485C-ENS-E01  
Revision: A

Issued:  
February 28<sup>th</sup>, 2022

Valid until:  
March 1<sup>st</sup>, 2025

The owner of a valid certificate for an assessed product is authorized to affix the following mark and relative ID number, to all recognized devices which are identical to the product assessed.

**BYHON**  
**SIL** ✓

**ID.N°010522EN04A**



#8914  
ISO/IEC 17065  
Product Certification Body