



The manufacturer  
may use the mark:



Revision 5.3 January 15, 2026  
Surveillance Audit Due  
January 31, 2027



# Certificate / Certificat Zertifikat / 合格証

YEC 2109013 C001

*exida* hereby confirms that the:

## **ADMAG TI Series Magnetic Flowmeter**

**Yokogawa Electric Corporation  
Musashino-shi, Tokyo, Japan**

Has been assessed per the relevant requirements of:

**IEC 61508 : 2010 Parts 1-3**

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 1<sub>H</sub>**  
**PFH/PFD<sub>avg</sub> and Architecture Constraints**  
**must be verified for each application**

### **Safety Function:**

The ADMAG TI Series Magnetic Flowmeter will measure Flow within the stated safety accuracy.

### **Application Restrictions:**

The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.



*Masanori Hondo*  
Evaluating Assessor  
*A. H.*  
Certifying Assessor

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## ADMAG TI Series Magnetic Flowmeter

### **Systematic Capability:**

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.

A Safety Instrumented Function (SIF) designed with this product must not be used at a SIL level higher than stated.

### **Random Capability:**

The SIL limit imposed by the Architectural Constraints must be met for each element. This element meets *exida* criteria for Route 2<sub>H</sub>.

### **IEC 61508 Failure Rates in FIT\***

Device/Configuration	$\lambda_{SD}$	$\lambda_{SU}$	$\lambda_{DD}$	$\lambda_{DU}$	SFF
<b>ADMAG TI Multi(Non-IS) Option</b>	–	<b>88</b>	<b>2,527</b>	<b>194</b>	<b>93.1%</b>
<b>ADMAG TI IS Option</b>	–	<b>91</b>	<b>2,684</b>	<b>203</b>	<b>93.2%</b>

\* FIT = 1 failure / 10<sup>9</sup> hours

### **SIL Verification:**

The Safety Integrity Level (SIL) of an entire Safety Instrumented Function (SIF) must be verified via a calculation of PFH/PFD<sub>avg</sub> considering redundant architectures, proof test interval, proof test effectiveness, any automatic diagnostics, average repair time and the specific failure rates of all products included in the SIF. Each element must be checked to assure compliance with minimum hardware fault tolerance (HFT) requirements.

The following documents are a mandatory part of certification:

**Assessment Report:** YEC 21/09-013 R002 V6 R3 (or later)

**Safety Manual:** IM01E21A21-02EN 7th Edition (or later)



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