

The manufacturer may use the mark:



Revision 2.1 January 23, 2025 Surveillance Audit Due February 1, 2028



# Certificate / Certificat Zertifikat / 合格証

STL 1909047 C001

exida hereby confirms that the:

# Axiom AN/ANX Valve Position Indicator/Controller

Valmet Flow Control Inc. Fergus Falls, MN - USA

Has been assessed per the relevant requirements of:

IEC 61508: 2010 Parts 1-2

and meets requirements providing a level of integrity to:

Systematic Capability: SC 3 (SIL 3 Capable)

Random Capability: Type A, Route 2<sub>H</sub> Device

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

### **Safety Function:**

The solenoid will control the position of the attached actuator/valve by either energizing or de-energizing the solenoid.

## **Application Restrictions:**

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



Evaluating Assessor

Certifying Assessor

## Certificate / Certificat / Zertifikat / 合格証 STL 1909047 C001

Systematic Capability: SC 3 (SIL 3 Capable)

Random Capability: Type A, Route 2<sub>H</sub> Device

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

### **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 device meets exida criteria for Route  $2_H$ .

### IEC 61508 Failure Rates in FIT\*

Application	λ <sub>sD</sub>	λ <sub>su</sub>	$\lambda_{ extsf{DD}}$	λου
Single Solenoid, DTT	0	269	0	299
Single Solenoid, ETT	0	107	0	474
Dual Solenoid	0	275	0	546

<sup>\*</sup> FIT = 1 failure / 109 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: STL 19-09-047 R002 V2 R2 (or later)

**Safety Manual:** 105535, Rev B (or later)

Axiom AN/ANX Valve Position Indicator/Controller



80 N Main St Sellersville, PA 18960

T-061, V5R3