Certificate / Certificat
Zertifikat / 合格証

WES 1810017 C001

exida hereby confirms that the:

AccuTrak 316 Silver Bullet

Westlock Controls
Saddle Brook, NJ - USA

Have 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_H Device

PFH/PFD_{avg} and Architecture Constraints must be verified for each application

Safety Function:

The Switch will open/close within the specified safety time when the Magnetic Trigger is brought within the sensing range.

Application Restrictions:

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

The manufacturer may use the mark:

Revision 3.0 August 27, 2024
Surveillance Audit Due
July 1, 2027

ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17065
PRODUCT CERTIFICATION BODY
#1004

exida Certification

Evaluating Assessor

Certifying Assessor

Certificate / Certificat / Zertifikat / 合格証

WES 1810017 C001

Systematic Capability: SC 3 (SIL 3 Capable)

Random Capability: Type A, Route 2_H Device

PFH/PFD_{avg} and Architecture Constraints must be verified for each application

AccuTrak 316
Silver Bullet

Systematic Capability :

These product have 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.

Versions

Series	Switch Type	Switch Quan
316SB	316SB or 316LT	1 or 2

IEC 61508 Failure Rates[1] in FIT[2]

Switch Circuit Qty	λ_{SD}	λ_{SU}	λ_{DD}	λ_{DU}
1 Switch Circuit	0	8	0	19
2 Switch Circuits	0	17	0	38

[1] Failure Rates listed are only applicable if the switch contacts current is limited to 60% of the switches rated capacity and the end user has added external transient protection if being used with non-resistive loads.
[2] FIT = 1 failure / 10^9 hours

SIL Verification:

The Safety Integrity Level (SIL) of an entire Safety Instrumented Function (SIF) must be verified via a calculation of PFH/PFD_{avg} 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: WES 15/05-053 R002 V5 R1 (or later)

Safety Manual: SMAN-006

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Sellersville, PA 18960