



# COMPLIANCE

with IEC EN 61508

Certificate No.: TUV IT 26 SIL 0698

**CERTIFICATE OWNER:** Aquestia Italy S.r.l.  
Via Dell'Acqua, 7  
20027 – Rescaldina (MI)  
Italy

**WE HEREWITH CONFIRM THAT  
DELUGE VALVES MODEL S-300  
MEET THE SIL REQUIREMENTS DETAILED IN THE ANNEXED TABLES  
FOR THE SAFETY FUNCTION:**

*“correct switching on demand (closed to open), in low demand mode of operation”*

**Examination result:** The above reported Deluge Valves Model S-300 were found to meet the standard defined requirements of the safety levels detailed in the following table according to IEC EN 61508, under fulfillment of the conditions listed in the Report R TUV IT 25 SIL 0583 in its currently valid version, on which this Certificate is based

**Examination parameters:** Construction/Functional characteristics and reliability and availability parameters of the above Deluge Valves Model S-300

**Official Report No.:** R TUV IT 25 SIL 0583

**Expiry Date** February, 05<sup>th</sup> 2029

**IT IS TO BE INTENDED THAT THE ABOVE OFFICIAL REPORT AND ITS ANNEXES ARE AN INTEGRAL PART OF THIS DOCUMENT  
THE PRESENT DOCUMENT SUBSTITUTES AND REPEALS THE DOCUMENT TUV IT 22 SIL 0043**

**Reference Standard** IEC EN 61508:2010 Part 2, 4, 6, 7

Milan, February, 06<sup>th</sup> 2026

TÜV ITALIA Srl



TÜV ITALIA Srl  
Industrie Service Division  
Managing Director

Alberto Carelli

## SUMMARY TABLE



<i>E/EE/EP safety-related system (final element)</i>	<b>Deluge Valves Model S-300 produced by Aquestia Italy S.r.l.</b>
<i>System type</i>	Type A
<i>Systematic Capability</i>	SC2
<i>Safety Function Definition</i>	“correct switching on demand (closed to open), in low demand mode of operation”
<i>Max SIL<sup>(1)</sup></i>	<b>SIL3</b>
$\lambda_{TOT}$	6,073E-07
$\lambda_{NE}$	4,418E-07
$\lambda_S$	0,000E+00
$\lambda_{DD}$	0,000E+00
$\lambda_{DU,FPT}$	1,656E-07
<i><math>\beta</math> and <math>\beta_D</math> factor</i>	10%
<i>MRT</i>	8 h
<i>Hardware Safety Integrity</i>	Route 2 <sub>H</sub>
<i>Systematic Safety Integrity</i>	Route 2 <sub>s</sub>
<b>Remarks</b>	
<i>(1) The Safety Integrity Level (SIL) of the entire Safety Instrumented Function (SIF) must be verified via a calculation of <math>PFD_{AVG}</math> considering the 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 subsystem must be checked to assure compliance with the minimum hardware fault tolerance (HFT) requirements.</i>	

*SIL classification according to Standard IEC EN 61508:2010 (Chapters: 2, 4, 6, 7) for Deluge Valves Model S-300 produced by Aquestia Italy S.r.l.*

NOTE: The present table is integral part of the Document: TUV IT 26 SIL 0698  
Date: February, 06<sup>th</sup> 2026