

SIL manufacturer's declaration

Functional safety in accordance with IEC 61508 and IEC 61511

Hereby we, InterApp Valcom SA

Calderón de la Barca 12

28860 Paracuellos de Jarama

Spain

declare that, for the valves listed below, the failure rates outlined below were detected in safety-related applications in accordance with IEC 61508 and IEC 61511.

Butterfly Valve	Туре	Range	
Desponia	D1, D3, D4	From DN25 up to DN1600	
Desponia Plus	DP1, DP3	From DN25 up to DN600	

Systematic Capability:

<u>Desponia Range of valves is suitable to reach SIL-2 for all calculated configurations when we use Route 2H.</u>

With Route 1H SIL-1 is achieved with 1001 and SIL-2 with 1002.

Safety function:

The butterfly Valve will move to the designed safe position per the actuator design within the specified safety time.

Authorized Person for the Manufacturer: R&D Manager

Name: Antonio Maestre

Signature:

Date: 02.10.2019 Sheet **1** of **2**



SIL manufacturer's declaration

Functional safety in accordance with IEC 61508 and IEC 61511

Random capability:

The evidence is based on proven in use, and number of sales and customer complaints about defective valves have been evaluated over a certain period of time.

The determinated failure rates apply to the operating mode. Probability of failure on demand is strongly connected to the conditions in use (temperature, pressure, fluid). Therefore, it's recommended to define the maintenance intervals and testing in collaboration with the manufacturer.

Safety Related Characteristics:

		TI = 1 Year		TI = 2 Years			
		1001	1002	1001	1002		
β=0 %	PFD _{AVG}	7,36E-03	5,32E-05	8,52E-03	5,85E-05		
	PFH	6,56E-03	3,98E-05	7,81E-03	4,60E-05		
	SFF	0,00%	0,00%	0,00%	0,00%		
	λ_{DU}	405 FITS					
	λ_{DD}	92 FITS					
	MTTF	282 years					
ß=10%	PFD _{AVG}	7,36E-03	7,79E-04	8,52E-03	8,99E-04		
	PFH	6,56E-03	6,89E-04	7,81E-03	8,18E-04		
	SFF	18,50%	18,50%	18,50%	18,50%		
	λ_{DU}	405 FITS					
	λ_{DD}	92 FITS					
	MTTF	282 years					

Date: 02.10.2019 Sheet 2 of 2