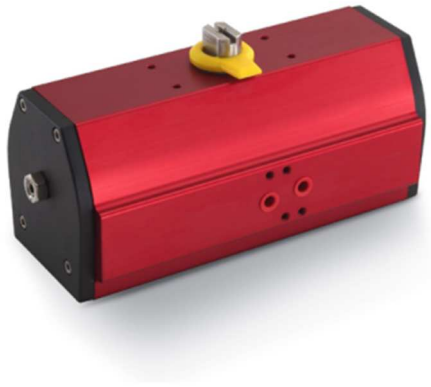
SAPAG	**SIL classification** **MTBF: Mean Time Between Failure** **SIL: Safety Integrity Level**

Product	**DR Pneumatic Actuator**	
Type	**Double Acting Pneumatic Actuator**	
Range	**DR1 – DR8**	

Objective

The objective is to determine the rate of critical failures of the Double Acting Pneumatic Actuator to allow MTBF (Mean Time Between Failure) calculation and SIL classification.

System description

Type	A
HFT	0
Safety functions	1. Delivery of a full stroke (90° +/- tolerance) driven by the piston of cylinder, powered by the specified medium working pressure
Mode of operation	Low Demand Mode

Summary Table

Random Failure rates				
Configuration	Safety Function	λ_{DU}	λ_{DD}	λ_{S}
No PST	1	$2{,}29.10^{-8}$	$0{,}00.10^{-0}$	$0{,}00.10^{-0}$
With PST	1	$2{,}06.10^{-9}$	$2{,}09.10^{-8}$	$0{,}00.10^{-0}$

Systematic capability	**3 (Route 1s applied)**			
Architectural Constraints	**Route 1H:**	**Applied**	**Route 2H:**	**Applied**
	The product can be used in: - Single channel configuration: Up to SIL 2 without external diagnostic tests Up to SIL 3 considering external diagnostic tests - Double channel configuration: Up to **SIL 3**			

		B. LAURENT	**E. VINCENT**
2023/03	**Brand Update**		
DATE	MODIFICATION	NOM / *Name*	NOM / *Name*
	Wordings	EMISSION	VERIFICATION / APPROBATION