

C E R T I F I C A T E

This certifies, that the company

Susin I-Tork India (P) Ltd.
No. 43A9, Vadakku thottom pakuthi Idikarai,
Coimbatore-641022 Tamilnadu,
India

Is authorized to provide the product mentioned below

Description of product: **PLS/PLD Series Linear Pneumatic Actuator**

In accordance with: **EN 61508:2010 Parts 1, 2, 3, 4, 5, 6, 7**



Registration No 23 24517 02
Test Report No PS-24517-23-M
File reference 24517-02

Validity
from 2023-08-28
until 2026-08-28



TÜV NORD Italia S.r.l. (TÜV NORD Group)
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Cerro Maggiore, 2023-08-28
prodotto@tuev-nord.it

Please also pay attention to the information stated overleaf

TNI-QF(IND-SIL-01)-14-Rev00_01_03_2020-Certificate_Type A

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E/EE/EP safety-related system (final element)		PL Series Linear Pneumatic Actuator	
Class		G5	G6
Series		PLS (Single Acting)	PLD (Double Acting)
Environment / Application ⁽¹⁾	Series Type	PLS200, PLS250, PLS300, PLS350, PLS380, PLS430, PLS480, PLS530, PLS580, PLS630	PLD200, PLD250, PLD300, PLD350, PLD380, PLD430, PLD480, PLD530, PLD580, PLD630
	Pressure Rating	Up to 8 bar	Up to 8bar
	Temperature Range	-20 °C to +80°C	-20 °C to +80 °C
Safety Function Definition		Correct switching (Open to Close / Close to open) on demand , in low demand mode of operation	Correct switching (Open to Close / Close to open) on demand , in low demand mode of operation
Max SIL (with HFT = 0)		SIL2	SIL2
Max SIL (with HFT = 1)		SIL3	SIL3
SC		3	3
λ_{TOT}		5,36E-06	1,19E-06
λ_S		8,63E-07	3,86E-08
λ_{DU}		4,50E-06	1,15E-06
PFD _{avg} ⁽²⁾		9,86E-03	5,05E-03
FPT interval		6 months	12 months
β and β_D factor		10%	10%
MRT		8 h	8 h
Hardware Safety Integrity		Route 2 _H	Route 2 _H
Systematic Safety Integrity		Route 2 _S	Route 2 _S

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Remarks

(1) Category identified according to specific environment and application, in particular for valve design for the specific fluid type and temperature range. Refer to the product safety manual for the detailed information on the categories.

(2) PFD of reference calculated on the basis of a Full Functional Proof Test with time intervals reported for HFT = 0 configuration only. This time interval is considered by TÜV as reasonably consistent with the implementation of the equipment for safety related-applications, with reference to the overall range of results shown in the report, where other possible combination of time intervals adequate for a classification up to the SIL reported. Note that, concerning Full Proof Tests and the Partial Stroke Test, time intervals respectively higher than 36 months and 12 months are considered by TÜV as not adequate and consistent for equipment for safety related applications.

(3) The values have been calculated assuming that during the FPT all failures are detected