





# C E R T I F I C A T E

## ANNEX to Certificate no. 16-SIL-0010018-17-TIC

Type	A
HFT	0
Safety functions	1. Delivery of a full stroke ( $90^\circ \pm$ tolerance) driven by the piston of cylinder, powered by the specified medium working pressure
Mode of operation	Low Demand Mode

Random failure rates				
Configuration	Safety function	$\lambda_{DU}$ [1/h]	$\lambda_{DD}$ [1/h]	$\lambda_S$ [1/h]
GH/D - No PST	1	2,60E-08	0,00E+00	0,00E+00
GH/D - With PST	1	2,34E-09	2,37E-08	0,00E+00

Systematic capability	3 (Route 1 <sub>s</sub> applied)			
Architectural constraints	Route 1 <sub>H</sub> :	Applied	Route 2 <sub>H</sub> :	Applied
	The product can be used in: <ul style="list-style-type: none"><li>single channel configuration:<ul style="list-style-type: none"><li>up to SIL 2 without external diagnostic tests</li><li>up to SIL 3 considering external diagnostic tests</li></ul></li><li>double channel configuration: up to SIL 3</li></ul>			

### Remarks:

- For further details, including environmental conditions, limitations of use, lifetime, failure rates traceability, mean repair times, common cause factors and systematic capability constraints, make reference to Safety Manual SM-GH-A-02-E.

END OF CERTIFICATE

Reggio Emilia, 23.07.2018

  
Dipl. Ing. Feridoon Sergizzarea

TÜV INTERCERT Certification Body