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C E R T I F I C A T E

Certificate no. 16-SIL-0010018-20-TIC Rev. 01

WE HEREBY CERTIFY THAT

Product description HYDRAULIC LINEAR SPRING RETURN ACTUATORS

Models SERIES LH/S

Manufacturer ROTORK FLUID SYSTEMS S.r.l.
Via Padre Jacques Hamel 138/B - 55016 Porcari LU

IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE STANDARDS

IEC 61508 Parts 1–7:2010

AS RESULT OF THE ASSESSMENT ACCORDING TO THE PROVISION
SET OUT IN THE ABOVE-MENTIONED STANDARDS

Summary Report no. RC-0419-198-SIL-TIC-PC-0010018-16-06 Rev. 01

Expiry date 17.04.2022

Date of first issue 18.04.2019

Note

This certificate is issued upon the request of the manufacturer as voluntary certification; it does not include the production surveillance.
This certificate does not allow the manufacturer to use the safety mark of TÜV INTERCERT.

Reggio Emilia, 22.01.2020



Dipl. Ing. Feridoon Sergizzarea

TÜV INTERCERT Certification Body

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C E R T I F I C A T E

ANNEX to Certificate no. 16-SIL-0010018-20-TIC Rev. 01

Type	A
HFT	0
Safety functions	1. Stem extended upon the demand of the actuation system 2. Stem retracted upon the demand of the actuation system
Mode of operation	Low Demand Mode

Random failure rates				
Configuration	Safety function	λ_{DU} [1/h]	λ_{DD} [1/h]	λ_S [1/h]
LH/SD - No PST	1	1,69E-08	0,00E+00	0,00E+00
LH/SD - With PST	1	1,69E-09	1,52E-08	0,00E+00
LH/SU - No PST	2	1,71E-08	0,00E+00	0,00E+00
LH/SU - With PST	2	1,71E-09	1,54E-08	0,00E+00

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

Remarks:

- The above random failure rates values are worst-case values for all the possible configurations.
- 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-LH-A-01-E.

END OF CERTIFICATE

Reggio Emilia, 22.01.2020


Dipl. Ing. Feridoon Sergizzarea

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