



Certificate no.

TAI-FS-C-25-0023

WE HEREBY CERTIFY THAT

Product description

Hydraulic rack and pinion spring return and double acting actuator

Models

Series RH/S, RH/D

Manufacturer

**Rotork Fluid Systems S.r.l.
Via Padre Jacques Hamel 138/B
I-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
THE PRODUCT MEETS ALSO THE REQUIREMENTS OF STANDARD
EN 17955:2024

Assessment report no.

TAI-FS-R-25-0023

Expiry date

03.07.2028

Issue date

04.07.2025

TUV AUSTRIA ITALIA
04.07.2025, Monte Roberto (AN)

Ing. Crescenzo Di Fratta

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Società a socio unico, soggetta a controllo e coordinamento di:
TÜV AUSTRIA HOLDING AG Deutschstrasse 10, A-1230, Vienna, Austria
www.tuvaustraiitalia.com

Annex to certificate no. TAI-FS-C-25-0023

Type	A
HFT	0
Safety functions	<u>Spring return actuators:</u> 1. Delivery of a full stroke ($90^\circ \pm$ tolerance) driven by the spring, with power fluid exhausted from the cylinder through the control system <u>Double acting actuators:</u> 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	λ_{DU} [1/h]	λ_{DD} [1/h]	λ_S [1/h]
Series RH/S - No PST	1	3,54E-08	0,00E+00	0,00E+00
Series RH/S - With PST	1	3,19E-09	3,22E-08	0,00E+00
Series RH/D - No PST	1	3,57E-08	0,00E+00	0,00E+00
Series RH/D - With PST	1	3,21E-09	3,25E-08	0,00E+00

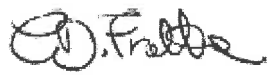
Systematic capability	3 (Route 1s applied)			
Architectural constraints	Route 1_H:	Applied	Route 2_H:	Applied
	The product can be used in: - single channel configuration: - up to SIL 2 without external diagnostic tests - up to SIL 3 considering external diagnostic tests - double channel configuration: up to SIL 3			

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-RH-A-01-E

END OF CERTIFICATE

TUV AUSTRIA ITALIA
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