



**Certificate no. TAI-FS-C-24-0070**

WE HEREBY CERTIFY THAT

**Product description** GAS-HYDRAULIC DOUBLE ACTING ACTUATOR

**Models** SERIES GPO

**Manufacturer** BIFFI ITALIA S.r.l.  
Strada Biffi 165  
I-29017 Fiorenzuola d'Arda (PC)

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.** TAI-FS-R-24-0139

**Expiry date** 08.08.2027

**Issue date** 09.08.2024

TUV AUSTRIA ITALIA  
09.08.2024, Monte Roberto (AN)

Ing. Crescenzo Di Fratta

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C.F./R. IVA IT01055750333 - Cap. Soc. i.v. € 400.000,00 - REA AN n. 211030  
Società a socio unico, soggetta a controllo e coordinamento di:  
TÜV AUSTRIA HOLDING AG Deutschstrasse 10, A-1230, Vienna, Austria  
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## Annex to certificate no. TAI-FS-C-24-0070

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

Random failure rates				
Configuration	Safety function	$\lambda_{DU}$ [1/h]	$\lambda_{DD}$ [1/h]	$\lambda_S$ [1/h]
Series GPO - No PST	1	1,88E-08	0,00E+00	0,00E+00
Series GPO - With PST	1	1,69E-09	1,71E-08	0,00E+00

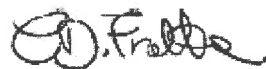
<b>Systematic capability</b>	3 (Route 1s applied)			
<b>Architectural constraints</b>	<b>Route 1<sub>H</sub>:</b>	Applied	<b>Route 2<sub>H</sub>:</b>	Applied
	The product can be used in: <ul style="list-style-type: none"> <li>• single channel configuration:                             <ul style="list-style-type: 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 014

END OF CERTIFICATE

TUV AUSTRIA ITALIA  
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