ZERTIFIKAT | CERTIFICATE | CERTIFICAT | CERTIFICADO | СЕРТИФИКАТ | شهادة | 证书 | 인증서

TÜV AUSTRIA

Certificate no. TAI-FS-C-25-0001

WE HEREBY CERTIFY THAT

Product description	**2-ways side entry floating ball valve**
Models	**Series R1, R2, R4, R5**
Manufacturer	**Ribel Valvole S.r.l.** **Via Badie 15** **I-24060 Castelli Calepio (BG)**

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

Assessment report no.	**TAI-FS-R-25-0001**
Expiry date	**23.01.2028**
Issue date	**24.01.2025**

TUV AUSTRIA ITALIA
24.01.2025, Monte Roberto (AN)

Ing. Crescenzo Di Fratta

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Società a socio unico, soggetta a controllo e coordinamento di:
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Annex to certificate no. TAI-FS-C-25-0001

Type	A
HFT	0
Safety functions	1. Close / Open upon the demand of the actuation system 2. Close upon the demand of the actuation system, with inline tightness when in closed position
Mode of operation	Low Demand Mode

Random failure rates				
Configuration	**Safety function**	**λ_{DU} [1/h]**	**λ_{DD} [1/h]**	**λ_S [1/h]**
2-ways floating - No PST	1	6,05E-08	0,00E+00	0,00E+00
2-ways floating - With PST	1	5,44E-09	5,50E-08	0,00E+00
2-ways floating - No PST	2	7,16E-08	0,00E+00	0,00E+00
2-ways floating - With PST	2	1,66E-08	5,50E-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: • single channel configuration: o up to SIL 2 without external diagnostic tests o up to SIL 3 considering external diagnostic tests (only for safety function 1) • 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 GM_SM-01

END OF CERTIFICATE

TUV AUSTRIA ITALIA
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