



**Certificate no. TAI-FS-C-22-0052**

WE HEREBY CERTIFY THAT

**Product description 2-WAYS FLOATING BALL VALVE**

**Models Series FL**

**Manufacturer RMT VALVOMECCANICA S.r.l.  
Via dei Patrioti  
I-21058 Solbiate Olona (VA)**

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-22-0105**

**Expiry date 07.11.2025**

**Issue date 08.11.2022**

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
08.11.2022, Monte Roberto (AN)

Page 1 of 2

Ing. Crescenzo Di Fratta

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Cod. Id. CEE IT02217380423 REA AN n. 170070  
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## Annex to certificate no. TAI-FS-C-22-0052

<b>Type</b>	A
<b>HFT</b>	0
<b>Safety functions</b>	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
<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]
2-ways floating - No PST	1	4,60E-08	0,00E+00	0,00E+00
2-ways floating - With PST	1	4,14E-09	4,19E-08	0,00E+00
2-ways floating - No PST	2	5,21E-08	0,00E+00	0,00E+00
2-ways floating - With PST	2	1,02E-08	4,19E-08	0,00E+00

<b>Systematic capability</b>	3 (Route 1 <sub>s</sub> 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-FL

END OF CERTIFICATE

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
08.11.2022, Monte Roberto (AN)



Ing. Crescenzo Di Fratta



**Certificate no. TAI-FS-C-22-0049**

WE HEREBY CERTIFY THAT

**Product description**

**2-WAYS BOLTED SIDE ENTRY TRUNNION MOUNTED BALL VALVE**

**Models**

**Series SE, V-CUT**

**Manufacturer**

**RMT VALVOMECCANICA S.r.l.**  
**Via dei Patrioti**  
**I-21058 Solbiate Olona (VA)**

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-22-0099**

**Expiry date 07.11.2025**

**Issue date 08.11.2022**

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
08.11.2022, Monte Roberto (AN)

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Ing. Crescenzo Di Fratta

## Annex to certificate no. TAI-FS-C-22-0049

<b>Type</b>	A
<b>HFT</b>	0
<b>Safety functions</b>	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
<b>Mode of operation</b>	Low Demand Mode

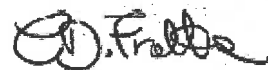
Random failure rates				
Configuration	Safety function	$\lambda_{DU}$ [1/h]	$\lambda_{DD}$ [1/h]	$\lambda_S$ [1/h]
Self-relieving / Double piston effect - No PST	1	4,10E-08	0,00E+00	0,00E+00
Self-relieving / Double piston effect - With PST	1	3,69E-09	3,73E-08	0,00E+00
Self-relieving - No PST	2	4,89E-08	0,00E+00	0,00E+00
Self-relieving - With PST	2	1,16E-08	3,73E-08	0,00E+00
Double piston effect - No PST	2	4,56E-08	0,00E+00	0,00E+00
Double piston effect - With PST	2	8,24E-09	3,73E-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:**

- Self-relieving configuration: both upstream and downstream seats shall be of self-relieving type (i.e. single barrier in the flow direction)
- Double piston effect configuration: at least downstream seat shall be of double piston effect type (i.e. double barrier in the flow direction)
- 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-SE

END OF CERTIFICATE



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TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
08.11.2022, Monte Roberto (AN)



## Annex to certificate no. TAI-FS-C-22-0050

<b>Type</b>	A
<b>HFT</b>	0
<b>Safety functions</b>	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
<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]
Self-relieving / Double piston effect - No PST	1	4,10E-08	0,00E+00	0,00E+00
Self-relieving / Double piston effect - With PST	1	3,69E-09	3,73E-08	0,00E+00
Self-relieving - No PST	2	5,10E-08	0,00E+00	0,00E+00
Self-relieving - With PST	2	1,37E-08	3,73E-08	0,00E+00
Double piston effect - No PST	2	4,51E-08	0,00E+00	0,00E+00
Double piston effect - With PST	2	7,75E-09	3,73E-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:**

- Self-relieving configuration: both upstream and downstream seats shall be of self-relieving type (i.e. single barrier in the flow direction)
- Double piston effect configuration: at least downstream seat shall be of double piston effect type (i.e. double barrier in the flow direction)
- 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-TE

END OF CERTIFICATE



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08.11.2022, Monte Roberto (AN)

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[www.tuvaustralia.com](http://www.tuvaustralia.com) [www.tuv.at](http://www.tuv.at)



**Certificate no. TAI-FS-C-22-0051**

WE HEREBY CERTIFY THAT

**Product description** 2-WAYS FULLY WELDED SIDE ENTRY TRUNNION MOUNTED BALL VALVE

**Models** Series FW

**Manufacturer** RMT VALVOMECCANICA S.r.l.  
Via dei Patrioti  
I-21058 Solbiate Olona (VA)

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-22-0103**

**Expiry date** 07.11.2025

**Issue date** 08.11.2022

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
08.11.2022, Monte Roberto (AN)

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Ing. Crescenzo Di Fratta

## Annex to certificate no. TAI-FS-C-22-0051

<b>Type</b>	A
<b>HFT</b>	0
<b>Safety functions</b>	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
<b>Mode of operation</b>	Low Demand Mode

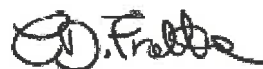
Random failure rates				
Configuration	Safety function	$\lambda_{DU}$ [1/h]	$\lambda_{DD}$ [1/h]	$\lambda_S$ [1/h]
Self-relieving / Double piston effect - No PST	1	4,11E-08	0,00E+00	0,00E+00
Self-relieving / Double piston effect - With PST	1	3,70E-09	3,74E-08	0,00E+00
Self-relieving - No PST	2	5,03E-08	0,00E+00	0,00E+00
Self-relieving - With PST	2	1,29E-08	3,74E-08	0,00E+00
Double piston effect - No PST	2	4,63E-08	0,00E+00	0,00E+00
Double piston effect - With PST	2	8,93E-09	3,74E-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:**

- Self-relieving configuration: both upstream and downstream seats shall be of self-relieving type (i.e. single barrier in the flow direction)
- Double piston effect configuration: at least downstream seat shall be of double piston effect type (i.e. double barrier in the flow direction)
- 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-FW

END OF CERTIFICATE



Ing. Crescenzo Di Fratta

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
08.11.2022, Monte Roberto (AN)

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 Cod. Id. CEE IT02217380423 REA AN n. 170070  
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**Certificate no. TAI-FS-C-21-0054**

WE HEREBY CERTIFY THAT

**Product description** GLOBE CONTROL VALVE

**Models** SERIES 22, 23

**Manufacturer** RMT VALVOMECCANICA S.r.l.  
Via dei Patrioti  
I-21058 Solbiate Olona (VA)

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-21-0112

**Expiry date** 03.06.2024

**Issue date** 04.06.2021

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
04.06.2021, Monte Roberto (AN)

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Ing. Crescenzo Di Fratta

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Cod. Id. CEE IT02217380423 REA AN n. 170070  
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## Annex to certificate no. TAI-FS-C-21-0054

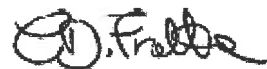
<b>Type</b>	A
<b>HFT</b>	0
<b>Safety functions</b>	1. Close / Open upon the demand of the actuation system 2. Close upon the demand of the actuation system, with inline tightness when in closed position
<b>Mode of operation</b>	Low Demand Mode

Random failure rates				
Configuration	Safety function	$\lambda_{DU}$ [1/h]	$\lambda_{DD}$ [1/h]	$\lambda_S$ [1/h]
Series 22, 23 - No PST	1	2,87E-07	0,00E+00	0,00E+00
Series 22, 23 - With PST	1	2,58E-08	2,61E-07	0,00E+00
Series 22, 23 - No PST	2	4,11E-07	0,00E+00	0,00E+00
Series 22, 23 - With PST	2	1,51E-07	2,61E-07	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-GLOBE.

END OF CERTIFICATE



TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
04.06.2021, Monte Roberto (AN)

Ing. Crescenzo Di Fratta



**Certificate no. TAI-FS-C-21-0053**

WE HEREBY CERTIFY THAT

**Product description** 3-WAYS GLOBE VALVE

**Models** SERIES 70

**Manufacturer** RMT VALVOMECCANICA S.r.l.  
Via dei Patrioti  
I-21058 Solbiate Olona (VA)

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-21-0110

**Expiry date** 03.06.2024

**Issue date** 04.06.2021

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
04.06.2021, Monte Roberto (AN)

Page 1 of 2

Ing. Crescenzo Di Fratta

## Annex to certificate no. TAI-FS-C-21-0053

<b>Type</b>	A
<b>HFT</b>	0
<b>Safety functions</b>	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
<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 70 - No PST	1	3,71E-07	0,00E+00	0,00E+00
Series 70 - With PST	1	3,34E-08	3,38E-07	0,00E+00
Series 70 - No PST	2	4,59E-07	0,00E+00	0,00E+00
Series 70 - With PST	2	1,21E-07	3,38E-07	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-GLOBE.

END OF CERTIFICATE

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
04.06.2021, Monte Roberto (AN)



Ing. Crescenzo Di Fratta



**Certificate no. TAI-FS-C-21-0096**

WE HEREBY CERTIFY THAT

**Product description** DOUBLE ECCENTRIC BUTTERFLY VALVE

**Models** SERIES 11

**Manufacturer** RMT VALVOMECCANICA S.r.l.  
Via dei Patrioti  
I-21058 Solbiate Olona (VA)

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-21-0193**

**Expiry date** 10.10.2024

**Issue date** 11.10.2021

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
11.10.2021, Monte Roberto (AN)

Page 1 of 2

Ing. Crescenzo Di Fratta

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Cap. Soc. i.v. EUR 10.000,00; R.I. Ancona – C.F. – P. IVA 02217380423  
Cod. Id. CEE IT02217380423 REA AN n. 170070  
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[www.tuvaustraiitalia.com](http://www.tuvaustraiitalia.com) [www.tuv.at](http://www.tuv.at)

## Annex to certificate no. TAI-FS-C-21-0096

<b>Type</b>	A
<b>HFT</b>	0
<b>Safety functions</b>	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
<b>Mode of operation</b>	Low Demand Mode

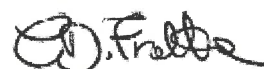
Random failure rates				
Configuration	Safety function	$\lambda_{DU}$ [1/h]	$\lambda_{DD}$ [1/h]	$\lambda_S$ [1/h]
Series 11 - No PST	1	2,26E-07	0,00E+00	0,00E+00
Series 11 - With PST	1	2,03E-08	2,06E-07	0,00E+00
Series 11 - No PST	2	3,16E-07	0,00E+00	0,00E+00
Series 11 - With PST	2	1,11E-07	2,06E-07	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- BU.

END OF CERTIFICATE

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
11.10.2021, Monte Roberto (AN)



Ing. Crescenzo Di Fratta



**Certificate no. TAI-FS-C-21-0055**

WE HEREBY CERTIFY THAT

**Product description** PNEUMATIC DIAPHRAGM LINEAR SINGLE SPRING ACTUATOR

**Models** SERIES LPD 100

**Manufacturer** RMT VALVOMECCANICA S.r.l.  
Via dei Patrioti  
I-21058 Solbiate Olona (VA)

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-21-0114

**Expiry date** 03.06.2024

**Issue date** 04.06.2021

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
04.06.2021, Monte Roberto (AN)

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Ing. Crescenzo Di Fratta

## Annex to certificate no. TAI-FS-C-21-0055

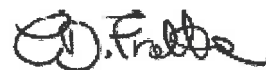
<b>Type</b>	A
<b>HFT</b>	0
<b>Safety functions</b>	1. Stem extended upon the demand of the actuation system 2. Stem retracted upon the demand of the actuation system
<b>Mode of operation</b>	Low Demand Mode

Random failure rates				
Configuration	Safety function	$\lambda_{DU}$ [1/h]	$\lambda_{DD}$ [1/h]	$\lambda_S$ [1/h]
LPD 100 - No PST	1	3,45E-08	0,00E+00	0,00E+00
LPD 100 - With PST	1	3,11E-09	3,14E-08	0,00E+00
LPD 100 - No PST	2	2,98E-08	0,00E+00	0,00E+00
LPD 100 - With PST	2	2,68E-09	2,71E-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- LPD.

END OF CERTIFICATE



TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.  
04.06.2021, Monte Roberto (AN)

Ing. Crescenzo Di Fratta