

# CERTIFICATE

This certifies, that the company

**Valvosider S.r.l.**  
**Via San Rocco, 2**  
**13011 Borgosesia (VC)**  
**Italy**

Is authorized to provide the product mentioned below

Description of product:

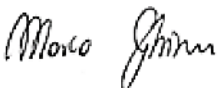
**Globe valve:**

- **Bolted Bonnet Straight Pattern / Y Pattern / Angle Pattern**
- **Pressure Seal Bonnet Straight Pattern / Y Pattern / Angle Pattern**
- **Bellow Seal**
- **Cryogenic Extension Bonnet**

In accordance with:

**EN 61508:2010 Parts 1, 2, 4, 5, 6, 7**

Registration No 22 23204 02  
Test Report No PS-23204-22-L-02  
File reference 23204-02



TUV NORD Italia S.r.l. (TUV NORD Group)  
Via Turati, 70 20023 Cerro Maggiore (MI)



[www.tuev-nord.it](http://www.tuev-nord.it)

Validity  
from 2022-11-16  
until 2025-11-16

Cerro Maggiore, 2022-11-16  
[prodotto@tuev-nord.it](mailto:prodotto@tuev-nord.it)

Please also pay attention to the information stated overleaf

TNI-QF(IND-SIL-01)-14-Rev00\_01\_03\_2020-Certificate\_Type A

# ANNEX

Annex 1, Page 2 of 2

To Certificate-Nr. 22 23204 02

<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]
Globe valve - No PST	1	2,44E-07	0,00E+00	0,00E+00
Globe valve - With PST	1	2,19E-08	2,22E-07	0,00E+00
Globe valve - No PST	2	3,65E-07	0,00E+00	0,00E+00
Globe valve - With PST	2	1,43E-07	2,22E-07	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>			
<b>Remarks:</b>	<ul style="list-style-type: none"> <li>• 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 SFM-SIL-VG</li> </ul>			

