

# Certificate

**No.: V 454 2014 C2**

<b>Product tested</b>	Ball Valves	<b>Certificate holder</b>	JDV CONTROL VALVES Co., Ltd. No. 6-1, Qingnian Rd. Yangmei City, Taoyuan County 326 Taiwan, R.O.C.
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<b>Type designation</b>	JBFM, JBT, JBTM
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<b>Codes and standards</b>	IEC 61508 Parts 1-7:2010 (in extracts)	IEC 61511 Parts 1-3:2004 (in extracts)
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<b>Intended application</b>	The valves are suitable for a use in a safety instrumented system up to and including SIL2. Under consideration of the minimum required hardware fault tolerance HFT=1 the valves may be used in a redundant structure up to and including SIL3.
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<b>Specific requirements</b>	The Safe Failure Fraction (SFF) was estimated by an alternative approach using a FMEA according to EN161:2011/A3:2013.
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<b>Specific requirements</b>	The instructions of the associated Installation and Operating Manual shall be considered.
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Summary of test results see back side of this certificate.

Valid until 2019-07-17

The issue of this certificate is based upon an examination, whose results are documented in report-no.: V 454 2014 S1 dated 2014-07-16.

This certificate is valid only for products which are identical with the product tested. It becomes invalid at any change of the codes and standards forming the basis of testing for the intended application.

**TÜV Rheinland Industrie Service GmbH**  
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Am Grauen Stein, 51105 Köln  
Certification Body for FS-Products

Köln, 2014-07-17



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