


Certificate of Inspection (Page 1/2)
Certificate No. 17/OR027/OLE.LOGIC_101/2017

Issued June 28th, 2017

<i>Object of Inspection</i>	2/2 POPPET VALVE VD2 SERIES
<i>Applicant</i>	OLEODINAMICA REVA SRL, Via Isacchi, 3-42 124 Reggio Emilia (Italy)
<i>Configuration</i>	2/2 Poppet valve four types of configuration (1, 2, 3 and 4) and four types of pilot flange configuration (A, B, C and D) according to drawing n°AVD2_CONF rev.0 and Datasheet DS-VD2-00 (02-17): AVD2 %%% A (B) % 1 (2) (3) (4) %% AVD2 %%% C (D) % 1 (2) (3) (4) %% % : see coding information in VD2 Datasheet Type "A", (HFT =0)
<i>Inspection Std</i>	IEC 61508:Ed. 2 - 2010 Functional safety of electrical/electronic/programmable electronic safety-related systems
<i>References</i>	IEC 61511: Ed. 2 - 2016 Functional safety – Safety instrumented systems for the process industry sector
<i>Inspection Result</i>	BUREAU VERITAS ITALY states that the 2/2 POPPET VALVE VD2 SERIES four types of configuration (1, 2, 3 and 4) and four types of pilot flange configuration (A, B, C and D), type "A", are confirmed to meet the requirements of IEC 61511 Ed. 1:2016 for use in low demand application on a SIF requiring up to SIL 3 as a single device (HFT = 0), a systematic capability of SIL 3, and up to SIL 3 overall, where the Safety Manual constraints are respected. "Proven use" approach is applied according to Route 1H. Route 1S applies. IEC 61511 Ed. 2: 2016, Part 1, §11.4.3 clause (2 nd bullet) is also respected.
<i>Restrictions/ Conditions</i>	As per Safety Manual SFM-VD2 Safety Manual and Report code: OLE.LOGIC/OR27/17 AS01 V.1.0 - SAR Safety Analysis Report
<i>Inspection Report</i>	This statement has been performed by the evaluation of the specific documents as reported into the Report code: OLE.LOGIC/OR27/17 AS01 V.1.0 - SAR Safety Analysis Report, issued by Bureau Veritas Italia S.p.A. The reports issued by Bureau Veritas Italia S.p.A. are an integral part of this Inspection Certificate. This certificate is valid for 2/2 POPPET VALVE VD2 SERIES four types of configuration (1, 2, 3 and 4) and four types of pilot flange configuration (A, B, C and D) by OLEODINAMICA REVA SRL. The design, ratings and operational parameters are described in the Report code: OLE.LOGIC/OR27/17 AS01 V.1.0 - SAR Safety Analysis Report, issued by Bureau Veritas Italia S.p.A.
<i>Date of issue</i>	June 28th, 2017
<i>Expiring date (5 years)</i>	June 27th, 2022
<i>Signature</i>	
<i>Name:</i> Tommaso Ghiara	<i>Title:</i> General Manager

On behalf of: Bureau Veritas Italia, Via Paolo Imperiale 4 - 16126 Genova – Italia (I)



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LOGIC VALVES MODEL CODE	λ_t	λ_d	λ_{du}	λ_s	SFF (%)	SIL Arch. Constraints HFT=0	SIL (Systematic capability)	SIL
AVD2%%C (D)%2%	3,73E-06	3,39E-07	0.0	3,39E-06	90,9%	3	3	3
AVD2%%C (D)%4%	4,10E-06	3,43E-07	0.0	3,75E-06	91,6%	3	3	3
AVD2%%A (B)%1%	2,27E-06	1,08E-08	0.0	2,26E-06	99,5%	3	3	3
AVD2%%A (B)%2%	2,28E-06	1,48E-08	0.0	2,26E-06	99,4%	3	3	3
AVD2%%A (B)%3%	2,27E-06	1,08E-08	0.0	2,26E-06	99,5%	3	3	3
AVD2%%A (B)%4%	2,64E-06	1,88E-08	0.0	2,63E-06	99,3%	3	3	3
AVD2%%C (D)%3%	3,73E-06	3,35E-07	0.0	3,39E-06	91,0%	3	3	3
AVD2%%C (D)%1%	3,73E-06	3,35E-07	0.0	3,39E-06	91,0%	3	3	3

Table A – 2/2 Poppet Valves Safety function failure rates, SFF, SIL

As per these values, the aforementioned equipment, as a single device, can be used for SIL metrics calculations in the whole Safety Functions up to SIL 3 Safety Functions, as constrained as per clauses reported in Report Code: "OLE.LOGIC/OR27/17 AS01 V.1.0 - SAR Safety Analysis Report" and in Safety Manual "SFM-VD2 Safety Manual.

Should any violation occur of either all or part of requirements reported into the Report Code: "OLE.LOGIC/OR27/17 AS01 V.1.0 - SAR Safety Analysis Report", statements in Table A are no longer valid.



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