ISO 15848-1:2015
Methane Fugitive Emission Test Report

Performed for

Guide Valve Limited

www.gvs-vci.com

10 inch ANSI Class 900
Soft-Seated Trunnion Mounted Ball Valve
Product Code: GVS 10” GB1 ANSI 900

Project Number: 219322
Test Start Date: July 22, 2019

Performed by

YARMOUTH RESEARCH AND TECHNOLOGY, LLC

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Fugitive Emission Test Data Sheet

Customer:	Guide Valve Limited	**Date:**	7/22/2019
Project #:	219322		
Product Description:	10 inch Class 900 soft seated trunnion mounted ball valve		
Product Code:	GVS 10" GB1 ANSI 900		
Packing Description:	PTFE-lgiloy lip seals + FKM O-ring + Graphite		
Sample Supplied by:	Customer		
Stem Diameter:	75 mm		
Packing Nut Torque:	NA		

Test Conditions

Test Standard:	ISO/FDIS 15848-1:2015	**Test Stand:**	Yarmouth Stand 1
Tightness Class:	AM	**Allowable:**	50 PPMv
Test Media:	Methane		
Endurance Class:	CO3 2500 Mechanical Cycles		
Temperature Class:	200C 4 Thermal Cycles		
Pressure Class:	ANSI 900	**Rating:**	2220 psig @ambient 1900 psig @high temp
Testing Method:	Suck Through Method		
Mounting Position:	Stem and Bore Horizontal		
Max. Allowable Bonnet Gasket Leakage:	50 PPMv by sniffing method		
Leakage Device:	Baseline		
Cycling Rate:	1 cycle per 30 seconds		

Test Data Summary - Stem Seal

Cycle Number	*Nom.Temp (C)*	*Static Stem Seal Leakage (PPMv)*		*Packing Retorque See Notes*
		Avg.	*Max.*	
0	20	1	1	
50	20	0	0	
50	200	3	5	
100	200	1	1	
100	20	0	1	
150	20	0	1	
150	200	1	2	
200	200	0	1	
205	20	1	1	
1,000	20	0	1	
1,000	200	1	2	
1,500	200	0	0	
1,500	20	3	3	
2,000	20	0	0	
2,000	200	0	0	
2,500	200	1	1	
2,500	20	0	0	
Maximum Leakage:		**3**	**5**	
Maximum Allowable:		**50**	**50**	

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Test Data Summary - Bonnet Seal

Cycle Number	*Nom.Temp (C)*	*Leakage - PPMv*	
		Avg.	*Max.*
0	20	1	1
205	20	1	2
1,500	20	0	0
2,500	20	2	4
Maximum Leakage:		**2**	**4**
Maximum Allowable:		**50**	**50**

Test Data Summary - Body Seal A

Cycle Number	*Nom.Temp (C)*	*Leakage - PPMv*	
		Avg.	*Max.*
0	20	0	1
205	20	1	2
1,500	20	0	1
2,500	20	2	2
Maximum Leakage:		**2**	**2**
Maximum Allowable:		**50**	**50**

Test Data Summary - Body Seal B

Cycle Number	*Nom.Temp (C)*	*Leakage - PPMv*	
		Avg.	*Max.*
0	20	1	2
205	20	1	2
1,500	20	1	1
2,500	20	1	2
Maximum Leakage:		**1**	**2**
Maximum Allowable:		**50**	**50**

Test Data Summary - Operating Actuator Pressure

Cycle Number	*Nom. Temp (C)*	*Operating Actuator Pressure (psig)*
0	20	15
2,500	20	15

Performance Class:

ISO FE AM - CO3 - SSA 0 - t200C - ANSI 900 - ISO 15848-1

Results

The valve met the requirements of the performance class stated above.

Certified By

Matthew J. Wasielewski, PE
President and Manager
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