

ISO 15848-1:2015-06 (E)

Industrial valves - Measurement, test and qualification procedures for fugitive emissions - Part 1: Classification system and qualification procedures for type testing of valves

Contents		Page
Foreword		iv
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and abbreviations	3
5	Type test	4
5.1	Test conditions	4
5.1.1	Preparation of a valve to be tested	4
5.1.2	Test fluid	4
5.1.3	Test temperature	4
5.1.4	Measurement of test valve temperature	4
5.1.5	Leakage measurement	7
5.2	Test procedures	8
5.2.1	Safety rules	8
5.2.2	Test equipment	8
5.2.3	Stem (or shaft) seal adjustment (SSA)	8
5.2.4	Test description	9
6	Performance classes	11
6.1	Classification criteria	11
6.2	Tightness classes	11
6.2.1	Definition	11
6.2.2	Helium as test fluid	12
6.2.3	Methane as test fluid	12
6.2.4	Correlations	12
6.3	Endurance classes	12
6.3.1	Mechanical-cycle classes for isolating valves	12
6.3.2	Mechanical-cycle classes for control valves	14
6.4	Temperature classes	15
6.5	Examples of class designation	16
6.6	Marking	16
7	Reporting	16
8	Extension of qualification to untested valves	17
Annex A (normative)	Total leak rate measurement	19
Annex B (normative)	Leak measurement using the sniffing method	32
Annex C (informative)	Leak rate conversion (helium)	41

Bibliography 43