

ISO 5167-6:2019 (E)

Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 6: Wedge meters

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principles of the method of measurement and computation
5	Wedge meters
5.1	Field of application
5.2	General shape
5.3	Material and manufacture
5.4	Pressure tapings
5.5	Discharge coefficient, C
5.5.1	Limits of use
5.5.2	Discharge coefficient of the wedge meter
5.6	Expansibility [expansion] factor, ϵ
5.7	Uncertainty of the discharge coefficient, C
5.8	Uncertainty of the expansibility [expansion] factor, ϵ
5.9	Pressure loss
6	Installation requirements
6.1	General
6.2	Minimum upstream and downstream straight lengths for installations between various fittings and the wedge meter
6.3	Additional specific installation requirements for wedge meters
6.3.1	Circularity and cylindricality of pipes upstream and downstream of the wedge meter
6.3.2	Roughness of the upstream and downstream pipe
6.3.3	Positioning of a thermowell
6.3.4	Bidirectional wedge meters
7	Flow calibration of wedge meters
7.1	General
7.2	Test facility
7.3	Meter installation
7.4	Design of the test programme
7.5	Reporting the calibration results
7.6	Uncertainty analysis of the calibration
7.6.1	General
7.6.2	Uncertainty of the test facility
7.6.3	Uncertainty of the wedge meter
Annex A	(informative) Table of expansibility [expansion] factor
Annex B	(informative) Use of K_{d2} parameter