

ISO 5167-4:2003-03 (E)

Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full - Part 4: Venturi tubes

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	2
3	Terms and definitions	2
4	Principles of the method of measurement and computation	2
5	Classical Venturi tubes	3
5.1	Field of application	3
5.2	General shape	3
5.3	Material and manufacture	7
5.4	Pressure tappings	7
5.5	Discharge coefficient, C	8
5.6	Expansibility [expansion] factor,	9
5.7	Uncertainty of the discharge coefficient C	10
5.8	Uncertainty of the expansibility [expansion] factor	10
5.9	Pressure loss	10
6	Installation requirements	11
6.1	General	11
6.2	Minimum upstream and downstream straight lengths for installation between various fittings and the Venturi tube	11
6.3	Flow conditioners	15
6.4	Additional specific installation requirements for classical Venturi tubes	15
	Annex A (informative) Table of expansibility [expansion] factor	17
	Annex C (informative) Pressure loss in a classical Venturi tube	22
	Bibliography	24