

DIN EN 1751:2014-06 (E)

Ventilation for buildings - Air terminal devices - Aerodynamic testing of damper and valves

Contents		Page
Foreword		3
1	Scope	4
2	Normative references	4
3	Terms, definitions, symbols and suffixes	5
3.1	Terms and definitions	5
3.2	Symbols	5
3.3	Suffixes	6
4	Instrumentation	6
4.1	Air flow rate measurement	6
4.2	Pressure measurement	7
4.3	Temperature measurement	7
5	Leakage tests	7
5.1	General	7
5.2	Damper and valve leakage	7
5.3	Casing leakage	8
6	Flow rate and pressure tests	8
6.1	Ducted method	8
6.2	Chamber method	10
6.2.1	General	10
6.2.2	Size relationship	10
6.2.3	Tests	10
6.3	Test report	10
Annex A (informative)	Mechanical testing of dampers and valves	17
A.1	Scope	17
A.2	Instrumentation: Torque measurement	17
A.3	Pressure test to determine limiting value for structural stability	17
A.4	Torque tests to determine the torque required to operate the damper or valve and the limiting value to avoid structural damage	18
Annex B (informative)	Thermal transmittance through dampers and valves	20
B.1	Introduction	20
B.2	Scope	20
B.3	Thermal loss test using a substitution method	20
Annex C (normative)	Classification of a damper or valve leakage	23
C.1	Scope	23
C.2	Leakage through closed blade(s)	23
C.3	Casing leakage	23
Annex D (informative)	Effect of Duct Configuration on Pressure Loss Coefficient	26

D.1	General	26
D.2	Application of correction factor	28
	Bibliography	29