

ISO 15086-2:2000-02 (E)

Hydraulic fluid power - Determination of fluid-borne noise characteristics of components and systems - Part 2: Measurement of speed of sound in a fluid in a pipe

Contents		Page
Foreword		iv
Introduction		v
1 Scope		1
2 Normative references		1
3 Terms and definitions		1
4 Symbols and subscripts		2
5 Instrumentation		3
6 Hydraulic noise generator		4
7 Test conditions		5
8 Test rig		5
9 Test procedure for Method 1		9
10 Test procedure for Method 2		10
11 Test report		11
Annex A (normative) Errors and classes of measurement of mean value		13
Annex B (normative) Errors and classes of dynamic measurement		14
Annex C (normative) Data reduction algorithms		15
Annex D (informative) Example of speed of sound calculation in MATLAB® language using three pressure transducers in a pipe (Method 1)		21
Annex E (informative) Example of speed of sound calculation in MATLAB® language using two pressure transducers in a closed-end pipe (Method 2)		25
Bibliography		27