

# ISO 6358-2:2013-05 (E)

## Pneumatic fluid power - Determination of flow-rate characteristics of components using compressible fluids - Part 2: Alternative test methods

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>2</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>2</b>
<b>4</b>	<b>Symbols and units .....</b>	<b>2</b>
<b>5</b>	<b>Test installation .....</b>	<b>2</b>
<b>5.1</b>	<b>Test circuit for discharge test .....</b>	<b>3</b>
<b>5.2</b>	<b>Test circuit for charge test .....</b>	<b>3</b>
<b>5.3</b>	<b>General requirements .....</b>	<b>4</b>
<b>5.4</b>	<b>Requirements for the tank (item 4) .....</b>	<b>5</b>
<b>5.5</b>	<b>Special requirements .....</b>	<b>7</b>
<b>6</b>	<b>Test procedures .....</b>	<b>8</b>
<b>6.1</b>	<b>Test conditions .....</b>	<b>8</b>
<b>6.2</b>	<b>Measuring procedures .....</b>	<b>9</b>
<b>6.3</b>	<b>Calculation of characteristics .....</b>	<b>12</b>
<b>7</b>	<b>Presentation of test results .....</b>	<b>16</b>
	<b>Annex A (informative) Evaluation of measurement uncertainty .....</b>	<b>18</b>
	<b>Annex B (normative) Test method to determine and calibrate the volume of an isothermal tank.24</b>	
	<b>Annex C (informative) Isothermal tank stuffing .....</b>	<b>30</b>
	<b>Annex D (informative) Test method to determine isothermal performance .....</b>	<b>33</b>
	<b>Annex E (informative) Equations for calculation of flow-rate characteristics .....</b>	<b>36</b>
	<b>Annex F (informative) Procedures for calculating critical back-pressure ratio, b, and subsonic index, m, by the least-square method using the Solver function in Microsoft Excel .....</b>	<b>39</b>
	<b>Bibliography .....</b>	<b>43</b>