

# ISO 18752:2006-07 (E)

## Rubber hoses and hose assemblies - Wire- or textile-reinforced single-pressure types for hydraulic applications - Specification

---

| <b>Contents</b>                                                |                                                        | <b>Page</b> |
|----------------------------------------------------------------|--------------------------------------------------------|-------------|
| Foreword .....                                                 |                                                        | iv          |
| <b>1</b>                                                       | <b>Scope .....</b>                                     | <b>1</b>    |
| <b>2</b>                                                       | <b>Normative references .....</b>                      | <b>1</b>    |
| <b>3</b>                                                       | <b>Terms and definitions .....</b>                     | <b>2</b>    |
| <b>4</b>                                                       | <b>Classification .....</b>                            | <b>2</b>    |
| <b>4.1</b>                                                     | <b>Classes .....</b>                                   | <b>2</b>    |
| <b>4.2</b>                                                     | <b>Grades and types .....</b>                          | <b>3</b>    |
| <b>5</b>                                                       | <b>Materials and construction .....</b>                | <b>4</b>    |
| <b>5.1</b>                                                     | <b>Hoses .....</b>                                     | <b>4</b>    |
| <b>5.2</b>                                                     | <b>Hose assemblies .....</b>                           | <b>4</b>    |
| <b>6</b>                                                       | <b>Dimensions and tolerances .....</b>                 | <b>4</b>    |
| <b>6.1</b>                                                     | <b>Diameters .....</b>                                 | <b>4</b>    |
| <b>6.2</b>                                                     | <b>Cover thickness .....</b>                           | <b>6</b>    |
| <b>6.3</b>                                                     | <b>Concentricity .....</b>                             | <b>6</b>    |
| <b>7</b>                                                       | <b>Physical properties .....</b>                       | <b>7</b>    |
| <b>7.1</b>                                                     | <b>Fluid resistance of rubber compounds .....</b>      | <b>7</b>    |
| <b>7.1.1</b>                                                   | <b>Test pieces .....</b>                               | <b>7</b>    |
| <b>7.1.2</b>                                                   | <b>Oil resistance .....</b>                            | <b>7</b>    |
| <b>7.2</b>                                                     | <b>Performance requirements .....</b>                  | <b>7</b>    |
| <b>7.2.1</b>                                                   | <b>Hydrostatic requirements .....</b>                  | <b>7</b>    |
| <b>7.2.2</b>                                                   | <b>Change in length .....</b>                          | <b>7</b>    |
| <b>7.2.3</b>                                                   | <b>Minimum bend radius .....</b>                       | <b>7</b>    |
| <b>7.2.4</b>                                                   | <b>Resistance to impulse .....</b>                     | <b>9</b>    |
| <b>7.2.5</b>                                                   | <b>Leakage of hose assemblies .....</b>                | <b>9</b>    |
| <b>7.2.6</b>                                                   | <b>Cold flexibility .....</b>                          | <b>9</b>    |
| <b>7.2.7</b>                                                   | <b>Adhesion between components .....</b>               | <b>9</b>    |
| <b>7.2.8</b>                                                   | <b>Vacuum resistance .....</b>                         | <b>9</b>    |
| <b>7.2.9</b>                                                   | <b>Abrasion resistance .....</b>                       | <b>10</b>   |
| <b>7.2.10</b>                                                  | <b>Ozone resistance .....</b>                          | <b>10</b>   |
| <b>8</b>                                                       | <b>Frequency of testing .....</b>                      | <b>10</b>   |
| <b>9</b>                                                       | <b>Marking .....</b>                                   | <b>10</b>   |
| <b>9.1</b>                                                     | <b>Hoses .....</b>                                     | <b>10</b>   |
| <b>9.2</b>                                                     | <b>Hose assemblies .....</b>                           | <b>11</b>   |
| <b>10</b>                                                      | <b>Recommendations for packaging and storage .....</b> | <b>11</b>   |
| <b>11</b>                                                      | <b>Test report .....</b>                               | <b>11</b>   |
| <b>Annex A (normative) Type tests and routine tests .....</b>  |                                                        | <b>12</b>   |
| <b>Annex B (informative) Production acceptance tests .....</b> |                                                        | <b>13</b>   |

|                                                                                                                               |           |
|-------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Annex C (informative) Recommendations for lengths of supplied hoses and tolerances on lengths of hose assemblies .....</b> | <b>14</b> |
| <b>Annex D (informative) Information to be provided by hose manufacturer .....</b>                                            | <b>15</b> |
| <b>Bibliography .....</b>                                                                                                     | <b>16</b> |