

**BUREAU OF INDIAN STANDARDS**

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*Draft Indian Standard*

**WIRE REINFORCED RUBBER COVERED HYDRAULIC HOSE — SPECIFICATION**  
*(Fourth Revision of IS 7651)*

(ICS 23.100.40; 83.140.40)

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Rubber and Rubber Products Sectional Committee,  
PCD 13

Last date for comment  
09 April 2024

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**NATIONAL FOREWORD**  
*(Formal clauses will be added later)*

This standard was first published in 1975 and subsequently revised in 1979, 1997 and 2021.

The fourth revision has been undertaken to align it with the latest version of ISO 1436 : 2020 in dual numbering system to make pace with latest developments that have taken place at international level.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions and terminologies are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

| <i>International Standard</i> | <i>Corresponding<br/>Standard</i> | <i>Indian</i> | <i>Degree of Equivalence</i> |
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| ISO 1402, Rubber and plastics hoses and hose assemblies — Hydrostatic testing  | IS 443 (Part 3) : 2023 / ISO 1402 : 2021 Methods of Test for Rubber and Plastics — Tubing, Hoses and Hose Assemblies Part 3 Rubber and Plastics Hoses and Hose Assemblies — Hydrostatic Testing ( <i>fourth revision</i> )                                       | Identical |
| ISO 1817, Rubber, vulcanized or thermoplastic — Determination of the effect of liquids   | IS 3400 (Part 6) : 2018/ ISO 1817 : 2015 Methods of Test for Vulcanized Rubbers Part 6 Determination of the Effect of Liquids ( <i>fourth revision</i> )   | Identical |
| ISO 4671, Rubber and plastics hoses and hose assemblies — Methods of measurement of the dimensions of hoses and the lengths of hose assemblies | IS 443 (Part 8) : 2023 / ISO 4671 : 2022 Methods of Test for Rubber and Plastics — Tubing, Hoses and Hose Assemblies Part 8 Rubber and Plastics Hoses and Hose Assemblies — Methods of Measurement of the Dimensions of Hoses and the Lengths of Hose Assemblies | Identical |
| ISO 6605, Hydraulic fluid power — Test methods for hoses and hose assemblies   | IS 17159 : 2019 ISO 6605 : 2017 Hydraulic Fluid Power — Hoses and Hose Assemblies — Test Methods   | Identical |
| ISO 6743-4, Lubricants, industrial oils and related products (class L) — Classification — Part 4: Family H (Hydraulic systems)                 | IS 11159 (Part 5) : 2019 ISO 6743-4 : 2015 Lubricants, Industrial Oils and Related Products (Class L) — Classification Part 5 Family H (Hydraulic Systems) ( <i>first revision</i> )   | Identical |
| ISO 6803, Rubber or plastics hoses and hose assemblies — Hydraulic-pressure impulse test without flexing                                       | IS 443 (Part 6) : 2022 ISO 6803 : 2017 Methods of Test for Rubber and Plastics — Tubing, Hoses and Hose Assemblies Part 6 Rubber and Plastics Hoses and Hose Assemblies — Hydraulic Pressure Impulse Test Without Flexing ( <i>first revision</i> )              | Identical |
| ISO 7233, Rubber and plastics hoses and hose assemblies —  | IS 443 (Part 9) : 2023 ISO 7233 : 2021 Methods of Test for   | Identical |

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| Determination of resistance to vacuum  | Rubber and Plastics — Tubing, Hoses and Hose Assemblies Part 9 Rubber and Plastics Hoses and Hose Assemblies — Determination of Resistance to Vacuum   |           |
| ISO 7326, Rubber and plastics hoses — Assessment of ozone resistance under static conditions   | IS 443 (Part 1) : 2022 / ISO 7326 : 2016 Methods of Test for Rubber and Plastics Tubing, Hoses and Hose Assemblies Part 1 Rubber and Plastics Hoses Assessment of Ozone Resistance under Static Conditions ( <i>fourth revision</i> )                        | Identical |
| ISO 8033, Rubber and plastics hoses — Determination of adhesion between components   | IS 3400 (Part 24) : 2012 / ISO 8033 : 2016 Methods of test for vulcanized rubber : Part 24 Rubber and plastics hose — Determination of adhesion between components ( <i>first revision</i> )   | Identical |
| ISO 8330, Rubber and plastics hoses and hose assemblies — Vocabulary   | IS 16204 : 2014/ ISO 8330 : 2022 Rubber and plastics hoses and hose assemblies — Vocabulary  | Identical |
| ISO 10619-1, Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 1: Bending tests at ambient temperature      | IS 443 (Part 10) : 2023 / ISO 10619-1 : 2017 Methods of Test for Rubber and Plastics — Tubing, Hoses and Hose Assemblies Part 10 Rubber and Plastics Hoses and Tubing — Measurement of Flexibility and Stiffness — Bending Tests at Ambient Temperature      | Identical |
| ISO 10619-2, Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 2: Bending tests at sub-ambient temperatures | IS 443 (Part 11) : 2023 / ISO 10619-2 : 2021 Methods of Test for Rubber and Plastics — Tubing, Hoses and Hose Assemblies Part 11 Rubber and Plastics Hoses and Tubing — Measurement of Flexibility and Stiffness — Bending Tests at Sub-Ambient Temperatures | Identical |

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*).' The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

**NOTE** — The technical content of the document is not available on website. For details, please refer the corresponding ISO 1436:2020 or kindly contact:

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