

BUREAU OF INDIAN STANDARDS

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Draft Indian Standard

**RUBBER SEALS — JOINT RINGS FOR WATER SUPPLY, DRAINAGE AND
SEWERAGE PIPELINES — SPECIFICATION FOR MATERIALS**
(*Third Revision of IS 5382*)

(ICS 83.140.50; 91.140.60; 91.140.80)

Rubber and Rubber Products Sectional Committee,
PCD 13

Last date for comment
09 April 2024

NATIONAL FOREWORD

(Formal clauses will be added later)

This standard was originally published in 1969 and subsequently revised in 1985 and 2018.

The third revision has been undertaken to align it with the latest version of ISO 4633 : 2023 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:

International Standard	Corresponding Indian Standard	Degree of Equivalence
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ISO 37, Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties	IS 3400 (Part 1) : 2021/ ISO 37 : 2017 Methods of test for vulcanized rubber : Part 1 Determination of tensile stress-strain properties (fourth revision)	Identical
ISO 48-2, Rubber, vulcanized or thermoplastic — Determination of hardness — Part 2: Hardness between 10 IRHD and 100 IRHD	IS 3400 (Part 2/Sec 2) : 2023 / ISO 48-2 : 2018 Methods of Test for Rubber, Vulcanized or Thermoplastic Part 2 Determination of Hardness Section 2 Hardness Between 10 IRHD and 100 IRHD (<i>fifth revision</i>)	Identical
ISO 188, Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests	IS 3400 (Part 4) : 2012 /ISO 188 : 2011 Methods of test for vulcanized rubber : Part 4 Accelerated ageing and heat resistance (third revision)	Identical
ISO 815-1, Rubber, vulcanized or thermoplastic — Determination of compression set — Part 1: At ambient or elevated temperatures	IS 3400 (Part 10/Sec 1) : 2022/ ISO 815-1 : 2019 Methods of Test for Rubber, Vulcanized or Thermoplastic Part 10 Compression Set Section 1 at Ambient or Elevated Temperatures (<i>third revision</i>)	Identical
ISO 815-2, Rubber, vulcanized or thermoplastic — Determination of compression set — Part 2: At low temperatures	IS 3400 (Part 10/Sec 2) : 2022 / ISO 815-2 : 2019 Methods of Test for Rubber, Vulcanized or Thermoplastic Part 10 Compression Set Section 2 At low temperatures (<i>third revision</i>)	Identical
ISO 1431-1, Rubber, vulcanized or thermoplastic — Resistance to ozone cracking — Part 1: Static and dynamic strain testing	IS 3400 (Part 20) : 2018/ ISO 1431-1 : 2012 Methods of Test for Vulcanized Rubbers Part 20 Resistance to Ozone Cracking — Static Strain Test (<i>second 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 3302-1, Rubber — Tolerances for products — Part 1: Dimensional tolerances	IS 16752 : 2018 / ISO 3302-1 : 2014 Rubber — Tolerances for Products — Dimensional Tolerances	Identical
ISO 3384-1, Rubber, vulcanized or thermoplastic — Determination of stress relaxation in compression — Part 1: Testing at constant temperature	IS 3400 (Part 28) : 2022 / ISO 3384-1 : 2019 Methods of Test For Rubber, Vulcanized or Thermoplastic Part 28 Determination of Stress Relaxation in Compression — Testing at Constant Temperature (<i>first revision</i>)	Identical
ISO 9691:1992, Rubber — Recommendations for the workmanship of pipe joint rings — Description and classification of imperfections	IS 16751 : 2018 / ISO 9691 : 1992 Rubber — Recommendations for the Workmanship of Pipe Joint Rings — Description and Classification of Imperfections	Identical
ISO 23529, Rubber — General procedures for preparing and conditioning test pieces for physical test methods	IS 13867 : 2021/ ISO 23529 : 2016 Rubber — General Procedures for Preparing and Conditioning Test Pieces for Physical Test Methods (<i>first revision</i>)	Identical

The technical committee has reviewed the provisions of the following Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with this standard:

<i>Standard</i>	<i>Title</i>
ISO 3387	Rubber — Determination of crystallization effects by hardness measurements
ISO 11346	Rubber, vulcanized or thermoplastic — Estimation of life-time and maximum temperature of use

This standard also makes a reference to the Packing and BIS Certification Marking of the product. Details of which are given in National Annex A.

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 4633:2023 or kindly contact:

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National Annex A
(*National Foreword*)

A-1 PACKING

The product shall be packed as agreed to between the purchaser and the supplier.

A-2 BIS CERTIFICATION MARKING

A-2.1 The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.