Doc No. : LITD 33 (24136) Draft IS/ IEC 63203-401-1:2023 February 2024

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

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मसौदा भारतीय मानक

पहनने योग्य विद्युत उपकरण एवं प्रौद्योगिकियां – भाग **401:** उपकरण एवं पद्धति : कार्यात्मक तत्व – अनुभाग 1: स्ट्रेचएबल रेजिस्टिव स्ट्रेन सेंसर की मूल्यांकन विधि

Draft Indian Standard

Wearable electronic devices and technologies – Part 401: Devices and systems: functional elements – Section 1: Evaluation method of the stretchable resistive strain sensor

ICS 31.020

LITD 33-Wearable Electronic Devices and	Last date for comments: 9 March 2024
Technologies Sectional Committee	

NATIONAL FOREWORD

(Formal clauses to be added later)

This Draft Indian Standard Part 401/Sec 1 which is identical with IEC 63203-401-1:2023 Wearable electronic devices and technologies –Part 401-1: Devices and systems: functional elements – Evaluation method of the stretchable resistive strain sensor' issue by the Electrotechnical Commission (IEC) will be adopted by the Bureau of Indian Standards on the recommendation of Wearable Electronic Devices and Technologies Sectional Committee LITD 33 and approval of the Electronics and Information Technology Division Council.

The text of IEC Standard may be approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appears 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 places, are listed below along with their degree of equivalence for editions indicated. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International Standard	Title
IEC 62899-202-4:2021	Printed electronics – Part 202-4: Materials – Conductive ink – Measurement methods for properties of stretchable printed layers (conductive and insulating)
ISO 291:2008	Plastics – Standard atmospheres for conditioning and testing
ISO/TS 12901-2:2014	Nanotechnologies – Occupational risk management applied to engineered nanomaterials – Part 2: Use of the control banding approach

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 same as that of the specified value in this standard

SCOPE of IEC 63203-401-1:2023

This part of IEC 63203-401 specifies a measurement method of tensile strain for stretchable, resistive strain sensors. This document describes characterization procedures for evaluation of the gauge factor, linearity, response characteristics, and hysteresis of unimodal tension sensors but is not appropriate for assessment of the physical properties of the sensor material such as the elastic modulus, elastic limit, and Poisson's ratio.

Note: The Technical content of this document has not been enclosed as these are identical with the

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corresponding IEC Standard. For details please refer IEC 63203-401-1:2023 or kindly contact.

Head,

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