BS ISO 20054:2022

BSI Standards Publication

Plain bearings — Bearings containing dispersed solid lubricants

Documents
Document Sharing Hub

Full document details: BS ISO 20054:2022

National foreword

This British Standard is the UK implementation of ISO 20054:2022. It supersedes BS ISO 20054:2016, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/12, Plain bearings.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

© The British Standards Institution 2022
Published by BSI Standards Limited 2022

ISBN 978 0 539 20848 1

ICS 21.100.10

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 August 2022.

Amendments/corrigenda issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: BS ISO 20054:2022

INTERNATIONAL STANDARD

ISO 20054

Second edition
2022-06-24

Plain bearings — Bearings containing dispersed solid lubricants

Paliers lisses — Paliers contenant des lubrifiants solides dispersés

Reference number
ISO 20054:2022(E)

Documents
Document Sharing Hub

© ISO 2022

Full document details: BS ISO 20054:2022

COPYRIGHT PROTECTED DOCUMENT

© ISO 2022, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

© ISO 2022 – All rights reserved

Documents
Document Sharing Hub

Full document details: BS ISO 20054:2022

Contents

Page

Foreword ... **iv**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Symbols and units ... **1**

5 Characteristics ... **1**
5.1 Structure ... 1
5.2 Lubricating mechanism ... 3
5.3 Applicable field ... 4

6 Material ... **4**
6.1 Metal matrix ... 4
6.2 Solid lubricant ... 4
6.3 Combination of metal matrix and solid lubricant ... 5

7 Dimension ... **5**
7.1 General ... 5
7.2 General dimension ... 6
7.2.1 Seamless bush ... 6
7.2.2 Wrapped bush ... 7
7.3 Tolerance classes and limit deviations ... 7
7.3.1 General ... 7
7.3.2 Bearing fit ... 7
7.3.3 Bearing clearance ... 7

8 Assembling ... **8**

9 Surface finish ... **8**

Annex A (informative) **Guidance for selection of a bearing metal matrix for bearings containing dispersed solid lubricants** ... **9**

Annex B (informative) **Actual applications of a bearing containing dispersed solid lubricants** ... **10**

Bibliography ... **11**

© ISO 2022 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 20054:2022

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 123, *Plain bearings*, Subcommittee SC 7, *Special types of plain bearings*.

This second edition cancels and replaces the first edition (ISO 20054:2016), of which it constitutes a minor revision.

The main changes are as follows:

— the titles of 5.2, 7.3.2 and 7.3.3 have been changed to more suitable ones;

— changes in the description in 7.1 have been made due to the above changes.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

© ISO 2022 – All rights reserved
Documents
Document Sharing Hub
Full document details: BS ISO 20054:2022