
Gauging of hexagon sockets

Calibrage des six pans creux

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 23429:2004

<https://standards.iteh.ai/catalog/standards/sist/a6a60be4-d02a-4a8a-9f98-37b9dbcc7748/iso-23429-2004>



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 23429:2004

<https://standards.iteh.ai/catalog/standards/sist/a6a60be4-d02a-4a8a-9f98-37b9dbcc7748/iso-23429-2004>

© ISO 2004

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 23429 was prepared by Technical Committee ISO/TC 2, *Fasteners*.

iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO 23429:2004

<https://standards.iteh.ai/catalog/standards/sist/a6a60be4-d02a-4a8a-9f98-37b9dbcc7748/iso-23429-2004>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 23429:2004

<https://standards.iteh.ai/catalog/standards/sist/a6a60be4-d02a-4a8a-9f98-37b9dbcc7748/iso-23429-2004>

Gauging of hexagon sockets

1 Scope

This International Standard specifies gauges for hexagon sockets with tolerances as specified in ISO 4759-1.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4759-1, *Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A, B and C*

3 Dimensions

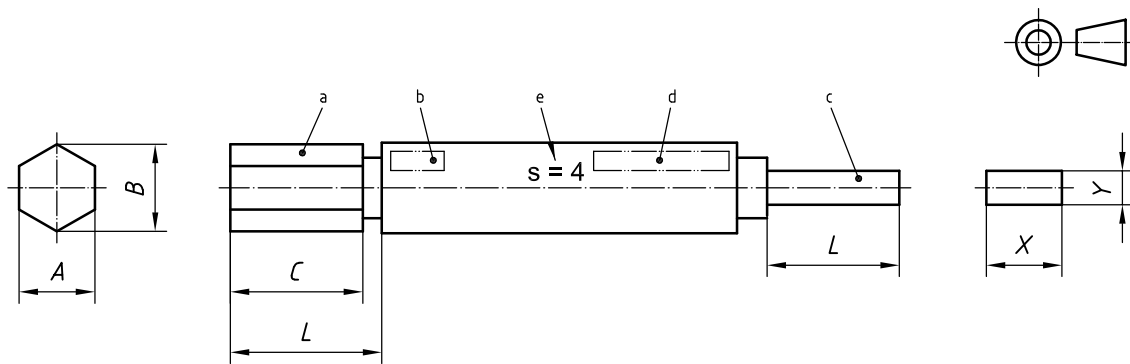
For gauge dimensions see Figure 1 and Table 2.

For design rules for gauge dimensions see Table 1.

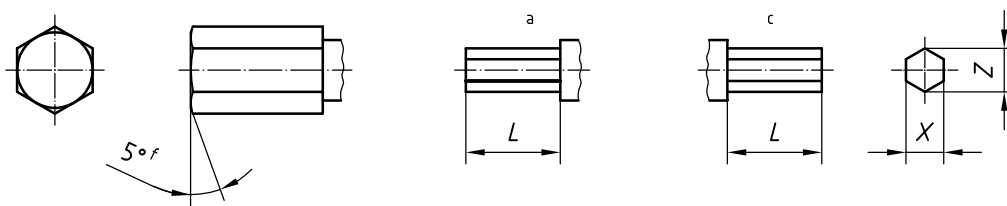
4 Designation

EXAMPLE A gauge for a hexagon socket with a width across flats of 10 mm is designated as follows:

Gauge ISO 23429 - 10



a) Regular construction



b) Optional constructions of GO members and NOT GO members for small sizes

- a GO member.
- b Panel for marking GO.
- c NOT GO member.
- d Panel for marking NOT GO.
- e Socket size (width across flats).
- f 5° chamfer optional.

ITC STANDARD PREVIEW
(standards.iteh.ai)

ISO 23429:2004
<https://standards.iteh.ai/catalog/standards/sist/a6a60be4-d02a-4a8a-9f98-37b9dbcc7748/iso-23429-2004>

Figure 1 — Gauge dimensions

Table 1 — Design rules for gauge dimensions

Dimensions in millimetres

Gauge type	Dimensions
GO gauge for dimension s^a	$A_{max} = s_{min} - 0,001$ $A_{min} = A_{max} - 0,003 (s \leq 2)$ $A_{min} = A_{max} - 0,005 (s > 2)$
GO gauge for dimension e^b	$B_{max} = e_{min} - 0,005$ $B_{min} = B_{max} - 0,005$
NOT GO gauge for dimension s	$X_{min} = s_{max} + 0,001$ $X_{max} = X_{min} + 0,002 (s \leq 2)$ $X_{max} = X_{min} + 0,005 (s > 2)$
a Width across flats of socket. b Width across corners of socket.	

Table 2 — Gauge dimensions

Dimensions in millimetres

Nominal socket size, <i>s</i>		0,7	0,9	1,3	1,5	2	2,5	3	4	5	6	8	
GO gauge: Width across flat	<i>A</i>	max.	0,709	0,886	1,274	1,519	2,019	2,519	3,019	4,019	5,019	6,019	8,024
		min.	0,706	0,883	1,271	1,516	2,016	2,514	3,014	4,014	5,014	6,014	8,019
GO gauge: Width across corners	<i>B</i>	max.	0,804	1,006	1,449	1,728	2,298	2,868	3,438	4,578	5,718	6,858	9,144
		min.	0,799	1,001	1,444	1,723	2,293	2,863	3,433	4,573	5,713	6,853	9,139
GO gauge: Length	<i>C</i>	min.	1,5	2,4	4,7	5	5	7	7	7	8	8	
Usable gauge length	<i>L</i>	min.	1,5	2,4	4,7	5	5	7	7	7	12	16	
NOT GO gauge: Width across flats	<i>X</i>	max.	0,727	0,916	1,303	1,583	2,083	2,586	3,086	4,101	5,146	6,146	8,181
		min.	0,725	0,914	1,301	1,581	2,081	2,581	3,081	4,096	5,141	6,141	8,176
NOT GO gauge: Thickness	<i>Y</i>	max.	—	—	—	—	—	—	1,80	2,30	2,80	3,80	
		min.	—	—	—	—	—	—	1,75	2,25	2,75	3,75	
NOT GO gauge: Width across corners	<i>Z</i>	max.	0,782	0,980	1,397	1,68	2,23	2,79	3,35	—	—	—	—
		min.	0,770	0,968	1,384	1,66	2,21	2,77	3,33	—	—	—	—

Nominal socket size, <i>s</i>		10	12	14	17	19	22	27	32	36	41	46	
GO Gauge: Width across flat	<i>A</i>	max.	10,024	12,031	14,031	17,049	19,064	22,064	27,064	32,079	36,079	41,079	46,079
		min.	10,019	12,026	14,026	17,044	19,059	22,059	27,059	32,074	36,074	41,074	46,074
GO Gauge: Width across corners	<i>B</i>	max.	11,424	13,711	15,991	19,432	21,729	25,149	30,849	36,566	41,126	46,826	52,526
		min.	11,419	13,706	15,986	19,427	21,724	25,144	30,844	36,561	41,121	46,821	52,521
GO gauge: Length	<i>C</i>	min.	12	12	12	19	19	22	22	32	32	41	41
Usable gauge length	<i>L</i>	min.	20	24	28	34	44	54	64	72	82	82	
NOT GO gauge: Width across flats	<i>X</i>	max.	10,181	12,218	14,218	17,236	19,281	22,281	27,281	32,336	36,336	41,336	46,336
		min.	10,176	12,213	14,213	17,231	19,276	22,276	27,276	32,331	36,331	41,331	46,331
NOT GO gauge: Thickness	<i>Y</i>	max.	4,80	5,75	6,75	8,10	9,10	10,50	12,90	15,30	17,20	19,60	22,00
		min.	4,75	5,70	6,70	8,05	9,05	10,45	12,85	15,25	17,15	19,55	21,95
NOT GO gauge: Width across corners	<i>Z</i>	max.	—	—	—	—	—	—	—	—	—	—	
		min.	—	—	—	—	—	—	—	—	—	—	

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 23429:2004

<https://standards.iteh.ai/catalog/standards/sist/a6a60be4-d02a-4a8a-9f98-37b9dbcc7748/iso-23429-2004>

ICS 21.060.10

Price based on 3 pages