
International Standard



8738

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Plain washers for clevis pins — Product grade A

Rondelles plates pour axes d'articulation — Grade A

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Descriptors : fasteners, hinge pins, washers, plain washers, specifications, dimensions, designation.

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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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8738 was prepared by Technical Committee ISO/TC 2, *Fasteners*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Plain washers for clevis pins — Product grade A

1 Scope and field of application

This International Standard specifies the characteristics of plain washers for clevis pins according to ISO 2340 and ISO 2341.

Plain washers in accordance with this International Standard shall be used on the cotter pin end only.

2 References

ISO 2081, *Metallic coatings — Electroplated coatings of zinc on iron or steel.*

ISO 2340, *Clevis pins without head.*

ISO 2341, *Clevis pins with head.*

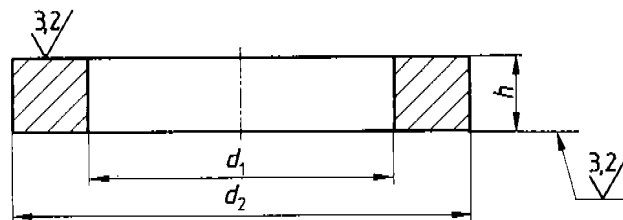
ISO 3269, *Fasteners — Acceptance inspection.*

ISO 4520, *Chromate conversion coatings on electroplated zinc and cadmium coatings.*

ISO 4759/3, *Tolerances for fasteners — Part 3 : Washers for metric bolts, screws and nuts with thread diameters from 1 up to and including 150 mm — Product grades A and C.*

3 Dimensions

Surface roughness values in micrometres



Dimensions in millimetres

Nominal size d	Hole diameter d_1		Outside diameter d_2		Thickness h		
	nom. (min.)	max.	nom. (max.)	min.	nom.	max.	min.
3	3	3,14	6	5,70	0,8	0,9	0,7
4	4	4,18	8	7,64	0,8	0,9	0,7
5	5	5,18	10	9,64	1	1,1	0,9
6	6	6,18	12	11,57	1,6	1,8	1,4
8	8	8,22	15	14,57	2	2,2	1,8
10	10	10,22	18	17,57	2,5	2,7	2,3
12	12	12,27	20	19,48	3	3,3	2,7
14	14	14,27	22	21,48	3	3,3	2,7
16	16	16,27	24	23,48	3	3,3	2,7
18	18	18,27	28	27,48	4	4,3	3,7
20	20	20,33	30	29,48	4	4,3	3,7
22	22	22,33	34	33,38	4	4,3	3,7
24	24	24,33	37	36,38	4	4,3	3,7
27	27	27,52	39	38	5	5,6	4,4
30	30	30,52	44	43	5	5,6	4,4
33	33	33,62	47	46	5	5,6	4,4
36	36	36,62	50	49	6	6,6	5,4
40	40	40,62	56	54,8	6	6,6	5,4
45	45	45,62	60	58,8	6	6,6	5,4
50	50	50,62	66	64,8	8	9	7
55	55	55,74	72	70,8	8	9	7
60	60	60,74	78	76,8	10	11	9
70	70	70,74	92	90,6	10	11	9
80	80	80,74	98	96,6	12	13,2	10,8
90	90	90,87	110	108,6	12	13,2	10,8
100	100	100,87	120	118,6	12	13,2	10,8

4 Specifications and reference International Standards

Material	St = Steel, hardness 160 to 250 HV (class 160 HV). Other materials as agreed between customer and supplier.
Tolerances	Product grade A to ISO 4759/3. All tolerances shall apply prior to the application of a plating or coating.
Surface finish	Plain, i.e. washers to be supplied in natural finish, treated with a rust-preventative lubricant, unless otherwise specified by agreement between customer and supplier.
	Preferred coatings are black oxide, phosphate coating or zinc plating with chromate conversion coating (see ISO 2081 and ISO 4520). Other coatings as agreed between customer and supplier.
Workmanship	Parts shall be uniform in quality and free of irregularities or detrimental defects. No burrs shall appear on any part of the washer.
Acceptability	The acceptance procedure is covered in ISO 3269.

5 Designation

Example for the designation of a plain washer with nominal size 8, property class 160HV :

Washer ISO 8738 - 8 - 160HV