

UDC 621.882.31

August 1991

Hexagon nuts with a height of $1,5 d$ DIN
6330Sechskentmuttern 1,5 d hoch

Supersedes March 1965x edition.

In keeping with current practice in standards published by the International Organization for Standardization (ISO), a comma has been used throughout as the decimal marker.

Dimensions in mm

1 Scope and field of application

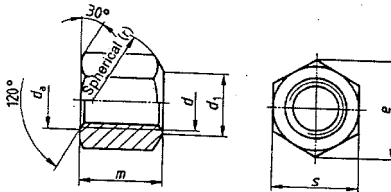
This standard specifies hexagon nuts designed for use with bolts in assemblies that will be frequently disassembled and reassembled. They are provided with a spherical bearing face which, in conjunction with a 120° countersink or a conical seat as specified in DIN 6319, permit any displacements of clamping elements to be compensated.

2 Dimensions and designation

Details left unspecified are to be selected as appropriate.

Type B, with one spherical bearing face

The nuts shall be countersunk on both sides at 120° down to diameter d_a .



Designation of an M 20 type B hexagon nut:

Hexagon nut DIN 6330 - B M 20

d	d_1 h14	d_a max.	e min.	m js15	r	Limit deviations	s	\approx	Approx. mass (7,85 kg/dm ³), per 1000 units, in Kg
M 6	7	7	11,05	9	9	10	h13	5	
M 8	9	9	14,38	12	11	13		9,6	
M 10	11,5	11	17,77	15	15	16		21	
M 12	14	13	20,03	18	17	18		31,5	
M 16	18	17	26,75	24	22	24		61	
M 20	22	21	33,53	30	27	30		120	
M 24	26	25	39,98	36	32	36	h14	206	
M 30	32	31	51,28	45	41	46		419	
M 36	38	37	61,31	54	50	55		715	
M 42	44	43	72,61	63	58	65		1170	
M 48	52	50	83,91	72	67	75		1800	

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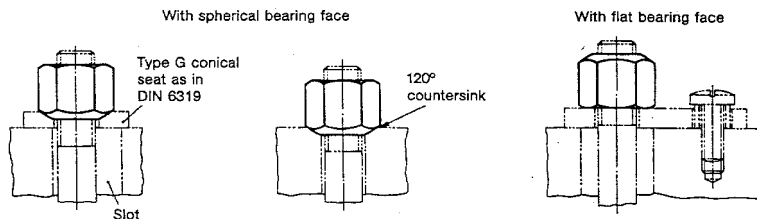
3 Property class (material)

The nut material shall be of property class 8 or, preferably, 10, as specified in ISO 898 Part 2. The steel from which the nuts are to be manufactured may contain a certain amount of lead.

4 Hardness and tolerances

Property class 8 nuts shall have a hardness of 188 to 302 HV 30, and property class 10 nuts, of 240 to 302 HV 30. Nuts shall be of product grade A as specified in ISO 4759 Part 1.

Examples of application



Standards referred to

DIN 6319	Spherical washers and conical seats
ISO 272:1982	Fasteners; hexagon products; widths across flats
ISO 898-2:1980	Mechanical properties of fasteners; nuts with specified proof load values
ISO 4759-1:1978	Tolerances for fasteners; bolts, screws, and nuts with thread diameters from 1,6 to 150 mm and product grades A, B and C

Previous editions

DIN 6330: 01.41, 10.43, 07.62, 09.82, 03.65x.

Amendments

The following amendments have been made to the March 1985x edition.

- The scope of the standard has been extended to include M 6 hexagon nuts.
- The widths across corners, *e*, have been amended and the widths across flats, *s*, for sizes M 10 and M 12 have been replaced by 16 mm and 18 mm, in agreement with ISO 272.
- Clauses 3 and 4 have been harmonized with the specifications given in ISO 4759 Part 1.
- The standard has been editorially revised.

International Patent Classification

F 16 B 5/02
F 16 B 37/00