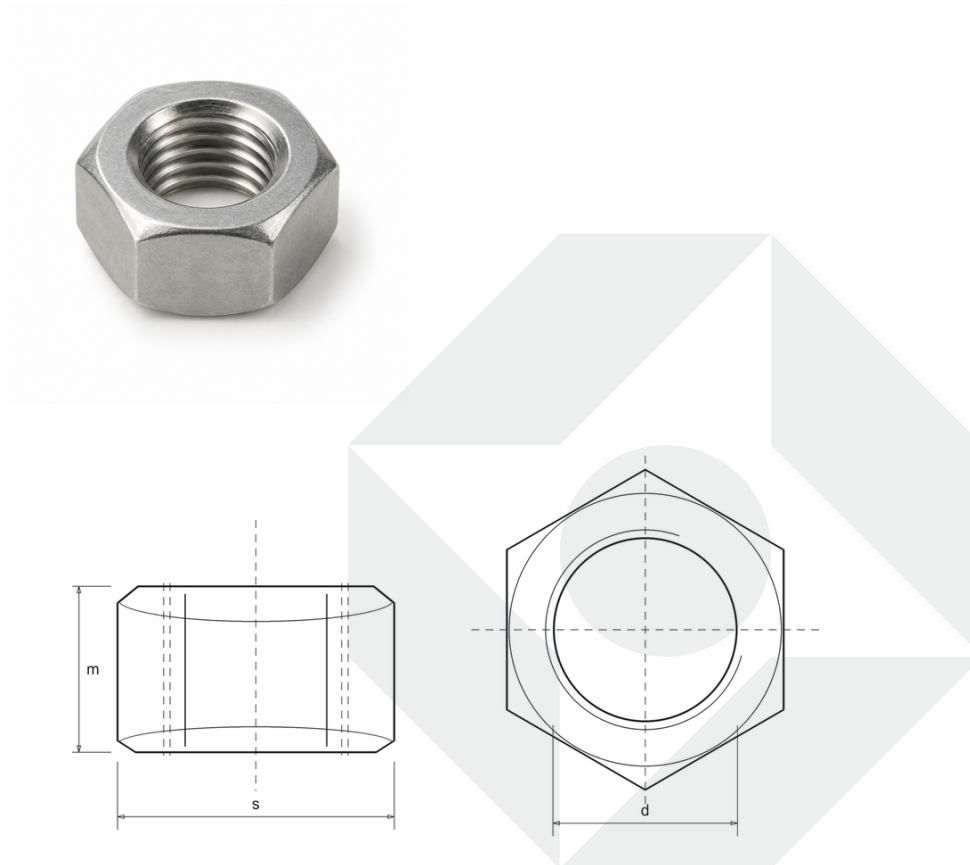


ASME B18.2.2 UNC

UNC full hexagon nut

An inch series: nominal diameter and threads per inch must match the mating bolt.

Selection from 1/4 to 7/8 inch. Other sizes and threads on request. UNC and UNF are distinct, non-interchangeable series.



Dimensions in inches. TPI: threads per inch · s: width across flats · m: height. Full-hex series limits; not heavy hex.

Identification drawing, not a manufacturing drawing.

Dimensional range

Dimensions in inches.

Thread (in)	TPI	sMin	sMax	mMin	mMax
1/4	20	0.428	0.438	0.212	0.226
5/16	18	0.489	0.5	0.258	0.273
3/8	16	0.551	0.563	0.32	0.337
7/16	14	0.675	0.688	0.365	0.385
1/2	13	0.736	0.75	0.427	0.445
9/16	12	0.861	0.875	0.473	0.496
5/8	11	0.922	0.938	0.535	0.559
3/4	10	1.088	1.125	0.617	0.665
7/8	9	1.269	1.312	0.724	0.776



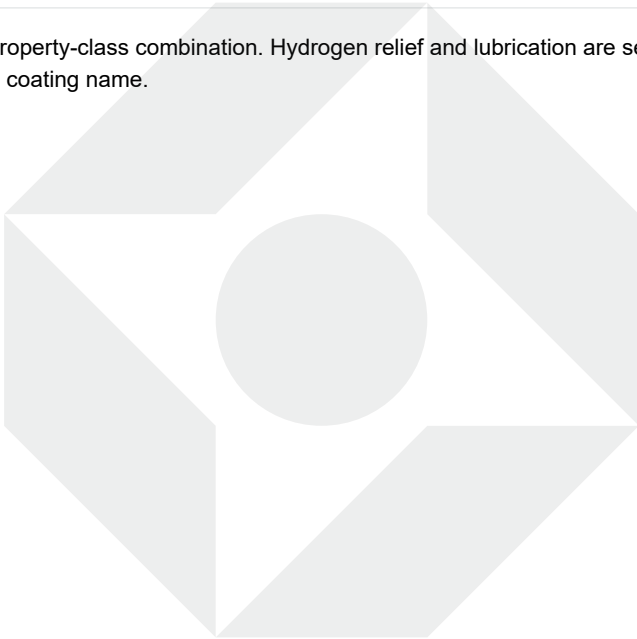
Materials and classes

Material	Class / hardness	in / TPI	Supply
Steel to mechanical specification	To be specified	1/4-20 UNC, 5/16-18 UNC, 3/8-16 UNC, 7/16-14 UNC, 1/2-13 UNC, 9/16-12 UNC, 5/8-11 UNC, 3/4-10 UNC, 7/8-9 UNC	On request

Finishes and treatments

Finish	Material	Class	in / TPI
Plain / as manufactured	Steel to mechanical specification	To be specified	1/4-20 UNC, 5/16-18 UNC, 3/8-16 UNC, 7/16-14 UNC, 1/2-13 UNC, 9/16-12 UNC, 5/8-11 UNC, 3/4-10 UNC, 7/8-9 UNC

Select the finish for the material/property-class combination. Hydrogen relief and lubrication are separate process requirements, not certificates and not implied by the coating name.



Standards, documents and enquiry

ASME B18.2.2 identifies geometry. Agree ASTM/SAE specification, grade, thread tolerance and finish for the supply. No automatic equivalence to metric classes 8, 10 or 12.

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Supply documentation

Declaration of conformity; Material certificate; EN 10204 2.2 test report; EN 10204 3.1 inspection certificate; Dimensional inspection report; Coating report; Other documentation

Documents are subject to order agreement; no batch certificate is automatically included.

Related components

ISO 4032, ISO 4014. Match nominal diameter, pitch, strength, material, finish and joint conditions.

Request a quote

Specify standard, diameter, pitch and length where applicable, material, property class or hardness, finish, quantity and documents. Other sizes and dedicated production can be assessed on request, with agreed minimum quantities.

Reference technical configurations: these do not represent stock quantities.

Other materials and specifications

For requirements beyond the tabulated combinations, enquire about aluminium, brass, nylon, duplex, superduplex or an ASTM specification. Alloy or grade, dimensions, mechanical requirements and finish are defined for the enquiry; the geometric reference does not automatically imply conformity with the product standard.

