

US hexagon nut UNC / UNF

A hexagon nut for joints using American unified threads. UNC and UNF share one data sheet while retaining distinct pitches, dimensions and configurations.

Dimensional range

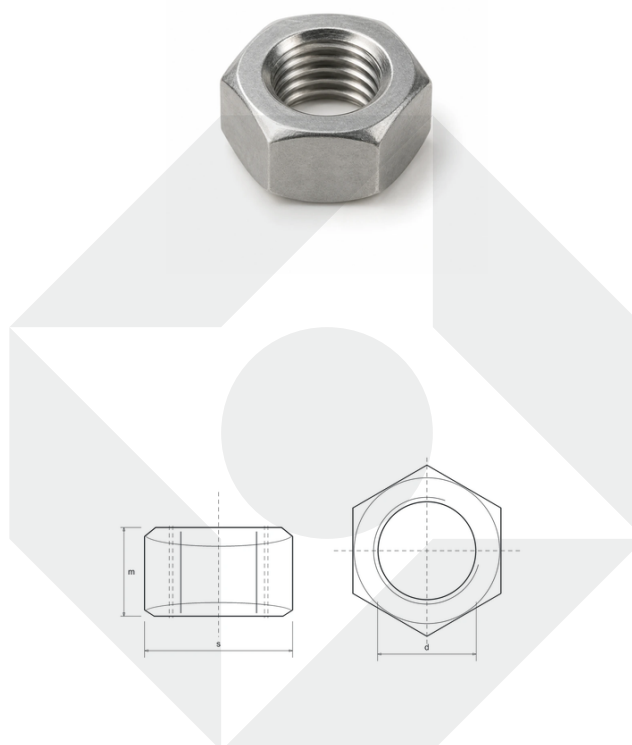
1/4-7/8 in

Thread

Unified UNC / UNF · TPI

Configuration

Regular hexagon · two thread series



Technical drawing

Dimensions in inches. TPI

threads per inch

s

width across flats

m

height. Full-hex series limits; not heavy hex.

Variants and dimensional data

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. Identification drawing, not a manufacturing drawing.

Thread (in)	Series	TPI	sMin	sMax	mMin	mMax
1/4	UNC	20	0.428	0.438	0.212	0.226

Thread (in)	Series	TPI	sMin	sMax	mMin	mMax
5/16	UNC	18	0.489	0.5	0.258	0.273
3/8	UNC	16	0.551	0.563	0.32	0.337
7/16	UNC	14	0.675	0.688	0.365	0.385
1/2	UNC	13	0.736	0.75	0.427	0.445
9/16	UNC	12	0.861	0.875	0.473	0.496
5/8	UNC	11	0.922	0.938	0.535	0.559
3/4	UNC	10	1.088	1.125	0.617	0.665
7/8	UNC	9	1.269	1.312	0.724	0.776
1/4	UNF	28	0.428	0.438	0.212	0.226
5/16	UNF	24	0.489	0.5	0.258	0.273
3/8	UNF	24	0.551	0.563	0.32	0.337
7/16	UNF	20	0.675	0.688	0.365	0.385
1/2	UNF	20	0.736	0.75	0.427	0.445
9/16	UNF	18	0.861	0.875	0.473	0.496
5/8	UNF	18	0.922	0.938	0.535	0.559
3/4	UNF	16	1.088	1.125	0.617	0.665
7/8	UNF	14	1.269	1.312	0.724	0.776

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.

Table dimensions refer to the stated execution. DIN/UNI, polymer and special variants require verification of their own dimensions; they do not automatically inherit reference geometry, weight or performance.

Materials, classes, finishes and treatments

Executions are distinguished by reference, material, class and finish. DIN, ISO and UNI references do not imply dimensional equivalence or availability of every size in each material. Supply and batch documents require quotation confirmation.

Execution reference	Material	Class / hardness	Documented finishes
ANSI B18.2.2	Steel	To be specified	Plain; Yellow zinc plated; Zinc plated

“To be specified” is a requirement not established by this selection; it does not imply class 70/80, HV hardness or an automatic finish. Steel property classes do not apply to nylon/polyamide; PA6 and PA66 are distinguished only where stated. For nuts with non-metallic inserts, the material shown is the body material.

Documentation

Document	Status
Declaration of conformity	Subject to order agreement
Material certificate	Subject to order agreement
EN 10204 2.2 test report	Subject to order agreement
EN 10204 3.1 inspection certificate	Subject to order agreement
Dimensional inspection report	Subject to order agreement
Coating report	Subject to order agreement
Other documentation	Subject to order agreement

Batch documents are not automatically included: specify your requirements in the RFQ.

ISO, DIN and UNI: key differences

ASME B18.2.2

Dimensions of the specified commercial selection do not replace a manufacturing drawing or the complete supply specification.

