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Westfield Fasteners Product Specification:

DIN 439 Type B - Hexagon Thin Nuts, Metric Fine Pitch

This datasheet provides technical specifications, dimensions and tolerances for metric fine pitch hex thin nuts available from Westfield Fasteners, in accordance with DIN 439.

Product Description

DIN 439 Type B hexagon thin nuts, also known as half nuts or jam nuts, have a reduced height compared with standard hexagon nuts and feature chamfered edges.

They are commonly used where installation space is restricted or as part of a double-nut locking arrangement.

These nuts feature a metric fine-pitch thread, providing a smaller thread pitch than the corresponding standard metric coarse thread. They must be used with bolts, screws or threaded components having the same nominal diameter and thread pitch.

Scope of the DIN standard.

DIN 439 specifies dimensions and tolerances for hexagon thin nuts with metric threads, distinguishing between Type A (unchamfered) and Type B (chamfered) designs.

This datasheet covers Type B nuts with metric fine-pitch threads.

DIN 439 has been superseded by ISO specifications, including ISO 8675 for metric fine-pitch hexagon thin nuts. Dimensional differences may exist between the DIN and ISO specifications, and compatibility should be confirmed before substituting one type for another.

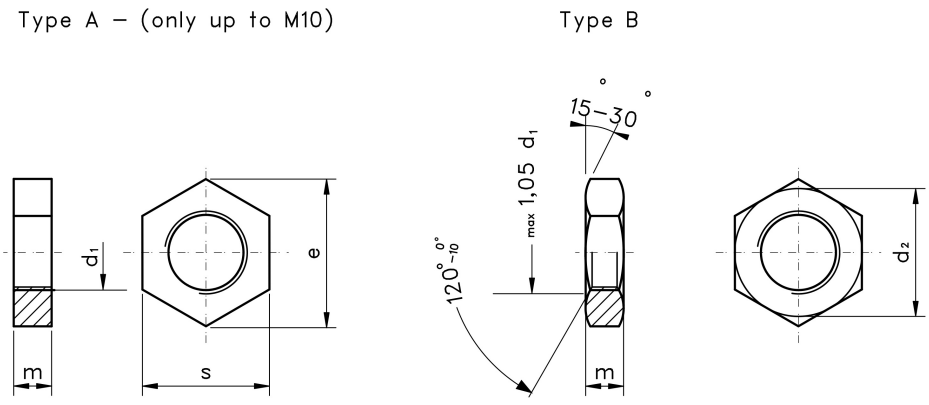


Figure 1: DIN 439 Type B Hexagon Thin Nut

Table 1: Dimensions and Tolerances according to DIN 439

	Thread	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48	M52
Thread, d_1	Fine Pitch 1	M8x1	M10x1.25	M12x1.5	M14x1.5	M16x1.5	M18x2	M20x2	M22x2	M24x2	M27x2	M30x2	M33x3	M36x3	M39x3	M42x3	M45x3	M48x3	M52x3
	Fine Pitch 2	-	-	-	-	-	-	-	-	-	-	-	-	M36x2	M39x2	M42x2	M45x2	M48x2	M52x2
	Fine Pitch 3	-	M10x1	M12x1.25	-	-	M18x1.5	M20x1.5	M22x1.5	M24x1.5	M27x1.5	M30x1.5	M33x1.5	M36x1.5	M39x1.5	M42x1.5	M45x1.5	M48x1.5	M52x1.5
d_2	min	11.7	15.3	17.1	19.8	21.6	24.3	27	28.8	32.4	36.9	41.4	45	49.5	54	62	66	71	76
e	Type A min	14.20	18.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Type B min	14.38	18.90	21.10	24.49	26.75	30.14	33.53	35.72	39.98	45.63	51.28	55.80	61.31	66.96	72.61	78.26	83.91	89.56
m		4	5	6	7	8	9	10	11	12	13.5	15	16.5	18	19.5	21	22.5	24	26
s		13	17	19	22	24	27	30	32	36	41	46	50	55	60	65	70	75	80

Material Specifications

The following table summarises the available materials, mechanical properties and applicable specifications for this range of metric fine-pitch hexagon thin nuts.

Due to their reduced height and thread engagement, thin nuts generally have a lower load-carrying capacity than full-height nuts of the same nominal thread size. They should not be considered direct substitutes for full-height nuts in applications requiring equivalent proof-load performance.

Material grades and property classes may vary according to the nominal thread size.

Material Code	Description	Thin Nut Class / Spec.	Nominal Proof Load Stress (N/mm²)
A2	A2 / 304 Stainless Steel	A2-025 min.	250
A4	A4 / 316 Stainless Steel	A4-025 min.	250
BZP	Zinc Plated Carbon Steel	Class 04 Steel	200

For further information on the relevant dimensional specifications, refer to DIN 439. Actual product dimensions should be confirmed against the tables above.