



Westfield Fasteners Product Specification:

DIN 439 - Half Nut (Lock Nut), Coarse Pitch

This product guide contains the specification for metric threaded half or lock nuts, a range of standard parts available from Westfield Fasteners. The basis of this specification is the DIN standard DIN 439.

Product Description

A half nut, also known as a thin nut or jam/lock nut. Typically fitted with a spanner or ratchet with socket, often used in pairs or in conjunction with a hexagon full nut in a locking arrangement. A popular nut type, and used for decades on all types of assembly throughout the world. Fine Pitch and Left Hand Thread variants are also available.

Scope of the DIN standard.

DIN 439 Hexagon thin nuts specifies the dimensions and tolerances for sizes from M1.6 up to and including M52. ISO 4035 is similar to DIN 439. Strength grades are given as either a hardness value such as 11H or a value based on tensile strength such as 04.

Table 1 below defines the overall dimensions and tolerances of this nut type.

Although the DIN 439 standard has now been superseded by ISO 4035, off the shelf parts are currently more generally available to the older specification. The ISO standard specifies revised nut heights and across the flats dimensions on certain sizes, but are otherwise interchangeable.

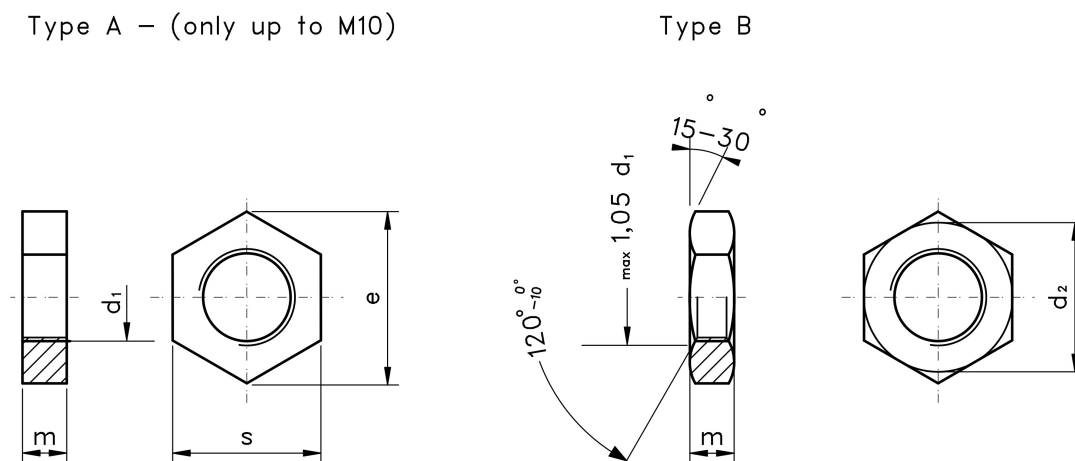


Figure 1: Half Nut (Lock Nut) Coarse Pitch

Notes to figure 1:

- Type A - up to and including M2.5 is 11 H. From M3 upwards, it's 04.
- Type B - up to and including M2.5 is 11 H. From M3 to M10, it's 04. M12 to M39, it's 04, 06. Over M39, it's 14 H.

Variations from DIN 985

DIN 439 covers materials including carbon steel and brass. The hex thin nuts we stock in other materials and grades are made with reference to this standard, but are not mentioned specifically.

Table 1: Dimensions & Tolerances according to DIN 439 (mm)

Thread, d ₁	Thread	M1.6	M1.8	M2	M2.5	M3	M3.5	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48	M52	
		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	2.88	3.15	3.6	4.5	4.95	5.4	6.1	7.2	9	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	3.28	3.62	4.18	5.31	5.87	6.44	7.50	8.63	10.89	14.20	18.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Type B min	3.48	3.82	4.38	5.51	6.08	6.64	7.74	8.87	11.05	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		1	1.1	1.2	1.6	1.8	2	2.2	2.7	3.2	4	5	6	7	8	9	10	11	12	13.5	15	16.5	18	19.5	21	22.5	24	26	
s		3.2	3.5	4	5	5.5	6	7	8	10	13	17	19	22	24	27	30	32	36	41	46	50	55	60	65	70	75	80	

For further details, please refer to the ISO/DIN standard document for this item.