



Product Engineering

**HEXAGON LOCK NUTS
ISO METRIC THREAD**

(Printed Copies are Uncontrolled)

Metric Standard

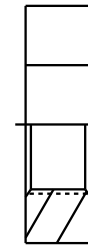
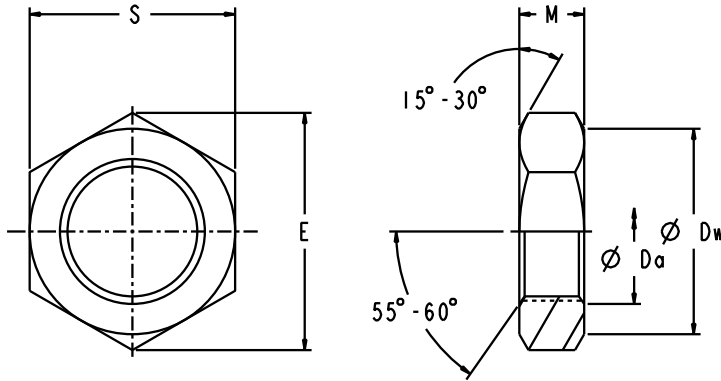
26DM

Date: 18 Mar 14

Writer: Don Dockter

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**PROPERTY CLASS 4D
THREAD COARSE
TOLERANCE CLASS 6H**



OPTIONAL DESIGN
(NO CHAMFER)

**Projection: Iso Method E
Conforms to ISO 4035 (2012)**

Table 1: Hexagon Lock Nut Dimensions
Dimensions are in millimeters

Number	Nom Size D ₁	Pitch P	D ₂		E		M		S	
			Min	Max	Min	Min (Optional Form)	Max (Nom)	Min	Max (Nom)	Min
26DM8	M8	1.25	11.6	14.38	14.20	4	3.70	13	12.73	
26DM10	M10	1.5	14.6	17.77	18.72	5	4.70	16	15.73	
26DM12	M12	1.75	16.6	20.03	---	6	5.70	18	17.73	
26DM14	M14	2	19.6	23.36	---	7	6.42	22	21.87	
26DM16	M16	2	22.5	26.75	---	8	7.42	24	23.67	
26DM18	M18	2.5	24.9	29.56	---	9	8.42	27	26.16	
26DM20	M20	2.5	27.7	32.95	---	10	9.10	30	29.16	
26DM22	M22	2.5	31.4	37.29	---	11	9.90	32	31.00	
26DM24	M24	3	33.2	39.55	---	12	10.90	36	35.00	
26DM27	M27	3	38.0	45.20	---	13.5	12.40	41	40.00	
26DM30	M30	3.5	42.8	50.85	---	15	13.90	46	45.00	
26DM33	M33	3.5	46.6	55.37	---	16.5	15.40	50	49.00	
26DM36	M36	4	51.1	60.79	---	18	16.90	55	53.80	
26DM39	M39	4	55.9	66.44	---	19.5	18.20	60	58.80	
26DM42	M42	4.5	60.0	71.30	---	21	19.70	65	63.10	
26DM45	M45	4.5	64.7	76.95	---	22.5	21.2	70	68.10	
26DM48	M48	5	69.5	82.60	---	24	22.7	75	73.10	
26DM52	M52	5	74.2	88.25	---	26	24.7	80	78.10	

Note: Part numbers in blue bold type indicate preferred sizes.



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Part Number Formula

The digits after the “M” show the nominal thread diameter.

Example: 26DM24

These nuts only to be used as lock nuts.

General

Nuts shall be chamfered on both sides. For sizes M8 and M10 the manufacturer has the option of no chamfers. The threaded hole shall be countersunk at the bearing surfaces at an angle of 120° to clear the major diameter of the thread. The bearing surfaces shall be at right angles to the axis of the thread within a tolerance of 1° for sizes up to M27 and within 1/2° for M30 and larger. The wrench flats shall be at right angles to the bearing surfaces within a tolerance of ±2° of the thread hole shall be concentric with the axis of the nut within the tolerances in [Table 2](#).

Table 2

Nom Size	M8-M10	M12-M20	M22-M33	M36-M52
Tolerance	.43	.52	.62	.74

Thread Designation

The thread shall be ISO metric coarse thread of tolerance class 6H.

Thread Tolerances

For thread data and tolerances refer to [Data Sheet M2](#) “ISO Metric Screw Threads, Class 6H/6g Coarse Threads”. The tolerances apply to unplated nuts and to plated nuts after plating. Plated threads shall not transgress the basic diameters, tolerance position “H”.

Material

The material shall be steel to meet the mechanical properties(Grade 4D) specified below:

Hardness (BrineII)HBmin 110kp/mm²max 302 kp/mm²

Hardness (Rockwell)HRBmin 63

HRCmax 30

The lock nuts shall not be subject to proof load tests.

Note: As yet the International Organization of Standardization ISO has not laid down mechanical property specifications for nuts with usable thread lengths less than .6 times the nominal thread diameter. For this reason the DIN specification for hardness limits is used to define the properties of these lock nuts.

Identification

Nuts may be coded at the option of the manufacturer to show the mechanical properties, preferably with “4D” or in accordance with the code as standardized in the country of manufacture.

Identification marks on the face of nuts shall not be in raised characters.

Defects

Nuts shall be free from burrs, seams, laps, loose scale, irregular surfaces, etc., which affect serviceability.

Protective Treatment

Plated per Bobcat Standard [PS-P](#).