



DIN 980V Locking Nuts

Leader-Fastener is a manufacturer and distributor of **DIN 980V Locking Nuts**. We have a complete line of service from having invested in production plants, export department and to having a quality control team and center to meet your requirements. We regard quality as the life of the company. We persist in good quality as the first policy and have established a set of quality control and inspection system according to the international standard. We have carried out ISO9001 Quality Guarantee System in every course of production, transportation and selling. We do hope we could be your partner in business by topping quality, knight service and competitive

price in the near future and be your friends as well.

DIN 980 Locking Nuts, all metal lock nut is also known as all metal self-locking nut. There are two main locking forms:

- a. This kind of nut is called 980-v type, and the common forms are as follows: end face three-point type, elliptical type, side extrusion type.
- b. The nut is embedded with a metal locking plate, which can prevent losing by the locking ring. This kind of nut is called 980-m

The locking principle of 980-v type nut is as follows: through die stamping, the screw thread of the nut itself has about 3 teeth deformed, and after deformation, the inner diameter of the nut thread is slightly smaller than the outer diameter of the bolt thread. Therefore, the friction force between the threads after the nut is tightened is far greater than that of the common thread, which can play an effective role in preventing losing.

The locking nut can be used repeatedly, but it is not recommended to disassemble and install repeatedly. After many times of disassembly and installation, the locking torque of the nut will decrease significantly (the fifth disassembly is significantly lower than the first disassembly).

The mechanical performance requirements of all metal lock nuts are the same as those of ordinary nuts. The common grades of carbon steel are generally grade 8, grade 10 and grade 12, while those of stainless steel are generally grade 70 and Grade 80.

Among them, the carbon steel nut's load retention and hardness requirements shall refer to the standard of ordinary carbon steel nut, which can refer to the standard ISO 898-1 (mechanical property requirements of carbon steel nut) for acceptance. Stainless steel nuts only refer to carbon steel nuts for load holding performance, and hardness is not required.

To ensure the locking performance, the locking nut shall refer to the torque requirements for five times of screwing in and out specified in ISO 2320 (mechanical performance requirements for pre torque locking nuts). Ordinary nuts do not have this special requirement.

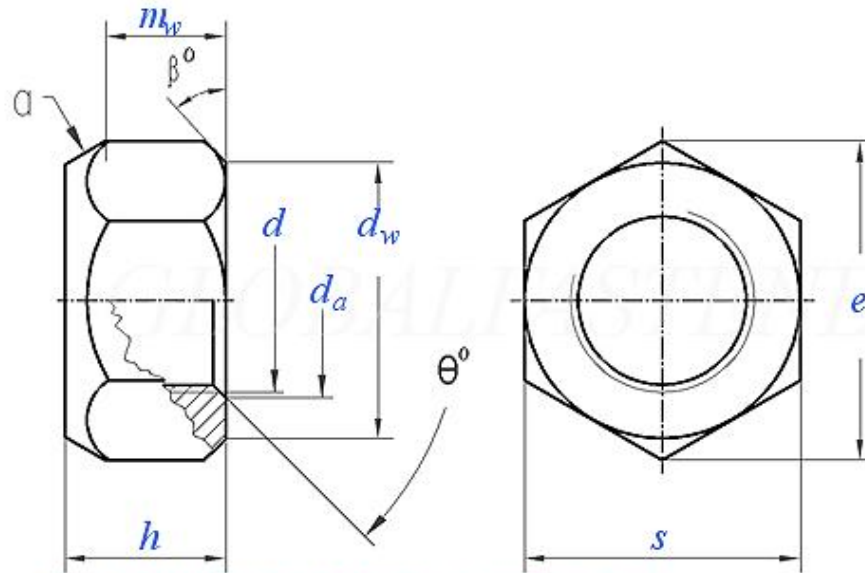
Product Specification of **DIN 980V Locking Nuts**

Material : Carbon steel, Stainless steel, Alloy Steel, Brass.

Finishment: Black, Zinc Plated, Zinc Yellow, HDG, Phosphate, DACROMET, Geomet, Magin, Ruspert, Teflon, etc.

DIN 980 (V) - 1987 All-Metal Prevailing Torque Type Hexagon Nuts with Single Piece Metal

(Type V)



a : Prevailing torque element, shape optional.

θ : $90^\circ \sim 120^\circ$

β : $15^\circ \sim 30^\circ$

Thread Size		M3	M4	M5	M6	M7	M8	M10	M12	M14	M16	
D												
P	Pitch	Coarse thread	0.5	0.7	0.8	1	1	1.25	1.5	1.75	2	2
		Fine thread 1	/	/	/	/	/	1	1	1.5	1.5	1.5
		Fine thread 2	/	/	/	/	/	/	1.25	1.25	/	/
d_a	min	3	4	5	6	7	8	10	12	14	16	
	max	3.45	4.6	5.75	6.75	7.75	8.75	10.8	13	15.1	17.3	
d_w	min	4.6	5.9	6.9	8.9	9.6	11.6	15.6	17.4	20.5	22.5	
e	min	6.01	7.66	8.79	11.05	12.12	14.38	18.9	21.1	24.49	26.75	
h	max=nominal size	3.7	4.2	5.1	6	7	8	10	12	14	16	
	min	3.4	3.9	4.8	5.7	6.5	7.5	9	11	12	14	
m_w	min	1.65	2.2	2.75	3.3	3.85	4.4	5.5	6.6	7.7	8.8	
s	max=nominal size	5.5	7	8	10	11	13	17	19	22	24	
	min	5.32	6.78	7.78	9.78	10.73	12.73	16.73	18.67	21.67	23.67	

Thread Size	M18	M20	M22	M24	M27	M30	M33	M36	M39
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D											
P	Pitch	Coarse thread	2.5	2.5	2.5	3	3	3.5	3.5	4	4
		Fine thread 1	2	2	2	2	2	2	2	3	3
		Fine thread 2	1.5	1.5	1.5	/	/	/	/	/	/
d _a	min	18	20	22	24	27	30	33	36	39	
	max	19.5	21.6	23.7	25.9	29.1	32.4	35.6	38.9	42.1	
d _w	min	24.9	27.7	29.5	33.2	38	42.7	46.6	51.1	55.9	
e	min	29.56	32.95	35.03	39.55	45.2	50.85	55.37	60.79	66.44	
h	max=nominal size	18	20	22	24	27	30	33	36	39	
	min	16	18	20	22	25	28	31	34	37	
m _w	min	9.9	11	12.2	13.2	14.8	16.5	18.2	19.8	21.5	
s	max=nominal size	27	30	32	36	41	46	50	55	60	
	min	26.16	29.16	31	35	40	45	49	53.8	58.8	

①, Type V:

Single-piece metal nuts are nuts without an insert, in which increased friction is created by the appropriate deformation of the prevailing torque element of the nut.

Type M:

Two-piece metal nuts are nuts, in which increased friction is created by an additional metal element inserted in the prevailing torque element of the nut. This type does not have full loadability.

②, Material:

Steel, Strength class (material): 5,8,10,12(≤M16)。 Standard ISO 898-2 for type V (coarse thread nut), DIN 267-4 for type M and type V(fine thread nut)