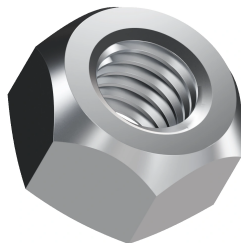


ISO 7042

Prevailing torque type all-metal hexagon nuts, style 2



Standard	ISO 7042	
Product Type	This document specifies the characteristics of prevailing torque (all metal) hexagon high nuts, in steel and stainless steel, with metric coarse pitch thread M5 to M39, and with product grades A and B. NOTE These nuts are designed with an overall height $h_{min} = m_{min}$ (as specified in ISO 898-2 and ISO 4033 for style 2) plus the prevailing torque feature. h_{max} has been established in function of h_{min} ; therefore, the tolerance ($h_{max} - h_{min}$) does not follow the ISO code system for tolerances (IT system). The wrenching height $m_{w,min}$ corresponds to the values specified for style 1. If in certain cases other specifications are requested, property classes and stainless steel grades can be selected from ISO 898-2 or ISO 3506-2.	
Material	Stainless Steel, Carbon Steel	
Property Class	A2-70, A4-80 (ISO 3506-2) · 6, 8, 10 (ISO 898-2)	
Surface Finish	Passivated, Plain, Zinc Plated, Dacromet	
Size Range	M5 - M36	Thread ISO metric coarse pitch

BASIS OF SPECIFICATION

WHICH STANDARD GOVERNS WHAT

Dimensions to	ISO 7042:1997
Carbon steel / Alloy steel mechanical properties to	ISO 898-2:2022
Stainless steel mechanical properties to	ISO 3506-2:2020
Product grade	A / B

PROPERTY CLASSES

REQUIRED VALUES PER ISO 3506-2

Class	Governing property	Source
A2-70	Proof load - no tensile strength specified for nuts	ISO 3506-2
A4-80	Proof load - no tensile strength specified for nuts	ISO 3506-2

PROPERTY CLASSES

REQUIRED VALUES PER ISO 898-2

Class	Governing property	Source
6	Proof load - no tensile strength specified for nuts	ISO 898-2
8	Proof load - no tensile strength specified for nuts	ISO 898-2
10	Proof load - no tensile strength specified for nuts	ISO 898-2

DIMENSIONAL DATA - SIZES WE SUPPLY

ALL DIMENSIONS PER THE STANDARD

d Diameter - mm	P Thread Pitch - mm	da (max) Underhead Diameter - mm	da (min) Clearance Diameter - mm	dw (min) Bearing Diameter - mm	e (min) Width Across Corners - mm	h (max) Thickness - mm	h (min) Thickness - mm	mw (min) Wrenching Height - mm	s (max) Width Across Flats - mm	s (min) Width Across Flats - mm
M5	0.8	5.75	5	6.88	8.79	5.1	4.8	3.52	8	7.78
M6	1	6.75	6	8.88	11.05	6	5.4	3.92	10	9.78
M8	1.25	8.75	8	11.63	14.38	8	7.14	5.15	13	12.73
M10	1.5	10.8	10	14.63	17.77	10	8.94	6.43	16	15.73
M12	1.75	13	12	16.63	20.03	12	11.57	8.3	18	17.73
M16	2	17.3	16	22.49	26.75	16.4	15.7	11.28	24	23.67
M20	2.5	21.6	20	27.7	32.95	20.3	19	13.52	30	29.16
M24	3	25.9	24	33.25	39.55	23.9	22.6	16.16	36	35
M30	3.5	32.4	30	42.75	50.85	30	27.3	19.44	46	45
M36	4	38.9	36	51.11	60.79	36	33.1	23.52	55	53.8

FURTHER SIZES IN THIS STANDARD

ALL DIMENSIONS PER THE STANDARD

Not held in stock. Available to order; minimum order quantity applies.

d Diameter - mm	P Thread Pitch - mm	da (max) Underhead Diameter - mm	da (min) Clearance Diameter - mm	dw (min) Bearing Diameter - mm	e (min) Width Across Corners - mm	h (max) Thickness - mm	h (min) Thickness - mm	mw (min) Wrenching Height - mm	s (max) Width Across Flats - mm	s (min) Width Across Flats - mm
M14	2	15.1	14	19.64	23.36	14.1	13.4	9.68	21	20.67

MARKING
Steel — Required

What	Manufacturer identification mark and the property class symbol of Table 9. Small nuts, or nuts whose shape leaves no room, may use the clock-face marking of Table 9 instead
Where	Indented on a side face or on the bearing face, or embossed on the chamfer; an embossed mark shall not stand above the bearing face
Sizes	All sizes
Clause	ISO 898-2:2012, 10.3.1, 10.3.2 and 10.4.1

"The marking symbol in accordance with 10.3.2 to 10.5 shall be embossed or indented, during the manufacturing process, on all nuts manufactured to the requirements of this part of ISO 898."

Prevailing torque nuts must be marked. The product standard has no marking clause and points to ISO 2320, which has no marking clause either; ISO 2320:1997 Clause 4 states that the property classes are the same as ISO 898-2 and ISO 898-6 specify for hexagon nuts, so ISO 898-2 Clause 10 governs.

Confirm the ordered property class before production.

INSPECTION DOCUMENTS WE CAN ISSUE

EN 10204 3.1 material certificate	Can be included when agreed in the order.
Dimensional inspection report	Can be provided for the agreed inspection scope.
Certificate of conformity	Can be issued against the confirmed order requirements.
Mechanical test report	Available when the required tests are agreed before production.
Chemical analysis report	Available when the material verification scope is agreed.
Coating inspection report	Can record the coating checks agreed for the order.

REFERENCES & NOTES

Note: Dimensional values follow the selected execution standard. Material properties and batch test results are included only when declared or supported by the applicable certificate or test report.