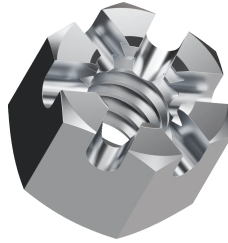


DIN 935

Hexagon slotted and castle nuts



Standard	DIN 935		
Product Type	Hexagon slotted and castle nuts		
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, Hot Dip Galvanized, Dacromet, Phosphate, Blackened		
Size Range	M4 - M64	Thread	ISO metric coarse pitch

BASIS OF SPECIFICATION

WHICH STANDARD GOVERNS WHAT

Dimensions to	DIN 935-1:2000-10
Carbon steel / Alloy steel mechanical properties to	DIN EN 20898-2
Stainless steel mechanical properties to	DIN EN ISO 3506-2
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	m Nut Height - mm	s (max) Width Across Flats - mm	e (min) Width Across Corners - mm	Crown Diameter - mm	Slot Width - mm	Slot Depth - mm	Matching Cotter Pin
M4	0.7	5	7	7.66	-	1.2	3.2	1x10
M5	0.8	6	8	8.79	-	1.4	4	1.2x12
M6	1	7.5	10	11.05	-	2	5	1.6x14
M8	1.25	9.5	13	14.38	-	2.5	6.5	2x16
M10	1.5	12	16	17.77	-	2.8	8	2.5x20
M12	1.75	15	18	20.03	16	3.5	10	3.2x22
M16	2	19	24	26.75	22	4.5	13	4x28
M20	2.5	22	30	32.95	28	4.5	16	4x36
M24	3	27	36	39.55	34	5.5	19	5x40
M30	3.5	33	46	50.85	42	7	24	6.3x50
M36	4	38	55	60.79	50	7	29	6.3x63

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	m Nut Height - mm	s (max) Width Across Flats - mm	e (min) Width Across Corners - mm	Crown Diameter - mm	Slot Width - mm	Slot Depth - mm	Matching Cotter Pin
M42	4.5	46	65	71.3	58	9	34	8x71
M48	5	50	75	82.6	65	9	38	8x80
M56	5.5	57	85	93.56	75	9	45	8x100
M64	6	66	95	104.86	85	11	51	10x100

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."

Stainless steel — Required

What	Stainless steel grade, the optional letter L for low-carbon grades (C 0,030 % max.), a hyphen and the property class symbol of Table 10, for example A4-80, together with the manufacturer identification mark. For grades A2 and A4 only, the alternative groove marking of Figure 7 may be used; where it carries no property class, property class 50 applies
Where	Preferably on the top of the nut, which is the face opposite the bearing face, indented or embossed; or indented on the side of the nut. An embossed mark on the top is not counted in the nut height. On nuts with flange, on the flange when the manufacturing process does not allow marking on the top
Sizes	D ≥ 5 mm
Clause	ISO 3506-2:2020, 11.1 Nut marking, 11.2 Manufacturer's identification mark and 11.3.1 Hexagon nuts

"All hexagon nuts of nominal thread diameter D ≥ 5 mm shall be marked for all stainless steel grades and all property classes, with the stainless steel grade in accordance with Clause 7, with the property class symbol in accordance with Table 10 or 11, and with the manufacturer's identification mark in accordance with 11.2."

Table 2 of DIN 935-1:2000-10 sets no marking symbol of its own. Steel classes follow DIN EN 20898-2 with DIN EN ISO 898-6, stainless follows DIN EN ISO 3506-2 and copper-zinc follows DIN EN 28839.

Steel classes are 6, 8 and 10 for d up to and including 39 mm, by agreement above. Stainless is A2-70 below 20 mm and A2-50 above 20 mm up to and including 39 mm, by agreement above 39 mm. The original prints both limits as strict inequalities, so d = 20 mm falls under neither line; we do not state a stainless class for M20.

Footnote 3 records a deviation from DIN EN ISO 898-6: for fine pitch nuts of classes 8 and 10 a minimum hardness of 272 HV 30 is sufficient.

The designation carries two things a hexagon nut designation does not. For threads M10, M12, M14 and M22 the width across flats must be written in, for example Kronenmutter DIN 935 - M12 - SW18 - 8; and for nominal thread diameters from 12 mm to 39 mm supplied without a stepped crown the code KK is inserted: Kronenmutter DIN 935 - M20 - KK - 8.

Footnote 1 carries the same coating caution as DIN 934: with electroplating to DIN EN ISO 4042 a 6H nut must not fall below the zero line, a larger fundamental deviation may be needed, and that can impair the stripping resistance of the assembly.

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.