Data sheet nuts — DIN 934 / ISO 4032, DIN 439, DIN 6334, DIN 1587, classes, torques, lock nuts

Dimensions in mm. The hexagon nut DIN 934 was superseded by ISO 4032; our nuts follow the DIN widths across flats (M10 = 17, M12 = 19, M14 = 22, M22 = 32). The nut class belongs with the bolt class: class 8 with 8.8, class 10 with 10.9, A2-70 with stainless A2-70. Tightening torques apply to the bolted joint (VDI 2230, friction coefficient 0.10, 90 % of yield) and are guide values.

Dimension table

size	pitch P	width across flats s	height m DIN 934	across corners e	m DIN 439 thin	m DIN 6334 high	m DIN 1587 cap
M3	0.5	5.5	2.4	6.01	1.8	9	6
M4	0.7	7	3.2	7.66	2.2	12	8
M5	0.8	8	4	8.79	2.7	15	10
M6	1	10	5	11.05	3.2	18	12
M8	1.25	13	6.5	14.38	4	24	15
M10	1.5	17	8	18.9	5	30	18
M12	1.75	19	10	21.1	6	36	22
M14	2	22	11	24.49	7	42	25
M16	2	24	13	26.75	8	48	28
M18	2.5	27	15	30.14	9	54	32
M20	2.5	30	16	33.53	10	60	34
M22	2.5	32	18	35.72	11	66	36
M24	3	36	19	39.98	12	72	42
M27	3	41	22	45.2	13.5	81	48
M30	3.5	46	24	50.85	15	90	52
M36	4	55	29	60.79	18	108	62

Classes and tightening torques

size	8.8 (Nm)	10.9 (Nm)
M3	1.15	1.68
M4	2.64	3.88
M5	5.2	7.6
M6	9	13.2
M8	21.5	32
M10	42.5	62.5
M12	73.5	108
M14	118	173
M16	180	264
M20	362	520
M24	625	890

Classes

8 / 10 / 12	steel, nut class = first figure of the bolt class (ISO 898-2); class 8 with 8.8, 10 with 10.9, 12 with 12.9
04 / 05	thin nuts DIN 439: jam nuts only, do not carry full preload

A2-70 / A4-70	stainless, tensile strength 700 N/mm² (ISO 3506-2); A2-80 / A4-80 = 800 N/mm²
A2-035 / A4-035	thin stainless nuts (DIN 439 / 936) with reduced proof load

Lock nuts: which one where

DIN 985 / ISO 10511	nylon ring; up to 120 °C; reusable a few times; the most common locking
DIN 982 / ISO 7040	high type with nylon ring for full preload
DIN 980V / ISO 7042	all-metal (deformed thread); up to 300 °C; reusable more often
DIN 7967	spring steel counter nut; low and light; locks an existing nut
DIN 9626	lock nut with flange and nylon ring; replaces the washer
DIN 6923 serrated	flange nut with serrations; locks on mild steel, marks the surface