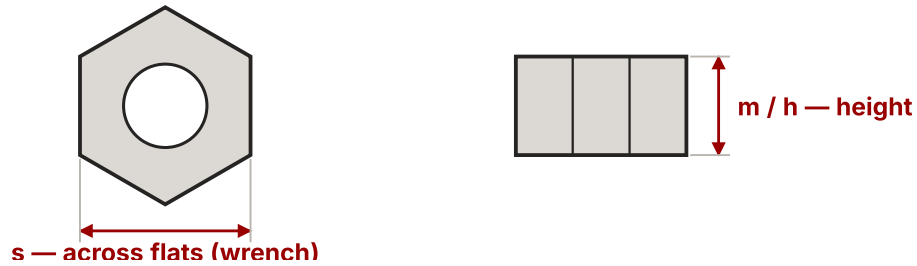
Metric Nut Dimensions

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Wrench size (across flats) and height for metric nuts — hex (DIN 934), nylon-insert (DIN 985), thin jam (DIN 439), all-metal lock (DIN 980), flange (DIN 6923) and thin castle (DIN 937).

A metric nut is named for the bolt it fits — an M10 nut goes on an M10 bolt — and the wrench that turns it is its width **across flats** (s), in millimetres. Each style below has its own height; the same style comes in coarse and fine thread with the same wrench.



Letters match the table columns: **s** across flats (the wrench), **m** / **h** height.

Metric hex nuts — DIN 934 (mm)

SIZE	WRENCH S
M1.6	3.2 mm
M2	4 mm
M2.5	5 mm
M3	5.5 mm
M3.5	6 mm
M4	7 mm
M5	8 mm
M6	10 mm
M8	13 mm
M10	—
M12	—
M14	—
M16	24 mm
M18	27 mm
M20	30 mm
M22	—
M24	36 mm
M27	41 mm
M30	46 mm
M33	50 mm
M36	55 mm
M39	60 mm
M42	65 mm
M45	70 mm
M48	75 mm
M52	80 mm
M56	85 mm
M60	90 mm
M64	95 mm

Only the wrench size is listed here. DIN 934 and its replacement ISO 4032 take a different wrench at M10, M12, M14 and M22 (ISO: 16, 18, 21, 34 mm; DIN: 17, 19, 22, 32 mm) and our sources mix the two, so those sizes are a dash — check the nut or give us a call. Nut height is left off: only one of our sources gives the DIN 934 heights.

Metric nylon-insert lock nuts — DIN 985 (mm)

SIZE	WRENCH S	HEIGHT H MAX
M3	—	—
M4	7 mm	5

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SIZE	WRENCH S	HEIGHT H MAX
M5	8 mm	5
M6	10 mm	6
M8	13 mm	8
M10	17 mm	10
M12	19 mm	12
M14	22 mm	14
M16	24 mm	16
M18	27 mm	18.5
M20	30 mm	20
M22	32 mm	22
M24	36 mm	24
M27	41 mm	27
M30	46 mm	30
M36	55 mm	36
M39	60 mm	39
M42	65 mm	42
M45	70 mm	45
M48	75 mm	48

Overall height with the nylon ring. A dash: our sources differ — give us a call.

Metric thin (jam) hex nuts — DIN 439 (mm)

SIZE	WRENCH S	HEIGHT M MAX
M2	4 mm	1.2
M3	5.5 mm	1.8
M4	7 mm	2.2
M5	8 mm	2.7
M6	10 mm	3.2
M8	13 mm	4
M10	17 mm	5
M12	19 mm	6
M16	24 mm	8
M20	30 mm	10
M24	36 mm	12
M30	46 mm	15
M36	55 mm	18
M42	65 mm	21
M48	75 mm	24

A thin nut, often used to lock a full nut.

Metric all-metal lock nuts — DIN 980 (mm)

SIZE	WRENCH S	HEIGHT H MAX
M4	7 mm	4.2
M5	8 mm	5.1
M6	10 mm	6
M8	13 mm	8
M10	17 mm	10
M12	19 mm	12
M14	22 mm	14
M16	24 mm	16
M20	30 mm	20
M24	36 mm	24
M27	41 mm	27
M30	46 mm	30

All-metal prevailing-torque lock nut — no nylon, so it takes more heat than a nylon-insert nut.

Metric flange nuts — DIN 6923 (mm)

SIZE	WRENCH S	HEIGHT M MAX	FLANGE DIA DC MAX

SIZE	WRENCH S	HEIGHT M MAX	FLANGE DIA DC MAX
M5	8 mm	5	11.8
M6	10 mm	6	14.2
M8	13 mm	8	17.9
M10	15 mm	10	21.8
M12	18 mm	12	26
M14	21 mm	14	29.9
M16	24 mm	16	34.5
M20	30 mm	20	42.8

Serrated flange: the teeth under the flange bite into the surface and resist loosening.

Metric thin castle nuts — DIN 937 (mm)

SIZE	WRENCH S	HEIGHT M MAX	SLOT WIDTH N MIN
M6	10 mm	6	2
M8	13 mm	8	2.5
M10	17 mm	9	2.8
M12	19 mm	10	3.5
M14	22 mm	11	3.5
M16	24 mm	12	4.5
M18	27 mm	13	4.5
M20	30 mm	13	4.5
M22	32 mm	15	5.5
M24	36 mm	15	5.5
M27	41 mm	17	5.5
M30	46 mm	18	7
M36	55 mm	20	7
M42	65 mm	23	9
M45	70 mm	25	9

Low (thin) castle nut, slotted for a cotter pin.

Good to know
Match the nut to the bolt: a nut at least as strong as the bolt, and the same thread pitch. Metric thread pitches are on the metric thread pitch chart; nut and bolt property classes on the ISO 898-1 page; inch hex nuts on the hex nut chart.

Quick answers

What size wrench fits an M8 metric nut?
A **13 mm** wrench (DIN 934 hex nut).

What wrench goes with each metric hex nut?
M1.6 – 3.2 mm, M2 – 4 mm, M2.5 – 5 mm, M3 – 5.5 mm, M3.5 – 6 mm, M4 – 7 mm, M5 – 8 mm, M6 – 10 mm, M8 – 13 mm, M16 – 24 mm, M18 – 27 mm, M20 – 30 mm, M24 – 36 mm, M27 – 41 mm, M30 – 46 mm, M33 – 50 mm, M36 – 55 mm, M39 – 60 mm, M42 – 65 mm, M45 – 70 mm, M48 – 75 mm, M52 – 80 mm, M56 – 85 mm, M60 – 90 mm, M64 – 95 mm. M10, M12, M14 and M22 differ between DIN 934 and ISO 4032.

How tall is an M10 nylon-insert lock nut?
10 mm maximum, with the nylon ring (DIN 985).

How thick is an M12 jam nut?
6 mm maximum (DIN 439).

What size wrench fits an M8 flange nut?
A **13 mm** wrench; the flange is 17.9 mm across (DIN 6923).

Reference values drawn from the governing standards. For critical applications, confirm against the standard and the manufacturer's published data. Technical information disclaimer →