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M18 · English · anchor-bolt-weight-chart-m18-en

Anchor Bolt Weight Chart — M18

M18 · 13 lengths · 4 configurations · kg per piece · carbon steel 7.85 g/cm³

M18

kg per piece

Shank length L (mm)	Straight no add-on	J-Hook hook +108 mm (6d)	L-Bend leg +72 mm (4d)	With Plate plate 72×9 mm
100	0.2	0.42	0.34	0.57
150	0.3	0.52	0.44	0.67
200	0.4	0.62	0.54	0.77
250	0.5	0.72	0.64	0.87
300	0.6	0.82	0.74	0.97
400	0.8	1	0.94	1.2
500	1	1.2	1.1	1.4
600	1.2	1.4	1.3	1.6
800	1.6	1.8	1.7	2
1000	2	2.2	2.1	2.4
1200	2.4	2.6	2.5	2.8
1500	3	3.2	3.1	3.4
2000	4	4.2	4.1	4.4

All values are computed as geometric volume × density (carbon steel 7.85 g/cm³, base metal, coating excluded) — no copyrighted standard tables are reproduced. Straight = cylinder π/4·d²·L; J-hook = shank + hook developed length 6d (GB/T 799 hooked-bolt basis, identical to the online calculator); L-bend = shank + leg 4d (explicit assumption — GB/T 799 has no L-type leg table); with-plate = shank + square plate a×a×t (a=4d, t=0.5d, explicit assumption, unwelded-hole-free plate, weld and accessories excluded). The full nominal diameter is used along the shank with no thread reduction.

Cell shows weight per piece (kg/pc, carbon steel 7.85 g/cm³). L = straight shank length (hook/leg/plate excluded); full nominal diameter along the whole shank (no thread reduction).

Basis of Calculation & Disclosed Assumptions

Boundary: theoretical geometric estimates for quotation, freight and lifting budgets. Actual piece weight varies with the as-built configuration (hook/leg/plate per drawing) and coating (hot-dip galvanizing ≈ +4.5%). Use measured values for trade settlement; send drawings for non-standard configurations.

References

- GB/T 799-2020 — Anchor bolts (CN, official full text; common series — anchor bolts are often custom-designed per project drawing) — https://openstd.samr.gov.cn/bzgk/gb/std?std_no=GB%2FT%20799-2020
- GB/T 192-2003 — General purpose metric screw threads: basic profile (CN, official full text; ISO 68-1 equivalent) — https://openstd.samr.gov.cn/bzgk/gb/std?std_no=GB%2FT%20192-2003
- Metric thread basic profile (ISO 68-1)
- Dimensions cross-checked against industry fastener data libraries; densities are common industry values

Disclaimer: This chart is an engineering estimation for selection, quotation and freight estimation only. It does not constitute design or acceptance criteria.

Material Density Conversion

Values above are carbon steel (7.85 g/cm³); for other materials multiply by the density factor.

Material	Density (g/cm³) g/cm³	Factor
Carbon / Alloy Steel	7.85	×1.000
Stainless 304	7.93	×1.010
Stainless 316	7.98	×1.017
Brass	8.5	×1.083

Anchor Bolt Weight Chart — M18 — Yaxiio full-range reference PDF, pack v1 · generated 2026-09-10 · data source: yaxiio-customer/utils/fastenerCalc.ts (single source of truth) · methodology matches the online tool pages · https://www.yaxiio.com/en/tools/anchor-bolt-weight-chart/m18