

Anchor Bolt Weight Chart — M8

M8 · 13 lengths · 4 configurations · kg per piece · carbon steel 7.85 g/cm³

M8

kg per piece

Shank length L (mm)	Straight no add-on	J-Hook hook +48 mm (6d)	L-Bend leg +32 mm (4d)	With Plate plate 32×4 mm
100	0.039	0.058	0.052	0.072
150	0.059	0.078	0.072	0.091
200	0.079	0.098	0.092	0.11
250	0.099	0.12	0.11	0.13
300	0.12	0.14	0.13	0.15
400	0.16	0.18	0.17	0.19
500	0.2	0.22	0.21	0.23
600	0.24	0.26	0.25	0.27
800	0.32	0.33	0.33	0.35
1000	0.39	0.41	0.41	0.43
1200	0.47	0.49	0.49	0.51
1500	0.59	0.61	0.6	0.62
2000	0.79	0.81	0.8	0.82

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 $\pi/4 \cdot d^2 \cdot L$; 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 $a \times a \times t$ ($a=4d$, $t=0.5d$, 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