

Anchor Bolt Weight Chart — M33

M33 · 13 lengths · 4 configurations · kg per piece · carbon steel 7.85 g/cm³

M33

kg per piece

Shank length L (mm)	Straight no add-on	J-Hook hook +198 mm (6d)	L-Bend leg +132 mm (4d)	With Plate plate 132×16.5 mm
100	0.67	2	1.6	2.9
150	1	2.3	1.9	3.3
200	1.3	2.7	2.2	3.6
250	1.7	3	2.6	3.9
300	2	3.3	2.9	4.3
400	2.7	4	3.6	4.9
500	3.4	4.7	4.2	5.6
600	4	5.4	4.9	6.3
800	5.4	6.7	6.3	7.6
1000	6.7	8	7.6	9
1200	8.1	9.4	8.9	10.3
1500	10.1	11.4	11	12.3
2000	13.4	14.8	14.3	15.7

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