Torque Unit Converter (N·m, kgf·m, lbf·ft, lbf·in)

Convert a torque between newton metres, kilonewton metres, newton millimetres, kilogram-force metres and centimetres, pound-force feet and pound-force inches.

Method: Unit definitions per NIST SP 811 and the SI Brochure (exact where defined)

Input parameters

Unit system: SI

Parameter	Value	Unit
Torque (choose its unit)	1.3558	N·m

Calculated results

Parameter	Value	Unit
newton metre	1.3558	N·m
kilonewton metre	0.001356	kN·m
newton millimetre	1,355.8	N·mm
kilogram-force metre	0.13825	kgf·m
kilogram-force centimetre	13.825	kgf·cm
pound-force foot	1.00000	lbf·ft
pound-force inch	12.000	lbf·in

Notes for this case

- Torque is force times lever arm; both factors convert.

Formula and method

$$x_{\text{unit}} = \frac{x_{SI}}{f_{\text{unit}}}$$

Variables

x	Torque (choose its unit)	N·m

Method and standards

Each unit's factor to the SI unit is held once in the unit registry.

Assumptions and limits

- Exact factors where the definition is exact.

References

- Unit definitions per NIST SP 811 and the SI Brochure (exact where defined)

Report details

Report reference	FCC-2RE8-6SAC (the same inputs always give the same reference)
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Calculator	Torque Unit Converter (N·m, kgf·m, lbf·ft, lbf·in)
Method last reviewed	12 November 2026
Software release	FireCAD Calc, release of 17 November 2026
Release checks	2 reference cases of this calculator, computed independently, are checked on every release

Results are for engineering estimation. Verify critical designs against the referenced standards and your own data.

This calculator online

https://calc.firecad.com/general/unit-conversions/torque-unit-converter

Open this case on calc.firecad.com →

Reopens the calculator with the inputs of this report.