Gas Flow Converter (Nm³/h, scfm, MMscfd)

Convert a gas flow at reference conditions between Nm³/s, Nm³/h, Nm³/d, standard cubic feet per minute, thousand standard cubic feet per day and million per day.

Method: Unit definitions per NIST SP 811 and the SI Brochure (exact where defined); Normal 0 °C and 101.325 kPa; standard 60 °F and 14.696 psia

Input parameters

Unit system: SI

Parameter	Value	Unit
Gas flow (choose its unit)	1,000.0	Nm³/h

Calculated results

Parameter	Value	Unit
Nm³/s	0.27778	Nm³/s
Nm³/h	1,000.0	Nm³/h
Nm³/d	24,000	Nm³/d
scfm	622.10	scfm
Mscf/d	895.82	Mscf/d
MMscfd	0.89582	MMscfd

Notes for this case

• Normal cubic metres refer to 0 °C and 101.325 kPa; standard cubic feet to 60 °F and 14.696 psia, so one Nm³ holds the same gas as about 37.33 scf (not 35.31, the plain cubic-foot ratio). The converter applies that reference-condition ratio. Some industries use 15 °C or 20 °C 'standard' metres; check which applies before converting.

Formula and method

$$1\ \mathrm{Nm^3}\ (0°\mathrm{C}) \approx 37.33\ \mathrm{scf}\ (60°\mathrm{F})$$

Variables

$\dot{V}_n$	Gas flow (choose its unit)	Nm³/s

Method and standards

Gas flow units.

Assumptions and limits

- Ideal-gas reference-condition ratio.

References

Unit definitions per NIST SP 811 and the SI Brochure (exact where defined), Normal 0 °C and 101.325 kPa; standard 60 °F and 14.696 psia

Report details

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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/gas-flow-normal-standard-converter

Open this case on calc.firecad.com →

Reopens the calculator with the inputs of this report.