

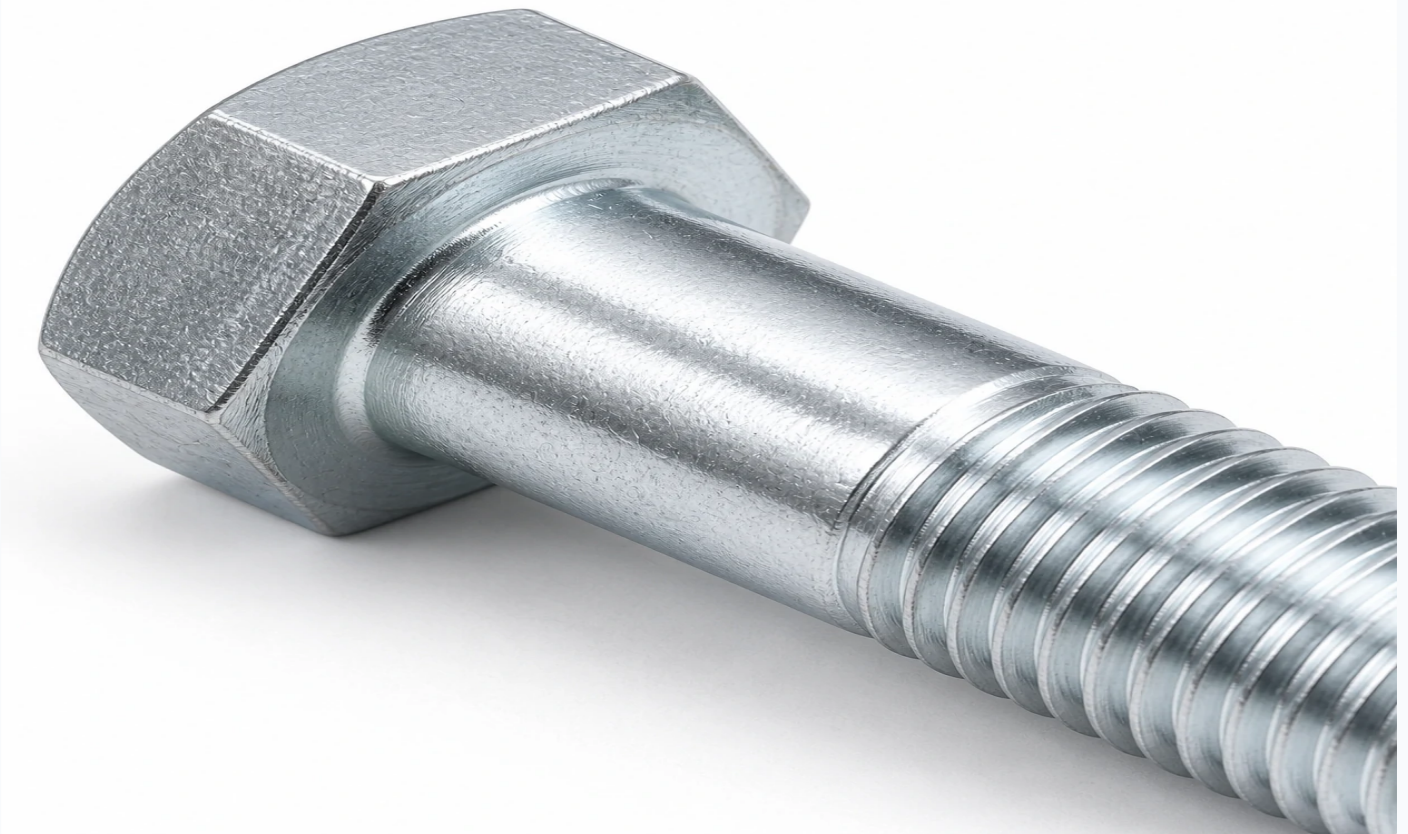
Bolt Property Classes — ISO 898-1

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Engineering Reference · Bolt Property Classes

Bolt Property Classes to ISO 898-1. Full dimensional table, materials, finishes and quotation. 10 sizes listed.



Manufactured to ISO 898-1, Bolt Property Classes are engineering reference supplied by engineeringhardware.com. The dimensional data, materials and selection notes are summarized here.

About This Reference

This is an engineering reference table for bolt property classes based on ISO 898-1. Use it alongside our fastener catalog when selecting and specifying parts.

Reference Data (ISO 898-1)

Property class	Material	Tensile strength Rm (MPa)	Yield strength Re min (MPa)	Yield ratio	Diameter range	Application	Reference standard
4.6	Low-carbon steel	400	240	0.6	M5~M100	General purpose	ISO 898-1
4.8	Low-carbon steel (annealed)	420	340	0.8	M1.6~M16	General purpose	ISO 898-1
5.6	Low/medium-carbon steel	500	300	0.6	M5~M100	General purpose	ISO 898-1
5.8	Low/medium-carbon steel	520	420	0.8	M1.6~M24	General purpose	ISO 898-1
6.8	Low/medium-carbon steel	600	480	0.8	M1.6~M24	General purpose	ISO 898-1
8.8	Medium-carbon steel (quenched & tempered)	830	660	0.8	M16~M72	High strength, most common	ISO 898-1
8.8	Low-alloy steel (quenched & tempered)	800	640	0.8	M1.6~M16	High strength, most common	ISO 898-1
9.8	Medium-carbon steel	900	720	0.8	M1.6~M16	High strength	ISO 898-1
10.9	Alloy steel (quenched & tempered)	1040	940	0.9	M5~M100	Ultra-high strength	ISO 898-1
12.9	Alloy steel (quenched & tempered)	1220	1100	0.9	M1.6~M100	Very high strength, common for socket screws	ISO 898-1

Related Fasteners

- [Clearance Hole Sizes — ISO 273](#)
- [Tap Drill Sizes — ISO 2306 \(reference\)](#)
- [Tightening Torque Reference — ISO 898 \(reference\)](#)
- [Metric Thread Dimensions — ISO 724 / ISO 965](#)
- [Metric Fine Thread Dimensions — ISO 724](#)

Frequently Asked Questions

What does the Bolt Property Classes reference table cover?

Bolt Property Classes is an engineering reference table aligned with ISO 898-1. Use the values alongside our fastener catalog when selecting and specifying parts.

How do I request a quotation?

Use the parametric drawing on this page to set the exact configuration (size, material, finish) and click "Request this configuration" — a specialist from engineeringhardware.com will respond within one business day.

More Engineering Reference

[← Previous](#)[Metric Thread Dimensions](#)[ISO 724 / ISO 965](#)[Next →](#)[Tightening Torque Reference](#)[ISO 898 \(reference\)](#)