

Metric Machine Screw Diameter and Thread Chart

Tip: Set your PDF viewer to "Actual size" before printing to maintain scale.

This printable 'lay-over' chart helps identify metric machine screw diameter and thread pitch. Print at actual size and compare to screws for quick sizing.

Size	Diameter (mm)	Coarse Pitch	Fine Pitch	Tap Drill (Coarse)
M1.6	1.6mm	0.35mm	-	1.25mm
M2	2.0mm	0.4mm	-	1.6mm
M2.5	2.5mm	0.45mm	-	2.05mm
M3	3.0mm	0.5mm	-	2.5mm
M3.5	3.5mm	0.6mm	-	2.9mm
M4	4.0mm	0.7mm	0.5mm	3.3mm
M5	5.0mm	0.8mm	0.5mm	4.2mm
M6	6.0mm	1.0mm	0.75mm	5.0mm
M8	8.0mm	1.25mm	1.0mm	6.75mm
M10	10.0mm	1.5mm	1.25mm	8.5mm
M12	12.0mm	1.75mm	1.25mm	10.25mm

Common Metric Machine Screw Head Styles

Head Style	DIN/ISO Standard	Description
Pan Head	DIN 7985 / ISO 7045	Low profile, rounded top
Flat Head	DIN 965 / ISO 7046	90° countersunk
Socket Head Cap	DIN 912 / ISO 4762	Cylindrical, hex socket drive
Button Head Socket	ISO 7380	Low profile, hex socket
Cheese Head	DIN 84 / ISO 1207	Cylindrical sides, flat top

Metric Machine Screw Diameter and Thread Chart

Material Property Classes (ISO 898-1)

Class	Tensile Strength	Material	Typical Use
4.8	420 MPa	Low/medium carbon steel	General purpose
8.8	800 MPa	Medium carbon steel	Standard industrial
10.9	1000 MPa	Alloy steel, quenched	High strength applications
12.9	1200 MPa	Alloy steel, quenched	Extreme stress applications
A2-70	700 MPa	304 Stainless steel	Corrosion resistance
A4-80	800 MPa	316 Stainless steel	Marine, chemical resistance

How to Use This Chart

1. **Measure screw diameter** with calipers (in millimeters)
2. **Check thread pitch** using a thread gauge or pitch ruler
3. **Compare to chart** to identify screw size (e.g., M6-1.0, M8-1.25)
4. **Property class marking** on head indicates strength and material