

M8 Slotted Flat Point Set Screw Dimensions

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M8 Slotted Flat Point Set Screw dimensions to GB/T 73 / ISO 4766: coarse thread pitch 1.25 mm, clearance hole (ISO 273 medium) 9 mm, tapping drill 6.75 mm. Tighten to approximately 24 Nm at property class 8.8 in a dry, as-supplied condition.

Coarse thread pitch

1.25 mm

Clearance hole (ISO 273 medium)

9 mm

Tapping drill

6.75 mm

Tightening torque (class 8.8)

24 Nm

Figures are nominal values from the governing standard. Confirm against the tolerance class for your application before machining or ordering.



M8 is one of the standard coarse-thread sizes for slotted flat point set screw under GB/T 73 / ISO 4766. The sections below reproduce the dimensional row, list the matching tools and hole sizes, and summarize where this size is normally specified.

M8 Dimensional Row (GB/T 73 / ISO 4766)

Size	Pitch (mm)	Length L (mm)	Hex socket s (mm)	Engagement depth t min (mm)
M8	1.25	12	4.0	4.0

Spanner & Drive for M8 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)

The hex socket for M8 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038) is shown in the spec table — use the matching Allen / hex key (an ISO 2936 hex key set covers the full range). A T-handle key gives the most feel when you are judging preload by hand; anything repeated across a batch wants a torque-controlled driver instead.

Hole Sizes for M8

Coarse-thread pitch (ISO 724)	1.25 mm
Through-hole / clearance (ISO 273 medium)	9 mm
Tapping drill, coarse thread	6.75 mm

Tightening Torque for M8

Class 8.8 (dry, ~ μ 0.125)	$\approx$ 24 Nm
Class 10.9 (dry, ~ μ 0.125)	$\approx$ 36 Nm
Class 12.9 (dry, ~ μ 0.125)	$\approx$ 42 Nm

Indicative dry-joint values. Lubrication can lower the required torque by 15–25%.

Always confirm against the joint design, especially when going up a strength class.

Proof Load & Strength for M8

Set screws are rated to ISO 898-5 by hardness, because they work in compression against a shaft rather than in tension. ISO 898-1 excludes them, and a set screw has no head to preload against, so neither a property class nor a preload torque applies. Seating torque depends on the point form and the shaft material.

M8 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038) Weight

A steel M8 slotted flat point set screw at the listed 12 mm length weighs approximately 2.2 g each — about 2.2 kg per 1,000 pieces. Stainless A2/A4 weighs roughly the same (density 7.9–8.0 g/cm³).

Actual weight varies slightly with head form, thread and finish; use this figure for freight estimation only.

Installation Tips for M8 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)

- Use a quality Allen key fully seated in the socket — partial engagement is the most common cause of stripped sockets at this size.
- For countersunk and button-head variants, chamfer the through-hole to seat the head flush without preloading the head/shank fillet.

Mating Parts for M8

For M8, pair with a M8 hex nut (ISO 4032 / DIN 934) and, where used, a M8 flat washer (ISO 7089 / DIN 125A) under the head and under the nut.

Custom manufacturing · Made to drawing

Need slotted flat point set screw in a size this table does not list?

This page covers M8 slotted flat point set screw. Head form and drive can be specified to the assembly rather than to a standard: a larger bearing face, a security drive, or a socket sized for the tool already on the bench. Made by cold heading or warm forging.

Minimum order from 2,000 pieces; samples within 7 days of drawing approval.

Custom screw manufacturing

(<https://engineeringhardware.com/custom/screws/>)

Send a drawing (<https://engineeringhardware.com/custom/screws/#rfq>)

Technical Drawing

Customize the parameters below — every spec field is editable, and the drawing redraws to match the values you choose. Changing the size will snap the other fields to that size's standard values; you can then override any individual value.



Dimensioned line drawing of M8 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038) to GB/T 73 / ISO 4766. Side view and top view, drawn to the dimensions in the table below and redrawn for any size selected.

Opens a short step to confirm the exact specification before you enter contact details.

Request a Quote

Click “Request this configuration” under the drawing to confirm the exact specification, then add your contact details. You can also send the request without a specification — but only an accurate selection gets an accurate quote.

Dimensions & Specifications (GB/T 73 / ISO 4766)

Size	Pitch (mm)	Length L (mm)	Hex socket s (mm)	Engagement depth t min (mm)
M3	0.5	6	1.5	1.4
M4	0.7	6	2.0	2.0
M5	0.8	7	2.5	2.5
M6	1.0	9	3.0	3.0
M8	1.25	12	4.0	4.0
M10	1.5	15	5.0	5.0
M12	1.75	18	6.0	6.0
M16	2.0	24	8.0	8.0
M20	2.5	30	10.0	10.0
M24	3.0	36	12.0	12.0

Materials & Grades

Select a material class to see the grades we supply it in. Each designation is listed with its ISO/EN, AISI/SAE, JIS and GB equivalents.

Stainless Steel

Carbon Steel66

Alloy Steel41

Bearing Steels5

Spring Steel25

Aluminum and Aluminum Alloys21

Brass17

Bronze11

Copper8

Titanium and Titanium Alloys18

Nickel and Nickel Alloys22

Iron-Nickel and High-Temperature Alloys10

Tool Steel and Specialty Hardened Steels9

Structural and Construction Steels9

Stainless Steel

Austenitic Stainless Steel

A1

AISI 303 · SAE 303 · SUS303 · EN 1.4305 · X8CrNiS18-9

A2

AISI 304 · SAE 304 · SUS304 · EN 1.4301 · X5CrNi18-10 · 06Cr19Ni10

304L

AISI 304L · SUS304L · EN 1.4307 · X2CrNi18-9 · 022Cr19Ni10

302

AISI 302 · SUS302 · EN 1.4310

305

AISI 305 · SUS305 · EN 1.4303

A4

AISI 316 · SAE 316 · SUS316 · EN 1.4401 · X5CrNiMo17-12-2 · 06Cr17Ni12Mo2

316L

AISI 316L · SUS316L · EN 1.4404 · X2CrNiMo17-12-2 · 022Cr17Ni12Mo2

321

AISI 321 · SUS321 · EN 1.4541 · X6CrNiTi18-10

310 / 310S

AISI 310 · AISI 310S · SUS310S · EN 1.4845

302HQ

AISI 302HQ

A3**A5****347**

AISI 347 · SUS347 · EN 1.4550 · X6CrNiNb18-10

309 / 309S

AISI 309 · AISI 309S · SUS309S

Martensitic Stainless Steel**AISI 410**

SUS410 · EN 1.4006 · X12Cr13 · 12Cr13

AISI 420

SUS420J1 · SUS420J2 · EN 1.4021 · EN 1.4028 · 20Cr13 · 30Cr13

AISI 431

SUS431 · EN 1.4057 · X17CrNi16-2

C1**C3****C4****AISI 440A****AISI 440B****AISI 440C****SUS440C · EN 1.4125****Ferritic Stainless Steel****AISI 430****SUS430 · EN 1.4016 · X6Cr17 · 10Cr17****F1****AISI 434****AISI 444****Precipitation-Hardening Stainless Steel****17-4 PH****AISI 630 · UNS S17400 · SUS630 · EN 1.4542 · X5CrNiCuNb16-4****15-5 PH****UNS S15500****17-7 PH****UNS S17700****Duplex and Super Duplex Stainless Steel****Duplex 2205****UNS S31803 · UNS S32205 · EN 1.4462****Super Duplex 2507****UNS S32750 · EN 1.4410****D2****D4****D6**

D8**Lean Duplex 2101****UNS S32101****Super Duplex S32760****UNS S32760 · EN 1.4501**

Carbon Steel

Low-Carbon Steel

SAE 1006**SAE 1008****SAE 1010****SAE 1018****SAE 1020****Q195****Q235****SAE 1012****SAE 1015****Q215****ML08****ML08AI****ML10****ML15****ML20****SWRCH6A****SWRCH8A****SWRCH10A****SWRCH12A**

SWRCH15A**SWRCH18A****Medium-Carbon Steel****SAE 1035****SAE 1045****S45C****C45****SAE 1030****SAE 1040****SAE 1050****30****35****40****45****50****S35C****S40C****S50C****C35****C40****High-Carbon Steel****SAE 1060****SAE 1070****65Mn****SAE 1065**

SAE 1075**SAE 1080****SAE 1085****SAE 1090****SAE 1095****60****65****70****75****80****85**

Cold-Heading Steel

SWRCH22A**10B21****SWRCH22K****SWRCH25K****SWRCH30K****SWRCH35K****SWRCH40K****ML20Mn****ML25****ML30****ML35****ML40****15B25**

Alloy Steel

Chromium Steel

40Cr**45Cr****AISI 5140****SAE 5140****AISI 5120****SAE 5120****SCr420****SCr440**

Chromium-Molybdenum Steel

35CrMo**42CrMo****AISI 4140****SCM435****SCM440****42CrMo4****30CrMo****AISI 4130****SAE 4130****SAE 4140****AISI 4142****AISI 4145****SCM415****SCM420****SCM445**

EN 1.7220**EN 1.7225****25CrMo4****34CrMo4****Nickel-Chromium-Molybdenum Steel****AISI 4340****SAE 4340****40CrNiMo****SNCM439****EN 1.6511****36CrNiMo4****Boron Alloy Steel****10B22****10B21****15B21****15B25****20MnTiB****20Mn2B****35VB****40MnB****Bearing Steel****Bearing Steel****GCr15****AISI 52100**

SAE 52100 · UNS G52986**SUJ2****100Cr6****EN 1.3505****GCr15SiMn**

Spring Steel

Carbon Spring Steel

SAE 1065**SAE 1070****SAE 1075****SAE 1080****SAE 1095****65****70****75****80****65Mn**

Silicon-Manganese Spring Steel

60Si2Mn**60Si2MnA****SUP6****SUP7**

Chromium-Vanadium Spring Steel

50CrVA**SAE 6150**

AISI 6150**SUP10****Stainless Spring Steel****AISI 301****SUS301****EN 1.4310****AISI 302****AISI 304****AISI 316****17-7 PH****Aluminum and Aluminum Alloys****Commercially Pure Aluminum****1050****1060****1070****1100****2xxx Series Aluminum****2024****2011****2014****2017****5xxx Series Aluminum****5052**

5083**5754****6xxx Series Aluminum****6061****6061-T6****6063****6082****6082-T6****7xxx Series Aluminum****7075****7075-T6****7005****7050****7075-T73****Brass****Free-Cutting Brass****C36000****H62****HPb59-1****C3601****C3602****C3604****CuZn36Pb3****CuZn39Pb3**

EN CW614N**EN CW617N****H65****Lead-Free Brass****C69300****C27450****CW510L****CW511L****Naval Brass****C46400****CuZn39Sn1****Bronze****Silicon Bronze****C65500****C65100****C65600****Phosphor Bronze****C51000****C52100****CuSn6****CuSn8**

Aluminum Bronze

C95400**C95500****C63000****CuAl10Ni5Fe4**

Copper

Copper

C11000**T2****C10100****C10200****C12200****T1****TU1****TU2**

Titanium and Titanium Alloys

Commercially Pure Titanium

Grade 2**Grade 1****Grade 3****Grade 4****TA1****TA2**

TA3**Alpha-Beta Titanium Alloys****Grade 5****Ti-6Al-4V****TC4****UNS R56400****Low-Interstitial Grade****Grade 23****Ti-6Al-4V ELI****UNS R56407****Other Titanium Fastener Alloys****Ti-6Al-6V-2Sn****Ti-6Al-2Sn-4Zr-2Mo****Beta-C titanium****Ti-10V-2Fe-3Al****Nickel and Nickel Alloys****Commercially Pure Nickel****Nickel 200****UNS N02200****Nickel 201****UNS N02201**

Inconel Alloys

Inconel 625

UNS N06625

Inconel 718

UNS N07718

Inconel 600

UNS N06600

Inconel 601

UNS N06601

Inconel 686

UNS N06686

Inconel X-750

UNS N07750

Monel Alloys

Monel 400

UNS N04400

Monel K-500

UNS N05500

Hastelloy Alloys

Hastelloy C-276

UNS N10276

Hastelloy C-22

UNS N06022

Hastelloy B-2

UNS N10665

Hastelloy B-3

UNS N10675

Hastelloy X

UNS N06002

Other Nickel Alloys

Alloy 20

UNS N08020

Alloy 625

Alloy 718

Alloy 825

UNS N08825

Alloy 925

UNS N09925

Iron-Nickel and High-Temperature Alloys

A286

A-286

UNS S66286

EN 1.4980

Invar

Invar 36

Alloy 36

UNS K93600

FeNi36

Alloy 42

Alloy 42

UNS K94100

FeNi42

Tool Steel and Specialty Hardened Steel

Tool Steel and Specialty Hardened Steel

AISI D2**AISI H13****SKD11****Cr12MoV****AISI O1****AISI A2****AISI S7****SKD61****9CrSi**

Structural and Construction Steel

Structural and Construction Steel

ASTM A36**Q235B****Q355B****S355JR****Q235C****Q355C****S235JR****S275JR****S355J2**

Applications & Industries for M8 Slotted Flat Point Set Screw

What Slotted Flat Point Set Screw are specified for, industry by industry. Stocked from M3 to M24.

Industries that specify Slotted Flat Point Set Screw

Steel fabrication **Bolted connections in frames, enclosures, walkways and weldments, on the bench and on site.**

Energy & infrastructure **Tower, pipework, switchgear and plant fixings specified for long service life and inspectable joints.**

Maintenance & MRO **Stocked replacements matched to an existing property class, thread and finish.**

Food, pharma & cleanroom **Stainless assemblies that are washed down, where the finish matters as much as the strength.**

Machine building & OEM **The default fastener on production equipment: covers, brackets, motor mounts and sub-assemblies tightened to a specified torque.**

Automotive & transport **Chassis, driveline and body fixings that see vibration and are assembled to a controlled preload.**

Typical applications

- **assemblies that are dismantled for service and re-torqued**
- **joints where the property class is stated on the drawing**
- **clamping two machined faces to a calculated preload**
- **bolting brackets, motors and gearboxes to a frame**

Service conditions to specify against

Marine and coastal

Available in A4 (316) stainless for chloride exposure — coastal structures, pool halls, water treatment and deck hardware, where A2 will eventually pit.

High load

Supplied in ISO 898-1 property classes, so the joint can be designed to a stated proof load and tightened to a calculated torque rather than by feel.

Torque and preload

The joint is designed around bolt tension, so lubrication, coating and the friction coefficient all change the torque figure — state them together.

Where to use something else

- **Do not use a machine thread into unthreaded sheet or timber; use a tapping screw, rivet nut or insert made for that parent material.**

Need help matching Slotted Flat Point Set Screw to your application? Send the assembly, the load and the environment with your enquiry and we will specify the size, material and finish against them.

Video: M8 Slotted Flat Point Set Screw Dimensions



► Watch video: <https://www.youtube.com/watch?v=UI9OjLHvdGA>(<https://www.youtube.com/watch?v=UI9OjLHvdGA>)

Third-party video, selected automatically for this topic. It is not produced by Engineering Hardware and is not a specification source — use the tables on this page for dimensional data.

Inside the plant

Manufactured in our own plant

This part is cold-formed, threaded, heat-treated and finished in-house. The stages below are where its class and finish are actually decided.



01

Cold heading

Wire rod is drawn to size and cold-formed into blanks. Forming rather than cutting keeps the grain flow continuous around the head, which is where a bolt is most likely to fail.

Head dimensions and under-head radius checked at set-up and per shift.



02

Thread rolling

Threads are rolled between hardened dies rather than cut. Rolled threads are stronger in fatigue than cut threads and hold pitch and flank angle far more consistently across a batch.

Go / no-go ring gauges to ISO 965 tolerance class 6g.



03

Heat treatment

Quench-and-temper brings carbon and alloy steel to the property class ordered — 8.8, 10.9 or 12.9 — with the furnace charge tracked so a finished lot can be traced back to it.

Core hardness and tensile tested per lot to ISO 898-1.



04

Surface treatment

Zinc, zinc-nickel, hot-dip galvanizing, black oxide, phosphate and Dacromet, selected against the service environment rather than against the price list.

Coating thickness and neutral salt spray hours to ISO 9227.

Frequently Asked Questions

Which Allen key fits M8 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)?

The hex-socket size for each row of Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038) is shown in the spec table — use the matching Allen / hex key. An ISO 2936 set covers every size on this page.

How do I avoid stripping the socket on M8 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)?

Fully seat the key in the socket, choose ball-end keys only for low-torque finishing work, and prefer a T-handle key when feel matters. For production use a torque-controlled driver.

What is the coarse-thread pitch of M8 for Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)?

For M8 the standard coarse pitch is 1.25 mm — this is the value used for Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038).

What torque do M8 class 8.8 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038) take?

A dry M8 class 8.8 joint takes about 24 Nm ($\approx$ 36 Nm for 10.9, $\approx$ 42 Nm for 12.9). Confirm against your joint design; lubrication reduces these values.

How do I request a quotation?

Use the technical drawing on this page to pick the exact configuration, then submit it with the quote form. We respond within one business day.

Related Pages

[View the full Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 \(Series 038\) page](https://engineeringhardware.com/fastener/cad-svg-038-setscrewflat/)
(<https://engineeringhardware.com/fastener/cad-svg-038-setscrewflat/>)

More Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038) Guides

- **M3 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)** (<https://engineeringhardware.com/guide/size/m3-cad-svg-038-setscrewflat/>)
- **M4 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)** (<https://engineeringhardware.com/guide/size/m4-cad-svg-038-setscrewflat/>)
- **M5 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)** (<https://engineeringhardware.com/guide/size/m5-cad-svg-038-setscrewflat/>)
- **M6 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)** (<https://engineeringhardware.com/guide/size/m6-cad-svg-038-setscrewflat/>)
- **M10 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)** (<https://engineeringhardware.com/guide/size/m10-cad-svg-038-setscrewflat/>)
- **M12 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)** (<https://engineeringhardware.com/guide/size/m12-cad-svg-038-setscrewflat/>)
- **M16 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)** (<https://engineeringhardware.com/guide/size/m16-cad-svg-038-setscrewflat/>)
- **M20 Slotted Flat Point Set Screw — GB/T 73 / ISO 4766 (Series 038)** (<https://engineeringhardware.com/guide/size/m20-cad-svg-038-setscrewflat/>)