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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 820-2015

**Raised countersunk head screws with cross recess
(English Translation)**

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Foreword

This standard is one of the national standards "slotted screw and screw with cross recesses" series, which includes.

- GB/T 65 Slotted cheese head screws;
- GB/T 67 Slotted pan head screws;
- GB/T 68 Slotted countersunk flat head screws (common head styles);
- GB/T 69 Countersunk slotted raised head screws (common head styles);
- GB/T 818 Pan head screws with cross recess;
- GB/T 819.1 Countersunk flat head screws with cross recess - Part 1.

Property class 4.8;

- GB/T 819.2 Countersunk flat head screws with cross recess - Part 2.

Property class 8.8, stainless steel screws and non-ferrous metal screws;

- GB/T 820 Raised countersunk head screws with cross recess;
- GB/T 822 Cross head screws with cross recess;
- GB/T 823 Small pan head screws with cross recess;
- GB/T 13806.1 Fasteners for fine machines - Cross recessed screws.

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 820-2000 "Cross recessed countersunk head screw"; as compared with GB/T 820-2000, the main technical changes are as follows.

- DELETE "if requiring other technical requirements, SELECT from GB/T

3098.6 and GB/T 3098.10)..." (Chapter 1 of 2000 version);

- UNIFY the reference thread standard as GB/T 193, GB/T 9145 (Chapter 2);
- ADD the performance rating specifications for steel and non-ferrous metal screws " $d < 3$ mm, FOLLOW the agreement" (Table 2);
- ADD the technical requirements for non-electrolytic zinc flake coating of steel and non-ferrous metal screw, which shall follow GB/T 5267.2 (Table 2);

Raised countersunk head screws with cross recess

1 Scope

This standard specifies the type and size, technical condition and marking of the raised countersunk head screws with cross recess.

This standard applies to the type H and type Z raised countersunk head screws with cross recess of the thread specification M1.6 ~ M10, the performance level of 4.8, A2-50, A2-70, CU2, CU3 and AL4, AND the product grade A.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this Standard.

GB/T 90.1 Fasteners - Acceptance inspection (GB/T 90.1-2002, ISO 3269.2000, IDT)

GB/T 90.2 Fastener - Marking and packaging

GB/T 193 General purpose metric screw threads - General plan (GB/T 193-2003, ISO 26.1998, MOD)

GB/T 944.1 Cross recesses for screws (GB/T 944.1-1985, eqv ISO 4757.1983)

GB/T 1237 Designation system for fasteners (GB/T 1237-2000, eqv ISO 8991.1986)

GB/T 3098.1 Mechanical properties of fasteners - Bolts, screws and studs (GB/T 3098.1-2000, idt ISO 898-1.1999)

GB/T 3098.6 Mechanical properties of fasteners - Stainless steel bolts, screws and studs (GB/T 3098.6-2014, ISO 3506-1.2009, MOD)

GB/T 3098.10 Mechanical properties of fasteners - Bolts, screws, studs and nuts made of non-ferrous metal (GB/T 3098.10-1993, eqv ISO 8839.1986)

GB/T 3103.1 Tolerances for fasteners - Bolts, screws, studs and nuts (GB/T 3103.1-2002, ISO 4759-1.2000, IDT)

GB/T 5267.1 Fastener - Electroplated coatings (GB/T 5267.1-2002, ISO 4042.1999, IDT)

GB/T 5267.2 Fasteners - Non-electrolytically applied zinc flake coatings (GB/T 5267.2-2002, ISO 10683.2000, IDT)

GB/T 5267.4 Passivation of corrosion-resistant stainless-steel fasteners (GB/T 5267.4-2009, ISO 16048.2003, IDT)

GB/T 5276 Fasteners - Bolts, screws, studs and nuts - Symbols and descriptions of dimensions (GB/T 5276-2015, ISO 225.2010, MOD),

GB/T 5779.1 Fasteners - Surface discontinuities - Bolts, screws and studs for general requirements (GB/T 5779.1-2000, idt ISO 6157-1.1988)

GB/T 9145 General purpose metric screw threads - Limits of sizes for the screw threads of medium quality and preferable plan (GB/T 9145-2003, ISO 965-2.1998, MOD)

GB/T 16938 Fasteners - General requirements for bolts screws studs and nuts (GB/T 16938-2008, ISO 8992.2005, IDT)

3 Size

As for the type and size of the screws, SEE Figure 1 and Table 1.

The dimensional designation and marking shall comply with GB/T 5276.

The rod diameter of the threadless part is approximately equal to the pitch diameter of the thread OR allowed to be equal to the major diameter of the thread.

The type H raised countersunk head screws with cross recess of the thread size M5, nominal length $l = 20$ mm, performance grade of 4.8, product grade A, without surface treatment is marked as.

Screw GB/T 820 M5 x 20

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