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

GB/T 819.2-2016

**Countersunk flat head screws with cross recess -- Part 2:
Property class 8.8, stainless steel screws and non-ferrous metal
screws**

(English Translation)

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Foreword

This Part is one of the serial national standards of "Slotted Screws and Cross Recess Screws", such series include.

- GB/T 65 Slotted Cheese Head Screws;
- GB/T 67 Slotted Pan Head Screws;
- GB/T 68 Slotted Countersunk Flat Head Screws;
- GB/T 69 Slotted Raised Countersunk Head Screws;
- 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 Recessed Cheese Head Screws;
- GB/T 823 Cross Recessed Small Pan Head Screws;
- GB/T 13806.1 Fasteners for Fine Mechanics - Cross Recessed Screws.

This Part was drafted as per the rules specified in GB/T 1.1-2009.

This Part replaced GB/T 819.2-1997 Countersunk Flat Head Screws with Cross Recess - Part 2. Steel Property Class 8.8, Stainless Steel A2-70 and Non-Ferrous Metal CU2 or CU3; compared with GB/T 819.2-1997, the major technical changes are

as follows.

- Delete "if under special conditions, the technical conditions specified beyond this Standard,... GB 3106 and GB 9145" (Chapter 1 of 1997 Edition);
 - Unify the reference thread standards into GB/T 193, GB/T 9145 (see Chapter 2);
 - add "d< 3mm, as per agreement" to the property class of steel and non-ferrous metal screws (see Table 2);
 - Add the steel screws non--electrolytically applied zinc flake coating technical requirements as per GB/T 5267.2 (see Table 2);
 - Add the stainless-steel screws passivation treatment technical requirements as
- Countersunk Flat Head Screws with Cross Recess -
Part 2. Property Class 8.8, Stainless Steel Screws and
Non-Ferrous Metal Screws

1 Scope

This Part of GB/T 819 specifies the type and dimension, technical conditions and markings of stainless steel and non-ferrous metal countersunk flat head screws with cross recess and property class 8.8.

This Part is applicable to Type-H and Type-Z countersunk flat head screws with cross recess for Thread Specification M2~M10, Property Class 8.8, A2-70, CU2, CU3, 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 document.

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

GB/T 90.2 Fasteners - Marking and Packaging

GB/T 193 General Purpose Screw Threads - Diameters and Pitches (GB/T 193-

2003, ISO 261.1998, 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 3098.1-2010, ISO 898-1.2009, MOD)

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 and Studs Made of Non-Ferrous Metals (GB/T 3908.10-1993, eqv ISO 8839.1986)

GB/T 3103.1 Tolerances for Fasteners - Bolts, Screws and Nuts (GB/T 3103.1-2002, idt ISO 4759-1.2000)

GB/T 5267.1 Fasteners - 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 5279 Countersunk Head Screws - Head Configuration and Gauging (GB/T 5279-1985, idt ISO 7721.1983)

GB/T 5279.2 Countersunk Flat Head Screws - Part 2. Penetration Depth of Cross Recesses (GB/T 5279.2-1997, idt ISO 7721-2.1990)

GB/T 5779.1 Fastener - Surface Discontinues - 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 Dimension

The type and dimension of screws can refer to Figure 1 and Table 1.

The dimension codes and markings shall conform to GB/T 5276.

The shank diameter of the part without thread equals to the medium diameter of thread or allows equaling to the large diameter of thread.

Screw GB/T 819.2 M5x20

If insert depth series are needed to designate, the type and series number of cross recess shall be indicated in the marking, e.g.. Type-H, Series 1.

Screw GB/T 819.2 M5x20 H1

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