**CAP SCREWS & BOLTS**

**Grade 9 HEX CAP SCREWS Cap Screws**

**Grade-9 Hex Cap Screws Holo Krome**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **E** | | **F** | | |  | **H** |
|  | **Body**  **Diameter** | | **Width Across Flats** | | |  | **Head Height** |
|  | **Max** | **Min** | **Basic** | **Max** | **Min** | **Basic** | **Max** |
| 0.2500 | 0.2500 | 0.2450 | 7/16 | 0.438 | 0.428 | 3/16 | 0.194 |
| 0.3125 | 0.3125 | 0.3065 | 1/2 | 0.500 | 0.489 | 15/64 | 0.242 |
| 0.3750 | 0.3750 | 0.3690 | 9/16 | 0.562 | 0.551 | 9/32 | 0.289 |
| 0.4375 | 0.4375 | 0.4305 | 5/8 | 0.625 | 0.612 | 21/64 | 0.338 |
| 0.5000 | 0.5000 | 0.4930 | 3/4 | 0.750 | 0.736 | 3/8 | 0.386 |
| 0.5625 | 0.5625 | 0.5545 | 13/16 | 0.812 | 0.798 | 27/64 | 0.433 |
| 0.6250 | 0.6250 | 0.6170 | 15/16 | 0.938 | 0.922 | 15/32 | 0.481 |
| 0.7500 | 0.7500 | 0.7410 | 1-1/8 | 1.125 | 1.100 | 9/16 | 0.577 |
| 0.8750 | 0.8750 | 0.8660 | 1-5/16 | 1.312 | 1.285 | 21/32 | 0.672 |

**Nominal or Basic Product**

**Diameter**

**Min**

1/4 0.181 5/16 0.227 3/8 0.273 7/16 0.318 1/2 0.364 9/16 0.410 5/8 0.456 3/4 0.548 7/8 0.640 1 1.0000 1.0000 0.9900 1-1/2 1.500 1.469 3/4 0.768 0.732

**Nominal Screw Length**

**Tolerance on Length**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Nominal Screw Size** | Up to 1 in., incl. | Over 1 in. to 2-1/2 in., incl. | Over 2-1/2 in. to 4 in., incl. | Over 4 in. to 6 in., incl. |
| **1/4 to 3/8** | -0.03 | -0.04 | -0.06 | -0.10 |
| **7/16 and 1/2** | -0.03 | -0.06 | -0.08 | -0.10 |
| **9/16 to 3/4** | -0.03 | -0.08 | -0.10 | -0.10 |

Longer than 6 in.

-0.18

-0.18

-0.18

**7/8 and 1** .... -0.10 -0.14 -0.16 -0.20

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**CAP SCREWS & BOLTS**

**Grade 9**

**Cap Screws HEX CAP SCREWS**

**GRADE-9 HEX CAP SCREW**

**Description** A cap screw made from medium carbon or alloy steel with head height approximately 25% higher than a standard cap  screw.

**Applications/ Advantages**

Has greater tensile strength than a Grade-8. Designed for use in heavy machinery and equipment subject to harsh environmental and fatigue conditions.

**Material** AISI 8637 / 8640 / 8740 Medium Carbon Alloy Steel wire or 4340 Alloy Steel bar stock **Hardness** Rockwell C38 - C42

**Proof Load** 140,650 psi.

**Yield Strength\*** 159,500 psi. minimum

**Tensile Strength** 180,000 psi. minimum

**Elongation\*** 10% minimum (all diameters)

**Reduction of**

**Area\*** 35% minimum (all sizes)

**Plating** Steel EcoGuard™ 1000-hour Gray/Silver finish

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