**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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