

Datasheet

RS Stock No: 292079

Steel Black Self-Colour, Hexagon Cap Socket Screws: Imperial Thread



Socket Caps have a small cylindrical head with tall, vertical sides giving them space saving advantages as well as greater tensile strength. They also require less side room for wrenches. These socket screws are used in many applications including the manufacture and repair of vehicles, machine tooling, tools and dies, machine production and repair and general engineering applications. Most importantly, socket cap head screws provide safety, reliability and cost efficiency.

- Threaded in accordance with DIN 912 Standard / ISO 4762
- 12.9 grade heat-treated high tensile alloy steel
- Used for applications with limited space in high-tensile applications
- Suitable for use in many industrial applications and similarly medical, construction, electronic and domestic applications
- Imperial sizes are normally used where machinery and equipment has been manufactured in the USA
- Requires a Hex Key / Allen Key

The chart below allows you to easily convert between Imperial and Metric:

| INCH & METRIC | | | | | | | | | | | | | | |
|---------------|-----|------|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-----|
| INCH | 1/4 | 5/16 | 3/8 | 1/2 | 5/8 | 3/4 | 7/8 | 1 | 1 1/8 | 1 1/4 | 1 3/8 | 1 1/2 | 1 3/4 | 2 |
| METRIC | M6 | M8 | M10 | M12 | M16 | M20 | M22 | M24 | M27 | M30 | M33 | M36 | M42 | M48 |

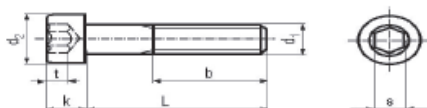


ENGLISH

Please view our full range listing below for all Imperial Black Self-Colour Steel Hexagon Socket Cap Head Screws:

| Head Shape | Material | Thread Size | Length | RS Part No. |
|----------------|----------|-------------|--------|-------------|
| Hex Socket Cap | Steel | ¼ In | ½ In | 292079 |
| Hex Socket Cap | Steel | ¼ In | ⅝ In | 292085 |
| Hex Socket Cap | Steel | ¼ In | ¾ In | 292091 |
| Hex Socket Cap | Steel | ¼ In | 1 In | 292108 |
| Hex Socket Cap | Steel | ¼ In | 1 ¼ In | 292114 |
| Hex Socket Cap | Steel | ¼ In | 1 ½ In | 292120 |
| | | | | |
| Hex Socket Cap | Steel | 5/16 In | ¾ In | 292142 |
| Hex Socket Cap | Steel | 5/16 In | 1 In | 292158 |
| Hex Socket Cap | Steel | 5/16 In | 1 ¼ In | 292164 |
| Hex Socket Cap | Steel | 5/16 In | 1 ½ In | 292170 |
| Hex Socket Cap | Steel | 5/16 In | 2 In | 292192 |
| | | | | |
| Hex Socket Cap | Steel | 3/8 In | 1 In | 292215 |
| Hex Socket Cap | Steel | 3/8 In | 1 ¼ In | 292221 |
| Hex Socket Cap | Steel | 3/8 In | 1 ½ In | 292237 |
| Hex Socket Cap | Steel | 3/8 In | 2 In | 292259 |

SOCKET HEAD CAP SCREWS DIN 912/ ISO 4762 / ANSI B 18.3.1 M



Head Diameter d2 max. allows for
Knurled Head

| | | | | | | | | | | | | | | |
|---------------------------|---------------|--------|-------------|--------|--------------|-------|-------------|--------|--------------|--------|--------------|--------|------------|--------|
| Thread Size d1 | (M1.4) | | M1.6 | | M2 | | M2.5 | | M2.6 | | M3 | | M4 | |
| Thread Pitch | 0.3 | | 0.35 | | 0.4 | | 0.45 | | 0.45 | | 0.5 | | 0.7 | |
| Thread Length b | 14 | | 15 | | 16 | | 17 | | NA | | 18 | | 20 | |
| Head Dia. d2 | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. |
| DIN 912 (1983) | 2.46 | 2.74 | 2.86 | 3.14 | 3.62 | 3.98 | 4.32 | 4.68 | 4.82 | 5.18 | 5.32 | 5.68 | 6.78 | 7.22 |
| ISO 4762 (1997) | | | 2.86 | 3.14 | 3.62 | 3.98 | 4.32 | 4.68 | | | 5.32 | 5.68 | 6.78 | 7.22 |
| ANSI B 18.3.1 M (1988) | | | 2.87 | 3.14 | 3.65 | 3.98 | 4.33 | 4.68 | | | 5.32 | 5.68 | 6.80 | 7.22 |
| Head Height k | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. |
| DIN 912 (1983) | 1.28 | 1.40 | 1.46 | 1.60 | 1.86 | 2.00 | 2.36 | 2.50 | 2.46 | 2.60 | 2.86 | 3.00 | 3.82 | 4.00 |
| ISO 4762 (1997) | | | 1.46 | 1.60 | 1.86 | 2.00 | 2.36 | 2.50 | | | 2.86 | 3.00 | 3.82 | 4.00 |
| ANSI B 18.3.1 M (1988) | | | 1.52 | 1.60 | 1.91 | 2.00 | 2.40 | 2.50 | | | 2.89 | 3.00 | 3.88 | 4.00 |
| Key Size nominal s | 1.3 | | 1.5 | | 1.5 | | 2 | | 2 | | 2.5 | | 3 | |
| | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. |
| DIN 912 (1983) | 1.32 | 1.38 | 1.52 | 1.56 | 1.52 | 1.56 | 2.02 | 2.06 | 2.02 | 2.06 | 2.52 | 2.58 | 3.02 | 3.08 |
| ISO 4762 (1997) | | | 1.52 | 1.56 | 1.52 | 1.56 | 2.02 | 2.06 | | | 2.52 | 2.58 | 3.02 | 3.08 |
| ANSI B 18.3.1 M (1988) | | | 1.520 | 1.545 | 1.520 | 1.545 | 2.020 | 2.045 | | | 2.52 | 2.58 | 3.020 | 3.071 |
| Key Engagement t | min. | | min. | | min. | | min. | | min. | | min. | | min. | |
| DIN 912 (1983) | 0.6 | | 0.7 | | 1 | | 1.10 | | 1.2 | | 1.3 | | 2 | |
| ISO 4762 (1997) | | | 0.7 | | 1 | | 1.10 | | | | 1.3 | | 2 | |
| ANSI B 18.3.1 M (1988) | | | 0.8 | | 1 | | 1.25 | | | | 1.5 | | 2 | |
| Thread Size d1 | M5 | | M6 | | M8 | | M10 | | M12 | | (M14) | | M16 | |
| Thread Pitch | 0.8 | | 1 | | 1.25 | | 1.5 | | 1.75 | | 2 | | 2 | |
| Thread Length b | 22 | | 24 | | 28 | | 32 | | 36 | | 40 | | 44 | |
| Head Dia. d2 | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. |
| DIN 912 (1983) | 8.28 | 8.72 | 9.78 | 10.22 | 12.73 | 13.27 | 15.73 | 16.27 | 17.73 | 18.27 | 20.67 | 21.33 | 23.67 | 24.33 |
| ISO 4762 (1997) | 8.28 | 8.72 | 9.78 | 10.22 | 12.73 | 13.27 | 15.73 | 16.27 | 17.73 | 18.27 | 20.67 | 21.33 | 23.67 | 24.33 |
| ANSI B 18.3.1 M (1988) | 8.27 | 8.72 | 9.74 | 10.22 | 12.70 | 13.27 | 15.67 | 16.27 | 17.63 | 18.27 | 20.6 | 21.33 | 23.58 | 24.33 |
| Head Height k | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. |
| DIN 912 (1983) | 4.82 | 5.00 | 5.7 | 6.0 | 7.64 | 8.00 | 9.64 | 10.00 | 11.57 | 12.00 | 13.57 | 14.00 | 15.57 | 16.00 |
| ISO 4762 (1997) | 4.82 | 5.00 | 5.7 | 6.0 | 7.64 | 8.00 | 9.64 | 10.00 | 11.57 | 12.00 | 13.57 | 14.00 | 15.57 | 16.00 |
| ANSI B 18.3.1 M (1988) | 4.86 | 5.00 | 5.85 | 6.00 | 7.83 | 8.00 | 9.81 | 10.00 | 11.79 | 12.00 | 13.77 | 14.00 | 15.76 | 16.00 |
| Key Size nominal s | 4 | | 5 | | 6 | | 8 | | 10 | | 12 | | 14 | |
| | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. |
| DIN 912 (1983) | 4.020 | 4.095 | 5.02 | 5.14 | 6.02 | 6.14 | 8.025 | 8.175 | 10.025 | 10.175 | 12.032 | 12.212 | 14.032 | 14.212 |
| ISO 4762 (1997) | 4.020 | 4.095 | 5.02 | 5.14 | 6.02 | 6.14 | 8.025 | 8.175 | 10.025 | 10.175 | 12.032 | 12.212 | 14.032 | 14.212 |
| ANSI B 18.3.1 M (1988) | 4.020 | 4.084 | 5.020 | 5.084 | 6.020 | 6.095 | 8.025 | 8.115 | 10.025 | 10.127 | 12.032 | 12.146 | 14.032 | 14.159 |
| Key Engagement t | min. | | min. | | min. | | min. | | min. | | min. | | min. | |
| DIN 912 (1983) | 2.5 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | |
| ISO 4762 (1997) | 2.5 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | |
| ANSI B 18.3.1 M (1988) | 2.5 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | |
| Thread Size d1 | (M18) | | M20 | | (M22) | | M24 | | (M27) | | M30 | | M33 | |
| Thread Pitch | 2.5 | | 2.5 | | 2.5 | | 3 | | 3 | | 3.5 | | 3.5 | |
| Thread Length b | 48 | | 52 | | 56 | | 60 | | 66 | | 72 | | 78 | |
| Head Dia. d2 | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. |
| DIN 912 (1983) | 26.67 | 27.33 | 29.67 | 30.33 | 32.61 | 33.39 | 35.61 | 36.39 | 39.61 | 40.39 | 44.61 | 45.39 | 49.61 | 50.39 |
| ISO 4762 (1997) | | | 29.67 | 30.33 | | | 35.61 | 36.39 | | | 44.61 | 45.39 | | |
| ANSI B 18.3.1 M (1988) | | | 29.53 | 30.33 | | | 35.48 | 36.39 | | | 44.42 | 45.39 | | |
| Head Height k | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. |
| DIN 912 (1983) | 17.57 | 18.00 | 19.48 | 20.00 | 21.48 | 22.00 | 23.48 | 24.00 | 26.48 | 27.00 | 29.48 | 30.00 | 32.38 | 33.00 |
| ISO 4762 (1997) | | | 19.48 | 20.00 | | | 23.48 | 24.00 | | | 29.48 | 30.00 | | |
| ANSI B 18.3.1 M (1988) | | | 19.73 | 20.00 | | | 23.70 | 24.00 | | | 29.67 | 30.00 | | |
| Key Size nominal s | 14 | | 17 | | 17 | | 19 | | 19 | | 22 | | 24 | |
| | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. | min. | max. |
| DIN 912 (1983) | 14.032 | 14.212 | 17.05 | 17.23 | 17.05 | 17.23 | 19.065 | 19.275 | 19.065 | 19.275 | 22.065 | 22.275 | 24.065 | 24.275 |
| ISO 4762 (1997) | | | 17.05 | 17.23 | | | 19.065 | 19.275 | | | 22.065 | 22.275 | | |
| ANSI B 18.3.1 M (1988) | | | 17.050 | 17.216 | | | 19.065 | 19.243 | | | 22.065 | 22.319 | | |
| Key Engagement t | min. | | min. | | min. | | min. | | min. | | min. | | min. | |
| DIN 912 (1983) | 9 | | 10 | | 11 | | 12 | | 13.5 | | 15.5 | | 18 | |
| ISO 4762 (1997) | | | 10 | | | | 12 | | | | 15.5 | | | |
| ANSI B 18.3.1 M (1988) | | | 10 | | | | 12 | | | | 15.0 | | | |

For More Detailed Information, Please Refer To Complete DIN, ISO, or ANSI Standard, Which Are The Governing Standards.