

# Datasheet

**RS Stock No: 1871336**

## **A4, 316 Stainless Steel Self-Colour Hexagon Socket Cap Head Screws: Metric Thread**



Socket caps have a small cylindrical head with tall, vertical sides giving them space-saving advantages as well as greater tensile strength and they require less side room for wrenches.

- Threaded in accordance with DIN 912 Standard
- A4 grade 316 Stainless Steel
- Higher level of corrosion resistance than A2 Stainless Steel
- Can be used up to 300°C
- Used for applications with limited space in high tensile applications
- Suitable for use in many industrial applications involving processing chemicals, as well as high saline environments such as coastal and marine environments
- Also used in most medical, construction, electronic and domestic applications
- Requires a Hex Key / Allen Key



**ENGLISH**

Please view our full range listing below for all A4 316 Stainless Steel Self-Colour Hexagon Socket Cap Head Screws:

| <b>Head Shape</b> | <b>Material</b> | <b>Thread Size</b> | <b>Length</b> | <b>RS Part No.</b> |
|-------------------|-----------------|--------------------|---------------|--------------------|
| Hex Socket Cap    | Stainless Steel | M3                 | 6 mm          | 1871207            |
| Hex Socket Cap    | Stainless Steel | M3                 | 8 mm          | 1871213            |
| Hex Socket Cap    | Stainless Steel | M3                 | 10 mm         | 6604636            |
| Hex Socket Cap    | Stainless Steel | M3                 | 12 mm         | 1871229            |
| Hex Socket Cap    | Stainless Steel | M3                 | 16 mm         | 1871235            |
| Hex Socket Cap    | Stainless Steel | M3                 | 20 mm         | 3044429            |
| Hex Socket Cap    | Stainless Steel | M3                 | 25 mm         | 3044435            |
| Hex Socket Cap    | Stainless Steel | M3                 | 30 mm         | 3044615            |
|                   |                 |                    |               |                    |
| Hex Socket Cap    | Stainless Steel | M4                 | 8 mm          | 1871241            |
| Hex Socket Cap    | Stainless Steel | M4                 | 10 mm         | 6604639            |
| Hex Socket Cap    | Stainless Steel | M4                 | 12 mm         | 1871257            |
| Hex Socket Cap    | Stainless Steel | M4                 | 16 mm         | 1871263            |
| Hex Socket Cap    | Stainless Steel | M4                 | 20 mm         | 1871279            |
| Hex Socket Cap    | Stainless Steel | M4                 | 25 mm         | 1871285            |
| Hex Socket Cap    | Stainless Steel | M4                 | 30 mm         | 1871308            |
| Hex Socket Cap    | Stainless Steel | M4                 | 40 mm         | 3044609            |
| Hex Socket Cap    | Stainless Steel | M4                 | 50 mm         | 3044592            |
|                   |                 |                    |               |                    |
| Hex Socket Cap    | Stainless Steel | M5                 | 8 mm          | 6604633            |
| Hex Socket Cap    | Stainless Steel | M5                 | 10 mm         | 3044586            |
| Hex Socket Cap    | Stainless Steel | M5                 | 12 mm         | 1871314            |
| Hex Socket Cap    | Stainless Steel | M5                 | 16 mm         | 1871320            |
| Hex Socket Cap    | Stainless Steel | M5                 | 20 mm         | 1871336            |
| Hex Socket Cap    | Stainless Steel | M5                 | 25 mm         | 1871342            |
| Hex Socket Cap    | Stainless Steel | M5                 | 30 mm         | 1871364            |
| Hex Socket Cap    | Stainless Steel | M5                 | 40 mm         | 1871370            |
| Hex Socket Cap    | Stainless Steel | M5                 | 50 mm         | 3044570            |
| Hex Socket Cap    | Stainless Steel | M5                 | 60 mm         | 3044564            |

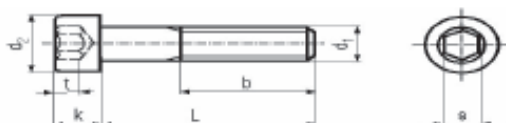


**ENGLISH**

Please view our full range listing below for all A4 316 Stainless Steel Self-Colour Hexagon Socket Cap Head Screws:

| Head Shape     | Material        | Thread Size | Length | RS Part No. |
|----------------|-----------------|-------------|--------|-------------|
| Hex Socket Cap | Stainless Steel | M6          | 10 mm  | 6604642     |
| Hex Socket Cap | Stainless Steel | M6          | 12 mm  | 1871386     |
| Hex Socket Cap | Stainless Steel | M6          | 16 mm  | 1871392     |
| Hex Socket Cap | Stainless Steel | M6          | 20 mm  | 1871409     |
| Hex Socket Cap | Stainless Steel | M6          | 25 mm  | 1871421     |
| Hex Socket Cap | Stainless Steel | M6          | 30 mm  | 1871437     |
| Hex Socket Cap | Stainless Steel | M6          | 35 mm  | 1871443     |
| Hex Socket Cap | Stainless Steel | M6          | 40 mm  | 1871459     |
| Hex Socket Cap | Stainless Steel | M6          | 45 mm  | 6604645     |
| Hex Socket Cap | Stainless Steel | M6          | 50 mm  | 1871465     |
| Hex Socket Cap | Stainless Steel | M6          | 60 mm  | 3044558     |
| Hex Socket Cap | Stainless Steel | M8          | 16 mm  | 1871471     |
| Hex Socket Cap | Stainless Steel | M8          | 20 mm  | 1871487     |
| Hex Socket Cap | Stainless Steel | M8          | 25 mm  | 1871493     |
| Hex Socket Cap | Stainless Steel | M8          | 30 mm  | 1871500     |
| Hex Socket Cap | Stainless Steel | M8          | 35 mm  | 1871516     |
| Hex Socket Cap | Stainless Steel | M8          | 40 mm  | 1871522     |
| Hex Socket Cap | Stainless Steel | M8          | 45 mm  | 6604649     |
| Hex Socket Cap | Stainless Steel | M8          | 50 mm  | 1871538     |
| Hex Socket Cap | Stainless Steel | M8          | 60 mm  | 1871544     |
| Hex Socket Cap | Stainless Steel | M8          | 70 mm  | 6604658     |
| Hex Socket Cap | Stainless Steel | M8          | 80 mm  | 6604651     |
| Hex Socket Cap | Stainless Steel | M10         | 20 mm  | 3044542     |
| Hex Socket Cap | Stainless Steel | M10         | 25 mm  | 6604655     |
| Hex Socket Cap | Stainless Steel | M10         | 30 mm  | 3044520     |
| Hex Socket Cap | Stainless Steel | M10         | 40 mm  | 3044514     |
| Hex Socket Cap | Stainless Steel | M10         | 50 mm  | 3044508     |
| Hex Socket Cap | Stainless Steel | M10         | 70 mm  | 3044485     |
| Hex Socket Cap | Stainless Steel | M12         | 30 mm  | 3044463     |
| Hex Socket Cap | Stainless Steel | M12         | 40 mm  | 3044457     |
| Hex Socket Cap | Stainless Steel | M12         | 50 mm  | 3044441     |

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



Head Diameter d2 based on  
Knurled Head

| Thread Size d1         | M36    |        | (M39)  |        | M42    |        | (M45) |       | M48    |        | M56   |       | M64   |       |
|------------------------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|-------|-------|-------|-------|
| Thread Pitch           | 4      |        | 4      |        | 4.5    |        | 4.5   |       | 5      |        | 5.5   |       | 6     |       |
| Thread Length b        | 84     |        | NA     |        | 96     |        | NA    |       | 108    |        | 124   |       | 140   |       |
| Head Dia. d2           | min.   | max.   | min.   | max.   | min.   | max.   | min.  | max.  | min.   | max.   | min.  | max.  | min.  | max.  |
| DIN 912 (1983)         | 53.54  | 54.46  | 57.54  | 58.46  | 62.54  | 63.46  | 66.54 | 67.46 | 71.54  | 72.46  | 83.46 | 84.54 | 95.46 | 96.54 |
| ISO 4762 (1997)        | 53.54  | 54.46  |        |        | 62.54  | 63.46  |       |       | 71.54  | 72.46  | 83.46 | 84.54 | 95.46 | 96.54 |
| ANSI B 18.3.1 M (1986) | 53.37  | 54.46  |        |        | 62.31  | 63.46  |       |       | 71.27  | 72.46  |       |       |       |       |
| Head Height k          | min.   | max.   | min.   | max.   | min.   | max.   | min.  | max.  | min.   | max.   | min.  | max.  | min.  | max.  |
| DIN 912 (1983)         | 35.38  | 36.00  | 38.38  | 39.00  | 41.38  | 42.00  | 44.38 | 45.00 | 47.38  | 48.00  | 55.26 | 56.00 | 63.26 | 64.00 |
| ISO 4762 (1997)        | 35.38  | 36.00  |        |        | 41.38  | 42.00  |       |       | 47.38  | 48.00  | 55.26 | 56.00 | 63.26 | 64.00 |
| ANSI B 18.3.1 M (1986) | 35.54  | 36.00  |        |        | 41.61  | 42.00  |       |       | 47.58  | 48.00  |       |       |       |       |
| Key Size nominal s     | 27     |        | 27     |        | 32     |        | 32    |       | 36     |        | 41    |       | 46    |       |
|                        | min.   | max.   | min.   | max.   | min.   | max.   | min.  | max.  | min.   | max.   | min.  | max.  | min.  | max.  |
| DIN 912 (1983)         | 27.065 | 27.275 | 27.065 | 27.275 | 32.08  | 32.33  | 32.08 | 32.33 | 36.08  | 36.33  | 41.08 | 41.33 | 46.08 | 46.33 |
| ISO 4762 (1997)        | 27.065 | 27.275 |        |        | 32.08  | 32.33  |       |       | 36.08  | 36.33  | 41.08 | 41.33 | 46.08 | 46.33 |
| ANSI B 18.3.1 M (1986) | 27.065 | 27.319 |        |        | 32.080 | 32.461 |       |       | 36.080 | 36.461 |       |       |       |       |
| Key Engagement t       | min.   |        | min.   |        | min.   |        | min.  |       | min.   |        | min.  |       | min.  |       |
| DIN 912 (1983)         | 19     |        | 22     |        | 24     |        | 24    |       | 28     |        | 34    |       | 38    |       |
| ISO 4762 (1997)        | 19     |        |        |        | 24     |        |       |       | 28     |        | 34    |       |       |       |
| ANSI B 18.3.1 M (1986) | 18     |        |        |        | 21     |        |       |       | 24     |        |       |       |       |       |

| Thread Size d1     | M72    |        | M80    |        | M90    |        | M100   |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Thread Pitch       | 6      |        | 6      |        | 6      |        | 6      |        |
| Thread Length b    | 156    |        | 172    |        | 192    |        | 212    |        |
| Head Dia. d2       | min.   | max.   | min.   | max.   | min.   | max.   | min.   | max.   |
| DIN 912 (1983)     | 107.46 | 108.54 | 119.46 | 120.54 | 134.37 | 135.63 | 149.37 | 150.63 |
| Head Height k      | min.   | max.   | min.   | max.   | min.   | max.   | min.   | max.   |
| DIN 912 (1983)     | 71.26  | 72.00  | 79.26  | 80.00  | 89.13  | 90.00  | 99.13  | 100.00 |
| Key Size nominal s | 55     |        | 65     |        | 75     |        | 85     |        |
|                    | min.   | max.   | min.   | max.   | min.   | max.   | min.   | max.   |
| DIN 912 (1983)     | 55.10  | 55.40  | 65.10  | 65.40  | 75.10  | 75.40  | 85.12  | 85.47  |
| Key Engagement t   | min.   |        | min.   |        | min.   |        | min.   |        |
| DIN 912 (1983)     | 43     |        | 48     |        | 54     |        | 60     |        |

| Property Class          | 12.9       |      | 8.8-d 16mm |      | 8.8-d 16mm |      | 10.9       |      | A2 /A4-50 |      | A2 /A4-70  |      | A2 /A4-80  |      |
|-------------------------|------------|------|------------|------|------------|------|------------|------|-----------|------|------------|------|------------|------|
| Tensile Strength        | 176900 psi |      | 116000 psi |      | 120350 psi |      | 150800 psi |      | 72500 psi |      | 101500 psi |      | 116000 psi |      |
| Yield Strength          | 159500 psi |      | 92800 psi  |      | 95700 psi  |      | 136300 psi |      | 30450 psi |      | 65250 psi  |      | 87000 psi  |      |
| Rockwell Hardness (HRC) | min.       | max. | min.       | max. | min.       | max. | min.       | max. | min.      | max. | min.       | max. | min.       | max. |
|                         | 39         | 44   | 22         | 32   | 23         | 34   | 32         | 39   | NA        | NA   | NA         | NA   | NA         | NA   |

| Property Class   | Steel         | Steel      | Stainless Steel |
|------------------|---------------|------------|-----------------|
|                  | 12.9          | 8.8 & 10.9 | A2 & A4         |
| Finish           | Furnace Black |            | Plain           |
| Thread Tolerance | 5g5g          | 6g         |                 |

Diameters & Lengths With ( ) are not recommended for new design.

M1.4, 2.6, 39 and 45 are no longer included in DIN 912.

M1.4, 2.6, 18, 22, 27, 33, 39, and 45 are no longer included in ISO 4762.

The basic difference between DIN 912-12.9 (1983) / ISO 4762-12.9 (1997) and ANSI B 18.3.M (1986) is both DIN and ISO have a thread tolerance of 5g5g, while ANSI has a thread tolerance of 4g6g, which may not be readily available on a worldwide basis.

ANSI B 18.3.1 M is only available in Property Class 12.9.

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