

# Datasheet

**RS Stock No: 6604639**

## **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



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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



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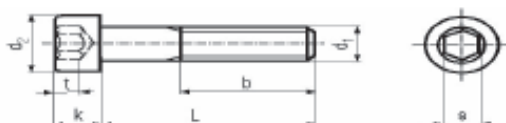
Please view our full range listing below for all A4 316 Stainless Steel Self-Colour Hexagon Socket Cap Head Screws:

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



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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.