ENGLISH

Datasheet

RS Stock No: 292091

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

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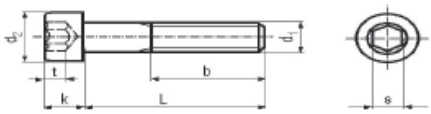
Please view our full range listing below for all Imperial Black Self-Colour Steel Hexagon Socket Cap Head Screws:

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

ENGLISH

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 (1986)			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)	1.26	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 (1986)			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	1.36	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 (1986)			1.520	1.545	1.520	1.545	2.020	2.045			2.52	2.56	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 (1986)			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 (1986)	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 (1986)	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 (1986)	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 (1986)	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 (1986)			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 (1986)			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 (1986)			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 (1986)			10				12				15.0			

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