



**ENGLISH** 

#### **Datasheet**

**RS Stock No: 292170** 

# 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	% In	292085		
Hex Socket Cap	Steel	¼ In	3⁄4 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		





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#### 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		_	.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	1.58 1.545	1.52	1.56	2.02	2.06	<b>—</b>		2.52	2.58	3.02	3.08	
ANSI B 18.3.1 M (1986)		<u> </u>	1.520				2.020	2.045	⊢		2.52	2.56	3.020	3.071	
Key Engagement t		in.		iin.	min.		min.		min.		m		min.		
DIN 912 (1983) ISO 4762 (1997)	0	.6	0.7 0.7		1			1.10		.2		.3		2	
ANSI B 18.3.1 M (1986)	+				1		1.10				_	.5			
, ,			0.8		1		1.25						2		
Thread Size d1		M5	M6		M8			M10		M12		(M14)		M16	
Thread Pitch		.8	1		1.25		1.5		1.75		2		2		
Thread Length b	_	2		24		8	_	2	_	6		0	_	4	
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 DIN 912 (1983)	min. 4.82	max. 5.00	min. 5.7	max. 6.0	min. 7.64	max. 8.00	min. 9.64	max. 10.00	min. 11.57	max. 12.00	min. 13.57	max. 14.00	min. 15.57	max. 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	4.00	4	3.00	5	7.00	0.00	8.01	R 10.00		0	10.77	2	13.70	4	
,	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	m	in.	min.		min.		min.		min.		min.		min.		
DIN 912 (1983)	2	.5	3		4		5		6		7		8		
ISO 4762 (1997)		.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	4	18		52	5	6	6	80	6	6	7	2	7	'8	
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	$ldsymbol{ldsymbol{eta}}$		44.61	45.39	$ldsymbol{ldsymbol{eta}}$		
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	<u> </u>		29.48	30.00			
ANSI B 18.3.1 M (1986)			19.73 20.00		4.7		23.70 24.00		10		29.67 30.00		<del></del>		
Key Size nominal s	. 14		17		17		19		19		22		24		
DIN 042 (4002)	min. 14.032	max. 14.212	min. 17.05	max. 17.23	min. 17.05	max. 17.23	min. 19.065	max. 19.275	min. 19.065	max. 19.275	min. 22.065	max. 22.275	min. 24.065	max. 24.275	
DIN 912 (1983) ISO 4762 (1997)	14.032	14.212	17.05	17.23	17.00	17.23	19.065	19.275	18.000	18.270	22.065	22.275	24.000	24.270	
ANSI B 18.3.1 M (1986)		-	17.050	17.216	-		19.065	19.275	$\vdash$	$\vdash$	22.065	22.2/5	$\vdash$	$\vdash$	
<u> </u>		in				in.	_	_	_	in			_	in	
Key Engagement t DIN 912 (1983)	min. 9		min. 10		min.		min. 12		min. 13.5		min. 15.5		min. 18		
ISO 4762 (1997)	8		10		11		12		13.5		15.5		18		
	<del> </del>			10	-		12				15.0		$\vdash$		
ANSI B 18.3.1 M (1986)															

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