

HEX BOLT

CLASS 10.9 METRIC



BLACK

APPLICATION

Bremick® Hex Head Metric Class 10.9 bolts are designed for industrial and construction applications where high tensile superior performance is required

PRODUCT ATTRIBUTES

Material Class: Carbon Steel Class 10.9

Thread Form: 6g

Finish: Plain/Natural/Lightly Oiled

Standard: Complies to AS 1110.1 2015

Mechanical Properties: Complies to AS/NZS 4291.1 2015

Chemical Composition: Complies to AS/NZS 4291.1 2015

HEAD MARKING

Manufacturer Mark

B

Property Class

10.9

MECHANICAL PROPERTIES

PROPERTIES	TENSILE STRENGTH (MPa)	STRESS UNDER PROOF LOAD (MPa)	HARDNESS					
	MIN	NOM.	VICKERS (HV)		BRINELL (HBW)		ROCKWELL (HRC)	
CLASS 10.9	1040	830	320	380	316	375	32	39

CHEMICAL COMPOSITION

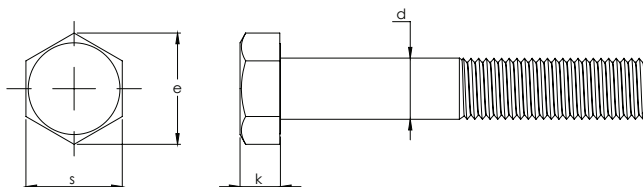
MATERIAL	C		P	S	B	TEMPERING TEMPERATURE °C
	MIN	MAX	MAX	MAX	MAX	MIN
CARBON STEEL	0.25	0.55	0.025	0.025	0.003	425

FINISH INFORMATION

PLAIN / BLACK / NATURAL

DESCRIPTION	OVERVIEW	CORROSION RESISTANCE
Plain, black & natural are all terms referring to the fastener not having a coating applied. The product has a light oil added. .	Plain or uncoated fasteners offer no corrosion protection they are supplied lightly oiled to inhibit the rust process prior to installation and help during installation.	—

DIMENSIONAL DATA (mm)



DIAMETER	PITCH (mm)	ACROSS FLATS (s)		ACROSS CORNERS (e)		HEAD HEIGHT (k)		MAJOR DIAMETER (d)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
M5	0.8	7.78	8	8.79		3.35	3.65	4.82	5
M6	1	9.78	10	11.05		3.85	4.15	5.82	6
M8	1.25	12.73	13	14.38		5.15	5.45	7.78	8
M10	1.5	15.73	16	17.77		6.22	6.58	9.78	10
M12	1.75	17.73	18	20.03		7.32	7.68	11.73	12
M14	2	20.67	21	23.36		8.62	8.98	13.73	14
M16	2	23.67	24	26.75		9.82	10.18	15.73	16
M20	2.5	29.67	30	33.53		12.28	12.72	19.67	20
M24	3	35.38	36	39.98		14.78	15.22	23.67	24
M27	3	40	41	45.2		13.65	17.35	26.48	27
M30	3.5	45	46	50.85		18.28	19.12	29.48	30
M36	4	53.8	55	60.79		22.08	22.92	35.38	36
M42	4.5	63.1	65	71.3		25.58	26.42	41.38	42
M48	5	73.1	75	82.6		29.58	30.42	47.38	48

Note: For lengths longer than 150mm or longer than 10 x diameter reference standard AS 1110.1:2015

SOCKET OR SPANNER SIZE (mm)

BOLT DIAMETER	M5	M6	M8	M10	M12	M14	M16	M20	M24	M27	M30	M36	M42	M48
SPANNER SIZE	8	10	13	16	18	21	24	30	36	41	46	55	65	75

THREAD LENGTH (mm)

Length	M5	M6	M8	M10	M12	M14	M16	M20	M24	M27	M30	M36	M42	M48
20														
25	16													
30	16	18												
35	16	18	22											
40	16	18	22											
45	16	18	22	26										
50	16	18	22	26										
55	16	18	22	26	30									
60	16	18	22	26	30	34								
65	16	18	22	26	30	34	38							
70	16	18	22	26	30	34	38							
80	16	18	22	26	30	34	38	46						
90	16	18	22	26	30	34	38	46	54					
100	16	18	22	26	30	34	38	46	54	60				
110	16	18	22	26	30	34	38	46	54	60	66			
120	16	18	22	26	30	34	38	46	54	60	66			
130	22	24	28	32	36	40	44	52	60	66	72			
140	22	24	28	32	36	40	44	52	60	66	72	84		
150	22	24	28	32	36	40	44	52	60	66	72	84		
160	-	24	28	32	36	40	44	52	60	66	72	84	96	
180	-	-	28	32	36	40	44	52	60	66	72	84	96	108
200	-	-	28	32	36	40	44	52	60	66	72	84	96	108
220	-	-	-	45	49	53	57	65	73	79	85	97	109	121
240	-	-	-	-	49	53	57	65	73	79	85	97	109	121
260	-	-	-	-	49	53	57	65	73	79	85	97	109	121
280	-	-	-	-	-	53	57	65	73	79	85	97	109	121
300	-	-	-	-	-	-	57	65	73	79	85	97	109	121
320	-	-	-	-	-	-	-	65	73	79	85	97	109	121
340	-	-	-	-	-	-	-	65	73	79	85	97	109	121
360	-	-	-	-	-	-	-	-	73	79	85	97	109	121
380	-	-	-	-	-	-	-	-	-	79	85	97	109	121
400	-	-	-	-	-	-	-	-	-	-	85	97	109	121
420	-	-	-	-	-	-	-	-	-	-	-	97	109	121
440	-	-	-	-	-	-	-	-	-	-	-	97	109	121
460	-	-	-	-	-	-	-	-	-	-	-	97	109	121
480	-	-	-	-	-	-	-	-	-	-	-	-	109	121
500	-	-	-	-	-	-	-	-	-	-	-	-	109	121

ALL SIZES ABOVE THE STEPPED LINE ARE FULLY THREADED

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