

# HEX BOLT CLASS 4.6 METRIC



**HOT DIPPED GALVANISED**

## APPLICATION

Bremick® Hex Head Metric Class 4.6 bolts are designed for industrial and construction applications where moderate tensile performance is required

## PRODUCT ATTRIBUTES

**Material Class:** Carbon Steel Class 4.6

**Thread Form:** Metric 8g

**Finish:** Hot Dipped Galvanised

**Standard:** Complies to AS 1111.1:2015

**Mechanical Properties:** Complies to ISO 898.1:2013

**Chemical Composition:** Complies to ISO 898.1:2013

## HEAD MARKING



In some cases, the Bremick head mark will be replaced by the mark of the original manufacturer

## MECHANICAL PROPERTIES

PROPERTIES	TENSILE STRENGTH (MPa)		STRESS UNDER PROOF LOAD (MPa)		HARDNESS					
					VICKERS (HV)		BRINELL (HBW)		ROCKWELL (HRB)	
	MIN	NOM.	MIN	MAX	MIN	MAX	MIN	MAX		
CLASS 4.6	400	225	120	220	114	209	67	95		

## CHEMICAL COMPOSITION (%)

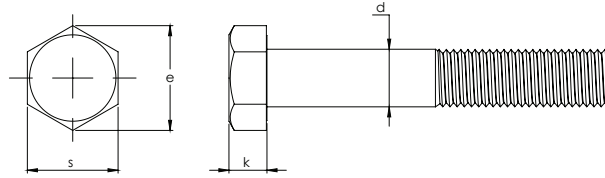
MATERIAL	C		P	S	B	TEMPERING TEMPERATURE °C
	MIN	MAX	MAX	MAX	MAX	MIN
CARBON STEEL	-	0.55	0.050	0.060	Not Specified	-

## FINISH INFORMATION

### HOT DIPPED GALVANISED

DESCRIPTION	OVERVIEW	CORROSION RESISTANCE
Hot Dipped Galvanised is a process of dipping a steel object into a molten bath of zinc (455° - 480°C). The molten zinc adheres to the anchor surface covering all the corners and edges.	Bremick® Hot Dipped Galvanised Coating provides a moderate/high level of corrosion protection and is recommended for damp external application. Bremick® Hot Dipped Galvanising complies with AS/NZS 1214.	Moderate/High.

## 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	0.80	7.64	8	8.63		3.13	3.88	4.52	5.48
M6	1.00	9.64	10	10.89		3.63	4.38	5.52	6.48
M8	1.25	12.57	13	14.20		4.93	5.68	7.42	8.58
M10	1.50	15.57	16	17.59		5.95	6.85	9.42	10.58
M12	1.75	17.57	18	19.85		7.05	7.95	11.30	12.70
M14	2.00	20.16	21	22.78		8.35	9.25	13.30	14.70
M16	2.00	23.16	24	26.17		9.25	10.75	15.30	16.70
M20	2.50	29.16	30	32.95		11.60	13.40	19.16	20.84
M24	3.00	35.00	36	39.55		14.10	15.90	23.16	24.84
M27	3.00	40.00	41	45.20		16.10	17.90	26.16	27.84
M30	3.50	45.00	46	50.85		17.65	19.75	29.16	30.84
M36	4.00	53.80	55	60.79		21.45	23.55	35.00	37.00
M42	4.50	63.10	65	71.30		24.95	27.05	41.00	43.00
M48	5.00	73.10	75	82.60		28.95	31.05	47.00	49.00

## 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												
40	16	18	22											
45	16	18	22	26										
50	16	18	22	26	30									
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	22	24	28	32	36	40	44	52	60	66	72	84	96	
180	22	24	28	32	36	40	44	52	60	66	72	84	96	108
200	22	24	28	32	36	40	44	52	60	66	72	84	96	108
220	35	37	41	45	49	53	57	65	73	79	85	97	109	121
240	35	37	41	45	49	53	57	65	73	79	85	97	109	121
260	35	37	41	45	49	53	57	65	73	79	85	97	109	121
280	35	37	41	45	49	53	57	65	73	79	85	97	109	121
300	35	37	41	45	49	53	57	65	73	79	85	97	109	121
325	-	37	41	45	49	53	57	65	73	79	85	97	109	121
350	-	37	41	45	49	53	57	65	73	79	85	97	109	121
375	-	-	41	45	49	53	57	65	73	79	85	97	109	121
400	-	-	41	45	49	53	57	65	73	79	85	97	109	121
425	-	-	-	45	49	53	57	65	73	79	85	97	109	121
450	-	-	-	45	49	53	57	65	73	79	85	97	109	121
475	-	-	-	-	49	53	57	65	73	79	85	97	109	121
500	-	-	-	-	49	53	57	65	73	79	85	97	109	121
550	-	-	-	-	-	53	57	65	73	79	85	97	109	121
600	-	-	-	-	-	-	57	65	73	79	85	97	109	121
650	-	-	-	-	-	-	57	65	73	79	85	97	109	121
700	-	-	-	-	-	-	-	65	73	79	85	97	109	121
750	-	-	-	-	-	-	-	65	73	79	85	97	109	121

**ALL SIZES ABOVE THE STEPPED LINE ARE FULLY THREADED**

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