

BOLT, NUT & WASHER METRIC



**ZINC
PLATED**

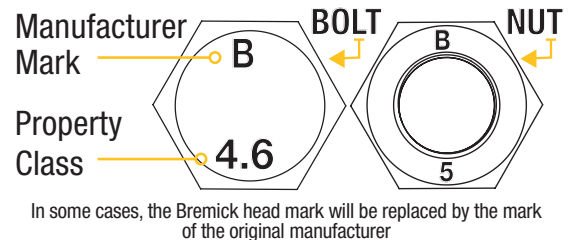
APPLICATION

Bremick® Hex Head Metric Class 4.6 bolts, Metric Class 5 hex nuts, and flat washers are suited to industrial and construction applications requiring moderate-strength fastening, providing secure clamping, load distribution, and surface protection in general assembly and maintenance use.

PRODUCT ATTRIBUTES

Material Class:	Bolt - Carbon Steel 4.6 Nut - Carbon Steel Class 5 (style 1, NQT)
Thread Form:	Bolt - Metric 8g Nut - Metric 7H
Finish:	Zinc Plated
Standard:	Bolt complies to AS 1111.1:2015 Nut complies to AS 1112.3:2015
Mechanical Properties:	Bolt complies to ISO 898.1:2013 Nut complies to ISO 898.2:2022

HEAD MARKING



Chemical Composition: Bolt complies to ISO 898.1:2013
Nut complies to ISO 898.2:2022

MECHANICAL PROPERTIES

COMPONENTS	PROOF LOAD (N)	TENSILE STRENGTH (MPa)	STRESS UNDER PROOF LOAD (MPa)	HARDNESS					
				VICKERS (HV)		BRINELL (HBW)		ROCKWELL (HRB)	
				MIN	MAX	MIN	MAX	MIN	MAX
BOLT - CLASS 4.6	-	400	225	120	220	114	209	67	95
NUT - CLASS 5	51400 (M12)	-	610	130	334	124	318	71.2 HRB	33.9 HRC
	95800 (M16)								

CHEMICAL COMPOSITION (%)

MATERIAL	C		P	S	Mn
	MIN	MAX	MAX	MIN	MAX
BOLT MATERIAL - CARBON STEEL	-	0.55	0.050	0.060	
NUT MATERIAL - CARBON STEEL	0.06	0.58	0.060	0.150	0.25

FINISH INFORMATION

ZINC PLATED		
DESCRIPTION	OVERVIEW	CORROSION RESISTANCE

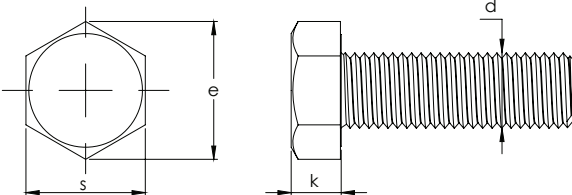
Zinc Plating is a process of depositing a thin layer of zinc onto the surface of a steel object through electroplating. The steel object is then passivated with a transparent conversion layer.

Bremick® Zinc Plated Coating provides a low level of corrosion protection and is recommended for dry internal application. Bremick® Zinc Plating complies with AS1789.

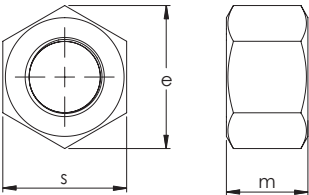
Low.

DIMENSIONAL DATA (mm)

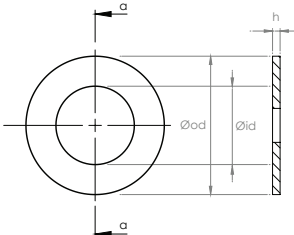
BOLT



NUT



WASHER



Diameter	PITCH (mm)	ACROSS FLATS (s)		ACROSS CORNERS (e)		HEAD HEIGHT (k)		BODY DIAMETER (d)		ACROSS FLATS (s)		ACROSS CORNERS (e)		NUT HEIGHT (m)		INNER DIAMETER (od)	OUTER DIAMETER (id)	THICKNESS (n)
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	NOM	NOM	NOM
M12	1.75	17.57	18.00	19.85		7.05	7.95	11.3	12.7	17.73	18.00	19.85		10.37	10.80	32.00	13.50	2.10
M16	2.00	23.16	24.00	26.17		9.25	10.75	15.3	16.7	23.67	24.00	26.17		14.10	14.80	33.00	17.60	2.40

SOCKET OR SPANNER SIZE (inches)

BOLT DIAMETER	M12	M16
SPANNER SIZE	18	24

THREAD LENGTH

Note: Bolt is fully threaded