

FLANGE PURLIN
CLASS 4.6 METRIC



ZINC
PLATED

APPLICATION

Bremick® Flange purlin assemblies are designed with an integrated flange on both the bolt head and the nut. This flange design distributes the clamping force over a larger area making them ideal for light gauge structural steel applications.

PRODUCT ATTRIBUTES

Material Class:	Carbon Steel Class 4.6
Thread Form:	Metric 6g/6H
Finish:	Zinc Plated
Standard:	Complies to Bremick Specification
Mechanical Properties:	Bolt complies to ISO 898.1 2013 Nut complies to ISO 898.2 2022
Chemical Composition:	Bolt complies to ISO 898.1 2013 Nut complies to ISO 898.2 2022

HEAD MARKING



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

MECHANICAL PROPERTIES

COMPONENTS	PROOF LOAD (N)	STRESS UNDER PROOF LOAD (MPa)	TENSILE STRENGTH (MPa)	HARDNESS					
				VICKERS (HV)		BRINELL (HBW)		ROCKWELL (HRB/HRC)	
	MIN	NOM.	NOM.	MIN	MAX	MIN	MAX	MIN	MAX
BOLT - CLASS 4.6	19000 (M12)	225	400	120	220	114	209	67 HRB	95 HRB
	35300 (M16)								
NUT - CLASS 5	51400 (M12)	610	N/A	130	334	124	318	71.2 HRB	33.9 HRC
	95800 (M16)								

CHEMICAL COMPOSITION (%)

MATERIAL	C		P	S	B	Mn	TEMPERING TEMPERATURE °C
	MIN	MAX	MAX	MAX	MAX	MIN	MIN
BOLT - CLASS 4.6	-	0.55	0.050	0.060	Not Specified	N/A	-
NUT - CLASS 5	0.06	0.58	0.060	0.150	N/A	0.25	-

FINISH INFORMATION

ZINC PLATED		
DESCRIPTION	OVERVIEW	CORROSION RESISTANCE

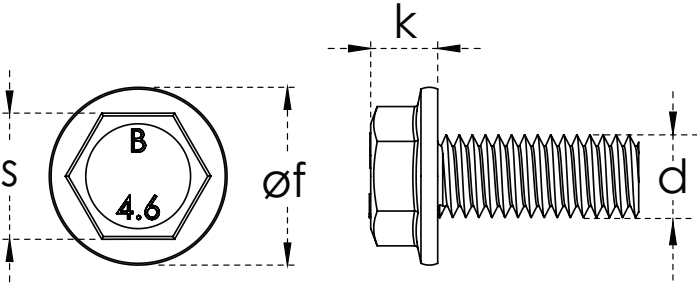
Zinc Plating is a process of depositing a thin layer of zinc onto the surface of a steel object through electroplating. The steel object is then passivated with a transparent conversion layer.

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

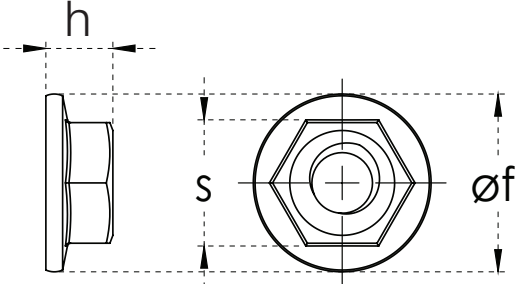
Low.

DIMENSIONAL DATA (mm)

Flange Bolt



Flange Nut



Diameter d	PITCH (mm)	ACROSS FLATS (s)	FLANGE DIAMETER (f)	HEAD HEIGHT (k)
		NOMINAL	NOMINAL	NOMINAL
M12	1.75	18.00	28.00	10.50
M16	2.00	24.00	32.00	13.50

ACROSS FLATS (s)	FLANGE DIAMETER (f)	NUT HEIGHT (h)	SPANNER SIZE
NOMINAL	NOMINAL	NOMINAL	NOMINAL
18.00	28.00	12.50	18.00
24.00	32.00	17.50	24.00

NOTE: Dimensions are compliant with ISO 4161

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