

# FLANGE PURLIN CLASS 8.8 METRIC

## 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

|                               |                                                                   |
|-------------------------------|-------------------------------------------------------------------|
| <b>Material Class:</b>        | Carbon Steel Class 8.8                                            |
| <b>Thread Form:</b>           | Metric 6g/6H                                                      |
| <b>Finish:</b>                | Hot Dipped Galvanised                                             |
| <b>Standard:</b>              | Complies to Bremick Specification                                 |
| <b>Mechanical Properties:</b> | Bolt complies to ISO 898.1 2013<br>Nut complies to ISO 898.2 2022 |
| <b>Chemical Composition:</b>  | Bolt complies to ISO 898.1 2013<br>Nut complies to ISO 898.2 2022 |

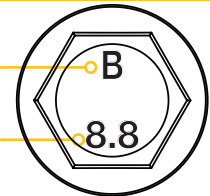
**HOT DIPPED  
GALVANISED**



## HEAD MARKING

Manufacturer Mark

Property Class



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

## MECHANICAL PROPERTIES

| COMPONENTS          | PROOF LOAD<br>(N) | STRESS UNDER<br>PROOF LOAD<br>(MPa) | TENSILE<br>STRENGTH<br>(MPa) | HARDNESS     |     |               |     |                    |          |
|---------------------|-------------------|-------------------------------------|------------------------------|--------------|-----|---------------|-----|--------------------|----------|
|                     |                   |                                     |                              | VICKERS (HV) |     | BRINELL (HBW) |     | ROCKWELL (HRB/HRC) |          |
|                     | MIN               | NOM.                                | NOM.                         | MIN          | MAX | MIN           | MAX | MIN                | MAX      |
| BOLT -<br>CLASS 8.8 | 48900 (M12)       | 580                                 | 800                          | 250          | 320 | 245           | 316 | 22                 | 32       |
|                     | 91000 (M16)       |                                     |                              |              |     |               |     |                    |          |
| NUT -<br>CLASS 8    | 74200 (M12)       | 895                                 | -                            | 200          | 334 | 195           | 330 | 92.7 HRB           | 34.8 HRC |
|                     | 138200 (M16)      |                                     |                              |              |     |               |     |                    |          |

## CHEMICAL COMPOSITION (%)

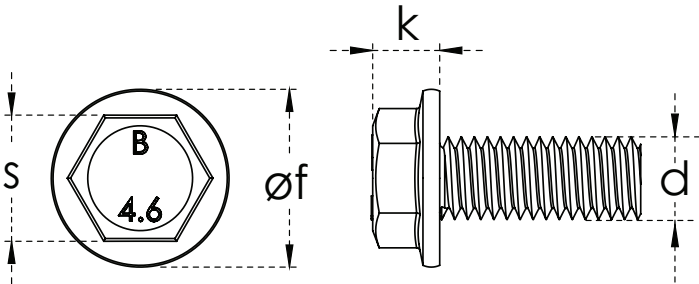
| MATERIAL         | C    |      | P     | S     | B     | Mn   | TEMPERING<br>TEMPERATURE °C |
|------------------|------|------|-------|-------|-------|------|-----------------------------|
|                  | MIN  | MAX  | MAX   | MAX   | MAX   | MIN  | MIN                         |
| BOLT - CLASS 8.8 | 0.15 | 0.40 | 0.025 | 0.025 | 0.003 | N/A  | 425                         |
| NUT - CLASS 8    | 0.15 | 0.58 | 0.048 | 0.058 | N/A   | 0.45 | 380                         |

FINISH INFORMATION

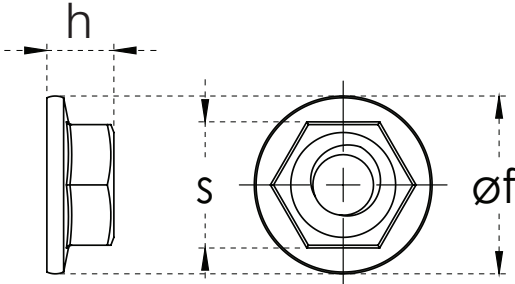
| HOT DIPPED GALVANISED                                                                                                                                                                     |                                                                                                                                                                                                            |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 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)

Flange Bolt



Flange Nut



| Diameter<br>d | PITCH<br>(mm) | ACROSS FLATS<br>(s) | FLANGE<br>DIAMETER (f) | HEAD HEIGHT<br>(k) | ACROSS<br>FLATS<br>(s) | FLANGE<br>DIAMETER (f) | NUT HEIGHT<br>(h) | SPANNER<br>SIZE |
|---------------|---------------|---------------------|------------------------|--------------------|------------------------|------------------------|-------------------|-----------------|
|               |               | NOMINAL             | NOMINAL                | NOMINAL            | NOMINAL                | NOMINAL                | NOMINAL           | NOMINAL         |
| M12           | 1.75          | 18.00               | 28.00                  | 10.50              | 18.00                  | 28.00                  | 12.50             | 18.00           |
| M16           | 2.00          | 24.00               | 32.00                  | 13.50              | 24.00                  | 32.00                  | 17.50             | 24.00           |

NOTE: Dimensions are compliant with ISO 4161

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