

# BRODER METALS GROUP NES833



NES833 / DEF STAN 02-833 is a corrosion resistant material favoured for use in marine and offshore industries for valve components, fasteners and heat exchangers.

## NES833 Aluminium Bronze Specifications

Broder Metals Group supply NES833 Aluminium Bronze with the intent of meeting the following relevant classes and specifications on the final product: DEF STAN 02-833 PART 2 ISSUE 2 GRADE 1 ALUMINIUM BRONZE. For more information on NES833 contact us or download our technical information sheet.

**NES833 Technical Table**

| Grade          | NES833 PART 2 ISSUE 2 GRADE 1  |   |   |                    |
|----------------|--|---|---|--------------------|
|                | Extruded rods etc < 40 mm dia  | Rolled & Forged rods etc < 30 mm dia      | Rods etc above sizes to left  |                    |
| Heat Treatment | 720-760 deg° Air Cool  | 720-760 deg° Air Cool                     | To be supplied as one of:   |                    |
|                | Heat to be maintained for 20 minutes per 25 mm section (with min 1 hour)   |   | a. Hot worked<br>b. Stress relieved (after cold working)<br>C.. Heat Treated (details reported) |                    |
| Mechanicals    | Tensile N/mm <sup>2</sup> (min)  | 0.2% Proof stress N/mm <sup>2</sup> (min) | Elongation on 5.65 gauge length %   | Izod Value J (min) |
| < 15 mm dia    | 680  | 325                                       | 17  | -                  |
| 15 mm – 25 mm  | 680  | 325                                       | 17  | 24                 |
| 25 mm -100mm   | 635  | 295                                       | 17  | 27                 |
| 100 mm + dia   | 620  | 245                                       | 15  | 23                 |
| Notes          | Within the DEF STAN standard, Forgings are divided into 4 Classes while rods, profiles and rectangular bars are divided into 2 grades. The classification delineates the importance of the application that the end product will be used for and different classes and grades require different levels of control, reporting and testing (for example 100% ultrasonic) – all of which we can handle – please ask us if you require advice. |   |   |                    |

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## Applications

Because of its excellent corrosion resistance in seawater NES833 is used widely in marine environments. Abrasion resistance, non-sparking, strength and toughness in NES833 enables its use in safety tools, valves, fasteners, springs, gears and bearings under heavy loads.

NES833 is just one of a range of corrosion resistant materials stocked by Broder Metals Group Ltd – please see our website for the full range stocked: [www.broder-metals-group.com](http://www.broder-metals-group.com)

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