

## SPECIFICATIONS

Commercial NES835 DEF STAN 835

A Copper/Nickel Alloy with very high strength and very high corrosion resistance especially in sewerage and marine environments. Also very good resistance to galling. Mainly used in Naval Engineering, Aerospace and Defence Applications.

## CHEMICAL COMPOSITION

DEFSTAN 02-835/2(2011)  
Rod and Forgings

Element	% Present
Nickel (Ni)	13.5 - 16.5
Manganese (Mn)	3.5 - 5.5
Aluminium (Al)	1 - 2
Iron (Fe)	0.7 - 1.2
Chromium (Cr)	0.5 max
Zinc (Zn)	0.2 max
Silicon (Si)	0.15 max
Sulphur (S)	0.15 max
Tin (Sn)	0.1 max
Carbon (C)	0.05 max
Magnesium (Mg)	0.05 max
Lead (Pb)	0.02 max
Phosphorous (P)	0.01 max
Copper (Cu)	Balance

## MECHANICAL PROPERTIES

DEFSTAN 02-835/2(2011)  
Rod  
Up to 125mm

Property	Value
Proof Stress	430 Min MPa
Tensile Strength	725 Min MPa
Elongation A50 mm	18 Min %

DEFSTAN 02-835/2(  
Forgings  
Up to 125mm

Property	Value
Proof Stress	400 Min MPa
Tensile Strength	725 Min MPa
Elongation A50 mm	18 Min %

## ALLOY DESIGNATIONS

DEF STAN 02-835  
NES835  
NES 835  
DEF STAN 835

## TEMPER TYPES

FORGED AND HEAT TREATED

## SUPPLIED FORMS

Bar Grades 1 and 2  
Forgings Class 1, 2, 3

- Bar
- Rod
- Forgings

## CONTACT

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## REVISION HISTORY

Datasheet Updated	13 November 2018
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