SPECIFICATIONS

Commercial	NES834 DEF STAN 834

A Silicon Aluminium Bronze Alloy with high strength and very high corrosion resistance especially in sewater and marine enviroments. Also has good ductility and impact strength. Mainly used in Naval Engineering, Nuclear, Aerospace and Defence Applications.

CHEMICAL COMPOSITION

DEFSTAN 02-834(PT2)/1(2000)
Rod, Section, Forging & Forging Stock

Element	% Present
Aluminium (Al)	6 - 6.4
Silicon (Si)	2 - 2.4
Iron (Fe)	0.5 - 0.7
Manganese (Mn)	0.5 max
Zinc (Zn)	0.4 max
Nickel (Ni)	0.1 max
Tin (Sn)	0.1 max
Lead (Pb)	0.01 max
Copper (Cu)	Balance

ALLOY DESIGNATIONS

DEF STAN 02-834
NES834
NES 834
DEF STAN 834
DGS1044

TEMPER TYPES

ANNEALED

SUPPLIED FORMS

Annealed Bar - Grades 1 and 2
Forgings Class 1, 2, 3
- Bar
- Rod
- Forgings

MECHANICAL PROPERTIES

DEFSTAN 02-834(PT2)/1(2000)
Rod & Section
Up to 50mm

Property	Value
Proof Stress	275 Min MPa
Tensile Strength	525 Min MPa
Elongation A50 mm	20 Min %

Mechanical Properties shown are for annealed material.

DEFSTAN 02-834(PT2)/1(2000)
Rod & Section
50mm to 100mm

Property	Value
Proof Stress	235 Min MPa
Tensile Strength	525 Min MPa
Elongation A50 mm	20 Min %

Mechanical Properties shown are for annealed material.

DEFSTAN 02-834(PT2)/1(2000)
Rod & Section
Over 100mm

Property	Value
Proof Stress	220 Min MPa
Tensile Strength	525 Min MPa
Elongation A50 mm	20 Min %

Mechanical Properties shown are for annealed material.

DEFSTAN 02-834(PT2)/1(2000)
Forging & Forging Stock
All

Property	Value
Proof Stress	220 Min MPa
Tensile Strength	525 Min MPa
Elongation A50 mm	20 Min %

Mechanical Properties shown are for annealed material.

[1 OF 2] CONTINUED

CONTACT

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REVISION HISTORY

Datasheet Updated	13 November 2018

DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

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