

ATLAS BALL & BEARING CO LIMITED

NITRONIC® 32 BALL DATA SHEET

Attributes

Low nickel austenitic stainless steel which provides approximately twice the yield strength of 304 stainless steel with comparable corrosion resistance

Specification with equivalents

Nitronic 32
UNS S24100
XM28

Chemical Analysis %

C	0.15 max	P	0.045 max
Cr	16.50 - 19.00	S	0.03 max
Mn	11.00-14.00	Si	1.00 max
Ni	0.50-2.50	Fe	Bal
N	0.20-0.45		

Typical uses/applications

Components needing non-magnetic stainless steel balls with high strength and hardness

Mechanical/physical properties

Hardness	402-458 Hv, 41-46 HRC
Tensile strength	1200 - 2000 Mpa, 175-290 ksi
Specific gravity (density)	7.781 g/cm ³ (0.281 lb/in ³)
Melting point	1450-1510° C, 2642-2750° F
Coefficient of Expansion	16.16µm/m·°C (20-100°C) 8.98 x 10 ⁻⁶ in/in F (73-200° F)
Modulus of elasticity	199.2 kN/mm ² , 28900 ksi
Magnetic permeability	1.011 Oersteds
Poisson's ratio	0.290

www.atlasball.co.uk

Nitronic is a trade name of AK Steel

Whilst every care has been taken we cannot accept liability for any errors contained within this data sheet.

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