

# Grade 100 AISI 316 Stainless Steel Balls

**Grade:** Grade 100

**Formula:** Fe/Cr18/Ni10/Mo 3

**Diameter:** 3mm

**Quantity:** 10 Pcs

**Type:** Precision Sphere

**Sphericity:** 2.5 $\mu$ m

**UOM Code:** 138-929-97

**SKU:** 1000042441-group

**Product Code:** FE24-SP-000130

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	160-190
Elongation at break( % )	60
Modulus of elasticity( GPa )	190-210
Izod impact strength( J m <sup>2</sup> )	20-136
Tensile strength( MPa )	460-860

### Electrical Properties

Element	Value
Electrical resistivity( $\mu$ Ohmcm )	70-78
Temperature coefficient( K <sup>-1</sup> )	-

### Thermal Properties

Element	Value
Melting point( C )	1370-1400
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	502@23°C
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	16.3@23°C
Coefficient of thermal expansion( x10 <sup>-6</sup> K <sup>-1</sup> )	16-18@20-100°C

### Physical Properties

<b>Element</b>	<b>Value</b>
Density( gcm <sup>3</sup> )	7.96