

# Ion Implanted AISI 316 Stainless Steel Disk

**Grade:** Ion Implanted

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

**Thickness:** 0.5mm

**Diameter:** 20.3mm

**UOM Code:** 183-857-24

**SKU:** 1000070741-group

**Product Code:** FE24-FL-000112

## 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>21</sup> )	20-136
Tensile strength( MPa )	460-860

### Electrical Properties

Element	Value
Electrical resistivity( μOhmcm )	70-78
Temperature coefficient( K <sup>21</sup> )	-

### Thermal Properties

Element	Value
Melting point( C )	1370-1400
Specific heat( J K <sup>21</sup> kg <sup>21</sup> )	502@23°C
Thermal conductivity( W m <sup>21</sup> K <sup>21</sup> )	16.3@23°C
Coefficient of thermal expansion( x10 <sup>21</sup> K <sup>21</sup> )	16-18@20-100°C

### Physical Properties

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