

## R63C STRIP

### DATASHEET

R63C is a nickel alloy (Ni alloy) with high melting point and good conductivity. The alloy is characterized by a low discharge potential as well as good corrosion resistance in carburizing and sulphurizing atmospheres.

R63C is typically used as a spark plug electrode.

#### CHEMICAL COMPOSITION

	Ni %	Si %	Mn %
Nominal composition	95	1	4

#### MECHANICAL PROPERTIES

Tensile strength	
	R <sub>m</sub>
	MPa
Min	440
Max	1200

#### PHYSICAL PROPERTIES

Density g/cm <sup>3</sup>	8.72
Electrical resistivity at 20°C Ω mm <sup>2</sup> /m	0.22
Temperature coefficient of resistance [20- 250 °C] (x 10 <sup>-6</sup> /K)	3000

#### COEFFICIENT OF THERMAL EXPANSION

Temperature °C	Thermal Expansion x 10 <sup>-6</sup> /K
20 - 500	15.2

#### THERMAL CONDUCTIVITY

Temperature °C	100
W m <sup>-1</sup> K <sup>-1</sup>	38.5

#### SPECIFIC HEAT CAPACITY

Temperature °C	20
$\text{kJ kg}^{-1} \text{K}^{-1}$	0.203
Melting point °C	1430

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