

Formaplast 200 is a copper alloy with high thermal and electrical conductivity with good mechanical characteristics.

The high conductivity and the excellent machinability make it indicated in the large molds for plastic injection

Chemical Composition

Nichel	1,8 ÷ 3,0 %
Silicon	0,4 ÷ 0,8 %
Chrome	0,1 ÷ 1,2 %
Copper	Balance

Typical Mechanical Properties

	reference values	
Hardness	170 ÷ 220	HB
Tensile Strenght	650 ÷ 690	N/mm ²
Yeld strenght 0,2%	500 ÷ 520	N/mm ²
Elongation A5	10 ÷ 15	%
Elastic Modulus	135	Gpa

Applications

Welding electrodes and resistance
 Plastic mold inserts
 Injectors for warm rooms
 Pistons for cold rooms

Physical Properties

	reference values	
Elctric Conductivity	min 40	%IACS
Elctric Conductivity	min 22	m/Ω mm ²
Thermal Conductivity 20 °C	217	W/m °K
Thermal Conductivity 100°C	240	W/m °K
Coeff. Thermal Expansion	17,5	ppm/°C
Specific Heat <small>(Heat Capacity)</small> 100°C	398	J/kg°K
Melting points	1020-1050	°C
Density	8,80	g/cm ³

The complete line

at 20°C

FormaPlast	105	106	W/m°K
FormaPlast	105 ^{LH}	130	W/m°K
FormaPlast	160	130	W/m°K
FormaPlast	200	217	W/m°K
FormaPlast	240	208	W/m°K
FormaPlast	340	337	W/m°K