Special Alloys
SD94

SUNDWIGER Messingwerk

Material Designation	
Sundwiger	SD94
DIN-EN Symbol	CuFe2P
DIN-EN	CW107C
UNS	C19400
JIS	C1940

Typical Applications

- Conductor and connector wire
- Pins

Nominal Composition (mass content in %)	
Cu	Balance
Fe	2,4
Zn	< 0,12
Pb	< 0,03
P	0,03
Others	< 0,2

About the Alloy

SD94-wire belongs to the low-alloyed copper alloys which exhibit a mean electrical and thermal conductivity.
At the same time SD94, in contrast to copper, is distinguished by a higher strength and a better softening behaviour.

SD94 is very well for cold-forming and due to its physical properties predestined for the use in electronic construction, contact and switching elements.

Physical Properties*		
Electrical conductivity	≥36,9 ≥62	MS/m % IACS
Thermal conductivity	260	W/(m·K)
Thermal expansion coefficient**	17	10^{-6}/K
Density	8.9	g/cm³
Modulus of elasticity	123	GPa = kN/mm²

* Reference values at room temperature
** Between 20 and 300 °C

Mechanical Properties*	
Tensile strength in N/mm², soft	330 - 400
Elongation A_{100} in %, soft	> 30
Tensile strength in N/mm², hard	500 - 570

* Reference values

Available Dimensions

Round wire	1,2 - 5 mm in coils	max. 100 kg
	1,8 - 5 mm on stands	max. 1500 kg
	0,5 - 3 mmon reels	max. 1000 kg

Your Contact Person

Worldwide

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