

## Special Alloys

### SD94



Material Designation		Nominal Composition (mass content in %)		About the Alloy
Sundwiger	SD94	Cu	Balance	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.
DIN-EN Symbol	CuFe2P	Fe	2.4	
DIN-EN	CW107C	Zn	< 0.12	
UNS	C19400	Pb	< 0.03	
JIS	C1940	P	0.03	
		Others	< 0.2	

Physical Properties*			Mechanical Properties*		Available Dimensions		
Electrical conductivity	≥36,9 ≥62	MS/m % IACS	Tensile strength in N/mm <sup>2</sup> , soft	330 - 400	Round wire	1.2 - 5 mm in coils	max. 100 kg
Thermal conductivity	260	W/(m·K)	Elongation A100 in %, soft	> 30		1.8 - 5 mm on stands	max. 1500 kg
Thermal expansion coefficient**	17	10 <sup>-6</sup> /K	Tensile strength in N/mm <sup>2</sup> , hard	500 - 570		0.5 - 3 mm on reels	max. 1000 kg
Density	8.9	g/cm <sup>3</sup>	* Reference values				
Modulus of elasticity	123	GPa = kN/mm <sup>2</sup>	<b>Typical Applications</b>				
* Reference values at room temperature ** Between 20 and 300 °C			<ul style="list-style-type: none"> <li>• Conductor and connector wire</li> <li>• Pins</li> </ul>				

Your Contact Person	
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