

## Technical Data Copper-Tin Alloys <sup>1)</sup>

		Bronze					
		CuSn0,6	CuSn5	CuSn6	CuSn8		
<b>Material - No.</b>	DIN / EN	-	CW451K	CW452K	CW453K		
	UNS	C50100	C51000	C51900	C52100		
<b>Nominal Composition</b>	[%]	0,6 Sn Rest Cu	5 Sn Rest Cu	6 Sn Rest Cu	8 Sn Rest Cu		
<b>Conductivity <sup>2)</sup></b>	[m/(Ohm mm <sup>2</sup> )]	37	9,9	8,1	7,0		
<b>Conductivity <sup>2)</sup></b>	[% IACS]	63	17	14	12		
<b>Thermal Conductivity <sup>2)</sup></b>	[W/(m K)]	220	96	75	67		
<b>Coefficient of Thermal Expansion <sup>3)</sup></b>	[10 <sup>-6</sup> / K]	17	17	18	18		
<b>Tensile Strength annealed</b>	[N/mm <sup>2</sup> ]	290	400	420	470		
<b>Elongation annealed</b>	[%]	30	40	55	70		
<b>Tensile Strength hard</b>	[N/mm <sup>2</sup> ]	460	820	870	900		
<b>Density</b>	[g/cm <sup>3</sup> ]	8,9	8,9	8,8	8,8		

1) Nominal data for diameter 0,8 mm

2) At 20° C

3) Temperature range 20 - 200° C