

# KMD 560 - CuSn6 - C51900 - CW 452 K



## Application range:

Contact springs; connectors; membranes; switch elements; fixed contacts. Ultra-high strength spring elements.

### Physical properties

Density*	g/cm <sup>3</sup>	8,8
Thermal conductivity*	W/(m·K)	75
Electr. Conductivity ***	MS/m	8
Electr. Conductivity ***	IACS (%)	13
therm. Expansion coefficient **	10 <sup>-6</sup> K	18,5
Modulus of elasticity*	GPa	118

### Chemical composition (%)

Cu:	Rest
Sn:	5,5 - 7,0
P:	0,01 - 0,4

Condition	Temper class	Tensile strength T.S. min.-max. MPa	Yield strength Rp 0,2 min. MPa		Elongation A50 min. %		Hardness (Reference value) HV	Electrical conductivity MS/m	Bendability 90° <sup>1) 2) 3)</sup> Strip thickness ≤0,5 mm			
			3)	4)	3)	4)			R/t gw		R/t bw	
									stretch leveled	thermal stress relieved	stretch leveled	thermal stress relieved
cold rolled	R350	350 - 420	max. 300		45		80 - 120	8	0	0	0	0
cold rolled	R420	420 - 520	350	340	22	29	120 - 170	8	0	0	0	0
cold rolled	R500	500 - 590	450	410	15	22	160 - 190	8	0	0	0	0
cold rolled	R560	560 - 650	520	490	10	15	180 - 210	8	0	0	0	0
cold rolled	R640	640 - 730	590	570	5	12	200 - 230	8	0	0	1	0,5
cold rolled	R720	min. 720	650	620	-	4	min. 210	8	-	1	-	-
cold rolled	R850 <sup>5)</sup>	min. 850	-	800	-	1,5	min. 240	8	-	1	-	-

<sup>5)</sup> Thickness range: 0,15 - 0,60 mm

on request in fine grain size version

\* Reference values at room temperat \*\* Between 20 and 300 °C

\*\*\* Values for the lowest temper class

<sup>3)</sup> stretch leveled

<sup>1)</sup>  $r = x \cdot t$  (strips up to  $t = 0,50$  mm) <sup>2)</sup> Sample width = 10 mm / bending at smaller bending widths on request (Evaluation according to page 5.4.2. of Hand-Out)

<sup>4)</sup> thermal stress relieved

Disclaimer: Due to possible changes and variations in the production process, the information published in the hand-out / brochure / datasheet cannot be guaranteed. The right to changes and modifications in the composition of the products is hereby explicitly reserved, so no warranty claim shall be derived from the information provided.

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