

KHP®7026 (CuNi2Si)

Standard Designation

EN CW 111C / UNS C70260

Chemical Composition

Cu	Ni [%]	Si [%]	P [%]
Balance	1,60 - 2,50	0,40 - 0,80	max. 0,01

Description / Applications

KHP®7026 belongs to the group of CuNiSi (Corson type) alloys. KHP®7026 combines a high strength and a good electrical conductivity. Applications: connector springs, tabs, contact springs, switches, relays, leadframes

Physical Properties¹⁾

Density	8,8 g/cm ³	Thermal expansion coefficient	17·10 ⁻⁶ /K
Electrical conductivity	23 m/Ω·mm ² 40 % IACS ²⁾³⁾	Modulus of elasticity	130 GPa ⁴⁾
Thermal conductivity	161 W/m·K		

¹⁾ Guideline values for soft temper, measured at room temperature³⁾ 1 GPa = 1 kN/mm²²⁾ IACS = International Annealed Copper Standard

Processing information

Weldability	good	Stress corrosion cracking	none
Solderability	good		

Mechanical properties

Temper	Tensile Strength Rm [MPa]	Yield Strength Rp0,2 [MPa]	Elongation A50 [%]	Hardness HV	Bendability ¹⁾			
					90° r/t ²⁾		180° r/t ²⁾	
					GW ³⁾	BW ⁴⁾	GW ³⁾	BW ⁴⁾
R580/H120	580 - 660	min. 520	min. 12	175-205	0.5	0.5	0.5	1
R620/H170	620 - 710	min. 540	min. 10	190-215	0.5	0.5	1	1
R650/H200	650 - 730	min. 570	min. 7	195-225	1	1	1.5	1.5
R720/H220	min. 720	min. 650	min. 3	min. 215	1.5	2	1.5	2

¹⁾ The r/t values are valid for a strip thickness up to 0.6 mm (without crack). The data refer to rolled-to-temper material and a width of the bending area of 5 mm.

V-shape bend test according to ISO 7438

²⁾ r = inner radius, t = thickness³⁾ GW = good way⁴⁾ BW = bad way

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