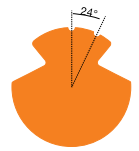


Contact wire made of VALTHERMO® CuSn0.1 according to EN 50149



Values for VALTHERMO® CuSn0.1 (high tensile strength)

technical data		nominal cross section				
		80	100	107	120	150
min. tensile strength R_m ²⁾	N/mm ²	375	375	360	360	360
min. breaking load ¹⁾ F_m	kN	29.1	36.4	37.4	41.9	52.4
Percentage Elongation after fracture A_{200}	%	3 – 8	3 – 8	3 – 8	3 – 8	3 – 8
Modulus of elasticity E	kN/mm ²	120	120	120	120	120
Half-hard point	°C	≥ 300	≥ 300	≥ 300	≥ 300	≥ 300
Electrical conductivity χ at 20 °C	m/(Ohm*mm ²)	≥ 56.3	≥ 56.3	≥ 56.3	≥ 56.3	≥ 56.3
Electrical conductivity χ at 20 °C	% IACS	≥ 97	≥ 97	≥ 97	≥ 97	≥ 97
Specific electrical resistance ρ_{el} at 20 °C	10 ⁻⁸ Ohm*m	≤ 1.777	≤ 1.777	≤ 1.777	≤ 1.777	≤ 1.777
Electrical resistance R	Ohm/km	≤ 0.229	≤ 0.183	≤ 0.171	≤ 0.153	≤ 0.122
Temperature coefficient α_{el} of electrical resistance	10 ⁻³ /K	3.8	3.8	3.8	3.8	3.8
Linear coefficient of thermal expansion α	10 ⁻⁵ /K	1.7	1.7	1.7	1.7	1.7
Specific mass ρ	10 ³ kg/m ³	8.89	8.89	8.89	8.89	8.89

¹⁾ calculation based on the minimum cross section

²⁾ different tensile strengths on request