

Brand name | NILO® Alloy K, Pernifer® 2918, Korvar

Trade name | Alloy K

Material No.	EN Designation	UNS	Alloy
1.3981	NiCo29-18	K94610	K

Description | Alloy K / 1.3981 (Kovar) is a nickel-iron-cobalt alloy.

Special properties | Very low coefficient of expansion from -100° to 450°C.

C %	Si ≤ %	Mn ≤ %	Ni %	Co %
≤ 0.05	0.03	0.50	28.0-30.0	17.0-18.0
Fe %				
Rest				

0.2% Yield strength $R_{0.2}$ ≥ N/mm <sup>2</sup>	Tensile strength $R_m$ N/mm <sup>2</sup>	Elongation $A_5$ ≥ %	Modulus of elasticity kN/mm <sup>2</sup>
370	≥ 530	30	160

Density g/cm <sup>3</sup>	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm <sup>2</sup> /m
8.3	500	17.5	0.049

Suitable welding filler materials | 1.3981

Application | High-power transmitting valves, transistor leads and headers, integrated-circuit lead frames

Available forms for 1.3981 / ALLOY K	Sheets/Plates	Bars	Fittings	Forged / cast parts	Finished part (drawing)
					