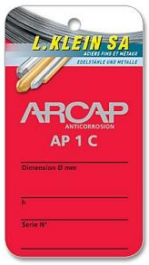

ARCAP
AP 1C
non-ferrous alloy
Copper Alloys

Material No.	*DIN Abbreviation*	*AFNOR*	*AISI/SAE/ASTM*	*ISO*	*Euro Standard EN*	*Others*
Arcap AP 1C	CuNi25Zn17				Arcap AP 1C	Arcap AP 1C springtemper

Distinctive feature & main property: a non-ferrous copper alloy, added with nickel, resistant to the majority of chemical and physical environments. A specification being easily processed, showing no magnetic interference and temperature variations have almost no effect on its resistivity.

Use & application range: this alloy is adapted for cutting and stamping or deep-drawing of many branches such as watches, automobile, optics and electrical connectors.

REFERENCE ANALYSIS %	**Mn**	**Ni**	**Cu**	**Pb**	**Sn**	**Fe**	**Zn**
	max. 0.50	**24.00 26.00**	**55.00 57.00**	**max. 0.03**	**max. 0.20**	**max. 0.30**	**balance**

EXECUTION DELIVERY FORM STANDARD SIZES AVAILABILITY	• Execution in slit or levelled & rolled strips as well as in coils • Standard size in stock: see **Programme range** • Stocked in spring temper, other sizes on request
TOLERANCES	• ∅ 0.10 – 1.60 mm, slit, levelled, rolled • Tighter tolerances on request

MECHANICAL PROPERTIES

At delivery status (rolled strip):

Condition	Tensile strength (R_m)	Elongation A (ε)	Vickers hardness (HV)
Annealed	≤ 450 MPa/mm²	≥ 30 LO 50 mm	≤ 130
¼ hard	450 – 550 MPa/mm²	≥ 15 LO 50 mm	130 – 165
½ hard	520 – 620 MPa/mm²	≥ 5 LO 50 mm	160 – 190
4/4 hard	620 – 730 MPa/mm²	≥ 1 LO 50 mm	200 – 230
Spring temper H15	≥ 730 MPa/mm²		≥ 220

HEAT TREATMENT	• Soft annealing: 750 – 800 °C, under neutral atmosphere • Hardening and tempering by heat treatment is impossible
CUTTING RATES	**v_c ~ 100 – 140 m/min**, short-chipping, value depending on the lubrication oil, cutting tools and shape of parts. • Cutting oil: INOX or ORTHO NFX Motorex

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