## C17410 Alloy174\*



## **DATA SHEET**

Fabricated Metal Products

Alloy Designation			
EN	/		
DIN	/		
UNS	C17410 ASTM B768		
JIS	/		

<sup>\*</sup>is a trademark licensed by Materion

Chemical Composition				
Be	0.15 - 0.5	%		
Со	0.35 - 0.6	%		
Cu	Remainder	%		

## **Characteristics**

**C17410** is a mill-hardened copper-beryllium strip alloy offering very high yield and fatigue strength together with exceptional electrical conductivity and strong resistance to stress-relaxation. Available in heat-treatable and mill-hardened tempers, it can reach yields up to ~830 MPa while retaining good ductility; conductivity is typically around 50% IACS—substantially higher than bronzes and brasses.

Main Applications
High reliability automotive terminals
Spring contacts for switches and relays.

Physical Properties (Reference values at room temperature)				
Density	g/cm <sup>3</sup>	8.8		
Electrical conductivility	IACS%(20°C)*	45-60		
Modulus of elasticity	KN/mm <sup>2</sup>	138		
Coefficient of thermal expansion	10 <sup>-6</sup> /K	17.6		
Thermal conductivity	W/(m*K)	230		

## \*value for the lowest temper class

Mechanical Properties					
TEMPER	Tensile Strength	Yield Strength	Elongation	Hardness	
	Мра	Мра	%	Hv	
1/2 HT	655 - 790	550 - 690	min. 10	180 - 230	
НТ	760 - 895	690 - 830	min. 7	210 - 280	

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**Contact Us:** 

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