



## OHMALLOY MATERIAL CO., LTD.

No. 1502, Youyi Road, Baoshan district, Shanghai 201999

TEL:+86-21-66796338

FAX:+86-21-66796339

Web: [www.alloywirecable.com](http://www.alloywirecable.com)

Email: [sales@ohmalloy.com](mailto:sales@ohmalloy.com)

### Type L Bare Wire

TYPE E ( CHROMEL vs Copel ) may be used in oxidizing, inert or dry reducing atmospheres, or for short periods of time under vacuum. Must be protected from sulfurous and marginally oxidizing atmospheres. Produces the highest EMF per degree o any standardized [thermocouple](#).

#### 1. Chemical Composition

Material	Chemical composition (%)				
	Ni	Cr	Cu	Mn	Al
LP(Chromel)	90	10			
LN(Copel)	44		Bal	0.5-1	

#### 2. Physical properties and Mechanical properties

Material	Density(g/cm <sup>3</sup> )	Melting point(°C)	Tensile Strength(Mpa)	Volume resistivity(μΩ.cm)	Elongation rate (%)
LP(Chromel)	8.5	1427	>490	70.6(20°C)	>25
LN(Copel)	8.8	1220	>390	49.0(20°C)	>25

#### 3. EMF Value range at different temperature

Material	EMF value Vs Pt(μV)				
	100°C	200°C	300°C	400°C	500°C
LP(Chromel)	6.750~6.970	14.436~14.678	22.711~22.967	31.348~31.628	40.116~40.468
LN(Copel)					

EMF value Vs Pt(μV)				
600°C	700°C	800°C	1000°C	1100°C
48.887~49.309	57.612~58.100	66.200~66.738		