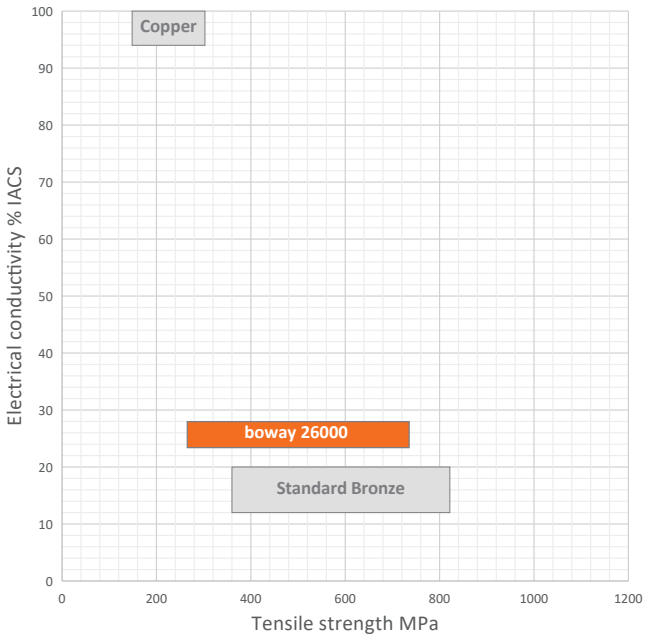
boway 26000

Material Designation

Boway Designation	boway 26000
UNS	C26000
EN	CuZn30
JIS	C2600
GB(China)	H70

Chemical Composition*

Cu	70	%
Zn	Rem.	%



Application Target

Signal connector	Suitable
Power connector	Suitable
Miniaturized connector	Not recommended
Switch/Relay	Suitable
Semiconductor	Not recommended

Ideal for automotive, industrial connectors, decorative parts

Characteristics

It has good cold working properties and good cold drawing and forming properties. It has medium strength and electrical conductivity, and lower material value. The alloy has good brazing performance. Brass strip materials have a wide range of applications, such as connectors, structural parts, decorative hardware, etc.

Fabrication Properties

Cold forming	Very good
Machining	Average
Electroplating	Good
Hot dip tinning	Good
Laser welding	Not suitable
Resistance welding	Good
Soft soldering	Very good

Physical Properties*

Density	8.82	g/cm^3
Electrical	24	% IACS
conductivity@20°C	15	MS/m
Thermal conductivity@20°C	126	W/(m·K)
Specific heat capacity	0.377	J/(g·K)
Modulus of elasticity	110	GPa
Poisson's ratio	0.34	
Coefficient of thermal expansion**	19.7	10^{-6}/K

* Typical values at room temperature for reference
** Average value between 20–300°C

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Mechanical Properties (Values Underlined Are For Reference Only)

Temper	Tensile strength		Yield strength	Elongation	Hardness
	MPa	ksi	MPa	A50 %	HV0.2
R270(O)	270–350	39–51	≤160	≥40	55–90
R350(1/4H)	350–430	51–62	≥170	≥21	95–125
R410(1/2H)	410–490	59–71	≥260	≥9	120–150
R480(H)	480–560	69–81	≥430	≥4	150–180
R550(EH)	550–640	79–93	≥550	-	170–200
R630(SH)	≥630	≥91	-	-	≥190
Annealed*	310–420	45–61	≥70	≥40	
H01*	340–405	49–59	≥145	≥34	
H02*	395–460	57–67	≥290	≥19	
H03*	440–510	64–74	≥300	≥8	
H04*	490–560	71–81	≥440	≥6	
H06*	570–635	83–92	≥525	≥2	
H08*	625–690	91–100	≥550	≥1	
H10*	655–715	95–104	≥570	≥1	

*According to ASTM B888

Bendability Bending thickness ≤ 0.5 mm; Bending width: 10 mm

Temper	90° R/T		180° R/T	
	Good Way	Bad Way	Good Way	Bad Way
R270	0	0	0	0
R350	0	0	0	0
R410	0	0	0	0
R480	0	0	0	0
R550	0	1	1	2
R630	0.5	1.5	1.5	3.5

90° bend test according to EN ISO7438, 180° bend test according to ASTM B820, shown values might show orange-peel, however no crack.

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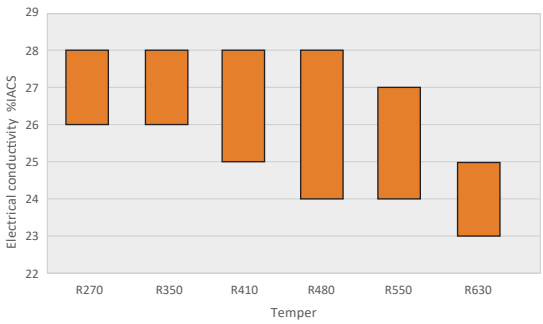
Packaging

Standard coils with outside diameters up to 1300 mm.
Traverse-wound coils with drum weights up to 500 kg.
Multiple-coil up to 3 tons.

Dimensions Available

Strip thickness 0.08–4.0mm, other gauges on request.
Strip width from 8.5 mm.
Electroplated strip available.

Electrical Conductivity



Fatigue Strength

The fatigue strength is defined as the maximum bending stress amplitude which a material withstands for 10.000.000 load cycles under symmetrical alternate load without breaking. It depends on the temper selected and can be estimated typically by 1/3 of tensile strength.

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