boway 26800

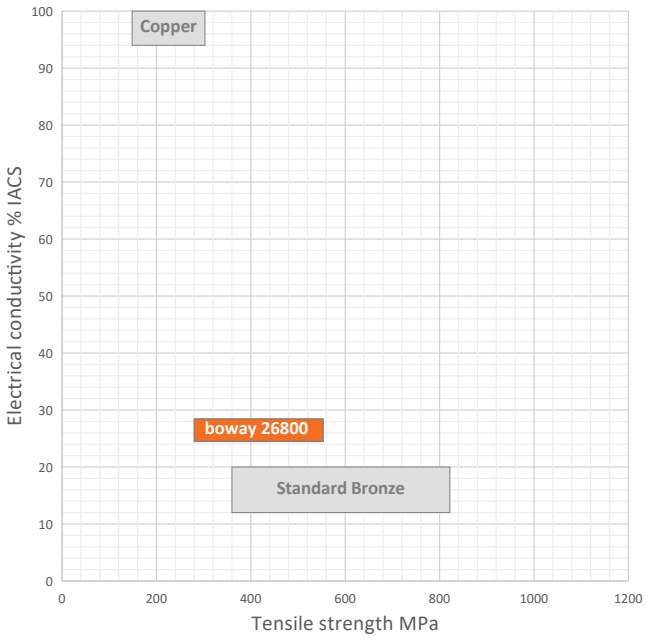
Material Designation

Boway Designation	boway 26800
UNS	C26800
EN	CuZn33
JIS	C2680
GB(China)	H66

Chemical Composition*

Cu	67	%
Zn	Rem.	%

* Nominal composition



Application Target

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

Ideal for automotive, industrial connectors, decorative parts

Characteristics

It has good cold working performance and good cold stretching performance. It has medium strength and conductivity, and lower material value. The alloy has good brazing performance, and the warm yellow appearance is very ornamental. Brass strip material has 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	Very good
Laser welding	Not suitable
Resistance welding	Good
Soft soldering	Very good

Physical Properties*

Density	8.48	g/cm^3
Electrical	26	% IACS
conductivity@20° C	15	MS/m
Thermal conductivity@20° C	121	W/(m·K)
Specific heat capacity	0.377	J/(g·K)
Modulus of elasticity	105	GPa
Poisson's ratio	0.34	
Coefficient of thermal expansion**	19.9	10^{-6}/K

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

Rev.2024,10

boway 26800

Mechanical Properties (Values Underlined Are For Reference Only)

Temper	Tensile strength		Yield strength	Elongation	Hardness
	MPa	ksi	MPa	A50 %	HV0.2
R280	280–380	42–52	≤ 170	≥ 40	55–90
R380	350–430	51–62	≥ 170	≥ 21	90–125
R420	420–500	61–73	≥ 300	≥ 6	120–155
R500	≥ 500	≥ 73	≥ 450	-	155–190
Annealed	305–420	44–61	160	52	
H01*	340–405	49–59	235	42	
H02*	380–450	55–65	305	36	
H03*	425–495	62–72	365	25	
H04*	470–540	68–78	395	19	
H06*	545–615	79–89	460	7	
H08*	595–655	86–95	490	5	
H10*	620–685	90–99	505	≤ 5	

*According to ASTM B36

Bendability Bending Thickness：≤0.5 mm , bending width：10mm

Temper	90° R/T		180° R/T	
	Good Way	Bad Way	Good Way	Bad Way
R280	0	0	0	0
R350	0	0	0	0
R420	0	0	0	0
R500	0	0	1	1

90° bend test According to EN ISO 7438, 180° bend test acc. to ASTM B820, shown values might show orange- peel, however no crack.

Rev.2024,10

boway 26800

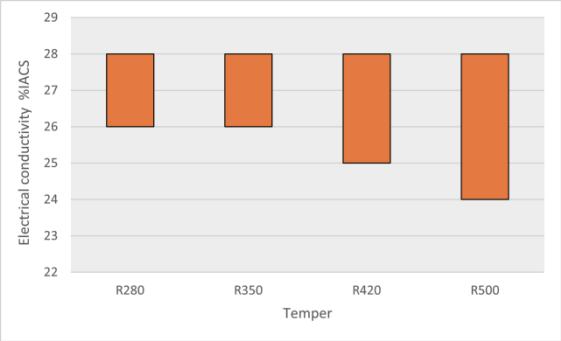
Packaging

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 0.08–4.0 mm, 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. For solid solution fine grain materials fatigue strength might increase up to 0,5 * of Tensile strength.

Rev.2024,10