

C260 (CuZn30)

Composition

Cu* (%)	Fe (%)	Pb (%)	Zn (%)
68.5-71.5	0.05 max	0.07 max	rem

*) Cu + sum of named elements min 99.7 %

Physical Properties

Temper	Melting point (liquidus)	Density	Specific heat cap. at 68 F (20 °C)	Electrical cond. Nom in black	Thermal cond. at 68 F (20 °C)	Mod. of elasticity	Coef. of therm.exp at 68 F (20 °C)
	°F °C						
All	1750	0.308	0.09	28	70	16	11.1
	954	8.53	0.38	28	121	110	20.0

Mechanical Properties

At max 0.040"
(1 mm)

Temper	R _{p0.2} Yield strength ksi N/mm ²	R _m Tensile strength ksi N/mm ²	A ₅₀ Elongation 2" %	Hardness for reference HR30T HV	Min bend ratio 90°		Min bend ratio 180°	
					GW	BW	GW	BW
Soft	21 145	45-61 310-421	53		0.0	0.0	0.0	0.0
H02 (1/2H)	49 338	57-67 393-462	32	135	0.0	0.0	0.0	0.0
H04 (H)	67 462	71-81 490-559	13	195	0.0	1.5	0.0	1.5
H06 (EH)	80 552	83-92 573-635	5	220	0.5	2.5	0.5	2.5
H08 (SH)	87 600	91-100 628-690	3	220				
H10 (ES)	90 621	95-104 655-717	2	220				

Other tempers are available upon request.

Data for information only and not for use as purchase specification.

Yield strength, Elongation and Hardness are typical values for each temper.

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Alloy attributes

Cartridge Brass, 70 % - 260 alloy with a nominal composition of 70 % copper and 30 % zinc is the most widely used copper alloy because of its combination of outstanding characteristics. The name originated from its use as the standard alloy for artillery shell and small-arms cartridge cases. Today, the alloy is widely used for clips, contacts, brackets in electrical wiring devices, especially for residential and commercial construction, often fabricated with hot dip tin coatings.

High ductility
Favorable cost
Good spring properties

Typical applications

Electric brackets, clips & contacts; radiator cores & tanks; hollowware base metal; lamps; bowls; trays; flashlight socket shells; grommets; eyelets; fasteners; bead chain; hardware items as knobs, roses, hinges; stencils; plumbing strainers & accessories; springs; cartridge & shell cases, hose couplings, decorative pots and planters.

Design limitations

Cold worked 260 alloy shapes may be susceptible to stress - corrosion cracking in certain media as ammonia or its compounds, mercury or its compounds. A stress-relief anneal can be utilized to minimize this susceptibility. Exposure to acidic media may result in dezincification

Applicable specifications

ASTM B36, B888