C26000

3.3. CuZn30

KME
ENGINEERING COPPER SOLUTIONS

Alloy Designation	
EN	CuZn30
DIN CEN/TS 13388	CW505L
UNS	C26000

Chemical Composition (Balance) Weight percentage		
Cu	70	%
Zn	Rest	%

Characteristics

CuZn30 combines excellent cold forming properties with good mechanical strength. CuZn30 has good hot forming properties and excellent soldering and brazing properties. Due to the outstanding deep drawing properties CuZn30 called “deep-draw” or “cartridge” brass.

Main Applications

Terminal Connectors, Flashlight Shells, Lamp Fixtures, Reflectors, Screw Shells, Fasteners, Electrical Sockets, Lamps.

Mechanical Properties (EN 1652)

Temper	Tensile Strength Rm	Yield Strength Minimum $Rp_{0.2}$	Elongation Minimum A_{50mm}	Hardness HV *	Bending 90° gw rel. Bending Radius R/T	Bending 90° bw rel. Bending Radius R/T
	MPa	MPa	%	HV	Strip Thickness ≤ 0.50mm	
R270	270 .. 350	≤ 170 *	40	55 .. 105	0	0
R350	350 .. 430	270 *	21	95 .. 125	0	0
R410	410 .. 490	350 *	9	120 .. 180	0	1
R480	480 .. 570	430 *	4	150 .. 190	0,5	2
R550	550 .. 640	480 *	2	170 .. 210	1	3
R630	≥ 630	560 *	-	≥ 190	-	-

* only for information

Physical Properties Typical values in annealed temper at 20 °C			
Density		8.53	g/cm³
Thermal expansion coefficient	20 .. 300 °C	19.7	10^{-6}/K
Specific heat capacity		0.377	J/(g·K)
Thermal conductivity		126	W/(m·K)
Electrical conductivity	MS/m	16	MS/m
Electrical conductivity	IACS	28	%
Thermal coefficient of electrical resistance	(0 .. 100 °C)	1.5	10^{-3}/K
Modulus of elasticity	GPa	115	GPa

Fabrication Properties *	
Cold Forming Properties	Excellent
Machinability (Rating 20)	Less suitable
Electroplating Properties	Excellent
Hot Tinning Properties	Excellent
Soft Soldering, Brazing	Excellent
Resistance Welding	Good
Gas Shielded Arc Welding	Fair
Laser Welding	Less suitable

* For more details call our technical service

Due to continuous improvements within our production process, the details given in our brochure cannot be guaranteed. We reserve the right to update or change our products without prior notice. We recommend that you seek confirmation of our product details / specifications before committing to specific alloys.

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