ZR16X

CuZr

lebronze alloys

Applications properties:

- High electrical and thermal conductivity
- Suitable mechanical properties
- Good annealing resistance

Physical properties:

Specific gravity	8,9
Coefficient of expansion 20 to 300°C x10^{-6}	17
Young's modulus N/mm²	110 000
Thermal conductivity W/(mK)	320
Resistivity micro ohm.cm	2,00
Electrical conductivity (%IACS)	86
Magnetic permeability	1,01

Alloy properties:

Copper Zirconium alloy
Transformation by forging or extrusion and drawing
Suitable for hot and cold working
Suitable for hard and soft brazing
Not suitable for welding

Applications:

Resistance welding:
Electrodes, sections

Nominal composition :

Zr	0,15
Cu	Balance

International standards:

ASTM: C15000
RWMA class 1
DIN 17666 wn 2.1580
DIN 17672
ISO 5182 A2/4
EN 12163, EN 12167, EN 12420 CW120C

Available forms, mechanical properties:

Size	forms/process				Mechanical properties									Available forms											
	Rods		Tubes		Forgings or stamped parts	Tensile strength		Yield strength 0,2% offset or 0,5% E.U.L. (1)		Elongation 5,65 √S	Hardness				Impact strength KCU (1) or IZOD (2)	Semi-finished products										parts	
	Extruded or forged or rolled	Drawn	extruded	Drawn		Mpa ≥ ; * = Mpa ≤	ksi ≥ ; * = Mpa ≤	Mpa ≥	ksi ≥	% ≥	HB	HRB	HV5	HRC		Rounds	Squares	Flats	Hexagones	Section	Tubes	Plates	Discs	Rings	Forged blanks	stamped	machined
TER condition rods Ø ≤ 25,4mm Ø ≤ 1"						415	60	310	45	13	120					▼											▼