

Brass, lead free

General information

Designation	CEN/TS 13388	:	CuZn21Si3P
Material number	CEN/TS 13388	:	CW724R
	USA; UNS-Nr.	:	C69300
Nickel plating (without EVolution EMC)	EN ISO 4042	:	Cu/Ni 3b, semi-bright, thickness 3-5 µm

Physical data

Density	:	8.25	g/cm ³
Elect. conductivity	:	4.5	MS/m
	:	7.8	%IACS
Thermal conductivity	:	35	W/(m*K)
E-Modul	:	approx.100	GPa

Mechanical data

Tensile strength	Rm	:	>500	N/mm ²
Yield strength	Rp0.2	:	>300	N/mm ²
Ultimate strain	:	:	min 15	%

Composition

Copper	Cu	:	76.0	%
Silicon	Si	:	3	%
Phosphor	P	:	0.05	%
Zinc	Zn	:	Residual	
Lead	Pb	:	<0.09	%

Chemical resistance

The brass alloy generally exhibits good corrosion resistance due to alloying additions. The addition of silicon and phosphorous improves resistance to tarnishing and reduces the risk to stress corrosion cracking and dezincification. It's resistant under normal dry atmosphere, against fresh water, mineral oils, fuels, cool- and cutting solutions. It is partly resistant under sea and industrial atmosphere, against neutral and alkaline salt solutions as well as organic compounds. Brass will be attacked by acids, halogens, chloride and chloridous solutions in atmospheres with high humidity and increased temperatures. Chloric atmospheres and damp ammonia gas can cause stress corrosion.

The material is lead-free according to RoHS and ELV(End of Life Vehicles Directive). The requirements for dezincification resistance according to ISO 6509 are met. Material suitable for drinking water hygiene according to UBA list.

AGRO AG

Hunzenschwil, October 22.2024

This table is arranged to our best knowledge and is to advise you without obligation. All values are approximate values and are based on tests done by our suppliers. Modifications remain reserving.