

# OPTICAL WIRE (TIN BRONZE)

Tin bronze optical wires from bedra make an impression by a flawless surface finish which is required by all renowned optical manufacturers.

## Fields of application

Temple

## Physical properties

<b>Density (kg/dm<sup>3</sup>)</b>	8,8
<b>Melting range (°C)</b>	910 - 1040
<b>E-Modulus (kN/mm<sup>2</sup>)</b>	115
<b>Thermal conductivity (W/m*K)</b>	75
<b>Coefficient of thermal expansion (10<sup>-6</sup>/K)</b>	18,5
<b>Electrical conductivity (MS/m)</b>	7

## Standardization and composition

<b>Standard designation</b>	CuSn6
<b>DIN</b>	17662
<b>Werkstoffnr.</b>	2.1022
<b>DIN EN 12166</b>	CW452K
<b>ASTM UNS</b>	C51900
<b>Cu</b>	balance
<b>Sn</b>	6
<b>P</b>	0,2
<b>Others</b>	max. 0,5

## Other tech. values

<b>Annealing temp. (°C)</b>	380 - 450
<b>Hardness annealed (HV)</b>	90
<b>Hardness 80% reduced (HV)</b>	290

## Delivery program

<b>Profiles</b>	Round wires / square profiles / flat wires / special profiles
<b>Surface coatings</b>	Several electroplated coatings, upon request
<b>Make-ups</b>	Spools / coils / rods / drums